



**O'BRIEN & GERE**  
ENGINEERS, INC.

January 14, 1999

2019

Mr. David Crosby, P.E.  
Bureau of Construction Services  
Division of Hazardous Waste Remediation  
New York State Department of Environmental Conservation  
50 Wolf Road  
Albany, NY 12233-7010

Re: Former Accurate Die Casting Site Fayetteville,  
NY

File: 2488.731

Dear Mr. Crosby:

Enclosed are four copies of the monthly progress report, required by the Order on Consent (#A7-0318-94-10) for the former Accurate Die Casting site in Fayetteville, New York, for the month of December 1998. Included in the progress report are the results of the monitoring activities associated with the SPDES Fact Sheet for the ground water treatment system through December 1998. If you have any questions regarding these reports, please do not hesitate to call me.

Very truly yours,

O'BRIEN & GERE ENGINEERS, INC.

Timothy M. Eddy, HGW  
Senior Project Scientist

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Attachments

- cc: V. Nattanmai, P.E. - NYSDEC  
A. English - NYSDEC  
T. Male - NYSDEC  
Central Field Unit: Project Attorney Accurate Die Site - NYSDEC  
C. Branagh, P.E. - NYSDEC Region 7  
Director, Bureau of Environmental Exposure Investigation - NYSDOH (2 copies)  
H. Hamel - NYSDOH  
C. Johnson, Esq. - ITT Corporation  
C. Salcines - ITT Corporation  
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M. Peters, Esq. - LeBoeuf, Lamb, Greene & MacRae  
T. Brown, P.E. - O'Brien & Gere Technical Services, Inc.  
Al Farrell, P.E. - O'Brien & Gere Engineers, Inc.



**FORMER ACCURATE DIE CASTING SITE  
FAYETTEVILLE, NEW YORK**

**Monthly Progress Report for: December 1998**

**(a) Activities Performed/Correspondences with NYSDEC**

1. During the month of December 1998, O'Brien & Gere operated the ground water collection and treatment system on behalf of ITT Industries. Between December 1 through December 31, 1998, a total of 450,480 gallons of ground water was treated: 352,940 gallons were recovered from recovery well RW-1; 96,910 gallons were recovered from RW-2; and 630 gallons were recovered from the sump located outside the northeast corner of the facility. As of December 31, 1998, a total of 24,244,800 gallons of ground water has been treated since startup on February 5, 1996.
2. During the month of December 1998, O'Brien & Gere performed the sampling activities associated with the Sampling and Analysis Plan (March 1996), revised according to the NYSDEC letter dated April 1, 1997, and the SPDES Fact Sheet (#734052) required by the Consent Order. The results of the SPDES sampling of the ground water treatment system effluent are discussed in Item b.
3. Bids for the construction of the ground water collection trench are currently undergoing review by ITT Industries.

**(b) Sampling and Test Results**

1. The analytical results associated with the SPDES Fact Sheet monitoring activities performed through December 31, 1998 are summarized in Table 1. The laboratory analytical data sheets are provided as Attachment A.

**(c) Projected Activities within next 45 days**

1. Continue operation of the ground water recovery and treatment system.
2. Complete review of the bids to construct the Ground Water Collection Trench- Contract No. 1 - General, award contract, and commence construction activities.
3. Prepare and submit the annual report summarizing 1998 remedial activities.

**(d) Project Schedule**

1. Ground water monitoring activities will continue to be performed in accordance with the NYSDEC-approved Sampling & Analysis Plan dated March 1996, as modified in accordance with the recommendations of the Annual Report for 1997 submitted to the NYSDEC on January 27, 1998. Also, the treatment system performance monitoring will continue to be conducted in accordance with the SPDES Permit fact sheet, as modified on March 13, 1997 and November 21, 1997.

**FORMER ACCURATE DIE CASTING SITE  
FAYETTEVILLE, NEW YORK  
(continued)**

**(e) Activities in support of Community Relations Plan**

1. None

**(f) Exceedences to SPDES Fact Sheet Limits**

1. None

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8260

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

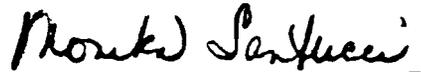
Sample: K1200  
Samp. Description: WTP Effluent - Grab  
Instrument: HP5973 GCMS#3  
Units: ug/L  
Number of analytes: 13

Collected: 12/02/98  
Received: 12/02/98  
Prepared: 12/04/98  
Matrix: Water  
QC Batch: 120498W1  
%Solids:  
Purge volume: 25 mL

Parameter	Result	Surrog		Analyzed	Notes
		Limits	Dilution		
Acetone	<10.		1	12/04/98	
Methylene chloride	<2.0		1	12/04/98	
trans-1,2-Dichloroethene	<.50		1	12/04/98	
cis-1,2-Dichloroethene	<.50		1	12/04/98	
Trichloroethene	<.50		1	12/04/98	
4-Methyl-2-pentanone	<5.0		1	12/04/98	
Toluene	<.50		1	12/04/98	
2-Hexanone	<5.0		1	12/04/98	
Tetrachloroethene	<.50		1	12/04/98	
1,1,2,2-Tetrachloroethane	<.50		1	12/04/98	
Dibromofluoromethane (surrogate)	96.%	61-136	1	12/04/98	
Toluene-d8 (surrogate)	101.%	84-114	1	12/04/98	
Bromofluorobenzene (surrogate)	97.%	77-117	1	12/04/98	

Notes:

# - Outside control limits J-Estimated value

Authorized:   
Date: December 7, 1998      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: K1198  
Samp. Description: WTP Influent  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m X .45mm ID  
Dilution: 50 Instrument: 9001

Collected: 12/02/98 Matrix: Water  
Received: 12/02/98 QC Batch: 120898W1  
Prepared: %Solids:  
Analyzed: 12/08/98 Purge volume: 5 ml

Number of analytes: 36

<u>Parameter</u>	<u>Result</u>	<u>Col</u>	<u>Surrog Limits</u>	<u>Notes</u>
Benzene	<50.	1		
Bromodichloromethane	<50.	1		
Bromoform	<500.	1		
Bromomethane	<500.	1		
Carbon tetrachloride	<50.	1		
Chlorobenzene	<50.	1		
Chloroethane	<50.	1		
2-Chloroethylvinyl ether	<500.	1		
Chloroform	<50.	1		
Chloromethane	<500.	1		
Dibromochloromethane	<50.	1		
1,2-Dichlorobenzene	<250.	1		
1,3-Dichlorobenzene	<250.	1		
1,4-Dichlorobenzene	<250.	1		
Dichlorodifluoromethane	<500.	1		
1,1-Dichloroethane	<50.	1		
1,2-Dichloroethane	<50.	1		
1,1-Dichloroethylene	<50.	1		
cis-1,2-Dichloroethylene	<50.	1		
trans-1,2-Dichloroethylene	<50.	1		
Dichloromethane	<50.	1		
1,2-Dichloropropane	<50.	1		
cis-1,3-Dichloropropylene	<50.	1		
trans-1,3-Dichloropropylene	<50.	1		
Ethylbenzene	<50.	1		
1,1,2,2-Tetrachloroethane	<50.	1		
Tetrachloroethylene	<50.	1		
Toluene	<50.	1		

# - Outside control limits J-Estimated value

Authorized: Monika Santucci  
Date: December 10, 1998 Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: K1199  
Samp. Description: WTP Between  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m X .45mm ID  
Dilution: 1 Instrument: 9001

Collected: 12/02/98 Matrix: Water  
Received: 12/02/98 QC Batch: 120998W1  
Prepared: %Solids:  
Analyzed: 12/09/98 Purge volume: 5 ml

Number of analytes: 36

<u>Parameter</u>	<u>Result</u>	<u>Col</u>	<u>Surrog Limits</u>	<u>Notes</u>
Benzene	<1.	1		
Bromodichloromethane	<1.	1		
Bromoform	<10.	1		
Bromomethane	<10.	1		
Carbon tetrachloride	<1.	1		
Chlorobenzene	<1.	1		
Chloroethane	<1.	1		
2-Chloroethylvinyl ether	<10.	1		
Chloroform	<1.	1		
Chloromethane	<10.	1		
Dibromochloromethane	<1.	1		
1,2-Dichlorobenzene	<5.	1		
1,3-Dichlorobenzene	<5.	1		
1,4-Dichlorobenzene	<5.	1		
Dichlorodifluoromethane	<10.	1		
1,1-Dichloroethane	<1.	1		
1,2-Dichloroethane	<1.	1		
1,1-Dichloroethylene	<1.	1		
cis-1,2-Dichloroethylene	<1.	1		
trans-1,2-Dichloroethylene	<1.	1		
Dichloromethane	<1.	1		
1,2-Dichloropropane	<1.	1		
cis-1,3-Dichloropropylene	<1.	1		
trans-1,3-Dichloropropylene	<1.	1		
Ethylbenzene	<1.	1		
1,1,2,2-Tetrachloroethane	<1.	1		
Tetrachloroethylene	<1.	1		
Toluene	<1.	1		

# - Outside control limits J-Estimated value

Authorized: Monika Santucci  
Date: December 10, 1998      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: K1198  
Samp. Description: WTP Influent  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m X .45mm ID  
Dilution: 50 Instrument: 9001

Collected: 12/02/98 Matrix: Water  
Received: 12/02/98 QC Batch: 120898W1  
Prepared: %Solids:  
Analyzed: 12/08/98 Purge volume: 5 ml

Number of analytes: 36

<u>Parameter</u>	<u>Result</u>	<u>Col</u>	<u>Surrog Limits</u>	<u>Notes</u>
1,1,1-Trichloroethane	<50.	1		
1,1,2-Trichloroethane	<50.	1		
Trichloroethylene	580.	1		
Trichlorofluoromethane	<50.	1		
Vinyl Chloride	<50.	1		
Xylenes (total)	<150.	1		
2-Chloropropane (surrogate)	90.%	1	69-118	
Fluorobenzene (surrogate)	99.%	1	85-119	

Notes:

# - Outside control limits J-Estimated value

Authorized: Monika Santucci  
Date: December 10, 1998 Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: K1199  
Samp. Description: WTP Between  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m X .45mm ID  
Dilution: 1 Instrument: 9001

Collected: 12/02/98 Matrix: Water  
Received: 12/02/98 QC Batch: 120998W1  
Prepared: %Solids:  
Analyzed: 12/09/98 Purge volume: 5 ml

Number of analytes: 36

<u>Parameter</u>	<u>Result</u>	<u>Col</u>	<u>Surrog Limits</u>	<u>Notes</u>
1,1,1-Trichloroethane	<1.	1		
1,1,2-Trichloroethane	<1.	1		
Trichloroethylene	<1.	1		
Trichlorofluoromethane	<1.	1		
Vinyl Chloride	<1.	1		
Xylenes (total)	<3.	1		
2-Chloropropane (surrogate)	100.%	1	69-118	
Fluorobenzene (surrogate)	98.%	1	85-119	

Notes:

# - Outside control limits J-Estimated value

Authorized: Monika Santucci  
Date: December 10, 1998 Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Trace Metals

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: K1201  
Samp. Description: WTP Effluent - Composite  
Units: mg/L

Collected: 12/02/98      Matrix: Water  
Received: 12/02/98      %Solids:  
Number of analytes: 2

<u>Parameter</u>	<u>Result</u>	<u>Method</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>QC Batch</u>	<u>Dilut. Note</u>
Mercury	<.0002	245.1	12/08/98	12/09/98	120898W1	1
Zinc	<.01	200.7	12/10/98	12/11/98	121098W1	1

Notes:

J-Estimated value

Authorized: Monika Santucci  
Date: December 15, 1998      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Wet Chemistry

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: K1201  
Samp. Description: WTP Effluent - Composite

Collected: 12/02/98  
Received: 12/02/98 15:35  
Matrix: Water

<u>Parameter</u>	<u>Result</u> <u>Units</u>	<u>Method</u>	<u>Prepared</u> <u>Analyzed</u>	<u>QC Batch</u> <u>Notes</u>
Total dissolved solids	1100. mg/L	EPA 160.1	12/03/98	120398W12
Total suspended solids	<5. mg/L	EPA 160.2	12/04/98	120498W11

Notes:

J-Estimated value

Authorized: Monika Santucci  
Date: December 8, 1998      Monika Santucci



# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8260

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Bi-Monthly Effluent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: K2300  
Samp. Description: WTP Effluent (Grab)  
Instrument: HP5970 GC/MS#2  
Units: ug/L  
Number of analytes: 13

Collected: 12/16/98  
Received: 12/16/98  
Prepared: 12/22/98  
Matrix: Water  
QC Batch: 122298W2  
%Solids:  
Purge volume: 25 mL

Parameter	Result	Surrog		Notes
		Limits	Dilution	
Acetone	<10.		1	12/22/98
Methylene chloride	<2.0		1	12/22/98
trans-1,2-Dichloroethene	<.50		1	12/22/98
cis-1,2-Dichloroethene	<.50		1	12/22/98
Trichloroethene	<.50		1	12/22/98
4-Methyl-2-pentanone	<5.0		1	12/22/98
Toluene	<.50		1	12/22/98
2-Hexanone	<5.0		1	12/22/98
Tetrachloroethene	<.50		1	12/22/98
1,1,2,2-Tetrachloroethane	<.50		1	12/22/98
Dibromofluoromethane (surrogate)	108.%	61-136	1	12/22/98
Toluene-d8 (surrogate)	106.%	84-114	1	12/22/98
Bromofluorobenzene (surrogate)	107.%	77-117	1	12/22/98

Notes:

# - Outside control limits J-Estimated value

Authorized: Monika Santucci  
Date: December 23, 1998      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Trace Metals

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Bi-Monthly Effluent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: K2301  
Samp. Description: WTP Effluent (Composite)  
Units: mg/L

Collected: 12/16/98      Matrix: Water  
Received: 12/16/98      %Solids:  
Number of analytes: 2

<u>Parameter</u>	<u>Result</u>	<u>Method</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>QC Batch</u>	<u>Dilut.</u>	<u>Note</u>
Mercury	<.0002	245.1	12/18/98	12/18/98	121898W1		1
Zinc	.01	200.7	12/23/98	12/28/98	122398W1		1

Notes:

J-Estimated value

Authorized: Monika Santucci  
Date: December 30, 1998      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Wet Chemistry

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Bi-Monthly Effluent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: K2301  
Samp. Description: WTP Effluent (Composite)

Collected: 12/16/98  
Received: 12/16/98 15:35  
Matrix: Water

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Method</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>QC Batch</u>	<u>Note</u>
Total dissolved solids	1000.	mg/L	EPA 160.1		12/21/98	122198W11	
Total suspended solids	<5.	mg/L	EPA 160.2		12/23/98	122398W11	

Notes:

J-Estimated value

Authorized: Monika Santucci  
Date: December 30, 1998    Monika Santucci

**Attachment A**

**Laboratory Analytical Data Sheets**

**Table 1**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Monitoring Requirements and Effluent Data**

Analyte (units)	Monitoring Requirements				Effluent	Effluent	Effluent	Effluent
	Discharge Limitation Daily Average	Discharge Limitation Daily Maximum	Minimum Measurement Frequency(1)	Sample Type	12/02/97	12/03/97	12/04/97	12/09/97
Flow (GPD)	Monitor	150000	Continuous	Meter	15300	---	15440	15494
pH (SU)	6.5 - 8.5		2/Week	Grab	7.56	---	7.56	7.58
Residue, non-filterable (mg/L)	Monitor	20	Weekly	3-hr comp.	---	5 U	---	---
Total dissolved solids (TDS) (mg/L)	Monitor	Monitor	Weekly	3-hr comp.	---	1100	---	---
CBOD5 (mg/L)	Monitor	Monitor	Quarterly	3-hr comp.	---	---	---	---
TKN (mg/L)	Monitor	Monitor	Quarterly	3-hr comp.	---	---	---	---
TOD (mg/L)	Monitor	15	Quarterly	Calculated	---	---	---	---
Dissolved Oxygen (mg/L)	Monitor	7 Min.	Quarterly	Grab	---	---	---	---
Aluminum, dissolved (mg/L)	Monitor	0.2	Quarterly	3-hr comp.	---	---	---	---
Antimony, total (mg/L)	Monitor	0.1	Quarterly	3-hr comp.	---	---	---	---
Chromium, total (mg/L)	Monitor	0.5	Quarterly	3-hr comp.	---	---	---	---
Cobalt, total (mg/L)	Monitor	0.01	Quarterly	3-hr comp.	---	---	---	---
Copper, total (mg/L)	Monitor	0.1	Quarterly	3-hr comp.	---	---	---	---
Iron, total (mg/L)	Monitor	0.3	Quarterly	3-hr comp.	---	---	---	---
Lead, total (mg/L)	Monitor	0.02	Quarterly	3-hr comp.	---	---	---	---
Mercury, total (mg/L)	Monitor	0.0008	2/Month	3-hr comp.	---	0.0002 U	---	---
Nickel, total (mg/L)	Monitor	0.2	Quarterly	3-hr comp.	---	---	---	---
Silver, total (mg/L)	Monitor	0.1	Quarterly	3-hr comp.	---	---	---	---
Vanadium, total (mg/L)	Monitor	0.03	Quarterly	3-hr comp.	---	---	---	---
Zinc, total (mg/L)	Monitor	0.3	2/Month	3-hr comp.	---	0.02	---	---
cis-1,2-Dichloroethene (ug/L)	Monitor	10	2/Month	Grab	---	0.50 U	---	---
trans-1,2-Dichloroethene (ug/L)	Monitor	10	2/Month	Grab	---	0.50 U	---	---
Methylene chloride (ug/L)	Monitor	50	2/Month	Grab	---	2.0 U	---	---
1,1,2,2-Tetrachloroethane (ug/L)	Monitor	30	2/Month	Grab	---	0.50 U	---	---
Tetrachloroethene (ug/L)	Monitor	20	2/Month	Grab	---	0.50 U	---	---
Toluene (ug/L)	Monitor	20	2/Month	Grab	---	0.50 U	---	---
Trichloroethene (ug/L)	Monitor	10	2/Month	Grab	---	0.50 U	---	---
Acetone (ug/L)	Monitor	1000	2/Month	Grab	---	10	---	---
2-Hexanone (ug/L)	Monitor	1000	2/Month	Grab	---	5.0 U	---	---
4-Methyl-2-pentanone (MIBK) (ug/L)	Monitor	1000	2/Month	Grab	---	5.0 U	---	---

NOTES: (1) Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.

--- - Not analyzed, NA - Data not available

U - Not Detected, J - Estimated

TOD = 1.5 X CBOD5 + 4.5 X TKN

**Table 1**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Monitoring Requirements and Effluent Data**

Analyte	Effluent 12/10/97	Effluent 12/11/97	Effluent 12/16/97	Effluent 12/17/97	Effluent 12/18/97	Effluent 12/23/97	Effluent 12/30/97	Effluent 01/06/98
Flow (GPD)	---	15810	15620	---	15320	15420	15450	17630
pH (SU)	---	7.58	7.6	---	7.6	7.58	7.58	7.61
Residue, non-filterable (mg/L)	5 U	---	---	5 U	---	5 U	5 U	---
Total dissolved solids (TDS) (mg/L)	1100	---	---	1100	---	1100	1200	---
CBOD5 (mg/L)	---	---	---	---	---	---	---	---
TKN (mg/L)	---	---	---	---	---	---	---	---
TOD (mg/L)	---	---	---	---	---	---	---	---
Dissolved Oxygen (mg/L)	---	---	9.07	---	---	---	---	---
Aluminum, dissolved (mg/L)	---	---	---	---	---	---	---	---
Antimony, total (mg/L)	---	---	---	---	---	---	---	---
Chromium, total (mg/L)	---	---	---	---	---	---	---	---
Cobalt, total (mg/L)	---	---	---	---	---	---	---	---
Copper, total (mg/L)	---	---	---	---	---	---	---	---
Iron, total (mg/L)	---	---	---	---	---	---	---	---
Lead, total (mg/L)	---	---	---	---	---	---	---	---
Mercury, total (mg/L)	---	---	---	0.0002 U	---	---	---	---
Nickel, total (mg/L)	---	---	---	---	---	---	---	---
Silver, total (mg/L)	---	---	---	---	---	---	---	---
Vanadium, total (mg/L)	---	---	---	---	---	---	---	---
Zinc, total (mg/L)	---	---	---	0.04	---	---	---	---
cis-1,2-Dichloroethene (ug/L)	---	---	---	0.50 U	---	---	---	---
trans-1,2-Dichloroethene (ug/L)	---	---	---	0.50 U	---	---	---	---
Methylene chloride (ug/L)	---	---	---	2.0 U	---	---	---	---
1,1,2,2-Tetrachloroethane (ug/L)	---	---	---	0.50 U	---	---	---	---
Tetrachloroethene (ug/L)	---	---	---	0.50 U	---	---	---	---
Toluene (ug/L)	---	---	---	0.50 U	---	---	---	---
Trichloroethene (ug/L)	---	---	---	0.50 U	---	---	---	---
Acetone (ug/L)	---	---	---	10 U	---	---	---	---
2-Hexanone (ug/L)	---	---	---	5.0 U	---	---	---	---
4-Methyl-2-pentanone (MIBK) (ug/L)	---	---	---	5.0 U	---	---	---	---

NOTES: (1) Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.  
 --- - Not analyzed, NA - Data not available  
 U - Not Detected, J - Estimated  
 TOD = 1.5 X CBOD5 + 4.5 X TKN

**Table 1**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Monitoring Requirements and Effluent Data**

Analyte	Effluent 01/07/98	Effluent 01/08/98	Effluent 01/13/98	Effluent 01/14/98	Effluent 01/15/98	Effluent 01/20/98	Effluent 01/21/98	Effluent 01/22/98
Flow (GPD)	---	17865	19584	---	20198	20310	---	20198
pH (SU)	---	7.61	7.61	---	7.61	7.61	---	7.63
Residue, non-filterable (mg/L)	5 U	---	---	5 U	---	---	5 U	---
Total dissolved solids (TDS) (mg/L)	1000	---	---	970	---	---	1000	---
CBOD5 (mg/L)	5 U	---	---	---	---	---	---	---
TKN (mg/L)	0.5	---	---	---	---	---	---	---
TOD (mg/L)	9.75 J	---	---	---	---	---	---	---
Dissolved Oxygen (mg/L)	9.69	---	---	---	---	---	---	---
Aluminum, dissolved (mg/L)	0.1 U	---	---	---	---	---	---	---
Antimony, total (mg/L)	0.06 U	---	---	---	---	---	---	---
Chromium, total (mg/L)	0.01 U	---	---	---	---	---	---	---
Cobalt, total (mg/L)	0.01 U	---	---	---	---	---	---	---
Copper, total (mg/L)	0.02	---	---	---	---	---	---	---
Iron, total (mg/L)	0.05 U	---	---	---	---	---	---	---
Lead, total (mg/L)	0.005 U	---	---	---	---	---	---	---
Mercury, total (mg/L)	0.0002 U	---	---	---	---	---	0.0002 U	---
Nickel, total (mg/L)	0.05 U	---	---	---	---	---	---	---
Silver, total (mg/L)	0.01 U	---	---	---	---	---	---	---
Vanadium, total (mg/L)	0.03 U	---	---	---	---	---	---	---
Zinc, total (mg/L)	0.02	---	---	---	---	---	0.03	---
cis-1,2-Dichloroethene (ug/L)	0.50 U	---	---	---	---	---	0.50 U	---
trans-1,2-Dichloroethene (ug/L)	0.50 U	---	---	---	---	---	0.50 U	---
Methylene chloride (ug/L)	2.0 U	---	---	---	---	---	2.0 U	---
1,1,2,2-Tetrachloroethane (ug/L)	0.50 U	---	---	---	---	---	0.50 U	---
Tetrachloroethene (ug/L)	0.50 U	---	---	---	---	---	0.50 U	---
Toluene (ug/L)	0.50 U	---	---	---	---	---	0.50 U	---
Trichloroethene (ug/L)	0.50 U	---	---	---	---	---	0.50 U	---
Acetone (ug/L)	10 U	---	---	---	---	---	10 U	---
2-Hexanone (ug/L)	5.0 U	---	---	---	---	---	5.0 U	---
4-Methyl-2-pentanone (MIBK) (ug/L)	5.0 U	---	---	---	---	---	5.0 U	---

NOTES: (1) Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.

--- - Not analyzed, NA - Data not available

U - Not Detected, J - Estimated

TOD = 1.5 X CBOD5 + 4.5 X TKN

**Table 1**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Monitoring Requirements and Effluent Data**

Analyte	Effluent 01/27/98	Effluent 01/28/98	Effluent 01/29/98	Effluent 02/03/98	Effluent 02/04/98	Effluent 02/05/98	Effluent 02/10/98	Effluent 02/11/98
Flow (GPD)	20744	---	20723	20580	---	20765	20452	---
pH (SU)	7.63	---	7.61	7.61	---	7.63	7.63	---
Residue, non-filterable (mg/L)	---	5 U	---	---	5 U	---	---	5 U
Total dissolved solids (TDS) (mg/L)	---	960	---	---	1000	---	---	960
CBOD5 (mg/L)	---	---	---	---	---	---	---	---
TKN (mg/L)	---	---	---	---	---	---	---	---
TOD (mg/L)	---	---	---	---	---	---	---	---
Dissolved Oxygen (mg/L)	---	---	---	---	---	---	---	---
Aluminum, dissolved (mg/L)	---	---	---	---	---	---	---	---
Antimony, total (mg/L)	---	---	---	---	---	---	---	---
Chromium, total (mg/L)	---	---	---	---	---	---	---	---
Cobalt, total (mg/L)	---	---	---	---	---	---	---	---
Copper, total (mg/L)	---	---	---	---	---	---	---	---
Iron, total (mg/L)	---	---	---	---	---	---	---	---
Lead, total (mg/L)	---	---	---	---	---	---	---	---
Mercury, total (mg/L)	---	---	---	---	0.0002 U	---	---	---
Nickel, total (mg/L)	---	---	---	---	---	---	---	---
Silver, total (mg/L)	---	---	---	---	---	---	---	---
Vanadium, total (mg/L)	---	---	---	---	---	---	---	---
Zinc, total (mg/L)	---	---	---	---	0.03	---	---	---
cis-1,2-Dichloroethene (ug/L)	---	---	---	---	0.50 U	---	---	---
trans-1,2-Dichloroethene (ug/L)	---	---	---	---	0.50 U	---	---	---
Methylene chloride (ug/L)	---	---	---	---	2.0 U	---	---	---
1,1,2,2-Tetrachloroethane (ug/L)	---	---	---	---	0.50 U	---	---	---
Tetrachloroethene (ug/L)	---	---	---	---	0.50 U	---	---	---
Toluene (ug/L)	---	---	---	---	0.50 U	---	---	---
Trichloroethene (ug/L)	---	---	---	---	0.50 U	---	---	---
Acetone (ug/L)	---	---	---	---	10 U	---	---	---
2-Hexanone (ug/L)	---	---	---	---	5.0 U	---	---	---
4-Methyl-2-pentanone (MIBK) (ug/L)	---	---	---	---	5.0 U	---	---	---

NOTES: (1) Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.

--- - Not analyzed, NA - Data not available

U - Not Detected, J - Estimated

TOD = 1.5 X CBOD5 + 4.5 X TKN

**Table 1**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Monitoring Requirements and Effluent Data**

Analyte	Effluent 02/12/98	Effluent 02/17/98	Effluent 02/18/98	Effluent 02/19/98	Effluent 02/25/98	Effluent 02/26/98	Effluent 03/03/98	Effluent 03/04/98
Flow (GPD)	20480	20321	20530	20817	---	20722	22150	---
pH (SU)	7.61	7.63	7.65	7.63	---	7.65	8.16	---
Residue, non-filterable (mg/L)	---	---	5 U	---	5 U	---	---	5 U
Total dissolved solids (TDS) (mg/L)	---	---	920	---	920	---	---	960
CBOD5 (mg/L)	---	---	---	---	---	---	---	---
TKN (mg/L)	---	---	---	---	---	---	---	---
TOD (mg/L)	---	---	---	---	---	---	---	---
Dissolved Oxygen (mg/L)	---	---	8.29	---	---	---	---	8.33
Aluminum, dissolved (mg/L)	---	---	---	---	---	---	---	---
Antimony, total (mg/L)	---	---	---	---	---	---	---	---
Chromium, total (mg/L)	---	---	---	---	---	---	---	---
Cobalt, total (mg/L)	---	---	---	---	---	---	---	---
Copper, total (mg/L)	---	---	---	---	---	---	---	---
Iron, total (mg/L)	---	---	---	---	---	---	---	---
Lead, total (mg/L)	---	---	---	---	---	---	---	---
Mercury, total (mg/L)	---	---	0.0002 U	---	---	---	---	0.0002 U
Nickel, total (mg/L)	---	---	---	---	---	---	---	---
Silver, total (mg/L)	---	---	---	---	---	---	---	---
Vanadium, total (mg/L)	---	---	---	---	---	---	---	---
Zinc, total (mg/L)	---	---	0.05	---	---	---	---	0.01 U
cis-1,2-Dichloroethene (ug/L)	---	---	0.50 U	---	---	---	---	0.50 U
trans-1,2-Dichloroethene (ug/L)	---	---	0.50 U	---	---	---	---	0.50 U
Methylene chloride (ug/L)	---	---	2.0 U	---	---	---	---	2.0 U
1,1,2,2-Tetrachloroethane (ug/L)	---	---	0.50 U	---	---	---	---	0.50 U
Tetrachloroethene (ug/L)	---	---	0.50 U	---	---	---	---	0.50 U
Toluene (ug/L)	---	---	0.50 U	---	---	---	---	0.50 U
Trichloroethene (ug/L)	---	---	0.50 U	---	---	---	---	0.50 U
Acetone (ug/L)	---	---	10 U	---	---	---	---	10 U
2-Hexanone (ug/L)	---	---	5.0 U	---	---	---	---	5.0 U
4-Methyl-2-pentanone (MIBK) (ug/L)	---	---	5.0 U	---	---	---	---	5.0 U

NOTES: (1) Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.

--- - Not analyzed, NA - Data not available

U - Not Detected, J - Estimated

TOD = 1.5 X CBOD5 + 4.5 X TKN

**Table 1**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Monitoring Requirements and Effluent Data**

Analyte	Effluent 03/05/98	Effluent 03/10/98	Effluent 03/11/98	Effluent 03/12/98	Effluent 03/17/98	Effluent 03/18/98	Effluent 03/19/98	Effluent 03/24/98
Flow (GPD)	20910	21731	---	21062	22110	---	22390	22160
pH (SU)	7.89	7.76	---	7.71	7.69	---	7.63	7.61
Residue, non-filterable (mg/L)	---	---	5 U	---	---	5 U	---	---
Total dissolved solids (TDS) (mg/L)	---	---	980	---	---	890	---	---
CBOD5 (mg/L)	---	---	---	---	---	---	---	---
TKN (mg/L)	---	---	---	---	---	---	---	---
TOD (mg/L)	---	---	---	---	---	---	---	---
Dissolved Oxygen (mg/L)	---	---	---	---	---	---	---	---
Aluminum, dissolved (mg/L)	---	---	---	---	---	---	---	---
Antimony, total (mg/L)	---	---	---	---	---	---	---	---
Chromium, total (mg/L)	---	---	---	---	---	---	---	---
Cobalt, total (mg/L)	---	---	---	---	---	---	---	---
Copper, total (mg/L)	---	---	---	---	---	---	---	---
Iron, total (mg/L)	---	---	---	---	---	---	---	---
Lead, total (mg/L)	---	---	---	---	---	---	---	---
Mercury, total (mg/L)	---	---	---	---	---	0.0002 U	---	---
Nickel, total (mg/L)	---	---	---	---	---	---	---	---
Silver, total (mg/L)	---	---	---	---	---	---	---	---
Vanadium, total (mg/L)	---	---	---	---	---	---	---	---
Zinc, total (mg/L)	---	---	---	---	---	0.01 U	---	---
cis-1,2-Dichloroethene (ug/L)	---	---	---	---	---	0.50 U	---	---
trans-1,2-Dichloroethene (ug/L)	---	---	---	---	---	0.50 U	---	---
Methylene chloride (ug/L)	---	---	---	---	---	2.0 U	---	---
1,1,2,2-Tetrachloroethane (ug/L)	---	---	---	---	---	0.50 U	---	---
Tetrachloroethene (ug/L)	---	---	---	---	---	0.50 U	---	---
Toluene (ug/L)	---	---	---	---	---	0.50 U	---	---
Trichloroethene (ug/L)	---	---	---	---	---	0.50 U	---	---
Acetone (ug/L)	---	---	---	---	---	10 U	---	---
2-Hexanone (ug/L)	---	---	---	---	---	5.0 U	---	---
4-Methyl-2-pentanone (MIBK) (ug/L)	---	---	---	---	---	5.0 U	---	---

NOTES: (1) Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.

--- - Not analyzed, NA - Data not available

U - Not Detected, J - Estimated

TOD = 1.5 X CBOD5 + 4.5 X TKN

**Table 1**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Monitoring Requirements and Effluent Data**

Analyte	Effluent 03/25/98	Effluent 03/26/98	Effluent 03/31/98	Effluent 04/01/98	Effluent 04/02/98	Effluent 04/07/98	Effluent 04/08/98	Effluent 04/09/98
Flow (GPD)	---	22111	22480	---	21879	21527	---	21630
pH (SU)	---	7.63	7.63	---	7.65	7.61	---	7.65
Residue, non-filterable (mg/L)	5 U	---	---	5 U	---	---	5 U	---
Total dissolved solids (TDS) (mg/L)	890	---	---	910	---	---	1100	---
CBOD5 (mg/L)	---	---	---	5 U	---	---	---	---
TKN (mg/L)	---	---	---	0.4 U	---	---	---	---
TOD (mg/L)	---	---	---	9.3 U	---	---	---	---
Dissolved Oxygen (mg/L)	---	---	---	8.83	---	---	---	---
Aluminum, dissolved (mg/L)	---	---	---	0.1 U	---	---	---	---
Antimony, total (mg/L)	---	---	---	0.06 U	---	---	---	---
Chromium, total (mg/L)	---	---	---	0.01 U	---	---	---	---
Cobalt, total (mg/L)	---	---	---	0.01 U	---	---	---	---
Copper, total (mg/L)	---	---	---	0.01 U	---	---	---	---
Iron, total (mg/L)	---	---	---	0.05 U	---	---	---	---
Lead, total (mg/L)	---	---	---	0.005 U	---	---	---	---
Mercury, total (mg/L)	---	---	---	0.0002 U	---	---	---	---
Nickel, total (mg/L)	---	---	---	0.05 U	---	---	---	---
Silver, total (mg/L)	---	---	---	0.01 U	---	---	---	---
Vanadium, total (mg/L)	---	---	---	0.03 U	---	---	---	---
Zinc, total (mg/L)	---	---	---	0.01 U	---	---	---	---
cis-1,2-Dichloroethene (ug/L)	---	---	---	0.50 U	---	---	---	---
trans-1,2-Dichloroethene (ug/L)	---	---	---	0.50 U	---	---	---	---
Methylene chloride (ug/L)	---	---	---	2.0 U	---	---	---	---
1,1,2,2-Tetrachloroethane (ug/L)	---	---	---	0.50 U	---	---	---	---
Tetrachloroethene (ug/L)	---	---	---	0.50 U	---	---	---	---
Toluene (ug/L)	---	---	---	0.50 U	---	---	---	---
Trichloroethene (ug/L)	---	---	---	0.50 U	---	---	---	---
Acetone (ug/L)	---	---	---	10 U	---	---	---	---
2-Hexanone (ug/L)	---	---	---	5.0 U	---	---	---	---
4-Methyl-2-pentanone (MIBK) (ug/L)	---	---	---	5.0 U	---	---	---	---

NOTES: (1) Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.

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U - Not Detected, J - Estimated

TOD = 1.5 X CBOD5 + 4.5 X TKN

**Table 1**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Monitoring Requirements and Effluent Data**

Analyte	Effluent 04/14/98	Effluent 04/15/98	Effluent 04/16/98	Effluent 04/21/98	Effluent 04/22/98	Effluent 04/23/98	Effluent 04/28/98	Effluent 04/29/98
Flow (GPD)	21226	---	21080	21246	---	21485	21170	---
pH (SU)	7.65	---	7.63	7.65	---	7.65	7.67	---
Residue, non-filterable (mg/L)	---	5 U	---	---	5 U	---	---	5 U
Total dissolved solids (TDS) (mg/L)	---	910	---	---	940	---	---	980
CBOD5 (mg/L)	---	---	---	---	---	---	---	---
TKN (mg/L)	---	---	---	---	---	---	---	---
TOD (mg/L)	---	---	---	---	---	---	---	---
Dissolved Oxygen (mg/L)	---	---	---	---	---	---	---	---
Aluminum, dissolved (mg/L)	---	---	---	---	---	---	---	---
Antimony, total (mg/L)	---	---	---	---	---	---	---	---
Chromium, total (mg/L)	---	---	---	---	---	---	---	---
Cobalt, total (mg/L)	---	---	---	---	---	---	---	---
Copper, total (mg/L)	---	---	---	---	---	---	---	---
Iron, total (mg/L)	---	---	---	---	---	---	---	---
Lead, total (mg/L)	---	---	---	---	---	---	---	---
Mercury, total (mg/L)	---	0.0002 U	---	---	---	---	---	---
Nickel, total (mg/L)	---	---	---	---	---	---	---	---
Silver, total (mg/L)	---	---	---	---	---	---	---	---
Vanadium, total (mg/L)	---	---	---	---	---	---	---	---
Zinc, total (mg/L)	---	0.03	---	---	---	---	---	---
cis-1,2-Dichloroethene (ug/L)	---	0.50 U	---	---	---	---	---	---
trans-1,2-Dichloroethene (ug/L)	---	0.50 U	---	---	---	---	---	---
Methylene chloride (ug/L)	---	2.0 U	---	---	---	---	---	---
1,1,2,2-Tetrachloroethane (ug/L)	---	0.50 U	---	---	---	---	---	---
Tetrachloroethene (ug/L)	---	0.50 U	---	---	---	---	---	---
Toluene (ug/L)	---	0.50 U	---	---	---	---	---	---
Trichloroethene (ug/L)	---	0.50 U	---	---	---	---	---	---
Acetone (ug/L)	---	10 U	---	---	---	---	---	---
2-Hexanone (ug/L)	---	5.0 U	---	---	---	---	---	---
4-Methyl-2-pentanone (MIBK) (ug/L)	---	5.0 U	---	---	---	---	---	---

NOTES: (1) Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.  
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 U - Not Detected, J - Estimated  
 TOD = 1.5 X CBOD5 + 4.5 X TKN

**Table 1**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Monitoring Requirements and Effluent Data**

Analyte	Effluent 04/30/98	Effluent 05/05/98	Effluent 05/07/98	Effluent 05/12/98	Effluent 05/13/98	Effluent 05/14/98	Effluent 05/19/98	Effluent 05/20/98
Flow (GPD)	21100	20880	20740	20880	---	20498	20620	---
pH (SU)	7.65	7.61	7.65	7.67	---	7.65	7.65	---
Residue, non-filterable (mg/L)	---	5 U	---	---	5 U	---	---	5 U
Total dissolved solids (TDS) (mg/L)	---	850	---	---	920	---	---	990
CBOD5 (mg/L)	---	---	---	---	---	---	---	---
TKN (mg/L)	---	---	---	---	---	---	---	---
TOD (mg/L)	---	---	---	---	---	---	---	---
Dissolved Oxygen (mg/L)	---	10.72	---	---	---	---	---	---
Aluminum, dissolved (mg/L)	---	---	---	---	---	---	---	---
Antimony, total (mg/L)	---	---	---	---	---	---	---	---
Chromium, total (mg/L)	---	---	---	---	---	---	---	---
Cobalt, total (mg/L)	---	---	---	---	---	---	---	---
Copper, total (mg/L)	---	---	---	---	---	---	---	---
Iron, total (mg/L)	---	---	---	---	---	---	---	---
Lead, total (mg/L)	---	---	---	---	---	---	---	---
Mercury, total (mg/L)	---	0.0002 U	---	---	---	---	---	0.0002 U
Nickel, total (mg/L)	---	---	---	---	---	---	---	---
Silver, total (mg/L)	---	---	---	---	---	---	---	---
Vanadium, total (mg/L)	---	---	---	---	---	---	---	---
Zinc, total (mg/L)	---	0.01 U	---	---	---	---	---	0.01 U
cis-1,2-Dichloroethene (ug/L)	---	0.50 U	---	---	---	---	---	0.50 U
trans-1,2-Dichloroethene (ug/L)	---	0.50 U	---	---	---	---	---	0.50 U
Methylene chloride (ug/L)	---	2.0 U	---	---	---	---	---	2.0 U
1,1,2,2-Tetrachloroethane (ug/L)	---	0.50 U	---	---	---	---	---	0.50 U
Tetrachloroethene (ug/L)	---	0.50 U	---	---	---	---	---	0.50 U
Toluene (ug/L)	---	0.50 U	---	---	---	---	---	0.50 U
Trichloroethene (ug/L)	---	0.50 U	---	---	---	---	---	0.50 U
Acetone (ug/L)	---	10 U	---	---	---	---	---	10 U
2-Hexanone (ug/L)	---	5.0 U	---	---	---	---	---	5.0 U
4-Methyl-2-pentanone (MIBK) (ug/L)	---	5.0 U	---	---	---	---	---	5.0 U

NOTES: (1) Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.

--- - Not analyzed, NA - Data not available

U - Not Detected, J - Estimated

TOD = 1.5 X CBOD5 + 4.5 X TKN

**Table 1**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Monitoring Requirements and Effluent Data**

Analyte	Effluent 05/21/98	Effluent 05/26/98	Effluent 05/27/98	Effluent 05/28/98	Effluent 06/02/98	Effluent 06/03/98	Effluent 06/04/98	Effluent 06/09/98
Flow (GPD)	20350	15504	---	19867	19784	---	19700	19350
pH (SU)	7.67	7.62	---	7.69	7.72	---	7.98	7.82
Residue, non-filterable (mg/L)	---	---	5 U	---	---	5 U	---	---
Total dissolved solids (TDS) (mg/L)	---	---	860	---	---	1000	---	---
CBOD5 (mg/L)	---	---	---	---	---	---	---	---
TKN (mg/L)	---	---	---	---	---	---	---	---
TOD (mg/L)	---	---	---	---	---	---	---	---
Dissolved Oxygen (mg/L)	---	---	---	---	---	8.14	---	---
Aluminum, dissolved (mg/L)	---	---	---	---	---	---	---	---
Antimony, total (mg/L)	---	---	---	---	---	---	---	---
Chromium, total (mg/L)	---	---	---	---	---	---	---	---
Cobalt, total (mg/L)	---	---	---	---	---	---	---	---
Copper, total (mg/L)	---	---	---	---	---	---	---	---
Iron, total (mg/L)	---	---	---	---	---	---	---	---
Lead, total (mg/L)	---	---	---	---	---	---	---	---
Mercury, total (mg/L)	---	---	---	---	---	0.0002 U	---	---
Nickel, total (mg/L)	---	---	---	---	---	---	---	---
Silver, total (mg/L)	---	---	---	---	---	---	---	---
Vanadium, total (mg/L)	---	---	---	---	---	---	---	---
Zinc, total (mg/L)	---	---	---	---	---	0.02	---	---
cis-1,2-Dichloroethene (ug/L)	---	---	---	---	---	0.50 U	---	---
trans-1,2-Dichloroethene (ug/L)	---	---	---	---	---	0.50 U	---	---
Methylene chloride (ug/L)	---	---	---	---	---	2.0 U	---	---
1,1,2,2-Tetrachloroethane (ug/L)	---	---	---	---	---	0.50 U	---	---
Tetrachloroethene (ug/L)	---	---	---	---	---	0.50 U	---	---
Toluene (ug/L)	---	---	---	---	---	0.50 U	---	---
Trichloroethene (ug/L)	---	---	---	---	---	0.50 U	---	---
Acetone (ug/L)	---	---	---	---	---	10 U	---	---
2-Hexanone (ug/L)	---	---	---	---	---	5.0 U	---	---
4-Methyl-2-pentanone (MIBK) (ug/L)	---	---	---	---	---	5.0 U	---	---

NOTES: (1) Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.  
 --- - Not analyzed, NA - Data not available  
 U - Not Detected, J - Estimated  
 TOD = 1.5 X CBOD5 + 4.5 X TKN

**Table 1**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Monitoring Requirements and Effluent Data**

Analyte	Effluent 06/10/98	Effluent 06/11/98	Effluent 06/16/98	Effluent 06/17/98	Effluent 06/18/98	Effluent 06/23/98	Effluent 06/24/98	Effluent 06/25/98
Flow (GPD)	---	19200	18470	---	18313	18930	---	18250
pH (SU)	---	7.78	7.72	---	7.71	7.70	---	7.72
Residue, non-filterable (mg/L)	---	---	---	---	---	---	---	---
Total dissolved solids (TDS) (mg/L)	5 U	---	---	5 U	---	---	5 U	---
CBOD5 (mg/L)	980	---	---	950	---	---	990	---
TKN (mg/L)	---	---	---	---	---	---	---	---
TOD (mg/L)	---	---	---	---	---	---	---	---
Dissolved Oxygen (mg/L)	---	---	---	---	---	---	---	---
Aluminum, dissolved (mg/L)	---	---	---	---	---	---	---	---
Antimony, total (mg/L)	---	---	---	---	---	---	---	---
Chromium, total (mg/L)	---	---	---	---	---	---	---	---
Cobalt, total (mg/L)	---	---	---	---	---	---	---	---
Copper, total (mg/L)	---	---	---	---	---	---	---	---
Iron, total (mg/L)	---	---	---	---	---	---	---	---
Lead, total (mg/L)	---	---	---	---	---	---	---	---
Mercury, total (mg/L)	---	---	---	---	---	---	---	---
Nickel, total (mg/L)	---	---	---	0.0002 U	---	---	---	---
Silver, total (mg/L)	---	---	---	---	---	---	---	---
Vanadium, total (mg/L)	---	---	---	---	---	---	---	---
Zinc, total (mg/L)	---	---	---	0.34	---	---	---	---
cis-1,2-Dichloroethene (ug/L)	---	---	---	0.50 U	---	---	---	---
trans-1,2-Dichloroethene (ug/L)	---	---	---	0.50 U	---	---	---	---
Methylene chloride (ug/L)	---	---	---	2.0 U	---	---	---	---
1,1,2,2-Tetrachloroethane (ug/L)	---	---	---	0.50 U	---	---	---	---
Tetrachloroethene (ug/L)	---	---	---	0.50 U	---	---	---	---
Toluene (ug/L)	---	---	---	0.50 U	---	---	---	---
Trichloroethene (ug/L)	---	---	---	0.50 U	---	---	---	---
Acetone (ug/L)	---	---	---	10 U	---	---	---	---
2-Hexanone (ug/L)	---	---	---	5.0 U	---	---	---	---
4-Methyl-2-pentanone (MIBK) (ug/L)	---	---	---	5.0 U	---	---	---	---

NOTES: (1) Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.

--- - Not analyzed, NA - Data not available

U - Not Detected, J - Estimated

TOD = 1.5 X CBOD5 + 4.5 X TKN

**Table 1**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Monitoring Requirements and Effluent Data**

Analyte	Effluent 06/30/98	Effluent 07/01/98	Effluent 07/02/98	Effluent 07/07/98	Effluent 07/08/98	Effluent 07/09/98	Effluent 07/14/98	Effluent 07/15/98
Flow (GPD)	19930	---	19230	19158	---	19480	19110	---
pH (SU)	7.72	---	7.72	7.71	---	7.71	7.72	---
Residue, non-filterable (mg/L)	---	5 U	---	---	5 U	---	---	5 U
Total dissolved solids (TDS) (mg/L)	---	950	---	---	880	---	---	1200
CBOD5 (mg/L)	---	5 U	---	---	---	---	---	---
TKN (mg/L)	---	0.4 U	---	---	---	---	---	---
TOD (mg/L)	---	9.3 U	---	---	---	---	---	---
Dissolved Oxygen (mg/L)	---	7.62	---	---	---	---	---	---
Aluminum, dissolved (mg/L)	---	0.1 U	---	---	---	---	---	---
Antimony, total (mg/L)	---	0.06 U	---	---	---	---	---	---
Chromium, total (mg/L)	---	0.01 U	---	---	---	---	---	---
Cobalt, total (mg/L)	---	0.01 U	---	---	---	---	---	---
Copper, total (mg/L)	---	0.02	---	---	---	---	---	---
Iron, total (mg/L)	---	0.05 U	---	---	---	---	---	---
Lead, total (mg/L)	---	0.005 U	---	---	---	---	---	---
Mercury, total (mg/L)	---	0.0002 U	---	---	---	---	---	0.0002 U
Nickel, total (mg/L)	---	0.05 U	---	---	---	---	---	---
Silver, total (mg/L)	---	0.01 U	---	---	---	---	---	---
Vanadium, total (mg/L)	---	0.03 U	---	---	---	---	---	---
Zinc, total (mg/L)	---	0.05	---	---	---	---	---	0.06
cis-1,2-Dichloroethene (ug/L)	---	0.50 U	---	---	---	---	---	0.50 U
trans-1,2-Dichloroethene (ug/L)	---	0.50 U	---	---	---	---	---	0.50 U
Methylene chloride (ug/L)	---	2.0 U	---	---	---	---	---	2.0 U
1,1,2,2-Tetrachloroethane (ug/L)	---	0.50 U	---	---	---	---	---	0.50 U
Tetrachloroethene (ug/L)	---	0.50 U	---	---	---	---	---	0.50 U
Toluene (ug/L)	---	2.5	---	---	---	---	---	0.50 U
Trichloroethene (ug/L)	---	0.50 U	---	---	---	---	---	0.50 U
Acetone (ug/L)	---	10 U	---	---	---	---	---	10 U
2-Hexanone (ug/L)	---	5.0 U	---	---	---	---	---	5.0 U
4-Methyl-2-pentanone (MIBK) (ug/L)	---	5.0 U	---	---	---	---	---	5.0 U

NOTES: (1) Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.

--- - Not analyzed, NA - Data not available

U - Not Detected, J - Estimated

TOD = 1.5 X CBOD5 + 4.5 X TKN

**Table 1**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Monitoring Requirements and Effluent Data**

Analyte	Effluent 07/16/98	Effluent 07/21/98	Effluent 07/22/98	Effluent 07/23/98	Effluent 07/28/98	Effluent 07/29/98	Effluent 07/30/98	Effluent 08/04/98
Flow (GPD)	19085	19010	---	19160	19060	---	19085	19025
pH (SU)	7.72	7.72	---	7.71	7.71	---	7.72	7.72
Residue, non-filterable (mg/L)	---	---	5 U	---	---	5 U	---	---
Total dissolved solids (TDS) (mg/L)	---	---	1000	---	---	1000	---	---
CBOD5 (mg/L)	---	---	---	---	---	---	---	---
TKN (mg/L)	---	---	---	---	---	---	---	---
TOD (mg/L)	---	---	---	---	---	---	---	---
Dissolved Oxygen (mg/L)	---	---	---	---	---	---	---	---
Aluminum, dissolved (mg/L)	---	---	---	---	---	---	---	---
Antimony, total (mg/L)	---	---	---	---	---	---	---	---
Chromium, total (mg/L)	---	---	---	---	---	---	---	---
Cobalt, total (mg/L)	---	---	---	---	---	---	---	---
Copper, total (mg/L)	---	---	---	---	---	---	---	---
Iron, total (mg/L)	---	---	---	---	---	---	---	---
Lead, total (mg/L)	---	---	---	---	---	---	---	---
Mercury, total (mg/L)	---	---	---	---	---	---	---	---
Nickel, total (mg/L)	---	---	---	---	---	---	---	---
Silver, total (mg/L)	---	---	---	---	---	---	---	---
Vanadium, total (mg/L)	---	---	---	---	---	---	---	---
Zinc, total (mg/L)	---	---	---	---	---	---	---	---
cis-1,2-Dichloroethene (ug/L)	---	---	---	---	---	---	---	---
trans-1,2-Dichloroethene (ug/L)	---	---	---	---	---	---	---	---
Methylene chloride (ug/L)	---	---	---	---	---	---	---	---
1,1,2,2-Tetrachloroethane (ug/L)	---	---	---	---	---	---	---	---
Tetrachloroethene (ug/L)	---	---	---	---	---	---	---	---
Toluene (ug/L)	---	---	---	---	---	---	---	---
Trichloroethene (ug/L)	---	---	---	---	---	---	---	---
Acetone (ug/L)	---	---	---	---	---	---	---	---
2-Hexanone (ug/L)	---	---	---	---	---	---	---	---
4-Methyl-2-pentanone (MIBK) (ug/L)	---	---	---	---	---	---	---	---

NOTES: (1) Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.  
 --- - Not analyzed, NA - Data not available  
 U - Not Detected, J - Estimated  
 TOD = 1.5 X CBOD5 + 4.5 X TKN

**Table 1**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Monitoring Requirements and Effluent Data**

Analyte	Effluent 08/05/98	Effluent 08/06/98	Effluent 08/11/98	Effluent 08/12/98	Effluent 08/13/98	Effluent 08/18/98	Effluent 08/19/98	Effluent 08/20/98
Flow (GPD)	---	18916	18730	---	18489	18605	---	18557
pH (SU)	---	7.71	7.69	---	7.72	7.72	---	7.72
Residue, non-filterable (mg/L)	5 U	---	---	5 U	---	---	5 U	---
Total dissolved solids (TDS) (mg/L)	910	---	---	900	---	---	910	---
CBOD5 (mg/L)	---	---	---	---	---	---	---	---
TKN (mg/L)	---	---	---	---	---	---	---	---
TOD (mg/L)	---	---	---	---	---	---	---	---
Dissolved Oxygen (mg/L)	7.31	---	---	---	---	---	---	---
Aluminum, dissolved (mg/L)	---	---	---	---	---	---	---	---
Antimony, total (mg/L)	---	---	---	---	---	---	---	---
Chromium, total (mg/L)	---	---	---	---	---	---	---	---
Cobalt, total (mg/L)	---	---	---	---	---	---	---	---
Copper, total (mg/L)	---	---	---	---	---	---	---	---
Iron, total (mg/L)	---	---	---	---	---	---	---	---
Lead, total (mg/L)	---	---	---	---	---	---	---	---
Mercury, total (mg/L)	0.0002 U	---	---	---	---	---	0.0002 U	---
Nickel, total (mg/L)	---	---	---	---	---	---	---	---
Silver, total (mg/L)	---	---	---	---	---	---	---	---
Vanadium, total (mg/L)	---	---	---	---	---	---	---	---
Zinc, total (mg/L)	0.09	---	---	---	---	---	0.02	---
cis-1,2-Dichloroethene (ug/L)	0.50 U	---	---	---	---	---	0.50 U	---
trans-1,2-Dichloroethene (ug/L)	0.50 U	---	---	---	---	---	0.50 U	---
Methylene chloride (ug/L)	2.0 U	---	---	---	---	---	2.0 U	---
1,1,2,2-Tetrachloroethane (ug/L)	0.50 U	---	---	---	---	---	0.50 U	---
Tetrachloroethene (ug/L)	0.50 U	---	---	---	---	---	0.50 U	---
Toluene (ug/L)	0.50 U	---	---	---	---	---	0.50 U	---
Trichloroethene (ug/L)	0.50 U	---	---	---	---	---	0.50 U	---
Acetone (ug/L)	10 U	---	---	---	---	---	10 U	---
2-Hexanone (ug/L)	5.0 U	---	---	---	---	---	5.0 U	---
4-Methyl-2-pentanone (MIBK) (ug/L)	5.0 U	---	---	---	---	---	5.0 U	---

NOTES: (1) Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.

--- - Not analyzed, NA - Data not available

U - Not Detected, J - Estimated

TOD = 1.5 X CBOD5 + 4.5 X TKN

**Table 1**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Monitoring Requirements and Effluent Data**

Analyte	Effluent 08/25/98	Effluent 08/26/98	Effluent 08/27/98	Effluent 09/01/98	Effluent 09/02/98	Effluent 09/03/98	Effluent 09/08/98	Effluent 09/09/98
Flow (GPD)	19070	---	18450	18550	---	18443	18336	---
pH (SU)	7.72	---	7.72	7.72	---	7.72	7.72	---
Residue, non-filterable (mg/L)	---	5 U	---	---	5 U	---	---	5 U
Total dissolved solids (TDS) (mg/L)	---	880	---	---	960	---	---	950
CBOD5 (mg/L)	---	---	---	---	---	---	---	---
TKN (mg/L)	---	---	---	---	---	---	---	---
TOD (mg/L)	---	---	---	---	---	---	---	---
Dissolved Oxygen (mg/L)	---	---	---	---	---	10.79	---	---
Aluminum, dissolved (mg/L)	---	---	---	---	---	---	---	---
Antimony, total (mg/L)	---	---	---	---	---	---	---	---
Chromium, total (mg/L)	---	---	---	---	---	---	---	---
Cobalt, total (mg/L)	---	---	---	---	---	---	---	---
Copper, total (mg/L)	---	---	---	---	---	---	---	---
Iron, total (mg/L)	---	---	---	---	---	---	---	---
Lead, total (mg/L)	---	---	---	---	---	---	---	---
Mercury, total (mg/L)	---	---	---	---	0.0002 U	---	---	---
Nickel, total (mg/L)	---	---	---	---	---	---	---	---
Silver, total (mg/L)	---	---	---	---	---	---	---	---
Vanadium, total (mg/L)	---	---	---	---	---	---	---	---
Zinc, total (mg/L)	---	---	---	---	0.02	---	---	---
cis-1,2-Dichloroethene (ug/L)	---	---	---	---	0.50 U	---	---	---
trans-1,2-Dichloroethene (ug/L)	---	---	---	---	0.50 U	---	---	---
Methylene chloride (ug/L)	---	---	---	---	2.0 U	---	---	---
1,1,2,2-Tetrachloroethane (ug/L)	---	---	---	---	0.50 U	---	---	---
Tetrachloroethene (ug/L)	---	---	---	---	0.50 U	---	---	---
Toluene (ug/L)	---	---	---	---	0.50 U	---	---	---
Trichloroethene (ug/L)	---	---	---	---	0.50 U	---	---	---
Acetone (ug/L)	---	---	---	---	10 U	---	---	---
2-Hexanone (ug/L)	---	---	---	---	5.0 U	---	---	---
4-Methyl-2-pentanone (MIBK) (ug/L)	---	---	---	---	5.0 U	---	---	---

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 TOD = 1.5 X CBOD5 + 4.5 X TKN

**Table 1**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Monitoring Requirements and Effluent Data**

Analyte	Effluent 09/10/98	Effluent 09/15/98	Effluent 09/16/98	Effluent 09/17/98	Effluent 09/22/98	Effluent 09/23/98	Effluent 09/24/98	Effluent 09/29/98
Flow (GPD)	18806	17916	---	17710	17860	---	17590	17098
pH (SU)	7.72	7.74	---	7.70	7.72	---	7.74	7.74
Residue, non-filterable (mg/L)	---	---	5 U	---	---	5 U	---	---
Total dissolved solids (TDS) (mg/L)	---	---	940	---	---	1100	---	---
CBOD5 (mg/L)	---	---	---	---	---	---	---	---
TKN (mg/L)	---	---	---	---	---	---	---	---
TOD (mg/L)	---	---	---	---	---	---	---	---
Dissolved Oxygen (mg/L)	---	---	---	---	---	---	---	---
Aluminum, dissolved (mg/L)	---	---	---	---	---	---	---	---
Antimony, total (mg/L)	---	---	---	---	---	---	---	---
Chromium, total (mg/L)	---	---	---	---	---	---	---	---
Cobalt, total (mg/L)	---	---	---	---	---	---	---	---
Copper, total (mg/L)	---	---	---	---	---	---	---	---
Iron, total (mg/L)	---	---	---	---	---	---	---	---
Lead, total (mg/L)	---	---	---	---	---	---	---	---
Mercury, total (mg/L)	---	---	0.0002 U	---	---	---	---	---
Nickel, total (mg/L)	---	---	---	---	---	---	---	---
Silver, total (mg/L)	---	---	---	---	---	---	---	---
Vanadium, total (mg/L)	---	---	---	---	---	---	---	---
Zinc, total (mg/L)	---	---	0.02	---	---	---	---	---
cis-1,2-Dichloroethene (ug/L)	---	---	0.50 U	---	---	---	---	---
trans-1,2-Dichloroethene (ug/L)	---	---	0.50 U	---	---	---	---	---
Methylene chloride (ug/L)	---	---	2.0 U	---	---	---	---	---
1,1,2,2-Tetrachloroethane (ug/L)	---	---	0.50 U	---	---	---	---	---
Tetrachloroethene (ug/L)	---	---	0.50 U	---	---	---	---	---
Toluene (ug/L)	---	---	0.50 U	---	---	---	---	---
Trichloroethene (ug/L)	---	---	0.50 U	---	---	---	---	---
Acetone (ug/L)	---	---	10 U	---	---	---	---	---
2-Hexanone (ug/L)	---	---	5.0 U	---	---	---	---	---
4-Methyl-2-pentanone (MIBK) (ug/L)	---	---	5.0 U	---	---	---	---	---

NOTES: (1) Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.  
 --- - Not analyzed, NA - Data not available  
 U - Not Detected, J - Estimated  
 TOD = 1.5 X CBOD5 + 4.5 X TKN

**Table 1**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Monitoring Requirements and Effluent Data**

Analyte	Effluent 09/30/98	Effluent 10/01/98	Effluent 10/06/98	Effluent 10/07/98	Effluent 10/08/98	Effluent 10/13/98	Effluent 10/14/98	Effluent 10/15/98
Flow (GPD)	---	16860	16268	---	16200	16020	---	16020
pH (SU)	---	7.74	7.76	---	7.74	7.76	---	7.76
Residue, non-filterable (mg/L)	5 U	---	---	5 U	---	---	5 U	---
Total dissolved solids (TDS) (mg/L)	900	---	---	990	---	---	1100	---
CBOD5 (mg/L)	---	---	---	5 U	---	---	---	---
TKN (mg/L)	---	---	---	0.4 U	---	---	---	---
TOD (mg/L)	---	---	---	9.3 U	---	---	---	---
Dissolved Oxygen (mg/L)	---	---	---	10.44	---	---	---	---
Aluminum, dissolved (mg/L)	---	---	---	0.1 U	---	---	---	---
Antimony, total (mg/L)	---	---	---	0.06 U	---	---	---	---
Chromium, total (mg/L)	---	---	---	0.01 U	---	---	---	---
Cobalt, total (mg/L)	---	---	---	0.01 U	---	---	---	---
Copper, total (mg/L)	---	---	---	0.03	---	---	---	---
Iron, total (mg/L)	---	---	---	0.05 U	---	---	---	---
Lead, total (mg/L)	---	---	---	0.005 U	---	---	---	---
Mercury, total (mg/L)	---	---	---	0.0002 U	---	---	---	---
Nickel, total (mg/L)	---	---	---	0.05 U	---	---	---	---
Silver, total (mg/L)	---	---	---	0.01 U	---	---	---	---
Vanadium, total (mg/L)	---	---	---	0.03 U	---	---	---	---
Zinc, total (mg/L)	---	---	---	0.04	---	---	---	---
cis-1,2-Dichloroethene (ug/L)	---	---	---	0.50 U	---	---	---	---
trans-1,2-Dichloroethene (ug/L)	---	---	---	0.50 U	---	---	---	---
Methylene chloride (ug/L)	---	---	---	2.0 U	---	---	---	---
1,1,2,2-Tetrachloroethane (ug/L)	---	---	---	0.50 U	---	---	---	---
Tetrachloroethene (ug/L)	---	---	---	0.50 U	---	---	---	---
Toluene (ug/L)	---	---	---	0.50 U	---	---	---	---
Trichloroethene (ug/L)	---	---	---	0.50 U	---	---	---	---
Acetone (ug/L)	---	---	---	10 U	---	---	---	---
2-Hexanone (ug/L)	---	---	---	5.0 U	---	---	---	---
4-Methyl-2-pentanone (MIBK) (ug/L)	---	---	---	5.0 U	---	---	---	---

NOTES: (1) Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.

--- - Not analyzed, NA - Data not available

U - Not Detected, J - Estimated

TOD = 1.5 X CBOD5 + 4.5 X TKN

**Table 1**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Monitoring Requirements and Effluent Data**

Analyte	Effluent 10/20/98	Effluent 10/21/98	Effluent 10/22/98	Effluent 10/27/98	Effluent 10/28/98	Effluent 10/29/98	Effluent 11/03/98	Effluent 11/04/98
Flow (GPD)	15740	---	15550	15280	---	15510	14922	---
pH (SU)	7.76	---	7.74	7.76	---	7.76	7.76	---
Residue, non-filterable (mg/L)	---	5 U	---	---	5 U	---	---	5 U
Total dissolved solids (TDS) (mg/L)	---	1000	---	---	1000	---	---	980
CBOD5 (mg/L)	---	---	---	---	---	---	---	---
TKN (mg/L)	---	---	---	---	---	---	---	---
TOD (mg/L)	---	---	---	---	---	---	---	---
Dissolved Oxygen (mg/L)	---	---	---	---	---	---	---	9.38
Aluminum, dissolved (mg/L)	---	---	---	---	---	---	---	---
Antimony, total (mg/L)	---	---	---	---	---	---	---	---
Chromium, total (mg/L)	---	---	---	---	---	---	---	---
Cobalt, total (mg/L)	---	---	---	---	---	---	---	---
Copper, total (mg/L)	---	---	---	---	---	---	---	---
Iron, total (mg/L)	---	---	---	---	---	---	---	---
Lead, total (mg/L)	---	---	---	---	---	---	---	---
Mercury, total (mg/L)	---	0.0002 U	---	---	---	---	---	0.0002 U
Nickel, total (mg/L)	---	---	---	---	---	---	---	---
Silver, total (mg/L)	---	---	---	---	---	---	---	---
Vanadium, total (mg/L)	---	---	---	---	---	---	---	---
Zinc, total (mg/L)	---	0.02	---	---	---	---	---	0.04
cis-1,2-Dichloroethene (ug/L)	---	0.50 U	---	---	---	---	---	0.50 U
trans-1,2-Dichloroethene (ug/L)	---	0.50 U	---	---	---	---	---	0.50 U
Methylene chloride (ug/L)	---	2.0 U	---	---	---	---	---	2.0 U
1,1,2,2-Tetrachloroethane (ug/L)	---	0.50 U	---	---	---	---	---	0.50 U
Tetrachloroethene (ug/L)	---	0.50 U	---	---	---	---	---	0.50 U
Toluene (ug/L)	---	0.50 U	---	---	---	---	---	0.50 U
Trichloroethene (ug/L)	---	0.50 U	---	---	---	---	---	0.50 U
Acetone (ug/L)	---	10 U	---	---	---	---	---	10 U
2-Hexanone (ug/L)	---	5.0 U	---	---	---	---	---	5.0 U
4-Methyl-2-pentanone (MIBK) (ug/L)	---	5.0 U	---	---	---	---	---	5.0 U

NOTES: (1) Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.

--- - Not analyzed, NA - Data not available

U - Not Detected, J - Estimated

TOD = 1.5 X CBOD5 + 4.5 X TKN



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**Table 1**  
**Accurate Die Casting Site**  
**Fayetteville, New York**

**Monitoring Requirements and Effluent Data**

Analyte	Effluent 11/05/98	Effluent 11/10/98	Effluent 11/11/98	Effluent 11/12/98	Effluent 11/17/98	Effluent 11/18/98	Effluent 11/19/98	Effluent 11/24/98
Flow (GPD)	14780	14410	8	14230	14110	5 U	13940	13690
pH (SU)	7.74	7.81	1300	7.90	7.90	1000	7.85	7.79
Residue, non-filterable (mg/L)	--	--	--	--	--	--	--	5 U
Total dissolved solids (TDS) (mg/L)	--	--	--	--	--	--	--	1100
CBOD5 (mg/L)	--	--	--	--	--	--	--	--
TKN (mg/L)	--	--	--	--	--	--	--	--
TOD (mg/L)	--	--	--	--	--	--	--	--
Dissolved Oxygen (mg/L)	--	--	--	--	--	--	0.0002 U	--
Aluminum, dissolved (mg/L)	--	--	--	--	--	--	0.02	--
Aluminum, total (mg/L)	--	--	--	--	--	--	0.50 U	--
Antimony, total (mg/L)	--	--	--	--	--	--	0.50 U	--
Chromium, total (mg/L)	--	--	--	--	--	--	2.0 U	--
Cobalt, total (mg/L)	--	--	--	--	--	--	0.50 U	--
Copper, total (mg/L)	--	--	--	--	--	--	0.50 U	--
Iron, total (mg/L)	--	--	--	--	--	--	0.50 U	--
Lead, total (mg/L)	--	--	--	--	--	--	0.50 U	--
Mercury, total (mg/L)	--	--	--	--	--	--	0.50 U	--
Nickel, total (mg/L)	--	--	--	--	--	--	0.50 U	--
Silver, total (mg/L)	--	--	--	--	--	--	10 U	--
Nickel, total (mg/L)	--	--	--	--	--	--	5.0 U	--
Vanadium, total (mg/L)	--	--	--	--	--	--	5.0 U	--
Zinc, total (mg/L)	--	--	--	--	--	--	5.0 U	--
cis-1,2-Dichloroethene (ug/L)	--	--	--	--	--	--	--	--
trans-1,2-Dichloroethene (ug/L)	--	--	--	--	--	--	--	--
Methylene chloride (ug/L)	--	--	--	--	--	--	--	--
1,1,2,2-Tetrachloroethane (ug/L)	--	--	--	--	--	--	--	--
Tetrachloroethene (ug/L)	--	--	--	--	--	--	--	--
Toluene (ug/L)	--	--	--	--	--	--	--	--

**Table 1**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Monitoring Requirements and Effluent Data**

Analyte	Effluent 12/01/98	Effluent 12/02/98	Effluent 12/03/98	Effluent 12/08/98	Effluent 12/09/98	Effluent 12/10/98	Effluent 12/15/98	Effluent 12/16/98
Flow (GPD)	13363	---	13325	13120	---	13080	12800	---
pH (SU)	7.81	---	7.85	7.81	---	7.81	7.81	---
Residue, non-filterable (mg/L)	---	5 U	---	---	5 U	---	---	5 U
Total dissolved solids (TDS) (mg/L)	---	1100	---	---	1100	---	---	1000
CBOD5 (mg/L)	---	---	---	---	---	---	---	---
TKN (mg/L)	---	---	---	---	---	---	---	---
TOD (mg/L)	---	---	---	---	---	---	---	---
Dissolved Oxygen (mg/L)	---	9.25	---	---	---	---	---	---
Aluminum, dissolved (mg/L)	---	---	---	---	---	---	---	---
Antimony, total (mg/L)	---	---	---	---	---	---	---	---
Chromium, total (mg/L)	---	---	---	---	---	---	---	---
Cobalt, total (mg/L)	---	---	---	---	---	---	---	---
Copper, total (mg/L)	---	---	---	---	---	---	---	---
Iron, total (mg/L)	---	---	---	---	---	---	---	---
Lead, total (mg/L)	---	---	---	---	---	---	---	---
Mercury, total (mg/L)	---	0.0002 U	---	---	---	---	---	0.0002 U
Nickel, total (mg/L)	---	---	---	---	---	---	---	---
Silver, total (mg/L)	---	---	---	---	---	---	---	---
Vanadium, total (mg/L)	---	---	---	---	---	---	---	---
Zinc, total (mg/L)	---	0.01 U	---	---	---	---	---	0.01
cis-1,2-Dichloroethene (ug/L)	---	0.50 U	---	---	---	---	---	0.50 U
trans-1,2-Dichloroethene (ug/L)	---	0.50 U	---	---	---	---	---	0.50 U
Methylene chloride (ug/L)	---	2.0 U	---	---	---	---	---	2.0 U
1,1,2,2-Tetrachloroethane (ug/L)	---	0.50 U	---	---	---	---	---	0.50 U
Tetrachloroethene (ug/L)	---	0.50 U	---	---	---	---	---	0.50 U
Toluene (ug/L)	---	0.50 U	---	---	---	---	---	0.50 U
Trichloroethene (ug/L)	---	0.50 U	---	---	---	---	---	0.50 U
Acetone (ug/L)	---	10 U	---	---	---	---	---	10 U
2-Hexanone (ug/L)	---	5.0 U	---	---	---	---	---	5.0 U
4-Methyl-2-pentanone (MIBK) (ug/L)	---	5.0 U	---	---	---	---	---	5.0 U

NOTES: (1) Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.

--- - Not analyzed, NA - Data not available

U - Not Detected, J - Estimated

TOD = 1.5 X CBOD5 + 4.5 X TKN

**Table 1**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Monitoring Requirements and Effluent Data**

Analyte	Effluent	Effluent	Effluent	Effluent	Effluent
	12/17/98	12/21/98	12/23/98	12/29/98	12/31/98
Flow (GPD)	12720	12563	12830	12700	12590
pH (SU)	7.81	7.81	7.81	7.78	7.82
Residue, non-filterable (mg/L)	---	---	5 U	---	---
Total dissolved solids (TDS) (mg/L)	---	---	1100	---	---
CBOD5 (mg/L)	---	---	---	---	---
TKN (mg/L)	---	---	---	---	---
TOD (mg/L)	---	---	---	---	---
Dissolved Oxygen (mg/L)	---	---	---	---	---
Aluminum, dissolved (mg/L)	---	---	---	---	---
Antimony, total (mg/L)	---	---	---	---	---
Chromium, total (mg/L)	---	---	---	---	---
Cobalt, total (mg/L)	---	---	---	---	---
Copper, total (mg/L)	---	---	---	---	---
Iron, total (mg/L)	---	---	---	---	---
Lead, total (mg/L)	---	---	---	---	---
Mercury, total (mg/L)	---	---	---	---	---
Nickel, total (mg/L)	---	---	---	---	---
Silver, total (mg/L)	---	---	---	---	---
Vanadium, total (mg/L)	---	---	---	---	---
Zinc, total (mg/L)	---	---	---	---	---
cis-1,2-Dichloroethene (ug/L)	---	---	---	---	---
trans-1,2-Dichloroethene (ug/L)	---	---	---	---	---
Methylene chloride (ug/L)	---	---	---	---	---
1,1,2,2-Tetrachloroethane (ug/L)	---	---	---	---	---
Tetrachloroethene (ug/L)	---	---	---	---	---
Toluene (ug/L)	---	---	---	---	---
Trichloroethene (ug/L)	---	---	---	---	---
Acetone (ug/L)	---	---	---	---	---
2-Hexanone (ug/L)	---	---	---	---	---
4-Methyl-2-pentanone (MIBK) (ug/L)	---	---	---	---	---

NOTES: (1) Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.  
 --- - Not analyzed, NA - Data not available  
 U - Not Detected, J - Estimated  
 TOD = 1.5 X CBOD5 + 4.5 X TKN

FILE



**O'BRIEN & GERE**  
ENGINEERS, INC.

February 25, 1999

Mr. David Crosby, P.E.  
Bureau of Construction Services  
Division of Hazardous Waste Remediation  
New York State Department of Environmental Conservation  
50 Wolf Road  
Albany, NY 12233-7010

Re: Annual Report  
Former Accurate Die Casting Site  
Fayetteville, New York

File: 2488.731 #5

Dear Mr. Crosby:

This letter presents the Annual Report for the ground water recovery and treatment system (System) at the former Accurate Die Casting site located at 547 East Genesee Street in the Village of Fayetteville, New York (Figure 1). The System was constructed in 1995 to recover and treat overburden and shallow bedrock ground water exhibiting volatile organic compounds (VOCs) in accordance with the Consent Order between the New York State Department of Environmental Conservation (NYSDEC) and ITT Commercial Finance Corporation dated August 19, 1991, as amended June 6, 1994. The System has been operating since February 5, 1996.

The purpose of this report is to present a summary and evaluation of the data collected between December 1, 1997 and December 1, 1998. These data include monitoring and recovery well data as well as System performance information generated in accordance with the NYSDEC-approved Sampling and Analysis Plan (SAP) dated March 1996 and the State Pollutant Discharge Elimination System (SPDES) Permit #734052.

This report is divided into six sections as follows:

1. Project background
2. System performance
3. Ground water monitoring
4. Ground water quality assessment
5. Conclusions
6. Recommendations



## **1. PROJECT BACKGROUND**

Presented below is background information regarding the remedial investigation (RI) for the site, remediation activities completed to date, and information regarding the ground water recovery and treatment system.

### ***Remediation investigation:***

As a result of the RI and additional studies conducted for the former Accurate Die Casting site, the NYSDEC identified five areas which could pose an unacceptable risk to human health if not remediated. The five areas identified in the December 1994 Record of Decision (ROD) are as follows:

- Area 1 - An area of soils containing polychlorinated biphenyls (PCBs), polycyclic aromatic hydrocarbons (PAHs), and VOCs. This area is also referred to as the PCB/PAH/VOC Soils Area and its location is shown on Figure 2.
- Area 2 - An area where soils contained trichloroethylene (TCE) located outside the northeast corner of the former Accurate Die Casting facility as shown on Figure 2.
- Area 3 - Overburden ground water containing TCE above NYSDEC ground water quality standards.
- Area 4 - Shallow bedrock ground water containing TCE above NYSDEC ground water quality standards.
- Area 5 - An abandoned septic tank, located as shown on Figure 2, containing sludge exhibiting concentrations of zinc above NYSDEC standards.

### ***Remediation activities completed:***

- Area 1 - Unsaturated soils exhibiting concentrations of PAHs, PCBs and VOCs above remedial action objectives (RAOs) in the northwest area of the site were excavated during September and October 1995. After excavating approximately 600 cy of soil, grab samples were collected from the excavations and analyzed for PAHs, VOCs and PCBs to evaluate if further action was required. Based on the results of the sampling and analyses, it was concluded that the unsaturated soils containing PAHs, PCBs and VOCs above the RAOs had been removed to the extent practicable.

In 1997, approximately 350 cy of the 600 cy of excavated soil was removed from the site and transported to the ESMI facility in Fort Edward, New York for low temperature thermal destruction and subsequent off-site disposal. The remaining 250 cy of soil was mechanically processed on-site to enhance volatilization of VOCs in accordance with the ROD amendment issued in October 1997.

In April 1998, following analyses that indicated that the RAOs had been achieved, the 250 cy of mechanically processed soils were spread on-site in the Corrective Action Management Unit (CAMU) identified in the ROD amendment. In accordance with the NYSDEC requirements, approximately 1 foot of general fill, topsoil, and grass seed was placed on top of the processed soils.

Pursuant to ESD Notice, in August 1998 construction plans for the installation of a ground water collection trench to collect ground water containing VOCs in Area 1 were submitted to the NYSDEC for review. The proposed location of the collection trench is shown on Figure 2. Pursuant to an Explanation of Significant Differences (ESD) notice dated October 1998, the plans were approved with modifications. Completion of construction activities will occur in 1999. Collected ground water will be treated at the existing on-site treatment system.

Area 2 - The area outside the northeast corner of the facility was addressed as part of an Interim Remedial Measure (IRM) between May 24 and June 22, 1994. During that period, soils exhibiting TCE above the RAO of 0.7 mg/kg were removed, to the extent practicable. Afterwards, the soil was mechanically processed on-site to enhance volatilization of the VOCs until residual levels were documented to be below the RAOs. Following achievement of the RAOs, the soils were used to backfill the excavation. A description of the soil remediation activities completed in this area is provided in the NYSDEC-approved Soil Remediation Activities Summary Report dated October 1994.

Area 3 - As part of the IRM which addressed the soils outside the northeast corner of the facility, a ground water collection sump was constructed within the excavation (Figure 2). The sump extends to the clay layer which was found to be present at the base of the excavation made during the soil remediation activities. This sump is being utilized as one of the ground water recovery points for the ground water recovery and treatment system constructed at the Site to address the shallow/overburden ground water.

Also, an overburden recovery well designated as RW-1 (Figure 2) was constructed on-site as part of the IRM. A 24-hour aquifer performance test was conducted using this recovery well on September 28 and 29, 1994 to evaluate the overburden aquifer characteristics and to assess the influence of pumping on the overburden aquifer. The results of the performance test are provided in the NYSDEC-approved Basis of Design Report for the System dated December 1994. This recovery well is being utilized to collect ground water containing TCE in the overburden aquifer downgradient of the northeast corner of the facility.

Recovery and treatment of overburden ground water using the sump and RW-1 has been ongoing since February 5, 1996 and is continuing.

Area 4 - A second ground water recovery well, designated as RW-2, is being utilized on-site to recover ground water containing VOCs from the shallow bedrock in the vicinity of the northeast corner of the facility (Figure 2). This well was installed between September 5 and 18, 1995, in accordance with the NYSDEC-approved Remedial Design/Remedial Action (RD/RA) Work

Plan dated March 1995 and the letter from O'Brien & Gere dated May 26, 1995, as amended on July 17, 1995. An aquifer performance test was conducted using this recovery well between November 7 and 13, 1995. The results of the performance test were provided to the NYSDEC in a letter report dated January 12, 1996.

Recovery and treatment of shallow bedrock ground water using RW-2 was initiated on February 5, 1996 and is continuing.

Area 5 - During 1995, the septic tank was uncovered and the contents were removed and disposed of at an off-site NYSDEC-approved landfill. Once the contents were removed, the walls of the septic tank were cleaned using a pressure-washer. The spent washing liquid was collected and treated on-site using the ground water treatment system. Subsequent to decontaminating the floor and walls of the septic tank, the concrete vault was filled and buried, completing remediation of this area.

***Ground water recovery and treatment system:***

The ground water recovery and treatment system is currently recovering ground water from the sump, RW-1, and RW-2. Upon completion, water collected by the ground water collection trench will also be treated at the on-site treatment system. Ground water collection and treatment will continue until VOC levels in the ground water are below NYSDEC ground water quality standards, or until such a time that asymptotic levels have been achieved and further reduction in VOC levels in ground water is not practicable.

The ground water recovered from the sump and the two recovery wells is being treated through two 1,500 lb granular activated carbon (GAC) vessels, connected in series, in accordance with the Basis of Design Report dated December 1994. Prior to being pumped through the GAC filters, the ground water from each of the individual recovery wells is combined in a 2,000 gallon flow equalization tank and pumped through two 10-micron bag filters connected in parallel.

A flow meter for each recovery well is provided on the influent lines to the equalization tank. The tank is also equipped to be used as an aeration tank to pretreat the recovered ground water for VOCs prior to GAC filtration, if necessary.

Following treatment by the GAC, the treated ground water is discharged to the bank of Bishop Brook, as shown on Figure 2, to increase dissolved oxygen levels of the effluent prior to entering the brook. Discharge of treated ground water to Bishop Brook is monitored for compliance with the conditions of the SPDES Permit as discussed in the Operation and Maintenance (O&M) Manual dated August 1996.

**2. SYSTEM PERFORMANCE**

Operation of the ground water recovery and treatment system was initiated on February 5, 1996. The System has run continuously since start-up with the exception of brief periods when maintenance activities were performed. Between December 1, 1997 and December 1, 1998, a total of 6,856,820 gallons of ground water were

recovered and treated. A summary of the quantity of water pumped each month and the percentage of the total flow contribution from each recovery well and the sump is presented in the following table:

Month	RW-1		RW-2		Sump		Total Gallons
December 1997	357,600	80%	91,530	20%	100	<1%	449,230
January 1998	404,000	70%	161,680	28%	10,070	2%	574,750
February 1998	402,280	67%	193,830	32%	1,970	<1%	598,080
March 1998	459,890	66%	231,590	33%	5,130	1%	696,610
April 1998	437,440	66%	224,560	34%	150	<1%	662,150
May 1998	410,630	67%	203,400	33%	720	<1%	614,750
June 1998	347,060	65%	182,710	34%	2,650	<1%	532,420
July 1998	377,460	63%	215,240	36%	3,350	1%	596,050
August 1998	363,980	63%	212,450	37%	3,230	1%	579,660
September 1998	343,380	64%	190,140	35%	2,850	1%	536,370
October 1998	332,860	69%	146,430	30%	1,090	<1%	480,380
November 1998	343,380	64%	190,140	35%	2,850	1%	536,370
Total	4,578,960	67%	2,243,700	33%	34,160	<1%	6,856,820

Source: O'Brien & Gere Technical Services

A graph depicting the total monthly volumes recovered and treated since startup is presented in Attachment 1. As indicated from the graph, the monthly volumes have been decreasing since the 3rd quarter 1997. The decrease may be attributed to the decrease in the efficiency of the recovery well RW-1 which is discussed further under *Ground Water Elevation Assessment* in Section 3 of this report.

***Treatment system performance monitoring:***

System monitoring has been performed in accordance with the SPDES Fact Sheet (#734052) permit as last modified by the NYSDEC on November 13, 1997, and the SAP as modified by a letter to the NYSDEC dated April 1, 1997. In addition to the SPDES monitoring requirements for the System effluent, the ground water monitoring program includes a monthly System influent sample for VOCs analysis to enable an evaluation of the VOC loading of the GAC. A sample is also collected between the lead and lag GAC vessels (intermediate sample) monthly for VOCs analysis to enable an evaluation of breakthrough through the lead GAC vessel. The monthly System influent and intermediate samples are analyzed for VOCs using EPA Method 8010/8020, and the effluent samples are analyzed for VOCs using EPA Method 8260. The current monitoring requirements of the SPDES permit, including the discharge limitation daily average, the discharge limitation daily maximum, the minimum measurement frequency, and the sample type for each analyte, are presented on Table 1 along with the results of analyses. Based on the treatment system effluent monitoring data, the System is treating recovered ground water in accordance with the ROD.

To date, TCE has been the only compound detected in the influent. A graph showing monthly influent TCE concentrations is included in Attachment 2. As indicated on the graph, influent TCE concentrations have generally decreased since the commencement of recovery operations. Based on the total monthly gallons recovered and monthly influent TCE concentrations, approximately 243 lbs of TCE has been removed from ground water since the commencement of ground water treatment system operations.

***Treatment system maintenance activities:***

The treatment system maintenance activities have included the periodic replacement of spent GAC and the replacement of bag filters. Spent carbon was shipped as hazardous waste to Calgon Corp. in Catlesburg, KY for reactivation.

A summary of maintenance activities for the reporting period is provided below.

- January 6, 1998 Changed west bag filter.
- February 3, 1998 Changed east bag filter.
- March 2, 1998 Replaced carbon in GAC #1 and adjusted valve positions to put GAC #2 in the lead position.
- May 15, 1998 Changed west bag filter. More silt accumulation observed.
- May 26, 1998 Replaced blown fuse in RW-2 power supply.
- June 2, 1998 Replaced carbon in GAC #2 and adjusted valve positions to put GAC #1 in the lead position.
- August 17, 1998 Changed west bag filter.
- November 9, 1998 Replaced carbon in GAC #1 and adjusted valve positions to put GAC #2 in the lead position. Replaced the east bag filter.

**3. GROUND WATER MONITORING**

Ground water quality monitoring was completed in April and October 1998. The purpose of the ground water monitoring program is to:

- evaluate the zone of capture for the overburden (RW-1) and bedrock (RW-2) recovery wells
- assess the volatile organic compound (VOC) concentrations within the overburden and bedrock ground water, and assess when the criteria for discontinuing pumping have been met
- monitor and assess ground water quality in the PCB/PAH/VOC Soils Area

On November 5, 1998, at the request of the NYSDEC, ITT Industries installed a shallow ground water monitoring well (MW-24) downgradient of existing well MW-21 and the proposed ground water collection trench location in the vicinity of the PCB/PAH/VOC Soils Area. The locations of MW-24 as well as the proposed ground water collection trench are shown on Figure 2.

### **Ground Water Elevation Assessment**

Ground water elevation monitoring was performed during each semi-annual sampling event in April and October 1998 to assess the extent of influence attributable to pumping the overburden (RW-1) and shallow bedrock (RW-2) ground water recovery wells, as well as seasonal influences. The well construction details and ground water elevations measured through October 1998 are summarized in Table 2. Overburden and bedrock ground water elevations and drawdown measured since startup through October 1998 are illustrated on graphs included in Attachment 2.

Seasonal elevation fluctuations depicted on the ground water elevation graphs are consistent with previous data. Review of the bedrock drawdown graphs (Attachment 2) indicated that the drawdown in the bedrock aquifer is consistent with previous results.

Review of the overburden drawdown graphs (Attachment 2) shows an increasing difference in drawdown between recovery well RW-1 and the overburden aquifer monitoring wells. The increasing difference indicates that the recovery well may be becoming less efficient. The apparent reduced recovery well efficiency would result in a reduced area of drawdown, and subsequently a reduced capture zone within the overburden aquifer. The reduced recovery well efficiency may likely be due to clogging and/or encrustation in the recovery well screen. The recovery well efficiency should be restored through physical and potentially chemical redevelopment techniques to reduce encrustation in the recovery well screen.

A capture zone assessment based on ground water elevation contours for October 1998 (Figure 3) was not attempted due to the apparent inefficiency of recovery well RW-1. As indicated in the first Annual Report dated February 5, 1997, it was estimated that the extent of ground water capture around RW-1 in the overburden aquifer ranges between a distance of 100 ft under low ground water elevation conditions, and 150 ft under high conditions.

Overburden ground water elevation data in the PAH/VOC/PCB Soils Area was not included in the ground water contour because the wells in this area screen a shallow aquifer unit that is hydrogeologically distinct from the unit screened by the remaining site overburden monitoring wells. However, shallow ground water flow direction in the PAH/VOC/PCB Soils Area is north, towards Bishop Brook, based on the ground water elevations in this vicinity.

### **Ground Water Quality Assessment**

Ground water samples were collected in accordance with the NYSDEC-approved SAP dated March 1996 and analyzed for VOCs to evaluate ground water quality. Table 3 presents a summary of TCE concentrations and

Table 4 presents a summary of other VOCs detected in the ground water. Graphs depicting TCE concentration trends are included in Attachment 3.

The following observations are based on the data:

- The TCE concentrations in site ground water exhibit seasonal variations with higher TCE concentrations observed during the months with low ground water elevation (July and October), and lower TCE concentrations observed during the months with higher ground water elevation (January and April).
- TCE concentrations in well MW-9 exhibit a higher seasonal variation since the commencement of ground water recovery. TCE concentrations in well MW-14 exhibit an overall uptrend since the commencement of ground water quality monitoring. TCE concentrations in MW-12 exhibit a decrease. Concentrations in MW-5 and MW-13 have remained consistent with previous data.
- TCE concentrations in MW-6, PZ-1, and PZ-2 have decreased since the commencement of ground water recovery operations which demonstrates that recovery well RW-1 is reducing downgradient migration.
- TCE concentrations in the PAH/VOC/PCB Soils Area are consistent with previous data. Concentrations in MW-22 have increased since monitoring has commenced, but appear to have stabilized. Constituents detected in well MW-24 included cis, 1,2-Dichloroethylene at 2,600 ppb and trichloroethylene at 6,000 ppb. It is expected that the concentrations in MW-24 will decrease subsequent to the installation of the ground water collection trench.
- TCE concentrations in the bedrock aquifer have stabilized since 1997.

## 5. CONCLUSIONS

Below is a summary of observations based on the data presented herein.

1. An additional 6,856,820 gallons of combined overburden and bedrock ground water has been recovered and treated between December 1, 1997 and December 1, 1998. The monthly ground water recovery volumes have been decreasing since the 3rd quarter 1997. The decrease may be attributed to a decrease in the efficiency of the recovery well.
2. Based on the treatment system effluent monitoring data, the GAC vessels are treating recovered ground water in accordance with the ROD.
3. The extent of ground water capture in the overburden aquifer is likely reduced due to the reduced efficiency of recovery well RW-1.
4. Ground water quality data trends continue to suggest seasonal variations with higher TCE concentrations typically noted in the months with low ground water elevation (July and October) and lower TCE concentrations in months with higher ground water elevation (January and April).

Mr. David Crosby, P.E.  
February 25, 1999  
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## 6. RECOMMENDATIONS

Following are recommendations based on the results of monitoring performed between December 1997 and December 1, 1998.

1. Ground water quality monitoring should continue to be performed on an annual basis in accordance with the SAP for all the existing monitoring wells on site during October. On a semi-annual basis, during the month of April, ground water samples should continue to be collected from monitoring wells MW-6, MW-9, MW-10, MW-11, MW-14, MW-17, MW-18, MW-19, MW-21, MW-22, MW-24, and the sump in accordance with the May 21, 1997 letter to the NYSDEC and the protocol presented in the SAP.
2. Recovery well RW-1 should be redeveloped to reduce encrustation in the recovery well screen and increase well efficiency.

If you have any questions regarding the information presented herein, please do not hesitate to call Al Farrell or me.

Very truly yours,

O'BRIEN & GERE ENGINEERS, INC.



James R. Heckathorne, P.E.  
Vice President

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**Table 1**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Monitoring Requirements and Effluent Data**

Analyte (units)	Monitoring Requirements				Effluent	Effluent	Effluent	Effluent
	Discharge Limitation Daily Average	Discharge Limitation Daily Maximum	Minimum Measurement Frequency(1)	Sample Type	11/04/97	11/05/97	11/06/97	11/11/97
Flow (GPD)	Monitor	150000	Continuous	Meter	15433	---	15450	15550
pH (SU)	6.5 - 8.5		2/Week	Grab	7.56	---	7.54	7.56
Residue, non-filterable (mg/L)	Monitor	20	Weekly	3-hr comp.	---	5 U	---	---
Total dissolved solids (TDS) (mg/L)	Monitor	Monitor	Weekly	3-hr comp.	---	1100	---	---
CBOD5 (mg/L)	Monitor	Monitor	Quarterly	3-hr comp.	---	---	---	---
TKN (mg/L)	Monitor	Monitor	Quarterly	3-hr comp.	---	---	---	---
TOD (mg/L)	Monitor	15	Quarterly	Calculated	---	---	---	---
Dissolved Oxygen (mg/L)	Monitor	7 Min.	Quarterly	Grab	---	---	---	---
Aluminum, dissolved (mg/L)	Monitor	0.2	Quarterly	3-hr comp.	---	---	---	---
Antimony, total (mg/L)	Monitor	0.1	Quarterly	3-hr comp.	---	---	---	---
Chromium, total (mg/L)	Monitor	0.5	Quarterly	3-hr comp.	---	---	---	---
Cobalt, total (mg/L)	Monitor	0.01	Quarterly	3-hr comp.	---	---	---	---
Copper, total (mg/L)	Monitor	0.1	Quarterly	3-hr comp.	---	---	---	---
Iron, total (mg/L)	Monitor	0.3	Quarterly	3-hr comp.	---	---	---	---
Lead, total (mg/L)	Monitor	0.02	Quarterly	3-hr comp.	---	---	---	---
Mercury, total (mg/L)	Monitor	0.0008	2/Month	3-hr comp.	---	0.0002 U	---	---
Nickel, total (mg/L)	Monitor	0.2	Quarterly	3-hr comp.	---	---	---	---
Silver, total (mg/L)	Monitor	0.1	Quarterly	3-hr comp.	---	---	---	---
Vanadium, total (mg/L)	Monitor	0.03	Quarterly	3-hr comp.	---	---	---	---
Zinc, total (mg/L)	Monitor	0.3	2/Month	3-hr comp.	---	0.02	---	---
cis-1,2-Dichloroethene (ug/L)	Monitor	10	2/Month	Grab	---	0.50 U	---	---
trans-1,2-Dichloroethene (ug/L)	Monitor	10	2/Month	Grab	---	0.50 U	---	---
Methylene chloride (ug/L)	Monitor	50	2/Month	Grab	---	2.0 U	---	---
1,1,2,2-Tetrachloroethane (ug/L)	Monitor	30	2/Month	Grab	---	0.50 U	---	---
Tetrachloroethene (ug/L)	Monitor	20	2/Month	Grab	---	0.50 U	---	---
Toluene (ug/L)	Monitor	20	2/Month	Grab	---	0.50 U	---	---
Trichloroethene (ug/L)	Monitor	10	2/Month	Grab	---	0.50 U	---	---
Acetone (ug/L)	Monitor	1000	2/Month	Grab	---	10 U	---	---
2-Hexanone (ug/L)	Monitor	1000	2/Month	Grab	---	5.0 U	---	---
4-Methyl-2-pentanone (MIBK) (ug/L)	Monitor	1000	2/Month	Grab	---	5.0 U	---	---

NOTES: (1) Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.

--- - Not analyzed, NA - Data not available

U - Not Detected, J - Estimated

TOD = 1.5 X CBOD5 + 4.5 X TKN

**Table 1**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Monitoring Requirements and Effluent Data**

Analyte	Effluent 11/12/97	Effluent 11/13/97	Effluent 11/18/97	Effluent 11/19/97	Effluent 11/20/97	Effluent 11/25/97	Effluent 12/02/97	Effluent 12/03/97
Flow (GPD)	---	15530	15683	---	15631	15400	15300	---
pH (SU)	---	7.56	7.54	---	7.54	7.56	7.56	---
Residue, non-filterable (mg/L)	5 U	---	---	5 U	---	5 U	---	5 U
Total dissolved solids (TDS) (mg/L)	1100	---	---	1100	---	1200	---	1100
CBOD5 (mg/L)	---	---	---	---	---	---	---	---
TKN (mg/L)	---	---	---	---	---	---	---	---
TOD (mg/L)	---	---	---	---	---	---	---	---
Dissolved Oxygen (mg/L)	---	---	7.7	---	---	---	---	---
Aluminum, dissolved (mg/L)	---	---	---	---	---	---	---	---
Antimony, total (mg/L)	---	---	---	---	---	---	---	---
Chromium, total (mg/L)	---	---	---	---	---	---	---	---
Cobalt, total (mg/L)	---	---	---	---	---	---	---	---
Copper, total (mg/L)	---	---	---	---	---	---	---	---
Iron, total (mg/L)	---	---	---	---	---	---	---	---
Lead, total (mg/L)	---	---	---	---	---	---	---	---
Mercury, total (mg/L)	---	---	---	0.0002 U	---	---	---	0.0002 U
Nickel, total (mg/L)	---	---	---	---	---	---	---	---
Silver, total (mg/L)	---	---	---	---	---	---	---	---
Vanadium, total (mg/L)	---	---	---	---	---	---	---	---
Zinc, total (mg/L)	---	---	---	0.01	---	---	---	0.02
cis-1,2-Dichloroethene (ug/L)	---	---	---	0.50 U	---	---	---	0.50 U
trans-1,2-Dichloroethene (ug/L)	---	---	---	0.50 U	---	---	---	0.50 U
Methylene chloride (ug/L)	---	---	---	2.0 U	---	---	---	2.0 U
1,1,2,2-Tetrachloroethane (ug/L)	---	---	---	0.50 U	---	---	---	0.50 U
Tetrachloroethene (ug/L)	---	---	---	0.50 U	---	---	---	0.50 U
Toluene (ug/L)	---	---	---	0.50 U	---	---	---	0.50 U
Trichloroethene (ug/L)	---	---	---	0.50 U	---	---	---	0.50 U
Acetone (ug/L)	---	---	---	10 U	---	---	---	10
2-Hexanone (ug/L)	---	---	---	5.0 U	---	---	---	5.0 U
4-Methyl-2-pentanone (MIBK) (ug/L)	---	---	---	5.0 U	---	---	---	5.0 U

NOTES: (1) Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.  
 --- - Not analyzed, NA - Data not available  
 U - Not Detected, J - Estimated  
 TOD = 1.5 X CBOD5 + 4.5 X TKN

**Table 1**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Monitoring Requirements and Effluent Data**

Analyte	Effluent 12/04/97	Effluent 12/09/97	Effluent 12/10/97	Effluent 12/11/97	Effluent 12/16/97	Effluent 12/17/97	Effluent 12/18/97	Effluent 12/23/97
Flow (GPD)	15440	15494	---	15810	15620	---	15320	15420
pH (SU)	7.56	7.58	---	7.58	7.6	---	7.6	7.58
Residue, non-filterable (mg/L)	---	---	5 U	---	---	5 U	---	5 U
Total dissolved solids (TDS) (mg/L)	---	---	1100	---	---	1100	---	1100
CBOD5 (mg/L)	---	---	---	---	---	---	---	---
TKN (mg/L)	---	---	---	---	---	---	---	---
TOD (mg/L)	---	---	---	---	---	---	---	---
Dissolved Oxygen (mg/L)	---	---	---	---	9.07	---	---	---
Aluminum, dissolved (mg/L)	---	---	---	---	---	---	---	---
Antimony, total (mg/L)	---	---	---	---	---	---	---	---
Chromium, total (mg/L)	---	---	---	---	---	---	---	---
Cobalt, total (mg/L)	---	---	---	---	---	---	---	---
Copper, total (mg/L)	---	---	---	---	---	---	---	---
Iron, total (mg/L)	---	---	---	---	---	---	---	---
Lead, total (mg/L)	---	---	---	---	---	---	---	---
Mercury, total (mg/L)	---	---	---	---	---	0.0002 U	---	---
Nickel, total (mg/L)	---	---	---	---	---	---	---	---
Silver, total (mg/L)	---	---	---	---	---	---	---	---
Vanadium, total (mg/L)	---	---	---	---	---	---	---	---
Zinc, total (mg/L)	---	---	---	---	---	0.04	---	---
cis-1,2-Dichloroethene (ug/L)	---	---	---	---	---	0.50 U	---	---
trans-1,2-Dichloroethene (ug/L)	---	---	---	---	---	0.50 U	---	---
Methylene chloride (ug/L)	---	---	---	---	---	2.0 U	---	---
1,1,2,2-Tetrachloroethane (ug/L)	---	---	---	---	---	0.50 U	---	---
Tetrachloroethene (ug/L)	---	---	---	---	---	0.50 U	---	---
Toluene (ug/L)	---	---	---	---	---	0.50 U	---	---
Trichloroethene (ug/L)	---	---	---	---	---	0.50 U	---	---
Acetone (ug/L)	---	---	---	---	---	10 U	---	---
2-Hexanone (ug/L)	---	---	---	---	---	5.0 U	---	---
4-Methyl-2-pentanone (MIBK) (ug/L)	---	---	---	---	---	5.0 U	---	---

NOTES: (1) Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.

--- - Not analyzed, NA - Data not available

U - Not Detected, J - Estimated

TOD = 1.5 X CBOD5 + 4.5 X TKN

**Table 1**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Monitoring Requirements and Effluent Data**

Analyte	Effluent 12/30/97	Effluent 01/06/98	Effluent 01/07/98	Effluent 01/08/98	Effluent 01/13/98	Effluent 01/14/98	Effluent 01/15/98	Effluent 01/20/98
Flow (GPD)	15450	17630	---	17865	19584	---	20198	20310
pH (SU)	7.58	7.61	---	7.61	7.61	---	7.61	7.61
Residue, non-filterable (mg/L)	5 U	---	5 U	---	---	5 U	---	---
Total dissolved solids (TDS) (mg/L)	1200	---	1000	---	---	970	---	---
CBOD5 (mg/L)	---	---	5 U	---	---	---	---	---
TKN (mg/L)	---	---	0.5	---	---	---	---	---
TOD (mg/L)	---	---	9.75 J	---	---	---	---	---
Dissolved Oxygen (mg/L)	---	---	9.69	---	---	---	---	---
Aluminum, dissolved (mg/L)	---	---	0.1 U	---	---	---	---	---
Antimony, total (mg/L)	---	---	0.06 U	---	---	---	---	---
Chromium, total (mg/L)	---	---	0.01 U	---	---	---	---	---
Cobalt, total (mg/L)	---	---	0.01 U	---	---	---	---	---
Copper, total (mg/L)	---	---	0.02	---	---	---	---	---
Iron, total (mg/L)	---	---	0.05 U	---	---	---	---	---
Lead, total (mg/L)	---	---	0.005 U	---	---	---	---	---
Mercury, total (mg/L)	---	---	0.0002 U	---	---	---	---	---
Nickel, total (mg/L)	---	---	0.05 U	---	---	---	---	---
Silver, total (mg/L)	---	---	0.01 U	---	---	---	---	---
Vanadium, total (mg/L)	---	---	0.03 U	---	---	---	---	---
Zinc, total (mg/L)	---	---	0.02	---	---	---	---	---
cis-1,2-Dichloroethene (ug/L)	---	---	0.50 U	---	---	---	---	---
trans-1,2-Dichloroethene (ug/L)	---	---	0.50 U	---	---	---	---	---
Methylene chloride (ug/L)	---	---	2.0 U	---	---	---	---	---
1,1,2,2-Tetrachloroethane (ug/L)	---	---	0.50 U	---	---	---	---	---
Tetrachloroethene (ug/L)	---	---	0.50 U	---	---	---	---	---
Toluene (ug/L)	---	---	0.50 U	---	---	---	---	---
Trichloroethene (ug/L)	---	---	0.50 U	---	---	---	---	---
Acetone (ug/L)	---	---	10 U	---	---	---	---	---
2-Hexanone (ug/L)	---	---	5.0 U	---	---	---	---	---
4-Methyl-2-pentanone (MIBK) (ug/L)	---	---	5.0 U	---	---	---	---	---

NOTES: (1) Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.

--- - Not analyzed, NA - Data not available

U - Not Detected, J - Estimated

TOD = 1.5 X CBOD5 + 4.5 X TKN

**Table 1**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Monitoring Requirements and Effluent Data**

Analyte	Effluent 01/21/98	Effluent 01/22/98	Effluent 01/27/98	Effluent 01/28/98	Effluent 01/29/98	Effluent 02/03/98	Effluent 02/04/98	Effluent 02/05/98
Flow (GPD)	---	20198	20744	---	20723	20580	---	20765
pH (SU)	---	7.63	7.63	---	7.61	7.61	---	7.63
Residue, non-filterable (mg/L)	5 U	---	---	5 U	---	---	5 U	---
Total dissolved solids (TDS) (mg/L)	1000	---	---	960	---	---	1000	---
CBOD5 (mg/L)	---	---	---	---	---	---	---	---
TKN (mg/L)	---	---	---	---	---	---	---	---
TOD (mg/L)	---	---	---	---	---	---	---	---
Dissolved Oxygen (mg/L)	---	---	---	---	---	---	---	---
Aluminum, dissolved (mg/L)	---	---	---	---	---	---	---	---
Antimony, total (mg/L)	---	---	---	---	---	---	---	---
Chromium, total (mg/L)	---	---	---	---	---	---	---	---
Cobalt, total (mg/L)	---	---	---	---	---	---	---	---
Copper, total (mg/L)	---	---	---	---	---	---	---	---
Iron, total (mg/L)	---	---	---	---	---	---	---	---
Lead, total (mg/L)	---	---	---	---	---	---	---	---
Mercury, total (mg/L)	0.0002 U	---	---	---	---	---	0.0002 U	---
Nickel, total (mg/L)	---	---	---	---	---	---	---	---
Silver, total (mg/L)	---	---	---	---	---	---	---	---
Vanadium, total (mg/L)	---	---	---	---	---	---	---	---
Zinc, total (mg/L)	0.03	---	---	---	---	---	0.03	---
cis-1,2-Dichloroethene (ug/L)	0.50 U	---	---	---	---	---	0.50 U	---
trans-1,2-Dichloroethene (ug/L)	0.50 U	---	---	---	---	---	0.50 U	---
Methylene chloride (ug/L)	2.0 U	---	---	---	---	---	2.0 U	---
1,1,2,2-Tetrachloroethane (ug/L)	0.50 U	---	---	---	---	---	0.50 U	---
Tetrachloroethene (ug/L)	0.50 U	---	---	---	---	---	0.50 U	---
Toluene (ug/L)	0.50 U	---	---	---	---	---	0.50 U	---
Trichloroethene (ug/L)	0.50 U	---	---	---	---	---	0.50 U	---
Acetone (ug/L)	10 U	---	---	---	---	---	10 U	---
2-Hexanone (ug/L)	5.0 U	---	---	---	---	---	5.0 U	---
4-Methyl-2-pentanone (MIBK) (ug/L)	5.0 U	---	---	---	---	---	5.0 U	---

NOTES: (1) Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.  
 --- - Not analyzed, NA - Data not available  
 U - Not Detected, J - Estimated  
 TOD = 1.5 X CBOD5 + 4.5 X TKN

**Table 1**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Monitoring Requirements and Effluent Data**

Analyte	Effluent 02/10/98	Effluent 02/11/98	Effluent 02/12/98	Effluent 02/17/98	Effluent 02/18/98	Effluent 02/19/98	Effluent 02/25/98	Effluent 02/26/98
Flow (GPD)	20452	---	20480	20321	20530	20817	---	20722
pH (SU)	7.63	---	7.61	7.63	7.65	7.63	---	7.65
Residue, non-filterable (mg/L)	---	5 U	---	---	5 U	---	5 U	---
Total dissolved solids (TDS) (mg/L)	---	960	---	---	920	---	920	---
CBOD5 (mg/L)	---	---	---	---	---	---	---	---
TKN (mg/L)	---	---	---	---	---	---	---	---
TOD (mg/L)	---	---	---	---	---	---	---	---
Dissolved Oxygen (mg/L)	---	---	---	---	8.29	---	---	---
Aluminum, dissolved (mg/L)	---	---	---	---	---	---	---	---
Antimony, total (mg/L)	---	---	---	---	---	---	---	---
Chromium, total (mg/L)	---	---	---	---	---	---	---	---
Cobalt, total (mg/L)	---	---	---	---	---	---	---	---
Copper, total (mg/L)	---	---	---	---	---	---	---	---
Iron, total (mg/L)	---	---	---	---	---	---	---	---
Lead, total (mg/L)	---	---	---	---	---	---	---	---
Mercury, total (mg/L)	---	---	---	---	0.0002 U	---	---	---
Nickel, total (mg/L)	---	---	---	---	---	---	---	---
Silver, total (mg/L)	---	---	---	---	---	---	---	---
Vanadium, total (mg/L)	---	---	---	---	---	---	---	---
Zinc, total (mg/L)	---	---	---	---	0.05	---	---	---
cis-1,2-Dichloroethene (ug/L)	---	---	---	---	0.50 U	---	---	---
trans-1,2-Dichloroethene (ug/L)	---	---	---	---	0.50 U	---	---	---
Methylene chloride (ug/L)	---	---	---	---	2.0 U	---	---	---
1,1,2,2-Tetrachloroethane (ug/L)	---	---	---	---	0.50 U	---	---	---
Tetrachloroethene (ug/L)	---	---	---	---	0.50 U	---	---	---
Toluene (ug/L)	---	---	---	---	0.50 U	---	---	---
Trichloroethene (ug/L)	---	---	---	---	0.50 U	---	---	---
Acetone (ug/L)	---	---	---	---	10 U	---	---	---
2-Hexanone (ug/L)	---	---	---	---	5.0 U	---	---	---
4-Methyl-2-pentanone (MIBK) (ug/L)	---	---	---	---	5.0 U	---	---	---

NOTES: (1) Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.  
 --- - Not analyzed, NA - Data not available  
 U - Not Detected, J - Estimated  
 TOD = 1.5 X CBOD5 + 4.5 X TKN

**Table 1**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Monitoring Requirements and Effluent Data**

Analyte	Effluent 03/03/98	Effluent 03/04/98	Effluent 03/05/98	Effluent 03/10/98	Effluent 03/11/98	Effluent 03/12/98	Effluent 03/17/98	Effluent 03/18/98
Flow (GPD)	22150	---	20910	21731	---	21062	22110	---
pH (SU)	8.16	---	7.89	7.76	---	7.71	7.69	---
Residue, non-filterable (mg/L)	---	5 U	---	---	5 U	---	---	5 U
Total dissolved solids (TDS) (mg/L)	---	960	---	---	980	---	---	890
CBOD5 (mg/L)	---	---	---	---	---	---	---	---
TKN (mg/L)	---	---	---	---	---	---	---	---
TOD (mg/L)	---	---	---	---	---	---	---	---
Dissolved Oxygen (mg/L)	---	8.33	---	---	---	---	---	---
Aluminum, dissolved (mg/L)	---	---	---	---	---	---	---	---
Antimony, total (mg/L)	---	---	---	---	---	---	---	---
Chromium, total (mg/L)	---	---	---	---	---	---	---	---
Cobalt, total (mg/L)	---	---	---	---	---	---	---	---
Copper, total (mg/L)	---	---	---	---	---	---	---	---
Iron, total (mg/L)	---	---	---	---	---	---	---	---
Lead, total (mg/L)	---	---	---	---	---	---	---	---
Mercury, total (mg/L)	---	0.0002 U	---	---	---	---	---	0.0002 U
Nickel, total (mg/L)	---	---	---	---	---	---	---	---
Silver, total (mg/L)	---	---	---	---	---	---	---	---
Vanadium, total (mg/L)	---	---	---	---	---	---	---	---
Zinc, total (mg/L)	---	0.01 U	---	---	---	---	---	0.01 U
cis-1,2-Dichloroethene (ug/L)	---	0.50 U	---	---	---	---	---	0.50 U
trans-1,2-Dichloroethene (ug/L)	---	0.50 U	---	---	---	---	---	0.50 U
Methylene chloride (ug/L)	---	2.0 U	---	---	---	---	---	2.0 U
1,1,2,2-Tetrachloroethane (ug/L)	---	0.50 U	---	---	---	---	---	0.50 U
Tetrachloroethene (ug/L)	---	0.50 U	---	---	---	---	---	0.50 U
Toluene (ug/L)	---	0.50 U	---	---	---	---	---	0.50 U
Trichloroethene (ug/L)	---	0.50 U	---	---	---	---	---	0.50 U
Acetone (ug/L)	---	10 U	---	---	---	---	---	10 U
2-Hexanone (ug/L)	---	5.0 U	---	---	---	---	---	5.0 U
4-Methyl-2-pentanone (MIBK) (ug/L)	---	5.0 U	---	---	---	---	---	5.0 U

NOTES: (1) Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.

--- - Not analyzed, NA - Data not available

U - Not Detected, J - Estimated

TOD = 1.5 X CBOD5 + 4.5 X TKN

**Table 1**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Monitoring Requirements and Effluent Data**

Analyte	Effluent 03/19/98	Effluent 03/24/98	Effluent 03/25/98	Effluent 03/26/98	Effluent 03/31/98	Effluent 04/01/98	Effluent 04/02/98	Effluent 04/07/98
Flow (GPD)	22390	22160	---	22111	22480	---	21879	21527
pH (SU)	7.63	7.61	---	7.63	7.63	---	7.65	7.61
Residue, non-filterable (mg/L)	---	---	5 U	---	---	5 U	---	---
Total dissolved solids (TDS) (mg/L)	---	---	890	---	---	910	---	---
CBOD5 (mg/L)	---	---	---	---	---	5 U	---	---
TKN (mg/L)	---	---	---	---	---	0.4 U	---	---
TOD (mg/L)	---	---	---	---	---	9.3 U	---	---
Dissolved Oxygen (mg/L)	---	---	---	---	---	8.83	---	---
Aluminum, dissolved (mg/L)	---	---	---	---	---	0.1 U	---	---
Antimony, total (mg/L)	---	---	---	---	---	0.06 U	---	---
Chromium, total (mg/L)	---	---	---	---	---	0.01 U	---	---
Cobalt, total (mg/L)	---	---	---	---	---	0.01 U	---	---
Copper, total (mg/L)	---	---	---	---	---	0.01 U	---	---
Iron, total (mg/L)	---	---	---	---	---	0.05 U	---	---
Lead, total (mg/L)	---	---	---	---	---	0.005 U	---	---
Mercury, total (mg/L)	---	---	---	---	---	0.0002 U	---	---
Nickel, total (mg/L)	---	---	---	---	---	0.05 U	---	---
Silver, total (mg/L)	---	---	---	---	---	0.01 U	---	---
Vanadium, total (mg/L)	---	---	---	---	---	0.03 U	---	---
Zinc, total (mg/L)	---	---	---	---	---	0.01 U	---	---
cis-1,2-Dichloroethene (ug/L)	---	---	---	---	---	0.50 U	---	---
trans-1,2-Dichloroethene (ug/L)	---	---	---	---	---	0.50 U	---	---
Methylene chloride (ug/L)	---	---	---	---	---	2.0 U	---	---
1,1,2,2-Tetrachloroethane (ug/L)	---	---	---	---	---	0.50 U	---	---
Tetrachloroethene (ug/L)	---	---	---	---	---	0.50 U	---	---
Toluene (ug/L)	---	---	---	---	---	0.50 U	---	---
Trichloroethene (ug/L)	---	---	---	---	---	0.50 U	---	---
Acetone (ug/L)	---	---	---	---	---	10 U	---	---
2-Hexanone (ug/L)	---	---	---	---	---	5.0 U	---	---
4-Methyl-2-pentanone (MIBK) (ug/L)	---	---	---	---	---	5.0 U	---	---

NOTES: (1) Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.  
 --- Not analyzed, NA - Data not available  
 U - Not Detected, J - Estimated  
 TOD = 1.5 X CBOD5 + 4.5 X TKN

**Table 1**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Monitoring Requirements and Effluent Data**

Analyte	Effluent 04/08/98	Effluent 04/09/98	Effluent 04/14/98	Effluent 04/15/98	Effluent 04/16/98	Effluent 04/21/98	Effluent 04/22/98	Effluent 04/23/98
Flow (GPD)	---	21630	21226	---	21080	21246	---	21485
pH (SU)	---	7.65	7.65	---	7.63	7.65	---	7.65
Residue, non-filterable (mg/L)	5 U	---	---	5 U	---	---	5 U	---
Total dissolved solids (TDS) (mg/L)	1100	---	---	910	---	---	940	---
CBOD5 (mg/L)	---	---	---	---	---	---	---	---
TKN (mg/L)	---	---	---	---	---	---	---	---
TOD (mg/L)	---	---	---	---	---	---	---	---
Dissolved Oxygen (mg/L)	---	---	---	---	---	---	---	---
Aluminum, dissolved (mg/L)	---	---	---	---	---	---	---	---
Antimony, total (mg/L)	---	---	---	---	---	---	---	---
Chromium, total (mg/L)	---	---	---	---	---	---	---	---
Cobalt, total (mg/L)	---	---	---	---	---	---	---	---
Copper, total (mg/L)	---	---	---	---	---	---	---	---
Iron, total (mg/L)	---	---	---	---	---	---	---	---
Lead, total (mg/L)	---	---	---	---	---	---	---	---
Mercury, total (mg/L)	---	---	---	0.0002 U	---	---	---	---
Nickel, total (mg/L)	---	---	---	---	---	---	---	---
Silver, total (mg/L)	---	---	---	---	---	---	---	---
Vanadium, total (mg/L)	---	---	---	---	---	---	---	---
Zinc, total (mg/L)	---	---	---	0.03	---	---	---	---
cis-1,2-Dichloroethene (ug/L)	---	---	---	0.50 U	---	---	---	---
trans-1,2-Dichloroethene (ug/L)	---	---	---	0.50 U	---	---	---	---
Methylene chloride (ug/L)	---	---	---	2.0 U	---	---	---	---
1,1,2,2-Tetrachloroethane (ug/L)	---	---	---	0.50 U	---	---	---	---
Tetrachloroethene (ug/L)	---	---	---	0.50 U	---	---	---	---
Toluene (ug/L)	---	---	---	0.50 U	---	---	---	---
Trichloroethene (ug/L)	---	---	---	0.50 U	---	---	---	---
Acetone (ug/L)	---	---	---	10 U	---	---	---	---
2-Hexanone (ug/L)	---	---	---	5.0 U	---	---	---	---
4-Methyl-2-pentanone (MIBK) (ug/L)	---	---	---	5.0 U	---	---	---	---

NOTES: (1) Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.  
 --- - Not analyzed, NA - Data not available  
 U - Not Detected, J - Estimated  
 TOD = 1.5 X CBOD5 + 4.5 X TKN

**Table 1**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Monitoring Requirements and Effluent Data**

Analyte	Effluent 04/28/98	Effluent 04/29/98	Effluent 04/30/98	Effluent 05/05/98	Effluent 05/07/98	Effluent 05/12/98	Effluent 05/13/98	Effluent 05/14/98
Flow (GPD)	21170	---	21100	20880	20740	20880	---	20498
pH (SU)	7.67	---	7.65	7.61	7.65	7.67	---	7.65
Residue, non-filterable (mg/L)	---	5 U	---	5 U	---	---	5 U	---
Total dissolved solids (TDS) (mg/L)	---	980	---	850	---	---	920	---
CBOD5 (mg/L)	---	---	---	---	---	---	---	---
TKN (mg/L)	---	---	---	---	---	---	---	---
TOD (mg/L)	---	---	---	---	---	---	---	---
Dissolved Oxygen (mg/L)	---	---	---	10.72	---	---	---	---
Aluminum, dissolved (mg/L)	---	---	---	---	---	---	---	---
Antimony, total (mg/L)	---	---	---	---	---	---	---	---
Chromium, total (mg/L)	---	---	---	---	---	---	---	---
Cobalt, total (mg/L)	---	---	---	---	---	---	---	---
Copper, total (mg/L)	---	---	---	---	---	---	---	---
Iron, total (mg/L)	---	---	---	---	---	---	---	---
Lead, total (mg/L)	---	---	---	---	---	---	---	---
Mercury, total (mg/L)	---	---	---	0.0002 U	---	---	---	---
Nickel, total (mg/L)	---	---	---	---	---	---	---	---
Silver, total (mg/L)	---	---	---	---	---	---	---	---
Vanadium, total (mg/L)	---	---	---	---	---	---	---	---
Zinc, total (mg/L)	---	---	---	0.01 U	---	---	---	---
cis-1,2-Dichloroethene (ug/L)	---	---	---	0.50 U	---	---	---	---
trans-1,2-Dichloroethene (ug/L)	---	---	---	0.50 U	---	---	---	---
Methylene chloride (ug/L)	---	---	---	2.0 U	---	---	---	---
1,1,2,2-Tetrachloroethane (ug/L)	---	---	---	0.50 U	---	---	---	---
Tetrachloroethene (ug/L)	---	---	---	0.50 U	---	---	---	---
Toluene (ug/L)	---	---	---	0.50 U	---	---	---	---
Trichloroethene (ug/L)	---	---	---	0.50 U	---	---	---	---
Acetone (ug/L)	---	---	---	10 U	---	---	---	---
2-Hexanone (ug/L)	---	---	---	5.0 U	---	---	---	---
4-Methyl-2-pentanone (MIBK) (ug/L)	---	---	---	5.0 U	---	---	---	---

NOTES: (1) Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.

--- - Not analyzed, NA - Data not available

U - Not Detected, J - Estimated

TOD = 1.5 X CBOD5 + 4.5 X TKN

**Table 1**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Monitoring Requirements and Effluent Data**

Analyte	Effluent 05/19/98	Effluent 05/20/98	Effluent 05/21/98	Effluent 05/26/98	Effluent 05/27/98	Effluent 05/28/98	Effluent 06/02/98	Effluent 06/03/98
Flow (GPD)	20620	---	20350	15504	---	19867	19784	---
pH (SU)	7.65	---	7.67	7.62	---	7.69	7.72	---
Residue, non-filterable (mg/L)	---	5 U	---	---	5 U	---	---	5 U
Total dissolved solids (TDS) (mg/L)	---	990	---	---	860	---	---	1000
CBOD5 (mg/L)	---	---	---	---	---	---	---	---
TKN (mg/L)	---	---	---	---	---	---	---	---
TOD (mg/L)	---	---	---	---	---	---	---	---
Dissolved Oxygen (mg/L)	---	---	---	---	---	---	---	8.14
Aluminum, dissolved (mg/L)	---	---	---	---	---	---	---	---
Antimony, total (mg/L)	---	---	---	---	---	---	---	---
Chromium, total (mg/L)	---	---	---	---	---	---	---	---
Cobalt, total (mg/L)	---	---	---	---	---	---	---	---
Copper, total (mg/L)	---	---	---	---	---	---	---	---
Iron, total (mg/L)	---	---	---	---	---	---	---	---
Lead, total (mg/L)	---	---	---	---	---	---	---	---
Mercury, total (mg/L)	---	0.0002 U	---	---	---	---	---	0.0002 U
Nickel, total (mg/L)	---	---	---	---	---	---	---	---
Silver, total (mg/L)	---	---	---	---	---	---	---	---
Vanadium, total (mg/L)	---	---	---	---	---	---	---	---
Zinc, total (mg/L)	---	0.01 U	---	---	---	---	---	0.02
cis-1,2-Dichloroethene (ug/L)	---	0.50 U	---	---	---	---	---	0.50 U
trans-1,2-Dichloroethene (ug/L)	---	0.50 U	---	---	---	---	---	0.50 U
Methylene chloride (ug/L)	---	2.0 U	---	---	---	---	---	2.0 U
1,1,2,2-Tetrachloroethane (ug/L)	---	0.50 U	---	---	---	---	---	0.50 U
Tetrachloroethene (ug/L)	---	0.50 U	---	---	---	---	---	0.50 U
Toluene (ug/L)	---	0.50 U	---	---	---	---	---	0.50 U
Trichloroethene (ug/L)	---	0.50 U	---	---	---	---	---	0.50 U
Acetone (ug/L)	---	10 U	---	---	---	---	---	10 U
2-Hexanone (ug/L)	---	5.0 U	---	---	---	---	---	5.0 U
4-Methyl-2-pentanone (MIBK) (ug/L)	---	5.0 U	---	---	---	---	---	5.0 U

NOTES: (1) Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.

--- - Not analyzed, NA - Data not available

U - Not Detected, J - Estimated

TOD = 1.5 X CBOD5 + 4.5 X TKN

**Table 1**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Monitoring Requirements and Effluent Data**

Analyte	Effluent 06/04/98	Effluent 06/09/98	Effluent 06/10/98	Effluent 06/11/98	Effluent 06/16/98	Effluent 06/17/98	Effluent 06/18/98	Effluent 06/23/98
Flow (GPD)	19700	19350	---	19200	18470	---	18313	18930
pH (SU)	7.98	7.82	---	7.78	7.72	---	7.71	7.70
Residue, non-filterable (mg/L)	---	---	5 U	---	---	5 U	---	---
Total dissolved solids (TDS) (mg/L)	---	---	980	---	---	950	---	---
CBOD5 (mg/L)	---	---	---	---	---	---	---	---
TKN (mg/L)	---	---	---	---	---	---	---	---
TOD (mg/L)	---	---	---	---	---	---	---	---
Dissolved Oxygen (mg/L)	---	---	---	---	---	---	---	---
Aluminum, dissolved (mg/L)	---	---	---	---	---	---	---	---
Antimony, total (mg/L)	---	---	---	---	---	---	---	---
Chromium, total (mg/L)	---	---	---	---	---	---	---	---
Cobalt, total (mg/L)	---	---	---	---	---	---	---	---
Copper, total (mg/L)	---	---	---	---	---	---	---	---
Iron, total (mg/L)	---	---	---	---	---	---	---	---
Lead, total (mg/L)	---	---	---	---	---	---	---	---
Mercury, total (mg/L)	---	---	---	---	---	0.0002 U	---	---
Nickel, total (mg/L)	---	---	---	---	---	---	---	---
Silver, total (mg/L)	---	---	---	---	---	---	---	---
Vanadium, total (mg/L)	---	---	---	---	---	---	---	---
Zinc, total (mg/L)	---	---	---	---	---	0.34	---	---
cis-1,2-Dichloroethene (ug/L)	---	---	---	---	---	0.50 U	---	---
trans-1,2-Dichloroethene (ug/L)	---	---	---	---	---	0.50 U	---	---
Methylene chloride (ug/L)	---	---	---	---	---	2.0 U	---	---
1,1,2,2-Tetrachloroethane (ug/L)	---	---	---	---	---	0.50 U	---	---
Tetrachloroethene (ug/L)	---	---	---	---	---	0.50 U	---	---
Toluene (ug/L)	---	---	---	---	---	0.50 U	---	---
Trichloroethene (ug/L)	---	---	---	---	---	0.50 U	---	---
Acetone (ug/L)	---	---	---	---	---	10 U	---	---
2-Hexanone (ug/L)	---	---	---	---	---	5.0 U	---	---
4-Methyl-2-pentanone (MIBK) (ug/L)	---	---	---	---	---	5.0 U	---	---

NOTES: (1) Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.  
 --- - Not analyzed, NA - Data not available  
 U - Not Detected, J - Estimated  
 TOD = 1.5 X CBOD5 + 4.5 X TKN

**Table 1**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Monitoring Requirements and Effluent Data**

Analyte	Effluent 06/24/98	Effluent 06/25/98	Effluent 06/30/98	Effluent 07/01/98	Effluent 07/02/98	Effluent 07/07/98	Effluent 07/08/98	Effluent 07/09/98
Flow (GPD)	---	18250	19930	---	19230	19158	---	19480
pH (SU)	---	7.72	7.72	---	7.72	7.71	---	7.71
Residue, non-filterable (mg/L)	5 U	---	---	5 U	---	---	5 U	---
Total dissolved solids (TDS) (mg/L)	990	---	---	950	---	---	880	---
CBOD5 (mg/L)	---	---	---	5 U	---	---	---	---
TKN (mg/L)	---	---	---	0.4 U	---	---	---	---
TOD (mg/L)	---	---	---	9.3 U	---	---	---	---
Dissolved Oxygen (mg/L)	---	---	---	7.62	---	---	---	---
Aluminum, dissolved (mg/L)	---	---	---	0.1 U	---	---	---	---
Antimony, total (mg/L)	---	---	---	0.06 U	---	---	---	---
Chromium, total (mg/L)	---	---	---	0.01 U	---	---	---	---
Cobalt, total (mg/L)	---	---	---	0.01 U	---	---	---	---
Copper, total (mg/L)	---	---	---	0.02	---	---	---	---
Iron, total (mg/L)	---	---	---	0.05 U	---	---	---	---
Lead, total (mg/L)	---	---	---	0.005 U	---	---	---	---
Mercury, total (mg/L)	---	---	---	0.0002 U	---	---	---	---
Nickel, total (mg/L)	---	---	---	0.05 U	---	---	---	---
Silver, total (mg/L)	---	---	---	0.01 U	---	---	---	---
Vanadium, total (mg/L)	---	---	---	0.03 U	---	---	---	---
Zinc, total (mg/L)	---	---	---	0.05	---	---	---	---
cis-1,2-Dichloroethene (ug/L)	---	---	---	0.50 U	---	---	---	---
trans-1,2-Dichloroethene (ug/L)	---	---	---	0.50 U	---	---	---	---
Methylene chloride (ug/L)	---	---	---	2.0 U	---	---	---	---
1,1,2,2-Tetrachloroethane (ug/L)	---	---	---	0.50 U	---	---	---	---
Tetrachloroethene (ug/L)	---	---	---	0.50 U	---	---	---	---
Toluene (ug/L)	---	---	---	2.5	---	---	---	---
Trichloroethene (ug/L)	---	---	---	0.50 U	---	---	---	---
Acetone (ug/L)	---	---	---	10 U	---	---	---	---
2-Hexanone (ug/L)	---	---	---	5.0 U	---	---	---	---
4-Methyl-2-pentanone (MIBK) (ug/L)	---	---	---	5.0 U	---	---	---	---

NOTES: (1) Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.

--- - Not analyzed, NA - Data not available

U - Not Detected, J - Estimated

TOD = 1.5 X CBOD5 + 4.5 X TKN

**Table 1**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Monitoring Requirements and Effluent Data**

Analyte	Effluent 07/14/98	Effluent 07/15/98	Effluent 07/16/98	Effluent 07/21/98	Effluent 07/22/98	Effluent 07/23/98	Effluent 07/28/98	Effluent 07/29/98
Flow (GPD)	19110	---	19085	19010	---	19160	19060	---
pH (SU)	7.72	---	7.72	7.72	---	7.71	7.71	---
Residue, non-filterable (mg/L)	---	5 U	---	---	5 U	---	---	5 U
Total dissolved solids (TDS) (mg/L)	---	1200	---	---	1000	---	---	1000
CBOD5 (mg/L)	---	---	---	---	---	---	---	---
TKN (mg/L)	---	---	---	---	---	---	---	---
TOD (mg/L)	---	---	---	---	---	---	---	---
Dissolved Oxygen (mg/L)	---	---	---	---	---	---	---	---
Aluminum, dissolved (mg/L)	---	---	---	---	---	---	---	---
Antimony, total (mg/L)	---	---	---	---	---	---	---	---
Chromium, total (mg/L)	---	---	---	---	---	---	---	---
Cobalt, total (mg/L)	---	---	---	---	---	---	---	---
Copper, total (mg/L)	---	---	---	---	---	---	---	---
Iron, total (mg/L)	---	---	---	---	---	---	---	---
Lead, total (mg/L)	---	---	---	---	---	---	---	---
Mercury, total (mg/L)	---	0.0002 U	---	---	---	---	---	---
Nickel, total (mg/L)	---	---	---	---	---	---	---	---
Silver, total (mg/L)	---	---	---	---	---	---	---	---
Vanadium, total (mg/L)	---	---	---	---	---	---	---	---
Zinc, total (mg/L)	---	0.06	---	---	---	---	---	---
cis-1,2-Dichloroethene (ug/L)	---	0.50 U	---	---	---	---	---	---
trans-1,2-Dichloroethene (ug/L)	---	0.50 U	---	---	---	---	---	---
Methylene chloride (ug/L)	---	2.0 U	---	---	---	---	---	---
1,1,2,2-Tetrachloroethane (ug/L)	---	0.50 U	---	---	---	---	---	---
Tetrachloroethene (ug/L)	---	0.50 U	---	---	---	---	---	---
Toluene (ug/L)	---	0.50 U	---	---	---	---	---	---
Trichloroethene (ug/L)	---	0.50 U	---	---	---	---	---	---
Acetone (ug/L)	---	10 U	---	---	---	---	---	---
2-Hexanone (ug/L)	---	5.0 U	---	---	---	---	---	---
4-Methyl-2-pentanone (MIBK) (ug/L)	---	5.0 U	---	---	---	---	---	---

NOTES: (1) Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.

--- - Not analyzed, NA - Data not available

U - Not Detected, J - Estimated

TOD = 1.5 X CBOD5 + 4.5 X TKN

**Table 1**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Monitoring Requirements and Effluent Data**

Analyte	Effluent 07/30/98	Effluent 08/04/98	Effluent 08/05/98	Effluent 08/06/98	Effluent 08/11/98	Effluent 08/12/98	Effluent 08/13/98	Effluent 08/18/98
Flow (GPD)	19085	19025	---	18916	18730	---	18489	18605
pH (SU)	7.72	7.72	---	7.71	7.69	---	7.72	7.72
Residue, non-filterable (mg/L)	---	---	5 U	---	---	5 U	---	---
Total dissolved solids (TDS) (mg/L)	---	---	910	---	---	900	---	---
CBOD5 (mg/L)	---	---	---	---	---	---	---	---
TKN (mg/L)	---	---	---	---	---	---	---	---
TOD (mg/L)	---	---	---	---	---	---	---	---
Dissolved Oxygen (mg/L)	---	---	7.31	---	---	---	---	---
Aluminum, dissolved (mg/L)	---	---	---	---	---	---	---	---
Antimony, total (mg/L)	---	---	---	---	---	---	---	---
Chromium, total (mg/L)	---	---	---	---	---	---	---	---
Cobalt, total (mg/L)	---	---	---	---	---	---	---	---
Copper, total (mg/L)	---	---	---	---	---	---	---	---
Iron, total (mg/L)	---	---	---	---	---	---	---	---
Lead, total (mg/L)	---	---	---	---	---	---	---	---
Mercury, total (mg/L)	---	---	0.0002 U	---	---	---	---	---
Nickel, total (mg/L)	---	---	---	---	---	---	---	---
Silver, total (mg/L)	---	---	---	---	---	---	---	---
Vanadium, total (mg/L)	---	---	---	---	---	---	---	---
Zinc, total (mg/L)	---	---	0.09	---	---	---	---	---
cis-1,2-Dichloroethene (ug/L)	---	---	0.50 U	---	---	---	---	---
trans-1,2-Dichloroethene (ug/L)	---	---	0.50 U	---	---	---	---	---
Methylene chloride (ug/L)	---	---	2.0 U	---	---	---	---	---
1,1,2,2-Tetrachloroethane (ug/L)	---	---	0.50 U	---	---	---	---	---
Tetrachloroethene (ug/L)	---	---	0.50 U	---	---	---	---	---
Toluene (ug/L)	---	---	0.50 U	---	---	---	---	---
Trichloroethene (ug/L)	---	---	0.50 U	---	---	---	---	---
Acetone (ug/L)	---	---	10 U	---	---	---	---	---
2-Hexanone (ug/L)	---	---	5.0 U	---	---	---	---	---
4-Methyl-2-pentanone (MIBK) (ug/L)	---	---	5.0 U	---	---	---	---	---

NOTES: (1) Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.  
 --- - Not analyzed, NA - Data not available  
 U - Not Detected, J - Estimated  
 TOD = 1.5 X CBOD5 + 4.5 X TKN

**Table 1**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Monitoring Requirements and Effluent Data**

Analyte	Effluent 08/19/98	Effluent 08/20/98	Effluent 08/25/98	Effluent 08/26/98	Effluent 08/27/98	Effluent 09/01/98	Effluent 09/02/98	Effluent 09/03/98
Flow (GPD)	---	18557	19070	---	18450	18550	---	18443
pH (SU)	---	7.72	7.72	---	7.72	7.72	---	7.72
Residue, non-filterable (mg/L)	5 U	---	---	5 U	---	---	5 U	---
Total dissolved solids (TDS) (mg/L)	910	---	---	880	---	---	960	---
CBOD5 (mg/L)	---	---	---	---	---	---	---	---
TKN (mg/L)	---	---	---	---	---	---	---	---
TOD (mg/L)	---	---	---	---	---	---	---	---
Dissolved Oxygen (mg/L)	---	---	---	---	---	---	---	10.79
Aluminum, dissolved (mg/L)	---	---	---	---	---	---	---	---
Antimony, total (mg/L)	---	---	---	---	---	---	---	---
Chromium, total (mg/L)	---	---	---	---	---	---	---	---
Cobalt, total (mg/L)	---	---	---	---	---	---	---	---
Copper, total (mg/L)	---	---	---	---	---	---	---	---
Iron, total (mg/L)	---	---	---	---	---	---	---	---
Lead, total (mg/L)	---	---	---	---	---	---	---	---
Mercury, total (mg/L)	0.0002 U	---	---	---	---	---	0.0002 U	---
Nickel, total (mg/L)	---	---	---	---	---	---	---	---
Silver, total (mg/L)	---	---	---	---	---	---	---	---
Vanadium, total (mg/L)	---	---	---	---	---	---	---	---
Zinc, total (mg/L)	0.02	---	---	---	---	---	0.02	---
cis-1,2-Dichloroethene (ug/L)	0.50 U	---	---	---	---	---	0.50 U	---
trans-1,2-Dichloroethene (ug/L)	0.50 U	---	---	---	---	---	0.50 U	---
Methylene chloride (ug/L)	2.0 U	---	---	---	---	---	2.0 U	---
1,1,2,2-Tetrachloroethane (ug/L)	0.50 U	---	---	---	---	---	0.50 U	---
Tetrachloroethene (ug/L)	0.50 U	---	---	---	---	---	0.50 U	---
Toluene (ug/L)	0.50 U	---	---	---	---	---	0.50 U	---
Trichloroethene (ug/L)	0.50 U	---	---	---	---	---	0.50 U	---
Acetone (ug/L)	10 U	---	---	---	---	---	10 U	---
2-Hexanone (ug/L)	5.0 U	---	---	---	---	---	5.0 U	---
4-Methyl-2-pentanone (MIBK) (ug/L)	5.0 U	---	---	---	---	---	5.0 U	---

NOTES: (1) Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.

--- - Not analyzed, NA - Data not available

U - Not Detected, J - Estimated

TOD = 1.5 X CBOD5 + 4.5 X TKN

**Table 1**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Monitoring Requirements and Effluent Data**

Analyte	Effluent 09/08/98	Effluent 09/09/98	Effluent 09/10/98	Effluent 09/15/98	Effluent 09/16/98	Effluent 09/17/98	Effluent 09/22/98	Effluent 09/23/98
Flow (GPD)	18336	---	18806	17916	---	17710	17860	---
pH (SU)	7.72	---	7.72	7.74	---	7.70	7.72	---
Residue, non-filterable (mg/L)	---	5 U	---	---	5 U	---	---	5 U
Total dissolved solids (TDS) (mg/L)	---	950	---	---	940	---	---	1100
CBOD5 (mg/L)	---	---	---	---	---	---	---	---
TKN (mg/L)	---	---	---	---	---	---	---	---
TOD (mg/L)	---	---	---	---	---	---	---	---
Dissolved Oxygen (mg/L)	---	---	---	---	---	---	---	---
Aluminum, dissolved (mg/L)	---	---	---	---	---	---	---	---
Antimony, total (mg/L)	---	---	---	---	---	---	---	---
Chromium, total (mg/L)	---	---	---	---	---	---	---	---
Cobalt, total (mg/L)	---	---	---	---	---	---	---	---
Copper, total (mg/L)	---	---	---	---	---	---	---	---
Iron, total (mg/L)	---	---	---	---	---	---	---	---
Lead, total (mg/L)	---	---	---	---	---	---	---	---
Mercury, total (mg/L)	---	---	---	---	0.0002 U	---	---	---
Nickel, total (mg/L)	---	---	---	---	---	---	---	---
Silver, total (mg/L)	---	---	---	---	---	---	---	---
Vanadium, total (mg/L)	---	---	---	---	---	---	---	---
Zinc, total (mg/L)	---	---	---	---	0.02	---	---	---
cis-1,2-Dichloroethene (ug/L)	---	---	---	---	0.50 U	---	---	---
trans-1,2-Dichloroethene (ug/L)	---	---	---	---	0.50 U	---	---	---
Methylene chloride (ug/L)	---	---	---	---	2.0 U	---	---	---
1,1,2,2-Tetrachloroethane (ug/L)	---	---	---	---	0.50 U	---	---	---
Tetrachloroethene (ug/L)	---	---	---	---	0.50 U	---	---	---
Toluene (ug/L)	---	---	---	---	0.50 U	---	---	---
Trichloroethene (ug/L)	---	---	---	---	0.50 U	---	---	---
Acetone (ug/L)	---	---	---	---	10 U	---	---	---
2-Hexanone (ug/L)	---	---	---	---	5.0 U	---	---	---
4-Methyl-2-pentanone (MIBK) (ug/L)	---	---	---	---	5.0 U	---	---	---

NOTES: (1) Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.

--- - Not analyzed, NA - Data not available

U - Not Detected, J - Estimated

TOD = 1.5 X CBOD5 + 4.5 X TKN



**Table 1**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Monitoring Requirements and Effluent Data**

Analyte	Effluent 09/24/98	Effluent 09/29/98	Effluent 09/30/98	Effluent 10/01/98	Effluent 10/06/98	Effluent 10/07/98	Effluent 10/08/98	Effluent 10/13/98
Flow (GPD)	17590	17098	---	16860	16268	---	16200	16020
pH (SU)	7.74	7.74	---	7.74	7.76	---	7.74	7.76
Residue, non-filterable (mg/L)	---	---	5 U	---	---	5 U	---	---
Total dissolved solids (TDS) (mg/L)	---	---	900	---	---	990	---	---
CBOD5 (mg/L)	---	---	---	---	---	5 U	---	---
TKN (mg/L)	---	---	---	---	---	0.4 U	---	---
TOD (mg/L)	---	---	---	---	---	9.3 U	---	---
Dissolved Oxygen (mg/L)	---	---	---	---	---	10.44	---	---
Aluminum, dissolved (mg/L)	---	---	---	---	---	0.1 U	---	---
Antimony, total (mg/L)	---	---	---	---	---	0.06 U	---	---
Chromium, total (mg/L)	---	---	---	---	---	0.01 U	---	---
Cobalt, total (mg/L)	---	---	---	---	---	0.01 U	---	---
Copper, total (mg/L)	---	---	---	---	---	0.03	---	---
Iron, total (mg/L)	---	---	---	---	---	0.05 U	---	---
Lead, total (mg/L)	---	---	---	---	---	0.005 U	---	---
Mercury, total (mg/L)	---	---	---	---	---	0.0002 U	---	---
Nickel, total (mg/L)	---	---	---	---	---	0.05 U	---	---
Silver, total (mg/L)	---	---	---	---	---	0.01 U	---	---
Vanadium, total (mg/L)	---	---	---	---	---	0.03 U	---	---
Zinc, total (mg/L)	---	---	---	---	---	0.04	---	---
cis-1,2-Dichloroethene (ug/L)	---	---	---	---	---	0.50 U	---	---
trans-1,2-Dichloroethene (ug/L)	---	---	---	---	---	0.50 U	---	---
Methylene chloride (ug/L)	---	---	---	---	---	2.0 U	---	---
1,1,2,2-Tetrachloroethane (ug/L)	---	---	---	---	---	0.50 U	---	---
Tetrachloroethene (ug/L)	---	---	---	---	---	0.50 U	---	---
Toluene (ug/L)	---	---	---	---	---	0.50 U	---	---
Trichloroethene (ug/L)	---	---	---	---	---	0.50 U	---	---
Acetone (ug/L)	---	---	---	---	---	10 U	---	---
2-Hexanone (ug/L)	---	---	---	---	---	5.0 U	---	---
4-Methyl-2-pentanone (MIBK) (ug/L)	---	---	---	---	---	5.0 U	---	---

NOTES: (1) Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.  
 --- - Not analyzed, NA - Data not available  
 U - Not Detected, J - Estimated  
 TOD = 1.5 X CBOD5 + 4.5 X TKN



**Table 1**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Monitoring Requirements and Effluent Data**

Analyte	Effluent 10/14/98	Effluent 10/15/98	Effluent 10/20/98	Effluent 10/21/98	Effluent 10/22/98	Effluent 10/27/98	Effluent 10/28/98	Effluent 10/29/98
Flow (GPD)	---	16020	15740	---	15550	15280	---	15510
pH (SU)	---	7.76	7.76	---	7.74	7.76	---	7.76
Residue, non-filterable (mg/L)	5 U	---	---	5 U	---	---	5 U	---
Total dissolved solids (TDS) (mg/L)	1100	---	---	1000	---	---	1000	---
CBOD5 (mg/L)	---	---	---	---	---	---	---	---
TKN (mg/L)	---	---	---	---	---	---	---	---
TOD (mg/L)	---	---	---	---	---	---	---	---
Dissolved Oxygen (mg/L)	---	---	---	---	---	---	---	---
Aluminum, dissolved (mg/L)	---	---	---	---	---	---	---	---
Antimony, total (mg/L)	---	---	---	---	---	---	---	---
Chromium, total (mg/L)	---	---	---	---	---	---	---	---
Cobalt, total (mg/L)	---	---	---	---	---	---	---	---
Copper, total (mg/L)	---	---	---	---	---	---	---	---
Iron, total (mg/L)	---	---	---	---	---	---	---	---
Lead, total (mg/L)	---	---	---	---	---	---	---	---
Mercury, total (mg/L)	---	---	---	0.0002 U	---	---	---	---
Nickel, total (mg/L)	---	---	---	---	---	---	---	---
Silver, total (mg/L)	---	---	---	---	---	---	---	---
Vanadium, total (mg/L)	---	---	---	---	---	---	---	---
Zinc, total (mg/L)	---	---	---	0.02	---	---	---	---
cis-1,2-Dichloroethene (ug/L)	---	---	---	0.50 U	---	---	---	---
trans-1,2-Dichloroethene (ug/L)	---	---	---	0.50 U	---	---	---	---
Methylene chloride (ug/L)	---	---	---	2.0 U	---	---	---	---
1,1,2,2-Tetrachloroethane (ug/L)	---	---	---	0.50 U	---	---	---	---
Tetrachloroethene (ug/L)	---	---	---	0.50 U	---	---	---	---
Toluene (ug/L)	---	---	---	0.50 U	---	---	---	---
Trichloroethene (ug/L)	---	---	---	0.50 U	---	---	---	---
Acetone (ug/L)	---	---	---	10 U	---	---	---	---
2-Hexanone (ug/L)	---	---	---	5.0 U	---	---	---	---
4-Methyl-2-pentanone (MIBK) (ug/L)	---	---	---	5.0 U	---	---	---	---

NOTES: (1) Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.  
 --- - Not analyzed, NA - Data not available  
 U - Not Detected, J - Estimated  
 TOD = 1.5 X CBOD5 + 4.5 X TKN



**Table 1**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Monitoring Requirements and Effluent Data**

Analyte	Effluent 11/03/98	Effluent 11/04/98	Effluent 11/05/98	Effluent 11/10/98	Effluent 11/11/98	Effluent 11/12/98	Effluent 11/17/98	Effluent 11/18/98
Flow (GPD)	14922	---	14780	14410	---	14230	14110	---
pH (SU)	7.76	---	7.74	7.81	---	8.08	7.90	---
Residue, non-filterable (mg/L)	---	5 U	---	---	8	---	---	5 U
Total dissolved solids (TDS) (mg/L)	---	980	---	---	1300	---	---	1000
CBOD5 (mg/L)	---	---	---	---	---	---	---	---
TKN (mg/L)	---	---	---	---	---	---	---	---
TOD (mg/L)	---	---	---	---	---	---	---	---
Dissolved Oxygen (mg/L)	---	9.38	---	---	---	---	---	---
Aluminum, dissolved (mg/L)	---	---	---	---	---	---	---	---
Antimony, total (mg/L)	---	---	---	---	---	---	---	---
Chromium, total (mg/L)	---	---	---	---	---	---	---	---
Cobalt, total (mg/L)	---	---	---	---	---	---	---	---
Copper, total (mg/L)	---	---	---	---	---	---	---	---
Iron, total (mg/L)	---	---	---	---	---	---	---	---
Lead, total (mg/L)	---	---	---	---	---	---	---	---
Mercury, total (mg/L)	---	0.0002 U	---	---	---	---	---	0.0002 U
Nickel, total (mg/L)	---	---	---	---	---	---	---	---
Silver, total (mg/L)	---	---	---	---	---	---	---	---
Vanadium, total (mg/L)	---	---	---	---	---	---	---	---
Zinc, total (mg/L)	---	0.04	---	---	---	---	---	0.02
cis-1,2-Dichloroethene (ug/L)	---	0.50 U	---	---	---	---	---	0.50 U
trans-1,2-Dichloroethene (ug/L)	---	0.50 U	---	---	---	---	---	0.50 U
Methylene chloride (ug/L)	---	2.0 U	---	---	---	---	---	2.0 U
1,1,2,2-Tetrachloroethane (ug/L)	---	0.50 U	---	---	---	---	---	0.50 U
Tetrachloroethene (ug/L)	---	0.50 U	---	---	---	---	---	0.50 U
Toluene (ug/L)	---	0.50 U	---	---	---	---	---	0.50 U
Trichloroethene (ug/L)	---	0.50 U	---	---	---	---	---	0.50 U
Acetone (ug/L)	---	10 U	---	---	---	---	---	10 U
2-Hexanone (ug/L)	---	5.0 U	---	---	---	---	---	5.0 U
4-Methyl-2-pentanone (MIBK) (ug/L)	---	5.0 U	---	---	---	---	---	5.0 U

NOTES: (1) Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.  
 --- - Not analyzed, NA - Data not available  
 U - Not Detected, J - Estimated  
 TOD = 1.5 X CBOD5 + 4.5 X TKN

**Table 1**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Monitoring Requirements and Effluent Data**

Analyte	Effluent	Effluent
	11/19/98	11/24/98
Flow (GPD)	13940	13690
pH (SU)	7.85	7.79
Residue, non-filterable (mg/L)	---	5 U
Total dissolved solids (TDS) (mg/L)	---	1100
CBOD5 (mg/L)	---	---
TKN (mg/L)	---	---
TOD (mg/L)	---	---
Dissolved Oxygen (mg/L)	---	---
Aluminum, dissolved (mg/L)	---	---
Antimony, total (mg/L)	---	---
Chromium, total (mg/L)	---	---
Cobalt, total (mg/L)	---	---
Copper, total (mg/L)	---	---
Iron, total (mg/L)	---	---
Lead, total (mg/L)	---	---
Mercury, total (mg/L)	---	---
Nickel, total (mg/L)	---	---
Silver, total (mg/L)	---	---
Vanadium, total (mg/L)	---	---
Zinc, total (mg/L)	---	---
cis-1,2-Dichloroethene (ug/L)	---	---
trans-1,2-Dichloroethene (ug/L)	---	---
Methylene chloride (ug/L)	---	---
1,1,2,2-Tetrachloroethane (ug/L)	---	---
Tetrachloroethene (ug/L)	---	---
Toluene (ug/L)	---	---
Trichloroethene (ug/L)	---	---
Acetone (ug/L)	---	---
2-Hexanone (ug/L)	---	---
4-Methyl-2-pentanone (MIBK) (ug/L)	---	---

NOTES: (1) Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.

--- - Not analyzed, NA - Data not available

U - Not Detected, J - Estimated

TOD = 1.5 X CBOD5 + 4.5 X TKN

**Table 2**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Ground Water Elevation Summary Table**

WELL #	Ground Elevation (ft)	Well Casing Elevation (ft)	Screened Interval Elevation (ft)	Ground Water Elevation (ft) 05/28/92	Ground Water Elevation (ft) 06/26/92	Ground Water Elevation (ft) 08/07/92	Ground Water Elevation (ft) 09/26/94	Ground Water Elevation (ft) 09/27/94	Ground Water Elevation (ft) 10/18/94
MW-01	99.36	101.11	75.4 - 85.4	DRY	DRY	79.69	---	---	DRY
MW-02	91.80	94.68	76.6 - 86.6	83.21	82.81	84.32	83.10	83.28	80.12
MW-03	97.65	99.63	73.7 - 83.7	80.44	80.09	81.63	AB	AB	AB
MW-04	65.62	68.52	46.6 - 56.6	51.08	49.95	50.81	47.22	52.21	46.79
MW-05	88.21	90.42	49.2 - 59.2	60.71	63.76	61.22	59.87	59.91	59.45
MW-06	77.46	79.38	46.4 - 56.4	60.50	60.49	60.46	59.51	59.52	59.05
MW-07 (B)	75.66	78.34	34.3 - 44.3	54.59	54.55	54.47	53.90	53.97	53.55
MW-08	88.21	91.78	53.9 - 63.9	66.38	66.38	66.83	61.59	61.65	60.99
MW-09	102.44	104.03	49.7 - 59.7	60.46	60.51	61.83	59.57	59.59	59.08
MW-10 (B)	97.51	97.27	43.0 - 53.0	61.15	61.99	61.69	---	---	56.02
MW-11 (B)	91.48	93.80	43.1 - 53.1	62.34	63.70	63.66	58.41	58.39	57.47
MW-12	93.62	94.14	51.9 - 61.9	62.24	60.74	62.77	59.77	59.79	59.31
MW-13	98.80	98.70	77.7 - 87.7	DRY	80.62	80.92	---	---	78.70
MW-14	98.76	100.62	74.6 - 84.6	75.11	79.07	81.54	---	---	86.18
MW-15 (B)	96.10	98.90	32.7 - 42.7	NI	NI	NI	---	---	53.47
MW-16 (B)	98.50	100.85	50.8 - 60.8	NI	NI	NI	---	---	61.67
MW-17	66.90	69.24	53.7 - 63.7	NI	NI	NI	54.61	54.61	54.08
MW-18	76.50	78.29	61.5 - 71.5	NI	NI	NI	NI	NI	NI
MW-19	69.50	71.27	46.5 - 56.5	NI	NI	NI	NI	NI	NI
MW-20	70.98	72.89	51.9 - 61.9	NI	NI	NI	NI	NI	NI
MW-21	69.90	71.87	59.5 - 64.5	NI	NI	NI	NI	NI	NI
MW-22	71.50	73.34	60.9 - 65.9	NI	NI	NI	NI	NI	NI
MW-23 (B)	89.80	91.72	17.3 - 22.3	NI	NI	NI	NI	NI	NI
PZ-01	81.80	83.95	49.8 - 59.8	NI	NI	NI	59.56	59.57	59.10
PZ-02	80.60	83.06	42.8 - 52.8	NI	NI	NI	59.35	59.36	58.89
RW-01	78.40	80.28	29.4-39.4 - 45.4-50.4	NI	NI	NI	56.88	56.89	58.22
RW-02 (B)	91.58	95.18	NA - NA	NI	NI	NI	NI	NI	NI
SUMP	NA	97.93	NA - NA	NI	NI	NI	NI	NI	NI

NOTES: NI-Well not installed at time of monitoring, NA-Data not available, AB-Well was abandoned, --- Water level not monitored, (B)-Bedrock ground water monitoring well. Elevations based on assumed datum. MW-01 through MW-16 installed during Remedial Investigation (Stearns & Wheler). MW-03 was removed as part of the TCE Soils Interim Remedial Measure (IRM) completed in September 1994. System start-up 02/06/96; System shutdown 02/15/96; System restored 02/20/96. MW-13 casing elev. changed 06/06/96. MW-04 and MW-20 were abandoned and replaced by MW-21 and MW-22 on 01/20/97.

**Table 2**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Ground Water Elevation Summary Table**

WELL #	Ground Water Elevation (ft) 11/02/94	Ground Water Elevation (ft) 11/17/94	Ground Water Elevation (ft) 11/30/94	Ground Water Elevation (ft) 12/15/94	Ground Water Elevation (ft) 12/27/94	Ground Water Elevation (ft) 01/13/95	Ground Water Elevation (ft) 01/25/95	Ground Water Elevation (ft) 02/09/95	Ground Water Elevation (ft) 02/23/95
MW-01	---	---	---	---	---	---	---	---	---
MW-02	---	---	---	---	---	---	---	---	---
MW-03	AB								
MW-04	---	---	---	---	---	---	---	---	---
MW-05	---	---	---	---	---	---	---	---	---
MW-06	---	---	---	---	---	---	---	---	---
MW-07 (B)	---	---	---	---	---	---	---	---	---
MW-08	---	---	---	---	---	---	---	---	---
MW-09	---	---	---	---	---	---	---	---	---
MW-10 (B)	55.07	55.19	54.94	55.19	55.02	54.94	54.95	54.52	54.36
MW-11 (B)	50.01	56.68	55.59	56.63	56.55	55.63	55.63	56.13	55.63
MW-12	---	---	---	---	---	---	---	---	---
MW-13	82.92	78.21	78.21	80.92	78.34	78.25	77.83	77.84	77.75
MW-14	80.12	80.54	80.54	80.20	80.54	80.62	80.45	78.95	79.54
MW-15 (B)	---	---	---	---	---	---	---	---	---
MW-16 (B)	---	---	---	---	---	---	---	---	---
MW-17	---	---	---	---	---	---	---	---	---
MW-18	NI								
MW-19	NI								
MW-20	NI								
MW-21	NI								
MW-22	NI								
MW-23 (B)	NI								
PZ-01	---	---	---	---	---	---	---	---	---
PZ-02	---	---	---	---	---	---	---	---	---
RW-01	---	---	---	---	---	---	---	---	---
RW-02 (B)	NI								
SUMP	76.04	74.83	75.00	75.17	74.83	75.00	75.00	74.88	75.00

NOTES: NI-Well not installed at time of monitoring, NA-Data not available, AB-Well was abandoned, --- Water level not monitored, (B)-Bedrock ground water monitoring well. Elevations based on assumed datum. MW-01 through MW-16 installed during Remedial Investigation (Stearns & Wheler). MW-03 was removed as part of the TCE Soils Interim Remedial Measure (IRM) completed in September 1994. System start-up 02/06/96; System shutdown 02/15/96; System restored 02/20/96. MW-13 casing elev. changed 06/06/96. MW-04 and MW-20 were abandoned and replaced by MW-21 and MW-22 on 01/20/97.

**Table 2**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Ground Water Elevation Summary Table**

WELL #	Ground Water Elevation (ft) 03/09/95	Ground Water Elevation (ft) 04/26/95	Ground Water Elevation (ft) 07/25/95	Ground Water Elevation (ft) 10/17/95	Ground Water Elevation (ft) 02/05/96	Ground Water Elevation (ft) 02/07/96	Ground Water Elevation (ft) 02/15/96	Ground Water Elevation (ft) 02/16/96	Ground Water Elevation (ft) 02/20/96
MW-01	---	DRY	DRY	DRY	77.06	76.64	75.30	DRY	DRY
MW-02	---	83.28	82.42	84.22	84.04	83.87	83.41	83.34	83.15
MW-03	AB								
MW-04	---	51.44	45.94	50.05	53.60	52.06	55.39	54.43	52.46
MW-05	---	60.34	58.78	---	61.26	61.01	60.80	60.73	60.50
MW-06	---	60.02	58.52	58.10	60.86	60.44	60.41	60.11	59.80
MW-07 (B)	---	54.51	53.27	52.71	55.16	54.67	55.03	54.52	54.45
MW-08	---	63.41	59.82	60.76	66.61	66.40	65.93	65.84	65.47
MW-09	---	60.10	58.56	58.16	60.95	60.70	60.48	60.35	60.07
MW-10 (B)	55.02	57.49	54.60	54.61	62.00	59.88	62.11	60.42	59.96
MW-11 (B)	56.55	58.86	55.72	55.31	62.63	60.37	62.67	60.88	60.35
MW-12	---	60.30	58.76	58.35	61.11	60.83	60.65	60.50	60.21
MW-13	77.67	DRY	DRY	DRY	80.00	79.98	79.91	79.90	79.88
MW-14	80.12	80.61	80.61	80.72	79.91	80.02	80.28	80.29	80.35
MW-15 (B)	---	54.71	51.60	50.47	59.24	59.37	59.79	59.63	59.56
MW-16 (B)	---	63.86	59.41	58.06	67.14	67.17	66.90	66.79	66.57
MW-17	---	59.02	57.71	DRY	60.29	60.17	59.75	59.70	59.52
MW-18	NI								
MW-19	NI								
MW-20	NI								
MW-21	NI								
MW-22	NI								
MW-23 (B)	NI								
PZ-01	---	60.08	58.58	58.16	60.92	60.61	60.46	60.28	59.99
PZ-02	---	59.88	58.37	57.97	60.70	60.30	60.26	59.97	59.66
RW-01	---	59.14	57.60	57.11	59.64	55.04	59.22	54.71	54.40
RW-02 (B)	NI	NI	NI	56.05	63.80	59.98	63.83	60.67	60.09
SUMP	78.00	75.09	75.25	76.94	74.67	74.68	74.64	74.63	74.63

NOTES: NI-Well not installed at time of monitoring, NA-Data not available, AB-Well was abandoned, --- Water level not monitored, (B)-Bedrock ground water monitoring well. Elevations based on assumed datum. MW-01 through MW-16 installed during Remedial Investigation (Stearns & Wheler). MW-03 was removed as part of the TCE Soils Interim Remedial Measure (IRM) completed in September 1994. System start-up 02/06/96; System shutdown 02/15/96; System restored 02/20/96. MW-13 casing elev. changed 06/06/96. MW-04 and MW-20 were abandoned and replaced by MW-21 and MW-22 on 01/20/97.

**Table 2**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Ground Water Elevation Summary Table**

WELL #	Ground Water Elevation (ft) 02/22/96	Ground Water Elevation (ft) 02/29/96	Ground Water Elevation (ft) 03/07/96	Ground Water Elevation (ft) 03/21/96	Ground Water Elevation (ft) 04/04/96	Ground Water Elevation (ft) 04/10/96	Ground Water Elevation (ft) 04/18/96	Ground Water Elevation (ft) 05/02/96	Ground Water Elevation (ft) 06/06/96
MW-01	DRY	75.36	75.17	77.34	DRY	DRY	DRY	77.73	DRY
MW-02	83.32	83.67	83.50	84.24	83.68	83.68	84.86	85.35	83.17
MW-03	AB								
MW-04	60.37	58.14	55.10	59.26	52.66	54.43	60.28	59.70	51.63
MW-05	60.40	60.14	59.73	58.85	58.32	58.14	58.20	58.71	60.54
MW-06	59.75	59.45	58.96	58.02	57.48	57.28	57.41	58.17	59.91
MW-07 (B)	54.58	54.46	54.32	54.29	54.17	54.15	54.32	54.75	55.02
MW-08	65.42	65.12	64.68	64.76	64.10	63.83	64.08	65.43	67.07
MW-09	60.02	59.71	59.22	58.30	57.78	57.59	57.73	58.46	60.18
MW-10 (B)	59.91	59.64	59.43	59.07	58.81	58.72	58.61	59.72	62.25
MW-11 (B)	60.29	59.99	59.78	59.38	59.10	59.01	58.94	60.35	62.68
MW-12	60.16	59.86	59.37	58.44	57.93	57.74	57.86	58.59	60.33
MW-13	79.87	79.86	79.77	79.68	79.60	79.57	79.52	79.44	79.28
MW-14	80.38	80.44	80.45	80.49	80.52	80.55	78.14	79.29	80.56
MW-15 (B)	59.56	59.46	59.40	59.14	59.07	59.04	58.84	59.87	62.62
MW-16 (B)	66.52	66.39	66.17	65.99	65.99	65.90	65.84	67.02	68.40
MW-17	59.64	59.42	59.28	59.30	59.27	59.14	59.30	59.95	59.22
MW-18	NI	72.95							
MW-19	NI	DRY							
MW-20	NI	DRY							
MW-21	NI								
MW-22	NI								
MW-23 (B)	NI								
PZ-01	59.93	59.63	59.14	58.21	57.67	57.47	57.60	58.34	60.09
PZ-02	59.61	59.33	58.83	57.90	57.39	57.19	57.30	58.04	59.77
RW-01	54.35	54.05	53.58	52.76	52.24	52.03	52.11	52.69	53.82
RW-02 (B)	59.97	59.63	59.41	58.95	58.63	58.52	58.41	59.63	62.56
SUMP	75.30	74.90	74.65	74.87	74.69	74.99	75.89	75.76	74.73

NOTES: NI-Well not installed at time of monitoring, NA-Data not available, AB-Well was abandoned, --- Water level not monitored, (B)-Bedrock ground water monitoring well. Elevations based on assumed datum. MW-01 through MW-16 installed during Remedial Investigation (Stearns & Wheeler). MW-03 was removed as part of the TCE Soils Interim Remedial Measure (IRM) completed in September 1994. System start-up 02/06/96; System shutdown 02/15/96; System restored 02/20/96. MW-13 casing elev. changed 06/06/96. MW-04 and MW-20 were abandoned and replaced by MW-21 and MW-22 on 01/20/97.



**Table 2**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Ground Water Elevation Summary Table**

WELL #	Ground Water Elevation (ft) 07/16/96	Ground Water Elevation (ft) 09/05/96	Ground Water Elevation (ft) 10/21/96	Ground Water Elevation (ft) 11/19/96	Ground Water Elevation (ft) 01/16/97	Ground Water Elevation (ft) 02/04/97	Ground Water Elevation (ft) 04/15/97	Ground Water Elevation (ft) 07/08/97	Ground Water Elevation (ft) 10/22/97
MW-01	DRY	DRY	DRY	76.60	75.15	--	75.64	DRY	DRY
MW-02	83.32	82.57	83.18	84.22	83.56	--	83.81	83.09	82.84
MW-03	AB								
MW-04	52.45	DRY	55.91	55.91	53.12	--	AB	AB	AB
MW-05	58.98	56.33	55.40	56.49	59.15	--	59.83	59.16	58.34
MW-06	58.13	54.95	53.71	55.61	58.39	--	59.34	58.58	57.97
MW-07 (B)	53.95	52.44	51.22	52.68	54.28	--	54.70	52.93	50.63
MW-08	64.50	59.05	59.56	63.61	64.67	--	65.15	61.65	58.90
MW-09	58.38	55.38	54.24	56.64	58.65	--	59.60	58.76	58.00
MW-10 (B)	59.11	53.88	51.06	54.95	59.61	--	58.11	53.44	50.75
MW-11 (B)	59.53	54.72	52.88	55.85	60.15	--	58.59	55.20	52.50
MW-12	58.54	55.48	54.30	56.18	58.81	--	59.72	58.92	58.21
MW-13	79.35	79.15	79.07	80.68	80.49	--	80.33	79.84	79.53
MW-14	80.66	80.59	80.61	80.08	80.59	--	80.53	80.55	80.58
MW-15 (B)	59.24	54.83	51.58	51.99	58.83	--	59.83	56.63	50.48
MW-16 (B)	65.57	63.31	60.09	61.06	66.13	--	66.89	64.43	58.45
MW-17	58.46	57.89	55.96	58.02	59.33	--	59.64	58.33	DRY
MW-18	72.32	70.81	70.77	73.04	73.31	72.78	73.60	71.34	69.71
MW-19	DRY								
MW-20	50.26	DRY	DRY	DRY	DRY	--	AB	AB	AB
MW-21	NI	NI	NI	NI	NI	63.69	63.74	63.06	62.93
MW-22	NI	NI	NI	NI	NI	63.69	67.92	67.35	65.96
MW-23 (B)	NI	NI	NI	NI	NI	NI	37.71	35.61	32.29
PZ-01	58.31	55.13	53.90	55.83	58.57	--	59.51	58.70	58.01
PZ-02	57.97	54.90	53.53	55.25	58.23	--	59.13	58.34	57.65
RW-01	51.94	48.05	41.80	47.33	50.74	--	50.30	43.34	42.03
RW-02 (B)	59.14	51.01	42.02	55.39	60.03	--	55.69	44.07	42.89
SUMP	74.78	74.56	74.85	74.77	74.71	--	74.94	75.01	74.75

NOTES: NI-Well not installed at time of monitoring, NA-Data not available, AB-Well was abandoned, --- Water level not monitored, (B)-Bedrock ground water monitoring well. Elevations based on assumed datum. MW-01 through MW-16 installed during Remedial Investigation (Stearns & Wheeler). MW-03 was removed as part of the TCE Soils Interim Remedial Measure (IRM) completed in September 1994. System start-up 02/06/96; System shutdown 02/15/96; System restored 02/20/96. MW-13 casing elev. changed 06/06/96. MW-04 and MW-20 were abandoned and replaced by MW-21 and MW-22 on 01/20/97.



**Table 2**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Ground Water Elevation Summary Table**

WELL #	Ground Water Elevation (ft) 01/29/98	Ground Water Elevation (ft) 04/15/98	Ground Water Elevation (ft) 10/20/98
MW-01	DRY	DRY	DRY
MW-02	83.47	83.52	83.54
MW-03	AB	AB	AB
MW-04	AB	AB	AB
MW-05	60.86	61.05	60.04
MW-06	60.46	60.57	59.69
MW-07 (B)	52.90	53.82	51.76
MW-08	64.98	67.17	59.86
MW-09	60.51	60.56	59.71
MW-10 (B)	55.78	61.08	51.88
MW-11 (B)	56.75	61.73	53.98
MW-12	60.67	60.80	59.89
MW-13	78.87	78.67	78.31
MW-14	80.78	80.78	80.64
MW-15 (B)	56.34	62.10	52.58
MW-16 (B)	65.71	68.03	61.84
MW-17	59.70	59.51	57.93
MW-18	73.50	73.29	70.74
MW-19	DRY	DRY	DRY
MW-20	AB	AB	AB
MW-21	63.82	63.54	63.23
MW-22	68.51	68.39	67.83
MW-23 (B)	34.95	37.95	33.57
PZ-01	60.50	60.61	59.70
PZ-02	60.22	60.34	59.46
RW-01	43.13	32.60	32.36
RW-02 (B)	52.74	59.94	44.33
SUMP	74.89	74.96	75.20

NOTES: NI-Well not installed at time of monitoring, NA-Data not available, AB-Well was abandoned, --- Water level not monitored, (B)-Bedrock ground water monitoring well. Elevations based on assumed datum. MW-01 through MW-16 installed during Remedial Investigation (Steams & Wheler). MW-03 was removed as part of the TCE Soils Interim Remedial Measure (IRM) completed in September 1994. System start-up 02/06/96; System shutdown 02/15/96; System restored 02/20/96. MW-13 casing elev. changed 06/06/96. MW-04 and MW-20 were abandoned and replaced by MW-21 and MW-22 on 01/20/97.

**Table 3**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Ground Water Trichloroethylene Concentrations**

Date Sampled:	08/89	12/89	05/90	05/92	07/94	10/94	02/95	04/95	07/95
	TCE	TCE	TCE	TCE	TCE	TCE	TCE	TCE	TCE
WELL #	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MW-01	112	ND	2	ND	---	DRY	---	DRY	DRY
MW-02	ND	ND	1	ND	---	ND	ND	ND	ND
MW-03	Product	>55000	440000	340000	AB	AB	AB	AB	AB
MW-04	---	7	43	6	270	23	13	16	---
MW-05	---	340	344	110	330	410	290	280	---
MW-06	---	700	454	510	390	360	330	280	270
MW-07 (B)	---	ND	ND	ND	ND	ND	ND	ND	ND
MW-08	---	ND	ND	ND	---	ND	ND	ND	ND
MW-09	---	109	106	60	72	74	74	84	75
MW-10 (B)	---	---	---	4500	1600	1300	1400	1200	900
MW-11 (B)	---	---	---	5200	5500	5300	4300	3900	4000
MW-12	---	---	---	36	44	35	33	30	25
MW-13	---	---	---	110	740	510	---	DRY	DRY
MW-14	---	---	---	67	150	120	79	95	140
MW-15 (B)	---	---	---	NI	---	14	11	10	17
MW-16 (B)	---	---	---	NI	---	6	17	7	18
MW-17	---	---	---	NI	260	140	200	130	160
MW-18	---	---	---	NI	NI	NI	NI	NI	NI
MW-19	---	---	---	NI	NI	NI	NI	NI	NI
MW-20	---	---	---	NI	NI	NI	NI	NI	NI
MW-21	---	---	---	NI	NI	NI	NI	NI	NI
MW-22	---	---	---	NI	NI	NI	NI	NI	NI
MW-23 (B)	---	---	---	---	---	---	---	---	---
MW-24	NI	NI	NI	NI	NI	NI	NI	NI	NI
PZ-01	---	---	---	---	---	---	---	---	120
PZ-02	---	---	---	---	---	---	---	490	400
RW-01	---	---	---	NI	---	---	---	---	---
RW-02 (B)	---	---	---	NI	NI	NI	NI	NI	NI
SUMP	---	---	---	NI	NI	NI	---	---	---

NOTES: ND - Not detected above method detection limit, --- - Not analyzed, NI - Not installed at time of monitoring, AB - Well was abandoned.  
 MW-01 through MW-16 installed during Remedial Investigation (Stearns & Wheler).  
 MW-03 removed as part of TCE Soils Interim Remedial Measure (IRM) completed in September 1994. Data was collected by Stearns & Wheler prior to 07/22/94.  
 MW-04 and MW-20 were abandoned and replaced by MW-21 and MW-22 on 01/20/97.

**Table 3**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Ground Water Trichloroethylene Concentrations**

Date Sampled:	10/95 TCE ug/L	01/96 TCE ug/L	04/96 TCE ug/L	05/96 TCE ug/L	07/96 TCE ug/L	10/96 TCE ug/L	01/97 TCE ug/L	04/97 TCE ug/L	07/97 TCE ug/L
WELL #									
MW-01	DRY	---	DRY	---	DRY	DRY	---	---	DRY
MW-02	ND	---	---	---	---	ND	---	---	---
MW-03	AB								
MW-04	15	---	---	---	---	62	---	AB	AB
MW-05	---	---	---	---	---	180	---	---	---
MW-06	180	170	110	---	98	71	75	52	---
MW-07 (B)	ND	---	---	---	---	ND	---	---	---
MW-08	ND	---	---	---	---	ND	---	---	---
MW-09	68	100	64	---	65	50	95	83	66
MW-10 (B)	890	900	820	---	960	1700	1900	1200	---
MW-11 (B)	2600	2500	1500	---	1400	1600	1500	800	---
MW-12	29	---	---	---	---	17	---	---	---
MW-13	DRY	---	---	---	---	370	---	---	---
MW-14	78	84	250	---	230	170	390	400	260
MW-15 (B)	7	---	---	---	---	20	---	---	---
MW-16 (B)	20	---	---	---	---	11	---	---	---
MW-17	---	180	350	---	460	300	450	220	150
MW-18	NI	NI	NI	1200	---	2900	850	410	1800
MW-19	NI	NI	NI	---	DRY	DRY	DRY	DRY	DRY
MW-20	NI	NI	NI	70	---	DRY	DRY	AB	AB
MW-21	NI	520	310						
MW-22	NI	1	3						
MW-23 (B)	---	---	---	---	---	---	---	ND	ND
MW-24	NI								
PZ-01	---	---	---	---	---	32	---	---	---
PZ-02	---	---	---	---	---	540	---	---	---
RW-01	---	---	---	---	---	---	---	---	---
RW-02 (B)	---	---	---	---	---	---	---	---	---
SUMP	---	170	180	---	1000	---	320	180	---

NOTES: ND - Not detected above method detection limit, --- - Not analyzed, NI - Not installed at time of monitoring, AB - Well was abandoned.  
 MW-01 through MW-16 installed during Remedial Investigation (Stearns & Wheeler).  
 MW-03 removed as part of TCE Soils Interim Remedial Measure (IRM) completed in September 1994. Data was collected by Stearns & Wheeler prior to 07/22/94.  
 MW-04 and MW-20 were abandoned and replaced by MW-21 and MW-22 on 01/20/97.

**Table 3**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Ground Water Trichloroethylene Concentrations**

Date Sampled:	10/97	01/98	04/98	10/98	11/98
	TCE	TCE	TCE	TCE	TCE
	ug/L	ug/L	ug/L	ug/L	ug/L
WELL #					
MW-01	DRY	DRY	DRY	DRY	DRY
MW-02	ND	---	---	ND	---
MW-03	AB	AB	AB	AB	AB
MW-04	AB	AB	AB	AB	AB
MW-05	220	---	---	200	---
MW-06	ND	---	140	92	---
MW-07 (B)	ND	---	---	ND	---
MW-08	---	---	---	ND	---
MW-09	61	140	120	80	---
MW-10 (B)	1300	---	930	880	---
MW-11 (B)	1600	---	920	1100	---
MW-12	19	---	---	22	---
MW-13	760	---	---	480	---
MW-14	560	560	460	400	---
MW-15 (B)	18	---	---	21	---
MW-16 (B)	14	---	---	4	---
MW-17	---	270	800	250	---
MW-18	3100	1000	1100	3600	---
MW-19	DRY	DRY	DRY	DRY	DRY
MW-20	AB	AB	AB	AB	AB
MW-21	450	120	1300	180	---
MW-22	8	5	10	14	---
MW-23 (B)	ND	ND	---	ND	---
MW-24	NI	NI	NI	NI	6000
PZ-01	48	---	---	85	---
PZ-02	420	---	---	250	---
RW-01	---	---	---	---	---
RW-02 (B)	---	---	---	---	---
SUMP	2600	---	560	850	---

NOTES: ND - Not detected above method detection limit, --- - Not analyzed, NI - Not installed at time of monitoring, AB - Well was abandoned.

MW-01 through MW-16 installed during Remedial Investigation (Stearns & Wheeler).

MW-03 removed as part of TCE Soils Interim Remedial Measure (IRM) completed in September 1994. Data was collected by Stearns & Wheeler prior to 07/22/94.

MW-04 and MW-20 were abandoned and replaced by MW-21 and MW-22 on 01/20/97.

**Table 4**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Other Detected Volatile Organic Compounds**

Analyte	MW-04 10/22/96 ug/L	MW-17 04/10/96 ug/L	MW-17 10/22/96 ug/L	MW-17 01/16/97 ug/L	MW-17 04/15/97 ug/L	MW-17 07/08/97 ug/L	MW-17 01/29/98 ug/L	MW-17 10/20/98 ug/L
cis-1,2-Dichloroethene	12	---	7	---	---	---	---	---
Tetrachloroethene	---	20	12	22	15	18	12	17
Vinyl chloride	---	---	---	---	---	---	---	---

NOTES: --- Not detected.  
 MW-04 and MW-20 were abandoned and replaced by MW-21 and MW-22 on 01/20/97.

**Table 4**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Other Detected Volatile Organic Compounds**

Analyte	MW-18 10/22/96 ug/L	MW-18 07/08/97 ug/L	MW-18 10/21/98 ug/L	MW-20 05/24/96 ug/L	MW-21 01/21/97 ug/L	MW-21 04/16/97 ug/L	MW-21 07/08/97 ug/L	MW-21 10/23/97 ug/L
cis-1,2-Dichloroethene	81	66	160	46	650	630	770	800
Tetrachloroethene	---	---	---	---	---	---	---	---
Vinyl chloride	---	---	---	---	---	---	---	---

NOTES: --- Not detected.  
 MW-04 and MW-20 were abandoned and replaced by MW-21 and MW-22 on 01/20/97.

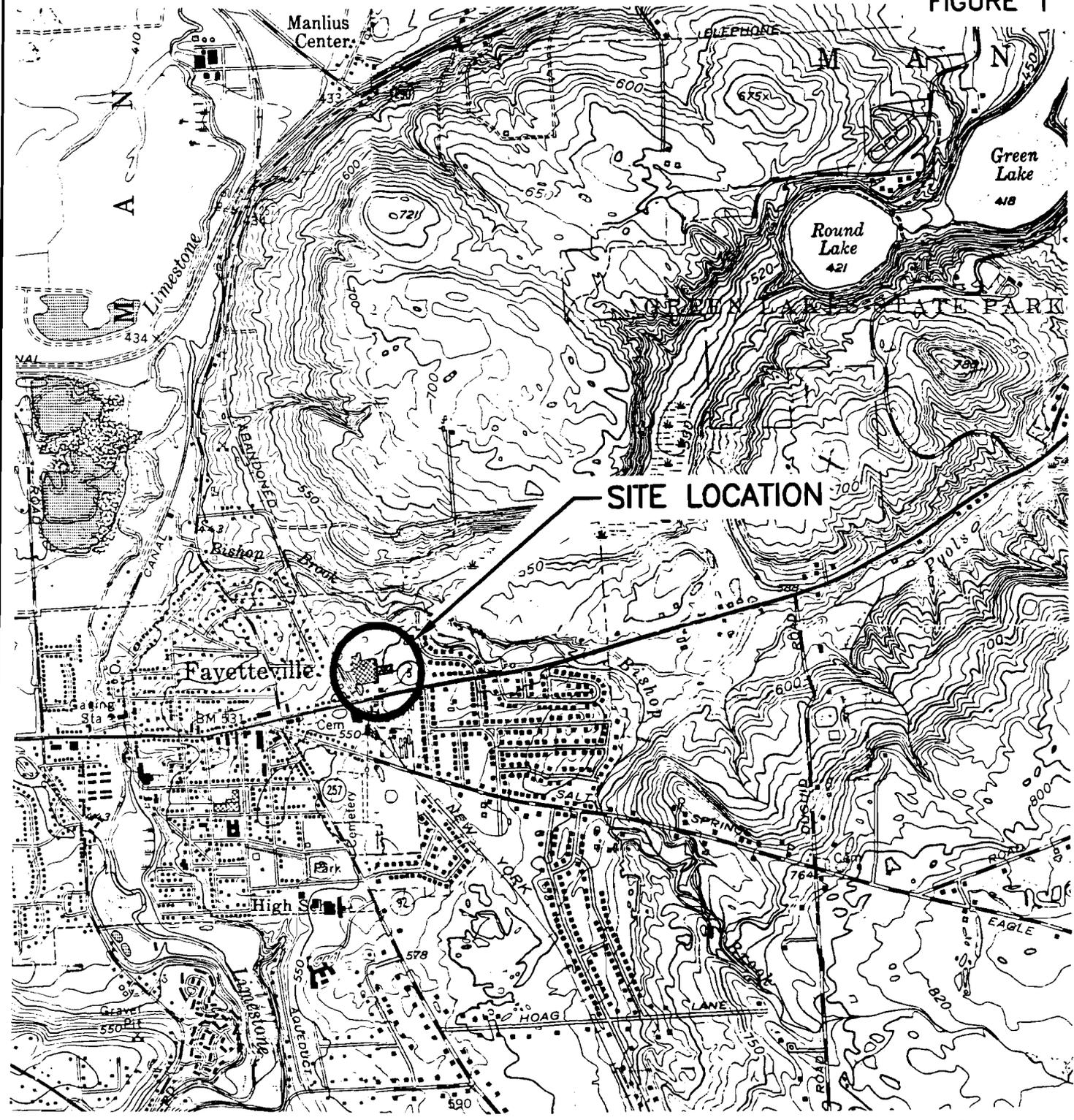
**Table 4**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Other Detected Volatile Organic Compounds**

Analyte	MW-21 01/29/98 ug/L	MW-21 04/16/98 ug/L	MW-21 10/21/98 ug/L	MW-22 01/21/97 ug/L	MW-22 04/16/97 ug/L	MW-22 07/08/97 ug/L	MW-22 10/23/97 ug/L	MW-22 01/29/98 ug/L
cis-1,2-Dichloroethene	350	1400	340	5	4	9	22	11
Tetrachloroethene	---	---	---	---	---	---	---	---
Vinyl chloride	---	---	---	---	---	---	3	---

NOTES: --- Not detected.  
 MW-04 and MW-20 were abandoned and replaced by MW-21 and MW-22 on 01/20/97.



FIGURE 1



ADAPTED FROM 7.5 MIN. U.S.G.S. SYRACUSE EAST QUAD MAP, SYRACUSE, NEW YORK



STATE LOCATION MAP

### ACCURATE DIE CASTING FAYETTEVILLE, NEW YORK

### SITE MAP



FILE NO. 2488.751.020

DATE: DECEMBER 1998 1"=2000'



FIGURE 2



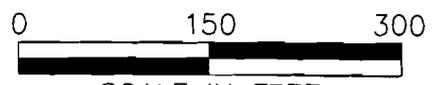
**LEGEND**

- P — PROPERTY LINE
- MW-4 ⊕ MONITORING WELL LOCATION
- MW-3 ⊕ FORMER MONITORING WELL LOCATION
- RW-1 ⊙ OVERBURDEN AQUIFER RECOVERY WELL
- RW-2 ⊙ BEDROCK GROUND WATER RECOVERY WELL
- PZ-1 ● PIEZOMETER LOCATION

NOTE: MW-24 LOC.

ACCURATE DIE CASTING  
FAYETTEVILLE, NEW YORK

**SITE PLAN**



SCALE IN FEET

DATE: JANUARY 1999

FILE NO. 2488.731.021



**O'BRIEN & GERE**  
ENGINEERS INC.

EAST GENESEE ST. (RT.5)

MW-15

MW-1

MW-16

MW-1

AREA 2:  
AREA PREVIOUSLY E)  
AS PART OF TCE SO  
INTERIM REMEDIAL ME

AREA  
APPROX.  
EMPTIED,  
SUBSEQU

FIGURE 3



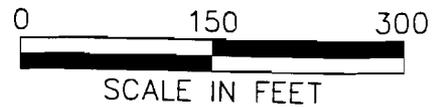
**LEGEND**

- — — — — PROPERTY LINE
- MW-1 MONITORING WELL LOCATION
- MW-4 FORMER MONITORING WELL LOCATION
- RW-1 OVERBURDEN AQUIFER RECOVERY WELL
- RW-2 BEDROCK GROUND WATER RECOVERY WELL
- PZ-1 PIEZOMETER LOCATION
- (58.01) GROUND WATER ELEVATION IN FT
- - - - - 75 GROUND WATER ELEVATION CONTOUR (DASHED WHERE INFERRED)

NOTE: MW-18, 21 & 22 NOT CONTOURED  
MW-24 LOCATION IS APPROXIMATE

ACCURATE DIE CASTING  
FAYETTEVILLE, NEW YORK

**OVERBURDEN  
GROUND WATER  
ELEVATION MAP  
(10/20/98)**



DATE: JANUARY 1999  
FILE NO. 2488.731.022

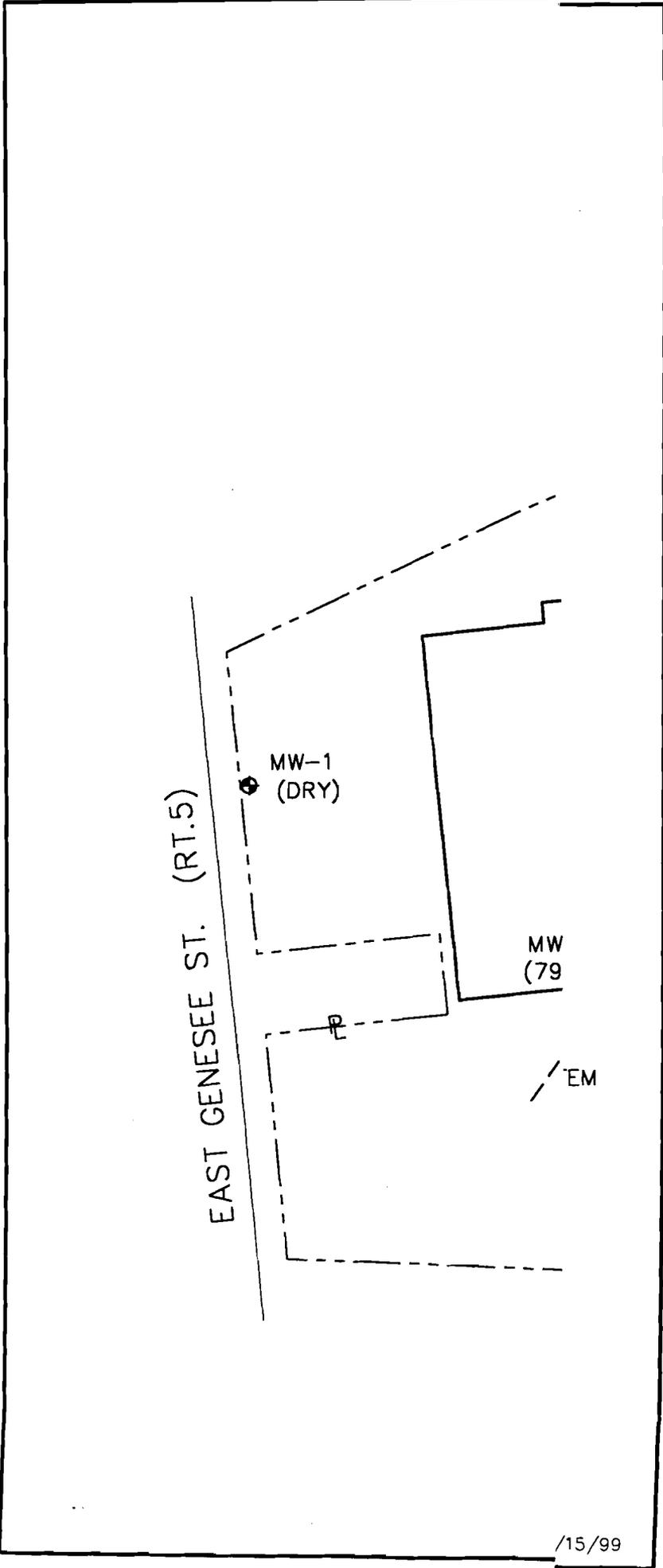


EAST GENESEE ST. (RT.5)

MW-1  
(DRY)

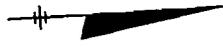
M  
(E  
MW-13  
(78.31)

80



/15/99

FIGURE 4



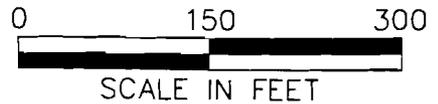
**LEGEND**

- P — PROPERTY LINE
- MW-1 ⊕ MONITORING WELL LOCATION
- MW-4 ⊕ FORMER MONITORING WELL LOCATION
- RW-1 ⊙ OVERBURDEN AQUIFER RECOVERY WELL
- RW-2 ⊙ BEDROCK GROUND WATER RECOVERY WELL
- PZ-1 ● PIEZOMETER LOCATION
- (58.01) GROUND WATER ELEVATION IN FEET
- - - 56 GROUND WATER ELEVATION CONTOUR (DASHED WHERE INFERRED)

NOTE: MW-18, 21 & 22 NOT CONTOURED

ACCURATE DIE CASTING  
FAYETTEVILLE, NEW YORK

**OVERBURDEN  
GROUND WATER  
ELEVATION MAP  
10/22/97**



DATE: JANUARY 1999  
FILE NO. 2488.731.023

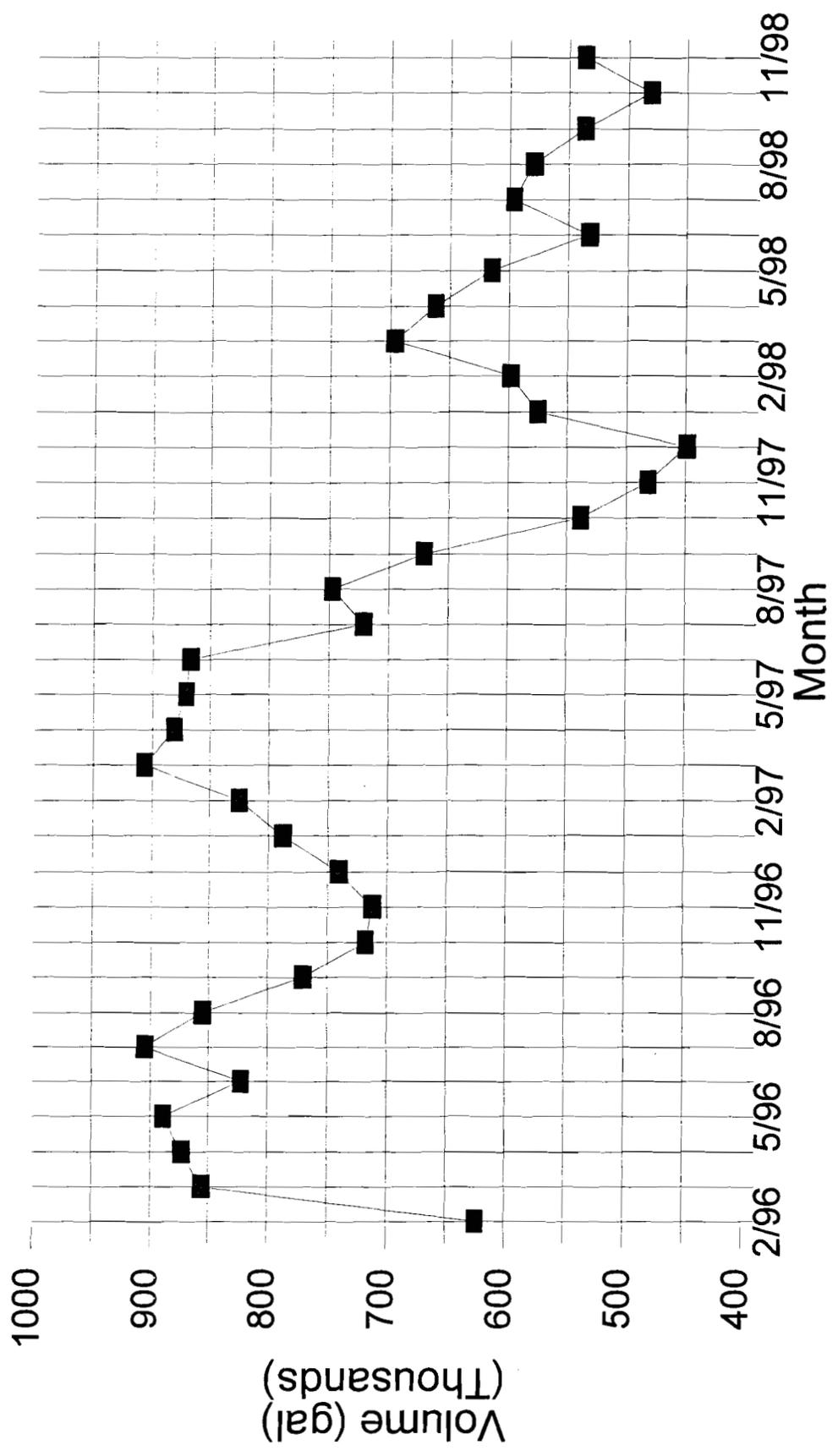


**Attachment 1**

**Monthly Total Treatment System Volume Graph**

# Monthly Total Treatment System Volume

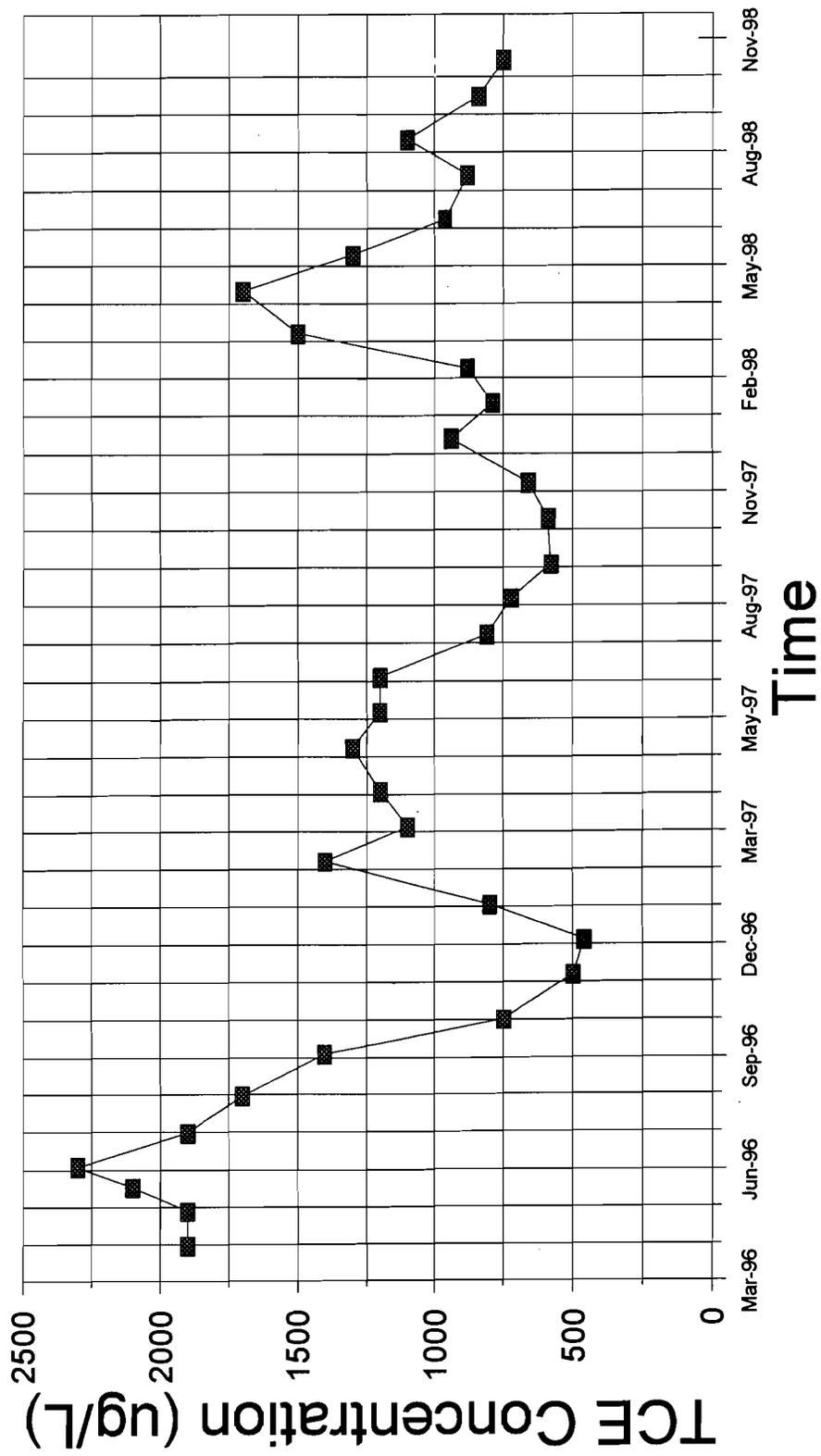
## Former Accurate Die Casting Site



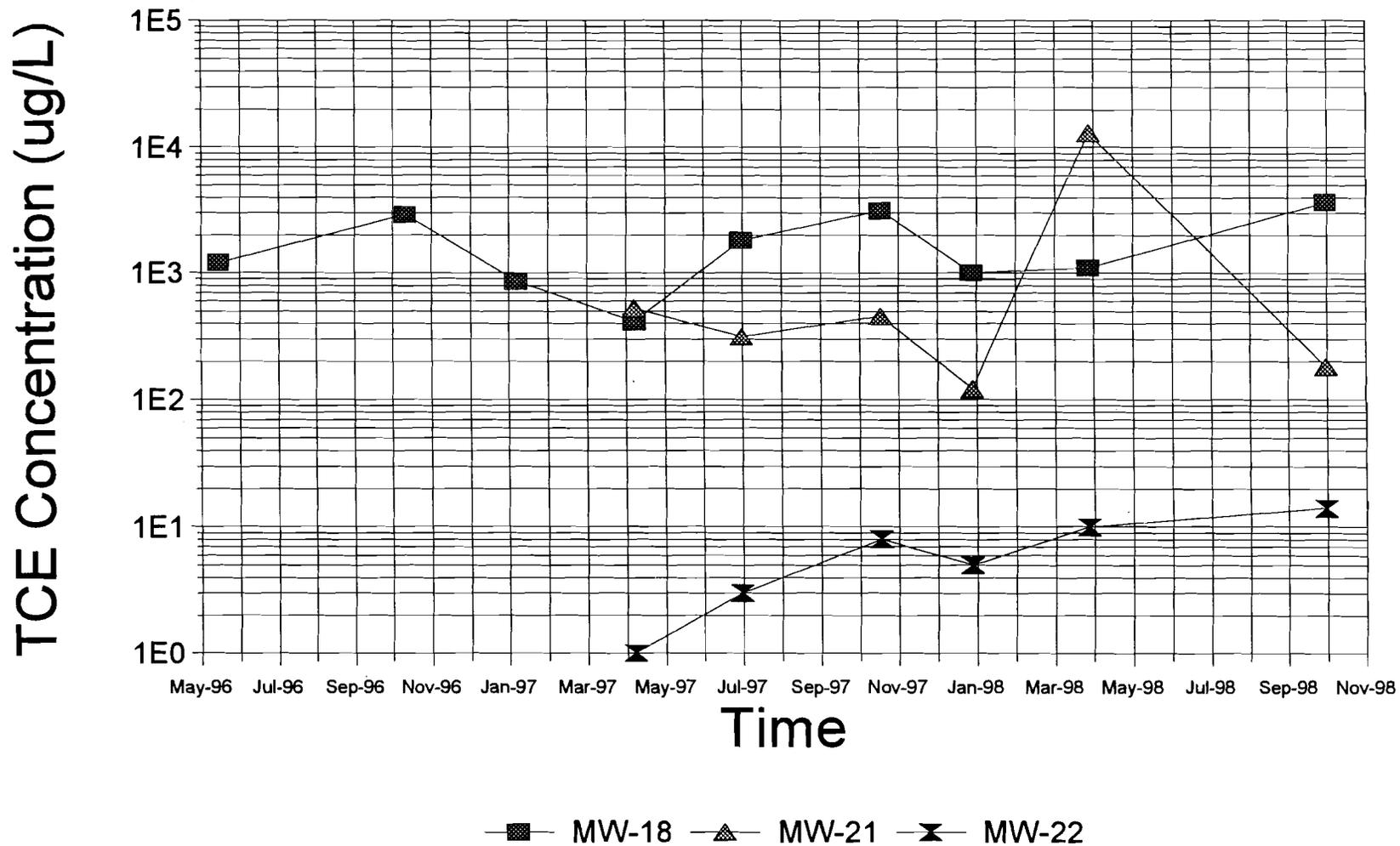
**Attachment 2**

**TCE Concentration Data Graphs**

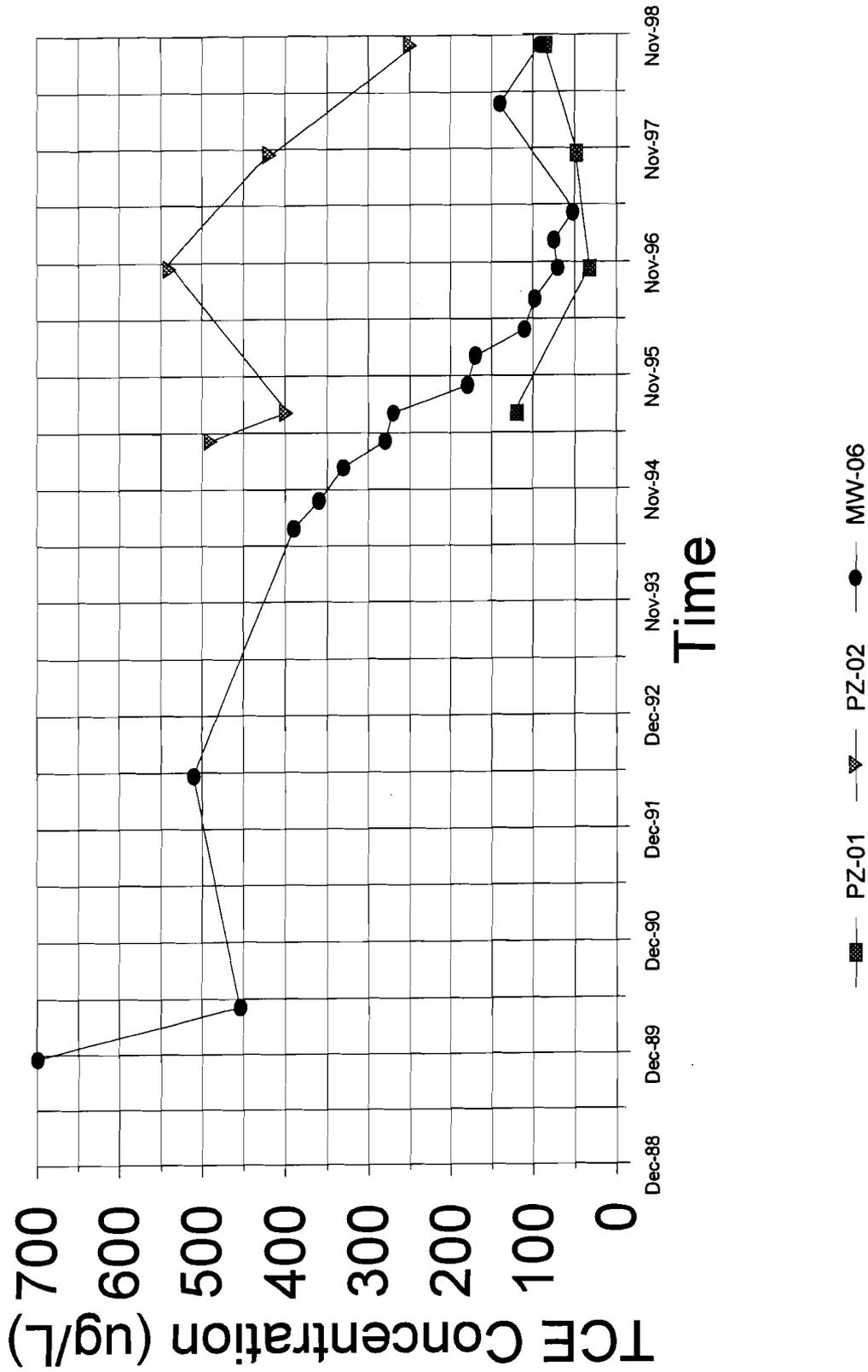
# Accurate Die Casting TCE Data Influent



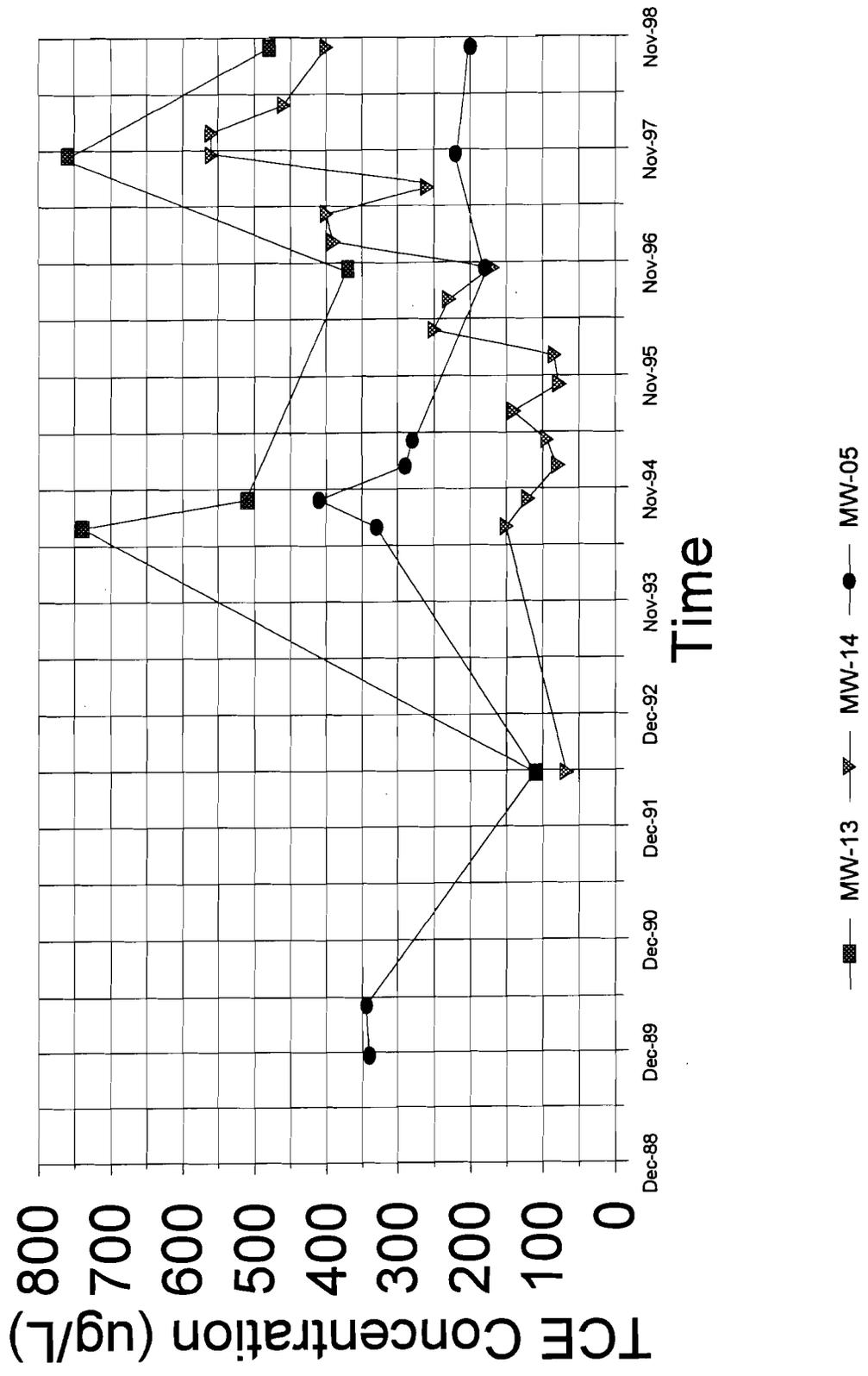
# Accurate Die Casting TCE Data PCB/PAH/VOC Area Wells



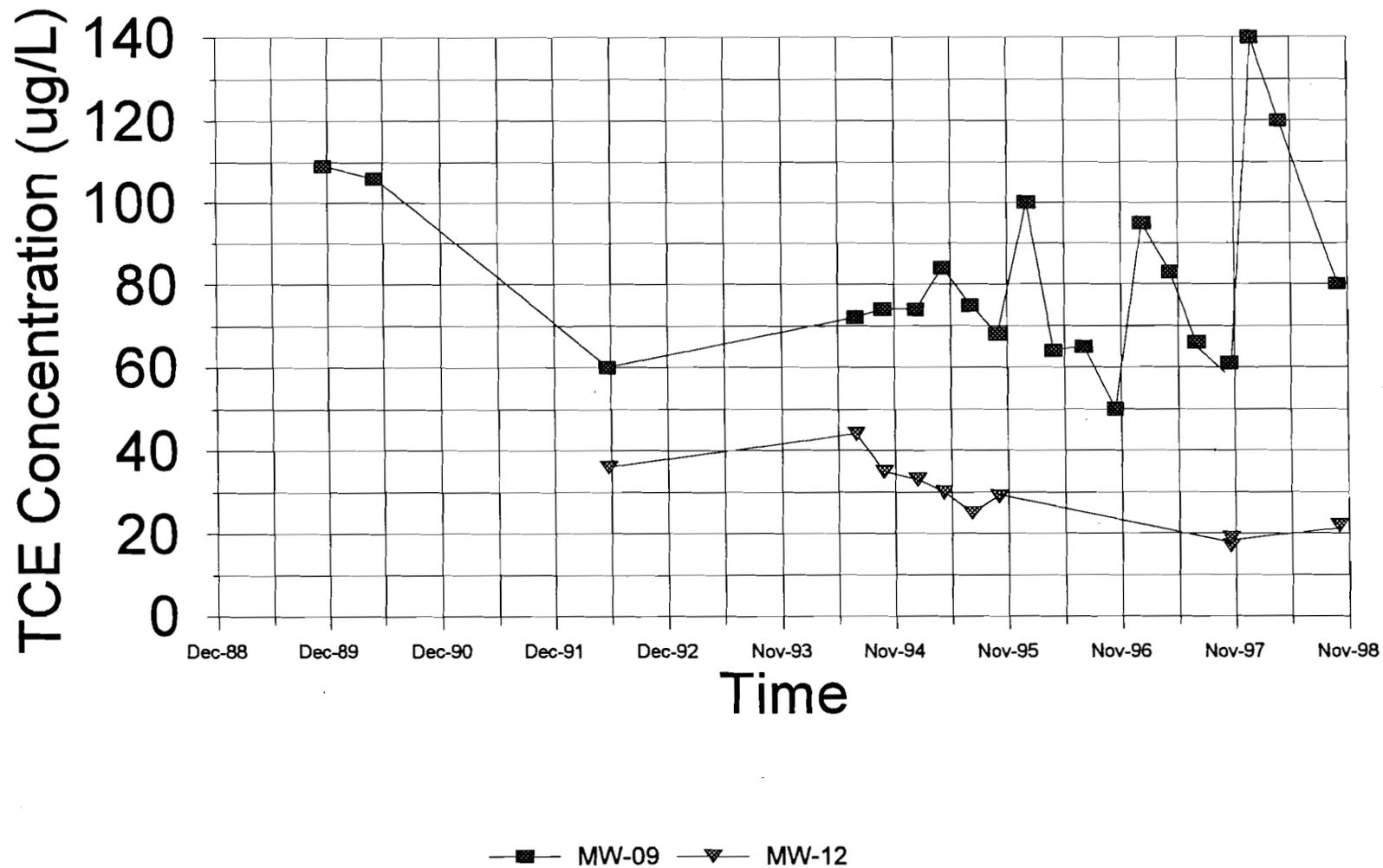
# Accurate Die Casting TCE Data Overburden Wells



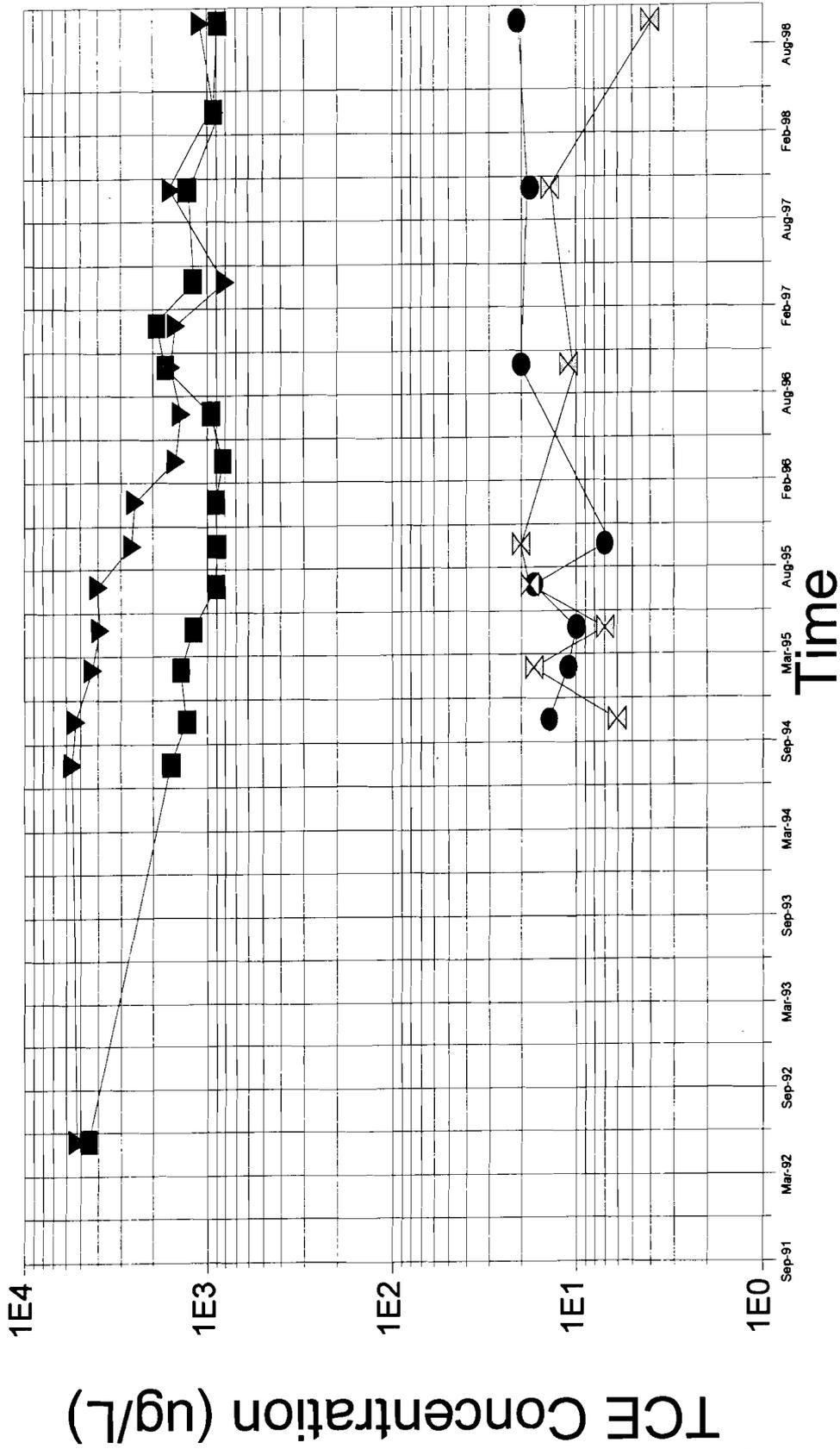
# Accurate Die Casting TCE Data Overburden Wells



# Accurate Die Casting TCE Data Overburden Wells



# Accurate Die Casting TCE Data Bedrock Wells

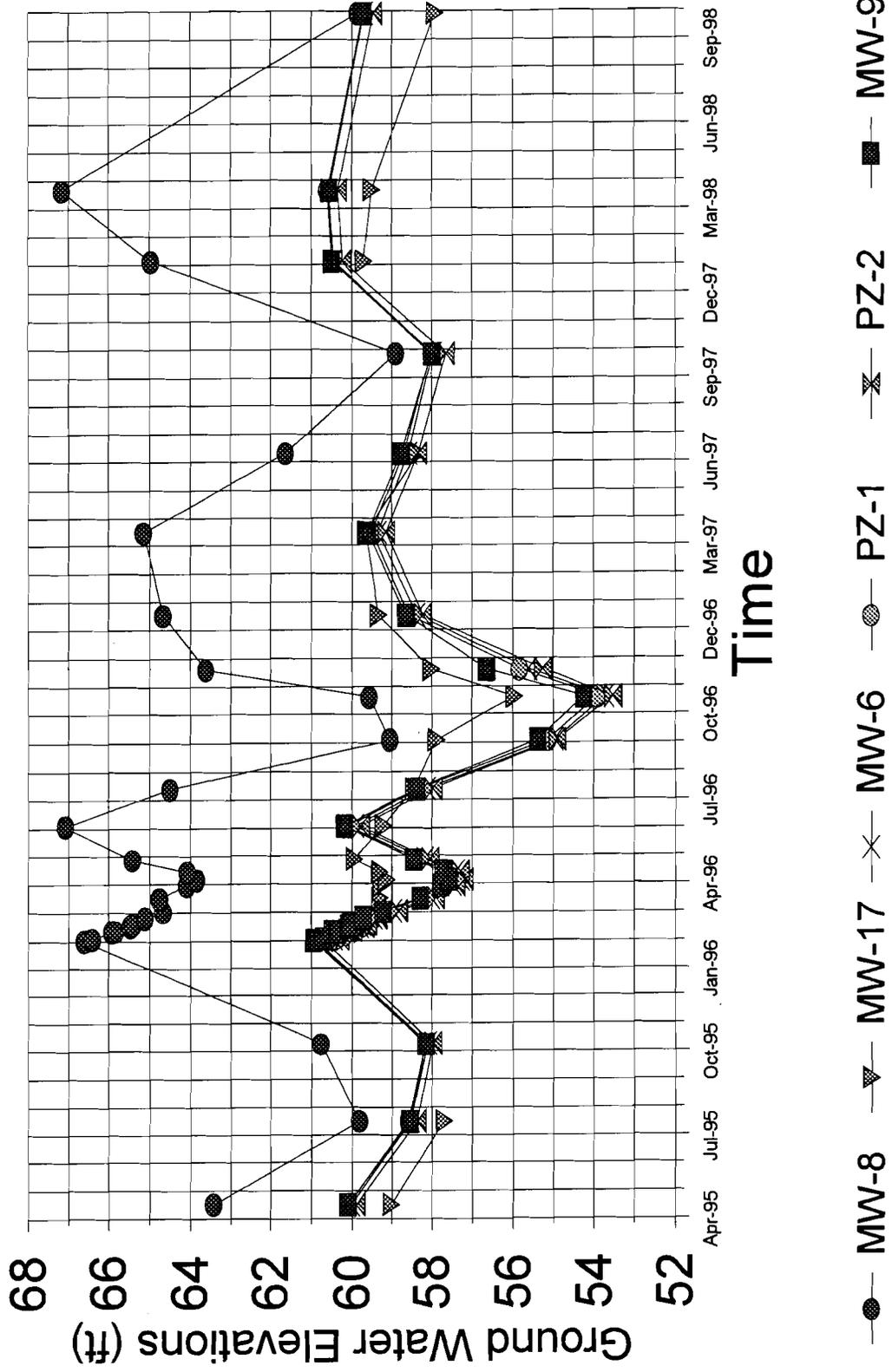


■ MW-10 (B) ▼ MW-11(B) ● MW-15 (B) × MW-16 (B)

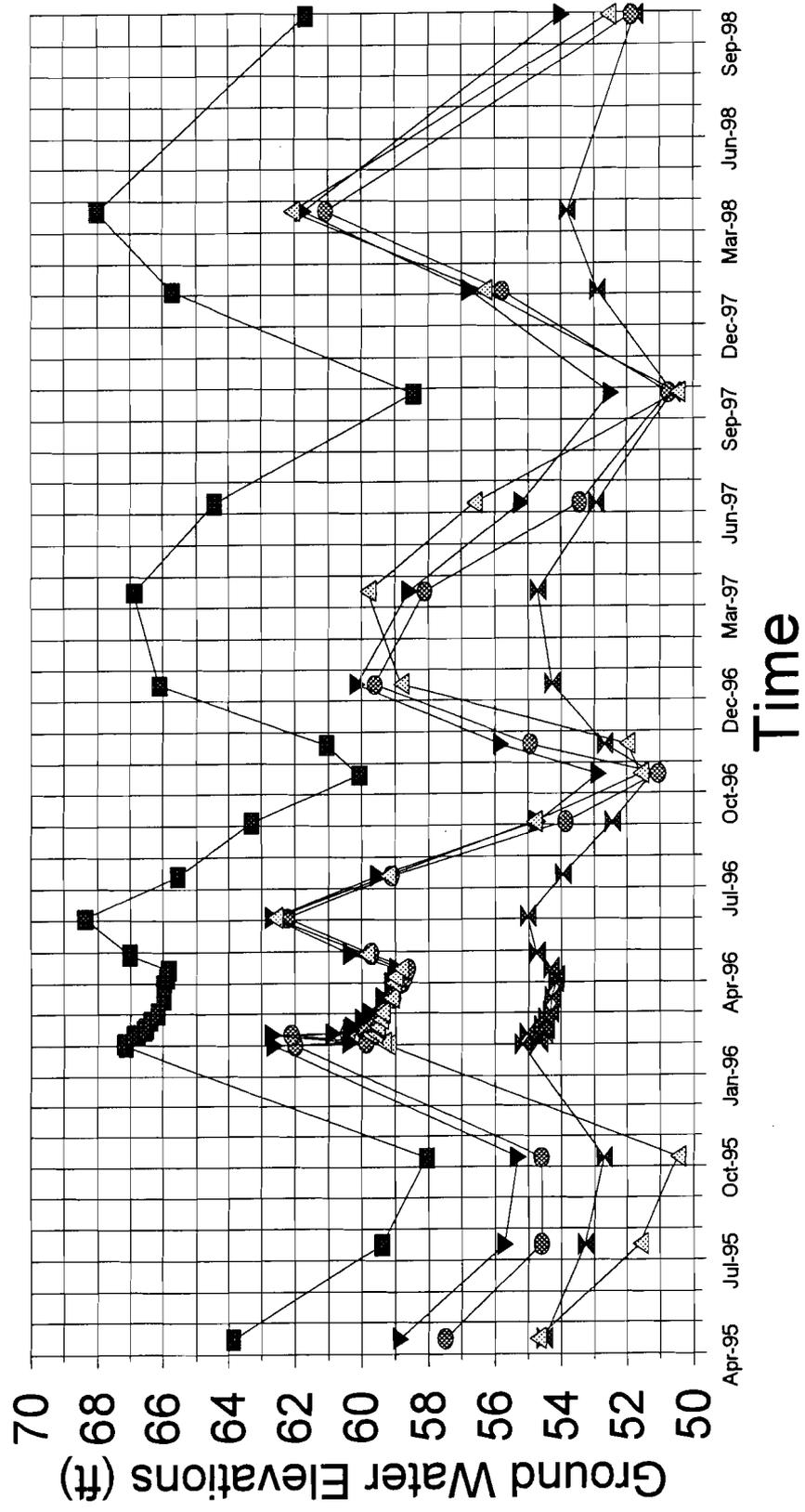
**Attachment 3**

**Ground Water Elevation Data Graphs**

# Accurate Die Casting Elevation Data Overburden Wells

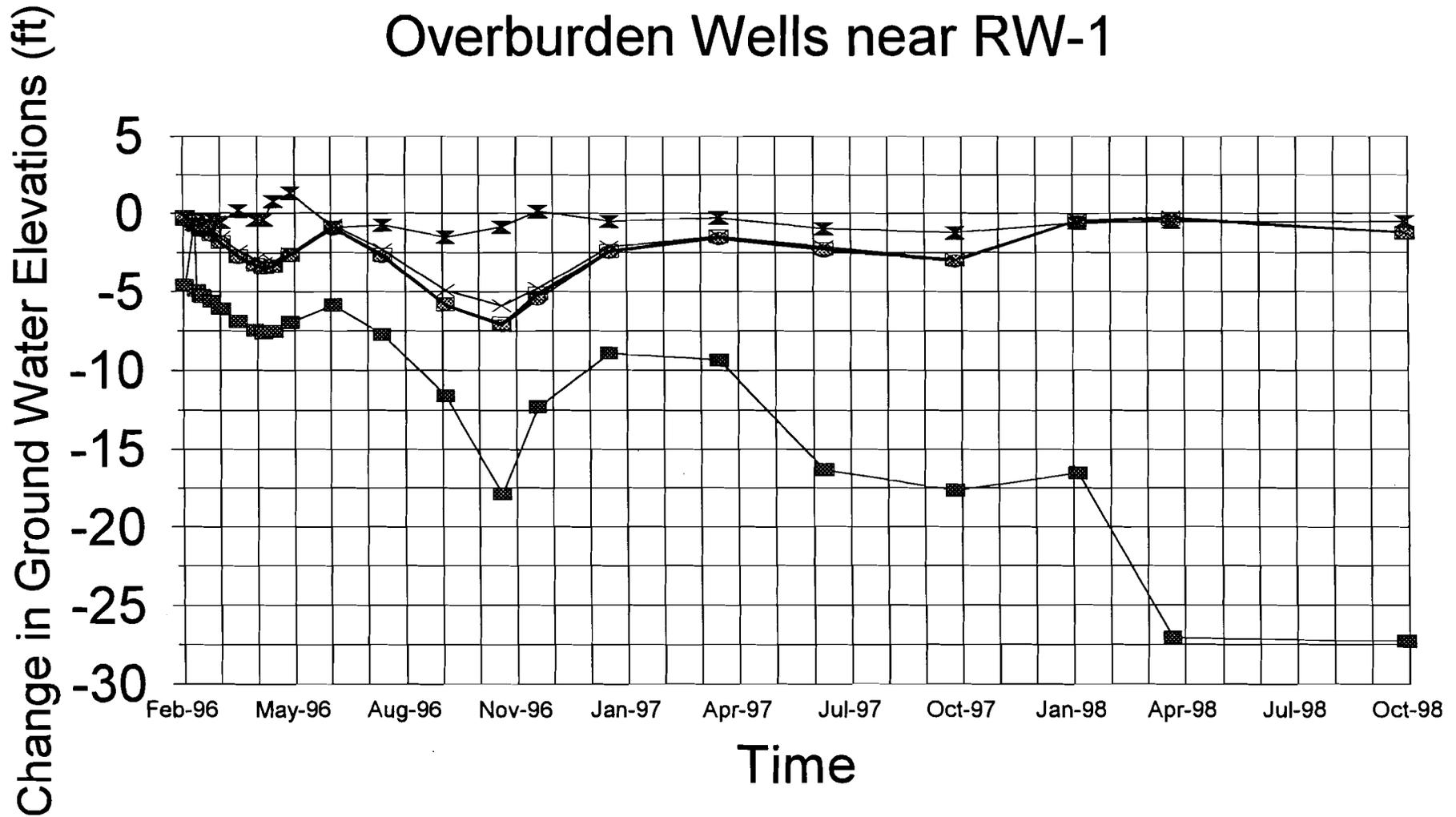


# Accurate Die Casting Elevation Data Bedrock Wells



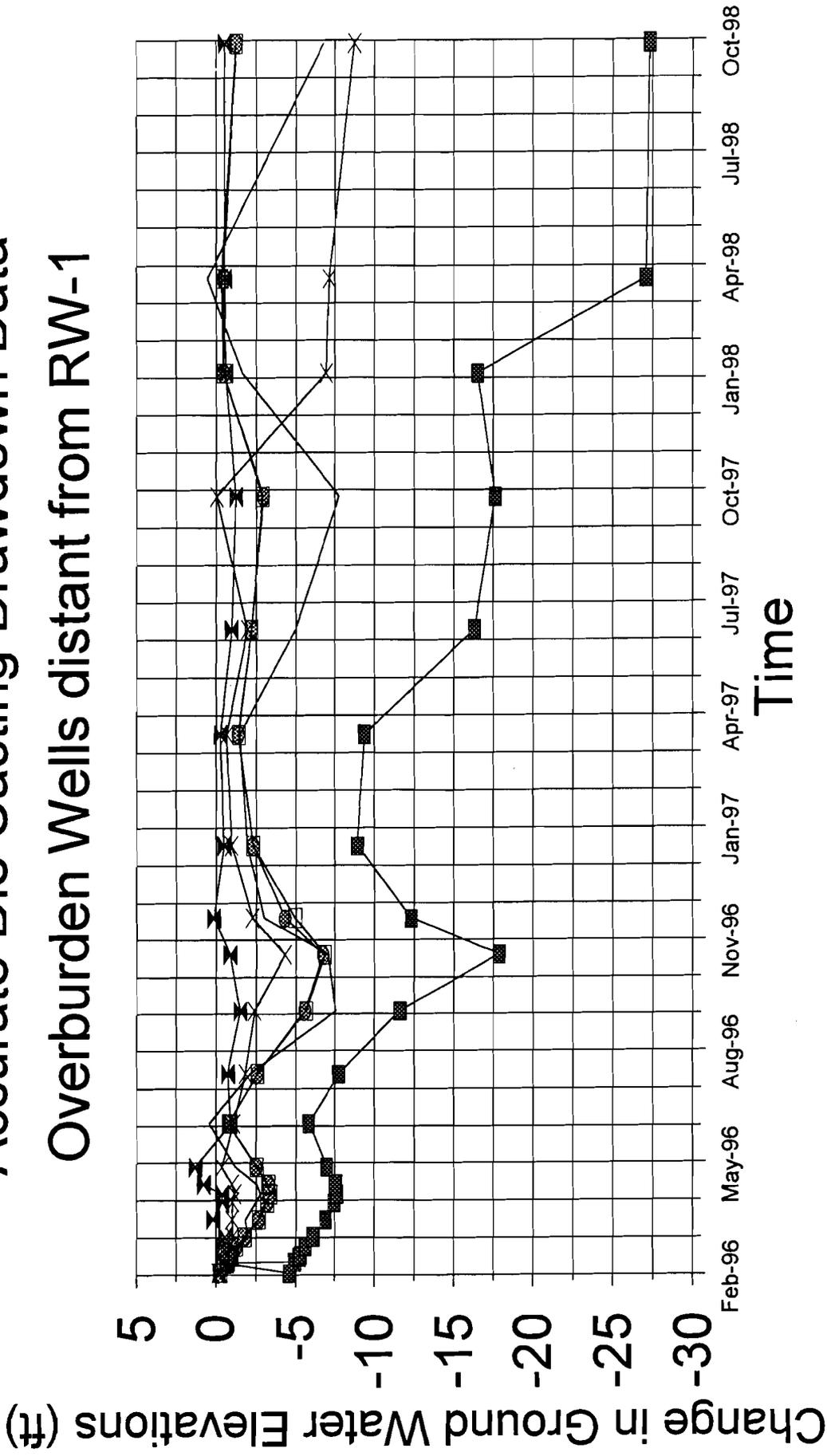
MW-7(B)  
 MW-10(B)  
 MW-11(B)  
 MW-15(B)  
 MW-16(B)

# Accurate Die Casting Drawdown Data Overburden Wells near RW-1

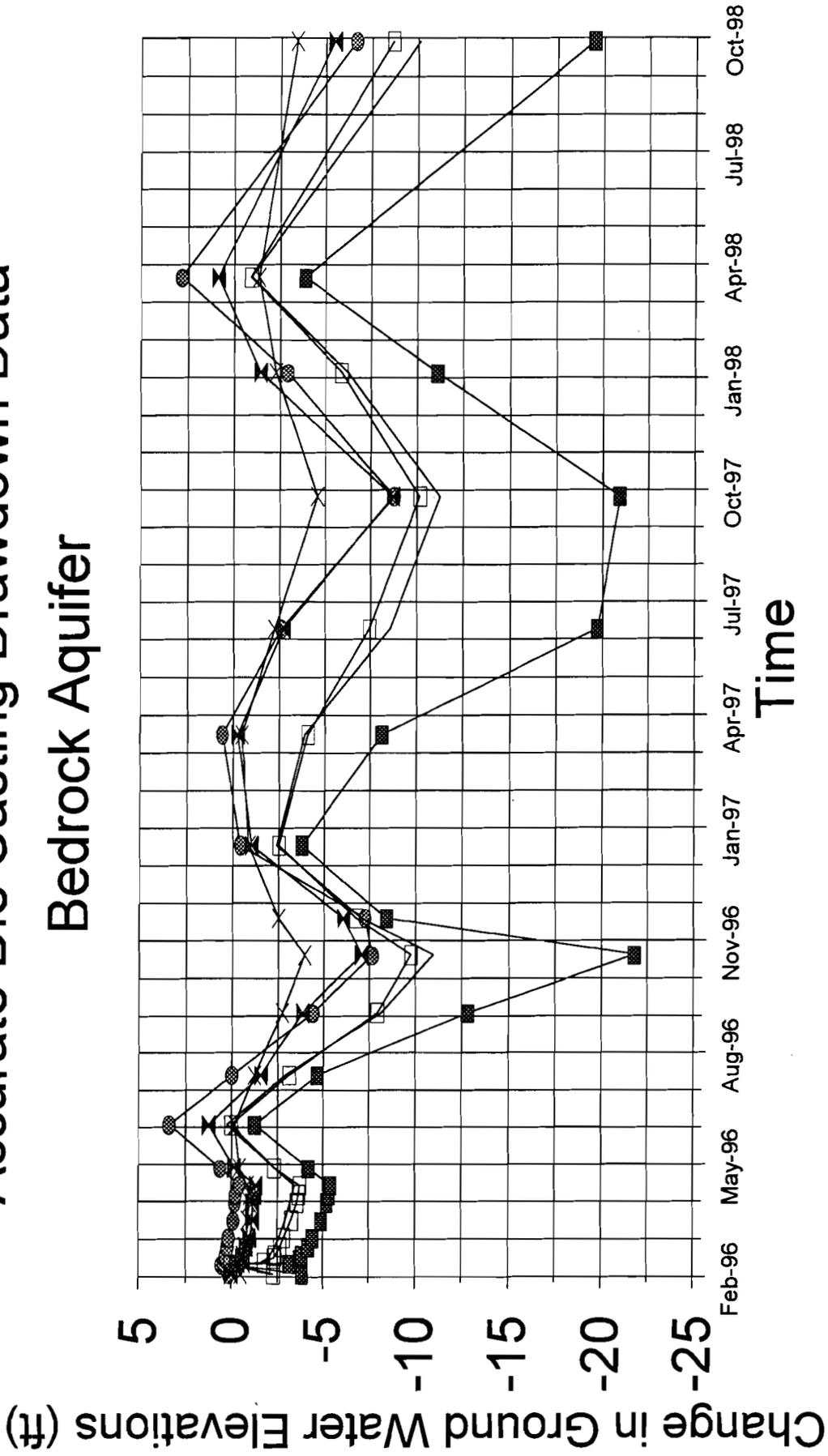


RW-1  
  PZ-2  
  PZ-1  
  MW-5  
  MW-6  
  MW-2

# Accurate Die Casting Drawdown Data Overburden Wells distant from RW-1

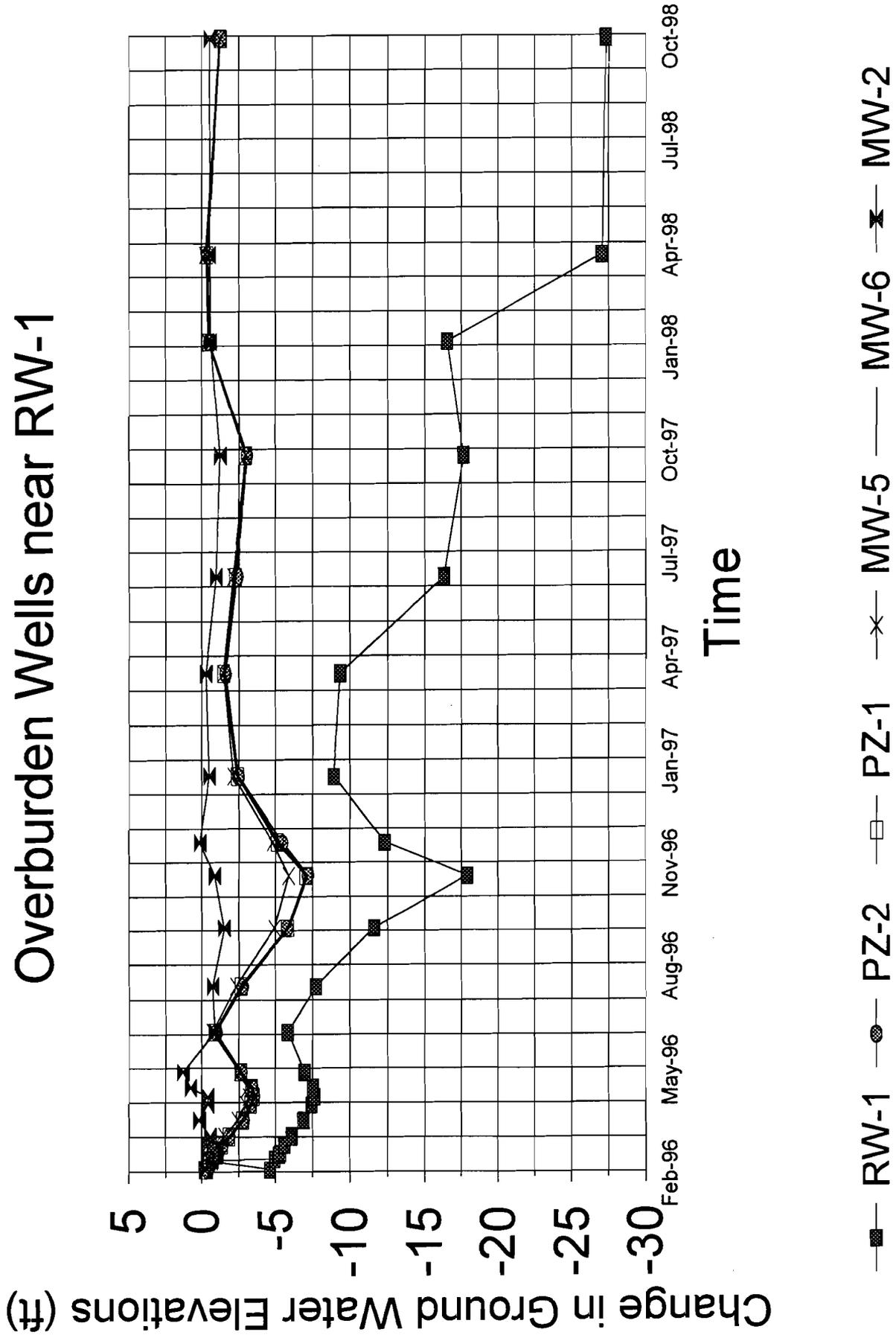


# Accurate Die Casting Drawdown Data Bedrock Aquifer



RW-2  
  MW-15  
  MW-11  
  MW-7  
  MW-10  
  MW-16

# Accurate Die Casting Drawdown Data Overburden Wells near RW-1



FILE



**O'BRIEN & GERE**  
ENGINEERS, INC.

FILE  
MAR 15 1999

March 11, 1999

Mr. David Crosby, P.E.  
Bureau of Construction Services  
Division of Hazardous Waste Remediation  
New York State Department of Environmental Conservation  
50 Wolf Road  
Albany, NY 12233-7010

Re: Former Accurate Die Casting Site  
Fayetteville, NY

File: 2488/23123

Dear Mr. Crosby:

Enclosed are four copies of the monthly progress report, required by the Order on Consent (#A7-0318-94-10) for the former Accurate Die Casting site in Fayetteville, New York, for the month of February 1999. Included in the progress report are the results of the monitoring activities associated with the SPDES Fact Sheet for the ground water treatment system through February 1999. If you have any questions regarding these reports, please do not hesitate to call me.

Very truly yours,

O'BRIEN & GERE ENGINEERS, INC.

Timothy M. Eddy, HGW  
Senior Project Scientist

I:\DIV7\PROJECTS\2488\23123\2\_CORRES\2-99MOR.WPD

Attachments

- cc: V. Nattanmai, P.E. - NYSDEC
- A. English - NYSDEC
- T. Male - NYSDEC
- Central Field Unit: Project Attorney Accurate Die Site - NYSDEC
- C. Branagh, P.E. - NYSDEC Region 7
- Director, Bureau of Environmental Exposure Investigation - NYSDOH (2 copies)
- H. Hamel - NYSDOH
- C. Johnson, Esq. - ITT Corporation
- C. Salcines - ITT Corporation
- R. Alessi, Esq. - LeBoeuf, Lamb, Greene & MacRae
- M. Peters, Esq. - LeBoeuf, Lamb, Greene & MacRae
- T. Brown, P.E. - O'Brien & Gere Technical Services, Inc.
- Al Farrell, P.E. - O'Brien & Gere Engineers, Inc.



**FORMER ACCURATE DIE CASTING SITE  
FAYETTEVILLE, NEW YORK**

**Monthly Progress Report for: February 1999**

**(a) Activities Performed/Correspondences with NYSDEC**

1. During the month of February 1999, O'Brien & Gere operated the ground water collection and treatment system on behalf of ITT Industries. Between February 1 through February 28, 1999, a total of 286,970 gallons of ground water was treated: 124,250 gallons were recovered from recovery well RW-1; 162,650 gallons were recovered from RW-2; and 70 gallons were recovered from the sump located outside the northeast corner of the facility. As of March 1, 1999, a total of 24,974,810 gallons of ground water has been treated since startup on February 5, 1996.
2. During the month of January 1999, O'Brien & Gere performed the sampling activities associated with the Sampling and Analysis Plan (March 1996), revised according to the NYSDEC letter dated April 1, 1997, and the SPDES Fact Sheet (#734052) required by the Consent Order. The results of the SPDES sampling of the ground water treatment system effluent are discussed in Item b.
3. Ground water quality samples were collected in the vicinity of the proposed ground water collection trench from wells MW-18, MW-21, MW-22, and MW-24 on February 16, 1999. The samples were analyzed for PCBs.
4. The annual report summarizing 1998 remedial activities was transmitted to the NYSDEC on February 25, 1999.

**(b) Sampling and Test Results**

1. The analytical results associated with the SPDES Fact Sheet monitoring activities performed in January 1999 are summarized in Table 1. The laboratory analytical data sheets are provided as Attachment A.

**© Projected Activities within next 45 days**

1. Continue operation of the ground water recovery and treatment system.
2. Evaluate and correct the cause of the decreasing ground water yields from recovery well RW-1.
3. The ground water collection trench contractor will prepare and submit the erosion control plan, construction water management plan, and health & safety plan to the NYSDEC.

**FORMER ACCURATE DIE CASTING SITE  
FAYETTEVILLE, NEW YORK  
(continued)**

**(d) Project Schedule**

1. Ground water monitoring activities will continue to be performed in accordance with the NYSDEC-approved Sampling & Analysis Plan dated March 1996, as modified in accordance with the recommendations of the Annual Report for 1997 submitted to the NYSDEC on January 27, 1998. Also, the treatment system performance monitoring will continue to be conducted in accordance with the SPDES Permit fact sheet, as modified on March 13, 1997 and November 21, 1997.

**(e) Activities in support of Community Relations Plan**

1. None

**(f) Exceedences to SPDES Fact Sheet Limits**

1. None

**Table 1**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Monitoring Requirements and Effluent Data**

Analyte (units)	Monitoring Requirements				Effluent	Effluent	Effluent	Effluent
	Discharge Limitation Daily Average	Discharge Limitation Daily Maximum	Minimum Measurement Frequency(1)	Sample Type	02/02/99	02/03/99	02/04/99	02/09/99
Flow (GPD)	Monitor	150000	Continuous	Meter	9172	---	9260	9840
pH (SU)	6.5 - 8.5		2/Week	Grab	7.85	---	7.85	7.85
Residue, non-filterable (mg/L)	Monitor	20	Weekly	3-hr comp.	---	5 U	---	---
Total dissolved solids (TDS) (mg/L)	Monitor	Monitor	Weekly	3-hr comp.	---	480	---	---
CBOD5 (mg/L)	Monitor	Monitor	Quarterly	3-hr comp.	---	---	---	---
TKN (mg/L)	Monitor	Monitor	Quarterly	3-hr comp.	---	---	---	---
TOD (mg/L)	Monitor	15	Quarterly	Calculated	---	---	---	---
Dissolved Oxygen (mg/L)	Monitor	7 Min.	Quarterly	Grab	---	7.90	---	---
Aluminum, dissolved (mg/L)	Monitor	0.2	Quarterly	3-hr comp.	---	---	---	---
Antimony, total (mg/L)	Monitor	0.1	Quarterly	3-hr comp.	---	---	---	---
Chromium, total (mg/L)	Monitor	0.5	Quarterly	3-hr comp.	---	---	---	---
Cobalt, total (mg/L)	Monitor	0.01	Quarterly	3-hr comp.	---	---	---	---
Copper, total (mg/L)	Monitor	0.1	Quarterly	3-hr comp.	---	---	---	---
Iron, total (mg/L)	Monitor	0.3	Quarterly	3-hr comp.	---	---	---	---
Lead, total (mg/L)	Monitor	0.02	Quarterly	3-hr comp.	---	---	---	---
Mercury, total (mg/L)	Monitor	0.0008	2/Month	3-hr comp.	---	0.0002 U	---	---
Nickel, total (mg/L)	Monitor	0.2	Quarterly	3-hr comp.	---	---	---	---
Silver, total (mg/L)	Monitor	0.1	Quarterly	3-hr comp.	---	---	---	---
Vanadium, total (mg/L)	Monitor	0.03	Quarterly	3-hr comp.	---	---	---	---
Zinc, total (mg/L)	Monitor	0.3	2/Month	3-hr comp.	---	0.03	---	---
cis-1,2-Dichloroethene (ug/L)	Monitor	10	2/Month	Grab	---	0.50 U	---	---
trans-1,2-Dichloroethene (ug/L)	Monitor	10	2/Month	Grab	---	0.50 U	---	---
Methylene chloride (ug/L)	Monitor	50	2/Month	Grab	---	2.0 U	---	---
1,1,2,2-Tetrachloroethane (ug/L)	Monitor	30	2/Month	Grab	---	0.50 U	---	---
Tetrachloroethene (ug/L)	Monitor	20	2/Month	Grab	---	0.50 U	---	---
Toluene (ug/L)	Monitor	20	2/Month	Grab	---	0.50 U	---	---
Trichloroethene (ug/L)	Monitor	10	2/Month	Grab	---	0.50 U	---	---
Acetone (ug/L)	Monitor	1000	2/Month	Grab	---	10 U	---	---
2-Hexanone (ug/L)	Monitor	1000	2/Month	Grab	---	5.0 U	---	---
4-Methyl-2-pentanone (MIBK) (ug/L)	Monitor	1000	2/Month	Grab	---	5.0 U	---	---

NOTES: (1) Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.

--- - Not analyzed, NA - Data not available

U - Not Detected, J - Estimated

TOD = 1.5 X CBOD5 + 4.5 X TKN

**Table 1**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Monitoring Requirements and Effluent Data**

Analyte	Effluent 02/10/99	Effluent 02/11/99	Effluent 02/16/99	Effluent 02/17/99	Effluent 02/18/99	Effluent 02/23/99	Effluent 02/24/99	Effluent 02/25/99
Flow (GPD)	---	9970	10258	---	10530	10798	---	11010
pH (SU)	---	7.85	7.85	---	7.85	7.87	---	7.87
Residue, non-filterable (mg/L)	5 U	---	---	5 U	---	---	5 U	---
Total dissolved solids (TDS) (mg/L)	480	---	---	430	---	---	440	---
CBOD5 (mg/L)	---	---	---	---	---	---	---	---
TKN (mg/L)	---	---	---	---	---	---	---	---
TOD (mg/L)	---	---	---	---	---	---	---	---
Dissolved Oxygen (mg/L)	---	---	---	---	---	---	---	---
Aluminum, dissolved (mg/L)	---	---	---	---	---	---	---	---
Antimony, total (mg/L)	---	---	---	---	---	---	---	---
Chromium, total (mg/L)	---	---	---	---	---	---	---	---
Cobalt, total (mg/L)	---	---	---	---	---	---	---	---
Copper, total (mg/L)	---	---	---	---	---	---	---	---
Iron, total (mg/L)	---	---	---	---	---	---	---	---
Lead, total (mg/L)	---	---	---	---	---	---	---	---
Mercury, total (mg/L)	---	---	---	0.0002 U	---	---	---	---
Nickel, total (mg/L)	---	---	---	---	---	---	---	---
Silver, total (mg/L)	---	---	---	---	---	---	---	---
Vanadium, total (mg/L)	---	---	---	---	---	---	---	---
Zinc, total (mg/L)	---	---	---	0.01 U	---	---	---	---
cis-1,2-Dichloroethene (ug/L)	---	---	---	0.50 U	---	---	---	---
trans-1,2-Dichloroethene (ug/L)	---	---	---	0.50 U	---	---	---	---
Methylene chloride (ug/L)	---	---	---	2.0 U	---	---	---	---
1,1,2,2-Tetrachloroethane (ug/L)	---	---	---	0.50 U	---	---	---	---
Tetrachloroethene (ug/L)	---	---	---	0.50 U	---	---	---	---
Toluene (ug/L)	---	---	---	0.50 U	---	---	---	---
Trichloroethene (ug/L)	---	---	---	0.50 U	---	---	---	---
Acetone (ug/L)	---	---	---	10 U	---	---	---	---
2-Hexanone (ug/L)	---	---	---	5.0 U	---	---	---	---
4-Methyl-2-pentanone (MIBK) (ug/L)	---	---	---	5.0 U	---	---	---	---

NOTES: (1) Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.  
 --- - Not analyzed, NA - Data not available  
 U - Not Detected, J - Estimated  
 TOD = 1.5 X CBOD5 + 4.5 X TKN

**ATTACHMENT A**  
**LABORATORY ANALYTICAL DATA SHEETS**

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Wet Chemistry

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Weekly Effluent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: K4907  
Samp. Description: WTP Effluent

Collected: 01/27/99  
Received: 01/27/99 15:30  
Matrix: Water

<u>Parameter</u>	<u>Result Units</u>	<u>Method</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>QC Batch</u>	<u>Note</u>
Total dissolved solids	560. mg/L	EPA 160.1		02/01/99	020199W13	
Total suspended solids	<5. mg/L	EPA 160.2		01/28/99	012899W11	

Notes:

J-Estimated value

Authorized: Monika Santucci  
Date: February 3, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

5000 Brittonfield Parkway  
 East Syracuse, New York 13057  
 (315) 437-0200

595

# Chain of Custody

Client: O'BRIEN & GERE TECHNICAL SERV. INC						TSS/TDS								
Project: ITT FINANCIAL (FORMER ACCURATE DIE)														
Sampled by: JERRY BORN														
Client Contact: JERRY BORN TIM EDDY			Phone # 637 0109 2467											
Sample Description						Analysis/Method								
Sample Location	Date Collected	Time Collected	Sample Matrix	Comp. or Grab	No. of Containers									Comments
WTP EFFLUENT	1/27/99	10:50 AM	WATER	COMP	1	X								
Relinquished by:			Date:		Time:		Received by:			Date:		Time:		
Relinquished by:			Date:		Time:		Received by:			Date:		Time:		
Relinquished by: <i>Jerry Born</i>			Date: 1/27/99		Time: 1:30		Received by Lab: <i>Mark F. Jackson</i>			Date: 1/27/99		Time: 1:30		
Shipment Method: HAND DELIVERED						Airbill Number:								

Turnaround Time Required:  
 Routine   X    
 Rush (Specify)           

Comments:

Cooler Temperature:   3°C

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8260

Client: O'Brien & Gere Engineers, Inc.  
 Project: Accurate Die Casting - Fayetteville, NY  
 Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
 Certification NY No.: 10155

Sample: K5433  
 Samp. Description: WTP Effluent - Grab  
 Instrument: HP5973 GCMS#3  
 Units: ug/L  
 Number of analytes: 13

Collected: 02/03/99  
 Received: 02/03/99  
 Prepared: 02/05/99  
 Matrix: Water  
 QC Batch: 020599W1  
 % Solids:  
 Purge volume: 25 mL

Parameter	Result	Surrog		Analyzed	Notes
		Limits	Dilution		
Acetone	<10.		1	02/05/99	
Methylene chloride	<2.0		1	02/05/99	
trans-1,2-Dichloroethene	<.50		1	02/05/99	
cis-1,2-Dichloroethene	<.50		1	02/05/99	
Trichloroethene	<.50		1	02/05/99	
4-Methyl-2-pentanone	<5.0		1	02/05/99	
Toluene	<.50		1	02/05/99	
2-Hexanone	<5.0		1	02/05/99	
Tetrachloroethene	<.50		1	02/05/99	
1,1,2,2-Tetrachloroethane	<.50		1	02/05/99	
Dibromofluoromethane (surrogate)	96.%	61-136	1	02/05/99	
Toluene-d8 (surrogate)	96.%	84-114	1	02/05/99	
Bromofluorobenzene (surrogate)	92.%	77-117	1	02/05/99	

Notes:

# - Outside control limits J-Estimated value

Authorized: Monika Santucci  
 Date: February 9, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: K5431  
Samp. Description: WTP Influent  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m X .45mm ID  
Dilution: 50 Instrument: 9001

Collected: 02/03/99 Matrix: Water  
Received: 02/03/99 QC Batch: 021199W1  
Prepared: %Solids:  
Analyzed: 02/11/99 Purge volume: 5 ml

Number of analytes: 36

<u>Parameter</u>	<u>Result</u>	<u>Col</u>	<u>Surrog Limits</u>	<u>Notes</u>
Benzene	<50.	1		
Bromodichloromethane	<50.	1		
Bromoform	<500.	1		
Bromomethane	<500.	1		
Carbon tetrachloride	<50.	1		
Chlorobenzene	<50.	1		
Chloroethane	<50.	1		
2-Chloroethylvinyl ether	<500.	1		
Chloroform	<50.	1		
Chloromethane	<500.	1		
Dibromochloromethane	<50.	1		
1,2-Dichlorobenzene	<250.	1		
1,3-Dichlorobenzene	<250.	1		
1,4-Dichlorobenzene	<250.	1		
Dichlorodifluoromethane	<500.	1		
1,1-Dichloroethane	<50.	1		
1,2-Dichloroethane	<50.	1		
1,1-Dichloroethylene	<50.	1		
cis-1,2-Dichloroethylene	<50.	1		
trans-1,2-Dichloroethylene	<50.	1		
Dichloromethane	<50.	1		
1,2-Dichloropropane	<50.	1		
cis-1,3-Dichloropropylene	<50.	1		
trans-1,3-Dichloropropylene	<50.	1		
Ethylbenzene	<50.	1		
1,1,2,2-Tetrachloroethane	<50.	1		
Tetrachloroethylene	<50.	1		
Toluene	<50.	1		

# - Outside control limits J-Estimated value

Authorized: Monika Santucci  
Date: February 16, 1999 Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
 Project: Accurate Die Casting - Fayetteville, NY  
 Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
 Certification NY No.: 10155

Sample: K5431  
 Samp. Description: WTP Influent  
 Primary column: Y  
 Units: ug/L  
 Column: DB-VRX 75m X .45mm ID  
 Dilution: 50 Instrument: 9001

Collected: 02/03/99 Matrix: Water  
 Received: 02/03/99 QC Batch: 021199W1  
 Prepared: %Solids:  
 Analyzed: 02/11/99 Purge volume: 5 ml

Number of analytes: 36

<u>Parameter</u>	<u>Result</u>	<u>Col</u>	<u>Surrog Limits</u>	<u>Notes</u>
1,1,1-Trichloroethane	<50.	1		
1,1,2-Trichloroethane	<50.	1		
Trichloroethylene	1100.	1		
Trichlorofluoromethane	<50.	1		
Vinyl Chloride	<50.	1		
Xylenes (total)	<150.	1		
2-Chloropropane (surrogate)	104.%	1	69-118	
Fluorobenzene (surrogate)	97.%	1	85-119	

Notes:

# - Outside control limits J-Estimated value

Authorized: Monika Santucci  
 Date: February 16, 1999 Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: K5432  
Samp. Description: WTP Between GACs  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m X .45mm ID  
Dilution: 1 Instrument: 9001

Collected: 02/03/99 Matrix: Water  
Received: 02/03/99 QC Batch: 021199W1  
Prepared: %Solids:  
Analyzed: 02/11/99 Purge volume: 5 ml

Number of analytes: 36

<u>Parameter</u>	<u>Result</u>	<u>Col</u>	<u>Surrog Limits</u>	<u>Notes</u>
Benzene	<1.	1		
Bromodichloromethane	<1.	1		
Bromoform	<10.	1		
Bromomethane	<10.	1		
Carbon tetrachloride	<1.	1		
Chlorobenzene	<1.	1		
Chloroethane	<1.	1		
2-Chloroethylvinyl ether	<10.	1		
Chloroform	<1.	1		
Chloromethane	<10.	1		
Dibromochloromethane	<1.	1		
1,2-Dichlorobenzene	<5.	1		
1,3-Dichlorobenzene	<5.	1		
1,4-Dichlorobenzene	<5.	1		
Dichlorodifluoromethane	<10.	1		
1,1-Dichloroethane	<1.	1		
1,2-Dichloroethane	<1.	1		
1,1-Dichloroethylene	<1.	1		
cis-1,2-Dichloroethylene	2.	1		
trans-1,2-Dichloroethylene	<1.	1		
Dichloromethane	<1.	1		
1,2-Dichloropropane	<1.	1		
cis-1,3-Dichloropropylene	<1.	1		
trans-1,3-Dichloropropylene	<1.	1		
Ethylbenzene	<1.	1		
1,1,2,2-Tetrachloroethane	<1.	1		
Tetrachloroethylene	<1.	1		
Toluene	<1.	1		

# - Outside control limits J-Estimated value

Authorized: Monika Santucci  
Date: February 16, 1999 Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: K5432  
Samp. Description: WTP Between GACs  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m X .45mm ID  
Dilution: 1 Instrument: 9001

Collected: 02/03/99 Matrix: Water  
Received: 02/03/99 QC Batch: 021199W1  
Prepared: %Solids:  
Analyzed: 02/11/99 Purge volume: 5 ml  
Number of analytes: 36

<u>Parameter</u>	<u>Result</u>	<u>Col</u>	<u>Surrog Limits</u>	<u>Notes</u>
1,1,1-Trichloroethane	<1.	1		
1,1,2-Trichloroethane	<1.	1		
Trichloroethylene	<1.	1		
Trichlorofluoromethane	<1.	1		
Vinyl Chloride	<1.	1		
Xylenes (total)	<3.	1		
2-Chloropropane (surrogate)	111.%	1	69-118	
Fluorobenzene (surrogate)	98.%	1	85-119	

Notes:

# - Outside control limits J-Estimated value

Authorized: Monika Santucci  
Date: February 16, 1999 Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Trace Metals

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: K5434  
Samp. Description: WTP Effluent - Composite  
Units: mg/L

Collected: 02/03/99      Matrix: Water  
Received: 02/03/99      %Solids:  
Number of analytes: 2

<u>Parameter</u>	<u>Result</u>	<u>Method</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>QC Batch</u>	<u>Dilut.</u>	<u>Note</u>
Mercury	<.0002	245.1	02/10/99	02/16/99	021099W2		1
Zinc	.03	200.7	02/09/99	02/09/99	020999W1		1

Notes:

<sup>†</sup>-Estimated value

Authorized: Monika Santucci  
Date: February 17, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Wet Chemistry

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: K5434  
Samp. Description: WTP Effluent - Composite

Collected: 02/03/99  
Received: 02/03/99 15:30  
Matrix: Water

<u>Parameter</u>	<u>Result Units</u>	<u>Method</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>QC Batch</u>	<u>Note</u>
Total dissolved solids	480. mg/L	EPA 160.1		02/04/99	020499W12	
Total suspended solids	<5. mg/L	EPA 160.2		02/04/99	020499W11	

Notes:

Estimated value

Authorized: Monika Santucci  
Date: February 9, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

5000 Brittonfield Parkway  
 East Syracuse, New York 13057  
 (315) 437-0200

650

# Chain of Custody

Client: O'BRIEN & GERE TECHNICAL SERV. INC.						Analysis/Method					
Project: IPT FINANCIAL (FORMER ACCURATE DIE)						VOCs EPA METHOD 8021 VOCs EPA METHOD 8021 VOCs EPA METHOD 8021 Zn & Hg TSS/TDS					
Sampled by:											
Client Contact: JERRY BORN TIM EDDY			Phone # 637 0109 2467								
Sample Description											
Sample Location	Date Collected	Time Collected	Sample Matrix	Comp. or Grab	No. of Containers						Comments
WTP INFLUENT	2/3/99	7:01 AM	WATER	GRAB	2	X					
WTP BETWEEN GACS	2/3/99	6:56 AM	WATER	GRAB	2		X				
WTP EFFLUENT	2/3/99	6:50 AM	WATER	GRAB	2			X			
WTP EFFLUENT	2/3/99	10:05 AM	WATER	COMP	1				X		
WTP EFFLUENT	2/3/99	10:01 AM	WATER	COMP	1					X	
Relinquished by:				Date:	Time:	Received by:				Date:	Time:
Relinquished by:				Date:	Time:	Received by:				Date:	Time:
Relinquished by: <i>[Signature]</i>				Date: 2/3/99	Time: 1530	Received by Lab: <i>[Signature]</i>				Date: 2/3/99	Time: 15:30
Shipment Method: HAND DELIVERED						Airbill Number:					

Turnaround Time Required:  
 Routine   X    
 Rush (Specify) \_\_\_\_\_

Comments:

Cooler Temperature: 30°

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Wet Chemistry

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Weekly Effluent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: K5702  
Samp. Description: WTP Effluent

Collected: 02/10/99  
Received: 02/10/99 15:40  
Matrix: Water

<u>Parameter</u>	<u>Result Units</u>	<u>Method</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>QC Batch</u>	<u>Note</u>
Total dissolved solids	480. mg/L	EPA 160.1		02/17/99	021799W12	
Total suspended solids	<5. mg/L	EPA 160.2		02/12/99	021299W11	

Notes:

Estimated value

Authorized: Monika Santucci  
Date: February 19, 1999    Monika Santucci



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

**Analytical Results  
Method: 8260**

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Bi-Monthly Effluent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: K6219  
Samp. Description: WTP Effluent - Grab  
Instrument: HP5970 GC/MS#2  
Units: ug/L  
Number of analytes: 14

Collected: 02/17/99  
Received: 02/17/99  
Prepared: 02/24/99  
Matrix: Water  
QC Batch: 022499W2  
%Solids:  
Purge volume: 25 mL

<u>Parameter</u>	<u>Result</u>	<u>Surrog</u> <u>Limits</u>	<u>Dilution</u>	<u>Analyzed</u>	<u>Notes</u>
Acetone	<10.		1	02/24/99	
Methylene chloride	<2.0		1	02/24/99	
trans-1,2-Dichloroethene	<.50		1	02/24/99	
cis-1,2-Dichloroethene	<.50		1	02/24/99	
Trichloroethene	<.50		1	02/24/99	
4-Methyl-2-pentanone	<5.0		1	02/24/99	
Toluene	<.50		1	02/24/99	
2-Hexanone	<5.0		1	02/24/99	
Tetrachloroethene	<.50		1	02/24/99	
1,1,2,2-Tetrachloroethane	<.50		1	02/24/99	
1,2-Dichloroethane-d4 (surrogate)	113.%	80-135	1	02/24/99	
Dibromofluoromethane (surrogate)	108.%	61-136	1	02/24/99	
Toluene-d8 (surrogate)	109.%	84-114	1	02/24/99	
Bromofluorobenzene (surrogate)	103.%	77-117	1	02/24/99	

Notes:

# - Outside control limits J-Estimated value

Authorized: Monika Santucci  
Date: February 25, 1999    Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Trace Metals

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Bi-Monthly Effluent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: K6220  
Samp. Description: WTP Effluent - Composite  
Units: mg/L

Collected: 02/17/99      Matrix: Water  
Received: 02/17/99      %Solids:  
Number of analytes: 2

<u>Parameter</u>	<u>Result</u>	<u>Method</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>QC Batch</u>	<u>Dilut. Note</u>
Mercury	<.0002	245.1	02/24/99	02/25/99	022499W1	1
Zinc	<.01	200.7	02/25/99	02/26/99	022599W1	1

Notes:

J-Estimated value

Authorized: Monika Santucci  
Date: February 27, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Wet Chemistry

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Bi-Monthly Effluent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: K6220  
Samp. Description: WTP Effluent - Composite

Collected: 02/17/99  
Received: 02/17/99 15:35  
Matrix: Water

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Method</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>QC Batch</u>	<u>Note</u>
Total dissolved solids	430.	mg/L	EPA 160.1		02/24/99	022499W19	
Total suspended solids	<5.	mg/L	EPA 160.2		02/23/99	022399W13	

Notes:

J-Estimated value

Authorized: Monika Santucci  
Date: February 27, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

5000 Brittonfield Parkway  
 East Syracuse, New York 13057  
 (315) 437-0200

# Chain of Custody

804

Client: <b>O'BRIEN &amp; GERE TECHNICAL SERVICES INC</b>						Analysis/Method <div style="transform: rotate(-45deg); display: inline-block;">WALC EPA METHOD</div> <div style="transform: rotate(-45deg); display: inline-block;">Hg + Zn</div> <div style="transform: rotate(-45deg); display: inline-block;">TSS/TDS</div>									
Project: <b>ITT FINANCIAL (FORMER ACCURATE DIE)</b>															
Sampled by: <b>JERRY BORN</b>															
Client Contact: <b>TIM EDDY</b> <b>JERRY BORN</b>			Phone # <b>2467</b> <b>637 0109</b>												
<b>Sample Description</b>															
Sample Location	Date Collected	Time Collected	Sample Matrix	Comp. or Grab	No. of Containers							Comments			
WTP EFFLUENT	2/17/99	7:30 AM	WATER	GRAB	2	X									
WTP EFFLUENT	2/17/99	1:37 PM	WATER	COMP	1		X								
WTP EFFLUENT	2/17/99	1:55 PM	WATER	COMP	1			X							
Relinquished by:				Date:		Time:		Received by:				Date:		Time:	
Relinquished by:				Date:		Time:		Received by:				Date:		Time:	
Relinquished by: <i>Jerry Born</i>				Date: 2/17/99		Time: 15:35		Received by Lab: <i>Mark E. Johnson</i>				Date: 2/17/99		Time: 15:35	
Shipment Method: <b>HAND DELIVERED</b>						Airbill Number:									

**Turnaround Time Required:**  
 Routine   X    
 Rush (Specify) \_\_\_\_\_

Comments:

Cooler Temperature:   50C



**O'BRIEN & GERE**  
ENGINEERS, INC.

April 13, 1999

Mr. David Crosby, P.E.  
Bureau of Construction Services  
Division of Hazardous Waste Remediation  
New York State Department of Environmental Conservation  
50 Wolf Road  
Albany, NY 12233-7010

Re: Former Accurate Die Casting Site  
Fayetteville, NY

File: 2488/23123 #2

Dear Mr. Crosby:

Enclosed are four copies of the monthly progress report, required by the Order on Consent (#A7-0318-94-10) for the former Accurate Die Casting site in Fayetteville, New York, for the month of March 1999. Included in the progress report are the results of the monitoring activities associated with the SPDES Fact Sheet for the ground water treatment system through March 1999. If you have any questions regarding these reports, please do not hesitate to call me.

Very truly yours,

O'BRIEN & GERE ENGINEERS, INC.

Timothy M. Eddy, HGW  
Senior Project Scientist

I:\DIV71\PROJECTS\2488\23123\2\_CORRES\3-99MOR.WPD

Attachments

cc: V. Nattanmai, P.E. - NYSDEC  
A. English - NYSDEC  
T. Male - NYSDEC  
Central Field Unit: Project Attorney Accurate Die Site - NYSDEC  
C. Branagh, P.E. - NYSDEC Region 7  
Director, Bureau of Environmental Exposure Investigation - NYSDOH (2 copies)  
H. Hamel - NYSDOH  
C. Johnson, Esq. - ITT Corporation  
C. Salcines - ITT Corporation  
R. Alessi, Esq. - LeBoeuf, Lamb, Greene & MacRae  
M. Peters, Esq. - LeBoeuf, Lamb, Greene & MacRae  
T. Brown, P.E. - O'Brien & Gere Technical Services, Inc.  
Al Farrell, P.E. - O'Brien & Gere Engineers, Inc.



**FORMER ACCURATE DIE CASTING SITE  
FAYETTEVILLE, NEW YORK**

**Monthly Progress Report for: March 1999**

**(a) Activities Performed/Correspondences with NYSDEC**

1. During the month of March 1999, O'Brien & Gere operated the ground water collection and treatment system on behalf of ITT Industries. Between March 1 through March 31, 1999, a total of 353,590 gallons of ground water was treated: 133,270 gallons were recovered from recovery well RW-1; 218,700 gallons were recovered from RW-2; and 1,620 gallons were recovered from the sump located outside the northeast corner of the facility. As of April 1, 1999, a total of 25,328,400 gallons of ground water has been treated since startup on February 5, 1996.
2. During the month of March 1999, O'Brien & Gere performed the sampling activities associated with the Sampling and Analysis Plan (March 1996), revised according to the NYSDEC letter dated April 1, 1997, and the SPDES Fact Sheet (#734052) required by the Consent Order. The results of the SPDES sampling of the ground water treatment system effluent are discussed in Item b.
3. On March 31, 1999 the treatment system flow alignment was modified to place the GAC#1 as the lead unit in preparation for changing out the carbon in GAC#2 unit.

**(b) Sampling and Test Results**

1. The analytical results associated with the SPDES Fact Sheet monitoring activities performed in February 1999 are summarized in Table 1. The laboratory analytical data sheets are provided as Attachment A.

**(c) Projected Activities within next 45 days**

1. Continue operation of the ground water recovery and treatment system.
2. Redevelop recovery well RW-1 and test pump for proper operation.
3. The ground water collection trench contractor will prepare and submit the erosion control plan, construction water management plan, and health & safety plan to the NYSDEC.
4. O'Brien & Gere will conduct semi-annual sampling of site ground water in April 1999

**FORMER ACCURATE DIE CASTING SITE  
FAYETTEVILLE, NEW YORK  
(continued)**

**(d) Project Schedule**

1. Ground water monitoring activities will continue to be performed in accordance with the NYSDEC-approved Sampling & Analysis Plan dated March 1996, as modified in accordance with the recommendations of the Annual Report for 1997 submitted to the NYSDEC on January 27, 1998. Also, the treatment system performance monitoring will continue to be conducted in accordance with the SPDES Permit fact sheet, as modified on March 13, 1997 and November 21, 1997.

**(e) Activities in support of Community Relations Plan**

1. None

**(f) Exceedences to SPDES Fact Sheet Limits**

1. None

**Table 1**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Monitoring Requirements and Effluent Data**

Analyte (units)	Monitoring Requirements				Effluent 03/02/99	Effluent 03/03/99	Effluent 03/04/99	Effluent 03/09/99
	Discharge Limitation Daily Average	Discharge Limitation Daily Maximum	Minimum Measurement Frequency(1)	Sample Type				
Flow (GPD)	Monitor	150000	Continuous	Meter	11140	---	11610	11320
pH (SU)	6.5 - 8.5		2/Week	Grab	7.85	---	7.92	7.89
Residue, non-filterable (mg/L)	Monitor	20	Weekly	3-hr comp.	---	5 U	---	---
Total dissolved solids (TDS) (mg/L)	Monitor	Monitor	Weekly	3-hr comp.	---	420	---	---
CBOD5 (mg/L)	Monitor	Monitor	Quarterly	3-hr comp.	---	---	---	---
TKN (mg/L)	Monitor	Monitor	Quarterly	3-hr comp.	---	---	---	---
TOD (mg/L)	Monitor	15	Quarterly	Calculated	---	---	---	---
Dissolved Oxygen (mg/L)	Monitor	7 Min.	Quarterly	Grab	---	12.05	---	---
Aluminum, dissolved (mg/L)	Monitor	0.2	Quarterly	3-hr comp.	---	---	---	---
Antimony, total (mg/L)	Monitor	0.1	Quarterly	3-hr comp.	---	---	---	---
Chromium, total (mg/L)	Monitor	0.5	Quarterly	3-hr comp.	---	---	---	---
Cobalt, total (mg/L)	Monitor	0.01	Quarterly	3-hr comp.	---	---	---	---
Copper, total (mg/L)	Monitor	0.1	Quarterly	3-hr comp.	---	---	---	---
Iron, total (mg/L)	Monitor	0.3	Quarterly	3-hr comp.	---	---	---	---
Lead, total (mg/L)	Monitor	0.02	Quarterly	3-hr comp.	---	---	---	---
Mercury, total (mg/L)	Monitor	0.0008	2/Month	3-hr comp.	---	0.0002 U	---	---
Nickel, total (mg/L)	Monitor	0.2	Quarterly	3-hr comp.	---	---	---	---
Silver, total (mg/L)	Monitor	0.1	Quarterly	3-hr comp.	---	---	---	---
Vanadium, total (mg/L)	Monitor	0.03	Quarterly	3-hr comp.	---	---	---	---
Zinc, total (mg/L)	Monitor	0.3	2/Month	3-hr comp.	---	0.01 U	---	---
cis-1,2-Dichloroethene (ug/L)	Monitor	10	2/Month	Grab	---	0.50 U	---	---
trans-1,2-Dichloroethene (ug/L)	Monitor	10	2/Month	Grab	---	0.50 U	---	---
Methylene chloride (ug/L)	Monitor	50	2/Month	Grab	---	2.0 U	---	---
1,1,2,2-Tetrachloroethane (ug/L)	Monitor	30	2/Month	Grab	---	0.50 U	---	---
Tetrachloroethene (ug/L)	Monitor	20	2/Month	Grab	---	0.50 U	---	---
Toluene (ug/L)	Monitor	20	2/Month	Grab	---	0.50 U	---	---
Trichloroethene (ug/L)	Monitor	10	2/Month	Grab	---	0.50 U	---	---
Acetone (ug/L)	Monitor	1000	2/Month	Grab	---	10 U	---	---
2-Hexanone (ug/L)	Monitor	1000	2/Month	Grab	---	5.0 U	---	---
4-Methyl-2-pentanone (MIBK) (ug/L)	Monitor	1000	2/Month	Grab	---	5.0 U	---	---

NOTES: (1) Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.

--- - Not analyzed, NA - Data not available

U - Not Detected, J - Estimated

TOD = 1.5 X CBOD5 + 4.5 X TKN

**Table 1**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Monitoring Requirements and Effluent Data**

Analyte	Effluent 03/10/99	Effluent 03/11/99	Effluent 03/16/99	Effluent 03/17/99	Effluent 03/18/99	Effluent 03/23/99	Effluent 03/24/99	Effluent 03/25/99
Flow (GPD)	---	11570	11450	---	11550	11320	---	11660
pH (SU)	---	7.88	7.85	---	7.85	7.85	---	7.85
Residue, non-filterable (mg/L)	5 U	---	---	5 U	---	---	5 U	---
Total dissolved solids (TDS) (mg/L)	420	---	---	400	---	---	400	---
CBOD5 (mg/L)	---	---	---	---	---	---	---	---
TKN (mg/L)	---	---	---	---	---	---	---	---
TOD (mg/L)	---	---	---	---	---	---	---	---
Dissolved Oxygen (mg/L)	---	---	---	---	---	---	---	---
Aluminum, dissolved (mg/L)	---	---	---	---	---	---	---	---
Antimony, total (mg/L)	---	---	---	---	---	---	---	---
Chromium, total (mg/L)	---	---	---	---	---	---	---	---
Cobalt, total (mg/L)	---	---	---	---	---	---	---	---
Copper, total (mg/L)	---	---	---	---	---	---	---	---
Iron, total (mg/L)	---	---	---	---	---	---	---	---
Lead, total (mg/L)	---	---	---	---	---	---	---	---
Mercury, total (mg/L)	---	---	---	0.0002 U	---	---	---	---
Nickel, total (mg/L)	---	---	---	---	---	---	---	---
Silver, total (mg/L)	---	---	---	---	---	---	---	---
Vanadium, total (mg/L)	---	---	---	---	---	---	---	---
Zinc, total (mg/L)	---	---	---	0.02	---	---	---	---
cis-1,2-Dichloroethene (ug/L)	---	---	---	0.50 U	---	---	---	---
trans-1,2-Dichloroethene (ug/L)	---	---	---	0.50 U	---	---	---	---
Methylene chloride (ug/L)	---	---	---	2.0 U	---	---	---	---
1,1,2,2-Tetrachloroethane (ug/L)	---	---	---	0.50 U	---	---	---	---
Tetrachloroethene (ug/L)	---	---	---	0.50 U	---	---	---	---
Toluene (ug/L)	---	---	---	0.50 U	---	---	---	---
Trichloroethene (ug/L)	---	---	---	0.50 U	---	---	---	---
Acetone (ug/L)	---	---	---	10 U	---	---	---	---
2-Hexanone (ug/L)	---	---	---	5.0 U	---	---	---	---
4-Methyl-2-pentanone (MIBK) (ug/L)	---	---	---	5.0 U	---	---	---	---

NOTES: (1) Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.

--- - Not analyzed, NA - Data not available

U - Not Detected, J - Estimated

TOD = 1.5 X CBOD5 + 4.5 X TKN

**Table 1**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Monitoring Requirements and Effluent Data**

Analyte	Effluent 03/30/99
Flow (GPD)	11170
pH (SU)	7.85
Residue, non-filterable (mg/L)	---
Total dissolved solids (TDS) (mg/L)	---
CBOD5 (mg/L)	---
TKN (mg/L)	---
TOD (mg/L)	---
Dissolved Oxygen (mg/L)	---
Aluminum, dissolved (mg/L)	---
Antimony, total (mg/L)	---
Chromium, total (mg/L)	---
Cobalt, total (mg/L)	---
Copper, total (mg/L)	---
Iron, total (mg/L)	---
Lead, total (mg/L)	---
Mercury, total (mg/L)	---
Nickel, total (mg/L)	---
Silver, total (mg/L)	---
Vanadium, total (mg/L)	---
Zinc, total (mg/L)	---
cis-1,2-Dichloroethene (ug/L)	---
trans-1,2-Dichloroethene (ug/L)	---
Methylene chloride (ug/L)	---
1,1,2,2-Tetrachloroethane (ug/L)	---
Tetrachloroethene (ug/L)	---
Toluene (ug/L)	---
Trichloroethene (ug/L)	---
Acetone (ug/L)	---
2-Hexanone (ug/L)	---
4-Methyl-2-pentanone (MIBK) (ug/L)	---
NOTES: (1) Minimum monitoring requirements based on the SPDES permit modified March 13, 1997. --- - Not analyzed, NA - Data not available U - Not Detected, J - Estimated TOD = 1.5 X CBOD5 + 4.5 X TKN	

**ATTACHMENT A**  
**LABORATORY ANALYTICAL DATA SHEETS**

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8260

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: K7096  
Samp. Description: WTP Effluent - Grab  
Instrument: HP5970 GC/MS#2  
Units: ug/L  
Number of analytes: 14

Collected: 03/03/99  
Received: 03/03/99  
Prepared: 03/05/99  
Matrix: Water  
QC Batch: 030599W2  
%Solids:  
Purge volume: 25 mL

Parameter	Result	Surrog Limits	Dilution	Analyzed Notes
Acetone	<10.		1	03/05/99
Methylene chloride	<2.0		1	03/05/99
trans-1,2-Dichloroethene	<.50		1	03/05/99
cis-1,2-Dichloroethene	<.50		1	03/05/99
Trichloroethene	<.50		1	03/05/99
4-Methyl-2-pentanone	<5.0		1	03/05/99
Toluene	<.50		1	03/05/99
2-Hexanone	<5.0		1	03/05/99
Tetrachloroethene	<.50		1	03/05/99
1,1,2,2-Tetrachloroethane	<.50		1	03/05/99
1,2-Dichloroethane-d4 (surrogate)	109.%	80-135	1	03/05/99
Dibromofluoromethane (surrogate)	114.%	61-136	1	03/05/99
Toluene-d8 (surrogate)	109.%	84-114	1	03/05/99
Bromofluorobenzene (surrogate)	107.%	77-117	1	03/05/99

Notes:

# - Outside control limits J-Estimated value

Authorized: Monika Santucci  
Date: March 5, 1999  
Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: K7094  
Samp. Description: WTP Influent  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m X .45mm ID  
Dilution: 50 Instrument: 9001

Collected: 03/03/99 Matrix: Water  
Received: 03/03/99 QC Batch: 031199W1  
Prepared: %Solids:  
Analyzed: 03/11/99 Purge volume: 5 ml  
Number of analytes: 36

<u>Parameter</u>	<u>Result</u>	<u>Col</u>	<u>Surrog Limits</u>	<u>Notes</u>
Benzene	<50.	1		
Bromodichloromethane	<50.	1		
Bromoform	<500.	1		
Bromomethane	<500.	1		
Carbon tetrachloride	<50.	1		
Chlorobenzene	<50.	1		
Chloroethane	<50.	1		
2-Chloroethylvinyl ether	<500.	1		
Chloroform	<50.	1		
Chloromethane	<500.	1		
Dibromochloromethane	<50.	1		
1,2-Dichlorobenzene	<250.	1		
1,3-Dichlorobenzene	<250.	1		
1,4-Dichlorobenzene	<250.	1		
Dichlorodifluoromethane	<500.	1		
1,1-Dichloroethane	<50.	1		
1,2-Dichloroethane	<50.	1		
1,1-Dichloroethylene	<50.	1		
cis-1,2-Dichloroethylene	<50.	1		
trans-1,2-Dichloroethylene	<50.	1		
Dichloromethane	<50.	1		
1,2-Dichloropropane	<50.	1		
cis-1,3-Dichloropropylene	<50.	1		
trans-1,3-Dichloropropylene	<50.	1		
Ethylbenzene	<50.	1		
1,1,2,2-Tetrachloroethane	<50.	1		
Tetrachloroethylene	<50.	1		
Toluene	<50.	1		

# - Outside control limits J-Estimated value

Authorized:   
Date: March 12, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: K7094  
Samp. Description: WTP Influent  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m X .45mm ID  
Dilution: 50 Instrument: 9001

Collected: 03/03/99 Matrix: Water  
Received: 03/03/99 QC Batch: 031199W1  
Prepared: %Solids:  
Analyzed: 03/11/99 Purge volume: 5 ml

Number of analytes: 36

<u>Parameter</u>	<u>Result</u>	<u>Col</u>	<u>Surrog Limits</u>	<u>Notes</u>
1,1,1-Trichloroethane	<50.	1		
1,1,2-Trichloroethane	<50.	1		
Trichloroethylene	1200.	1		
Trichlorofluoromethane	<50.	1		
Vinyl Chloride	<50.	1		
Xylenes (total)	<150.	1		
2-Chloropropane (surrogate)	97.%	1	69-118	
Fluorobenzene (surrogate)	98.%	1	85-119	

Notes:

# - Outside control limits J-Estimated value

Authorized: Monika Santucci  
Date: March 12, 1999 Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: K7095  
Samp. Description: WTP Between GACs  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m X .45mm ID  
Dilution: 1 Instrument: 9001

Collected: 03/03/99 Matrix: Water  
Received: 03/03/99 QC Batch: 031199W1  
Prepared: %Solids:  
Analyzed: 03/11/99 Purge volume: 5 ml  
Number of analytes: 36

Parameter	Result	Col	Surrog Limits	Notes
Benzene	<1.	1		
Bromodichloromethane	<1.	1		
Bromoform	<10.	1		
Bromomethane	<10.	1		
Carbon tetrachloride	<1.	1		
Chlorobenzene	<1.	1		
Chloroethane	<1.	1		
2-Chloroethylvinyl ether	<10.	1		
Chloroform	<1.	1		
Chloromethane	<10.	1		
Dibromochloromethane	<1.	1		
1,2-Dichlorobenzene	<5.	1		
1,3-Dichlorobenzene	<5.	1		
1,4-Dichlorobenzene	<5.	1		
Dichlorodifluoromethane	<10.	1		
1,1-Dichloroethane	<1.	1		
1,2-Dichloroethane	<1.	1		
1,1-Dichloroethylene	<1.	1		
cis-1,2-Dichloroethylene	4.	1		
trans-1,2-Dichloroethylene	<1.	1		
Dichloromethane	<1.	1		
1,2-Dichloropropane	<1.	1		
cis-1,3-Dichloropropylene	<1.	1		
trans-1,3-Dichloropropylene	<1.	1		
Ethylbenzene	<1.	1		
1,1,2,2-Tetrachloroethane	<1.	1		
Tetrachloroethylene	<1.	1		
Toluene	<1.	1		

# - Outside control limits J-Estimated value

Authorized: Monika Santucci  
Date: March 12, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: K7095  
Samp. Description: WTP Between GACs  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m X .45mm ID  
Dilution: 1 Instrument: 9001

Collected: 03/03/99 Matrix: Water  
Received: 03/03/99 QC Batch: 031199W1  
Prepared: %Solids:  
Analyzed: 03/11/99 Purge volume: 5 ml

Number of analytes: 36

<u>Parameter</u>	<u>Result</u>	<u>Col</u>	<u>Surrog Limits</u>	<u>Notes</u>
1,1,1-Trichloroethane	<1.	1		
1,1,2-Trichloroethane	<1.	1		
Trichloroethylene	8.	1		
Trichlorofluoromethane	<1.	1		
Vinyl Chloride	<1.	1		
Xylenes (total)	<3.	1		
2-Chloropropane (surrogate)	101.%	1	69-118	
Fluorobenzene (surrogate)	98.%	1	85-119	

Notes:

# - Outside control limits J-Estimated value

Authorized: Monika Santucci  
Date: March 12, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Trace Metals

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

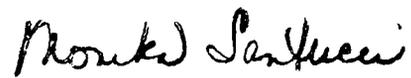
Sample: K7097  
Samp. Description: WTP Effluent - Composite  
Units: mg/L

Collected: 03/03/99      Matrix: Water  
Received: 03/03/99      %Solids:  
Number of analytes: 2

<u>Parameter</u>	<u>Result</u>	<u>Method</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>QC Batch</u>	<u>Dilut.</u>	<u>Note</u>
Mercury	<.0002	245.1	03/11/99	03/11/99	031199W1		1
Zinc	<.01	200.7	03/08/99	03/08/99	030899W1		1

Notes:

J-Estimated value

Authorized:   
Date: March 12, 1999      Monika Santucci

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

**Analytical Results  
Wet Chemistry**

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: K7097  
Samp. Description: WTP Effluent - Composite

Collected: 03/03/99                      Matrix: Water  
Received: 03/03/99 15:30

<u>Parameter</u>	<u>Result Units</u>	<u>Method</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>QC Batch</u>	<u>Note</u>
Total dissolved solids	420. mg/L	EPA 160.1		03/08/99	030899W14	
Total suspended solids	<5. mg/L	EPA 160.2		03/08/99	030899W12	

Notes:

J-Estimated value

Authorized: Monika Santucci  
Date: March 11, 1999                      Monika Santucci

954

# O'Brien & Gere Laboratories, Inc.

5000 Brittonfield Parkway  
 East Syracuse, New York 13057  
 (315) 437-0200

# Chain of Custody

Client: O'BRIEN & GERE TECHNICAL SERVICES INC  
 Project: ITT FINANCIAL (FORMER ACCURATE DIE)  
 Sampled by: JERRY BORN  
 Client Contact: TIM EDDY / JERRY BORN Phone # 2467 / 637 0109

Analysis/Method							
VOCs EPA METH 8021	VOCs EPA METH 8021	VOCs EPA METH 8021	Zn+Hg	TSS/TDS			

## Sample Description

Sample Location	Date Collected	Time Collected	Sample Matrix	Comp. or Grab	No. of Containers
WTP INFLUENT	3/3/99	7:01 AM	WATER	GRAB	2
WTP BETWEEN GRAB	3/3/99	6:58 AM	WATER	GRAB	2
WTP EFFLUENT	3/3/99	6:55 AM	WATER	GRAB	2
WTP EFFLUENT	3/3/99	10:15 AM	WATER	COMP	1
WTP EFFLUENT	3/3/99	10:18 AM	WATER	COMP	1

X							
	X						
		X					
			X				
				X			

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by: <i>[Signature]</i>	Date: 3/3/99	Time: 1530	Received by Lab: <i>[Signature]</i>	Date: 3/3/99	Time: 1530
Shipment Method: HAND	Airbill Number:				

Turnaround Time-Required:  
 Routine X  
 Rush (Specify) \_\_\_\_\_

Comments:

Cooler Temperature: 30°

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Wet Chemistry

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Weekly Effluent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: K7601  
Samp. Description: WTP Effluent

Collected: 03/10/99  
Received: 03/10/99 15:50  
Matrix: Water

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Method</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>QC Batch</u>	<u>Note</u>
Total dissolved solids	420.	mg/L	EPA 160.1		03/16/99	031699W16	
Total suspended solids	<5.	mg/L	EPA 160.2		03/12/99	031299W15	

Notes:

J-Estimated value

Authorized: Monika Santucci  
Date: March 19, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

5000 Brittonfield Parkway  
 East Syracuse, New York 13057  
 (315) 437-0200

1034

# Chain of Custody

Client: O'BRIEN + GERE TECHNICAL SERV. INC.						Analysis/Method  <i>TSS/TDS</i>								
Project: ITT FINANCIAL (FORMER ACCURATE DIE)														
Sampled by: JERRY BORN														
Client Contact: TIM EDDY JERRY BORN Phone # 2467 637 0109														
<b>Sample Description</b>														
Sample Location	Date Collected	Time Collected	Sample Matrix	Comp. or Grab	No. of Containers							Comments		
WTP EFFLUENT	3/10/99	10:20 AM	WATER	COMP	1	X								
Relinquished by:				Date:	Time:	Received by:				Date:	Time:			
Relinquished by:				Date:	Time:	Received by:				Date:	Time:			
Relinquished by: <i>Jerry Born</i>				Date: 3/10/99	Time: 15:50	Received by Lab: <i>Mark P. Jackson</i>				Date: 3/10/99	Time: 15:50			
Shipment Method: <i>HAND DELIVERED</i>						Airbill Number:								

Turnaround Time Required:  
 Routine   X    
 Rush (Specify) \_\_\_\_\_

Comments:

Cooler Temperature:   2°

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8260

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Bi-Monthly Effluent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

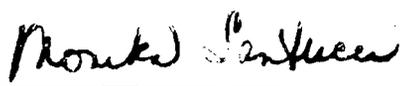
Sample: K7987  
Samp. Description: WTP Effluent (Grab)  
Instrument: HP5970 GC/MS#2  
Units: ug/L  
Number of analytes: 14

Collected: 03/17/99  
Received: 03/17/99  
Prepared: 03/19/99  
Matrix: Water  
QC Batch: 031999W2  
%Solids:  
Purge volume: 25 mL

Parameter	Result	Surrog		Analyzed	Notes
		Limits	Dilution		
Acetone	<10.		1	03/19/99	
Methylene chloride	<2.0		1	03/19/99	
trans-1,2-Dichloroethene	<.50		1	03/19/99	
cis-1,2-Dichloroethene	<.50		1	03/19/99	
Trichloroethene	<.50		1	03/19/99	
4-Methyl-2-pentanone	<5.0		1	03/19/99	
Toluene	<.50		1	03/19/99	
2-Hexanone	<5.0		1	03/19/99	
Tetrachloroethene	<.50		1	03/19/99	
1,1,2,2-Tetrachloroethane	<.50		1	03/19/99	
1,2-Dichloroethane-d4 (surrogate)	105.%	80-135	1	03/19/99	
Dibromofluoromethane (surrogate)	105.%	61-136	1	03/19/99	
Toluene-d8 (surrogate)	105.%	84-114	1	03/19/99	
Bromofluorobenzene (surrogate)	104.%	77-117	1	03/19/99	

Notes:

# - Outside control limits J-Estimated value

Authorized:   
Date: March 22, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Trace Metals

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Bi-Monthly Effluent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: K7988  
Samp. Description: WTP Effluent (Composite)  
Units: mg/L

Collected: 03/17/99      Matrix: Water  
Received: 03/17/99      %Solids:  
Number of analytes: 2

<u>Parameter</u>	<u>Result</u>	<u>Method</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>QC Batch</u>	<u>Dilut.</u>	<u>Note</u>
Mercury	<.0002	245.1	03/25/99	03/26/99	032599W1		1
Zinc	.02	200.7	03/24/99	03/24/99	032499W1		1

Notes:

J-Estimated value

Authorized: Monika Santucci  
Date: March 27, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Wet Chemistry

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Bi-Monthly Effluent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: K7988  
Samp. Description: WTP Effluent (Composite)

Collected: 03/17/99  
Received: 03/17/99 15:50  
Matrix: Water

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Method</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>QC Batch</u>	<u>Note</u>
Total dissolved solids	400.	mg/L	EPA 160.1		03/22/99	032299W13	
Total suspended solids	<5.	mg/L	EPA 160.2		03/22/99	032299W12	

Notes:

J-Estimated value

Authorized: Monika Santucci  
Date: March 25, 1999      Monika Santucci



# O'Brien & Gere Laboratories, Inc.

# Analytical Results Wet Chemistry

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Weekly Effluent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: K8520  
Samp. Description: WTP Effluent

Collected: 03/24/99                      Matrix: Water  
Received: 03/24/99 15:55

<u>Parameter</u>	<u>Result Units</u>	<u>Method</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>QC Batch</u>	<u>Note</u>
Total dissolved solids	400. mg/L	EPA 160.1		03/25/99	032599W11	
Total suspended solids	<5. mg/L	EPA 160.2		03/25/99	032599W12	

Notes:

J-Estimated value

Authorized: Monika Santucci  
Date: March 27, 1999                      Monika Santucci





**O'BRIEN & GERE**  
ENGINEERS, INC.

**FILE COPY**

MAY 17 1999

May 13, 1999

Mr. David Crosby, P.E.  
Bureau of Construction Services  
Division of Hazardous Waste Remediation  
New York State Department of Environmental Conservation  
50 Wolf Road  
Albany, NY 12233-7010

Re: Former Accurate Die Casting Site  
Fayetteville, NY

File: 2488/23123 #2

Dear Mr. Crosby:

Enclosed are four copies of the monthly progress report, required by the Order on Consent (#A7-0318-94-10) for the former Accurate Die Casting site in Fayetteville, New York, for the month of April 1999. Included in the progress report are the results of the monitoring activities associated with the SPDES Fact Sheet for the ground water treatment system through April 1999. If you have any questions regarding these reports, please do not hesitate to call me.

Very truly yours,

O'BRIEN & GERE ENGINEERS, INC.

Timothy M. Eddy, HGW  
Senior Project Scientist

I:\DIV71\PROJECTS\2488\23123\2\_CORRES\4-99MOR.WPD

**Attachments**

cc: V. Nattanmai, P.E. - NYSDEC  
A. English - NYSDEC  
T. Male - NYSDEC  
Central Field Unit: Project Attorney Accurate Die Site - NYSDEC  
C. Branagh, P.E. - NYSDEC Region 7  
Director, Bureau of Environmental Exposure Investigation - NYSDOH (2 copies)  
H. Hamel - NYSDOH  
C. Johnson, Esq. - ITT Corporation  
C. Salcines - ITT Corporation  
R. Alessi, Esq. - LeBoeuf, Lamb, Greene & MacRae  
M. Peters, Esq. - LeBoeuf, Lamb, Greene & MacRae  
T. Brown, P.E. - O'Brien & Gere Technical Services, Inc.  
John Terwilliger - O'Brien & Gere Technical Services, Inc



**FORMER ACCURATE DIE CASTING SITE  
FAYETTEVILLE, NEW YORK**

**Monthly Progress Report for: April 1999**

**(a) Activities Performed/Correspondences with NYSDEC**

1. During the month of April 1999, O'Brien & Gere operated the ground water collection and treatment system on behalf of ITT Industries. Between April 1 through April 30, 1999, a total of 540,900 gallons of ground water was treated: 351,830 gallons were recovered from recovery well RW-1; 188,970 gallons were recovered from RW-2; and 100 gallons were recovered from the sump located outside the northeast corner of the facility. As of April 1, 1999, a total of 25,869,300 gallons of ground water has been treated since startup on February 5, 1996.
2. During the month of April 1999, O'Brien & Gere performed the sampling activities associated with the Sampling and Analysis Plan (March 1996), revised according to the NYSDEC letter dated April 1, 1997, and the SPDES Fact Sheet (#734052) required by the Consent Order. The results of the SPDES sampling of the ground water treatment system effluent are discussed in Item b.
3. O'Brien & Gere completed semi-annual sampling of site ground water on April 23, 1999.
4. Recovery well RW-1 was rehabilitated during the week of April 12, 1999. Well efficiency, as measured by specific capacity, increased from 0.68 gpm/ft prior to rehabilitation to 3.8 gpm/ft afterwards.
5. The ground water collection trench contractor prepared and submitted the erosion control plan, construction water management plan, and health & safety plan to the NYSDEC. The NYSDEC provided comments to the plans in correspondence dated April 27, 1999.

**(b) Sampling and Test Results**

1. The analytical results associated with the SPDES Fact Sheet monitoring activities performed in April 1999 are summarized in Table 1. The laboratory analytical data sheets are provided as Attachment A.

**(c) Projected Activities within next 45 days**

1. Ground water monitoring activities will continue to be performed in accordance with the NYSDEC-approved Sampling & Analysis Plan dated March 1996, as modified in accordance with the recommendations of the Annual Report for 1997 submitted to the NYSDEC on January 27, 1998. Also, the treatment system performance monitoring will continue to be conducted in accordance with the SPDES Permit fact sheet, as modified on March 13, 1997 and November 21, 1997.
2. Continue operation of the ground water recovery and treatment system.

**FORMER ACCURATE DIE CASTING SITE  
FAYETTEVILLE, NEW YORK  
(continued)**

3. Address NYSDEC comments on the construction water management plan and health & safety plan.
4. Mobilization activities associated with the ground water collection trench installation will be completed during the week of May 3, 1999.
5. Trenching activities will commence during the week of May 17, 1999.

**(d) Activities in support of Community Relations Plan**

1. None

**(f) Exceedences to SPDES Fact Sheet Limits**

1. None

**Table 1**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Monitoring Requirements and Effluent Data**

Analyte (units)	Monitoring Requirements				Effluent	Effluent	Effluent	Effluent
	Discharge Limitation Daily Average	Discharge Limitation Daily Maximum	Minimum Measurement Frequency(1)	Sample Type	04/01/99	04/06/99	04/07/99	04/08/99
Flow (GPD)	Monitor	150000	Continuous	Meter	11230	11260	---	11430
pH (SU)	6.5 - 8.5		2/Week	Grab	7.96	7.96	---	7.94
Residue, non-filterable (mg/L)	Monitor	20	Weekly	3-hr comp.	---	---	5 U	---
Total dissolved solids (TDS) (mg/L)	Monitor	Monitor	Weekly	3-hr comp.	---	---	460	---
CBOD5 (mg/L)	Monitor	Monitor	Quarterly	3-hr comp.	---	---	5 U	---
TKN (mg/L)	Monitor	Monitor	Quarterly	3-hr comp.	---	---	0.4 U	---
TOD (mg/L)	Monitor	15	Quarterly	Calculated	---	---	9.3 U	---
Dissolved Oxygen (mg/L)	Monitor	7 Min.	Quarterly	Grab	---	---	7.91	---
Aluminum, dissolved (mg/L)	Monitor	0.2	Quarterly	3-hr comp.	---	---	---	---
Antimony, total (mg/L)	Monitor	0.1	Quarterly	3-hr comp.	---	---	0.06 U	---
Chromium, total (mg/L)	Monitor	0.5	Quarterly	3-hr comp.	---	---	0.01 U	---
Cobalt, total (mg/L)	Monitor	0.01	Quarterly	3-hr comp.	---	---	0.01 U	---
Copper, total (mg/L)	Monitor	0.1	Quarterly	3-hr comp.	---	---	0.01	---
Iron, total (mg/L)	Monitor	0.3	Quarterly	3-hr comp.	---	---	0.05	---
Lead, total (mg/L)	Monitor	0.02	Quarterly	3-hr comp.	---	---	0.005 U	---
Mercury, total (mg/L)	Monitor	0.0008	2/Month	3-hr comp.	---	---	0.0002 U	---
Nickel, total (mg/L)	Monitor	0.2	Quarterly	3-hr comp.	---	---	0.05 U	---
Silver, total (mg/L)	Monitor	0.1	Quarterly	3-hr comp.	---	---	0.01 U	---
Vanadium, total (mg/L)	Monitor	0.03	Quarterly	3-hr comp.	---	---	0.03 U	---
Zinc, total (mg/L)	Monitor	0.3	2/Month	3-hr comp.	---	---	0.01	---
cis-1,2-Dichloroethene (ug/L)	Monitor	10	2/Month	Grab	---	---	0.50 U	---
trans-1,2-Dichloroethene (ug/L)	Monitor	10	2/Month	Grab	---	---	0.50 U	---
Methylene chloride (ug/L)	Monitor	50	2/Month	Grab	---	---	2.0 U	---
1,1,2,2-Tetrachloroethane (ug/L)	Monitor	30	2/Month	Grab	---	---	0.50 U	---
Tetrachloroethene (ug/L)	Monitor	20	2/Month	Grab	---	---	0.50 U	---
Toluene (ug/L)	Monitor	20	2/Month	Grab	---	---	0.50 U	---
Trichloroethene (ug/L)	Monitor	10	2/Month	Grab	---	---	0.50 U	---
Acetone (ug/L)	Monitor	1000	2/Month	Grab	---	---	10 U	---
2-Hexanone (ug/L)	Monitor	1000	2/Month	Grab	---	---	5.0 U	---
4-Methyl-2-pentanone (MIBK) (ug/L)	Monitor	1000	2/Month	Grab	---	---	5.0 U	---

NOTES: (1) Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.

--- - Not analyzed, NA - Data not available

U - Not Detected, J - Estimated

TOD = 1.5 X CBOD5 + 4.5 X TKN

**Table 1**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Monitoring Requirements and Effluent Data**

Analyte	Effluent 04/13/99	Effluent 04/14/99	Effluent 04/15/99	Effluent 04/20/99	Effluent 04/21/99	Effluent 04/22/99	Effluent 04/27/99	Effluent 04/29/99
Flow (GPD)	7340	---	7020	26430	---	27200	28013	28060
pH (SU)	7.79	---	7.96	7.87	---	7.83	7.81	7.82
Residue, non-filterable (mg/L)	---	5 U	---	---	5 U	---	---	---
Total dissolved solids (TDS) (mg/L)	---	380	---	---	400	---	---	---
CBOD5 (mg/L)	---	---	---	---	---	---	---	---
TKN (mg/L)	---	---	---	---	---	---	---	---
TOD (mg/L)	---	---	---	---	---	---	---	---
Dissolved Oxygen (mg/L)	---	---	---	---	---	---	---	---
Aluminum, dissolved (mg/L)	---	---	---	---	---	---	---	---
Antimony, total (mg/L)	---	---	---	---	---	---	---	---
Chromium, total (mg/L)	---	---	---	---	---	---	---	---
Cobalt, total (mg/L)	---	---	---	---	---	---	---	---
Copper, total (mg/L)	---	---	---	---	---	---	---	---
Iron, total (mg/L)	---	---	---	---	---	---	---	---
Lead, total (mg/L)	---	---	---	---	---	---	---	---
Mercury, total (mg/L)	---	---	---	---	0.0002 U	---	---	---
Nickel, total (mg/L)	---	---	---	---	---	---	---	---
Silver, total (mg/L)	---	---	---	---	---	---	---	---
Vanadium, total (mg/L)	---	---	---	---	---	---	---	---
Zinc, total (mg/L)	---	---	---	---	0.04	---	---	---
cis-1,2-Dichloroethene (ug/L)	---	---	---	---	0.50 U	---	---	---
trans-1,2-Dichloroethene (ug/L)	---	---	---	---	0.50 U	---	---	---
Methylene chloride (ug/L)	---	---	---	---	2.0 U	---	---	---
1,1,2,2-Tetrachloroethane (ug/L)	---	---	---	---	0.50 U	---	---	---
Tetrachloroethene (ug/L)	---	---	---	---	0.50 U	---	---	---
Toluene (ug/L)	---	---	---	---	0.50 U	---	---	---
Trichloroethene (ug/L)	---	---	---	---	0.50 U	---	---	---
Acetone (ug/L)	---	---	---	---	10 U	---	---	---
2-Hexanone (ug/L)	---	---	---	---	5.0 U	---	---	---
4-Methyl-2-pentanone (MIBK) (ug/L)	---	---	---	---	5.0 U	---	---	---

NOTES: (1) Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.  
 --- - Not analyzed, NA - Data not available  
 U - Not Detected, J - Estimated  
 TOD = 1.5 X CBOD5 + 4.5 X TKN

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Wet Chemistry

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Weekly Effluent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

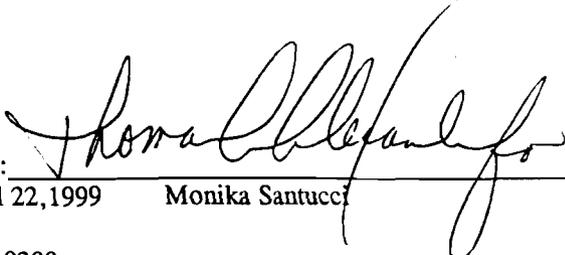
Sample: K9674  
Samp. Description: WTP Effluent

Collected: 04/14/99  
Received: 04/14/99 15:45  
Matrix: Water

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>Units</u>	<u>Method</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>QC Batch</u>	<u>Note</u>
Total dissolved solids	380.		mg/L	EPA 160.1		04/19/99	041999W12	
Total suspended solids	<5.	U	mg/L	EPA 160.2		04/19/99	041999W11	

Notes:

J-Estimated value

Authorized: 

Date: April 22, 1999

Monika Santucci

**ATTACHMENT A**  
**LABORATORY ANALYTICAL DATA SHEETS**

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Wet Chemistry

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Weekly Effluent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

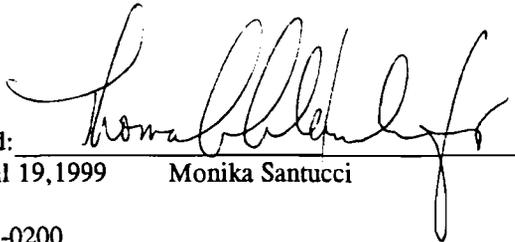
Sample: K8806  
Samp. Description: WTP Effluent

Collected: 03/31/99  
Received: 03/31/99 15:48  
Matrix: Water

<u>Parameter</u>	<u>Result Units</u>	<u>Method</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>QC Batch</u>	<u>Note</u>
Total dissolved solids	480. mg/L	EPA 160.1		04/06/99	040699W14	
Total suspended solids	<5. mg/L	EPA 160.2		04/02/99	040299W11	

Notes:

J-Estimated value

Authorized:   
Date: April 19, 1999  
Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8260

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

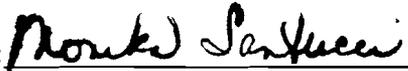
Sample: K9143  
Samp. Description: WTP Effluent - Grab  
Instrument: HP5973 GCMS#3  
Units: ug/L  
Number of analytes: 14

Collected: 04/07/99  
Received: 04/07/99  
Prepared: 04/12/99  
Matrix: Water  
QC Batch: 041299W1  
%Solids:  
Purge volume: 25 mL

<u>Parameter</u>	<u>Result</u>	<u>Surrog</u> <u>Limits</u>	<u>Dilution</u>	<u>Analyzed</u>	<u>Notes</u>
Acetone	<10.		1	04/12/99	
Methylene chloride	<2.0		1	04/12/99	
trans-1,2-Dichloroethene	<.50		1	04/12/99	
cis-1,2-Dichloroethene	<.50		1	04/12/99	
Trichloroethene	<.50		1	04/12/99	
4-Methyl-2-pentanone	<5.0		1	04/12/99	
Toluene	<.50		1	04/12/99	
2-Hexanone	<5.0		1	04/12/99	
Tetrachloroethene	<.50		1	04/12/99	
1,1,2,2-Tetrachloroethane	<.50		1	04/12/99	
1,2-Dichloroethane-d4 (surrogate)	111.%	80-135	1	04/12/99	
Dibromofluoromethane (surrogate)	103.%	61-136	1	04/12/99	
Toluene-d8 (surrogate)	103.%	84-114	1	04/12/99	
Bromofluorobenzene (surrogate)	88.%	77-117	1	04/12/99	

Notes:

# - Outside control limits J-Estimated value

Authorized:   
Date: April 13, 1999

Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: K9141  
Samp. Description: WTP Influent  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 50 Instrument: 9001

Collected: 04/07/99  
Received: 04/07/99  
Prepared:  
Analyzed: 04/21/99

Matrix: Water  
QC Batch: 042199W1  
%Solids:  
Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL Notes
Benzene	50.	U	1		50
Bromodichloromethane	50.	U	1		50
Bromoform	500.	U	1		500
Bromomethane	500.	U	1		500
Carbon tetrachloride	50.	U	1		50
Chlorobenzene	50.	U	1		50
Chloroethane	50.	U	1		50
2-Chloroethylvinyl ether	500.	U	1		500
Chloroform	50.	U	1		50
Chloromethane	500.	U	1		500
Dibromochloromethane	50.	U	1		50
1,2-Dichlorobenzene	250.	U	1		250
1,3-Dichlorobenzene	250.	U	1		250
1,4-Dichlorobenzene	250.	U	1		250
Dichlorodifluoromethane	500.	U	1		500
1,1-Dichloroethane	50.	U	1		50
1,2-Dichloroethane	50.	U	1		50
1,1-Dichloroethylene	50.	U	1		50
cis-1,2-Dichloroethylene	50.	U	1		50
trans-1,2-Dichloroethylene	50.	U	1		50
Dichloromethane	50.	U	1		50
1,2-Dichloropropane	50.	U	1		50
cis-1,3-Dichloropropylene	50.	U	1		50
trans-1,3-Dichloropropylene	50.	U	1		50
Ethylbenzene	50.	U	1		50
1,1,2,2-Tetrachloroethane	50.	U	1		50
Tetrachloroethylene	50.	U	1		50
Toluene	50.	U	1		50
1,1,1-Trichloroethane	50.	U	1		50

# - Outside control limits J-Estimated value

Authorized: Monika Santucci  
Date: April 21, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: K9141  
Samp. Description: WTP Influent  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 50 Instrument: 9001

Collected: 04/07/99  
Received: 04/07/99  
Prepared:  
Analyzed: 04/21/99

Matrix: Water  
QC Batch: 042199W1  
%Solids:  
Sample Size: 5 ml

Number of analytes: 34

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>Col</u>	<u>MDL</u>	<u>RL</u>	<u>Notes</u>
1,1,2-Trichloroethane	50.	U	1		50	
Trichloroethylene	1100.		1		50	
Trichlorofluoromethane	50.	U	1		50	
Vinyl Chloride	50.	U	1		50	
Xylenes (total)	150.	U	1		150	

<u>Surrogate</u>	<u>Result</u>	<u>Qual</u>	<u>Col</u>	<u>Limits</u>	<u>Notes</u>
2-Chloropropane (surrogate)	105.%		1	69-118	
Fluorobenzene (surrogate)	99.%		1	85-119	

Notes:

# - Outside control limits J-Estimated value

Authorized: Monika Santucci  
Date: April 21, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: K9142  
Samp. Description: WTP Between GACs  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 1 Instrument: 9001

Collected: 04/07/99  
Received: 04/07/99  
Prepared:  
Analyzed: 04/20/99

Matrix: Water  
QC Batch: 042099W1  
%Solids:  
Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL	Notes
Benzene	1.	U	1		1	
Bromodichloromethane	1.	U	1		1	
Bromoform	10.	U	1		10	
Bromomethane	10.	U	1		10	
Carbon tetrachloride	1.	U	1		1	
Chlorobenzene	1.	U	1		1	
Chloroethane	1.	U	1		1	
2-Chloroethylvinyl ether	10.	U	1		10	
Chloroform	1.	U	1		1	
Chloromethane	10.	U	1		10	
Dibromochloromethane	1.	U	1		1	
1,2-Dichlorobenzene	5.	U	1		5	
1,3-Dichlorobenzene	5.	U	1		5	
1,4-Dichlorobenzene	5.	U	1		5	
Dichlorodifluoromethane	10.	U	1		10	
1,1-Dichloroethane	1.	U	1		1	
1,2-Dichloroethane	1.	U	1		1	
1,1-Dichloroethylene	1.	U	1		1	
cis-1,2-Dichloroethylene	1.	U	1		1	
trans-1,2-Dichloroethylene	1.	U	1		1	
Dichloromethane	1.	U	1		1	
1,2-Dichloropropane	1.	U	1		1	
cis-1,3-Dichloropropylene	1.	U	1		1	
trans-1,3-Dichloropropylene	1.	U	1		1	
Ethylbenzene	1.	U	1		1	
1,1,2,2-Tetrachloroethane	1.	U	1		1	
Tetrachloroethylene	1.	U	1		1	
Toluene	1.	U	1		1	
1,1,1-Trichloroethane	1.	U	1		1	

# - Outside control limits J-Estimated value

Authorized: Monika Santucci  
Date: April 21, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: K9142  
Samp. Description: WTP Between GACs  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 1 Instrument: 9001

Collected: 04/07/99  
Received: 04/07/99  
Prepared:  
Analyzed: 04/20/99

Matrix: Water  
QC Batch: 042099W1  
% Solids:  
Sample Size: 5 ml

Number of analytes: 34

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>Col</u>	<u>MDL</u>	<u>RL</u>	<u>Notes</u>
1,1,2-Trichloroethane	1.	U	1			1
Trichloroethylene	1.	U	1			1
Trichlorofluoromethane	1.	U	1			1
Vinyl Chloride	1.	U	1			1
Xylenes (total)	3.	U	1			3

<u>Surrogate</u>	<u>Result</u>	<u>Qual</u>	<u>Col</u>	<u>Limits</u>	<u>Notes</u>
2-Chloropropane (surrogate)	107.%		1	69-118	
Fluorobenzene (surrogate)	99.%		1	85-119	

Notes:

# - Outside control limits J-Estimated value

Authorized:   
Date: April 21, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Trace Metals

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: K9144  
Samp. Description: WTP Effluent - Composite  
Units: mg/L

Collected: 04/07/99      Matrix: Water  
Received: 04/07/99      %Solids:  
Number of analytes: 11

<u>Parameter</u>	<u>Result</u>	<u>Method</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>QC Batch</u>	<u>Dilut.</u>	<u>Note</u>
Antimony	<.06	200.7	04/16/99	04/20/99	041699W1		1
Chromium	<.01	200.7	04/16/99	04/20/99	041699W1		1
Cobalt	<.01	200.7	04/16/99	04/20/99	041699W1		1
Copper	.01	200.7	04/16/99	04/20/99	041699W1		1
Iron	.05	200.7	04/21/99	04/21/99	042199W1		1
Lead	<.005	200.7	04/16/99	04/20/99	041699W1		1
Mercury	<.0002	245.1	04/18/99	04/19/99	041899W2		1
Nickel	<.05	200.7	04/16/99	04/20/99	041699W1		1
Silver	<.01	200.7	04/16/99	04/20/99	041699W1		1
Vanadium	<.03	200.7	04/16/99	04/20/99	041699W1		1
Zinc	.01	200.7	04/16/99	04/20/99	041699W1		1

Notes:

J-Estimated value

Authorized: Monika Santucci  
Date: April 26, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Wet Chemistry

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: K9144  
Samp. Description: WTP Effluent - Composite

Collected: 04/07/99 10:41      Matrix: Water  
Received: 04/07/99 15:30

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>Units</u>	<u>Method</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>QC Batch</u>	<u>Note</u>
CBOD5	<5.	U	mg/L	EPA 405.1		04/08/99	040899W15	
Total Kjeldahl nitrogen	<.4	U N	mg/L	EPA 351.2	04/13/99	04/15/99	041399W6	
Total dissolved solids	460.		mg/L	EPA 160.1		04/13/99	041399W22	
Total suspended solids	<5.	U	mg/L	EPA 160.2		04/13/99	041399W23	

Notes:

J-Estimated value

Authorized: Monika Santucci

Date: April 20, 1999

Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Trace Metals

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: K9145  
Samp. Description: WTP Eff.- Comp. - (lab filtered)  
Units: mg/L

Collected: 04/07/99      Matrix: Water  
Received: 04/07/99      %Solids:  
Number of analytes: 1

<u>Parameter</u>	<u>Result</u>	<u>Method</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>QC Batch</u>	<u>Dilut.</u>	<u>Note</u>
Aluminum, filtered	<.1	200.7	04/16/99	04/20/99	041699W1		1

Notes:

J-Estimated value

Authorized: Monika Santucci  
Date: April 26, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8260

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Bi-Monthly Effluent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

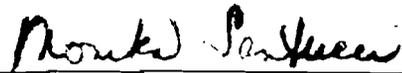
Sample: M0252  
Samp. Description: WTP Effluent - Grab  
Instrument: HP5970 GC/MS#2  
Units: ug/L  
Number of analytes: 14

Collected: 04/21/99  
Received: 04/21/99  
Prepared: 04/28/99  
Matrix: Water  
QC Batch: 042899W2  
%Solids:  
Purge volume: 25 mL

<u>Parameter</u>	<u>Result</u>	<u>Surrog Limits</u>	<u>Dilution</u>	<u>Analyzed</u>	<u>Notes</u>
Acetone	<10.		1	04/28/99	
Methylene chloride	<2.0		1	04/28/99	
trans-1,2-Dichloroethene	<.50		1	04/28/99	
cis-1,2-Dichloroethene	<.50		1	04/28/99	
Trichloroethene	<.50		1	04/28/99	
4-Methyl-2-pentanone	<5.0		1	04/28/99	
Toluene	<.50		1	04/28/99	
2-Hexanone	<5.0		1	04/28/99	
Tetrachloroethene	<.50		1	04/28/99	
1,1,2,2-Tetrachloroethane	<.50		1	04/28/99	
Dibromofluoromethane (surrogate)	89.%	61-136	1	04/28/99	
1,2-Dichloroethane-d4 (surrogate)	88.%	80-135	1	04/28/99	
Toluene-d8 (surrogate)	87.%	84-114	1	04/28/99	
Bromofluorobenzene (surrogate)	85.%	77-117	1	04/28/99	

Notes:

# - Outside control limits J-Estimated value

Authorized:   
Date: April 30, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Trace Metals

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Bi-Monthly Effluent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: M0253  
Samp. Description: WTP Effluent - Composite  
Units: mg/L

Collected: 04/21/99      Matrix: Water  
Received: 04/21/99      %Solids:  
Number of analytes: 2

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>MDL</u>	<u>RL</u>	<u>Method</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>QC Batch</u>	<u>Dilut.</u>	<u>Note</u>
Mercury	<.0002	U	.0001	.0002	245.1	04/27/99	04/28/99	042799W1		1
Zinc	.04		.002	.01	200.7	04/27/99	04/28/99	042799W1		1

Notes:

J-Estimated value

Authorized: Monika Santucci  
Date: April 30, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Wet Chemistry

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Bi-Monthly Effluent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: M0253  
Samp. Description: WTP Effluent - Composite

Collected: 04/21/99  
Received: 04/21/99 15:35  
Matrix: Water

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>Units</u>	<u>Method</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>QC Batch</u>	<u>Note</u>
Total dissolved solids	400.		mg/L	EPA 160.1		04/25/99	042599W12	
Total suspended solids	<5.	U	mg/L	EPA 160.2		04/27/99	042799W11	

Notes:

J-Estimated value

Authorized: Monika Santucci  
Date: April 30, 1999      Monika Santucci



**O'BRIEN & GERE**  
ENGINEERS, INC.

**FILE COPY**

June 14, 1999

17.09

Mr. David Crosby, P.E.  
Bureau of Construction Services  
Division of Hazardous Waste Remediation  
New York State Department of Environmental Conservation  
50 Wolf Road  
Albany, NY 12233-7010

Re: Former Accurate Die Casting Site  
Fayetteville, NY

File: 2488/23123 #2

Dear Mr. Crosby:

Enclosed are four copies of the monthly progress report, required by the Order on Consent (#A7-0318-94-10) for the former Accurate Die Casting site in Fayetteville, New York, for the month of May 1999. Included in the progress report are the results of the monitoring activities associated with the SPDES Fact Sheet for the ground water treatment system through May 1999. If you have any questions regarding these reports, please do not hesitate to call me.

Very truly yours,

O'BRIEN & GERE ENGINEERS, INC.

Alfred R. Farrell, P.E.  
Senior Project Engineer

I:\DIV7\PROJECTS\2488\23123\2\_CORRES\5-99MOR.WPD

Attachments

- cc: V. Nattanmai, P.E. - NYSDEC
- A. English - NYSDEC
- T. Male - NYSDEC
- Central Field Unit: Project Attorney Accurate Die Site - NYSDEC
- C. Branagh, P.E. - NYSDEC Region 7
- Director, Bureau of Environmental Exposure Investigation - NYSDOH (2 copies)
- H. Hamel - NYSDOH
- C. Johnson, Esq. - ITT Corporation
- C. Salcines - ITT Corporation
- R. Alessi, Esq. - LeBoeuf, Lamb, Greene & MacRae
- M. Peters, Esq. - LeBoeuf, Lamb, Greene & MacRae
- T. Brown, P.E. - O'Brien & Gere Technical Services, Inc.
- John Terwilliger - O'Brien & Gere Technical Services, Inc



**FORMER ACCURATE DIE CASTING SITE  
FAYETTEVILLE, NEW YORK**

**Monthly Progress Report for: May 1999**

**(a) Activities Performed/Correspondences with NYSDEC**

1. During the month of May 1999, O'Brien & Gere continued operating the ground water collection and treatment system on behalf of ITT Industries. As of May 28, 1999, a total of 26,461,740 gallons of ground water has been treated since startup on February 5, 1996. During the period since the monthly progress report for April 1999, 592,440 gallons of groundwater was treated.
2. During the month of May 1999, O'Brien & Gere performed the sampling activities associated with the SPDES Fact Sheet (#734052) required by the Consent Order. The results of the SPDES sampling of the groundwater treatment system effluent are discussed in Item b.
3. O'Brien & Gere Technical Services completed construction of the groundwater collection trench and sump between the former PAH/VOC/PCB Soils Area and Bishop Brook. Remaining work to be completed includes installing the electrical conduit and forcemain to the existing treatment building. Presently, approximately 300 cubic yards of soil excavated during construction of the groundwater collection trench is being stockpiled on site pending the results of laboratory analyses, and determination regarding if the material can be placed within the CAMU established on site. In accordance with the NYSDEC-approved Work Plan, three samples of the stockpiled soil were collected using USEPA sample preservation method 5035 and submitted for volatile organic compound analysis using USEPA method 8260.
4. The NYSDEC provided a letter dated May 28, 1999 approving the proposal to complete the one time requirement to collect an influent and effluent sample for PCB analysis from the groundwater collection system in October 1999.

**(b) Sampling and Test Results**

1. The analytical results associated with the SPDES Fact Sheet monitoring activities performed in May 1999 are summarized in Table 1. The laboratory analytical data sheets are provided as Attachment A.
2. The groundwater levels recorded in connection with the April 23, 1999 semi-annual sampling event are summarized in Table 2. Monitoring well MW-19 was dry and a groundwater sample could not be collected for analysis.
3. The analytical results associated with the April 23, 1999 semi-annual sampling event of monitoring wells MW-6, MW-9, MW-10, MW-11, MW-14, MW-17, MW-18, MW-21, MW-22 and MW-24 and the sump are summarized in Tables 3 and 4. Monitoring well MW-19 was dry and a groundwater sample could not be collected for analysis. The laboratory analytical data sheets are provided as Attachment B.

**FORMER ACCURATE DIE CASTING SITE  
FAYETTEVILLE, NEW YORK  
(continued)**

**(c) Projected Activities within next 45 days**

1. Groundwater monitoring activities will continue to be performed in accordance with the NYSDEC-approved Sampling & Analysis Plan dated March 1996, as modified in accordance with the recommendations of the Annual Report for 1997 submitted to the NYSDEC on January 27, 1998. Also, the treatment system performance monitoring will continue to be conducted in accordance with the SPDES Permit fact sheet, as modified on March 13, 1997 and November 21, 1997.
2. Continue operation of the groundwater recovery and treatment system.
3. Complete construction activities connected with the groundwater collection trench installation.

**(d) Activities in support of Community Relations Plan**

1. None

**(e) Exceedences to SPDES Fact Sheet Limits**

1. None

**ATTACHMENT A**

**SPDES PERMIT COMPLIANCE MONITORING  
LABORATORY ANALYTICAL DATA SHEETS**

**ATTACHMENT B**

**SEMI-ANNUAL GROUNDWATER QUALITY MONITORING  
LABORATORY ANALYTICAL DATA SHEETS**

**Table 1**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Monitoring Requirements and Effluent Data**

Analyte (units)	Monitoring Requirements				Effluent	Effluent	Effluent	Effluent
	Discharge Limitation Daily Average	Discharge Limitation Daily Maximum	Minimum Measurement Frequency(1)	Sample Type	05/05/99	05/06/99	05/11/99	05/12/99
Flow (GPD)	Monitor	150000	Continuous	Meter	---	27760	28010	---
pH (SU)	6.5 - 8.5		2/Week	Grab	---	7.82	7.8	---
Residue, non-filterable (mg/L)	Monitor	20	Weekly	3-hr comp.	5 U	---	---	5 U
Total dissolved solids (TDS) (mg/L)	Monitor	Monitor	Weekly	3-hr comp.	500	---	---	510
CBOD5 (mg/L)	Monitor	Monitor	Quarterly	3-hr comp.	---	---	---	---
TKN (mg/L)	Monitor	Monitor	Quarterly	3-hr comp.	---	---	---	---
TOD (mg/L)	Monitor	15	Quarterly	Calculated	---	---	---	---
Dissolved Oxygen (mg/L)	Monitor	7 Min.	Quarterly	Grab	---	---	---	---
Aluminum, dissolved (mg/L)	Monitor	0.2	Quarterly	3-hr comp.	---	---	---	---
Antimony, total (mg/L)	Monitor	0.1	Quarterly	3-hr comp.	---	---	---	---
Chromium, total (mg/L)	Monitor	0.5	Quarterly	3-hr comp.	---	---	---	---
Cobalt, total (mg/L)	Monitor	0.01	Quarterly	3-hr comp.	---	---	---	---
Copper, total (mg/L)	Monitor	0.1	Quarterly	3-hr comp.	---	---	---	---
Iron, total (mg/L)	Monitor	0.3	Quarterly	3-hr comp.	---	---	---	---
Lead, total (mg/L)	Monitor	0.02	Quarterly	3-hr comp.	---	---	---	---
Mercury, total (mg/L)	Monitor	0.0008	2/Month	3-hr comp.	0.0002 U	---	---	---
Nickel, total (mg/L)	Monitor	0.2	Quarterly	3-hr comp.	---	---	---	---
Silver, total (mg/L)	Monitor	0.1	Quarterly	3-hr comp.	---	---	---	---
Vanadium, total (mg/L)	Monitor	0.03	Quarterly	3-hr comp.	---	---	---	---
Zinc, total (mg/L)	Monitor	0.3	2/Month	3-hr comp.	0.03	---	---	---
cis-1,2-Dichloroethene (ug/L)	Monitor	10	2/Month	Grab	0.50 U	---	---	---
trans-1,2-Dichloroethene (ug/L)	Monitor	10	2/Month	Grab	0.50 U	---	---	---
Methylene chloride (ug/L)	Monitor	50	2/Month	Grab	2.0 U	---	---	---
1,1,2,2-Tetrachloroethane (ug/L)	Monitor	30	2/Month	Grab	0.50 U	---	---	---
Tetrachloroethene (ug/L)	Monitor	20	2/Month	Grab	0.50 U	---	---	---
Toluene (ug/L)	Monitor	20	2/Month	Grab	0.50 U	---	---	---
Trichloroethene (ug/L)	Monitor	10	2/Month	Grab	0.50 U	---	---	---
Acetone (ug/L)	Monitor	1000	2/Month	Grab	10 U	---	---	---
2-Hexanone (ug/L)	Monitor	1000	2/Month	Grab	5.0 U	---	---	---
4-Methyl-2-pentanone (MIBK) (ug/L)	Monitor	1000	2/Month	Grab	5.0 U	---	---	---

NOTES: (1) Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.

--- - Not analyzed, NA - Data not available

U - Not Detected, J - Estimated

TOD = 1.5 X CBOD5 + 4.5 X TKN

**Table 1**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Monitoring Requirements and Effluent Data**

Analyte	Effluent 05/13/99	Effluent 05/18/99	Effluent 05/19/99	Effluent 05/20/99	Effluent 05/25/99	Effluent 05/26/99	Effluent 05/27/99	Effluent 06/01/99
Flow (GPD)	27920	27370	---	27310	27030	---	27280	27185
pH (SU)	7.82	7.82	---	7.82	7.82	---	7.83	7.85
Residue, non-filterable (mg/L)	---	---	5 U	---	---	5 U	---	---
Total dissolved solids (TDS) (mg/L)	---	---	500	---	---	480	---	---
CBOD5 (mg/L)	---	---	---	---	---	---	---	---
TKN (mg/L)	---	---	---	---	---	---	---	---
TOD (mg/L)	---	---	---	---	---	---	---	---
Dissolved Oxygen (mg/L)	---	---	---	---	---	---	---	---
Aluminum, dissolved (mg/L)	---	---	---	---	---	---	---	---
Antimony, total (mg/L)	---	---	---	---	---	---	---	---
Chromium, total (mg/L)	---	---	---	---	---	---	---	---
Cobalt, total (mg/L)	---	---	---	---	---	---	---	---
Copper, total (mg/L)	---	---	---	---	---	---	---	---
Iron, total (mg/L)	---	---	---	---	---	---	---	---
Lead, total (mg/L)	---	---	---	---	---	---	---	---
Mercury, total (mg/L)	---	---	0.0002 U	---	---	---	---	---
Nickel, total (mg/L)	---	---	---	---	---	---	---	---
Silver, total (mg/L)	---	---	---	---	---	---	---	---
Vanadium, total (mg/L)	---	---	---	---	---	---	---	---
Zinc, total (mg/L)	---	---	0.04	---	---	---	---	---
cis-1,2-Dichloroethene (ug/L)	---	---	0.50 U	---	---	---	---	---
trans-1,2-Dichloroethene (ug/L)	---	---	0.50 U	---	---	---	---	---
Methylene chloride (ug/L)	---	---	2.0 U	---	---	---	---	---
1,1,2,2-Tetrachloroethane (ug/L)	---	---	0.50 U	---	---	---	---	---
Tetrachloroethene (ug/L)	---	---	0.50 U	---	---	---	---	---
Toluene (ug/L)	---	---	0.50 U	---	---	---	---	---
Trichloroethene (ug/L)	---	---	0.50 U	---	---	---	---	---
Acetone (ug/L)	---	---	10 U	---	---	---	---	---
2-Hexanone (ug/L)	---	---	5.0 U	---	---	---	---	---
4-Methyl-2-pentanone (MIBK) (ug/L)	---	---	5.0 U	---	---	---	---	---

NOTES: (1) Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.

--- - Not analyzed, NA - Data not available

U - Not Detected, J - Estimated

TOD = 1.5 X CBOD5 + 4.5 X TKN



**Table 2**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Ground Water Elevation Summary Table**

WELL #	Ground Elevation (ft)	Well Casing Elevation (ft)	Screened Interval Elevation (ft)	Ground Water Elevation (ft) 05/28/92	Ground Water Elevation (ft) 06/26/92	Ground Water Elevation (ft) 08/07/92	Ground Water Elevation (ft) 09/26/94	Ground Water Elevation (ft) 09/27/94	Ground Water Elevation (ft) 10/18/94
MW-01	99.36	101.11	75.4 - 85.4	DRY	DRY	79.69	---	---	DRY
MW-02	91.80	94.68	76.6 - 86.6	83.21	82.81	84.32	83.10	83.28	80.12
MW-03	97.65	99.63	73.7 - 83.7	80.44	80.09	81.63	AB	AB	AB
MW-04	65.62	68.52	46.6 - 56.6	51.08	49.95	50.81	47.22	52.21	46.79
MW-05	88.21	90.42	49.2 - 59.2	60.71	63.76	61.22	59.87	59.91	59.45
MW-06	77.46	79.38	46.4 - 56.4	60.50	60.49	60.46	59.51	59.52	59.05
MW-07 (B)	75.66	78.34	34.3 - 44.3	54.59	54.55	54.47	53.90	53.97	53.55
MW-08	88.21	91.78	53.9 - 63.9	66.38	66.38	66.83	61.59	61.65	60.99
MW-09	102.44	104.03	49.7 - 59.7	60.46	60.51	61.83	59.57	59.59	59.08
MW-10 (B)	97.51	97.27	43.0 - 53.0	61.15	61.99	61.69	---	---	56.02
MW-11 (B)	91.48	93.80	43.1 - 53.1	62.34	63.70	63.66	58.41	58.39	57.47
MW-12	93.62	94.14	51.9 - 61.9	62.24	60.74	62.77	59.77	59.79	59.31
MW-13	98.80	98.70	77.7 - 87.7	DRY	80.62	80.92	---	---	78.70
MW-14	98.76	100.62	74.6 - 84.6	75.11	79.07	81.54	---	---	86.18
MW-15 (B)	96.10	98.90	32.7 - 42.7	NI	NI	NI	---	---	53.47
MW-16 (B)	98.50	100.85	50.8 - 60.8	NI	NI	NI	---	---	61.67
MW-17	66.90	69.24	53.7 - 63.7	NI	NI	NI	54.61	54.61	54.08
MW-18	76.50	78.29	61.5 - 71.5	NI	NI	NI	NI	NI	NI
MW-19	69.50	71.27	46.5 - 56.5	NI	NI	NI	NI	NI	NI
MW-20	70.98	72.89	51.9 - 61.9	NI	NI	NI	NI	NI	NI
MW-21	69.90	71.87	59.5 - 64.5	NI	NI	NI	NI	NI	NI
MW-22	71.50	73.34	60.9 - 65.9	NI	NI	NI	NI	NI	NI
MW-23 (B)	89.80	91.72	17.3 - 22.3	NI	NI	NI	NI	NI	NI
MW-24				---	---	---	---	---	---
PZ-01	81.80	83.95	49.8 - 59.8	NI	NI	NI	59.56	59.57	59.10
PZ-02	80.60	83.06	42.8 - 52.8	NI	NI	NI	59.35	59.36	58.89
RW-01	78.40	80.28	29.4-39.4 - 45.4-50.4	NI	NI	NI	56.88	56.89	58.22
RW-02 (B)	91.58	95.18	NA - NA	NI	NI	NI	NI	NI	NI
SUMP	NA	97.93	NA - NA	NI	NI	NI	NI	NI	NI

NOTES: NI-Well not installed at time of monitoring, NA-Data not available, AB-Well was abandoned, --- Water level not monitored, (B)-Bedrock ground water monitoring well. Elevations based on assumed datum. MW-01 through MW-16 installed during Remedial Investigation (Stearns & Wheler). MW-03 was removed as part of the TCE Soils Interim Remedial Measure (IRM) completed in September 1994. System start-up 02/06/96; System shutdown 02/15/96; System restored 02/20/96. MW-13 casing elev. changed 06/06/96. MW-04 and MW-20 were abandoned and replaced by MW-21 and MW-22 on 01/20/97.



**Table 2**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Ground Water Elevation Summary Table**

WELL #	Ground Water Elevation (ft) 11/02/94	Ground Water Elevation (ft) 11/17/94	Ground Water Elevation (ft) 11/30/94	Ground Water Elevation (ft) 12/15/94	Ground Water Elevation (ft) 12/27/94	Ground Water Elevation (ft) 01/13/95	Ground Water Elevation (ft) 01/25/95	Ground Water Elevation (ft) 02/09/95	Ground Water Elevation (ft) 02/23/95
MW-01	---	---	---	---	---	---	---	---	---
MW-02	---	---	---	---	---	---	---	---	---
MW-03	AB								
MW-04	---	---	---	---	---	---	---	---	---
MW-05	---	---	---	---	---	---	---	---	---
MW-06	---	---	---	---	---	---	---	---	---
MW-07 (B)	---	---	---	---	---	---	---	---	---
MW-08	---	---	---	---	---	---	---	---	---
MW-09	---	---	---	---	---	---	---	---	---
MW-10 (B)	55.07	55.19	54.94	55.19	55.02	54.94	54.95	54.52	54.36
MW-11 (B)	50.01	56.68	55.59	56.63	56.55	55.63	55.63	56.13	55.63
MW-12	---	---	---	---	---	---	---	---	---
MW-13	82.92	78.21	78.21	80.92	78.34	78.25	77.83	77.84	77.75
MW-14	80.12	80.54	80.54	80.20	80.54	80.62	80.45	78.95	79.54
MW-15 (B)	---	---	---	---	---	---	---	---	---
MW-16 (B)	---	---	---	---	---	---	---	---	---
MW-17	---	---	---	---	---	---	---	---	---
MW-18	NI								
MW-19	NI								
MW-20	NI								
MW-21	NI								
MW-22	NI								
MW-23 (B)	NI								
MW-24	---	---	---	---	---	---	---	---	---
PZ-01	---	---	---	---	---	---	---	---	---
PZ-02	---	---	---	---	---	---	---	---	---
RW-01	---	---	---	---	---	---	---	---	---
RW-02 (B)	NI								
SUMP	76.04	74.83	75.00	75.17	74.83	75.00	75.00	74.88	75.00

NOTES: NI-Well not installed at time of monitoring, NA-Data not available, AB-Well was abandoned, --- Water level not monitored, (B)-Bedrock ground water monitoring well. Elevations based on assumed datum. MW-01 through MW-16 installed during Remedial Investigation (Stearns & Wheeler). MW-03 was removed as part of the TCE Soils Interim Remedial Measure (IRM) completed in September 1994. System start-up 02/06/96; System shutdown 02/15/96; System restored 02/20/96. MW-13 casing elev. changed 06/06/96. MW-04 and MW-20 were abandoned and replaced by MW-21 and MW-22 on 01/20/97.

**Table 2**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Ground Water Elevation Summary Table**

WELL #	Ground Water Elevation (ft) 03/09/95	Ground Water Elevation (ft) 04/26/95	Ground Water Elevation (ft) 07/25/95	Ground Water Elevation (ft) 10/17/95	Ground Water Elevation (ft) 02/05/96	Ground Water Elevation (ft) 02/07/96	Ground Water Elevation (ft) 02/15/96	Ground Water Elevation (ft) 02/16/96	Ground Water Elevation (ft) 02/20/96
MW-01	---	DRY	DRY	DRY	77.06	76.64	75.30	DRY	DRY
MW-02	---	83.28	82.42	84.22	84.04	83.87	83.41	83.34	83.15
MW-03	AB								
MW-04	---	51.44	45.94	50.05	53.60	52.06	55.39	54.43	52.46
MW-05	---	60.34	58.78	---	61.26	61.01	60.80	60.73	60.50
MW-06	---	60.02	58.52	58.10	60.86	60.44	60.41	60.11	59.80
MW-07 (B)	---	54.51	53.27	52.71	55.16	54.67	55.03	54.52	54.45
MW-08	---	63.41	59.82	60.76	66.61	66.40	65.93	65.84	65.47
MW-09	---	60.10	58.56	58.16	60.95	60.70	60.48	60.35	60.07
MW-10 (B)	55.02	57.49	54.60	54.61	62.00	59.88	62.11	60.42	59.96
MW-11 (B)	56.55	58.86	55.72	55.31	62.63	60.37	62.67	60.88	60.35
MW-12	---	60.30	58.76	58.35	61.11	60.83	60.65	60.50	60.21
MW-13	77.67	DRY	DRY	DRY	80.00	79.98	79.91	79.90	79.88
MW-14	80.12	80.61	80.61	80.72	79.91	80.02	80.28	80.29	80.35
MW-15 (B)	---	54.71	51.60	50.47	59.24	59.37	59.79	59.63	59.56
MW-16 (B)	---	63.86	59.41	58.06	67.14	67.17	66.90	66.79	66.57
MW-17	---	59.02	57.71	DRY	60.29	60.17	59.75	59.70	59.52
MW-18	NI								
MW-19	NI								
MW-20	NI								
MW-21	NI								
MW-22	NI								
MW-23 (B)	NI								
MW-24	---	---	---	---	---	---	---	---	---
PZ-01	---	60.08	58.58	58.16	60.92	60.61	60.46	60.28	59.99
PZ-02	---	59.88	58.37	57.97	60.70	60.30	60.26	59.97	59.66
RW-01	---	59.14	57.60	57.11	59.64	55.04	59.22	54.71	54.40
RW-02 (B)	NI	NI	NI	56.05	63.80	59.98	63.83	60.67	60.09
SUMP	78.00	75.09	75.25	76.94	74.67	74.68	74.64	74.63	74.63

NOTES: NI-Well not installed at time of monitoring, NA-Data not available, AB-Well was abandoned, --- Water level not monitored, (B)-Bedrock ground water monitoring well. Elevations based on assumed datum. MW-01 through MW-16 installed during Remedial Investigation (Stearns & Wheeler). MW-03 was removed as part of the TCE Soils Interim Remedial Measure (IRM) completed in September 1994. System start-up 02/06/96; System shutdown 02/15/96; System restored 02/20/96. MW-13 casing elev. changed 06/06/96. MW-04 and MW-20 were abandoned and replaced by MW-21 and MW-22 on 01/20/97.

**Table 2**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Ground Water Elevation Summary Table**

WELL #	Ground Water Elevation (ft) 02/22/96	Ground Water Elevation (ft) 02/29/96	Ground Water Elevation (ft) 03/07/96	Ground Water Elevation (ft) 03/21/96	Ground Water Elevation (ft) 04/04/96	Ground Water Elevation (ft) 04/10/96	Ground Water Elevation (ft) 04/18/96	Ground Water Elevation (ft) 05/02/96	Ground Water Elevation (ft) 06/06/96
MW-01	DRY	75.36	75.17	77.34	DRY	DRY	DRY	77.73	DRY
MW-02	83.32	83.67	83.50	84.24	83.68	83.68	84.86	85.35	83.17
MW-03	AB								
MW-04	60.37	58.14	55.10	59.26	52.66	54.43	60.28	59.70	51.63
MW-05	60.40	60.14	59.73	58.85	58.32	58.14	58.20	58.71	60.54
MW-06	59.75	59.45	58.96	58.02	57.48	57.28	57.41	58.17	59.91
MW-07 (B)	54.58	54.46	54.32	54.29	54.17	54.15	54.32	54.75	55.02
MW-08	65.42	65.12	64.68	64.76	64.10	63.83	64.08	65.43	67.07
MW-09	60.02	59.71	59.22	58.30	57.78	57.59	57.73	58.46	60.18
MW-10 (B)	59.91	59.64	59.43	59.07	58.81	58.72	58.61	59.72	62.25
MW-11 (B)	60.29	59.99	59.78	59.38	59.10	59.01	58.94	60.35	62.68
MW-12	60.16	59.86	59.37	58.44	57.93	57.74	57.86	58.59	60.33
MW-13	79.87	79.86	79.77	79.68	79.60	79.57	79.52	79.44	79.28
MW-14	80.38	80.44	80.45	80.49	80.52	80.55	81.14	79.29	80.56
MW-15 (B)	59.56	59.46	59.40	59.14	59.07	59.04	58.84	59.87	62.62
MW-16 (B)	66.52	66.39	66.17	65.99	65.99	65.90	65.84	67.02	68.40
MW-17	59.64	59.42	59.28	59.30	59.27	59.14	59.30	59.95	59.22
MW-18	NI	72.95							
MW-19	NI	DRY							
MW-20	NI	DRY							
MW-21	NI								
MW-22	NI								
MW-23 (B)	NI								
MW-24	---	---	---	---	---	---	---	---	---
PZ-01	59.93	59.63	59.14	58.21	57.67	57.47	57.60	58.34	60.09
PZ-02	59.61	59.33	58.83	57.90	57.39	57.19	57.30	58.04	59.77
RW-01	54.35	54.05	53.58	52.76	52.24	52.03	52.11	52.69	53.82
RW-02 (B)	59.97	59.63	59.41	58.95	58.63	58.52	58.41	59.63	62.56
SUMP	75.30	74.90	74.65	74.87	74.69	74.99	75.89	75.76	74.73

NOTES: NI-Well not installed at time of monitoring, NA-Data not available, AB-Well was abandoned, --- Water level not monitored, (B)-Bedrock ground water monitoring well. Elevations based on assumed datum. MW-01 through MW-16 installed during Remedial Investigation (Stearns & Wheeler). MW-03 was removed as part of the TCE Soils Interim Remedial Measure (IRM) completed in September 1994. System start-up 02/06/96; System shutdown 02/15/96; System restored 02/20/96. MW-13 casing elev. changed 06/06/96. MW-04 and MW-20 were abandoned and replaced by MW-21 and MW-22 on 01/20/97.



**Table 2**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Ground Water Elevation Summary Table**

WELL #	Ground Water Elevation (ft) 07/16/96	Ground Water Elevation (ft) 09/05/96	Ground Water Elevation (ft) 10/21/96	Ground Water Elevation (ft) 11/19/96	Ground Water Elevation (ft) 01/16/97	Ground Water Elevation (ft) 02/04/97	Ground Water Elevation (ft) 04/15/97	Ground Water Elevation (ft) 07/08/97	Ground Water Elevation (ft) 10/22/97
MW-01	DRY	DRY	DRY	76.60	75.15	---	75.64	DRY	DRY
MW-02	83.32	82.57	83.18	84.22	83.56	---	83.81	83.09	82.84
MW-03	AB								
MW-04	52.45	DRY	55.91	55.91	53.12	---	AB	AB	AB
MW-05	58.98	56.33	55.40	56.49	59.15	---	59.83	59.16	58.34
MW-06	58.13	54.95	53.71	55.61	58.39	---	59.34	58.58	57.97
MW-07 (B)	53.95	52.44	51.22	52.68	54.28	---	54.70	52.93	50.63
MW-08	64.50	59.05	59.56	63.61	64.67	---	65.15	61.65	58.90
MW-09	58.38	55.38	54.24	56.64	58.65	---	59.60	58.76	58.00
MW-10 (B)	59.11	53.88	51.06	54.95	59.61	---	58.11	53.44	50.75
MW-11 (B)	59.53	54.72	52.88	55.85	60.15	---	58.59	55.20	52.50
MW-12	58.54	55.48	54.30	56.18	58.81	---	59.72	58.92	58.21
MW-13	79.35	79.15	79.07	80.68	80.49	---	80.33	79.84	79.53
MW-14	80.66	80.59	80.61	80.08	80.59	---	80.53	80.55	80.58
MW-15 (B)	59.24	54.83	51.58	51.99	58.83	---	59.83	56.63	50.48
MW-16 (B)	65.57	63.31	60.09	61.06	66.13	---	66.89	64.43	58.45
MW-17	58.46	57.89	55.96	58.02	59.33	---	59.64	58.33	DRY
MW-18	72.32	70.81	70.77	73.04	73.31	72.78	73.60	71.34	69.71
MW-19	DRY								
MW-20	50.26	DRY	DRY	DRY	DRY	---	AB	AB	AB
MW-21	NI	NI	NI	NI	NI	63.69	63.74	63.06	62.93
MW-22	NI	NI	NI	NI	NI	63.69	67.92	67.35	65.96
MW-23 (B)	NI	NI	NI	NI	NI	NI	37.71	35.61	32.29
MW-24	---	---	---	---	---	---	---	---	---
PZ-01	58.31	55.13	53.90	55.83	58.57	---	59.51	58.70	58.01
PZ-02	57.97	54.90	53.53	55.25	58.23	---	59.13	58.34	57.65
RW-01	51.94	48.05	41.80	47.33	50.74	---	50.30	43.34	42.03
RW-02 (B)	59.14	51.01	42.02	55.39	60.03	---	55.69	44.07	42.89
SUMP	74.78	74.56	74.85	74.77	74.71	---	74.94	75.01	74.75

NOTES: NI-Well not installed at time of monitoring, NA-Data not available, AB-Well was abandoned, --- Water level not monitored, (B)-Bedrock ground water monitoring well. Elevations based on assumed datum. MW-01 through MW-16 installed during Remedial Investigation (Stearns & Wheeler). MW-03 was removed as part of the TCE Soils Interim Remedial Measure (IRM) completed in September 1994. System start-up 02/06/96; System shutdown 02/15/96; System restored 02/20/96. MW-13 casing elev. changed 06/06/96. MW-04 and MW-20 were abandoned and replaced by MW-21 and MW-22 on 01/20/97.

**Table 2**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Ground Water Elevation Summary Table**

WELL #	Ground Water Elevation (ft) 01/29/98	Ground Water Elevation (ft) 04/15/98	Ground Water Elevation (ft) 10/20/98	Ground Water Elevation (ft) 04/28/99
MW-01	DRY	DRY	DRY	DRY
MW-02	83.47	83.52	83.54	83.38
MW-03	AB	AB	AB	AB
MW-04	AB	AB	AB	AB
MW-05	60.86	61.05	60.04	59.91
MW-06	60.46	60.57	59.69	59.11
MW-07 (B)	52.90	53.82	51.76	54.57
MW-08	64.98	67.17	59.86	64.21
MW-09	60.51	60.56	59.71	59.68
MW-10 (B)	55.78	61.08	51.88	57.97
MW-11 (B)	56.75	61.73	53.98	58.36
MW-12	60.67	60.80	59.89	59.53
MW-13	78.87	78.67	78.31	78.08
MW-14	80.78	80.78	80.64	80.54
MW-15 (B)	56.34	62.10	52.58	58.94
MW-16 (B)	65.71	68.03	61.84	65.99
MW-17	59.70	59.51	57.93	58.76
MW-18	73.50	73.29	70.74	72.46
MW-19	DRY	DRY	DRY	DRY
MW-20	AB	AB	AB	AB
MW-21	63.82	63.54	63.23	63.31
MW-22	68.51	68.39	67.83	68.05
MW-23 (B)	34.95	37.95	33.57	36.76
MW-24	---	---	---	-7.38
PZ-01	60.50	60.61	59.70	59.30
PZ-02	60.22	60.34	59.46	59.03
RW-01	43.13	32.60	32.36	54.69
RW-02 (B)	52.74	59.94	44.33	56.74
SUMP	74.89	74.96	75.20	75.26

NOTES: NI-Well not installed at time of monitoring, NA-Data not available, AB-Well was abandoned, --- Water level not monitored, (B)-Bedrock ground water monitoring well. Elevations based on assumed datum. MW-01 through MW-16 installed during Remedial Investigation (Stearns & Wheler). MW-03 was removed as part of the TCE Soils Interim Remedial Measure (IRM) completed in September 1994. System start-up 02/06/96; System shutdown 02/15/96; System restored 02/20/96. MW-13 casing elev. changed 06/06/96. MW-04 and MW-20 were abandoned and replaced by MW-21 and MW-22 on 01/20/97.



**Table 3**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Ground Water Trichloroethylene Concentrations**

Date Sampled:	08/89	12/89	05/90	05/92	07/94	10/94	02/95	04/95	07/95
	TCE	TCE	TCE	TCE	TCE	TCE	TCE	TCE	TCE
WELL #	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MW-01	112	ND	2	ND	---	DRY	---	DRY	DRY
MW-02	ND	ND	1	ND	---	ND	ND	ND	ND
MW-03	Product	>55000	440000	340000	AB	AB	AB	AB	AB
MW-04	---	7	43	6	270	23	13	16	---
MW-05	---	340	344	110	330	410	290	280	---
MW-06	---	700	454	510	390	360	330	280	270
MW-07 (B)	---	ND	ND	ND	ND	ND	ND	ND	ND
MW-08	---	ND	ND	ND	---	ND	ND	ND	ND
MW-09	---	109	106	60	72	74	74	84	75
MW-10 (B)	---	---	---	4500	1600	1300	1400	1200	900
MW-11 (B)	---	---	---	5200	5500	5300	4300	3900	4000
MW-12	---	---	---	36	44	35	33	30	25
MW-13	---	---	---	110	740	510	---	DRY	DRY
MW-14	---	---	---	67	150	120	79	95	140
MW-15 (B)	---	---	---	NI	---	14	11	10	17
MW-16 (B)	---	---	---	NI	---	6	17	7	18
MW-17	---	---	---	NI	260	140	200	130	160
MW-18	---	---	---	NI	NI	NI	NI	NI	NI
MW-19	---	---	---	NI	NI	NI	NI	NI	NI
MW-20	---	---	---	NI	NI	NI	NI	NI	NI
MW-21	---	---	---	NI	NI	NI	NI	NI	NI
MW-22	---	---	---	NI	NI	NI	NI	NI	NI
MW-23 (B)	---	---	---	---	---	---	---	---	---
MW-24	NI	NI	NI	NI	NI	NI	NI	NI	NI
PZ-01	---	---	---	---	---	---	---	---	120
PZ-02	---	---	---	---	---	---	---	490	400
RW-01	---	---	---	NI	---	---	---	---	---
RW-02 (B)	---	---	---	NI	NI	NI	NI	NI	NI
SUMP	---	---	---	NI	NI	NI	---	---	---

NOTES: ND - Not detected above method detection limit, --- - Not analyzed, NI - Not installed at time of monitoring, AB - Well was abandoned.  
 MW-01 through MW-16 installed during Remedial Investigation (Stearns & Wheeler).  
 MW-03 removed as part of TCE Soils Interim Remedial Measure (IRM) completed in September 1994. Data was collected by Stearns & Wheeler prior to 07/22/94.  
 MW-04 and MW-20 were abandoned and replaced by MW-21 and MW-22 on 01/20/97.



**Table 3**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Ground Water Trichloroethylene Concentrations**

Date Sampled:	10/95	01/96	04/96	05/96	07/96	10/96	01/97	04/97	07/97
TCE	TCE	TCE	TCE	TCE	TCE	TCE	TCE	TCE	TCE
ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
WELL #									
MW-01	DRY	---	DRY	---	DRY	DRY	---	---	DRY
MW-02	ND	---	---	---	---	ND	---	---	---
MW-03	AB								
MW-04	15	---	---	---	---	62	---	AB	AB
MW-05	---	---	---	---	---	180	---	---	---
MW-06	180	170	110	---	98	71	75	52	---
MW-07 (B)	ND	---	---	---	---	ND	---	---	---
MW-08	ND	---	---	---	---	ND	---	---	---
MW-09	68	100	64	---	65	50	95	83	66
MW-10 (B)	890	900	820	---	960	1700	1900	1200	---
MW-11 (B)	2600	2500	1500	---	1400	1600	1500	800	---
MW-12	29	---	---	---	---	17	---	---	---
MW-13	DRY	---	---	---	---	370	---	---	---
MW-14	78	84	250	---	230	170	390	400	260
MW-15 (B)	7	---	---	---	---	20	---	---	---
MW-16 (B)	20	---	---	---	---	11	---	---	---
MW-17	---	180	350	---	460	300	450	220	150
MW-18	NI	NI	NI	1200	---	2900	850	410	1800
MW-19	NI	NI	NI	---	DRY	DRY	DRY	DRY	DRY
MW-20	NI	NI	NI	70	---	DRY	DRY	AB	AB
MW-21	NI	520	310						
MW-22	NI	1	3						
MW-23 (B)	---	---	---	---	---	---	---	ND	ND
MW-24	NI								
PZ-01	---	---	---	---	---	32	---	---	---
PZ-02	---	---	---	---	---	540	---	---	---
RW-01	---	---	---	---	---	---	---	---	---
RW-02 (B)	---	---	---	---	---	---	---	---	---
SUMP	---	170	180	---	1000	---	320	180	---

NOTES: ND - Not detected above method detection limit, --- - Not analyzed, NI - Not installed at time of monitoring, AB - Well was abandoned.  
 MW-01 through MW-16 installed during Remedial Investigation (Stearns & Wheler).  
 MW-03 removed as part of TCE Soils Interim Remedial Measure (IRM) completed in September 1994. Data was collected by Stearns & Wheler prior to 07/22/94.  
 MW-04 and MW-20 were abandoned and replaced by MW-21 and MW-22 on 01/20/97.



**Table 3**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Ground Water Trichloroethylene Concentrations**

Date Sampled:	10/97	01/98	04/98	10/98	11/98	04/99
	TCE	TCE	TCE	TCE	TCE	TCE
WELL #	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MW-01	DRY	DRY	DRY	DRY	DRY	DRY
MW-02	ND	---	---	ND	---	---
MW-03	AB	AB	AB	AB	AB	AB
MW-04	AB	AB	AB	AB	AB	AB
MW-05	220	---	---	200	---	---
MW-06	ND	---	140	92	---	63
MW-07 (B)	ND	---	---	ND	---	---
MW-08	---	---	---	ND	---	---
MW-09	61	140	120	80	---	120
MW-10 (B)	1300	---	930	880	---	720
MW-11 (B)	1600	---	920	1100	---	740
MW-12	19	---	---	22	---	---
MW-13	760	---	---	480	---	---
MW-14	560	560	460	400	---	460
MW-15 (B)	18	---	---	21	---	---
MW-16 (B)	14	---	---	4	---	---
MW-17	---	270	800	250	---	280
MW-18	3100	1000	1100	3600	---	620
MW-19	DRY	DRY	DRY	DRY	DRY	DRY
MW-20	AB	AB	AB	AB	AB	AB
MW-21	450	120	1300	180	---	510
MW-22	8	5	10	14	---	10
MW-23 (B)	ND	ND	---	ND	---	---
MW-24	NI	NI	NI	NI	6000	4300
PZ-01	48	---	---	85	---	---
PZ-02	420	---	---	250	---	---
RW-01	---	---	---	---	---	---
RW-02 (B)	---	---	---	---	---	---
SUMP	2600	---	560	850	---	400

NOTES: ND - Not detected above method detection limit, --- - Not analyzed, NI - Not installed at time of monitoring, AB - Well was abandoned.  
 MW-01 through MW-16 installed during Remedial Investigation (Stearns & Wheler).  
 MW-03 removed as part of TCE Soils Interim Remedial Measure (IRM) completed in September 1994. Data was collected by Stearns & Wheler prior to 07/22/94.  
 MW-04 and MW-20 were abandoned and replaced by MW-21 and MW-22 on 01/20/97.

**Table 4**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Other Detected Volatile Organic Compounds**

Analyte	MW-04	MW-10 (B)	MW-11 (B)	MW-17	MW-17	MW-17	MW-17	MW-17
	10/22/96	04/29/99	04/29/99	04/10/96	10/22/96	01/16/97	04/15/97	07/08/97
	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
cis-1,2-Dichloroethene	12	---	---	---	7	---	---	---
Chloroform	---	29	60	---	---	---	---	---
Tetrachloroethene	---	---	---	20	12	22	15	18
Vinyl chloride	---	---	---	---	---	---	---	---

NOTES: --- Not detected.  
 MW-04 and MW-20 were abandoned and replaced by MW-21 and MW-22 on 01/20/97.

**Table 4**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Other Detected Volatile Organic Compounds**

Analyte	MW-17 01/29/98 ug/L	MW-17 10/20/98 ug/L	MW-17 04/29/99 ug/L	MW-18 10/22/96 ug/L	MW-18 07/08/97 ug/L	MW-18 10/21/98 ug/L	MW-18 04/29/99 ug/L	MW-20 05/24/96 ug/L
cis-1,2-Dichloroethene	---	---	---	81	66	160	37	46
Chloroform	---	---	---	---	---	---	---	---
Tetrachloroethene	12	17	23	---	---	---	---	---
Vinyl chloride	---	---	---	---	---	---	---	---

NOTES: --- Not detected.  
 MW-04 and MW-20 were abandoned and replaced by MW-21 and MW-22 on 01/20/97.

**Table 4**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Other Detected Volatile Organic Compounds**

Analyte	MW-21 01/21/97 ug/L	MW-21 04/16/97 ug/L	MW-21 07/08/97 ug/L	MW-21 10/23/97 ug/L	MW-21 01/29/98 ug/L	MW-21 04/16/98 ug/L	MW-21 10/21/98 ug/L	MW-21 04/29/99 ug/L
cis-1,2-Dichloroethene	650	630	770	800	350	1400	340	2100
Chloroform	---	---	---	---	---	---	---	---
Tetrachloroethene	---	---	---	---	---	---	---	---
Vinyl chloride	---	---	---	---	---	---	---	---

NOTES: --- Not detected.  
 MW-04 and MW-20 were abandoned and replaced by MW-21 and MW-22 on 01/20/97.



**Table 4**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Other Detected Volatile Organic Compounds**

Analyte	MW-22 01/21/97 ug/L	MW-22 04/16/97 ug/L	MW-22 07/08/97 ug/L	MW-22 10/23/97 ug/L	MW-22 01/29/98 ug/L	MW-22 04/16/98 ug/L	MW-22 10/21/98 ug/L	MW-22 04/29/99 ug/L
cis-1,2-Dichloroethene	5	4	9	22	11	22	35	24
Chloroform	---	---	---	---	---	---	---	---
Tetrachloroethene	---	---	---	---	---	---	---	---
Vinyl chloride	---	---	---	3	---	---	---	---

NOTES: --- Not detected.  
MW-04 and MW-20 were abandoned and replaced by MW-21 and MW-22 on 01/20/97.



**ATTACHMENT A**

**SPDES PERMIT COMPLIANCE MONITORING  
LABORATORY ANALYTICAL DATA SHEETS**

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

**Analytical Results  
Method: 8260**

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: M1567  
Samp. Description: WTP Effluent - Grab  
Instrument: HP5970 GC/MS#2  
Units: ug/L  
Number of analytes: 14

Collected: 05/05/99      Matrix: Water  
Received: 05/05/99      QC Batch: 051199W2  
Prepared: 05/11/99      %Solids:  
Purge volume: 25 mL

<u>Parameter</u>	<u>Result</u>	<u>Surrog</u>		<u>Analyzed</u>	<u>Notes</u>
		<u>Limits</u>	<u>Dilution</u>		
Acetone	<10.		1	05/11/99	
Methylene chloride	<2.0		1	05/11/99	
trans-1,2-Dichloroethene	<.50		1	05/11/99	
cis-1,2-Dichloroethene	<.50		1	05/11/99	
Trichloroethene	<.50		1	05/11/99	
4-Methyl-2-pentanone	<5.0		1	05/11/99	
Toluene	<.50		1	05/11/99	
2-Hexanone	<5.0		1	05/11/99	
Tetrachloroethene	<.50		1	05/11/99	
1,1,2,2-Tetrachloroethane	<.50		1	05/11/99	
Dibromofluoromethane (surrogate)	108.%	61-136	1	05/11/99	
1,2-Dichloroethane-d4 (surrogate)	109.%	80-135	1	05/11/99	
Toluene-d8 (surrogate)	109.%	84-114	1	05/11/99	
Bromofluorobenzene (surrogate)	108.%	77-117	1	05/11/99	

Notes:

# - Outside control limits J-Estimated value

Authorized: Monika Santucci  
Date: May 12, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: M1565  
Samp. Description: WTP Influent  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 50 Instrument: 9001

Collected: 05/05/99  
Received: 05/05/99  
Prepared:  
Analyzed: 05/18/99

Matrix: Water  
QC Batch: 051899W1  
%Solids:  
Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL Notes
Benzene	<50.	U	1		50.
Bromodichloromethane	<50.	U	1		50.
Bromoform	<500.	U	1		500.
Bromomethane	<500.	U	1		500.
Carbon tetrachloride	<50.	U	1		50.
Chlorobenzene	<50.	U	1		50.
Chloroethane	<50.	U	1		50.
2-Chloroethylvinyl ether	<500.	U	1		500.
Chloroform	<50.	U	1		50.
Chloromethane	<500.	U	1		500.
Dibromochloromethane	<50.	U	1		50.
1,2-Dichlorobenzene	<250.	U	1		250.
1,3-Dichlorobenzene	<250.	U	1		250.
1,4-Dichlorobenzene	<250.	U	1		250.
Dichlorodifluoromethane	<500.	U	1		500.
1,1-Dichloroethane	<50.	U	1		50.
1,2-Dichloroethane	<50.	U	1		50.
1,1-Dichloroethylene	<50.	U	1		50.
cis-1,2-Dichloroethylene	<50.	U	1		50.
trans-1,2-Dichloroethylene	<50.	U	1		50.
Dichloromethane	<50.	U	1		50.
1,2-Dichloropropane	<50.	U	1		50.
cis-1,3-Dichloropropylene	<50.	U	1		50.
trans-1,3-Dichloropropylene	<50.	U	1		50.
Ethylbenzene	<50.	U	1		50.
1,1,2,2-Tetrachloroethane	<50.	U	1		50.
Tetrachloroethylene	<50.	U	1		50.
Toluene	<50.	U	1		50.
1,1,1-Trichloroethane	<50.	U	1		50.

# - Outside control limits. U - Undetected at the reported level.  
J - reported value is estimated.  
E - concentration exceeded the calibration range and is estimated.

Authorized:   
Date: May 19, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
 Project: Accurate Die Casting - Fayetteville, NY  
 Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
 Certification NY No.: 10155

Sample: M1565  
 Samp. Description: WTP Influent  
 Primary column: Y  
 Units: ug/L  
 Column: DB-VRX 75m x .45mm ID  
 Dilution: 50 Instrument: 9001

Collected: 05/05/99 Matrix: Water  
 Received: 05/05/99 QC Batch: 051899W1  
 Prepared: %Solids:  
 Analyzed: 05/18/99 Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL	Notes
1,1,2-Trichloroethane	<50.	U	1		50.	
Trichloroethylene	590.		1		50.	
Trichlorofluoromethane	<50.	U	1		50.	
Vinyl Chloride	<50.	U	1		50.	
Xylenes (total)	<150.	U	1		150.	

Surrogate	Result	Qual	Col	Limits	Notes
2-Chloropropane (surrogate)	93.%		1	69-118	
Fluorobenzene (surrogate)	101.%		1	85-119	

Notes:

# - Outside control limits. U - Undetected at the reported level.  
 J - reported value is estimated.  
 E - concentration exceeded the calibration range and is estimated.

Authorized:   
 Date: May 19, 1999 Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: M1566  
Samp. Description: WTP Between GACs  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 1 Instrument: 9001

Collected: 05/05/99  
Received: 05/05/99  
Prepared:  
Analyzed: 05/18/99

Matrix: Water  
QC Batch: 051899W1  
%Solids:  
Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL	Notes
Benzene	<1.	U	1		1.	
Bromodichloromethane	<1.	U	1		1.	
Bromoform	<10.	U	1		10.	
Bromomethane	<10.	U	1		10.	
Carbon tetrachloride	<1.	U	1		1.	
Chlorobenzene	<1.	U	1		1.	
Chloroethane	<1.	U	1		1.	
2-Chloroethylvinyl ether	<10.	U	1		10.	
Chloroform	<1.	U	1		1.	
Chloromethane	<10.	U	1		10.	
Dibromochloromethane	<1.	U	1		1.	
1,2-Dichlorobenzene	<5.	U	1		5.	
1,3-Dichlorobenzene	<5.	U	1		5.	
1,4-Dichlorobenzene	<5.	U	1		5.	
Dichlorodifluoromethane	<10.	U	1		10.	
1,1-Dichloroethane	<1.	U	1		1.	
1,2-Dichloroethane	<1.	U	1		1.	
1,1-Dichloroethylene	<1.	U	1		1.	
cis-1,2-Dichloroethylene	<1.	U	1		1.	
trans-1,2-Dichloroethylene	<1.	U	1		1.	
Dichloromethane	<1.	U	1		1.	
1,2-Dichloropropane	<1.	U	1		1.	
cis-1,3-Dichloropropylene	<1.	U	1		1.	
trans-1,3-Dichloropropylene	<1.	U	1		1.	
Ethylbenzene	<1.	U	1		1.	
1,1,2,2-Tetrachloroethane	<1.	U	1		1.	
Tetrachloroethylene	<1.	U	1		1.	
Toluene	<1.	U	1		1.	
1,1,1-Trichloroethane	<1.	U	1		1.	

# - Outside control limits. U - Undetected at the reported level.  
J - reported value is estimated.  
E - concentration exceeded the calibration range and is estimated.

Authorized:   
Date: May 19, 1999

Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
 Project: Accurate Die Casting - Fayetteville, NY  
 Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
 Certification NY No.: 10155

Sample: M1566  
 Samp. Description: WTP Between GACs  
 Primary column: Y  
 Units: ug/L  
 Column: DB-VRX 75m x .45mm ID  
 Dilution: 1 Instrument: 9001

Collected: 05/05/99 Matrix: Water  
 Received: 05/05/99 QC Batch: 051899W1  
 Prepared: %Solids:  
 Analyzed: 05/18/99 Sample Size: 5 ml

Number of analytes: 34

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>Col</u>	<u>MDL</u>	<u>RL</u>	<u>Notes</u>
1,1,2-Trichloroethane	<1.	U	1		1.	
Trichloroethylene	<1.	U	1		1.	
Trichlorofluoromethane	<1.	U	1		1.	
Vinyl Chloride	<1.	U	1		1.	
Xylenes (total)	<3.	U	1		3.	

<u>Surrogate</u>	<u>Result</u>	<u>Qual</u>	<u>Col</u>	<u>Limits</u>	<u>Notes</u>
2-Chloropropane (surrogate)	91.%		1	69-118	
Fluorobenzene (surrogate)	101.%		1	85-119	

Notes:

# - Outside control limits. U - Undetected at the reported level.  
 J - reported value is estimated.  
 E - concentration exceeded the calibration range and is estimated.

Authorized: Monika Santucci  
 Date: May 19, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Trace Metals

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: M1568  
Samp. Description: WTP Effluent - Composite  
Units: mg/L

Collected: 05/05/99      Matrix: Water  
Received: 05/05/99      %Solids:  
Number of analytes: 2

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>MDL</u>	<u>RL</u>	<u>Method</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>QC Batch</u>	<u>Dilut.</u>	<u>Note</u>
Mercury	<.0002	U	.0001	.0002	245.1	05/07/99	05/07/99	050799W1		1
Zinc	.03		.002	.01	200.7	05/13/99	05/14/99	051399W1		1

Notes:

U-Undetected at the reported level. J-reported value is estimated.

Authorized: Monika Santucci  
Date: May 15, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Wet Chemistry

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: M1568  
Samp. Description: WTP Effluent - Composite

Collected: 05/05/99  
Received: 05/05/99 15:25  
Matrix: Water

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>MDL</u>	<u>RL</u>	<u>Units</u>	<u>Method</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>QC Batch</u>	<u>Note</u>
Total dissolved solids	500.			10	mg/L	EPA 160.1		05/11/99	051199W14	
Total suspended solids	<5.	U		5.	mg/L	EPA 160.2		05/11/99	051199W11	

Notes:

J-Estimated value

Authorized: Monika Santucci  
Date: May 18, 1999

Monika Santucci



# O'Brien & Gere Laboratories, Inc.

# Analytical Results Wet Chemistry

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Weekly Effluent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

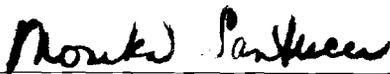
Sample: M2081  
Samp. Description: WTP Effluent

Collected: 05/12/99  
Received: 05/12/99 15:35  
Matrix: Water

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>MDL</u>	<u>RL</u>	<u>Units</u>	<u>Method</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>QC Batch</u>	<u>Note</u>
Total dissolved solids	510.			10	mg/L	EPA 160.1		05/17/99	051799W11	
Total suspended solids	<5.	U		5	mg/L	EPA 160.2		05/18/99	051899W12	

Notes:

J-Estimated value

Authorized:   
Date: May 24, 1999

Monika Santucci

# O'Brien & Gere Laboratories, Inc.

5000 Brittonfield Parkway  
 East Syracuse, New York 13057  
 (315) 437-0200

1799

# Chain of Custody

Client: O'BRIEN + GERE TECHNICAL SERVICES INC						Analysis/Method								
Project: ITT FINANCIAL (FORER ACCURATE DIE)						TSS/TDS								
Sampled by:														
Client Contact: AL FARRELL JERRY BORN			Phone # 2316 637 0109											
Sample Description														
Sample Location	Date Collected	Time Collected	Sample Matrix	Comp. or Grab	No. of Containers	Comment								
WTP EFFLUENT	5/12/99	11:00 AM	WATER	comp	1	X								
Relinquished by:			Date:		Time:		Received by:			Date:		Time:		
Relinquished by:			Date:		Time:		Received by:			Date:		Time:		
Relinquished by: <i>[Signature]</i>			Date: 5/12/99		Time: 1535		Received by Lab: Mark F. Jackson			Date: 5/12/99		Time: 15:35		
Shipment Method: HAND DELIVERED						Airbill Number:								

Turnaround Time Required:  
 Routine   X    
 Rush (Specify)           

Comments:

Cooler Temperature:   30C

**ATTACHMENT B**

**SEMI-ANNUAL GROUNDWATER QUALITY MONITORING  
LABORATORY ANALYTICAL DATA SHEETS**

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting  
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: M1121  
Samp. Description: MW-6  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 2 Instrument: 9001

Collected: 04/29/99  
Received: 04/29/99  
Prepared:  
Analyzed: 05/12/99

Matrix: Water  
QC Batch: 051299W1  
%Solids:  
Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL Notes
Benzene	<2.	U	1		2.
Bromodichloromethane	<2.	U	1		2.
Bromoform	<20.	U	1		20.
Bromomethane	<20.	U	1		20.
Carbon tetrachloride	<2.	U	1		2.
Chlorobenzene	<2.	U	1		2.
Chloroethane	<2.	U	1		2.
2-Chloroethylvinyl ether	<20.	U	1		20.
Chloroform	<2.	U	1		2.
Chloromethane	<20.	U	1		20.
Dibromochloromethane	<2.	U	1		2.
1,2-Dichlorobenzene	<10.	U	1		10.
1,3-Dichlorobenzene	<10.	U	1		10.
1,4-Dichlorobenzene	<10.	U	1		10.
Dichlorodifluoromethane	<20.	U	1		20.
1,1-Dichloroethane	<2.	U	1		2.
1,2-Dichloroethane	<2.	U	1		2.
1,1-Dichloroethylene	<2.	U	1		2.
cis-1,2-Dichloroethylene	<2.	U	1		2.
trans-1,2-Dichloroethylene	<2.	U	1		2.
Dichloromethane	<2.	U	1		2.
1,2-Dichloropropane	<2.	U	1		2.
cis-1,3-Dichloropropylene	<2.	U	1		2.
trans-1,3-Dichloropropylene	<2.	U	1		2.
Ethylbenzene	<2.	U	1		2.
1,1,2,2-Tetrachloroethane	<2.	U	1		2.
Tetrachloroethylene	<2.	U	1		2.
Toluene	<2.	U	1		2.
1,1,1-Trichloroethane	<2.	U	1		2.

# - Outside control limits. U - Undetected at the reported level.  
J - reported value is estimated.  
E - concentration exceeded the calibration range and is estimated.

Authorized: Monika Santucci  
Date: May 14, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting  
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: M1121  
Samp. Description: MW-6  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 2 Instrument: 9001

Collected: 04/29/99  
Received: 04/29/99  
Prepared:  
Analyzed: 05/12/99

Matrix: Water  
QC Batch: 051299W1  
%Solids:  
Sample Size: 5 ml

Number of analytes: 34

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>Col</u>	<u>MDL</u>	<u>RL</u>	<u>Notes</u>
1,1,2-Trichloroethane	<2.	U	1		2.	
Trichloroethylene	63.		1		2.	
Trichlorofluoromethane	<2.	U	1		2.	
Vinyl Chloride	<2.	U	1		2.	
Xylenes (total)	<6.	U	1		6.	

<u>Surrogate</u>	<u>Result</u>	<u>Qual</u>	<u>Col</u>	<u>Limits</u>	<u>Notes</u>
2-Chloropropane (surrogate)	92.%		1	69-118	
Fluorobenzene (surrogate)	100.%		1	85-119	

Notes:

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E - concentration exceeded the calibration range and is estimated.

Authorized: Monika Santucci  
Date: May 14, 1999

Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting  
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: M1117  
Samp. Description: MW-9  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 2 Instrument: 9001

Collected: 04/29/99  
Received: 04/29/99  
Prepared:  
Analyzed: 05/12/99

Matrix: Water  
QC Batch: 051299W1  
%Solids:  
Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL Notes
Benzene	<2.	U	1		2.
Bromodichloromethane	<2.	U	1		2.
Bromoform	<20.	U	1		20.
Bromomethane	<20.	U	1		20.
Carbon tetrachloride	<2.	U	1		2.
Chlorobenzene	<2.	U	1		2.
Chloroethane	<2.	U	1		2.
2-Chloroethylvinyl ether	<20.	U	1		20.
Chloroform	<2.	U	1		2.
Chloromethane	<20.	U	1		20.
Dibromochloromethane	<2.	U	1		2.
1,2-Dichlorobenzene	<10.	U	1		10.
1,3-Dichlorobenzene	<10.	U	1		10.
1,4-Dichlorobenzene	<10.	U	1		10.
Dichlorodifluoromethane	<20.	U	1		20.
1,1-Dichloroethane	<2.	U	1		2.
1,2-Dichloroethane	<2.	U	1		2.
1,1-Dichloroethylene	<2.	U	1		2.
cis-1,2-Dichloroethylene	<2.	U	1		2.
trans-1,2-Dichloroethylene	<2.	U	1		2.
Dichloromethane	<2.	U	1		2.
1,2-Dichloropropane	<2.	U	1		2.
cis-1,3-Dichloropropylene	<2.	U	1		2.
trans-1,3-Dichloropropylene	<2.	U	1		2.
Ethylbenzene	<2.	U	1		2.
1,1,2,2-Tetrachloroethane	<2.	U	1		2.
Tetrachloroethylene	<2.	U	1		2.
Toluene	<2.	U	1		2.
1,1,1-Trichloroethane	<2.	U	1		2.

# - Outside control limits. U - Undetected at the reported level.  
J - reported value is estimated.  
E - concentration exceeded the calibration range and is estimated.

Authorized: Monika Santucci  
Date: May 14, 1999  
Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting  
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: M1117  
Samp. Description: MW-9  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 2 Instrument: 9001

Collected: 04/29/99 Matrix: Water  
Received: 04/29/99 QC Batch: 051299W1  
Prepared: %Solids:  
Analyzed: 05/12/99 Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL	Notes
1,1,2-Trichloroethane	<2.	U	1		2.	
Trichloroethylene	120.		1		2.	
Trichlorofluoromethane	<2.	U	1		2.	
Vinyl Chloride	<2.	U	1		2.	
Xylenes (total)	<6.	U	1		6.	

Surrogate	Result	Qual	Col	Limits	Notes
2-Chloropropane (surrogate)	94.%		1	69-118	
Fluorobenzene (surrogate)	101.%		1	85-119	

Notes:

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E - concentration exceeded the calibration range and is estimated.

Authorized: Monika Santucci  
Date: May 14, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting  
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: M1115  
Samp. Description: MW-10  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 25 Instrument: 9001

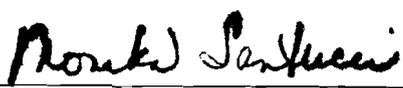
Collected: 04/29/99  
Received: 04/29/99  
Prepared:  
Analyzed: 05/10/99

Matrix: Water  
QC Batch: 051099W1  
%Solids:  
Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL Notes
Benzene	<25.	U	1		25
Bromodichloromethane	<25.	U	1		25
Bromoform	<250.	U	1		250
Bromomethane	<250.	U	1		250
Carbon tetrachloride	<25.	U	1		25
Chlorobenzene	<25.	U	1		25
Chloroethane	<25.	U	1		25
2-Chloroethylvinyl ether	<250.	U	1		250
Chloroform	29.		1		25
Chloromethane	<250.	U	1		250
Dibromochloromethane	<25.	U	1		25
1,2-Dichlorobenzene	<120.	U	1		125
1,3-Dichlorobenzene	<120.	U	1		125
1,4-Dichlorobenzene	<120.	U	1		125
Dichlorodifluoromethane	<250.	U	1		250
1,1-Dichloroethane	<25.	U	1		25
1,2-Dichloroethane	<25.	U	1		25
1,1-Dichloroethylene	<25.	U	1		25
cis-1,2-Dichloroethylene	<25.	U	1		25
trans-1,2-Dichloroethylene	<25.	U	1		25
Dichloromethane	<25.	U	1		25
1,2-Dichloropropane	<25.	U	1		25
cis-1,3-Dichloropropylene	<25.	U	1		25
trans-1,3-Dichloropropylene	<25.	U	1		25
Ethylbenzene	<25.	U	1		25
1,1,2,2-Tetrachloroethane	<25.	U	1		25
Tetrachloroethylene	<25.	U	1		25
Toluene	<25.	U	1		25
1,1,1-Trichloroethane	<25.	U	1		25

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Authorized:   
Date: May 14, 1999  
Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting  
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: M1115  
Samp. Description: MW-10  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 25 Instrument: 9001

Collected: 04/29/99  
Received: 04/29/99  
Prepared:  
Analyzed: 05/10/99

Matrix: Water  
QC Batch: 051099W1  
%Solids:  
Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL	Notes
1,1,2-Trichloroethane	<25.	U	1		25	
Trichloroethylene	720.		1		25	
Trichlorofluoromethane	<25.	U	1		25	
Vinyl Chloride	<25.	U	1		25	
Xylenes (total)	<75.	U	1		75	

Surrogate	Result	Qual	Col	Limits	Notes
2-Chloropropane (surrogate)	98.%		1	69-118	
Fluorobenzene (surrogate)	100.%		1	85-119	

Notes:

# - Outside control limits. U - Undetected at the reported level.  
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Authorized: Monika Santucci  
Date: May 14, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting  
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: M1116  
Samp. Description: MW-11  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 50 Instrument: 9001

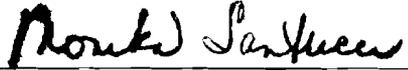
Collected: 04/29/99  
Received: 04/29/99  
Prepared:  
Analyzed: 05/10/99

Matrix: Water  
QC Batch: 051099W1  
%Solids:  
Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL	Notes
Benzene	<50.	U	1		50	
Bromodichloromethane	<50.	U	1		50	
Bromoform	<500.	U	1		500	
Bromomethane	<500.	U	1		500	
Carbon tetrachloride	<50.	U	1		50	
Chlorobenzene	<50.	U	1		50	
Chloroethane	<50.	U	1		50	
2-Chloroethylvinyl ether	<500.	U	1		500	
Chloroform	60.		1		50	
Chloromethane	<500.	U	1		500	
Dibromochloromethane	<50.	U	1		50	
1,2-Dichlorobenzene	<250.	U	1		250	
1,3-Dichlorobenzene	<250.	U	1		250	
1,4-Dichlorobenzene	<250.	U	1		250	
Dichlorodifluoromethane	<500.	U	1		500	
1,1-Dichloroethane	<50.	U	1		50	
1,2-Dichloroethane	<50.	U	1		50	
1,1-Dichloroethylene	<50.	U	1		50	
cis-1,2-Dichloroethylene	<50.	U	1		50	
trans-1,2-Dichloroethylene	<50.	U	1		50	
Dichloromethane	<50.	U	1		50	
1,2-Dichloropropane	<50.	U	1		50	
cis-1,3-Dichloropropylene	<50.	U	1		50	
trans-1,3-Dichloropropylene	<50.	U	1		50	
Ethylbenzene	<50.	U	1		50	
1,1,2,2-Tetrachloroethane	<50.	U	1		50	
Tetrachloroethylene	<50.	U	1		50	
Toluene	<50.	U	1		50	
1,1,1-Trichloroethane	<50.	U	1		50	

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J - reported value is estimated.  
E - concentration exceeded the calibration range and is estimated.

Authorized:   
Date: May 14, 1999

Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting  
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: M1116  
Samp. Description: MW-11  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 50 Instrument: 9001

Collected: 04/29/99  
Received: 04/29/99  
Prepared:  
Analyzed: 05/10/99

Matrix: Water  
QC Batch: 051099W1  
%Solids:  
Sample Size: 5 ml

Number of analytes: 34

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>Col</u>	<u>MDL</u>	<u>RL</u>	<u>Notes</u>
1,1,2-Trichloroethane	<50.	U	1		50	
Trichloroethylene	740.		1		50	
Trichlorofluoromethane	<50.	U	1		50	
Vinyl Chloride	<50.	U	1		50	
Xylenes (total)	<150.	U	1		150	

<u>Surrogate</u>	<u>Result</u>	<u>Qual</u>	<u>Col</u>	<u>Limits</u>	<u>Notes</u>
2-Chloropropane (surrogate)	98.%		1	69-118	
Fluorobenzene (surrogate)	101.%		1	85-119	

Notes:

# - Outside control limits. U - Undetected at the reported level.  
J - reported value is estimated.  
E - concentration exceeded the calibration range and is estimated.

Authorized: Monika Santucci  
Date: May 14, 1999

Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting  
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: M1119  
Samp. Description: MW-14  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 10 Instrument: 9001

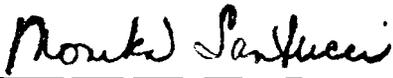
Collected: 04/29/99  
Received: 04/29/99  
Prepared:  
Analyzed: 05/12/99

Matrix: Water  
QC Batch: 051299W1  
%Solids:  
Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL	Notes
Benzene	<10.	U	1		10.	
Bromodichloromethane	<10.	U	1		10.	
Bromoform	<100.	U	1		100.	
Bromomethane	<100.	U	1		100.	
Carbon tetrachloride	<10.	U	1		10.	
Chlorobenzene	<10.	U	1		10.	
Chloroethane	<10.	U	1		10.	
2-Chloroethylvinyl ether	<100.	U	1		100.	
Chloroform	<10.	U	1		10.	
Chloromethane	<100.	U	1		100.	
Dibromochloromethane	<10.	U	1		10.	
1,2-Dichlorobenzene	<50.	U	1		50.	
1,3-Dichlorobenzene	<50.	U	1		50.	
1,4-Dichlorobenzene	<50.	U	1		50.	
Dichlorodifluoromethane	<100.	U	1		100.	
1,1-Dichloroethane	<10.	U	1		10.	
1,2-Dichloroethane	<10.	U	1		10.	
1,1-Dichloroethylene	<10.	U	1		10.	
cis-1,2-Dichloroethylene	<10.	U	1		10.	
trans-1,2-Dichloroethylene	<10.	U	1		10.	
Dichloromethane	<10.	U	1		10.	
1,2-Dichloropropane	<10.	U	1		10.	
cis-1,3-Dichloropropylene	<10.	U	1		10.	
trans-1,3-Dichloropropylene	<10.	U	1		10.	
Ethylbenzene	<10.	U	1		10.	
1,1,2,2-Tetrachloroethane	<10.	U	1		10.	
Tetrachloroethylene	<10.	U	1		10.	
Toluene	<10.	U	1		10.	
1,1,1-Trichloroethane	<10.	U	1		10.	

# - Outside control limits. U - Undetected at the reported level.  
J - reported value is estimated.  
E - concentration exceeded the calibration range and is estimated.

Authorized:   
Date: May 14, 1999  
Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting  
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: M1119  
Samp. Description: MW-14  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 10 Instrument: 9001

Collected: 04/29/99 Matrix: Water  
Received: 04/29/99 QC Batch: 051299W1  
Prepared: %Solids:  
Analyzed: 05/12/99 Sample Size: 5 ml

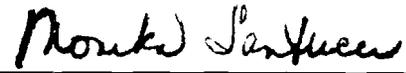
Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL	Notes
1,1,2-Trichloroethane	<10.	U	1		10.	
Trichloroethylene	460.		1		10.	
Trichlorofluoromethane	<10.	U	1		10.	
Vinyl Chloride	<10.	U	1		10.	
Xylenes (total)	<30.	U	1		30.	

Surrogate	Result	Qual	Col	Limits	Notes
2-Chloropropane (surrogate)	88.%		1	69-118	
Fluorobenzene (surrogate)	100.%		1	85-119	

Notes:

# - Outside control limits. U - Undetected at the reported level.  
J - reported value is estimated.  
E - concentration exceeded the calibration range and is estimated.

Authorized:   
Date: May 14, 1999 Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting  
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: M1120  
Samp. Description: MW-17  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 10 Instrument: 9001

Collected: 04/29/99  
Received: 04/29/99  
Prepared:  
Analyzed: 05/12/99

Matrix: Water  
QC Batch: 051299W1  
%Solids:  
Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL	Notes
Benzene	<10.	U	1		10.	
Bromodichloromethane	<10.	U	1		10.	
Bromoform	<100.	U	1		100.	
Bromomethane	<100.	U	1		100.	
Carbon tetrachloride	<10.	U	1		10.	
Chlorobenzene	<10.	U	1		10.	
Chloroethane	<10.	U	1		10.	
2-Chloroethylvinyl ether	<100.	U	1		100.	
Chloroform	<10.	U	1		10.	
Chloromethane	<100.	U	1		100.	
Dibromochloromethane	<10.	U	1		10.	
1,2-Dichlorobenzene	<50.	U	1		50.	
1,3-Dichlorobenzene	<50.	U	1		50.	
1,4-Dichlorobenzene	<50.	U	1		50.	
Dichlorodifluoromethane	<100.	U	1		100.	
1,1-Dichloroethane	<10.	U	1		10.	
1,2-Dichloroethane	<10.	U	1		10.	
1,1-Dichloroethylene	<10.	U	1		10.	
cis-1,2-Dichloroethylene	<10.	U	1		10.	
trans-1,2-Dichloroethylene	<10.	U	1		10.	
Dichloromethane	<10.	U	1		10.	
1,2-Dichloropropane	<10.	U	1		10.	
cis-1,3-Dichloropropylene	<10.	U	1		10.	
trans-1,3-Dichloropropylene	<10.	U	1		10.	
Ethylbenzene	<10.	U	1		10.	
1,1,2,2-Tetrachloroethane	<10.	U	1		10.	
Tetrachloroethylene	23.		1		10.	
Toluene	<10.	U	1		10.	
1,1,1-Trichloroethane	<10.	U	1		10.	

# - Outside control limits. U - Undetected at the reported level.  
J - reported value is estimated.  
E - concentration exceeded the calibration range and is estimated.

Authorized: Monika Santucci  
Date: May 14, 1999  
Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting  
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: M1120  
Samp. Description: MW-17  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 10 Instrument: 9001

Collected: 04/29/99  
Received: 04/29/99  
Prepared:  
Analyzed: 05/12/99

Matrix: Water  
QC Batch: 051299W1  
%Solids:  
Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL	Notes
1,1,2-Trichloroethane	<10.	U	1		10.	
Trichloroethylene	280.		1		10.	
Trichlorofluoromethane	<10.	U	1		10.	
Vinyl Chloride	<10.	U	1		10.	
Xylenes (total)	<30.	U	1		30.	

Surrogate	Result	Qual	Col	Limits	Notes
2-Chloropropane (surrogate)	86.%		1	69-118	
Fluorobenzene (surrogate)	100.%		1	85-119	

Notes:

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Authorized: Monika Santucci  
Date: May 14, 1999

Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting  
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: M1122  
Samp. Description: MW-18  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 25 Instrument: 9001

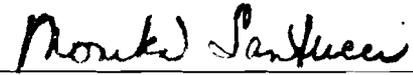
Collected: 04/29/99  
Received: 04/29/99  
Prepared:  
Analyzed: 05/13/99

Matrix: Water  
QC Batch: 051399W1  
%Solids:  
Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL	Notes
Benzene	<25.	U	1		25.	
Bromodichloromethane	<25.	U	1		25.	
Bromoform	<250.	U	1		250.	
Bromomethane	<250.	U	1		250.	
Carbon tetrachloride	<25.	U	1		25.	
Chlorobenzene	<25.	U	1		25.	
Chloroethane	<25.	U	1		25.	
2-Chloroethylvinyl ether	<250.	U	1		250.	
Chloroform	<25.	U	1		25.	
Chloromethane	<250.	U	1		250.	
Dibromochloromethane	<25.	U	1		25.	
1,2-Dichlorobenzene	<120.	U	1		125.	
1,3-Dichlorobenzene	<120.	U	1		125.	
1,4-Dichlorobenzene	<120.	U	1		125.	
Dichlorodifluoromethane	<250.	U	1		250.	
1,1-Dichloroethane	<25.	U	1		25.	
1,2-Dichloroethane	<25.	U	1		25.	
1,1-Dichloroethylene	<25.	U	1		25.	
cis-1,2-Dichloroethylene	37.		1		25.	
trans-1,2-Dichloroethylene	<25.	U	1		25.	
Dichloromethane	<25.	U	1		25.	
1,2-Dichloropropane	<25.	U	1		25.	
cis-1,3-Dichloropropylene	<25.	U	1		25.	
trans-1,3-Dichloropropylene	<25.	U	1		25.	
Ethylbenzene	<25.	U	1		25.	
1,1,2,2-Tetrachloroethane	<25.	U	1		25.	
Tetrachloroethylene	<25.	U	1		25.	
Toluene	<25.	U	1		25.	
1,1,1-Trichloroethane	<25.	U	1		25.	

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Authorized:   
Date: May 14, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting  
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: M1122  
Samp. Description: MW-18  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 25 Instrument: 9001

Collected: 04/29/99  
Received: 04/29/99  
Prepared:  
Analyzed: 05/13/99

Matrix: Water  
QC Batch: 051399W1  
%Solids:  
Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL	Notes
1,1,2-Trichloroethane	<25.	U	1		25.	
Trichloroethylene	620.		1		25.	
Trichlorofluoromethane	<25.	U	1		25.	
Vinyl Chloride	<25.	U	1		25.	
Xylenes (total)	<75.	U	1		75.	

Surrogate	Result	Qual	Col	Limits	Notes
2-Chloropropane (surrogate)	92.%		1	69-118	
Fluorobenzene (surrogate)	94.%		1	85-119	

Notes:

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J - reported value is estimated.  
E - concentration exceeded the calibration range and is estimated.

Authorized: Monika Santucci  
Date: May 14, 1999

Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting  
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: M1123  
Samp. Description: MW-21  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 100 Instrument: 9001

Collected: 04/29/99  
Received: 04/29/99  
Prepared:  
Analyzed: 05/13/99

Matrix: Water  
QC Batch: 051399W1  
%Solids:  
Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL	Notes
Benzene	<100.	U	1		100.	
Bromodichloromethane	<100.	U	1		100.	
Bromoform	<1000.	U	1		1000.	
Bromomethane	<1000.	U	1		1000.	
Carbon tetrachloride	<100.	U	1		100.	
Chlorobenzene	<100.	U	1		100.	
Chloroethane	<100.	U	1		100.	
2-Chloroethylvinyl ether	<1000.	U	1		1000.	
Chloroform	<100.	U	1		100.	
Chloromethane	<1000.	U	1		1000.	
Dibromochloromethane	<100.	U	1		100.	
1,2-Dichlorobenzene	<500.	U	1		500.	
1,3-Dichlorobenzene	<500.	U	1		500.	
1,4-Dichlorobenzene	<500.	U	1		500.	
Dichlorodifluoromethane	<1000.	U	1		1000.	
1,1-Dichloroethane	<100.	U	1		100.	
1,2-Dichloroethane	<100.	U	1		100.	
1,1-Dichloroethylene	<100.	U	1		100.	
cis-1,2-Dichloroethylene	2100.		1		100.	
trans-1,2-Dichloroethylene	<100.	U	1		100.	
Dichloromethane	<100.	U	1		100.	
1,2-Dichloropropane	<100.	U	1		100.	
cis-1,3-Dichloropropylene	<100.	U	1		100.	
trans-1,3-Dichloropropylene	<100.	U	1		100.	
Ethylbenzene	<100.	U	1		100.	
1,1,2,2-Tetrachloroethane	<100.	U	1		100.	
Tetrachloroethylene	<100.	U	1		100.	
Toluene	<100.	U	1		100.	
1,1,1-Trichloroethane	<100.	U	1		100.	

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Authorized: Monika Santucci  
Date: May 14, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting  
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: M1123  
Samp. Description: MW-21  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 100 Instrument: 9001

Collected: 04/29/99  
Received: 04/29/99  
Prepared:  
Analyzed: 05/13/99

Matrix: Water  
QC Batch: 051399W1  
%Solids:  
Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL	Notes
1,1,2-Trichloroethane	<100.	U	1		100.	
Trichloroethylene	510.		1		100.	
Trichlorofluoromethane	<100.	U	1		100.	
Vinyl Chloride	<100.	U	1		100.	
Xylenes (total)	<300.	U	1		300.	

Surrogate	Result	Qual	Col	Limits	Notes
2-Chloropropane (surrogate)	105.%		1	69-118	
Fluorobenzene (surrogate)	95.%		1	85-119	

Notes:

# - Outside control limits. U - Undetected at the reported level.  
J - reported value is estimated.  
E - concentration exceeded the calibration range and is estimated.

Authorized: \_\_\_\_\_  
Date: May 14, 1999

*Monika Santucci*  
Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting  
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: M1125  
Samp. Description: MW-22  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 1 Instrument: 9001

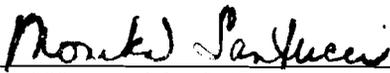
Collected: 04/29/99  
Received: 04/29/99  
Prepared:  
Analyzed: 05/12/99

Matrix: Water  
QC Batch: 051299W1  
%Solids:  
Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL	Notes
Benzene	<1.	U	1		1.	
Bromodichloromethane	<1.	U	1		1.	
Bromoform	<10.	U	1		10.	
Bromomethane	<10.	U	1		10.	
Carbon tetrachloride	<1.	U	1		1.	
Chlorobenzene	<1.	U	1		1.	
Chloroethane	<1.	U	1		1.	
2-Chloroethylvinyl ether	<10.	U	1		10.	
Chloroform	<1.	U	1		1.	
Chloromethane	<10.	U	1		10.	
Dibromochloromethane	<1.	U	1		1.	
1,2-Dichlorobenzene	<5.	U	1		5.	
1,3-Dichlorobenzene	<5.	U	1		5.	
1,4-Dichlorobenzene	<5.	U	1		5.	
Dichlorodifluoromethane	<10.	U	1		10.	
1,1-Dichloroethane	<1.	U	1		1.	
1,2-Dichloroethane	<1.	U	1		1.	
1,1-Dichloroethylene	<1.	U	1		1.	
cis-1,2-Dichloroethylene	24.		1		1.	
trans-1,2-Dichloroethylene	<1.	U	1		1.	
Dichloromethane	<1.	U	1		1.	
1,2-Dichloropropane	<1.	U	1		1.	
cis-1,3-Dichloropropylene	<1.	U	1		1.	
trans-1,3-Dichloropropylene	<1.	U	1		1.	
Ethylbenzene	<1.	U	1		1.	
1,1,2,2-Tetrachloroethane	<1.	U	1		1.	
Tetrachloroethylene	<1.	U	1		1.	
Toluene	<1.	U	1		1.	
1,1,1-Trichloroethane	<1.	U	1		1.	

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J - reported value is estimated.  
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Authorized:   
Date: May 14, 1999  
Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting  
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: M1125  
Samp. Description: MW-22  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 1 Instrument: 9001

Collected: 04/29/99  
Received: 04/29/99  
Prepared:  
Analyzed: 05/12/99

Matrix: Water  
QC Batch: 051299W1  
%Solids:  
Sample Size: 5 ml

Number of analytes: 34

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>Col</u>	<u>MDL</u>	<u>RL</u>	<u>Notes</u>
1,1,2-Trichloroethane	<1.	U	1		1.	
Trichloroethylene	10.		1		1.	
Trichlorofluoromethane	<1.	U	1		1.	
Vinyl Chloride	<1.	U	1		1.	
Xylenes (total)	<3.	U	1		3.	

<u>Surrogate</u>	<u>Result</u>	<u>Qual</u>	<u>Col</u>	<u>Limits</u>	<u>Notes</u>
2-Chloropropane (surrogate)	93.%		1	69-118	
Fluorobenzene (surrogate)	102.%		1	85-119	

Notes:

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Authorized: Monika Santucci  
Date: May 14, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting  
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: M1124  
Samp. Description: MW-24  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 100 Instrument: 9001

Collected: 04/29/99  
Received: 04/29/99  
Prepared:  
Analyzed: 05/13/99

Matrix: Water  
QC Batch: 051399W1  
%Solids:  
Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL	Notes
Benzene	<100.	U	1		100.	
Bromodichloromethane	<100.	U	1		100.	
Bromoform	<1000.	U	1		1000.	
Bromomethane	<1000.	U	1		1000.	
Carbon tetrachloride	<100.	U	1		100.	
Chlorobenzene	<100.	U	1		100.	
Chloroethane	<100.	U	1		100.	
2-Chloroethylvinyl ether	<1000.	U	1		1000.	
Chloroform	<100.	U	1		100.	
Chloromethane	<1000.	U	1		1000.	
Dibromochloromethane	<100.	U	1		100.	
1,2-Dichlorobenzene	<500.	U	1		500.	
1,3-Dichlorobenzene	<500.	U	1		500.	
1,4-Dichlorobenzene	<500.	U	1		500.	
Dichlorodifluoromethane	<1000.	U	1		1000.	
1,1-Dichloroethane	<100.	U	1		100.	
1,2-Dichloroethane	<100.	U	1		100.	
1,1-Dichloroethylene	<100.	U	1		100.	
cis-1,2-Dichloroethylene	1600.		1		100.	
trans-1,2-Dichloroethylene	<100.	U	1		100.	
Dichloromethane	<100.	U	1		100.	
1,2-Dichloropropane	<100.	U	1		100.	
cis-1,3-Dichloropropylene	<100.	U	1		100.	
trans-1,3-Dichloropropylene	<100.	U	1		100.	
Ethylbenzene	<100.	U	1		100.	
1,1,2,2-Tetrachloroethane	<100.	U	1		100.	
Tetrachloroethylene	<100.	U	1		100.	
Toluene	<100.	U	1		100.	
1,1,1-Trichloroethane	<100.	U	1		100.	

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J - reported value is estimated.  
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Authorized:   
Date: May 14, 1999

Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting  
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: M1124  
Samp. Description: MW-24  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 100 Instrument: 9001

Collected: 04/29/99  
Received: 04/29/99  
Prepared:  
Analyzed: 05/13/99

Matrix: Water  
QC Batch: 051399W1  
%Solids:  
Sample Size: 5 ml

Number of analytes: 34

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>Col</u>	<u>MDL</u>	<u>RL</u>	<u>Notes</u>
1,1,2-Trichloroethane	<100.	U	1		100.	
Trichloroethylene	4300.		1		100.	
Trichlorofluoromethane	<100.	U	1		100.	
Vinyl Chloride	<100.	U	1		100.	
Xylenes (total)	<300.	U	1		300.	

<u>Surrogate</u>	<u>Result</u>	<u>Qual</u>	<u>Col</u>	<u>Limits</u>	<u>Notes</u>
2-Chloropropane (surrogate)	94.%		1	69-118	
Fluorobenzene (surrogate)	95.%		1	85-119	

Notes:

# - Outside control limits. U - Undetected at the reported level.  
J - reported value is estimated.  
E - concentration exceeded the calibration range and is estimated.

Authorized: Monika Santucci  
Date: May 14, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting  
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: M1118  
Samp. Description: Sump  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 25 Instrument: 9001

Collected: 04/29/99  
Received: 04/29/99  
Prepared:  
Analyzed: 05/13/99

Matrix: Water  
QC Batch: 051399W1  
%Solids:  
Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL	Notes
Benzene	<25.	U	1		25.	
Bromodichloromethane	<25.	U	1		25.	
Bromoform	<250.	U	1		250.	
Bromomethane	<250.	U	1		250.	
Carbon tetrachloride	<25.	U	1		25.	
Chlorobenzene	<25.	U	1		25.	
Chloroethane	<25.	U	1		25.	
2-Chloroethylvinyl ether	<250.	U	1		250.	
Chloroform	<25.	U	1		25.	
Chloromethane	<250.	U	1		250.	
Dibromochloromethane	<25.	U	1		25.	
1,2-Dichlorobenzene	<120.	U	1		125.	
1,3-Dichlorobenzene	<120.	U	1		125.	
1,4-Dichlorobenzene	<120.	U	1		125.	
Dichlorodifluoromethane	<250.	U	1		250.	
1,1-Dichloroethane	<25.	U	1		25.	
1,2-Dichloroethane	<25.	U	1		25.	
1,1-Dichloroethylene	<25.	U	1		25.	
cis-1,2-Dichloroethylene	<25.	U	1		25.	
trans-1,2-Dichloroethylene	<25.	U	1		25.	
Dichloromethane	<25.	U	1		25.	
1,2-Dichloropropane	<25.	U	1		25.	
cis-1,3-Dichloropropylene	<25.	U	1		25.	
trans-1,3-Dichloropropylene	<25.	U	1		25.	
Ethylbenzene	<25.	U	1		25.	
1,1,2,2-Tetrachloroethane	<25.	U	1		25.	
Tetrachloroethylene	<25.	U	1		25.	
Toluene	<25.	U	1		25.	
1,1,1-Trichloroethane	<25.	U	1		25.	

# - Outside control limits. U - Undetected at the reported level.  
J - reported value is estimated.  
E - concentration exceeded the calibration range and is estimated.

Authorized:   
Date: May 14, 1999  
Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting  
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: M1118  
Samp. Description: Sump  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 25 Instrument: 9001

Collected: 04/29/99  
Received: 04/29/99  
Prepared:  
Analyzed: 05/13/99

Matrix: Water  
QC Batch: 051399W1  
%Solids:  
Sample Size: 5 ml

Number of analytes: 34

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>Col</u>	<u>MDL</u>	<u>RL</u>	<u>Notes</u>
1,1,2-Trichloroethane	<25.	U	1		25.	
Trichloroethylene	400.		1		25.	
Trichlorofluoromethane	<25.	U	1		25.	
Vinyl Chloride	<25.	U	1		25.	
Xylenes (total)	<75.	U	1		75.	

<u>Surrogate</u>	<u>Result</u>	<u>Qual</u>	<u>Col</u>	<u>Limits</u>	<u>Notes</u>
2-Chloropropane (surrogate)	95.%		1	69-118	
Fluorobenzene (surrogate)	95.%		1	85-119	

Notes:

- # - Outside control limits. U - Undetected at the reported level.
- J - reported value is estimated.
- E - concentration exceeded the calibration range and is estimated.

Authorized: Monika Santucci  
Date: May 14, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting  
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: M1126  
Samp. Description: QC Trip Blank  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 1 Instrument: 9001

Collected: 04/29/99  
Received: 04/29/99  
Prepared:  
Analyzed: 05/12/99

Matrix: Water  
QC Batch: 051299W1  
%Solids:  
Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL	Notes
Benzene	<1.	U	1		1.	
Bromodichloromethane	<1.	U	1		1.	
Bromoform	<10.	U	1		10.	
Bromomethane	<10.	U	1		10.	
Carbon tetrachloride	<1.	U	1		1.	
Chlorobenzene	<1.	U	1		1.	
Chloroethane	<1.	U	1		1.	
2-Chloroethylvinyl ether	<10.	U	1		10.	
Chloroform	<1.	U	1		1.	
Chloromethane	<10.	U	1		10.	
Dibromochloromethane	<1.	U	1		1.	
1,2-Dichlorobenzene	<5.	U	1		5.	
1,3-Dichlorobenzene	<5.	U	1		5.	
1,4-Dichlorobenzene	<5.	U	1		5.	
Dichlorodifluoromethane	<10.	U	1		10.	
1,1-Dichloroethane	<1.	U	1		1.	
1,2-Dichloroethane	<1.	U	1		1.	
1,1-Dichloroethylene	<1.	U	1		1.	
cis-1,2-Dichloroethylene	<1.	U	1		1.	
trans-1,2-Dichloroethylene	<1.	U	1		1.	
Dichloromethane	<1.	U	1		1.	
1,2-Dichloropropane	<1.	U	1		1.	
cis-1,3-Dichloropropylene	<1.	U	1		1.	
trans-1,3-Dichloropropylene	<1.	U	1		1.	
Ethylbenzene	<1.	U	1		1.	
1,1,2,2-Tetrachloroethane	<1.	U	1		1.	
Tetrachloroethylene	<1.	U	1		1.	
Toluene	<1.	U	1		1.	
1,1,1-Trichloroethane	<1.	U	1		1.	

# - Outside control limits. U - Undetected at the reported level.  
J - reported value is estimated.  
E - concentration exceeded the calibration range and is estimated.

Authorized: Monika Santucci  
Date: May 14, 1999  
Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting  
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: M1126  
Samp. Description: QC Trip Blank  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 1 Instrument: 9001

Collected: 04/29/99  
Received: 04/29/99  
Prepared:  
Analyzed: 05/12/99

Matrix: Water  
QC Batch: 051299W1  
%Solids:  
Sample Size: 5 ml

Number of analytes: 34

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>Col</u>	<u>MDL</u>	<u>RL</u>	<u>Notes</u>
1,1,2-Trichloroethane	<1.	U	1		1.	
Trichloroethylene	<1.	U	1		1.	
Trichlorofluoromethane	<1.	U	1		1.	
Vinyl Chloride	<1.	U	1		1.	
Xylenes (total)	<3.	U	1		3.	

<u>Surrogate</u>	<u>Result</u>	<u>Qual</u>	<u>Col</u>	<u>Limits</u>	<u>Notes</u>
2-Chloropropane (surrogate)	95.%		1	69-118	
Fluorobenzene (surrogate)	101.%		1	85-119	

Notes:

# - Outside control limits. U - Undetected at the reported level.  
J - reported value is estimated.  
E - concentration exceeded the calibration range and is estimated.

Authorized: Monika Santucci  
Date: May 14, 1999

Monika Santucci

1624

Client: O'BRIEN & GERE ENGINEERS, INC.

Project: FORMER ACCURATE DIE CASTING

Sampled by: CHAWN ODELL

Client Contact: TIM EDDY Phone # (315) 437-6100

Analysis/Method

8021 B (VOC's)

**Sample Description**

Sample Location	Date Collected	Time Collected	Sample Matrix	Comp. or Grab	No. of Containers	Comments
MW-10	4-29-99	0750	WATER	GRAB	2	
MW-11		0830				
MW-9		0915				
SAMP		0930				
MW-14		0955				
MW-17		1030				
MW-6		1100				
MW-18		1130				
MW-21		1150				
MW-24		1210				
MW-22		1240				
TRIP BLANK						

Relinquished by: Chawn Odell Date: 4-29-99 Time: 1325 Received by:

Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Received by Lab: Maule F. Jackson Date: 4/29/99 Time: 13:25

Shipment Method: \_\_\_\_\_ Airbill Number: \_\_\_\_\_

Turnaround Time Required: \_\_\_\_\_ Comments: \_\_\_\_\_

Routine \_\_\_\_\_  
Rush (Specify) \_\_\_\_\_

Cooler Temperature: 50c

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8260

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Bi-Monthly Effluent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: M2563  
Samp. Description: WTP Effluent - Grab  
Instrument: HP5970 GC/MS#2  
Units: ug/L  
Number of analytes: 14

Collected: 05/19/99  
Received: 05/19/99  
Prepared: 05/24/99  
Matrix: Water  
QC Batch: 052499W2  
%Solids:  
Purge volume: 25 mL

Parameter	Result	Surrog		Analyzed	Notes
		Limits	Dilution		
Acetone	<10.		1	05/24/99	
Methylene chloride	<2.0		1	05/24/99	
trans-1,2-Dichloroethene	<.50		1	05/24/99	
cis-1,2-Dichloroethene	<.50		1	05/24/99	
Trichloroethene	<.50		1	05/24/99	
4-Methyl-2-pentanone	<5.0		1	05/24/99	
Toluene	<.50		1	05/24/99	
2-Hexanone	<5.0		1	05/24/99	
Tetrachloroethene	<.50		1	05/24/99	
1,1,2,2-Tetrachloroethane	<.50		1	05/24/99	
Dibromofluoromethane (surrogate)	101.%	61-136	1	05/24/99	
1,2-Dichloroethane-d4 (surrogate)	109.%	80-135	1	05/24/99	
Toluene-d8 (surrogate)	105.%	84-114	1	05/24/99	
Bromofluorobenzene (surrogate)	110.%	77-117	1	05/24/99	

Notes:

# - Outside control limits J-Estimated value

Authorized:   
Date: May 25, 1999

Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Trace Metals

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Bi-Monthly Effluent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: M2564  
Samp. Description: WTP Effluent - Composite  
Units: mg/L

Collected: 05/19/99      Matrix: Water  
Received: 05/19/99      %Solids:  
Number of analytes: 2

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>MDL</u>	<u>RL</u>	<u>Method</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>QC Batch</u>	<u>Dilut.</u>	<u>Note</u>
Mercury	<.0002	U	.0001	.0002	245.1	05/26/99	05/27/99	052699W1	1	
Zinc	.04		.002	.01	200.7	05/26/99	05/28/99	052699W1	1	

Notes:

U-Undetected at the reported level. J-reported value is estimated.

Authorized: Monika Santucci  
Date: June 2, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Wet Chemistry

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Bi-Monthly Effluent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: M2564  
Samp. Description: WTP Effluent - Composite

Collected: 05/19/99  
Received: 05/19/99 15:22  
Matrix: Water

<u>Parameter</u>	<u>Result</u> <u>Units</u>	<u>Method</u>	<u>Prepared</u> <u>Analyzed</u>	<u>QC Batch</u> <u>Note</u>
Total dissolved solids	500. mg/L	EPA 160.1	05/20/99	052099W16
Total suspended solids	<5. mg/L	EPA 160.2	05/25/99	052599W11

Notes:

J-Estimated value

Authorized:   
Date: June 1, 1999  
Monika Santucci

# O'Brien & Gere Laboratories, Inc.

5000 Brittonfield Parkway  
 East Syracuse, New York 13057  
 (315) 437-0200

1872

# Chain of Custody

Client: O'BRIEN & GERE TECHNICAL SERV INC						Analysis/Method								
Project: ITT FINANCIAL (FORMER ACCURATE DIE)						TSS/IDS Zn+Hg VOLs EPA METH 8260								
Sampled by: JERRY BORN														
Client Contact: AL FARRELL JERRY BORN			Phone # 2316 632 0109											
Sample Description														
Sample Location	Date Collected	Time Collected	Sample Matrix	Comp. or Grab	No. of Containers									
WTP EFFLUENT	5/19/99		WATER	GRAB	2									
WTP EFFLUENT	5/19/99	10:12 AM	WATER	COMP	1		X							
WTP EFFLUENT	5/19/99	10:10 AM	WATER	COMP	1	X								
Relinquished by:			Date:	Time:	Received by:			Date:	Time:					
Relinquished by:			Date:	Time:	Received by:			Date:	Time:					
Relinquished by: <i>Jerry Born</i>			Date: 5/19/99	Time: 1522	Received by Lab: <i>Mark F. Jackson</i>			Date: 5/19/99	Time: 15:22					
Shipment Method: <i>HAND DELIVERED</i>						Airbill Number:								

Turnaround Time Required:  
 Routine   X    
 Rush (Specify) \_\_\_\_\_

Comments:

Cooler Temperature:   30c

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Wet Chemistry

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Weekly Effluent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: M3182  
Samp. Description: WTP Effluent

Collected: 05/26/99  
Received: 05/26/99 15:25  
Matrix: Water

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>MDL</u>	<u>RL Units</u>	<u>Method</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>QC Batch</u>	<u>Note</u>
Total dissolved solids	480.			10 mg/L	EPA 160.1		06/02/99	060299W12	
Total suspended solids	<5.	U		5 mg/L	EPA 160.2		05/28/99	052899W18	

Notes:

U-Undetected at reported level. J-reported value is estimated.

Authorized: \_\_\_\_\_  
Date: June 5, 1999

  
Monika Santucci

# O'Brien & Gere Laboratories, Inc.

5000 Brittonfield Parkway  
 East Syracuse, New York 13057  
 (315) 437-0200

1963

# Chain of Custody

Client: O'BRIEN & GERE TECHNICAL SERV INC						Analysis/Method  <i>ISS/IDS</i>								
Project: ITT FINANCIAL (FORMER ACQUATE DIE)														
Sampled by: JERRY BORN														
Client Contact: AL FAZIRELL JERRY BORN			Phone # 2316 637 0107											
Sample Description														
Sample Location	Date Collected	Time Collected	Sample Matrix	Comp. or Grab	No. of Containers							Comments		
WTP EFFLUENT	5/26/99	10:05 19 AM	WATER	COMP	1	X								
Relinquished by:			Date:		Time:		Received by:			Date:		Time:		
Relinquished by:			Date:		Time:		Received by:			Date:		Time:		
Relinquished by: <i>Jerry Born</i>			Date: 5/26/99		Time: 1525		Received by Lab: <i>Mark F. Neuman</i>			Date: 5/26/99		Time: 15:25		
Shipment Method: HAND DELIVERED						Airbill Number:								

Turnaround Time Required:  
 Routine   X    
 Rush (Specify)           

Comments:

Cooler Temperature:   30C



**O'BRIEN & GERE**  
ENGINEERS, INC.

JL 2

July 9, 1999

Mr. David Crosby, P.E.  
Bureau of Construction Services  
Division of Hazardous Waste Remediation  
New York State Department of Environmental Conservation  
50 Wolf Road  
Albany, NY 12233-7010

Re: Former Accurate Die Casting Site  
Fayetteville, NY

File: 2488/23123 #2

Dear Mr. Crosby:

Enclosed is the monthly progress report, required by the Order on Consent (#A7-0318-94-10) for the former Accurate Die Casting site in Fayetteville, New York, for the month of June 1999. Included in the progress report are the results of the monitoring activities associated with the SPDES Fact Sheet for the ground water treatment system through June 1999. If you have any questions regarding these reports, please do not hesitate to call me.

Very truly yours,

O'BRIEN & GERE ENGINEERS, INC.

Alfred R. Farrell, P.E.  
Senior Project Engineer

I:\DIV7\PROJECTS\2488\23123\2\_CORRES\6-99MOR.WPD

Attachments

- cc: V. Nattanmai, P.E. - NYSDEC  
A. English - NYSDEC  
T. Male - NYSDEC  
Central Field Unit: Project Attorney Accurate Die Site - NYSDEC  
C. Branagh, P.E. - NYSDEC Region 7  
Director, Bureau of Environmental Exposure Investigation - NYSDOH (2 copies)  
H. Hamel - NYSDOH  
C. Johnson, Esq. - ITT Corporation  
C. Salcines - ITT Corporation  
R. Alessi, Esq. - LeBoeuf, Lamb, Greene & MacRae  
M. Peters, Esq. - LeBoeuf, Lamb, Greene & MacRae  
T. Brown, P.E. - O'Brien & Gere Technical Services, Inc.  
R. Cheesman, P.E. - O'Brien & Gere Technical Services, Inc



**FORMER ACCURATE DIE CASTING SITE  
FAYETTEVILLE, NEW YORK**

**Monthly Progress Report for: June 1999**

**(a) Activities Performed/Correspondences with NYSDEC**

1. During the month of June 1999, O'Brien & Gere continued operating the ground water collection and treatment system. As of July 1, 1999, a total of 27,357,040 gallons of ground water has been treated since startup on February 5, 1996. During the period since the monthly progress report for May 1999, 895,300 gallons of groundwater was treated; 677,040 gallons from recovery well RW-1 and 218,260 gallons from RW-2. The sump outside the northeast corner of the building was dry.
2. During the month of June 1999, O'Brien & Gere performed the sampling activities associated with the SPDES Fact Sheet (#734052) required by the Consent Order. The results of the SPDES sampling of the groundwater treatment system effluent are discussed in Item b.
3. O'Brien & Gere Technical Services completed construction of the groundwater collection trench and sump between the former PAH/VOC/PCB Soils Area and Bishop Brook, including the electrical conduit and forcemain to the existing treatment building.

Presently, approximately 300 cubic yards of soil excavated during construction of the groundwater collection trench is being stockpiled on site. In accordance with the NYSDEC-approved Work Plan, three samples of the stockpiled soil were collected using USEPA sample preservation method 5035 and submitted for volatile organic compound analysis using USEPA method 8260. Based on the analyses, the soil samples did not contain detectable concentrations of VOCs.

The results of the laboratory analyses were presented to the NYSDEC in a letter dated June 25, 1999. Based on the results, approval from the NYSDEC was requested to place the stockpiled soil into the Corrective Action Management Unit (CAMU) at the site. Verbal approval to do so was provided by Dave Crosby of NYSDEC on July 6, 1999. A written approval from the NYSDEC is to follow.

**(b) Sampling and Test Results**

1. The analytical results associated with the SPDES Fact Sheet monitoring activities performed in June 1999 are summarized in Table 1. The laboratory analytical data sheets are provided as Attachment A.

**(c) Projected Activities within next 45 days**

1. The treatment system performance monitoring will continue to be conducted in accordance with the SPDES Permit fact sheet, as modified on March 13, 1997 and November 21, 1997.
2. Continue operation of the groundwater recovery and treatment system.
3. Complete placing excavated soils presently staged on site into the CAMU, thereby completing the construction activities connected with the groundwater collection trench installation.

**FORMER ACCURATE DIE CASTING SITE  
FAYETTEVILLE, NEW YORK  
(continued)**

**(d) Activities in support of Community Relations Plan**

1. None

**(e) Exceedences to SPDES Fact Sheet Limits**

1. None

**Table 1**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Monitoring Requirements and Effluent Data**

Analyte (units)	Monitoring Requirements				Effluent	Effluent	Effluent	Effluent
	Discharge Limitation Daily Average	Discharge Limitation Daily Maximum	Minimum Measurement Frequency(1)	Sample Type	06/01/99	06/02/99	06/03/99	06/08/99
Flow (GPD)	Monitor	150000	Continuous	Meter	27185	---	27157	27550
pH (SU)	6.5 - 8.5		2/Week	Grab	7.85	---	7.85	7.85
Residue, non-filterable (mg/L)	Monitor	20	Weekly	3-hr comp.	---	5 U	---	---
Total dissolved solids (TDS) (mg/L)	Monitor	Monitor	Weekly	3-hr comp.	---	520	---	---
CBOD5 (mg/L)	Monitor	Monitor	Quarterly	3-hr comp.	---	---	---	---
TKN (mg/L)	Monitor	Monitor	Quarterly	3-hr comp.	---	---	---	---
TOD (mg/L)	Monitor	15	Quarterly	Calculated	---	---	---	---
Dissolved Oxygen (mg/L)	Monitor	7 Min.	Quarterly	Grab	---	---	---	---
Aluminum, dissolved (mg/L)	Monitor	0.2	Quarterly	3-hr comp.	---	---	---	---
Antimony, total (mg/L)	Monitor	0.1	Quarterly	3-hr comp.	---	---	---	---
Chromium, total (mg/L)	Monitor	0.5	Quarterly	3-hr comp.	---	---	---	---
Cobalt, total (mg/L)	Monitor	0.01	Quarterly	3-hr comp.	---	---	---	---
Copper, total (mg/L)	Monitor	0.1	Quarterly	3-hr comp.	---	---	---	---
Iron, total (mg/L)	Monitor	0.3	Quarterly	3-hr comp.	---	---	---	---
Lead, total (mg/L)	Monitor	0.02	Quarterly	3-hr comp.	---	---	---	---
Mercury, total (mg/L)	Monitor	0.0008	2/Month	3-hr comp.	---	0.0002 U	---	---
Nickel, total (mg/L)	Monitor	0.2	Quarterly	3-hr comp.	---	---	---	---
Silver, total (mg/L)	Monitor	0.1	Quarterly	3-hr comp.	---	---	---	---
Vanadium, total (mg/L)	Monitor	0.03	Quarterly	3-hr comp.	---	---	---	---
Zinc, total (mg/L)	Monitor	0.3	2/Month	3-hr comp.	---	0.03	---	---
cis-1,2-Dichloroethene (ug/L)	Monitor	10	2/Month	Grab	---	0.50 U	---	---
trans-1,2-Dichloroethene (ug/L)	Monitor	10	2/Month	Grab	---	0.50 U	---	---
Methylene chloride (ug/L)	Monitor	50	2/Month	Grab	---	2.0 U	---	---
1,1,2,2-Tetrachloroethane (ug/L)	Monitor	30	2/Month	Grab	---	0.50 U	---	---
Tetrachloroethene (ug/L)	Monitor	20	2/Month	Grab	---	0.50 U	---	---
Toluene (ug/L)	Monitor	20	2/Month	Grab	---	0.50 U	---	---
Trichloroethene (ug/L)	Monitor	10	2/Month	Grab	---	0.50 U	---	---
Acetone (ug/L)	Monitor	1000	2/Month	Grab	---	10 U	---	---
2-Hexanone (ug/L)	Monitor	1000	2/Month	Grab	---	5.0 U	---	---
4-Methyl-2-pentanone (MIBK) (ug/L)	Monitor	1000	2/Month	Grab	---	5.0 U	---	---

NOTES: (1) Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.

--- - Not analyzed, NA - Data not available

U - Not Detected, J - Estimated

TOD = 1.5 X CBOD5 + 4.5 X TKN

**Table 1**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Monitoring Requirements and Effluent Data**

Analyte	Effluent 06/09/99	Effluent 06/10/99	Effluent 06/15/99	Effluent 06/16/99	Effluent 06/17/99	Effluent 06/22/99	Effluent 06/23/99	Effluent 06/24/99
Flow (GPD)	---	27350	27130	---	26804	26340	---	26270
pH (SU)	---	7.85	7.85	---	7.85	7.87	---	7.85
Residue, non-filterable (mg/L)	5 U	---	---	5 U	---	---	5 U	---
Total dissolved solids (TDS) (mg/L)	490	---	---	560	---	---	510	---
CBOD5 (mg/L)	---	---	---	---	---	---	---	---
TKN (mg/L)	---	---	---	---	---	---	---	---
TOD (mg/L)	---	---	---	---	---	---	---	---
Dissolved Oxygen (mg/L)	---	---	---	---	---	---	---	---
Aluminum, dissolved (mg/L)	---	---	---	---	---	---	---	---
Antimony, total (mg/L)	---	---	---	---	---	---	---	---
Chromium, total (mg/L)	---	---	---	---	---	---	---	---
Cobalt, total (mg/L)	---	---	---	---	---	---	---	---
Copper, total (mg/L)	---	---	---	---	---	---	---	---
Iron, total (mg/L)	---	---	---	---	---	---	---	---
Lead, total (mg/L)	---	---	---	---	---	---	---	---
Mercury, total (mg/L)	---	---	---	0.0002 U	---	---	---	---
Nickel, total (mg/L)	---	---	---	---	---	---	---	---
Silver, total (mg/L)	---	---	---	---	---	---	---	---
Vanadium, total (mg/L)	---	---	---	---	---	---	---	---
Zinc, total (mg/L)	---	---	---	0.02	---	---	---	---
cis-1,2-Dichloroethene (ug/L)	---	---	---	0.50 U	---	---	---	---
trans-1,2-Dichloroethene (ug/L)	---	---	---	0.50 U	---	---	---	---
Methylene chloride (ug/L)	---	---	---	2.0 U	---	---	---	---
1,1,2,2-Tetrachloroethane (ug/L)	---	---	---	0.50 U	---	---	---	---
Tetrachloroethene (ug/L)	---	---	---	0.50 U	---	---	---	---
Toluene (ug/L)	---	---	---	0.50 U	---	---	---	---
Trichloroethene (ug/L)	---	---	---	0.50 U	---	---	---	---
Acetone (ug/L)	---	---	---	10 U	---	---	---	---
2-Hexanone (ug/L)	---	---	---	5.0 U	---	---	---	---
4-Methyl-2-pentanone (MIBK) (ug/L)	---	---	---	5.0 U	---	---	---	---

NOTES: (1) Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.  
 --- - Not analyzed, NA - Data not available  
 U - Not Detected, J - Estimated  
 TOD = 1.5 X CBOD5 + 4.5 X TKN

**Table 1**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Monitoring Requirements and Effluent Data**

Analyte	Effluent 06/29/99
Flow (GPD)	26148
pH (SU)	7.89
Residue, non-filterable (mg/L)	---
Total dissolved solids (TDS) (mg/L)	---
CBOD5 (mg/L)	---
TKN (mg/L)	---
TOD (mg/L)	---
Dissolved Oxygen (mg/L)	---
Aluminum, dissolved (mg/L)	---
Antimony, total (mg/L)	---
Chromium, total (mg/L)	---
Cobalt, total (mg/L)	---
Copper, total (mg/L)	---
Iron, total (mg/L)	---
Lead, total (mg/L)	---
Mercury, total (mg/L)	---
Nickel, total (mg/L)	---
Silver, total (mg/L)	---
Vanadium, total (mg/L)	---
Zinc, total (mg/L)	---
cis-1,2-Dichloroethene (ug/L)	---
trans-1,2-Dichloroethene (ug/L)	---
Methylene chloride (ug/L)	---
1,1,2,2-Tetrachloroethane (ug/L)	---
Tetrachloroethene (ug/L)	---
Toluene (ug/L)	---
Trichloroethene (ug/L)	---
Acetone (ug/L)	---
2-Hexanone (ug/L)	---
4-Methyl-2-pentanone (MIBK) (ug/L)	---

NOTES: (1) Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.  
 --- - Not analyzed, NA - Data not available  
 U - Not Detected, J - Estimated  
 TOD = 1.5 X CBOD5 + 4.5 X TKN

**ATTACHMENT A**

**SPDES PERMIT COMPLIANCE MONITORING  
LABORATORY ANALYTICAL DATA SHEETS**

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8260

Client: O'Brien & Gere Engineers, Inc.  
 Project: Accurate Die Casting - Fayetteville, NY  
 Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
 Certification NY No.: 10155

Sample: M3531  
 Samp. Description: WTP Effluent - Grab  
 Instrument: HP5970 GC/MS#2  
 Units: ug/L  
 Number of analytes: 14

Collected: 06/02/99 Matrix: Water  
 Received: 06/02/99 QC Batch: 060499W2  
 Prepared: 06/04/99 %Solids:  
 Purge volume: 25 mL

Parameter	Result	Surrog		Notes
		Limits	Dilution	
Acetone	<10.		1	06/04/99
Methylene chloride	<2.0		1	06/04/99
trans-1,2-Dichloroethene	<.50		1	06/04/99
cis-1,2-Dichloroethene	<.50		1	06/04/99
Trichloroethene	<.50		1	06/04/99
4-Methyl-2-pentanone	<5.0		1	06/04/99
Toluene	<.50		1	06/04/99
2-Hexanone	<5.0		1	06/04/99
Tetrachloroethene	<.50		1	06/04/99
1,1,2,2-Tetrachloroethane	<.50		1	06/04/99
Dibromofluoromethane (surrogate)	105.%	61-136	1	06/04/99
1,2-Dichloroethane-d4 (surrogate)	96.%	80-135	1	06/04/99
Toluene-d8 (surrogate)	102.%	84-114	1	06/04/99
Bromofluorobenzene (surrogate)	98.%	77-117	1	06/04/99

Notes:

# - Outside control limits J-Estimated value

Authorized: Monika Santucci  
 Date: June 8, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: M3529  
Samp. Description: WTP Influent  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 50 Instrument: 9001

Collected: 06/02/99  
Received: 06/02/99  
Prepared:  
Analyzed: 06/11/99

Matrix: Water  
QC Batch: 061199W1  
%Solids:  
Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL Notes
Benzene	<50.	U	1		50.
Bromodichloromethane	<50.	U	1		50.
Bromoform	<500.	U	1		500.
Bromomethane	<500.	U	1		500.
Carbon tetrachloride	<50.	U	1		50.
Chlorobenzene	<50.	U	1		50.
Chloroethane	<50.	U	1		50.
2-Chloroethylvinyl ether	<500.	U	1		500.
Chloroform	<50.	U	1		50.
Chloromethane	<500.	U	1		500.
Dibromochloromethane	<50.	U	1		50.
1,2-Dichlorobenzene	<250.	U	1		250.
1,3-Dichlorobenzene	<250.	U	1		250.
1,4-Dichlorobenzene	<250.	U	1		250.
Dichlorodifluoromethane	<500.	U	1		500.
1,1-Dichloroethane	<50.	U	1		50.
1,2-Dichloroethane	<50.	U	1		50.
1,1-Dichloroethylene	<50.	U	1		50.
cis-1,2-Dichloroethylene	<50.	U	1		50.
trans-1,2-Dichloroethylene	<50.	U	1		50.
Dichloromethane	<50.	U	1		50.
1,2-Dichloropropane	<50.	U	1		50.
cis-1,3-Dichloropropylene	<50.	U	1		50.
trans-1,3-Dichloropropylene	<50.	U	1		50.
Ethylbenzene	<50.	U	1		50.
1,1,2,2-Tetrachloroethane	<50.	U	1		50.
Tetrachloroethylene	<50.	U	1		50.
Toluene	<50.	U	1		50.
1,1,1-Trichloroethane	<50.	U	1		50.

# - Outside control limits. U - Undetected at the reported level.  
J - reported value is estimated.  
E - concentration exceeded the calibration range and is estimated.

Authorized: Monika Santucci  
Date: June 14, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
 Project: Accurate Die Casting - Fayetteville, NY  
 Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
 Certification NY No.: 10155

Sample: M3529  
 Samp. Description: WTP Influent  
 Primary column: Y  
 Units: ug/L  
 Column: DB-VRX 75m x .45mm ID  
 Dilution: 50 Instrument: 9001

Collected: 06/02/99  
 Received: 06/02/99  
 Prepared:  
 Analyzed: 06/11/99

Matrix: Water  
 QC Batch: 061199W1  
 %Solids:  
 Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL	Notes
1,1,2-Trichloroethane	<50.	U	1		50.	
Trichloroethylene	510.		1		50.	
Trichlorofluoromethane	<50.	U	1		50.	
Vinyl Chloride	<50.	U	1		50.	
Xylenes (total)	<150.	U	1		150.	

Surrogate	Result	Qual	Col	Limits	Notes
2-Chloropropane (surrogate)	85.%		1	69-118	
Fluorobenzene (surrogate)	95.%		1	85-119	

Notes:

# - Outside control limits. U - Undetected at the reported level.  
 J - reported value is estimated.  
 E - concentration exceeded the calibration range and is estimated.

Authorized: Monika Santucci  
 Date: June 14, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: M3530  
Samp. Description: WTP Between GACs  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 1 Instrument: 9001

Collected: 06/02/99  
Received: 06/02/99  
Prepared:  
Analyzed: 06/11/99

Matrix: Water  
QC Batch: 061199W1  
%Solids:  
Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL Notes
Benzene	<1.	U	1		1.
Bromodichloromethane	<1.	U	1		1.
Bromoform	<10.	U	1		10.
Bromomethane	<10.	U	1		10.
Carbon tetrachloride	<1.	U	1		1.
Chlorobenzene	<1.	U	1		1.
Chloroethane	<1.	U	1		1.
2-Chloroethylvinyl ether	<10.	U	1		10.
Chloroform	<1.	U	1		1.
Chloromethane	<10.	U	1		10.
Dibromochloromethane	<1.	U	1		1.
1,2-Dichlorobenzene	<5.	U	1		5.
1,3-Dichlorobenzene	<5.	U	1		5.
1,4-Dichlorobenzene	<5.	U	1		5.
Dichlorodifluoromethane	<10.	U	1		10.
1,1-Dichloroethane	<1.	U	1		1.
1,2-Dichloroethane	<1.	U	1		1.
1,1-Dichloroethylene	<1.	U	1		1.
cis-1,2-Dichloroethylene	<1.	U	1		1.
trans-1,2-Dichloroethylene	<1.	U	1		1.
Dichloromethane	<1.	U	1		1.
1,2-Dichloropropane	<1.	U	1		1.
cis-1,3-Dichloropropylene	<1.	U	1		1.
trans-1,3-Dichloropropylene	<1.	U	1		1.
Ethylbenzene	<1.	U	1		1.
1,1,2,2-Tetrachloroethane	<1.	U	1		1.
Tetrachloroethylene	<1.	U	1		1.
Toluene	<1.	U	1		1.
1,1,1-Trichloroethane	<1.	U	1		1.

# - Outside control limits. U - Undetected at the reported level.  
J - reported value is estimated.  
E - concentration exceeded the calibration range and is estimated.

Authorized: Monika Santucci  
Date: June 14, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
 Project: Accurate Die Casting - Fayetteville, NY  
 Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
 Certification NY No.: 10155

Sample: M3530  
 Samp. Description: WTP Between GACs  
 Primary column: Y  
 Units: ug/L  
 Column: DB-VRX 75m x .45mm ID  
 Dilution: 1 Instrument: 9001

Collected: 06/02/99  
 Received: 06/02/99  
 Prepared:  
 Analyzed: 06/11/99

Matrix: Water  
 QC Batch: 061199W1  
 %Solids:  
 Sample Size: 5 ml

Number of analytes: 34

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>Col</u>	<u>MDL</u>	<u>RL</u>	<u>Notes</u>
1,1,2-Trichloroethane	<1.	U	1		1.	
Trichloroethylene	<1.	U	1		1.	
Trichlorofluoromethane	<1.	U	1		1.	
Vinyl Chloride	<1.	U	1		1.	
Xylenes (total)	<3.	U	1		3.	

<u>Surrogate</u>	<u>Result</u>	<u>Qual</u>	<u>Col</u>	<u>Limits</u>	<u>Notes</u>
2-Chloropropane (surrogate)	88.%		1	69-118	
Fluorobenzene (surrogate)	96.%		1	85-119	

Notes:

# - Outside control limits. U - Undetected at the reported level.  
 J - reported value is estimated.  
 E - concentration exceeded the calibration range and is estimated.

Authorized: Monika Santucci  
 Date: June 14, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Trace Metals

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: M3532  
Samp. Description: WTP Effluent - Composite  
Units: mg/L

Collected: 06/02/99      Matrix: Water  
Received: 06/02/99      %Solids:  
Number of analytes: 2

Parameter	Result	Qual	MDL	RL	Method	Prepared	Analyzed	QC Batch	Dilut.	Note
Mercury	<.0002	U	.0001	.0002	245.1	06/07/99	06/07/99	060799W1		1
Zinc	.03		.002	.01	200.7	06/09/99	06/10/99	060999W1		1

Notes:

U-Undetected at the reported level. J-reported value is estimated.

Authorized: Monika Santucci  
Date: June 11, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Wet Chemistry

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: M3532  
Samp. Description: WTP Effluent - Composite

Collected: 06/02/99  
Received: 06/02/99 15:20  
Matrix: Water

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>MDL</u>	<u>RL</u>	<u>Units</u>	<u>Method</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>QC Batch</u>	<u>Note</u>
Total dissolved solids	520.			10	mg/L	EPA 160.1		06/07/99	060799W11	
Total suspended solids	<5.	U		5	mg/L	EPA 160.2		06/08/99	060899W11	

Notes:

U-Undetected at reported level. J-reported value is estimated.

Authorized: \_\_\_\_\_  
Date: June 11, 1999

*Monika Santucci*  
Monika Santucci



# O'Brien & Gere Laboratories, Inc.

# Analytical Results Wet Chemistry

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting  
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517  
Certification NY No.: 10155

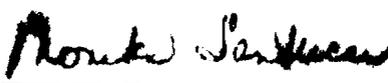
Sample: M4102  
Samp. Description: WTP Effluent

Collected: 06/09/99  
Received: 06/09/99 15:30  
Matrix: Water

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>MDL</u>	<u>RL</u>	<u>Units</u>	<u>Method</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>QC Batch</u>	<u>Note</u>
Total dissolved solids	490.			10	mg/L	EPA 160.1		06/14/99	061499W19	
Total suspended solids	<5.	U		5	mg/L	EPA 160.2		06/11/99	061199W18	

Notes:

U-Undetected at reported level. J-reported value is estimated.

Authorized:   
Date: June 17, 1999  
Monika Santucci



# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8260

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Bi-Monthly Effluent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

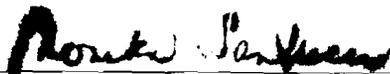
Sample: M4506  
Samp. Description: WTP Effluent - Grab  
Instrument: HP5970 GC/MS#2  
Units: ug/L  
Number of analytes: 14

Collected: 06/16/99  
Received: 06/16/99  
Prepared: 06/23/99  
Matrix: Water  
QC Batch: 062399W2  
%Solids:  
Purge volume: 25 mL

Parameter	Result	Surrog		Analyzed	Notes
		Limits	Dilution		
Acetone	<10.		1	06/23/99	
Methylene chloride	<2.0		1	06/23/99	
trans-1,2-Dichloroethene	<.50		1	06/23/99	
cis-1,2-Dichloroethene	<.50		1	06/23/99	
Trichloroethene	<.50		1	06/23/99	
4-Methyl-2-pentanone	<5.0		1	06/23/99	
Toluene	<.50		1	06/23/99	
2-Hexanone	<5.0		1	06/23/99	
Tetrachloroethene	<.50		1	06/23/99	
1,1,2,2-Tetrachloroethane	<.50		1	06/23/99	
Dibromofluoromethane (surrogate)	106.%	61-136	1	06/23/99	
1,2-Dichloroethane-d4 (surrogate)	89.%	80-135	1	06/23/99	
Toluene-d8 (surrogate)	98.%	84-114	1	06/23/99	
Bromofluorobenzene (surrogate)	102.%	77-117	1	06/23/99	

Notes:

# - Outside control limits J-Estimated value

Authorized:   
Date: June 25, 1999

Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Trace Metals

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Bi-Monthly Effluent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

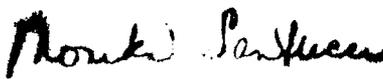
Sample: M4507  
Samp. Description: WTP Effluent - Composite  
Units: mg/L

Collected: 06/16/99      Matrix: Water  
Received: 06/16/99      %Solids:  
Number of analytes: 2

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>MDL</u>	<u>RL</u>	<u>Method</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>QC Batch</u>	<u>Dilut.</u>	<u>Note</u>
Mercury	<.0002	U	.0001	.0002	245.1	06/22/99	06/23/99	062299W2		1
Zinc	.02		.002	.01	200.7	06/22/99	06/23/99	062299W1		1

Notes:

U-Undetected at the reported level. J-reported value is estimated.

Authorized:   
Date: June 25, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Wet Chemistry

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Bi-Monthly Effluent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: M4507  
Samp. Description: WTP Effluent - Composite

Collected: 06/16/99  
Received: 06/16/99 15:40  
Matrix: Water

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>MDL</u>	<u>RL</u>	<u>Units</u>	<u>Method</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>QC Batch</u>	<u>Note</u>
Total dissolved solids	560.			10	mg/L	EPA 160.1		06/21/99	062199W13	
Total suspended solids	<5.	U		5	mg/L	EPA 160.2		06/21/99	062199W11	

Notes:

U-Undetected at reported level. J-reported value is estimated.

Authorized:   
Date: June 24, 1999  
Monika Santucci

2180

Client: O'BRIEN & GERE, TECHNICAL SERVICES INC						Analysis/Method					
Project: ITT FINANCIAL (FORMER ACCURATE DIE)						VOCs EPA METHOD TSS/IDS Zn+Hg					
Sampled by: JERRY BORN											
Client Contact: AL FARRELL JERRY BORN			Phone # 2316 6370109								
Sample Description											
Sample Location	Date Collected	Time Collected	Sample Matrix	Comp. or Grab	No. of Containers						Comments
WTP EFFLUENT	6/16/99	8:20 AM	WATER	GRAB	2	X					
" "	6/16/99	11:30 AM	WATER	COMP?			X				
" "	6/16/99	11:30 AM	WATER	COMP?				X			
<del>" "</del>	<del>6/16/99</del>	<del>11:30 AM</del>	<del>WATER</del>	<del>COMP?</del>							
Relinquished by:						Date:		Time:		Received by:	
Relinquished by:						Date:		Time:		Received by:	
Relinquished by: <i>Jerry Born</i>						Date: 6/16/99		Time: 1540		Received by Lab: <i>Thomas Alkacat</i>	
Date: 6/16/99						Time: 1540		Date: 6/16/99		Time: 1540	
Shipment Method: HAND DELIVERED						Airbill Number:					

Turnaround Time Required:  
 Routine   
 Rush (Specify) \_\_\_\_\_

Comments:

Cooler Temperature: 3°C

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Wet Chemistry

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Weekly Effluent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: M4889  
Samp. Description: WTP Effluent

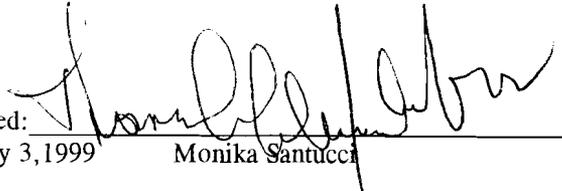
Collected: 06/23/99  
Received: 06/23/99 15:35  
Matrix: Water

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>MDL</u>	<u>RL</u>	<u>Units</u>	<u>Method</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>QC Batch</u>	<u>Note</u>
Total dissolved solids	510.			10	mg/L	EPA 160.1		06/29/99	062999W20	
Total suspended solids	<5.	U		5	mg/L	EPA 160.2		06/30/99	063099W11	

Notes:

U-Undetected at reported level. J-reported value is estimated.

Authorized:  
Date: July 3, 1999

  
Monika Santucci

# O'Brien & Gere Laboratories, Inc.

5000 Brittonfield Parkway  
 East Syracuse, New York 13057  
 (315) 437-0200

# Chain of Custody

2244

Client: O'BRIEN & GERE TECHNICAL SERV INC					Analysis/Method				
Project: FOKINER 1900 RTRITE DIE									
Sampled by: JERRY BORN									
Client Contact: JERRY BORN Phone # 2316 6390107									
Sample Description									
Sample Location	Date Collected	Time Collected	Sample Matrix	Comp. or Grab	No. of Containers	Comments			
WTR EFFLUENT	6/23/99	11:30 AM	WATER COMP		1	<div style="border: 1px solid black; padding: 5px; transform: rotate(-45deg); display: inline-block;">                         STS                          AD                          G                     </div>			
Relinquished by:					Date:	Time:	Received by:	Date:	Time:
Relinquished by: <i>Jerry Born</i>					Date:	Time:	Received by:	Date:	Time:
Relinquished by: <i>Jerry Born</i>					Date:	Time: 1535	Received by Lab:	Muelo Jackson Date: 6/23/99 Time: 15:35	
Shipment Method: <b>HAND DELIVERED</b>					Airbill Number:				

Turnaround Time Required:     
 Routine     
 Rush (Specify)   

Cooler Temperature:   30°



**O'BRIEN & GERE**  
ENGINEERS, INC.

August 10, 1999

Mr. David Crosby, P.E.  
Bureau of Construction Services  
Division of Hazardous Waste Remediation  
New York State Department of Environmental Conservation  
50 Wolf Road  
Albany, NY 12233-7010

Re: Former Accurate Die Casting Site  
Fayetteville, NY

File: 2488/23123 #2

Dear Mr. Crosby:

Enclosed is the monthly progress report, required by the Order on Consent (#A7-0318-94-10) for the former Accurate Die Casting site in Fayetteville, New York, for the month of July 1999. Included in the progress report are the results of the monitoring activities associated with the SPDES Fact Sheet for the ground water treatment system through July 1999. If you have any questions regarding these reports, please do not hesitate to call me.

Very truly yours,

O'BRIEN & GERE ENGINEERS, INC.

Alfred R. Farrell, P.E.  
Senior Project Engineer

I:\DIV71\PROJECTS\2488\23123\2\_CORRES\7-99MOR.WPD  
Attachments

cc: V. Nattanmai, P.E. - NYSDEC  
A. English - NYSDEC  
T. Male - NYSDEC  
Central Field Unit: Project Attorney Accurate Die Site - NYSDEC  
C. Branagh, P.E. - NYSDEC Region 7  
Director, Bureau of Environmental Exposure Investigation - NYSDOH (2 copies)  
H. Hamel - NYSDOH  
M. Peters, Esq. - LeBoeuf, Lamb, Greene & MacRae  
C. Johnson, Esq. - ITT Industries, Inc.  
T. Brown, P.E. - O'Brien & Gere Technical Services, Inc.  
R. Cheesman, P.E. - O'Brien & Gere Technical Services, Inc.



**FORM ACCURATE DIE CASTING SITE  
FAYETTEVILLE, NEW YORK**

**Report for: July 1999**

**Monthly Tests Performed/Correspondences with NYSDEC**

1. During the month of July 1999, O'Brien & Gere continued operating the ground water collection and treatment system. As of July 30, 1999, a total of 28,089,110 gallons of ground water has been treated since startup on February 5, 1996. Since July 1, 1999, 732,070 gallons of groundwater was treated; 561,030 gallons from recovery well RW-1, 168,830 gallons from RW-2, and 2,210 gallons from the sump outside the northeast corner of the building. No flow was recovered from the groundwater collection trench constructed in the former VOC/PAH/PCB Soils Area during the period.
2. During the month of July 1999, O'Brien & Gere performed the sampling activities associated with the SPDES Fact Sheet (#734052) required by the Consent Order. The results of the SPDES sampling of the groundwater treatment system effluent are discussed in Item b.
3. O'Brien & Gere Technical Services placed approximately 300 cubic yards of soil, excavated during construction of the groundwater collection trench, into the Corrective Action Management Unit (CAMU) at the site. Approval to do so was provided by the NYSDEC in a letter dated July 14, 1999.

**Sampling and Test Results**

- (b) 1. The analytical results associated with the SPDES Fact Sheet monitoring activities performed in July 1999 are summarized in Table 1. The laboratory analytical data sheets are provided as Attachment A.

**Projected Activities within next 45 days**

- (c) 1. The treatment system performance monitoring will continue to be conducted in accordance with the SPDES Permit fact sheet, as modified on March 13, 1997 and November 1997.
2. Continue operation of the groundwater recovery and treatment system.

**Activities in support of Community Relations Plan**

- (d) 1. None

**Exceedences to SPDES Fact Sheet Limits**

- (e) 1. None

0.1U	---
0.06U	---
0.01U	---
0.01U	---
0.01	---
0.05U	---
0.005U	---
0.0002U	---
0.05U	---
0.01U	---
0.03U	---
0.02	---
0.50U	---
0.50U	---
2.0U	---
0.50U	---
10U	---
5.0U	---
5.0U	---



**O'BRIEN & GERE**  
ENGINEERS, INC.

August 10, 1999

Mr. David Crosby, P.E.  
Bureau of Construction Services  
Division of Hazardous Waste Remediation  
New York State Department of Environmental Conservation  
50 Wolf Road  
Albany, NY 12233-7010

Re: Former Accurate Die Casting Site  
Fayetteville, NY

File: 2488/23123 #2

Dear Mr. Crosby:

Enclosed is the monthly progress report, required by the Order on Consent (#A7-0318-94-10) for the former Accurate Die Casting site in Fayetteville, New York, for the month of July 1999. Included in the progress report are the results of the monitoring activities associated with the SPDES Fact Sheet for the ground water treatment system through July 1999. If you have any questions regarding these reports, please do not hesitate to call me.

Very truly yours,

O'BRIEN & GERE ENGINEERS, INC.

Alfred R. Farrell, P.E.  
Senior Project Engineer

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Attachments

cc: V. Nattanmai, P.E. - NYSDEC  
A. English - NYSDEC  
T. Male - NYSDEC  
Central Field Unit: Project Attorney Accurate Die Site - NYSDEC  
C. Branagh, P.E. - NYSDEC Region 7  
Director, Bureau of Environmental Exposure Investigation - NYSDOH (2 copies)  
H. Hamel - NYSDOH  
M. Peters, Esq. - LeBoeuf, Lamb, Greene & MacRae  
C. Johnson, Esq. - ITT Industries, Inc.  
T. Brown, P.E. - O'Brien & Gere Technical Services, Inc.  
R. Cheesman, P.E. - O'Brien & Gere Technical Services, Inc.



**FORMER ACCURATE DIE CASTING SITE  
FAYETTEVILLE, NEW YORK**

**Monthly Progress Report for: July 1999**

**(a) Activities Performed/Correspondences with NYSDEC**

1. During the month of July 1999, O'Brien & Gere continued operating the ground water collection and treatment system. As of July 30, 1999, a total of 28,089,110 gallons of ground water has been treated since startup on February 5, 1996. Since July 1, 1999, 732,070 gallons of groundwater was treated; 561,030 gallons from recovery well RW-1, 168,830 gallons from RW-2, and 2,210 gallons from the sump outside the northeast corner of the building. No flow was recovered from the groundwater collection trench constructed in the former VOC/PAH/PCB Soils Area during the period.
2. During the month of July 1999, O'Brien & Gere performed the sampling activities associated with the SPDES Fact Sheet (#734052) required by the Consent Order. The results of the SPDES sampling of the groundwater treatment system effluent are discussed in Item b.
3. O'Brien & Gere Technical Services placed approximately 300 cubic yards of soil, excavated during construction of the groundwater collection trench, into the Corrective Action Management Unit (CAMU) at the site. Approval to do so was provided by the NYSDEC in a letter dated July 14, 1999.

**(b) Sampling and Test Results**

1. The analytical results associated with the SPDES Fact Sheet monitoring activities performed in July 1999 are summarized in Table 1. The laboratory analytical data sheets are provided as Attachment A.

**(c) Projected Activities within next 45 days**

1. The treatment system performance monitoring will continue to be conducted in accordance with the SPDES Permit fact sheet, as modified on March 13, 1997 and November 21, 1997.
2. Continue operation of the groundwater recovery and treatment system.

**(d) Activities in support of Community Relations Plan**

1. None

**(e) Exceedences to SPDES Fact Sheet Limits**

1. None

**Table 1**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Monitoring Requirements and Effluent Data**

Analyte (units)	Monitoring Requirements				Effluent	Effluent	Effluent	Effluent
	Discharge Limitation Daily Average	Discharge Limitation Daily Maximum	Minimum Measurement Frequency(1)	Sample Type	07/01/99	07/06/99	07/07/99	07/08/99
Flow (GPD)	Monitor	150000	Continuous	Meter	26390	25554	---	25941
pH (SU)	6.5 - 8.5		2/Week	Grab	7.89	7.87	---	7.87
Residue, non-filterable (mg/L)	Monitor	20	Weekly	3-hr comp.	---	---	5 U	---
Total dissolved solids (TDS) (mg/L)	Monitor	Monitor	Weekly	3-hr comp.	---	---	470	---
CBOD5 (mg/L)	Monitor	Monitor	Quarterly	3-hr comp.	---	---	5 U	---
TKN (mg/L)	Monitor	Monitor	Quarterly	3-hr comp.	---	---	0.4 U	---
TOD (mg/L)	Monitor	15	Quarterly	Calculated	---	---	9.3 U	---
Dissolved Oxygen (mg/L)	Monitor	7 Min.	Quarterly	Grab	---	---	9.19	---
Aluminum, dissolved (mg/L)	Monitor	0.2	Quarterly	3-hr comp.	---	---	0.1 U	---
Antimony, total (mg/L)	Monitor	0.1	Quarterly	3-hr comp.	---	---	0.06 U	---
Chromium, total (mg/L)	Monitor	0.5	Quarterly	3-hr comp.	---	---	0.01 U	---
Cobalt, total (mg/L)	Monitor	0.01	Quarterly	3-hr comp.	---	---	0.01 U	---
Copper, total (mg/L)	Monitor	0.1	Quarterly	3-hr comp.	---	---	0.01	---
Iron, total (mg/L)	Monitor	0.3	Quarterly	3-hr comp.	---	---	0.05 U	---
Lead, total (mg/L)	Monitor	0.02	Quarterly	3-hr comp.	---	---	0.005 U	---
Mercury, total (mg/L)	Monitor	0.0008	2/Month	3-hr comp.	---	---	0.0002 U	---
Nickel, total (mg/L)	Monitor	0.2	Quarterly	3-hr comp.	---	---	0.05 U	---
Silver, total (mg/L)	Monitor	0.1	Quarterly	3-hr comp.	---	---	0.01 U	---
Vanadium, total (mg/L)	Monitor	0.03	Quarterly	3-hr comp.	---	---	0.03 U	---
Zinc, total (mg/L)	Monitor	0.3	2/Month	3-hr comp.	---	---	0.02	---
cis-1,2-Dichloroethene (ug/L)	Monitor	10	2/Month	Grab	---	---	0.50 U	---
trans-1,2-Dichloroethene (ug/L)	Monitor	10	2/Month	Grab	---	---	0.50 U	---
Methylene chloride (ug/L)	Monitor	50	2/Month	Grab	---	---	2.0 U	---
1,1,2,2-Tetrachloroethane (ug/L)	Monitor	30	2/Month	Grab	---	---	0.50 U	---
Tetrachloroethene (ug/L)	Monitor	20	2/Month	Grab	---	---	0.50 U	---
Toluene (ug/L)	Monitor	20	2/Month	Grab	---	---	0.50 U	---
Trichloroethene (ug/L)	Monitor	10	2/Month	Grab	---	---	0.50 U	---
Acetone (ug/L)	Monitor	1000	2/Month	Grab	---	---	10 U	---
2-Hexanone (ug/L)	Monitor	1000	2/Month	Grab	---	---	5.0 U	---
4-Methyl-2-pentanone (MIBK) (ug/L)	Monitor	1000	2/Month	Grab	---	---	5.0 U	---

NOTES: (1) Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.

--- - Not analyzed, NA - Data not available

U - Not Detected, J - Estimated

TOD = 1.5 X CBOD5 + 4.5 X TKN

**Table 1**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Monitoring Requirements and Effluent Data**

Analyte	Effluent 07/13/99	Effluent 07/14/99	Effluent 07/15/99	Effluent 07/20/99	Effluent 07/21/99	Effluent 07/22/99	Effluent 07/27/99	Effluent 07/28/99
Flow (GPD)	25580	---	25469	25110	---	24960	24618	---
pH (SU)	7.89	---	7.89	7.89	---	7.89	7.89	---
Residue, non-filterable (mg/L)	---	5.0 U	---	---	5 U	---	---	5 U
Total dissolved solids (TDS) (mg/L)	---	540	---	---	580	---	---	700
CBOD5 (mg/L)	---	---	---	---	---	---	---	---
TKN (mg/L)	---	---	---	---	---	---	---	---
TOD (mg/L)	---	---	---	---	---	---	---	---
Dissolved Oxygen (mg/L)	---	---	---	---	---	---	---	---
Aluminum, dissolved (mg/L)	---	---	---	---	---	---	---	---
Antimony, total (mg/L)	---	---	---	---	---	---	---	---
Chromium, total (mg/L)	---	---	---	---	---	---	---	---
Cobalt, total (mg/L)	---	---	---	---	---	---	---	---
Copper, total (mg/L)	---	---	---	---	---	---	---	---
Iron, total (mg/L)	---	---	---	---	---	---	---	---
Lead, total (mg/L)	---	---	---	---	---	---	---	---
Mercury, total (mg/L)	---	---	---	---	0.0002 U	---	---	---
Nickel, total (mg/L)	---	---	---	---	---	---	---	---
Silver, total (mg/L)	---	---	---	---	---	---	---	---
Vanadium, total (mg/L)	---	---	---	---	---	---	---	---
Zinc, total (mg/L)	---	---	---	---	0.02	---	---	---
cis-1,2-Dichloroethene (ug/L)	---	---	---	---	0.50 U	---	---	---
trans-1,2-Dichloroethene (ug/L)	---	---	---	---	0.50 U	---	---	---
Methylene chloride (ug/L)	---	---	---	---	2.0 U	---	---	---
1,1,2,2-Tetrachloroethane (ug/L)	---	---	---	---	0.50 U	---	---	---
Tetrachloroethene (ug/L)	---	---	---	---	0.50 U	---	---	---
Toluene (ug/L)	---	---	---	---	0.50 U	---	---	---
Trichloroethene (ug/L)	---	---	---	---	0.50 U	---	---	---
Acetone (ug/L)	---	---	---	---	10 U	---	---	---
2-Hexanone (ug/L)	---	---	---	---	5.0 U	---	---	---
4-Methyl-2-pentanone (MIBK) (ug/L)	---	---	---	---	5.0 U	---	---	---

NOTES: (1) Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.  
 --- - Not analyzed, NA - Data not available  
 U - Not Detected, J - Estimated  
 TOD = 1.5 X CBOD5 + 4.5 X TKN

**Table 1**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Monitoring Requirements and Effluent Data**

Analyte	Effluent
Flow (GPD)	24080
pH (SU)	7.89
Residue, non-filterable (mg/L)	---
Total dissolved solids (TDS) (mg/L)	---
CBOD5 (mg/L)	---
TKN (mg/L)	---
TOD (mg/L)	---
Dissolved Oxygen (mg/L)	---
Aluminum, dissolved (mg/L)	---
Antimony, total (mg/L)	---
Chromium, total (mg/L)	---
Cobalt, total (mg/L)	---
Copper, total (mg/L)	---
Iron, total (mg/L)	---
Lead, total (mg/L)	---
Mercury, total (mg/L)	---
Nickel, total (mg/L)	---
Silver, total (mg/L)	---
Vanadium, total (mg/L)	---
Zinc, total (mg/L)	---
cis-1,2-Dichloroethene (ug/L)	---
trans-1,2-Dichloroethene (ug/L)	---
Methylene chloride (ug/L)	---
1,1,2,2-Tetrachloroethane (ug/L)	---
Tetrachloroethene (ug/L)	---
Toluene (ug/L)	---
Trichloroethene (ug/L)	---
Acetone (ug/L)	---
2-Hexanone (ug/L)	---
4-Methyl-2-pentanone (MIBK) (ug/L)	---

NOTES: (1) Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.

--- - Not analyzed, NA - Data not available

U - Not Detected, J - Estimated

TOD = 1.5 X CBOD5 + 4.5 X TKN

**ATTACHMENT A**

**SPDES PERMIT COMPLIANCE MONITORING  
LABORATORY ANALYTICAL DATA SHEETS**

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Wet Chemistry

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: M6097  
Samp. Description: WTP Effluent - Composite

Collected: 07/07/99 11:10      Matrix: Water  
Received: 07/07/99 15:35

Parameter	Result Units	Method	Prepared	Analyzed	QC Batch	Note
CBOD5	<5. mg/L	EPA 405.1		07/08/99	070899W19	
Total Kjeldahl nitrogen	<.4 mg/L	EPA 351.2	07/13/99	07/15/99	071399W4	
Total dissolved solids	470. mg/L	EPA 160.1		07/13/99	071399W15	
Total suspended solids	<5. mg/L	EPA 160.2		07/13/99	071399W12	

Notes:

J-Estimated value

Authorized: \_\_\_\_\_  
Date: July 21, 1999

Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Trace Metals

Client: O'Brien & Gere Engineers, Inc.  
 Project: Accurate Die Casting - Fayetteville, NY  
 Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
 Certification NY No.: 10155

Sample: M6097  
 Samp. Description: WTP Effluent - Composite  
 Units: mg/L

Collected: 07/07/99  
 Received: 07/07/99  
 Matrix: Water  
 %Solids:  
 Number of analytes: 11

Parameter	Result	Qual	MDL	RL	Method	Prepared	Analyzed	QC Batch	Dilut.	Note
Antimony	<.06	U	.003	.06	200.7	07/11/99	07/12/99	071199W1		1
Chromium	<.01	U	.001	.01	200.7	07/11/99	07/12/99	071199W1		1
Cobalt	<.01	U	.001	.01	200.7	07/11/99	07/12/99	071199W1		1
Copper	.01		.001	.01	200.7	07/11/99	07/12/99	071199W1		1
Iron	<.05	U	.018	.05	200.7	07/11/99	07/12/99	071199W1		1
Lead	<.005	U	.0022	.005	200.7	07/11/99	07/12/99	071199W1		1
Mercury	<.0002	U	.0001	.0002	245.1	07/14/99	07/15/99	071499W1		1
Nickel	<.05	U	.001	.05	200.7	07/11/99	07/12/99	071199W1		1
Silver	<.01	U	.001	.01	200.7	07/11/99	07/12/99	071199W1		1
Vanadium	<.03	U	.0003	.03	200.7	07/11/99	07/12/99	071199W1		1
Zinc	.02		.002	.01	200.7	07/11/99	07/12/99	071199W1		1

Notes:

U-Undetected at the reported level. J-reported value is estimated.

Authorized: Monika Santucci  
 Date: July 16, 1999

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Trace Metals

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: M6098  
Samp. Description: WTP Effluent (Filtered)  
Units: mg/L

Collected: 07/07/99      Matrix: Water  
Received: 07/07/99      %Solids:  
Number of analytes: 1

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>MDL</u>	<u>RL</u>	<u>Method</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>QC Batch</u>	<u>Dilut. Note</u>
Aluminum, filtered	<.1	U	.02	.1	200.7	07/11/99	07/12/99	071199W1	1

Notes:

U-Undetected at the reported level. J-reported value is estimated.

Authorized:  
Date: July 16, 1999

  
Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: M6094  
Samp. Description: WTP Influent  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 50 Instrument: 9001

Collected: 07/07/99  
Received: 07/07/99  
Prepared:  
Analyzed: 07/16/99

Matrix: Water  
QC Batch: 071699W1  
%Solids:  
Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL	Notes
Benzene	<50.	U	1		50.	
Bromodichloromethane	<50.	U	1		50.	
Bromoform	<500.	U	1		500.	
Bromomethane	<500.	U	1		500.	
Carbon tetrachloride	<50.	U	1		50.	
Chlorobenzene	<50.	U	1		50.	
Chloroethane	<50.	U	1		50.	
2-Chloroethylvinyl ether	<500.	U	1		500.	
Chloroform	<50.	U	1		50.	
Chloromethane	<500.	U	1		500.	
Dibromochloromethane	<50.	U	1		50.	
1,2-Dichlorobenzene	<250.	U	1		250.	
1,3-Dichlorobenzene	<250.	U	1		250.	
1,4-Dichlorobenzene	<250.	U	1		250.	
Dichlorodifluoromethane	<500.	U	1		500.	
1,1-Dichloroethane	<50.	U	1		50.	
1,2-Dichloroethane	<50.	U	1		50.	
1,1-Dichloroethylene	<50.	U	1		50.	
cis-1,2-Dichloroethylene	<50.	U	1		50.	
trans-1,2-Dichloroethylene	<50.	U	1		50.	
Dichloromethane	<50.	U	1		50.	
1,2-Dichloropropane	<50.	U	1		50.	
cis-1,3-Dichloropropylene	<50.	U	1		50.	
trans-1,3-Dichloropropylene	<50.	U	1		50.	
Ethylbenzene	<50.	U	1		50.	
1,1,2,2-Tetrachloroethane	<50.	U	1		50.	
Tetrachloroethylene	<50.	U	1		50.	
Toluene	<50.	U	1		50.	
1,1,1-Trichloroethane	<50.	U	1		50.	

# - Outside control limits. U - Undetected at the reported level.  
J - reported value is estimated.  
E - concentration exceeded the calibration range and is estimated.

Authorized: Monika Santucci  
Date: July 19, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
 Project: Accurate Die Casting - Fayetteville, NY  
 Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
 Certification NY No.: 10155

Sample: M6094  
 Samp. Description: WTP Influent  
 Primary column: Y  
 Units: ug/L  
 Column: DB-VRX 75m x .45mm ID  
 Dilution: 50 Instrument: 9001

Collected: 07/07/99  
 Received: 07/07/99  
 Prepared:  
 Analyzed: 07/16/99

Matrix: Water  
 QC Batch: 071699W1  
 %Solids:  
 Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL	Notes
1,1,2-Trichloroethane	<50.	U	1		50.	
Trichloroethylene	530.		1		50.	
Trichlorofluoromethane	<50.	U	1		50.	
Vinyl Chloride	<50.	U	1		50.	
Xylenes (total)	<150.	U	1		150.	

Surrogate	Result	Qual	Col	Limits	Notes
2-Chloropropane (surrogate)	101.%		1	69-118	
Fluorobenzene (surrogate)	100.%		1	85-119	

Notes:

- # - Outside control limits. U - Undetected at the reported level.
- J - reported value is estimated.
- E - concentration exceeded the calibration range and is estimated.

Authorized: Monika Santucci  
 Date: July 19, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: M6095  
Samp. Description: WTP Between GACs  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 1 Instrument: 9001

Collected: 07/07/99  
Received: 07/07/99  
Prepared:  
Analyzed: 07/16/99

Matrix: Water  
QC Batch: 071699W1  
%Solids:  
Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL	Notes
Benzene	<1.	U	1		1.	
Bromodichloromethane	<1.	U	1		1.	
Bromoform	<10.	U	1		10.	
Bromomethane	<10.	U	1		10.	
Carbon tetrachloride	<1.	U	1		1.	
Chlorobenzene	<1.	U	1		1.	
Chloroethane	<1.	U	1		1.	
2-Chloroethylvinyl ether	<10.	U	1		10.	
Chloroform	<1.	U	1		1.	
Chloromethane	<10.	U	1		10.	
Dibromochloromethane	<1.	U	1		1.	
1,2-Dichlorobenzene	<5.	U	1		5.	
1,3-Dichlorobenzene	<5.	U	1		5.	
1,4-Dichlorobenzene	<5.	U	1		5.	
Dichlorodifluoromethane	<10.	U	1		10.	
1,1-Dichloroethane	<1.	U	1		1.	
1,2-Dichloroethane	<1.	U	1		1.	
1,1-Dichloroethylene	<1.	U	1		1.	
cis-1,2-Dichloroethylene	2.		1		1.	
trans-1,2-Dichloroethylene	<1.	U	1		1.	
Dichloromethane	<1.	U	1		1.	
1,2-Dichloropropane	<1.	U	1		1.	
cis-1,3-Dichloropropylene	<1.	U	1		1.	
trans-1,3-Dichloropropylene	<1.	U	1		1.	
Ethylbenzene	<1.	U	1		1.	
1,1,2,2-Tetrachloroethane	<1.	U	1		1.	
Tetrachloroethylene	<1.	U	1		1.	
Toluene	<1.	U	1		1.	
1,1,1-Trichloroethane	<1.	U	1		1.	

# - Outside control limits. U - Undetected at the reported level.  
J - reported value is estimated.  
E - concentration exceeded the calibration range and is estimated.

Authorized: Monika Santucci  
Date: July 19, 1999

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
 Project: Accurate Die Casting - Fayetteville, NY  
 Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
 Certification NY No.: 10155

Sample: M6095  
 Samp. Description: WTP Between GACs  
 Primary column: Y  
 Units: ug/L  
 Column: DB-VRX 75m x .45mm ID  
 Dilution: 1 Instrument: 9001

Collected: 07/07/99  
 Received: 07/07/99  
 Prepared:  
 Analyzed: 07/16/99

Matrix: Water  
 QC Batch: 071699W1  
 %Solids:  
 Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL	Notes
1,1,2-Trichloroethane	<1.	U	1		1.	
Trichloroethylene	15.		1		1.	
Trichlorofluoromethane	<1.	U	1		1.	
Vinyl Chloride	<1.	U	1		1.	
Xylenes (total)	<3.	U	1		3.	

Surrogate	Result	Qual	Col	Limits	Notes
2-Chloropropane (surrogate)	102.%		1	69-118	
Fluorobenzene (surrogate)	100.%		1	85-119	

Notes:

# - Outside control limits. U - Undetected at the reported level.  
 J - reported value is estimated.  
 E - concentration exceeded the calibration range and is estimated.

Authorized:  
 Date: July 19, 1999

  
 \_\_\_\_\_  
 Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8260

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: M6096  
Samp. Description: WTP Effluent - Grab  
Instrument: HP5970 GC/MS#2  
Units: ug/L  
Number of analytes: 14

Collected: 07/07/99  
Received: 07/07/99  
Prepared: 07/14/99  
Matrix: Water  
QC Batch: 071499W2  
%Solids:  
Purge volume: 25 mL

Parameter	Result	Surrog		Analyzed	Notes
		Limits	Dilution		
Acetone	<10.		1	07/14/99	
Methylene chloride	<2.0		1	07/14/99	
trans-1,2-Dichloroethene	<.50		1	07/14/99	
cis-1,2-Dichloroethene	<.50		1	07/14/99	
Trichloroethene	<.50		1	07/14/99	
4-Methyl-2-pentanone	<5.0		1	07/14/99	
Toluene	<.50		1	07/14/99	
2-Hexanone	<5.0		1	07/14/99	
Tetrachloroethene	<.50		1	07/14/99	
1,1,2,2-Tetrachloroethane	<.50		1	07/14/99	
Dibromofluoromethane (surrogate)	99.%	61-136	1	07/14/99	
1,2-Dichloroethane-d4 (surrogate)	96.%	80-135	1	07/14/99	
Toluene-d8 (surrogate)	97.%	84-114	1	07/14/99	
Bromofluorobenzene (surrogate)	91.%	77-117	1	07/14/99	

Notes:

# - Outside control limits J-Estimated value

Authorized: Monika Santucci  
Date: July 15, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Wet Chemistry

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Weekly Effluent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: M7102  
Samp. Description: WTP Effluent

Collected: 07/14/99  
Received: 07/14/99 15:40  
Matrix: Water

Parameter	Result	Qual	MDL	RL	Units	Method	Prepared	Analyzed	QC Batch	Note
Total dissolved solids	540.			10	mg/L	EPA 160.1		07/20/99	072099W14	
Total suspended solids	<5.0	U		5	mg/L	EPA 160.2		07/19/99	071999W12	

Notes:

U-Undetected at reported level. J-reported value is estimated.

Authorized: \_\_\_\_\_  
Date: July 24, 1999

*Monika Santucci*  
Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Wet Chemistry

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Bi-Monthly Effluent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: M7733  
Samp. Description: WTP Effluent - Composite

Collected: 07/21/99  
Received: 07/21/99 15:20  
Matrix: Water

<u>Parameter</u>	<u>Result Units</u>	<u>Method</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>QC Batch</u>	<u>Note</u>
Total dissolved solids	580. mg/L	EPA 160.1		07/27/99	072799W12	
Total suspended solids	<5. mg/L	EPA 160.2		07/27/99	072799W13	

Notes:

J-Estimated value

Authorized: Monika Santucci  
Date: August 5, 1999

Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Trace Metals

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Bi-Monthly Effluent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: M7733  
Samp. Description: WTP Effluent - Composite  
Units: mg/L

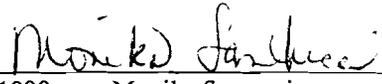
Collected: 07/21/99      Matrix: Water  
Received: 07/21/99      %Solids:  
Number of analytes: 2

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>MDL</u>	<u>RL</u>	<u>Method</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>QC Batch</u>	<u>Dilut.</u>	<u>Note</u>
Mercury	<.0002	U	.0001	.0002	245.1	07/29/99	07/28/99	072799W3		1
Zinc	.02		.002	.01	200.7	07/26/99	07/28/99	072699W1		1

Notes:

U-Undetected at the reported level. J-reported value is estimated.

Authorized: \_\_\_\_\_  
Date: August 3, 1999

  
Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8260

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Bi-Monthly Effluent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: M7732  
Samp. Description: WTP Effluent - Grab  
Instrument: HP5970 GC/MS#2  
Units: ug/L  
Number of analytes: 14

Collected: 07/21/99  
Received: 07/21/99  
Prepared: 07/23/99  
Matrix: Water  
QC Batch: 072399W2  
% Solids:  
Purge volume: 25 mL

Parameter	Result	Surrog		Notes
		Limits	Dilution	
Acetone	<10.		1	07/23/99
Methylene chloride	<2.0		1	07/23/99
trans-1,2-Dichloroethene	<.50		1	07/23/99
cis-1,2-Dichloroethene	<.50		1	07/23/99
Trichloroethene	<.50		1	07/23/99
4-Methyl-2-pentanone	<5.0		1	07/23/99
Toluene	<.50		1	07/23/99
2-Hexanone	<5.0		1	07/23/99
Tetrachloroethene	<.50		1	07/23/99
1,1,2,2-Tetrachloroethane	<.50		1	07/23/99
Dibromofluoromethane (surrogate)	97.%	61-136	1	07/23/99
1,2-Dichloroethane-d4 (surrogate)	95.%	80-135	1	07/23/99
Toluene-d8 (surrogate)	95.%	84-114	1	07/23/99
Bromofluorobenzene (surrogate)	90.%	77-117	1	07/23/99

Notes:

# - Outside control limits J-Estimated value

Authorized: \_\_\_\_\_  
Date: July 26, 1999

*Monika Santucci*  
\_\_\_\_\_  
Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Wet Chemistry

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Weekly Effluent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: M8330  
Samp. Description: WTP Effluent

Collected: 07/28/99  
Received: 07/28/99 15:15  
Matrix: Water

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Method</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>QC Batch</u>	<u>Note</u>
Total dissolved solids	700.	mg/L	EPA 160.1		08/02/99	080299W11	
Total suspended solids	<5.	mg/L	EPA 160.2		08/03/99	080399W18	

Notes:

J-Estimated value

Authorized: Monika Santucci  
Date: August 7, 1999  
Monika Santucci



SEP 16

September 10, 1999

Mr. David Crosby, P.E.  
Bureau of Construction Services  
Division of Hazardous Waste Remediation  
New York State Department of Environmental Conservation  
50 Wolf Road  
Albany, NY 12233-7010

Re: Former Accurate Die Casting Site  
Fayetteville, NY

File: 2488/23123 #2

Dear Mr. Crosby:

Enclosed is the monthly progress report, required by the Order on Consent (#A7-0318-94-10) for the former Accurate Die Casting site in Fayetteville, New York, for the month of August 1999. Included in the progress report are the results of the monitoring activities associated with the SPDES Fact Sheet for the ground water treatment system through August 1999. If you have any questions regarding these reports, please do not hesitate to call me.

Very truly yours,

O'BRIEN & GERE ENGINEERS, INC.

A handwritten signature in black ink, appearing to read 'Alfred R. Farrell', is written over a light-colored background.

Alfred R. Farrell, P.E.  
Senior Project Engineer

I:\DIV71\PROJECTS\2488\23123\2\_CORRES\8-99\MOR.WPD

Attachments

cc: V. Nattanmai, P.E. - NYSDEC  
A. English - NYSDEC  
T. Male - NYSDEC  
Central Field Unit: Project Attorney Accurate Die Site - NYSDEC  
C. Branagh, P.E. - NYSDEC Region 7  
Director, Bureau of Environmental Exposure Investigation - NYSDOH (2 copies)  
H. Hamel - NYSDOH  
T. Brown, P.E. - O'Brien & Gere Technical Services, Inc.  
R. Cheesman, P.E. - O'Brien & Gere Technical Services, Inc



**FORMER ACCURATE DIE CASTING SITE  
FAYETTEVILLE, NEW YORK**

**Monthly Progress Report for: August 1999**

**(a) Activities Performed/Correspondences with NYSDEC**

1. During the month of August 1999, O'Brien & Gere continued operating the ground water collection and treatment system. As of August 31, 1999, a total of 28,775,820 gallons of ground water has been treated since startup on February 5, 1996. Since July 30, 1999, 686,710 gallons of groundwater was treated; 562,080 gallons from recovery well RW-1 and 124,630 gallons from RW-2. No flow was recovered during the period from the sump outside the northeast corner of the building, or from the groundwater collection trench constructed in the former VOC/PAH/PCB Soils Area.
2. During the month of August 1999, O'Brien & Gere performed the sampling activities associated with the SPDES Fact Sheet (#734052) required by the Consent Order. The results of the SPDES sampling of the groundwater treatment system effluent are discussed in Item b.

**(b) Sampling and Test Results**

1. The analytical results associated with the SPDES Fact Sheet monitoring activities performed in August 1999 are summarized in Table 1. The laboratory analytical data sheets are provided as Attachment A.

**(c) Projected Activities within next 45 days**

1. The treatment system performance monitoring will continue to be conducted in accordance with the SPDES Permit fact sheet, as modified on March 13, 1997 and November 21, 1997.
2. Continue operation of the groundwater recovery and treatment system.

**(d) Activities in support of Community Relations Plan**

1. None

**(e) Exceedences to SPDES Fact Sheet Limits**

1. None

**Table 1**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Monitoring Requirements and Effluent Data**

Analyte (units)	Monitoring Requirements				Effluent	Effluent	Effluent	Effluent
	Discharge Limitation Daily Average	Discharge Limitation Daily Maximum	Minimum Measurement Frequency(1)	Sample Type	08/03/99	08/04/99	08/05/99	08/10/99
Flow (GPD)	Monitor	150000	Continuous	Meter	23220	---	22929	22110
pH (SU)	6.5 - 8.5		2/Week	Grab	7.89	---	7.89	7.91
Residue, non-filterable (mg/L)	Monitor	20	Weekly	3-hr comp.	---	5 U	---	---
Total dissolved solids (TDS) (mg/L)	Monitor	Monitor	Weekly	3-hr comp.	---	540	---	---
CBOD5 (mg/L)	Monitor	Monitor	Quarterly	3-hr comp.	---	---	---	---
TKN (mg/L)	Monitor	Monitor	Quarterly	3-hr comp.	---	---	---	---
TOD (mg/L)	Monitor	15	Quarterly	Calculated	---	---	---	---
Dissolved Oxygen (mg/L)	Monitor	7 Min.	Quarterly	Grab	---	9.58	---	---
Aluminum, dissolved (mg/L)	Monitor	0.2	Quarterly	3-hr comp.	---	---	---	---
Antimony, total (mg/L)	Monitor	0.1	Quarterly	3-hr comp.	---	---	---	---
Chromium, total (mg/L)	Monitor	0.5	Quarterly	3-hr comp.	---	---	---	---
Cobalt, total (mg/L)	Monitor	0.01	Quarterly	3-hr comp.	---	---	---	---
Copper, total (mg/L)	Monitor	0.1	Quarterly	3-hr comp.	---	---	---	---
Iron, total (mg/L)	Monitor	0.3	Quarterly	3-hr comp.	---	---	---	---
Lead, total (mg/L)	Monitor	0.02	Quarterly	3-hr comp.	---	---	---	---
Mercury, total (mg/L)	Monitor	0.0008	2/Month	3-hr comp.	---	0.0002 U	---	---
Nickel, total (mg/L)	Monitor	0.2	Quarterly	3-hr comp.	---	---	---	---
Silver, total (mg/L)	Monitor	0.1	Quarterly	3-hr comp.	---	---	---	---
Vanadium, total (mg/L)	Monitor	0.03	Quarterly	3-hr comp.	---	---	---	---
Zinc, total (mg/L)	Monitor	0.3	2/Month	3-hr comp.	---	0.04	---	---
cis-1,2-Dichloroethene (ug/L)	Monitor	10	2/Month	Grab	---	0.50 U	---	---
trans-1,2-Dichloroethene (ug/L)	Monitor	10	2/Month	Grab	---	0.50 U	---	---
Methylene chloride (ug/L)	Monitor	50	2/Month	Grab	---	2.0 U	---	---
1,1,2,2-Tetrachloroethane (ug/L)	Monitor	30	2/Month	Grab	---	0.50 U	---	---
Tetrachloroethene (ug/L)	Monitor	20	2/Month	Grab	---	0.50 U	---	---
Toluene (ug/L)	Monitor	20	2/Month	Grab	---	0.50 U	---	---
Trichloroethene (ug/L)	Monitor	10	2/Month	Grab	---	0.50 U	---	---
Acetone (ug/L)	Monitor	1000	2/Month	Grab	---	10 U	---	---
2-Hexanone (ug/L)	Monitor	1000	2/Month	Grab	---	5.0 U	---	---
4-Methyl-2-pentanone (MIBK) (ug/L)	Monitor	1000	2/Month	Grab	---	5.0 U	---	---

NOTES: (1) Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.

--- - Not analyzed, NA - Data not available

U - Not Detected, J - Estimated

TOD = 1.5 X CBOD5 + 4.5 X TKN

**Table 1**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Monitoring Requirements and Effluent Data**

Analyte	Effluent 08/11/99	Effluent 08/12/99	Effluent 08/17/99	Effluent 08/18/99	Effluent 08/19/99	Effluent 08/24/99	Effluent 08/25/99	Effluent 08/26/99
Flow (GPD)	---	21890	21210	---	20900	20310	---	20050
pH (SU)	---	7.89	7.89	---	7.89	7.89	---	7.89
Residue, non-filterable (mg/L)	5 U	---	---	5 U	---	---	5 U	---
Total dissolved solids (TDS) (mg/L)	630	---	---	730	---	---	690	---
CBOD5 (mg/L)	---	---	---	---	---	---	---	---
TKN (mg/L)	---	---	---	---	---	---	---	---
TOD (mg/L)	---	---	---	---	---	---	---	---
Dissolved Oxygen (mg/L)	---	---	---	---	---	---	---	---
Aluminum, dissolved (mg/L)	---	---	---	---	---	---	---	---
Antimony, total (mg/L)	---	---	---	---	---	---	---	---
Chromium, total (mg/L)	---	---	---	---	---	---	---	---
Cobalt, total (mg/L)	---	---	---	---	---	---	---	---
Copper, total (mg/L)	---	---	---	---	---	---	---	---
Iron, total (mg/L)	---	---	---	---	---	---	---	---
Lead, total (mg/L)	---	---	---	---	---	---	---	---
Mercury, total (mg/L)	---	---	---	0.0003	---	---	---	---
Nickel, total (mg/L)	---	---	---	---	---	---	---	---
Silver, total (mg/L)	---	---	---	---	---	---	---	---
Vanadium, total (mg/L)	---	---	---	---	---	---	---	---
Zinc, total (mg/L)	---	---	---	0.05	---	---	---	---
cis-1,2-Dichloroethene (ug/L)	---	---	---	0.50 U	---	---	---	---
trans-1,2-Dichloroethene (ug/L)	---	---	---	0.50 U	---	---	---	---
Methylene chloride (ug/L)	---	---	---	2.0 U	---	---	---	---
1,1,2,2-Tetrachloroethane (ug/L)	---	---	---	0.50 U	---	---	---	---
Tetrachloroethene (ug/L)	---	---	---	0.50 U	---	---	---	---
Toluene (ug/L)	---	---	---	0.50 U	---	---	---	---
Trichloroethene (ug/L)	---	---	---	0.50 U	---	---	---	---
Acetone (ug/L)	---	---	---	10 U	---	---	---	---
2-Hexanone (ug/L)	---	---	---	5.0 U	---	---	---	---
4-Methyl-2-pentanone (MIBK) (ug/L)	---	---	---	5.0 U	---	---	---	---

NOTES: (1) Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.

--- - Not analyzed, NA - Data not available

U - Not Detected, J - Estimated

TOD = 1.5 X CBOD5 + 4.5 X TKN

**Table 1**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Monitoring Requirements and Effluent Data**

Analyte	Effluent 08/31/99
Flow (GPD)	19480
pH (SU)	7.93
Residue, non-filterable (mg/L)	---
Total dissolved solids (TDS) (mg/L)	---
CBOD5 (mg/L)	---
TKN (mg/L)	---
TOD (mg/L)	---
Dissolved Oxygen (mg/L)	---
Aluminum, dissolved (mg/L)	---
Antimony, total (mg/L)	---
Chromium, total (mg/L)	---
Cobalt, total (mg/L)	---
Copper, total (mg/L)	---
Iron, total (mg/L)	---
Lead, total (mg/L)	---
Mercury, total (mg/L)	---
Nickel, total (mg/L)	---
Silver, total (mg/L)	---
Vanadium, total (mg/L)	---
Zinc, total (mg/L)	---
cis-1,2-Dichloroethene (ug/L)	---
trans-1,2-Dichloroethene (ug/L)	---
Methylene chloride (ug/L)	---
1,1,2,2-Tetrachloroethane (ug/L)	---
Tetrachloroethene (ug/L)	---
Toluene (ug/L)	---
Trichloroethene (ug/L)	---
Acetone (ug/L)	---
2-Hexanone (ug/L)	---
4-Methyl-2-pentanone (MIBK) (ug/L)	---

NOTES: (1) Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.  
 --- - Not analyzed, NA - Data not available  
 U - Not Detected, J - Estimated  
 TOD = 1.5 X CBOD5 + 4.5 X TKN

**ATTACHMENT A**

**SPDES PERMIT COMPLIANCE MONITORING  
LABORATORY ANALYTICAL DATA SHEETS**

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Bi-Monthly Effluent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: M8792  
Samp. Description: WTP Influent  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 25 Instrument: 9001

Collected: 08/04/99  
Received: 08/04/99  
Prepared:  
Analyzed: 08/17/99

Matrix: Water  
QC Batch: 081799W1  
% Solids:  
Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL Notes
Benzene	<25.	U	1		25.
Bromodichloromethane	<25.	U	1		25.
Bromoform	<250.	U	1		250.
Bromomethane	<250.	U	1		250.
Carbon tetrachloride	<25.	U	1		25.
Chlorobenzene	<25.	U	1		25.
Chloroethane	<25.	U	1		25.
2-Chloroethylvinyl ether	<250.	U	1		250.
Chloroform	<25.	U	1		25.
Chloromethane	<250.	U	1		250.
Dibromochloromethane	<25.	U	1		25.
1,2-Dichlorobenzene	<120.	U	1		125.
1,3-Dichlorobenzene	<120.	U	1		125.
1,4-Dichlorobenzene	<120.	U	1		125.
Dichlorodifluoromethane	<250.	U	1		250.
1,1-Dichloroethane	<25.	U	1		25.
1,2-Dichloroethane	<25.	U	1		25.
1,1-Dichloroethylene	<25.	U	1		25.
cis-1,2-Dichloroethylene	<25.	U	1		25.
trans-1,2-Dichloroethylene	<25.	U	1		25.
Dichloromethane	<25.	U	1		25.
1,2-Dichloropropane	<25.	U	1		25.
cis-1,3-Dichloropropylene	<25.	U	1		25.
trans-1,3-Dichloropropylene	<25.	U	1		25.
Ethylbenzene	<25.	U	1		25.
1,1,2,2-Tetrachloroethane	<25.	U	1		25.
Tetrachloroethylene	<25.	U	1		25.
Toluene	<25.	U	1		25.
1,1,1-Trichloroethane	<25.	U	1		25.

# - Outside control limits. U - Undetected at the reported level.  
J - reported value is estimated.  
E - concentration exceeded the calibration range and is estimated.

Authorized: Monika Santucci  
Date: August 18, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Bi-Monthly Effluent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: M8792  
Samp. Description: WTP Influent  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 25 Instrument: 9001

Collected: 08/04/99  
Received: 08/04/99  
Prepared:  
Analyzed: 08/17/99

Matrix: Water  
QC Batch: 081799W1  
%Solids:  
Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL	Notes
1,1,2-Trichloroethane	<25.	U	1		25.	
Trichloroethylene	420.		1		25.	
Trichlorofluoromethane	<25.	U	1		25.	
Vinyl Chloride	<25.	U	1		25.	
Xylenes (total)	<75.	U	1		75.	

Surrogate	Result	Qual	Col	Limits	Notes
2-Chloropropane (surrogate)	93.%		1	69-118	
Fluorobenzene (surrogate)	99.%		1	85-119	

Notes:

# - Outside control limits. U - Undetected at the reported level.  
J - reported value is estimated.  
E - concentration exceeded the calibration range and is estimated.

Authorized: Monika Santucci  
Date: August 18, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Bi-Monthly Effluent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: M8793  
Samp. Description: WTP Between GACs  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 2 Instrument: 9001

Collected: 08/04/99  
Received: 08/04/99  
Prepared:  
Analyzed: 08/18/99

Matrix: Water  
QC Batch: 081799W1  
%Solids:  
Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL Notes
Benzene	<2.	U	1		2.
Bromodichloromethane	<2.	U	1		2.
Bromoform	<20.	U	1		20.
Bromomethane	<20.	U	1		20.
Carbon tetrachloride	<2.	U	1		2.
Chlorobenzene	<2.	U	1		2.
Chloroethane	<2.	U	1		2.
2-Chloroethylvinyl ether	<20.	U	1		20.
Chloroform	<2.	U	1		2.
Chloromethane	<20.	U	1		20.
Dibromochloromethane	<2.	U	1		2.
1,2-Dichlorobenzene	<10.	U	1		10.
1,3-Dichlorobenzene	<10.	U	1		10.
1,4-Dichlorobenzene	<10.	U	1		10.
Dichlorodifluoromethane	<20.	U	1		20.
1,1-Dichloroethane	<2.	U	1		2.
1,2-Dichloroethane	<2.	U	1		2.
1,1-Dichloroethylene	<2.	U	1		2.
cis-1,2-Dichloroethylene	3.		1		2.
trans-1,2-Dichloroethylene	<2.	U	1		2.
Dichloromethane	<2.	U	1		2.
1,2-Dichloropropane	<2.	U	1		2.
cis-1,3-Dichloropropylene	<2.	U	1		2.
trans-1,3-Dichloropropylene	<2.	U	1		2.
Ethylbenzene	<2.	U	1		2.
1,1,2,2-Tetrachloroethane	<2.	U	1		2.
Tetrachloroethylene	<2.	U	1		2.
Toluene	<2.	U	1		2.
1,1,1-Trichloroethane	<2.	U	1		2.

# - Outside control limits. U - Undetected at the reported level.  
J - reported value is estimated.  
E - concentration exceeded the calibration range and is estimated.

Authorized: Monika Santucci  
Date: August 18, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Bi-Monthly Effluent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: M8793  
Samp. Description: WTP Between GACs  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 2 Instrument: 9001

Collected: 08/04/99 Matrix: Water  
Received: 08/04/99 QC Batch: 081799W1  
Prepared: %Solids:  
Analyzed: 08/18/99 Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL	Notes
1,1,2-Trichloroethane	<2.	U	1		2.	
Trichloroethylene	75.		1		2.	
Trichlorofluoromethane	<2.	U	1		2.	
Vinyl Chloride	<2.	U	1		2.	
Xylenes (total)	<6.	U	1		6.	

Surrogate	Result	Qual	Col	Limits	Notes
2-Chloropropane (surrogate)	97.%		1	69-118	
Fluorobenzene (surrogate)	100.%		1	85-119	

Notes:

# - Outside control limits. U - Undetected at the reported level.  
J - reported value is estimated.  
E - concentration exceeded the calibration range and is estimated.

Authorized: Monika Santucci  
Date: August 18, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8260

Client: O'Brien & Gere Engineers, Inc.  
 Project: Accurate Die Casting - Fayetteville, NY  
 Proj. Desc: Bi-Monthly Effluent Sampling

Job No.: 3435.021.517  
 Certification NY No.: 10155

Sample: M8794  
 Samp. Description: WTP Effluent - Grab  
 Instrument: HP5970 GC/MS#2  
 Units: ug/L  
 Number of analytes: 14

Collected: 08/04/99  
 Received: 08/04/99  
 Prepared: 08/10/99  
 Matrix: Water  
 QC Batch: 081099W2  
 %Solids:  
 Purge volume: 25 mL

Parameter	Result	Surrog		Analyzed	Notes
		Limits	Dilution		
Acetone	<10.		1	08/10/99	
Methylene chloride	<2.0		1	08/10/99	
trans-1,2-Dichloroethene	<.50		1	08/10/99	
cis-1,2-Dichloroethene	<.50		1	08/10/99	
Trichloroethene	<.50		1	08/10/99	
4-Methyl-2-pentanone	<5.0		1	08/10/99	
Toluene	<.50		1	08/10/99	
2-Hexanone	<5.0		1	08/10/99	
Tetrachloroethene	<.50		1	08/10/99	
1,1,2,2-Tetrachloroethane	<.50		1	08/10/99	
Dibromofluoromethane (surrogate)	92.%	61-136	1	08/10/99	
1,2-Dichloroethane-d4 (surrogate)	95.%	80-135	1	08/10/99	
Toluene-d8 (surrogate)	96.%	84-114	1	08/10/99	
Bromofluorobenzene (surrogate)	91.%	77-117	1	08/10/99	

Notes:

# - Outside control limits J-Estimated value

Authorized: *Monika Santucci*  
 Date: August 10, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Trace Metals

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Bi-Monthly Effluent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: M8795  
Samp. Description: WTP Effluent - Composite  
Units: mg/L

Collected: 08/04/99      Matrix: Water  
Received: 08/04/99      %Solids:  
Number of analytes: 2

Parameter	Result	Method	Prepared	Analyzed	QC Batch	Dilut.	Note
Mercury	<.0002	245.1	08/12/99	08/13/99	081299W1		1
Zinc	.04	200.7	08/06/99	08/09/99	080699W1		1

Notes:

J-Estimated value

Authorized: Monika Santucci  
Date: August 19, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Wet Chemistry

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Bi-Monthly Effluent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: M8795  
Samp. Description: WTP Effluent - Composite

Collected: 08/04/99  
Received: 08/04/99 15:35  
Matrix: Water

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Method</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>QC Batch</u>	<u>Note</u>
Total dissolved solids	540.	mg/L	EPA 160.1		08/09/99	080999W11	
Total suspended solids	<5.	mg/L	EPA 160.2		08/09/99	080999W12	

Notes:

J-Estimated value

Authorized: Monika Santucci  
Date: August 19, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

5000 Brittonfield Parkway  
 East Syracuse, New York 13057  
 (315) 437-0200

2766  
**Chain of Custody**

Client: O'BRIEN & GERE TECHNICAL SERVICES INC						Analysis/Method									
Project: FORMER ACCURATE DIE						VOCs EPA METH 8021 VOCs EPA METH 8021 VOCs EPA METH 8260 Hg + Zn TSS/TDS									
Sampled by: JERRY BORN															
Client Contact: AL FARRELL			Phone # 2316												
JERRY BORN			637 0109												
Sample Description															
Sample Location	Date Collected	Time Collected	Sample Matrix	Comp. or Grab	No. of Containers										
WTP INFLUENT	8/4/99	6:55 AM	WATER	GRAB	2	X									
WTP BETWEEN GAC'S	8/4/99	6:58 AM	WATER	GRAB	2		X								
WTP EFFLUENT	8/4/99	7:02 AM	WATER	GRAB	2			X							
WTP EFFLUENT	8/4/99	10:51 AM	WATER	COMP	1				X						
WTP EFFLUENT	8/4/99	10:53 AM	WATER	COMP	1					X					
Relinquished by: _____						Date: _____		Time: _____		Received by: _____		Date: _____		Time: _____	
Relinquished by: _____						Date: _____		Time: _____		Received by: _____		Date: _____		Time: _____	
Relinquished by: <i>Jerry Born</i>						Date: 8/4/99		Time: 15:35		Received by Lab: <i>Barbara Pauling</i>		Date: 8/4/99		Time: 15:35	
Shipment Method: <i>HAND DELIVERED</i>						Airbill Number: _____									

Turnaround Time Required:  
 Routine   X    
 Rush (Specify) \_\_\_\_\_

Comments: \_\_\_\_\_

Cooler Temperature:   4°C

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Wet Chemistry

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Weekly Effluent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: M9378  
Samp. Description: WTP Effluent

Collected: 08/11/99  
Received: 08/11/99 15:05  
Matrix: Water

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Method</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>QC Batch</u>	<u>Note</u>
Total dissolved solids	630.	mg/L	EPA 160.1		08/18/99	081899W14	
Total suspended solids	<5.	mg/L	EPA 160.2		08/17/99	081799W12	

Notes:

J-Estimated value

Authorized: Monika Santucci  
Date: August 30, 1999  
Monika Santucci



# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8260

Client: O'Brien & Gere Engineers, Inc.  
 Project: Accurate Die Casting - Fayetteville, NY  
 Proj. Desc: Bi-Monthly Effluent Sampling

Job No.: 3435.021.517  
 Certification NY No.: 10155

Sample: M9792  
 Samp. Description: WTP Effluent - Grab  
 Instrument: HP5973 GCMS#3  
 Units: ug/L  
 Number of analytes: 14

Collected: 08/18/99  
 Received: 08/18/99  
 Prepared: 08/25/99  
 Matrix: Water  
 QC Batch: 082599W1  
 %Solids:  
 Purge volume: 25 mL

Parameter	Result	Surrog		Analyzed	Notes
		Limits	Dilution		
Acetone	<10.		1	08/25/99	
Methylene chloride	<2.0		1	08/25/99	
trans-1,2-Dichloroethene	<.50		1	08/25/99	
cis-1,2-Dichloroethene	<.50		1	08/25/99	
Trichloroethene	<.50		1	08/25/99	
4-Methyl-2-pentanone	<5.0		1	08/25/99	
Toluene	<.50		1	08/25/99	
2-Hexanone	<5.0		1	08/25/99	
Tetrachloroethene	<.50		1	08/25/99	
1,1,2,2-Tetrachloroethane	<.50		1	08/25/99	
Dibromofluoromethane (surrogate)	109.%	61-136	1	08/25/99	
1,2-Dichloroethane-d4 (surrogate)	107.%	80-135	1	08/25/99	
Toluene-d8 (surrogate)	106.%	84-114	1	08/25/99	
Bromofluorobenzene (surrogate)	92.%	77-117	1	08/25/99	

Notes:

# - Outside control limits J-Estimated value

Authorized: Monika Santucci  
 Date: August 27, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Trace Metals

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Bi-Monthly Effluent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: M9793  
Samp. Description: WTP Effluent - Composite  
Units: mg/L

Collected: 08/18/99      Matrix: Water  
Received: 08/18/99      %Solids:  
Number of analytes: 2

Parameter	Result	Qual	MDL	RL	Method	Prepared	Analyzed	QC Batch	Dilut.	Note
Mercury	.0003		.0001	.0002	245.1	08/24/99	08/24/99	082499W1		1
Zinc	.05		.002	.01	200.7	08/23/99	08/26/99	082399W1		1

Notes:

U-Undetected at the reported level. J-reported value is estimated.

Authorized: Monika Santucci  
Date: August 28, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Wet Chemistry

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Bi-Monthly Effluent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: M9793  
Samp. Description: WTP Effluent - Composite

Collected: 08/18/99                      Matrix: Water  
Received: 08/18/99 14:45

<u>Parameter</u>	<u>Result</u>	<u>Units</u>	<u>Method</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>QC Batch</u>	<u>Note</u>
Total dissolved solids	730.	mg/L	EPA 160.1		08/24/99	082499W15	
Total suspended solids	<5.	mg/L	EPA 160.2		08/24/99	082499W12	

Notes:

J-Estimated value

Authorized: Monika Santucci  
Date: August 30, 1999      Monika Santucci

2942

Client: O'BRIEN & GERE TECHNICAL SERVICES						Analysis/Method					
Project: FORMER ACCURATE DIE						VOCs EPA METHOD TSS/TDS + Zn*Hg					
Sampled by: JERRY BORN											
Client Contact: AL FARREL JERRY BORN				Phone # 2316 6370109							
Sample Description											
Sample Location	Date Collected	Time Collected	Sample Matrix	Comp. or Grab	No. of Containers	Comments					
WTP EFFLUENT	8/18/99	7:00 AM	WATER	GRAB	2						
WTP EFFLUENT	8/18/99	11:48 AM	WATER	COMP	2						
Relinquished by:			Date:	Time:	Received by:			Date:	Time:		
Relinquished by:			Date:	Time:	Received by:			Date:	Time:		
Relinquished by: <i>Jerry Born</i>			Date: 8/18/99	Time: 1445	Received by Lab: <i>Mark F. Jackson</i>			Date: 8/18/99	Time: 14:45		
Shipment Method: <i>HAND DELIVERED</i>						Airbill Number:					

Turnaround Time Required:  
 Routine   X    
 Rush (Specify)           

Comments:

Cooler Temperature:   20°C

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Wet Chemistry

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Weekly Effluent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N0426  
Samp. Description: WTP Effluent

Collected: 08/25/99                      Matrix: Water  
Received: 08/25/99 15:10

<u>Parameter</u>	<u>Result Units</u>	<u>Method</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>QC Batch</u>	<u>Note</u>
Total dissolved solids	690. mg/L	EPA 160.1		09/01/99	090199W14	
Total suspended solids	<5. mg/L	EPA 160.2		09/01/99	090199W11	

Notes:

J-Estimated value

Authorized: Monika Santucci  
Date: September 9, 1999      Monika Santucci



OCT 11 1999

October 8, 1999

Mr. David Crosby, P.E.  
Bureau of Construction Services - Division of Hazardous Waste Remediation  
New York State Department of Environmental Conservation  
50 Wolf Road  
Albany, NY 12233-7010

Re: Former Accurate Die Casting Site  
Fayetteville, NY  
File: 2488/23123 #2

Dear Mr. Crosby:

This letter presents the status of groundwater treatment plant operations for the former Accurate Die Casting site in Fayetteville, New York for September 1999. This report is provided as required by the Order on Consent (#A7-0318-94-10). Included are the results of the monitoring activities associated with the SPDES Fact Sheet for the ground water treatment system.

1. As of September 30, 1999, a total of 29,366,530 gallons of ground water has been treated since startup on February 5, 1996. Since August 31, 1999, 590,710 gallons of groundwater was treated; 496,150 gallons from recovery well RW-1, 88,710 gallons from recovery well RW-2, and 5,850 gallons from the sump outside the northeast corner of the building. No flow was recovered during the period from the groundwater collection trench constructed in the former VOC/PAH/PCB Soils Area.
2. O'Brien & Gere performed the sampling activities associated with the SPDES Fact Sheet (#734052). The analytical results associated with the SPDES Fact Sheet monitoring activities performed in September 1999 are summarized in Table 1. The laboratory analytical data sheets are provided as Attachment A.

If you have any questions regarding this report, please do not hesitate to call me.

Very truly yours,

O'BRIEN & GERE ENGINEERS, INC.

A handwritten signature in black ink, appearing to read 'Alfred R. Farrell', is written over a light-colored background.

Alfred R. Farrell, P.E.  
Senior Project Engineer

I:\DIV71\PROJECTS\2488\23123\2\_CORRES\9-99MOR.WPD

Attachments

cc: V. Nattanmai, P.E. - NYSDEC  
A. English - NYSDEC  
T. Male - NYSDEC  
Central Field Unit: Project Attorney Accurate Die Site - NYSDEC  
C. Branagh, P.E. - NYSDEC Region 7  
Director, Bureau of Environmental Exposure Investigation - NYSDOH (2 copies)  
H. Hamel - NYSDOH



**Table 1**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Monitoring Requirements and Effluent Data**

Analyte (units)	Monitoring Requirements				Effluent	Effluent	Effluent	Effluent
	Discharge Limitation Daily Average	Discharge Limitation Daily Maximum	Minimum Measurement Frequency(1)	Sample Type	09/02/99	09/07/99	09/08/99	09/09/99
Flow (GPD)	Monitor	150000	Continuous	Meter	19237	18895	---	18538
pH (SU)	6.5 - 8.5		2/Week	Grab	7.89	7.91	---	7.94
Residue, non-filterable (mg/L)	Monitor	20	Weekly	3-hr comp.	5 U	---	5 U	---
Total dissolved solids (TDS) (mg/L)	Monitor	Monitor	Weekly	3-hr comp.	800	---	830	---
CBOD5 (mg/L)	Monitor	Monitor	Quarterly	3-hr comp.	---	---	---	---
TKN (mg/L)	Monitor	Monitor	Quarterly	3-hr comp.	---	---	---	---
TOD (mg/L)	Monitor	15	Quarterly	Calculated	---	---	---	---
Dissolved Oxygen (mg/L)	Monitor	7 Min.	Quarterly	Grab	---	---	9.13	---
Aluminum, dissolved (mg/L)	Monitor	0.2	Quarterly	3-hr comp.	---	---	---	---
Antimony, total (mg/L)	Monitor	0.1	Quarterly	3-hr comp.	---	---	---	---
Chromium, total (mg/L)	Monitor	0.5	Quarterly	3-hr comp.	---	---	---	---
Cobalt, total (mg/L)	Monitor	0.01	Quarterly	3-hr comp.	---	---	---	---
Copper, total (mg/L)	Monitor	0.1	Quarterly	3-hr comp.	---	---	---	---
Iron, total (mg/L)	Monitor	0.3	Quarterly	3-hr comp.	---	---	---	---
Lead, total (mg/L)	Monitor	0.02	Quarterly	3-hr comp.	---	---	---	---
Mercury, total (mg/L)	Monitor	0.0008	2/Month	3-hr comp.	0.0002 U	---	---	---
Nickel, total (mg/L)	Monitor	0.2	Quarterly	3-hr comp.	---	---	---	---
Silver, total (mg/L)	Monitor	0.1	Quarterly	3-hr comp.	---	---	---	---
Vanadium, total (mg/L)	Monitor	0.03	Quarterly	3-hr comp.	---	---	---	---
Zinc, total (mg/L)	Monitor	0.3	2/Month	3-hr comp.	0.04	---	---	---
cis-1,2-Dichloroethene (ug/L)	Monitor	10	2/Month	Grab	0.50 U	---	---	---
trans-1,2-Dichloroethene (ug/L)	Monitor	10	2/Month	Grab	0.50 U	---	---	---
Methylene chloride (ug/L)	Monitor	50	2/Month	Grab	2.0 U	---	---	---
1,1,2,2-Tetrachloroethane (ug/L)	Monitor	30	2/Month	Grab	0.50 U	---	---	---
Tetrachloroethene (ug/L)	Monitor	20	2/Month	Grab	0.50 U	---	---	---
Toluene (ug/L)	Monitor	20	2/Month	Grab	0.50 U	---	---	---
Trichloroethene (ug/L)	Monitor	10	2/Month	Grab	0.50 U	---	---	---
Acetone (ug/L)	Monitor	1000	2/Month	Grab	10 U	---	---	---
2-Hexanone (ug/L)	Monitor	1000	2/Month	Grab	5.0 U	---	---	---
4-Methyl-2-pentanone (MIBK) (ug/L)	Monitor	1000	2/Month	Grab	5.0 U	---	---	---

NOTES: (1) Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.

--- - Not analyzed, NA - Data not available

U - Not Detected, J - Estimated

TOD = 1.5 X CBOD5 + 4.5 X TKN



**Table 1**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Monitoring Requirements and Effluent Data**

Analyte	Effluent 09/14/99	Effluent 09/15/99	Effluent 09/16/99	Effluent 09/21/99	Effluent 09/22/99	Effluent 09/23/99	Effluent 09/28/99	Effluent 09/30/99
Flow (GPD)	18154	---	18040	20660	---	21640	20747	20554
pH (SU)	7.91	---	7.91	7.87	---	7.89	7.89	7.89
Residue, non-filterable (mg/L)	---	5 U	---	---	5 U	---	---	---
Total dissolved solids (TDS) (mg/L)	---	840	---	---	580	---	---	---
CBOD5 (mg/L)	---	---	---	---	---	---	---	---
TKN (mg/L)	---	---	---	---	---	---	---	---
TOD (mg/L)	---	---	---	---	---	---	---	---
Dissolved Oxygen (mg/L)	---	---	---	---	---	---	---	---
Aluminum, dissolved (mg/L)	---	---	---	---	---	---	---	---
Antimony, total (mg/L)	---	---	---	---	---	---	---	---
Chromium, total (mg/L)	---	---	---	---	---	---	---	---
Cobalt, total (mg/L)	---	---	---	---	---	---	---	---
Copper, total (mg/L)	---	---	---	---	---	---	---	---
Iron, total (mg/L)	---	---	---	---	---	---	---	---
Lead, total (mg/L)	---	---	---	---	---	---	---	---
Mercury, total (mg/L)	---	0.0002 U	---	---	---	---	---	---
Nickel, total (mg/L)	---	---	---	---	---	---	---	---
Silver, total (mg/L)	---	---	---	---	---	---	---	---
Vanadium, total (mg/L)	---	---	---	---	---	---	---	---
Zinc, total (mg/L)	---	0.01 U	---	---	---	---	---	---
cis-1,2-Dichloroethene (ug/L)	---	0.50 U	---	---	---	---	---	---
trans-1,2-Dichloroethene (ug/L)	---	0.50 U	---	---	---	---	---	---
Methylene chloride (ug/L)	---	2.0 U	---	---	---	---	---	---
1,1,2,2-Tetrachloroethane (ug/L)	---	0.50 U	---	---	---	---	---	---
Tetrachloroethene (ug/L)	---	0.50 U	---	---	---	---	---	---
Toluene (ug/L)	---	0.50 U	---	---	---	---	---	---
Trichloroethene (ug/L)	---	0.50 U	---	---	---	---	---	---
Acetone (ug/L)	---	10 U	---	---	---	---	---	---
2-Hexanone (ug/L)	---	5.0 U	---	---	---	---	---	---
4-Methyl-2-pentanone (MIBK) (ug/L)	---	5.0 U	---	---	---	---	---	---

NOTES: (1) Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.  
 --- - Not analyzed, NA - Data not available  
 U - Not Detected, J - Estimated  
 TOD = 1.5 X CBOD5 + 4.5 X TKN

**ATTACHMENT A**

**SPDES PERMIT COMPLIANCE MONITORING  
LABORATORY ANALYTICAL DATA SHEETS**

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8260

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N0781  
Samp. Description: WTP Effluent - Grab  
Instrument: HP5970 GC/MS#2  
Units: ug/L  
Number of analytes: 14

Collected: 09/02/99 Matrix: Water  
Received: 09/02/99 QC Batch: 091099W2  
Prepared: 09/10/99 %Solids:  
Purge volume: 25 mL

<u>Parameter</u>	<u>Result</u>	<u>Surrog</u> <u>Limits</u>	<u>Dilution</u>	<u>Analyzed</u>	<u>Notes</u>
Acetone	<10.		1	09/10/99	
Methylene chloride	<2.0		1	09/10/99	
trans-1,2-Dichloroethene	<.50		1	09/10/99	
cis-1,2-Dichloroethene	<.50		1	09/10/99	
Trichloroethene	<.50		1	09/10/99	
4-Methyl-2-pentanone	<5.0		1	09/10/99	
Toluene	<.50		1	09/10/99	
2-Hexanone	<5.0		1	09/10/99	
Tetrachloroethene	<.50		1	09/10/99	
1,1,2,2-Tetrachloroethane	<.50		1	09/10/99	
Dibromofluoromethane (surrogate)	108.%	61-136	1	09/10/99	
1,2-Dichloroethane-d4 (surrogate)	108.%	80-135	1	09/10/99	
Toluene-d8 (surrogate)	108.%	84-114	1	09/10/99	
Bromofluorobenzene (surrogate)	96.%	77-117	1	09/10/99	

Notes:

# - Outside control limits J-Estimated value

Authorized: Monika Santucci  
Date: September 14, 1999 Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N0779  
Samp. Description: WTP Influent  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 25 Instrument: 9001

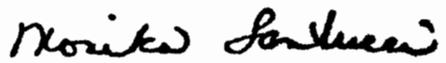
Collected: 09/02/99  
Received: 09/02/99  
Prepared:  
Analyzed: 09/13/99

Matrix: Water  
QC Batch: 091399W1  
%Solids:  
Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL	Notes
Benzene	<25.	U	1		25.	
Bromodichloromethane	<25.	U	1		25.	
Bromoform	<250.	U	1		250.	
Bromomethane	<250.	U	1		250.	
Carbon tetrachloride	<25.	U	1		25.	
Chlorobenzene	<25.	U	1		25.	
Chloroethane	<25.	U	1		25.	
2-Chloroethylvinyl ether	<250.	U	1		250.	
Chloroform	<25.	U	1		25.	
Chloromethane	<250.	U	1		250.	
Dibromochloromethane	<25.	U	1		25.	
1,2-Dichlorobenzene	<120.	U	1		125.	
1,3-Dichlorobenzene	<120.	U	1		125.	
1,4-Dichlorobenzene	<120.	U	1		125.	
Dichlorodifluoromethane	<250.	U	1		250.	
1,1-Dichloroethane	<25.	U	1		25.	
1,2-Dichloroethane	<25.	U	1		25.	
1,1-Dichloroethylene	<25.	U	1		25.	
cis-1,2-Dichloroethylene	<25.	U	1		25.	
trans-1,2-Dichloroethylene	<25.	U	1		25.	
Dichloromethane	<25.	U	1		25.	
1,2-Dichloropropane	<25.	U	1		25.	
cis-1,3-Dichloropropylene	<25.	U	1		25.	
trans-1,3-Dichloropropylene	<25.	U	1		25.	
Ethylbenzene	<25.	U	1		25.	
1,1,2,2-Tetrachloroethane	<25.	U	1		25.	
Tetrachloroethylene	<25.	U	1		25.	
Toluene	<25.	U	1		25.	
1,1,1-Trichloroethane	<25.	U	1		25.	

# - Outside control limits. U - Undetected at the reported level.  
J - reported value is estimated.  
E - concentration exceeded the calibration range and is estimated.

Authorized:   
Date: September 14, 1999 Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N0779  
Samp. Description: WTP Influent  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 25 Instrument: 9001

Collected: 09/02/99  
Received: 09/02/99  
Prepared:  
Analyzed: 09/13/99

Matrix: Water  
QC Batch: 091399W1  
%Solids:  
Sample Size: 5 ml

Number of analytes: 34

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>Col</u>	<u>MDL</u>	<u>RL</u>	<u>Notes</u>
1,1,2-Trichloroethane	<25.	U	1		25.	
Trichloroethylene	470.		1		25.	
Trichlorofluoromethane	<25.	U	1		25.	
Vinyl Chloride	<25.	U	1		25.	
Xylenes (total)	<75.	U	1		75.	

<u>Surrogate</u>	<u>Result</u>	<u>Qual</u>	<u>Col</u>	<u>Limits</u>	<u>Notes</u>
2-Chloropropane (surrogate)	104.%		1	69-118	
Fluorobenzene (surrogate)	97.%		1	85-119	

Notes:

# - Outside control limits. U - Undetected at the reported level.  
J - reported value is estimated.  
E - concentration exceeded the calibration range and is estimated.

Authorized: Monika Santucci  
Date: September 14, 1999 Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N0780  
Samp. Description: WTP Between GACs  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 1 Instrument: 9001

Collected: 09/02/99  
Received: 09/02/99  
Prepared:  
Analyzed: 09/14/99

Matrix: Water  
QC Batch: 091399W1  
%Solids:  
Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL	Notes
Benzene	<1.	U	1		1.	
Bromodichloromethane	<1.	U	1		1.	
Bromoform	<10.	U	1		10.	
Bromomethane	<10.	U	1		10.	
Carbon tetrachloride	<1.	U	1		1.	
Chlorobenzene	<1.	U	1		1.	
Chloroethane	<1.	U	1		1.	
2-Chloroethylvinyl ether	<10.	U	1		10.	
Chloroform	<1.	U	1		1.	
Chloromethane	<10.	U	1		10.	
Dibromochloromethane	<1.	U	1		1.	
1,2-Dichlorobenzene	<5.	U	1		5.	
1,3-Dichlorobenzene	<5.	U	1		5.	
1,4-Dichlorobenzene	<5.	U	1		5.	
Dichlorodifluoromethane	<10.	U	1		10.	
1,1-Dichloroethane	<1.	U	1		1.	
1,2-Dichloroethane	<1.	U	1		1.	
1,1-Dichloroethylene	<1.	U	1		1.	
cis-1,2-Dichloroethylene	<1.	U	1		1.	
trans-1,2-Dichloroethylene	<1.	U	1		1.	
Dichloromethane	<1.	U	1		1.	
1,2-Dichloropropane	<1.	U	1		1.	
cis-1,3-Dichloropropylene	<1.	U	1		1.	
trans-1,3-Dichloropropylene	<1.	U	1		1.	
Ethylbenzene	<1.	U	1		1.	
1,1,2,2-Tetrachloroethane	<1.	U	1		1.	
Tetrachloroethylene	<1.	U	1		1.	
Toluene	<1.	U	1		1.	
1,1,1-Trichloroethane	<1.	U	1		1.	

# - Outside control limits. U - Undetected at the reported level.  
J - reported value is estimated.  
E - concentration exceeded the calibration range and is estimated.

Authorized: Monika Santucci  
Date: September 14, 1999 Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N0780  
Samp. Description: WTP Between GACs  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 1 Instrument: 9001

Collected: 09/02/99  
Received: 09/02/99  
Prepared:  
Analyzed: 09/14/99

Matrix: Water  
QC Batch: 091399W1  
%Solids:  
Sample Size: 5 ml

Number of analytes: 34

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>Col</u>	<u>MDL</u>	<u>RL</u>	<u>Notes</u>
1,1,2-Trichloroethane	<1.	U	1		1.	
Trichloroethylene	<1.	U	1		1.	
Trichlorofluoromethane	<1.	U	1		1.	
Vinyl Chloride	<1.	U	1		1.	
Xylenes (total)	<3.	U	1		3.	

<u>Surrogate</u>	<u>Result</u>	<u>Qual</u>	<u>Col</u>	<u>Limits</u>	<u>Notes</u>
2-Chloropropane (surrogate)	116.%		1	69-118	
Fluorobenzene (surrogate)	98.%		1	85-119	

Notes:

# - Outside control limits. U - Undetected at the reported level.  
J - reported value is estimated.  
E - concentration exceeded the calibration range and is estimated.

Authorized: Monika Santucci  
Date: September 14, 1999 Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Trace Metals

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N0782  
Samp. Description: WTP Effluent - Composite  
Units: mg/L

Collected: 09/02/99      Matrix: Water  
Received: 09/02/99      %Solids:  
Number of analytes: 2

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>MDL</u>	<u>RL</u>	<u>Method</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>QC Batch</u>	<u>Dilut.</u>	<u>Note</u>
Mercury	<.0002	U	.0001	.0002	245.1	09/07/99	09/08/99	090799W2		1
Zinc	.04		.002	.01	200.7	09/07/99	09/08/99	090799W1		1

Notes:

U-Undetected at the reported level. J-reported value is estimated.

Authorized: Monika Santucci  
Date: September 11, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Wet Chemistry

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N0782  
Samp. Description: WTP Effluent - Composite

Collected: 09/02/99  
Received: 09/02/99 15:30  
Matrix: Water

<u>Parameter</u>	<u>Result Units</u>	<u>Method</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>QC Batch</u>	<u>Note</u>
Total dissolved solids	800. mg/L	EPA 160.1		09/07/99	090799W14	
Total suspended solids	<5. mg/L	EPA 160.2		09/07/99	090799W11	

Notes:

J-Estimated value

Authorized: Monika Santucci  
Date: September 11, 1999 Monika Santucci

# O'Brien & Gere Laboratories, Inc.

5000 Brittonfield Parkway  
 East Syracuse, New York 13057  
 (315) 437-0200

# Chain of Custody

3116

Client: O'BRIEN & GERE TECHNICAL SERVICES

Project: FORMER ACCURATE DIE

Sampled by: JERRY BORN

Client Contact: JERRY BORN Phone # 2316 6376109

### Sample Description

Sample Location	Date Collected	Time Collected	Sample Matrix	Comp. or Grab	No. of Containers
WTP EFFLUENT	9/2/99	9:32 AM	WATER	GRAB	2
WTP BETWEEN GACS	9/2/99	9:35 AM	WATER	GRAB	2
WTP EFFLUENT	9/2/99	9:37 AM	WATER	GRAB	2
WTP EFFLUENT	9/2/99	11:45 PM	WATER	COMP	1
WTP EFFLUENT	9/2/99	11:48 PM	WATER	GRAB	1

### Analysis/Method

Analysis/Method	Comments
EPA METHOD 8021	X
EPA METHOD 8022	X
EPA METHOD 8260	
GEN + H9	
TSS / TDS	

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Relinquished by: <u>JAN BOB</u>	Date: <u>9/2/99</u>	Time: <u>1530</u>	Received by Lab: <u>MURPHY JACKSON</u>	Date: <u>4/2/99</u>	Time: <u>15:30</u>
Shipment Method: <u>HAND DELIVERED</u>			Airbill Number:		

Turnaround Time Required: Routine  Rush (Specify) \_\_\_\_\_

Comments: \_\_\_\_\_

Cooler Temperature: 20°

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Wet Chemistry

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Weekly Effluent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N0909  
Samp. Description: WTP Effluent

Collected: 09/08/99  
Received: 09/08/99 15:10  
Matrix: Water

Parameter	Result	Qual	MDL	RL	Units	Method	Prepared	Analyzed	QC Batch	Note
Total dissolved solids	830.			10	mg/L	EPA 160.1		09/13/99	091399W13	
Total suspended solids	<5.	U		5	mg/L	EPA 160.2		09/15/99	091599W11	

Notes:

U-Undetected at reported level. J-reported value is estimated.

Authorized: Monika Santucci  
Date: September 17, 1999 Monika Santucci



# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8260

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Bi-Monthly Effluent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N1406  
Samp. Description: WTP Effluent - Grab  
Instrument: HP5973 GCMS#3  
Units: ug/L  
Number of analytes: 14

Collected: 09/15/99  
Received: 09/15/99  
Prepared: 09/17/99  
Matrix: Water  
QC Batch: 091699W1  
%Solids:  
Purge volume: 25 mL

<u>Parameter</u>	<u>Result</u>	<u>Surrog</u> <u>Limits</u>	<u>Dilution</u>	<u>Analyzed</u>	<u>Notes</u>
Acetone	<10.		1	09/17/99	
Methylene chloride	<2.0		1	09/17/99	
trans-1,2-Dichloroethene	<.50		1	09/17/99	
cis-1,2-Dichloroethene	<.50		1	09/17/99	
Trichloroethene	<.50		1	09/17/99	
4-Methyl-2-pentanone	<5.0		1	09/17/99	
Toluene	<.50		1	09/17/99	
2-Hexanone	<5.0		1	09/17/99	
Tetrachloroethene	<.50		1	09/17/99	
1,1,2,2-Tetrachloroethane	<.50		1	09/17/99	
Dibromofluoromethane (surrogate)	106.%	61-136	1	09/17/99	
1,2-Dichloroethane-d4 (surrogate)	108.%	80-135	1	09/17/99	
Toluene-d8 (surrogate)	111.%	84-114	1	09/17/99	
Bromofluorobenzene (surrogate)	88.%	77-117	1	09/17/99	

Notes:

# - Outside control limits J-Estimated value

Authorized:   
Date: September 20, 1999    Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Trace Metals

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Bi-Monthly Effluent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N1407  
Samp. Description: WTP Effluent - Composite  
Units: mg/L

Collected: 09/15/99      Matrix: Water  
Received: 09/15/99      %Solids:  
Number of analytes: 2

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>MDL</u>	<u>RL</u>	<u>Method</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>QC Batch</u>	<u>Dilut.</u>	<u>Note</u>
Mercury	<.0002	U	.0001	.0002	245.1	09/27/99	09/27/99	092799W1	1	
Zinc	<.01	U	.002	.01	200.7	09/17/99	09/20/99	091799W1	1	

Notes:

U-Undetected at the reported level. J-reported value is estimated.

Authorized: Monika Santucci

Date: September 28, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Wet Chemistry

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Bi-Monthly Effluent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N1407  
Samp. Description: WTP Effluent - Composite

Collected: 09/15/99                      Matrix: Water  
Received: 09/15/99 15:25

<u>Parameter</u>	<u>Result Units</u>	<u>Method</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>QC Batch</u>	<u>Note</u>
Total dissolved solids	840. mg/L	EPA 160.1		09/16/99	091699W18	
Total suspended solids	<5. mg/L	EPA 160.2		09/17/99	091799W11	

Notes:

J-Estimated value

Authorized: Monika Santucci  
Date: September 22, 1999    Monika Santucci



# O'Brien & Gere Laboratories, Inc.

# Analytical Results Wet Chemistry

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Weekly Effluent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N1995  
Samp. Description: WTP Effluent

Collected: 09/22/99                      Matrix: Water  
Received: 09/22/99 15:20

<u>Parameter</u>	<u>Result Units</u>	<u>Method</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>QC Batch</u>	<u>Note</u>
Total dissolved solids	580. mg/L	EPA 160.1		09/28/99	092899W11	
Total suspended solids	<5. mg/L	EPA 160.2		09/28/99	092899W12	

Notes:

J-Estimated value

Authorized: Monika Santucci  
Date: October 6, 1999      Monika Santucci





**O'BRIEN & GERE**  
ENGINEERS, INC.

NOV 17 1999

November 11, 1999

Mr. David Crosby, P.E.  
Bureau of Construction Services - Division of Hazardous Waste Remediation  
New York State Department of Environmental Conservation  
50 Wolf Road  
Albany, NY 12233-7010

Re: Former Accurate Die Casting Site  
Fayetteville, NY

File: 2488/23123 #2

Dear Mr. Crosby:

This letter presents the status of groundwater treatment plant operations for the former Accurate Die Casting site in Fayetteville, New York for October 1999. This report is provided as required by the Order on Consent (#A7-0318-94-10). Included are the results of the monitoring activities associated with the SPDES Fact Sheet for the groundwater treatment system.

1. As of October 29, 1999, a total of 29,955,300 gallons of groundwater has been treated since startup on February 5, 1996. Since September 30, 1999, 588,770 gallons of groundwater was treated; 479,990 gallons from recovery well RW-1, 105,700 gallons from recovery well RW-2, and 3,080 gallons from the sump outside the northeast corner of the building. No flow was recovered during the period from the groundwater collection trench constructed in the former VOC/PAH/PCB Soils Area.
2. O'Brien & Gere performed the sampling activities associated with the SPDES Fact Sheet (#734052). The analytical results associated with the SPDES Fact Sheet monitoring activities performed in October 1999 are summarized in Table 1. The laboratory analytical data sheets are provided as Attachment A.

As indicated in the facsimile to you dated October 12, 1999, collection of a groundwater treatment system influent and effluent sample for PCB analyses was postponed because of the absence of water in the interceptor trench. As requested in your May 28, 1999 letter, we will advise the NYSDEC of a sampling dated when it is determined.

3. O'Brien & Gere performed the annual round of groundwater sampling on October 19 and 20 in accordance with the requirements of the Sampling and Analysis Plan (March 1996), revised according to the NYSDEC letter dated April 1, 1997, and the recommendations of the Annual Report dated February 25, 1999. The laboratory reports for the analyses completed are provided as Attachment B. The results will be evaluated and an assessment of groundwater recovery and treatment operations will be presented later to the NYSDEC in an Annual Report for 1999.



O'Brien & Gere Engineers, Inc., an O'Brien & Gere company  
5000 Brittonfield Parkway / P.O. Box 4873, Syracuse, New York 13221-4873  
(315) 437-6100 / FAX (315) 463-7554 • <http://www.obg.com>  
... and offices in major U.S. cities

Mr. David Crosby, P.E.  
November 11, 1999  
Page 2

If you have any questions regarding this report, please do not hesitate to call me.

Very truly yours,

O'BRIEN & GERE ENGINEERS, INC.



Alfred R. Farrell, P.E.  
Senior Project Engineer

*I:\DIV71\PROJECTS\2488\23123\2\_CORRES\10-99MOR.WPD*

Attachments

cc: V. Nattanmai, P.E. - NYSDEC  
A. English - NYSDEC  
T. Male - NYSDEC  
Central Field Unit: Project Attorney Accurate Die Site - NYSDEC  
C. Branagh, P.E. - NYSDEC Region 7  
Director, Bureau of Environmental Exposure Investigation - NYSDOH (2 copies)  
H. Hamel - NYSDOH



**Table 1**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Monitoring Requirements and Effluent Data**

Analyte (units)	Monitoring Requirements				Effluent 10/05/99	Effluent 10/06/99	Effluent 10/07/99	Effluent 10/12/99
	Discharge Limitation Daily Average	Discharge Limitation Daily Maximum	Minimum Measurement Frequency(1)	Sample Type				
Flow (GPD)	Monitor	150000	Continuous	Meter	20546	---	20095	19750
pH (SU)	6.5 - 8.5		2/Week	Grab	7.89	---	7.89	7.89
Residue, non-filterable (mg/L)	Monitor	20	Weekly	3-hr comp.	---	5 U	---	5 U
Total dissolved solids (TDS) (mg/L)	Monitor	Monitor	Weekly	3-hr comp.	---	630	---	630
CBOD5 (mg/L)	Monitor	Monitor	Quarterly	3-hr comp.	---	5 U	---	---
TKN (mg/L)	Monitor	Monitor	Quarterly	3-hr comp.	---	0.4 U	---	---
TOD (mg/L)	Monitor	15	Quarterly	Calculated	---	9.3 U	---	---
Dissolved Oxygen (mg/L)	Monitor	7 Min.	Quarterly	Grab	---	10.48	---	---
Aluminum, dissolved (mg/L)	Monitor	0.2	Quarterly	3-hr comp.	---	0.1 U	---	---
Antimony, total (mg/L)	Monitor	0.1	Quarterly	3-hr comp.	---	0.06 U	---	---
Chromium, total (mg/L)	Monitor	0.5	Quarterly	3-hr comp.	---	0.01 U	---	---
Cobalt, total (mg/L)	Monitor	0.01	Quarterly	3-hr comp.	---	0.01 U	---	---
Copper, total (mg/L)	Monitor	0.1	Quarterly	3-hr comp.	---	0.01 U	---	---
Iron, total (mg/L)	Monitor	0.3	Quarterly	3-hr comp.	---	0.05 U	---	---
Lead, total (mg/L)	Monitor	0.02	Quarterly	3-hr comp.	---	0.005 U	---	---
Mercury, total (mg/L)	Monitor	0.0008	2/Month	3-hr comp.	---	0.0002 U	---	---
Nickel, total (mg/L)	Monitor	0.2	Quarterly	3-hr comp.	---	0.05 U	---	---
Silver, total (mg/L)	Monitor	0.1	Quarterly	3-hr comp.	---	0.01 U	---	---
Vanadium, total (mg/L)	Monitor	0.03	Quarterly	3-hr comp.	---	0.03 U	---	---
Zinc, total (mg/L)	Monitor	0.3	2/Month	3-hr comp.	---	0.01 U	---	---
cis-1,2-Dichloroethene (ug/L)	Monitor	10	2/Month	Grab	---	0.50 U	---	---
trans-1,2-Dichloroethene (ug/L)	Monitor	10	2/Month	Grab	---	0.50 U	---	---
Methylene chloride (ug/L)	Monitor	50	2/Month	Grab	---	2.0 U	---	---
1,1,2,2-Tetrachloroethane (ug/L)	Monitor	30	2/Month	Grab	---	0.50 U	---	---
Tetrachloroethene (ug/L)	Monitor	20	2/Month	Grab	---	0.50 U	---	---
Toluene (ug/L)	Monitor	20	2/Month	Grab	---	0.50 U	---	---
Trichloroethene (ug/L)	Monitor	10	2/Month	Grab	---	0.50 U	---	---
Acetone (ug/L)	Monitor	1000	2/Month	Grab	---	10 U	---	---
2-Hexanone (ug/L)	Monitor	1000	2/Month	Grab	---	5.0 U	---	---
4-Methyl-2-pentanone (MIBK) (ug/L)	Monitor	1000	2/Month	Grab	---	5.0 U	---	---

NOTES: (1) Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.

--- - Not analyzed, NA - Data not available

U - Not Detected, J - Estimated

TOD = 1.5 X CBOD5 + 4.5 X TKN



**Table 1**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Monitoring Requirements and Effluent Data**

Analyte	Effluent 10/14/99	Effluent 10/19/99	Effluent 10/20/99	Effluent 10/21/99	Effluent 10/26/99	Effluent 10/27/99	Effluent 10/28/99
Flow (GPD)	19950	20509	---	20609	20270	---	20200
pH (SU)	7.89	7.89	---	7.91	7.91	---	7.91
Residue, non-filterable (mg/L)	---	---	5 U	---	---	5 U	---
Total dissolved solids (TDS) (mg/L)	---	---	560	---	---	600	---
CBOD5 (mg/L)	---	---	---	---	---	---	---
TKN (mg/L)	---	---	---	---	---	---	---
TOD (mg/L)	---	---	---	---	---	---	---
Dissolved Oxygen (mg/L)	---	---	---	---	---	---	---
Aluminum, dissolved (mg/L)	---	---	---	---	---	---	---
Antimony, total (mg/L)	---	---	---	---	---	---	---
Chromium, total (mg/L)	---	---	---	---	---	---	---
Cobalt, total (mg/L)	---	---	---	---	---	---	---
Copper, total (mg/L)	---	---	---	---	---	---	---
Iron, total (mg/L)	---	---	---	---	---	---	---
Lead, total (mg/L)	---	---	---	---	---	---	---
Mercury, total (mg/L)	---	---	0.0002 U	---	---	---	---
Nickel, total (mg/L)	---	---	---	---	---	---	---
Silver, total (mg/L)	---	---	---	---	---	---	---
Vanadium, total (mg/L)	---	---	---	---	---	---	---
Zinc, total (mg/L)	---	---	0.01 U	---	---	---	---
cis-1,2-Dichloroethene (ug/L)	---	---	0.50 U	---	---	---	---
trans-1,2-Dichloroethene (ug/L)	---	---	0.50 U	---	---	---	---
Methylene chloride (ug/L)	---	---	2.0 U	---	---	---	---
1,1,2,2-Tetrachloroethane (ug/L)	---	---	0.50 U	---	---	---	---
Tetrachloroethene (ug/L)	---	---	0.50 U	---	---	---	---
Toluene (ug/L)	---	---	0.50 U	---	---	---	---
Trichloroethene (ug/L)	---	---	0.50 U	---	---	---	---
Acetone (ug/L)	---	---	10 U	---	---	---	---
2-Hexanone (ug/L)	---	---	5.0 U	---	---	---	---
4-Methyl-2-pentanone (MIBK) (ug/L)	---	---	5.0 U	---	---	---	---

NOTES: (1) Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.

--- - Not analyzed, NA - Data not available

U - Not Detected, J - Estimated

TOD = 1.5 X CBOD5 + 4.5 X TKN

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Wet Chemistry

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Weekly Effluent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N2395  
Samp. Description: WTP Effluent

Collected: 09/29/99                      Matrix: Water  
Received: 09/29/99 15:30

<u>Parameter</u>	<u>Result Units</u>	<u>Method</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>QC Batch</u>	<u>Note</u>
Total dissolved solids	630. mg/L	EPA 160.1		10/01/99	100199W12	
Total suspended solids	<5. mg/L	EPA 160.2		10/05/99	100599W11	

Notes:

J-Estimated value

Authorized: Monika Santucci  
Date: October 15, 1999      Monika Santucci



# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8260

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N2646  
Samp. Description: WTP Effluent - Grab  
Instrument: HP5970 GC/MS#2  
Units: ug/L  
Number of analytes: 14

Collected: 10/06/99  
Received: 10/06/99  
Prepared: 10/14/99  
Matrix: Water  
QC Batch: 101499W2  
%Solids:  
Purge volume: 25 mL

<u>Parameter</u>	<u>Result</u>	<u>Surrog</u> <u>Limits</u>	<u>Dilution</u>	<u>Analyzed</u>	<u>Notes</u>
Acetone	<10.		1	10/14/99	
Methylene chloride	<2.0		1	10/14/99	
trans-1,2-Dichloroethene	<.50		1	10/14/99	
cis-1,2-Dichloroethene	<.50		1	10/14/99	
Trichloroethene	<.50		1	10/14/99	
4-Methyl-2-pentanone	<5.0		1	10/14/99	
Toluene	<.50		1	10/14/99	
2-Hexanone	<5.0		1	10/14/99	
Tetrachloroethene	<.50		1	10/14/99	
1,1,2,2-Tetrachloroethane	<.50		1	10/14/99	
Dibromofluoromethane (surrogate)	111.%	61-136	1	10/14/99	
1,2-Dichloroethane-d4 (surrogate)	113.%	80-135	1	10/14/99	
Toluene-d8 (surrogate)	109.%	84-114	1	10/14/99	
Bromofluorobenzene (surrogate)	98.%	77-117	1	10/14/99	

Notes:

# - Outside control limits J-Estimated value

Authorized: Monika Santucci  
Date: October 15, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N2644  
Samp. Description: WTP Influent  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 50 Instrument: 9001

Collected: 10/06/99  
Received: 10/06/99  
Prepared:  
Analyzed: 10/19/99

Matrix: Water  
QC Batch: 101999W1  
%Solids:  
Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL Notes
Benzene	<50.	U	1		50.
Bromodichloromethane	<50.	U	1		50.
Bromoform	<500.	U	1		500.
Bromomethane	<500.	U	1		500.
Carbon tetrachloride	<50.	U	1		50.
Chlorobenzene	<50.	U	1		50.
Chloroethane	<50.	U	1		50.
2-Chloroethylvinyl ether	<500.	U	1		500.
Chloroform	<50.	U	1		50.
Chloromethane	<500.	U	1		500.
Dibromochloromethane	<50.	U	1		50.
1,2-Dichlorobenzene	<250.	U	1		250.
1,3-Dichlorobenzene	<250.	U	1		250.
1,4-Dichlorobenzene	<250.	U	1		250.
Dichlorodifluoromethane	<500.	U	1		500.
1,1-Dichloroethane	<50.	U	1		50.
1,2-Dichloroethane	<50.	U	1		50.
1,1-Dichloroethylene	<50.	U	1		50.
cis-1,2-Dichloroethylene	<50.	U	1		50.
trans-1,2-Dichloroethylene	<50.	U	1		50.
Dichloromethane	<50.	U	1		50.
1,2-Dichloropropane	<50.	U	1		50.
cis-1,3-Dichloropropylene	<50.	U	1		50.
trans-1,3-Dichloropropylene	<50.	U	1		50.
Ethylbenzene	<50.	U	1		50.
1,1,2,2-Tetrachloroethane	<50.	U	1		50.
Tetrachloroethylene	<50.	U	1		50.
Toluene	<50.	U	1		50.
1,1,1-Trichloroethane	<50.	U	1		50.

# - Outside control limits. U - Undetected at the reported level.  
J - reported value is estimated.  
E - concentration exceeded the calibration range and is estimated.

Authorized: Monika Santucci  
Date: October 20, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
 Project: Accurate Die Casting - Fayetteville, NY  
 Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
 Certification NY No.: 10155

Sample: N2644  
 Samp. Description: WTP Influent  
 Primary column: Y  
 Units: ug/L  
 Column: DB-VRX 75m x .45mm ID  
 Dilution: 50 Instrument: 9001

Collected: 10/06/99  
 Received: 10/06/99  
 Prepared:  
 Analyzed: 10/19/99

Matrix: Water  
 QC Batch: 101999W1  
 %Solids:  
 Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL	Notes
1,1,2-Trichloroethane	<50.	U	1		50.	
Trichloroethylene	350.		1		50.	
Trichlorofluoromethane	<50.	U	1		50.	
Vinyl Chloride	<50.	U	1		50.	
Xylenes (total)	<150.	U	1		150.	

Surrogate	Result	Qual	Col	Limits	Notes
2-Chloropropane (surrogate)	106.%		1	69-118	
Fluorobenzene (surrogate)	101.%		1	85-119	

Notes:

# - Outside control limits. U - Undetected at the reported level.  
 J - reported value is estimated.  
 E - concentration exceeded the calibration range and is estimated.

Authorized: Monika Santucci  
 Date: October 20, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N2645  
Samp. Description: WTP Between GACs  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 1 Instrument: 9001

Collected: 10/06/99  
Received: 10/06/99  
Prepared:  
Analyzed: 10/19/99

Matrix: Water  
QC Batch: 101999W1  
%Solids:  
Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL	Notes
Benzene	<1.	U	1		1.	
Bromodichloromethane	<1.	U	1		1.	
Bromoform	<10.	U	1		10.	
Bromomethane	<10.	U	1		10.	
Carbon tetrachloride	<1.	U	1		1.	
Chlorobenzene	<1.	U	1		1.	
Chloroethane	<1.	U	1		1.	
2-Chloroethylvinyl ether	<10.	U	1		10.	
Chloroform	<1.	U	1		1.	
Chloromethane	<10.	U	1		10.	
Dibromochloromethane	<1.	U	1		1.	
1,2-Dichlorobenzene	<5.	U	1		5.	
1,3-Dichlorobenzene	<5.	U	1		5.	
1,4-Dichlorobenzene	<5.	U	1		5.	
Dichlorodifluoromethane	<10.	U	1		10.	
1,1-Dichloroethane	<1.	U	1		1.	
1,2-Dichloroethane	<1.	U	1		1.	
1,1-Dichloroethylene	<1.	U	1		1.	
cis-1,2-Dichloroethylene	<1.	U	1		1.	
trans-1,2-Dichloroethylene	<1.	U	1		1.	
Dichloromethane	<1.	U	1		1.	
1,2-Dichloropropane	<1.	U	1		1.	
cis-1,3-Dichloropropylene	<1.	U	1		1.	
trans-1,3-Dichloropropylene	<1.	U	1		1.	
Ethylbenzene	<1.	U	1		1.	
1,1,2,2-Tetrachloroethane	<1.	U	1		1.	
Tetrachloroethylene	<1.	U	1		1.	
Toluene	<1.	U	1		1.	
1,1,1-Trichloroethane	<1.	U	1		1.	

# - Outside control limits. U - Undetected at the reported level.  
J - reported value is estimated.  
E - concentration exceeded the calibration range and is estimated.

Authorized: Monika Santucci  
Date: October 20, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N2645  
Samp. Description: WTP Between GACs  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 1 Instrument: 9001

Collected: 10/06/99 Matrix: Water  
Received: 10/06/99 QC Batch: 101999W1  
Prepared: %Solids:  
Analyzed: 10/19/99 Sample Size: 5 ml

Number of analytes: 34

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>Col</u>	<u>MDL</u>	<u>RL</u>	<u>Notes</u>
1,1,2-Trichloroethane	<1.	U	1		1.	
Trichloroethylene	<1.	U	1		1.	
Trichlorofluoromethane	<1.	U	1		1.	
Vinyl Chloride	<1.	U	1		1.	
Xylenes (total)	<3.	U	1		3.	

<u>Surrogate</u>	<u>Result</u>	<u>Qual</u>	<u>Col</u>	<u>Limits</u>	<u>Notes</u>
2-Chloropropane (surrogate)	111.%		1	69-118	
Fluorobenzene (surrogate)	100.%		1	85-119	

Notes:

# - Outside control limits. U - Undetected at the reported level.  
J - reported value is estimated.  
E - concentration exceeded the calibration range and is estimated.

Authorized: Monika Santucci  
Date: October 20, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Trace Metals

Client: O'Brien & Gere Engineers, Inc.  
 Project: Accurate Die Casting - Fayetteville, NY  
 Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
 Certification NY No.: 10155

Sample: N2647  
 Samp. Description: WTP Effluent - Composite  
 Units: mg/L

Collected: 10/06/99      Matrix: Water  
 Received: 10/06/99      %Solids:  
 Number of analytes: 11

Parameter	Result	Qual	MDL	RL	Method	Prepared	Analyzed	QC Batch	Dilut.	Note
Antimony	<.06	U	.0026	.06	200.7	10/15/99	10/18/99	101599W2		1
Chromium	<.01	U	.0015	.01	200.7	10/15/99	10/18/99	101599W2		1
Cobalt	<.01	U	.0012	.01	200.7	10/15/99	10/18/99	101599W2		1
Copper	<.01	U	.0006	.01	200.7	10/15/99	10/18/99	101599W2		1
Iron	<.05	U	.0175	.05	200.7	10/15/99	10/18/99	101599W2		1
Lead	<.005	U	.0021	.005	200.7	10/15/99	10/18/99	101599W2		1
Mercury	<.0002	U	.0001	.0002	245.1	10/14/99	10/15/99	101499W2		1
Nickel	<.05	U	.001	.05	200.7	10/15/99	10/18/99	101599W2		1
Silver	<.01	U	.0006	.01	200.7	10/15/99	10/18/99	101599W2		1
Vanadium	<.03	U	.0003	.03	200.7	10/15/99	10/18/99	101599W2		1
Zinc	<.01	U	.002	.01	200.7	10/15/99	10/18/99	101599W2		1

Notes:

U-Undetected at the reported level. J-reported value is estimated.

Authorized: Monika Santucci  
 Date: October 19, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Wet Chemistry

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N2647  
Samp. Description: WTP Effluent - Composite

Collected: 10/06/99 13:00      Matrix: Water  
Received: 10/06/99 15:40

<u>Parameter</u>	<u>Result Units</u>	<u>Method</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>QC Batch</u>	<u>Note</u>
CBOD5	<5. mg/L	EPA 405.1		10/08/99	100899W14	
Total Kjeldahl nitrogen	<.4 mg/L	EPA 351.2	10/18/99	10/21/99	102199W4	
Total dissolved solids	630. mg/L	EPA 160.1		10/12/99	101299W15	
Total suspended solids	<5. mg/L	EPA 160.2		10/13/99	101399W13	

Notes:

J-Estimated value

Authorized: Monika Santucci  
Date: October 22, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Trace Metals

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N2648  
Samp. Description: WTP Effluent - Composite (lab filtered)  
Units: mg/L

Collected: 10/06/99      Matrix: Water  
Received: 10/06/99      % Solids:  
Number of analytes: 1

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>MDL</u>	<u>RL</u>	<u>Method</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>QC Batch</u>	<u>Dilut.</u>	<u>Note</u>
Aluminum, filtered	<.1	U	.019	.1	200.7	10/15/99	10/18/99	101599W2		1

Notes:

U-Undetected at the reported level. J-reported value is estimated.

Authorized: Monika Santucci  
Date: October 19, 1999      Monika Santucci



# O'Brien & Gere Laboratories, Inc.

# Analytical Results Wet Chemistry

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Weekly Effluent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N2924  
Samp. Description: WTP Effluent

Collected: 10/12/99 10:10      Matrix: Water  
Received: 10/12/99 16:25

<u>Parameter</u>	<u>Result Units</u>	<u>Method</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>QC Batch</u>	<u>Note</u>
Total dissolved solids	630. mg/L	EPA 160.1		10/15/99	101599W13	
Total suspended solids	<5. mg/L	EPA 160.2		10/15/99	101599W12	

Notes:

J-Estimated value

Authorized: Monika Santucci  
Date: October 22, 1999      Monika Santucci



# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8260

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Bi-Monthly Effluent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

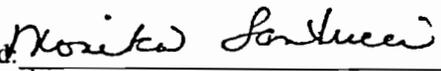
Sample: N3386  
Samp. Description: WTP Effluent - Grab  
Instrument: HP5973 GCMS#3  
Units: ug/L  
Number of analytes: 14

Collected: 10/20/99  
Received: 10/20/99  
Prepared: 11/01/99  
Matrix: Water  
QC Batch: 103199W1  
%Solids:  
Purge volume: 25 mL

Parameter	Result	Surrog		Notes
		Limits	Dilution	
Acetone	<10.		1	11/01/99
Methylene chloride	<2.0		1	11/01/99
trans-1,2-Dichloroethene	<.50		1	11/01/99
cis-1,2-Dichloroethene	<.50		1	11/01/99
Trichloroethene	<.50		1	11/01/99
4-Methyl-2-pentanone	<5.0		1	11/01/99
Toluene	<.50		1	11/01/99
2-Hexanone	<5.0		1	11/01/99
Tetrachloroethene	<.50		1	11/01/99
1,1,2,2-Tetrachloroethane	<.50		1	11/01/99
Dibromofluoromethane (surrogate)	90.%	70-131	1	11/01/99
1,2-Dichloroethane-d4 (surrogate)	92.%	81-120	1	11/01/99
Toluene-d8 (surrogate)	96.%	83-117	1	11/01/99
Bromofluorobenzene (surrogate)	78.%	78-119	1	11/01/99

Notes:

# - Outside control limits J-Estimated value

Authorized:   
Date: November 5, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Trace Metals

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Bi-Monthly Effluent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N3387  
Samp. Description: WTP Effluent - Composite  
Units: mg/L

Collected: 10/20/99      Matrix: Water  
Received: 10/20/99      % Solids:  
Number of analytes: 2

<u>Parameter</u>	<u>Result</u>	<u>Method</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>QC Batch</u>	<u>Dilut.</u>	<u>Note</u>
Mercury	<.0002	245.1	10/25/99	10/26/99	102599W1		1
Zinc	<.01	200.7	10/26/99	10/27/99	102699W1		1

Notes:

J-Estimated value

Authorized: Monika Santucci  
Date: November 6, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Wet Chemistry

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Bi-Monthly Effluent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N3387  
Samp. Description: WTP Effluent - Composite

Collected: 10/20/99                      Matrix: Water  
Received: 10/20/99 15:25

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>MDL</u>	<u>RL</u>	<u>Units</u>	<u>Method</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>QC Batch</u>	<u>Note</u>
Total dissolved solids	560.				mg/L	EPA 160.1		10/27/99	102799W12	
Total suspended solids	<5.	U			mg/L	EPA 160.2		10/25/99	102599W11	

Notes:

U-Undetected at reported level. J-reported value is estimated.

Authorized: Monika Santucci  
Date: October 30, 1999      Monika Santucci



# O'Brien & Gere Laboratories, Inc.

# Analytical Results Wet Chemistry

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Weekly Effluent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N3884  
Samp. Description: WTP Effluent

Collected: 10/27/99  
Received: 10/27/99 15:40  
Matrix: Water

Parameter	Result	Qual	MDL	RL	Units	Method	Prepared	Analyzed	QC Batch	Note
Total dissolved solids	600.				mg/L	EPA 160.1		11/01/99	110199W12	
Total suspended solids	<5.	U			mg/L	EPA 160.2		10/29/99	102999W12	

Notes:

U-Undetected at reported level. J-reported value is estimated.

Authorized:   
Date: November 4, 1999      Monika Santucci



**ANNUAL GROUNDWATER SAMPLING & ANALYSES  
LABORATORY ANALYTICAL DATA SHEETS**

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting  
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N3307  
Samp. Description: MW-2  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 1 Instrument: 9001

Collected: 10/19/99  
Received: 10/20/99  
Prepared:  
Analyzed: 10/23/99

Matrix: Water  
QC Batch: 102399W1  
%Solids:  
Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL	Notes
Benzene	<1.	U	1		1.	
Bromodichloromethane	<1.	U	1		1.	
Bromoform	<10.	U	1		10.	
Bromomethane	<10.	U	1		10.	
Carbon tetrachloride	<1.	U	1		1.	
Chlorobenzene	<1.	U	1		1.	
Chloroethane	<1.	U	1		1.	
2-Chloroethylvinyl ether	<10.	U	1		10.	
Chloroform	<1.	U	1		1.	
Chloromethane	<10.	U	1		10.	
Dibromochloromethane	<1.	U	1		1.	
1,2-Dichlorobenzene	<5.	U	1		5.	
1,3-Dichlorobenzene	<5.	U	1		5.	
1,4-Dichlorobenzene	<5.	U	1		5.	
Dichlorodifluoromethane	<10.	U	1		10.	
1,1-Dichloroethane	<1.	U	1		1.	
1,2-Dichloroethane	<1.	U	1		1.	
1,1-Dichloroethylene	<1.	U	1		1.	
cis-1,2-Dichloroethylene	<1.	U	1		1.	
trans-1,2-Dichloroethylene	<1.	U	1		1.	
Dichloromethane	<1.	U	1		1.	
1,2-Dichloropropane	<1.	U	1		1.	
cis-1,3-Dichloropropylene	<1.	U	1		1.	
trans-1,3-Dichloropropylene	<1.	U	1		1.	
Ethylbenzene	<1.	U	1		1.	
1,1,2,2-Tetrachloroethane	<1.	U	1		1.	
Tetrachloroethylene	<1.	U	1		1.	
Toluene	<1.	U	1		1.	
1,1,1-Trichloroethane	<1.	U	1		1.	

# - Outside control limits. U - Undetected at the reported level.  
J - reported value is estimated.  
E - concentration exceeded the calibration range and is estimated.

Authorized: Monika Santucci  
Date: November 3, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting  
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N3307  
Samp. Description: MW-2  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 1 Instrument: 9001

Collected: 10/19/99  
Received: 10/20/99  
Prepared:  
Analyzed: 10/23/99

Matrix: Water  
QC Batch: 102399W1  
%Solids:  
Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL	Notes
1,1,2-Trichloroethane	<1.	U	1		1.	
Trichloroethylene	<1.	U	1		1.	
Trichlorofluoromethane	<1.	U	1		1.	
Vinyl Chloride	<1.	U	1		1.	
Xylenes (total)	<3.	U	1		3.	

Surrogate	Result	Qual	Col	Limits	Notes
2-Chloropropane (surrogate)	101.%		1	72-123	
Fluorobenzene (surrogate)	99.%		1	81-114	

Notes:

# - Outside control limits. U - Undetected at the reported level.  
J - reported value is estimated.  
E - concentration exceeded the calibration range and is estimated.

Authorized: Monika Santucci  
Date: November 3, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting  
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N3319  
Samp. Description: MW-5  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 10 Instrument: 9001

Collected: 10/19/99  
Received: 10/20/99  
Prepared:  
Analyzed: 11/01/99

Matrix: Water  
QC Batch: 110199W1  
% Solids:  
Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL Notes
Benzene	<10.	U	1		10.
Bromodichloromethane	<10.	U	1		10.
Bromoform	<100.	U	1		100.
Bromomethane	<100.	U	1		100.
Carbon tetrachloride	<10.	U	1		10.
Chlorobenzene	<10.	U	1		10.
Chloroethane	<10.	U	1		10.
2-Chloroethylvinyl ether	<100.	U	1		100.
Chloroform	<10.	U	1		10.
Chloromethane	<100.	U	1		100.
Dibromochloromethane	<10.	U	1		10.
1,2-Dichlorobenzene	<50.	U	1		50.
1,3-Dichlorobenzene	<50.	U	1		50.
1,4-Dichlorobenzene	<50.	U	1		50.
Dichlorodifluoromethane	<100.	U	1		100.
1,1-Dichloroethane	<10.	U	1		10.
1,2-Dichloroethane	<10.	U	1		10.
1,1-Dichloroethylene	<10.	U	1		10.
cis-1,2-Dichloroethylene	<10.	U	1		10.
trans-1,2-Dichloroethylene	<10.	U	1		10.
Dichloromethane	<10.	U	1		10.
1,2-Dichloropropane	<10.	U	1		10.
cis-1,3-Dichloropropylene	<10.	U	1		10.
trans-1,3-Dichloropropylene	<10.	U	1		10.
Ethylbenzene	<10.	U	1		10.
1,1,2,2-Tetrachloroethane	<10.	U	1		10.
Tetrachloroethylene	<10.	U	1		10.
Toluene	<10.	U	1		10.
1,1,1-Trichloroethane	<10.	U	1		10.

# - Outside control limits. U - Undetected at the reported level.  
J - reported value is estimated.  
E - concentration exceeded the calibration range and is estimated.

Authorized: Monika Santucci  
Date: November 3, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting  
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N3319  
Samp. Description: MW-5  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 10 Instrument: 9001

Collected: 10/19/99  
Received: 10/20/99  
Prepared:  
Analyzed: 11/01/99

Matrix: Water  
QC Batch: 110199W1  
%Solids:  
Sample Size: 5 ml

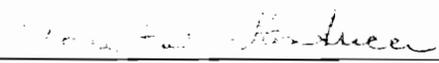
Number of analytes: 34

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>Col</u>	<u>MDL</u>	<u>RL</u>	<u>Notes</u>
1,1,2-Trichloroethane	<10.	U	1		10.	
Trichloroethylene	78.		1		10.	
Trichlorofluoromethane	<10.	U	1		10.	
Vinyl Chloride	<10.	U	1		10.	
Xylenes (total)	<30.	U	1		30.	

<u>Surrogate</u>	<u>Result</u>	<u>Qual</u>	<u>Col</u>	<u>Limits</u>	<u>Notes</u>
2-Chloropropane (surrogate)	109.%		1	72-123	
Fluorobenzene (surrogate)	96.%		1	81-114	

Notes:

# - Outside control limits. U - Undetected at the reported level.  
J - reported value is estimated.  
E - concentration exceeded the calibration range and is estimated.

Authorized:   
Date: November 3, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting  
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N3321  
Samp. Description: MW-6  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 2 Instrument: 9001

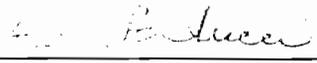
Collected: 10/19/99  
Received: 10/20/99  
Prepared:  
Analyzed: 11/02/99

Matrix: Water  
QC Batch: 110199W1  
%Solids:  
Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL	Notes
Benzene	<2.	U	1		2.	
Bromodichloromethane	<2.	U	1		2.	
Bromoform	<20.	U	1		20.	
Bromomethane	<20.	U	1		20.	
Carbon tetrachloride	<2.	U	1		2.	
Chlorobenzene	<2.	U	1		2.	
Chloroethane	<2.	U	1		2.	
2-Chloroethylvinyl ether	<20.	U	1		20.	
Chloroform	<2.	U	1		2.	
Chloromethane	<20.	U	1		20.	
Dibromochloromethane	<2.	U	1		2.	
1,2-Dichlorobenzene	<10.	U	1		10.	
1,3-Dichlorobenzene	<10.	U	1		10.	
1,4-Dichlorobenzene	<10.	U	1		10.	
Dichlorodifluoromethane	<20.	U	1		20.	
1,1-Dichloroethane	<2.	U	1		2.	
1,2-Dichloroethane	<2.	U	1		2.	
1,1-Dichloroethylene	<2.	U	1		2.	
cis-1,2-Dichloroethylene	<2.	U	1		2.	
trans-1,2-Dichloroethylene	<2.	U	1		2.	
Dichloromethane	<2.	U	1		2.	
1,2-Dichloropropane	<2.	U	1		2.	
cis-1,3-Dichloropropylene	<2.	U	1		2.	
trans-1,3-Dichloropropylene	<2.	U	1		2.	
Ethylbenzene	<2.	U	1		2.	
1,1,2,2-Tetrachloroethane	<2.	U	1		2.	
Tetrachloroethylene	<2.	U	1		2.	
Toluene	<2.	U	1		2.	
1,1,1-Trichloroethane	<2.	U	1		2.	

# - Outside control limits. U - Undetected at the reported level.  
J - reported value is estimated.  
E - concentration exceeded the calibration range and is estimated.

Authorized:   
Date: November 3, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting  
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N3321  
Samp. Description: MW-6  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 2 Instrument: 9001

Collected: 10/19/99  
Received: 10/20/99  
Prepared:  
Analyzed: 11/02/99

Matrix: Water  
QC Batch: 110199W1  
%Solids:  
Sample Size: 5 ml

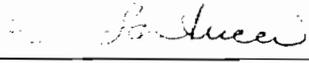
Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL	Notes
1,1,2-Trichloroethane	<2.	U	1		2.	
Trichloroethylene	72.		1		2.	
Trichlorofluoromethane	<2.	U	1		2.	
Vinyl Chloride	<2.	U	1		2.	
Xylenes (total)	<6.	U	1		6.	

Surrogate	Result	Qual	Col	Limits	Notes
2-Chloropropane (surrogate)	116.%		1	72-123	
Fluorobenzene (surrogate)	100.%		1	81-114	

Notes:

- # - Outside control limits. U - Undetected at the reported level.
- J - reported value is estimated.
- E - concentration exceeded the calibration range and is estimated.

Authorized:   
Date: November 3, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting  
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N3311  
Samp. Description: MW-7  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 1 Instrument: 9001

Collected: 10/19/99  
Received: 10/20/99  
Prepared:  
Analyzed: 10/23/99

Matrix: Water  
QC Batch: 102399W1  
%Solids:  
Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL	Notes
Benzene	<1.	U	1		1.	
Bromodichloromethane	<1.	U	1		1.	
Bromoform	<10.	U	1		10.	
Bromomethane	<10.	U	1		10.	
Carbon tetrachloride	<1.	U	1		1.	
Chlorobenzene	<1.	U	1		1.	
Chloroethane	<1.	U	1		1.	
2-Chloroethylvinyl ether	<10.	U	1		10.	
Chloroform	<1.	U	1		1.	
Chloromethane	<10.	U	1		10.	
Dibromochloromethane	<1.	U	1		1.	
1,2-Dichlorobenzene	<5.	U	1		5.	
1,3-Dichlorobenzene	<5.	U	1		5.	
1,4-Dichlorobenzene	<5.	U	1		5.	
Dichlorodifluoromethane	<10.	U	1		10.	
1,1-Dichloroethane	<1.	U	1		1.	
1,2-Dichloroethane	<1.	U	1		1.	
1,1-Dichloroethylene	<1.	U	1		1.	
cis-1,2-Dichloroethylene	<1.	U	1		1.	
trans-1,2-Dichloroethylene	<1.	U	1		1.	
Dichloromethane	<1.	U	1		1.	
1,2-Dichloropropane	<1.	U	1		1.	
cis-1,3-Dichloropropylene	<1.	U	1		1.	
trans-1,3-Dichloropropylene	<1.	U	1		1.	
Ethylbenzene	<1.	U	1		1.	
1,1,2,2-Tetrachloroethane	<1.	U	1		1.	
Tetrachloroethylene	<1.	U	1		1.	
Toluene	<1.	U	1		1.	
1,1,1-Trichloroethane	<1.	U	1		1.	

# - Outside control limits. U - Undetected at the reported level.  
J - reported value is estimated.  
E - concentration exceeded the calibration range and is estimated.

Authorized:   
Date: November 3, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting  
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N3311  
Samp. Description: MW-7  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 1 Instrument: 9001

Collected: 10/19/99 Matrix: Water  
Received: 10/20/99 QC Batch: 102399W1  
Prepared: %Solids:  
Analyzed: 10/23/99 Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL	Notes
1,1,2-Trichloroethane	<1.	U	1		1.	
Trichloroethylene	<1.	U	1		1.	
Trichlorofluoromethane	<1.	U	1		1.	
Vinyl Chloride	<1.	U	1		1.	
Xylenes (total)	<3.	U	1		3.	

Surrogate	Result	Qual	Col	Limits	Notes
2-Chloropropane (surrogate)	106.%		1	72-123	
Fluorobenzene (surrogate)	100.%		1	81-114	

Notes:

- # - Outside control limits. U - Undetected at the reported level.
- J - reported value is estimated.
- E - concentration exceeded the calibration range and is estimated.

Authorized: Monika Santucci  
Date: November 3, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting  
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N3309  
Samp. Description: MW-8  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 1 Instrument: 9001

Collected: 10/19/99  
Received: 10/20/99  
Prepared:  
Analyzed: 10/23/99

Matrix: Water  
QC Batch: 102399W1  
% Solids:  
Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL	Notes
Benzene	<1.	U	1		1.	
Bromodichloromethane	<1.	U	1		1.	
Bromoform	<10.	U	1		10.	
Bromomethane	<10.	U	1		10.	
Carbon tetrachloride	<1.	U	1		1.	
Chlorobenzene	<1.	U	1		1.	
Chloroethane	<1.	U	1		1.	
2-Chloroethylvinyl ether	<10.	U	1		10.	
Chloroform	<1.	U	1		1.	
Chloromethane	<10.	U	1		10.	
Dibromochloromethane	<1.	U	1		1.	
1,2-Dichlorobenzene	<5.	U	1		5.	
1,3-Dichlorobenzene	<5.	U	1		5.	
1,4-Dichlorobenzene	<5.	U	1		5.	
Dichlorodifluoromethane	<10.	U	1		10.	
1,1-Dichloroethane	<1.	U	1		1.	
1,2-Dichloroethane	<1.	U	1		1.	
1,1-Dichloroethylene	<1.	U	1		1.	
cis-1,2-Dichloroethylene	<1.	U	1		1.	
trans-1,2-Dichloroethylene	<1.	U	1		1.	
Dichloromethane	<1.	U	1		1.	
1,2-Dichloropropane	<1.	U	1		1.	
cis-1,3-Dichloropropylene	<1.	U	1		1.	
trans-1,3-Dichloropropylene	<1.	U	1		1.	
Ethylbenzene	<1.	U	1		1.	
1,1,2,2-Tetrachloroethane	<1.	U	1		1.	
Tetrachloroethylene	<1.	U	1		1.	
Toluene	<1.	U	1		1.	
1,1,1-Trichloroethane	<1.	U	1		1.	

# - Outside control limits. U - Undetected at the reported level.  
J - reported value is estimated.  
E - concentration exceeded the calibration range and is estimated.

Authorized: Monika Santucci  
Date: November 3, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting  
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N3309  
Samp. Description: MW-8  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 1 Instrument: 9001

Collected: 10/19/99  
Received: 10/20/99  
Prepared:  
Analyzed: 10/23/99

Matrix: Water  
QC Batch: 102399W1  
% Solids:  
Sample Size: 5 ml

Number of analytes: 34

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>Col</u>	<u>MDL</u>	<u>RL</u>	<u>Notes</u>
1,1,2-Trichloroethane	<1.	U	1			1.
Trichloroethylene	<1.	U	1			1.
Trichlorofluoromethane	<1.	U	1			1.
Vinyl Chloride	<1.	U	1			1.
Xylenes (total)	<3.	U	1			3.

<u>Surrogate</u>	<u>Result</u>	<u>Qual</u>	<u>Col</u>	<u>Limits</u>	<u>Notes</u>
2-Chloropropane (surrogate)	101.%		1	72-123	
Fluorobenzene (surrogate)	100.%		1	81-114	

Notes:

# - Outside control limits. U - Undetected at the reported level.  
J - reported value is estimated.  
E - concentration exceeded the calibration range and is estimated.

Authorized: Monika Santucci  
Date: November 3, 1999  
Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting  
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N3310  
Samp. Description: MW-9  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 5 Instrument: 9001

Collected: 10/19/99  
Received: 10/20/99  
Prepared:  
Analyzed: 10/23/99

Matrix: Water  
QC Batch: 102399W1  
% Solids:  
Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL	Notes
Benzene	<5.	U	1		5.	
Bromodichloromethane	<5.	U	1		5.	
Bromoform	<50.	U	1		50.	
Bromomethane	<50.	U	1		50.	
Carbon tetrachloride	<5.	U	1		5.	
Chlorobenzene	<5.	U	1		5.	
Chloroethane	<5.	U	1		5.	
2-Chloroethylvinyl ether	<50.	U	1		50.	
Chloroform	<5.	U	1		5.	
Chloromethane	<50.	U	1		50.	
Dibromochloromethane	<5.	U	1		5.	
1,2-Dichlorobenzene	<25.	U	1		25.	
1,3-Dichlorobenzene	<25.	U	1		25.	
1,4-Dichlorobenzene	<25.	U	1		25.	
Dichlorodifluoromethane	<50.	U	1		50.	
1,1-Dichloroethane	<5.	U	1		5.	
1,2-Dichloroethane	<5.	U	1		5.	
1,1-Dichloroethylene	<5.	U	1		5.	
cis-1,2-Dichloroethylene	<5.	U	1		5.	
trans-1,2-Dichloroethylene	<5.	U	1		5.	
Dichloromethane	<5.	U	1		5.	
1,2-Dichloropropane	<5.	U	1		5.	
cis-1,3-Dichloropropylene	<5.	U	1		5.	
trans-1,3-Dichloropropylene	<5.	U	1		5.	
Ethylbenzene	<5.	U	1		5.	
1,1,2,2-Tetrachloroethane	<5.	U	1		5.	
Tetrachloroethylene	<5.	U	1		5.	
Toluene	<5.	U	1		5.	
1,1,1-Trichloroethane	<5.	U	1		5.	

# - Outside control limits. U - Undetected at the reported level.  
J - reported value is estimated.  
E - concentration exceeded the calibration range and is estimated.

Authorized: Monika Santucci  
Date: November 3, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting  
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N3310  
Samp. Description: MW-9  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 5 Instrument: 9001

Collected: 10/19/99  
Received: 10/20/99  
Prepared:  
Analyzed: 10/23/99

Matrix: Water  
QC Batch: 102399W1  
%Solids:  
Sample Size: 5 ml

Number of analytes: 34

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>Col</u>	<u>MDL</u>	<u>RL</u>	<u>Notes</u>
1,1,2-Trichloroethane	<5.	U	1		5.	
Trichloroethylene	46.		1		5.	
Trichlorofluoromethane	<5.	U	1		5.	
Vinyl Chloride	<5.	U	1		5.	
Xylenes (total)	<15.	U	1		15.	

<u>Surrogate</u>	<u>Result</u>	<u>Qual</u>	<u>Col</u>	<u>Limits</u>	<u>Notes</u>
2-Chloropropane (surrogate)	102.%		1	72-123	
Fluorobenzene (surrogate)	99.%		1	81-114	

Notes:

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E - concentration exceeded the calibration range and is estimated.

Authorized: Monika Santucci  
Date: November 3, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting  
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N3323  
Samp. Description: MW-10  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 25 Instrument: 9001

Collected: 10/20/99  
Received: 10/20/99  
Prepared:  
Analyzed: 11/02/99

Matrix: Water  
QC Batch: 110199W1  
%Solids:  
Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL Notes
Benzene	<25.	U	1		25.
Bromodichloromethane	<25.	U	1		25.
Bromoform	<250.	U	1		250.
Bromomethane	<250.	U	1		250.
Carbon tetrachloride	<25.	U	1		25.
Chlorobenzene	<25.	U	1		25.
Chloroethane	<25.	U	1		25.
2-Chloroethylvinyl ether	<250.	U	1		250.
Chloroform	<25.	U	1		25.
Chloromethane	<250.	U	1		250.
Dibromochloromethane	<25.	U	1		25.
1,2-Dichlorobenzene	<120.	U	1		125.
1,3-Dichlorobenzene	<120.	U	1		125.
1,4-Dichlorobenzene	<120.	U	1		125.
Dichlorodifluoromethane	<250.	U	1		250.
1,1-Dichloroethane	<25.	U	1		25.
1,2-Dichloroethane	<25.	U	1		25.
1,1-Dichloroethylene	<25.	U	1		25.
cis-1,2-Dichloroethylene	<25.	U	1		25.
trans-1,2-Dichloroethylene	<25.	U	1		25.
Dichloromethane	<25.	U	1		25.
1,2-Dichloropropane	<25.	U	1		25.
cis-1,3-Dichloropropylene	<25.	U	1		25.
trans-1,3-Dichloropropylene	<25.	U	1		25.
Ethylbenzene	<25.	U	1		25.
1,1,2,2-Tetrachloroethane	<25.	U	1		25.
Tetrachloroethylene	<25.	U	1		25.
Toluene	<25.	U	1		25.
1,1,1-Trichloroethane	<25.	U	1		25.

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J - reported value is estimated.  
E - concentration exceeded the calibration range and is estimated.

Authorized: \_\_\_\_\_  
Date: November 3, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting  
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N3323  
Samp. Description: MW-10  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 25 Instrument: 9001

Collected: 10/20/99 Matrix: Water  
Received: 10/20/99 QC Batch: 110199W1  
Prepared: %Solids:  
Analyzed: 11/02/99 Sample Size: 5 ml

Number of analytes: 34

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>Col</u>	<u>MDL</u>	<u>RL</u>	<u>Notes</u>
1,1,2-Trichloroethane	<25.	U	1		25.	
Trichloroethylene	700.		1		25.	
Trichlorofluoromethane	<25.	U	1		25.	
Vinyl Chloride	<25.	U	1		25.	
Xylenes (total)	<75.	U	1		75.	

<u>Surrogate</u>	<u>Result</u>	<u>Qual</u>	<u>Col</u>	<u>Limits</u>	<u>Notes</u>
2-Chloropropane (surrogate)	112.%		1	72-123	
Fluorobenzene (surrogate)	98.%		1	81-114	

Notes:

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E - concentration exceeded the calibration range and is estimated.

Authorized: Monika Santucci  
Date: November 3, 1999

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting  
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N3318  
Samp. Description: MW-11  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 25 Instrument: 9001

Collected: 10/19/99  
Received: 10/20/99  
Prepared:  
Analyzed: 11/01/99

Matrix: Water  
QC Batch: 110199W1  
%Solids:  
Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL	Notes
Benzene	<25.	U	1		25.	
Bromodichloromethane	<25.	U	1		25.	
Bromoform	<250.	U	1		250.	
Bromomethane	<250.	U	1		250.	
Carbon tetrachloride	<25.	U	1		25.	
Chlorobenzene	<25.	U	1		25.	
Chloroethane	<25.	U	1		25.	
2-Chloroethylvinyl ether	<250.	U	1		250.	
Chloroform	<25.	U	1		25.	
Chloromethane	<250.	U	1		250.	
Dibromochloromethane	<25.	U	1		25.	
1,2-Dichlorobenzene	<120.	U	1		125.	
1,3-Dichlorobenzene	<120.	U	1		125.	
1,4-Dichlorobenzene	<120.	U	1		125.	
Dichlorodifluoromethane	<250.	U	1		250.	
1,1-Dichloroethane	<25.	U	1		25.	
1,2-Dichloroethane	<25.	U	1		25.	
1,1-Dichloroethylene	<25.	U	1		25.	
cis-1,2-Dichloroethylene	<25.	U	1		25.	
trans-1,2-Dichloroethylene	<25.	U	1		25.	
Dichloromethane	<25.	U	1		25.	
1,2-Dichloropropane	<25.	U	1		25.	
cis-1,3-Dichloropropylene	<25.	U	1		25.	
trans-1,3-Dichloropropylene	<25.	U	1		25.	
Ethylbenzene	<25.	U	1		25.	
1,1,2,2-Tetrachloroethane	<25.	U	1		25.	
Tetrachloroethylene	<25.	U	1		25.	
Toluene	<25.	U	1		25.	
1,1,1-Trichloroethane	<25.	U	1		25.	

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J - reported value is estimated.  
E - concentration exceeded the calibration range and is estimated.

Authorized:   
Date: November 3, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting  
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N3318  
Samp. Description: MW-11  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 25 Instrument: 9001

Collected: 10/19/99 Matrix: Water  
Received: 10/20/99 QC Batch: 110199W1  
Prepared: %Solids:  
Analyzed: 11/01/99 Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL	Notes
1,1,2-Trichloroethane	<25.	U	1		25.	
Trichloroethylene	900.		1		25.	
Trichlorofluoromethane	<25.	U	1		25.	
Vinyl Chloride	<25.	U	1		25.	
Xylenes (total)	<75.	U	1		75.	

Surrogate	Result	Qual	Col	Limits	Notes
2-Chloropropane (surrogate)	110.%		1	72-123	
Fluorobenzene (surrogate)	96.%		1	81-114	

Notes:

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Authorized:   
Date: November 3, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting  
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N3312  
Samp. Description: MW-12  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 1 Instrument: 9001

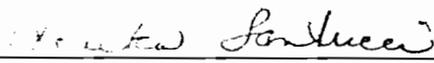
Collected: 10/19/99  
Received: 10/20/99  
Prepared:  
Analyzed: 10/23/99

Matrix: Water  
QC Batch: 102399W1  
% Solids:  
Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL	Notes
Benzene	<1.	U	1		1.	
Bromodichloromethane	<1.	U	1		1.	
Bromoform	<10.	U	1		10.	
Bromomethane	<10.	U	1		10.	
Carbon tetrachloride	<1.	U	1		1.	
Chlorobenzene	<1.	U	1		1.	
Chloroethane	<1.	U	1		1.	
2-Chloroethylvinyl ether	<10.	U	1		10.	
Chloroform	<1.	U	1		1.	
Chloromethane	<10.	U	1		10.	
Dibromochloromethane	<1.	U	1		1.	
1,2-Dichlorobenzene	<5.	U	1		5.	
1,3-Dichlorobenzene	<5.	U	1		5.	
1,4-Dichlorobenzene	<5.	U	1		5.	
Dichlorodifluoromethane	<10.	U	1		10.	
1,1-Dichloroethane	<1.	U	1		1.	
1,2-Dichloroethane	<1.	U	1		1.	
1,1-Dichloroethylene	<1.	U	1		1.	
cis-1,2-Dichloroethylene	<1.	U	1		1.	
trans-1,2-Dichloroethylene	<1.	U	1		1.	
Dichloromethane	<1.	U	1		1.	
1,2-Dichloropropane	<1.	U	1		1.	
cis-1,3-Dichloropropylene	<1.	U	1		1.	
trans-1,3-Dichloropropylene	<1.	U	1		1.	
Ethylbenzene	<1.	U	1		1.	
1,1,2,2-Tetrachloroethane	<1.	U	1		1.	
Tetrachloroethylene	<1.	U	1		1.	
Toluene	<1.	U	1		1.	
1,1,1-Trichloroethane	<1.	U	1		1.	

# - Outside control limits. U - Undetected at the reported level.  
J - reported value is estimated.  
E - concentration exceeded the calibration range and is estimated.

Authorized:   
Date: November 3, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting  
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N3312  
Samp. Description: MW-12  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 1 Instrument: 9001

Collected: 10/19/99  
Received: 10/20/99  
Prepared:  
Analyzed: 10/23/99

Matrix: Water  
QC Batch: 102399W1  
%Solids:  
Sample Size: 5 ml

Number of analytes: 34

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>Col</u>	<u>MDL</u>	<u>RL</u>	<u>Notes</u>
1,1,2-Trichloroethane	<1.	U	1		1.	
Trichloroethylene	15.		1		1.	
Trichlorofluoromethane	<1.	U	1		1.	
Vinyl Chloride	<1.	U	1		1.	
Xylenes (total)	<3.	U	1		3.	

<u>Surrogate</u>	<u>Result</u>	<u>Qual</u>	<u>Col</u>	<u>Limits</u>	<u>Notes</u>
2-Chloropropane (surrogate)	98.%		1	72-123	
Fluorobenzene (surrogate)	99.%		1	81-114	

Notes:

- # - Outside control limits. U - Undetected at the reported level.  
J - reported value is estimated.  
E - concentration exceeded the calibration range and is estimated.

Authorized: Monika Santucci  
Date: November 3, 1999     Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting  
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N3325  
Samp. Description: MW-13  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 20 Instrument: 9001

Collected: 10/20/99  
Received: 10/20/99  
Prepared:  
Analyzed: 11/02/99

Matrix: Water  
QC Batch: 110299W1  
%Solids:  
Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL Notes
Benzene	<20.	U	1		20.
Bromodichloromethane	<20.	U	1		20.
Bromoform	<200.	U	1		200.
Bromomethane	<200.	U	1		200.
Carbon tetrachloride	<20.	U	1		20.
Chlorobenzene	<20.	U	1		20.
Chloroethane	<20.	U	1		20.
2-Chloroethylvinyl ether	<200.	U	1		200.
Chloroform	<20.	U	1		20.
Chloromethane	<200.	U	1		200.
Dibromochloromethane	<20.	U	1		20.
1,2-Dichlorobenzene	<100.	U	1		100.
1,3-Dichlorobenzene	<100.	U	1		100.
1,4-Dichlorobenzene	<100.	U	1		100.
Dichlorodifluoromethane	<200.	U	1		200.
1,1-Dichloroethane	<20.	U	1		20.
1,2-Dichloroethane	<20.	U	1		20.
1,1-Dichloroethylene	<20.	U	1		20.
cis-1,2-Dichloroethylene	<20.	U	1		20.
trans-1,2-Dichloroethylene	<20.	U	1		20.
Dichloromethane	<20.	U	1		20.
1,2-Dichloropropane	<20.	U	1		20.
cis-1,3-Dichloropropylene	<20.	U	1		20.
trans-1,3-Dichloropropylene	<20.	U	1		20.
Ethylbenzene	<20.	U	1		20.
1,1,2,2-Tetrachloroethane	<20.	U	1		20.
Tetrachloroethylene	<20.	U	1		20.
Toluene	<20.	U	1		20.
1,1,1-Trichloroethane	<20.	U	1		20.

# - Outside control limits. U - Undetected at the reported level.  
J - reported value is estimated.  
E - concentration exceeded the calibration range and is estimated.

Authorized: \_\_\_\_\_  
Date: November 3, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting  
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N3325  
Samp. Description: MW-13  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 20 Instrument: 9001

Collected: 10/20/99  
Received: 10/20/99  
Prepared:  
Analyzed: 11/02/99

Matrix: Water  
QC Batch: 110299W1  
%Solids:  
Sample Size: 5 ml

Number of analytes: 34

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>Col</u>	<u>MDL</u>	<u>RL</u>	<u>Notes</u>
1,1,2-Trichloroethane	<20.	U	1		20.	
Trichloroethylene	430.		1		20.	
Trichlorofluoromethane	<20.	U	1		20.	
Vinyl Chloride	<20.	U	1		20.	
Xylenes (total)	<60.	U	1		60.	

<u>Surrogate</u>	<u>Result</u>	<u>Qual</u>	<u>Col</u>	<u>Limits</u>	<u>Notes</u>
2-Chloropropane (surrogate)	99.%		1	72-123	
Fluorobenzene (surrogate)	99.%		1	81-114	

Notes:

# - Outside control limits. U - Undetected at the reported level.  
J - reported value is estimated.  
E - concentration exceeded the calibration range and is estimated.

Authorized: \_\_\_\_\_  
Date: November 3, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting  
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N3324  
Samp. Description: MW-14  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 10 Instrument: 9001

Collected: 10/20/99  
Received: 10/20/99  
Prepared:  
Analyzed: 11/02/99

Matrix: Water  
QC Batch: 110299W1  
% Solids:  
Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL	Notes
Benzene	<10.	U	1		10.	
Bromodichloromethane	<10.	U	1		10.	
Bromoform	<100.	U	1		100.	
Bromomethane	<100.	U	1		100.	
Carbon tetrachloride	<10.	U	1		10.	
Chlorobenzene	<10.	U	1		10.	
Chloroethane	<10.	U	1		10.	
2-Chloroethylvinyl ether	<100.	U	1		100.	
Chloroform	<10.	U	1		10.	
Chloromethane	<100.	U	1		100.	
Dibromochloromethane	<10.	U	1		10.	
1,2-Dichlorobenzene	<50.	U	1		50.	
1,3-Dichlorobenzene	<50.	U	1		50.	
1,4-Dichlorobenzene	<50.	U	1		50.	
Dichlorodifluoromethane	<100.	U	1		100.	
1,1-Dichloroethane	<10.	U	1		10.	
1,2-Dichloroethane	<10.	U	1		10.	
1,1-Dichloroethylene	<10.	U	1		10.	
cis-1,2-Dichloroethylene	<10.	U	1		10.	
trans-1,2-Dichloroethylene	<10.	U	1		10.	
Dichloromethane	<10.	U	1		10.	
1,2-Dichloropropane	<10.	U	1		10.	
cis-1,3-Dichloropropylene	<10.	U	1		10.	
trans-1,3-Dichloropropylene	<10.	U	1		10.	
Ethylbenzene	<10.	U	1		10.	
1,1,2,2-Tetrachloroethane	<10.	U	1		10.	
Tetrachloroethylene	<10.	U	1		10.	
Toluene	<10.	U	1		10.	
1,1,1-Trichloroethane	<10.	U	1		10.	

# - Outside control limits. U - Undetected at the reported level.  
J - reported value is estimated.  
E - concentration exceeded the calibration range and is estimated.

Authorized: \_\_\_\_\_  
Date: November 3, 1999      Monika Santucci



# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting  
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N3306  
Samp. Description: MW-15  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 1 Instrument: 9001

Collected: 10/19/99  
Received: 10/20/99  
Prepared:  
Analyzed: 11/01/99

Matrix: Water  
QC Batch: 110199W1  
%Solids:  
Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL	Notes
Benzene	<1.	U	1		1.	
Bromodichloromethane	<1.	U	1		1.	
Bromoform	<10.	U	1		10.	
Bromomethane	<10.	U	1		10.	
Carbon tetrachloride	<1.	U	1		1.	
Chlorobenzene	<1.	U	1		1.	
Chloroethane	<1.	U	1		1.	
2-Chloroethylvinyl ether	<10.	U	1		10.	
Chloroform	<1.	U	1		1.	
Chloromethane	<10.	U	1		10.	
Dibromochloromethane	<1.	U	1		1.	
1,2-Dichlorobenzene	<5.	U	1		5.	
1,3-Dichlorobenzene	<5.	U	1		5.	
1,4-Dichlorobenzene	<5.	U	1		5.	
Dichlorodifluoromethane	<10.	U	1		10.	
1,1-Dichloroethane	<1.	U	1		1.	
1,2-Dichloroethane	<1.	U	1		1.	
1,1-Dichloroethylene	<1.	U	1		1.	
cis-1,2-Dichloroethylene	<1.	U	1		1.	
trans-1,2-Dichloroethylene	<1.	U	1		1.	
Dichloromethane	<1.	U	1		1.	
1,2-Dichloropropane	<1.	U	1		1.	
cis-1,3-Dichloropropylene	<1.	U	1		1.	
trans-1,3-Dichloropropylene	<1.	U	1		1.	
Ethylbenzene	<1.	U	1		1.	
1,1,2,2-Tetrachloroethane	<1.	U	1		1.	
Tetrachloroethylene	<1.	U	1		1.	
Toluene	<1.	U	1		1.	
1,1,1-Trichloroethane	<1.	U	1		1.	

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J - reported value is estimated.  
E - concentration exceeded the calibration range and is estimated.

Authorized:   
Date: November 3, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting  
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N3306  
Samp. Description: MW-15  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 1 Instrument: 9001

Collected: 10/19/99  
Received: 10/20/99  
Prepared:  
Analyzed: 11/01/99

Matrix: Water  
QC Batch: 110199W1  
%Solids:  
Sample Size: 5 ml

Number of analytes: 34

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>Col</u>	<u>MDL</u>	<u>RL</u>	<u>Notes</u>
1,1,2-Trichloroethane	<1.	U	1		1.	
Trichloroethylene	13.		1		1.	
Trichlorofluoromethane	<1.	U	1		1.	
Vinyl Chloride	<1.	U	1		1.	
Xylenes (total)	<3.	U	1		3.	

<u>Surrogate</u>	<u>Result</u>	<u>Qual</u>	<u>Col</u>	<u>Limits</u>	<u>Notes</u>
2-Chloropropane (surrogate)	115.%		1	72-123	
Fluorobenzene (surrogate)	96.%		1	81-114	

Notes:

# - Outside control limits. U - Undetected at the reported level.  
J - reported value is estimated.  
E - concentration exceeded the calibration range and is estimated.

Authorized:   
Date: November 3, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting  
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N3305  
Samp. Description: MW-16  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 1 Instrument: 9001

Collected: 10/19/99 Matrix: Water  
Received: 10/20/99 QC Batch: 102399W1  
Prepared: %Solids:  
Analyzed: 10/23/99 Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL	Notes
Benzene	<1.	U	1		1.	
Bromodichloromethane	<1.	U	1		1.	
Bromoform	<10.	U	1		10.	
Bromomethane	<10.	U	1		10.	
Carbon tetrachloride	<1.	U	1		1.	
Chlorobenzene	<1.	U	1		1.	
Chloroethane	<1.	U	1		1.	
2-Chloroethylvinyl ether	<10.	U	1		10.	
Chloroform	<1.	U	1		1.	
Chloromethane	<10.	U	1		10.	
Dibromochloromethane	<1.	U	1		1.	
1,2-Dichlorobenzene	<5.	U	1		5.	
1,3-Dichlorobenzene	<5.	U	1		5.	
1,4-Dichlorobenzene	<5.	U	1		5.	
Dichlorodifluoromethane	<10.	U	1		10.	
1,1-Dichloroethane	<1.	U	1		1.	
1,2-Dichloroethane	<1.	U	1		1.	
1,1-Dichloroethylene	<1.	U	1		1.	
cis-1,2-Dichloroethylene	<1.	U	1		1.	
trans-1,2-Dichloroethylene	<1.	U	1		1.	
Dichloromethane	<1.	U	1		1.	
1,2-Dichloropropane	<1.	U	1		1.	
cis-1,3-Dichloropropylene	<1.	U	1		1.	
trans-1,3-Dichloropropylene	<1.	U	1		1.	
Ethylbenzene	<1.	U	1		1.	
1,1,2,2-Tetrachloroethane	<1.	U	1		1.	
Tetrachloroethylene	<1.	U	1		1.	
Toluene	<1.	U	1		1.	
1,1,1-Trichloroethane	<1.	U	1		1.	

# - Outside control limits. U - Undetected at the reported level.  
J - reported value is estimated.  
E - concentration exceeded the calibration range and is estimated.

Authorized:   
Date: November 3, 1999 Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting  
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N3305  
Samp. Description: MW-16  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 1 Instrument: 9001

Collected: 10/19/99 Matrix: Water  
Received: 10/20/99 QC Batch: 102399W1  
Prepared: %Solids:  
Analyzed: 10/23/99 Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL	Notes
1,1,2-Trichloroethane	<1.	U	1			1.
Trichloroethylene	15.		1			1.
Trichlorofluoromethane	<1.	U	1			1.
Vinyl Chloride	<1.	U	1			1.
Xylenes (total)	<3.	U	1			3.

Surrogate	Result	Qual	Col	Limits	Notes
2-Chloropropane (surrogate)	101.%		1	72-123	
Fluorobenzene (surrogate)	99.%		1	81-114	

Notes:

# - Outside control limits. U - Undetected at the reported level.  
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E - concentration exceeded the calibration range and is estimated.

Authorized: Monika Santucci  
Date: November 3, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting  
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N3313  
Samp. Description: MW-17  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 10 Instrument: 9001

Collected: 10/19/99  
Received: 10/20/99  
Prepared:  
Analyzed: 10/23/99

Matrix: Water  
QC Batch: 102399W1  
%Solids:  
Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL Notes
Benzene	<10.	U	1		10.
Bromodichloromethane	<10.	U	1		10.
Bromoform	<100.	U	1		100.
Bromomethane	<100.	U	1		100.
Carbon tetrachloride	<10.	U	1		10.
Chlorobenzene	<10.	U	1		10.
Chloroethane	<10.	U	1		10.
2-Chloroethylvinyl ether	<100.	U	1		100.
Chloroform	<10.	U	1		10.
Chloromethane	<100.	U	1		100.
Dibromochloromethane	<10.	U	1		10.
1,2-Dichlorobenzene	<50.	U	1		50.
1,3-Dichlorobenzene	<50.	U	1		50.
1,4-Dichlorobenzene	<50.	U	1		50.
Dichlorodifluoromethane	<100.	U	1		100.
1,1-Dichloroethane	<10.	U	1		10.
1,2-Dichloroethane	<10.	U	1		10.
1,1-Dichloroethylene	<10.	U	1		10.
cis-1,2-Dichloroethylene	<10.	U	1		10.
trans-1,2-Dichloroethylene	<10.	U	1		10.
Dichloromethane	<10.	U	1		10.
1,2-Dichloropropane	<10.	U	1		10.
cis-1,3-Dichloropropylene	<10.	U	1		10.
trans-1,3-Dichloropropylene	<10.	U	1		10.
Ethylbenzene	<10.	U	1		10.
1,1,2,2-Tetrachloroethane	<10.	U	1		10.
Tetrachloroethylene	<10.	U	1		10.
Toluene	<10.	U	1		10.
1,1,1-Trichloroethane	<10.	U	1		10.

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J - reported value is estimated.  
E - concentration exceeded the calibration range and is estimated.

Authorized: Monika Santucci  
Date: November 3, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting  
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N3313  
Samp. Description: MW-17  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 10 Instrument: 9001

Collected: 10/19/99 Matrix: Water  
Received: 10/20/99 QC Batch: 102399W1  
Prepared: %Solids:  
Analyzed: 10/23/99 Sample Size: 5 ml

Number of analytes: 34

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>Col</u>	<u>MDL</u>	<u>RL</u>	<u>Notes</u>
1,1,2-Trichloroethane	<10.	U	1		10.	
Trichloroethylene	180.		1		10.	
Trichlorofluoromethane	<10.	U	1		10.	
Vinyl Chloride	<10.	U	1		10.	
Xylenes (total)	<30.	U	1		30.	

<u>Surrogate</u>	<u>Result</u>	<u>Qual</u>	<u>Col</u>	<u>Limits</u>	<u>Notes</u>
2-Chloropropane (surrogate)	96.%		1	72-123	
Fluorobenzene (surrogate)	100.%		1	81-114	

Notes:

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J - reported value is estimated.  
E - concentration exceeded the calibration range and is estimated.

Authorized: Monika Santucci  
Date: November 3, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting  
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N3314  
Samp. Description: MW-18  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 100 Instrument: 9001

Collected: 10/19/99  
Received: 10/20/99  
Prepared:  
Analyzed: 11/01/99

Matrix: Water  
QC Batch: 110199W1  
% Solids:  
Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL Notes
Benzene	<100.	U	1		100.
Bromodichloromethane	<100.	U	1		100.
Bromoform	<1000.	U	1		1000.
Bromomethane	<1000.	U	1		1000.
Carbon tetrachloride	<100.	U	1		100.
Chlorobenzene	<100.	U	1		100.
Chloroethane	<100.	U	1		100.
2-Chloroethylvinyl ether	<1000.	U	1		1000.
Chloroform	<100.	U	1		100.
Chloromethane	<1000.	U	1		1000.
Dibromochloromethane	<100.	U	1		100.
1,2-Dichlorobenzene	<500.	U	1		500.
1,3-Dichlorobenzene	<500.	U	1		500.
1,4-Dichlorobenzene	<500.	U	1		500.
Dichlorodifluoromethane	<1000.	U	1		1000.
1,1-Dichloroethane	<100.	U	1		100.
1,2-Dichloroethane	<100.	U	1		100.
1,1-Dichloroethylene	<100.	U	1		100.
cis-1,2-Dichloroethylene	<100.	U	1		100.
trans-1,2-Dichloroethylene	<100.	U	1		100.
Dichloromethane	<100.	U	1		100.
1,2-Dichloropropane	<100.	U	1		100.
cis-1,3-Dichloropropylene	<100.	U	1		100.
trans-1,3-Dichloropropylene	<100.	U	1		100.
Ethylbenzene	<100.	U	1		100.
1,1,2,2-Tetrachloroethane	<100.	U	1		100.
Tetrachloroethylene	<100.	U	1		100.
Toluene	<100.	U	1		100.
1,1,1-Trichloroethane	<100.	U	1		100.

# - Outside control limits. U - Undetected at the reported level.  
J - reported value is estimated.  
E - concentration exceeded the calibration range and is estimated.

Authorized: Monika Santucci  
Date: November 3, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting  
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N3314  
Samp. Description: MW-18  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 100 Instrument: 9001

Collected: 10/19/99 Matrix: Water  
Received: 10/20/99 QC Batch: 110199W1  
Prepared: %Solids:  
Analyzed: 11/01/99 Sample Size: 5 ml

Number of analytes: 34

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>Col</u>	<u>MDL</u>	<u>RL</u>	<u>Notes</u>
1,1,2-Trichloroethane	<100.	U	1		100.	
Trichloroethylene	1800.		1		100.	
Trichlorofluoromethane	<100.	U	1		100.	
Vinyl Chloride	<100.	U	1		100.	
Xylenes (total)	<300.	U	1		300.	

<u>Surrogate</u>	<u>Result</u>	<u>Qual</u>	<u>Col</u>	<u>Limits</u>	<u>Notes</u>
2-Chloropropane (surrogate)	112.%		1	72-123	
Fluorobenzene (surrogate)	99.%		1	81-114	

Notes:

- # - Outside control limits. U - Undetected at the reported level.
- J - reported value is estimated.
- E - concentration exceeded the calibration range and is estimated.

Authorized: Monika Santucci  
Date: November 3, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting  
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N3316  
Samp. Description: MW-21  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 20 Instrument: 9001

Collected: 10/19/99 Matrix: Water  
Received: 10/20/99 QC Batch: 110299W1  
Prepared: %Solids:  
Analyzed: 11/02/99 Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL Notes
Benzene	<20.	U	1		20.
Bromodichloromethane	<20.	U	1		20.
Bromoform	<200.	U	1		200.
Bromomethane	<200.	U	1		200.
Carbon tetrachloride	<20.	U	1		20.
Chlorobenzene	<20.	U	1		20.
Chloroethane	<20.	U	1		20.
2-Chloroethylvinyl ether	<200.	U	1		200.
Chloroform	<20.	U	1		20.
Chloromethane	<200.	U	1		200.
Dibromochloromethane	<20.	U	1		20.
1,2-Dichlorobenzene	<100.	U	1		100.
1,3-Dichlorobenzene	<100.	U	1		100.
1,4-Dichlorobenzene	<100.	U	1		100.
Dichlorodifluoromethane	<200.	U	1		200.
1,1-Dichloroethane	<20.	U	1		20.
1,2-Dichloroethane	<20.	U	1		20.
1,1-Dichloroethylene	<20.	U	1		20.
cis-1,2-Dichloroethylene	670.		1		20.
trans-1,2-Dichloroethylene	<20.	U	1		20.
Dichloromethane	<20.	U	1		20.
1,2-Dichloropropane	<20.	U	1		20.
cis-1,3-Dichloropropylene	<20.	U	1		20.
trans-1,3-Dichloropropylene	<20.	U	1		20.
Ethylbenzene	<20.	U	1		20.
1,1,2,2-Tetrachloroethane	<20.	U	1		20.
Tetrachloroethylene	<20.	U	1		20.
Toluene	<20.	U	1		20.
1,1,1-Trichloroethane	<20.	U	1		20.

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

J - reported value is estimated.

E - concentration exceeded the calibration range and is estimated.

Authorized: Monika Santucci  
Date: November 3, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting  
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N3316  
Samp. Description: MW-21  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 20 Instrument: 9001

Collected: 10/19/99  
Received: 10/20/99  
Prepared:  
Analyzed: 11/02/99

Matrix: Water  
QC Batch: 110299W1  
%Solids:  
Sample Size: 5 ml

Number of analytes: 34

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>Col</u>	<u>MDL</u>	<u>RL</u>	<u>Notes</u>
1,1,2-Trichloroethane	<20.	U	1		20.	
Trichloroethylene	90.		1		20.	
Trichlorofluoromethane	<20.	U	1		20.	
Vinyl Chloride	<20.	U	1		20.	
Xylenes (total)	<60.	U	1		60.	

<u>Surrogate</u>	<u>Result</u>	<u>Qual</u>	<u>Col</u>	<u>Limits</u>	<u>Notes</u>
2-Chloropropane (surrogate)	96.%		1	72-123	
Fluorobenzene (surrogate)	98.%		1	81-114	

Notes:

# - Outside control limits. U - Undetected at the reported level.  
J - reported value is estimated.  
E - concentration exceeded the calibration range and is estimated.

Authorized: Monika Santucci  
Date: November 3, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting  
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N3315  
Samp. Description: MW-22  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 1 Instrument: 9001

Collected: 10/19/99 Matrix: Water  
Received: 10/20/99 QC Batch: 102399W1  
Prepared: %Solids:  
Analyzed: 10/23/99 Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL Notes
Benzene	<1.	U	1		1.
Bromodichloromethane	<1.	U	1		1.
Bromoform	<10.	U	1		10.
Bromomethane	<10.	U	1		10.
Carbon tetrachloride	<1.	U	1		1.
Chlorobenzene	<1.	U	1		1.
Chloroethane	<1.	U	1		1.
2-Chloroethylvinyl ether	<10.	U	1		10.
Chloroform	<1.	U	1		1.
Chloromethane	<10.	U	1		10.
Dibromochloromethane	<1.	U	1		1.
1,2-Dichlorobenzene	<5.	U	1		5.
1,3-Dichlorobenzene	<5.	U	1		5.
1,4-Dichlorobenzene	<5.	U	1		5.
Dichlorodifluoromethane	<10.	U	1		10.
1,1-Dichloroethane	<1.	U	1		1.
1,2-Dichloroethane	<1.	U	1		1.
1,1-Dichloroethylene	<1.	U	1		1.
cis-1,2-Dichloroethylene	28.		1		1.
trans-1,2-Dichloroethylene	<1.	U	1		1.
Dichloromethane	<1.	U	1		1.
1,2-Dichloropropane	<1.	U	1		1.
cis-1,3-Dichloropropylene	<1.	U	1		1.
trans-1,3-Dichloropropylene	<1.	U	1		1.
Ethylbenzene	<1.	U	1		1.
1,1,2,2-Tetrachloroethane	<1.	U	1		1.
Tetrachloroethylene	<1.	U	1		1.
Toluene	<1.	U	1		1.
1,1,1-Trichloroethane	<1.	U	1		1.

# - Outside control limits. U - Undetected at the reported level.  
J - reported value is estimated.  
E - concentration exceeded the calibration range and is estimated.

Authorized: Monika Santucci  
Date: November 3, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting  
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N3315  
Samp. Description: MW-22  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 1 Instrument: 9001

Collected: 10/19/99 Matrix: Water  
Received: 10/20/99 QC Batch: 102399W1  
Prepared: %Solids:  
Analyzed: 10/23/99 Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL	Notes
1,1,2-Trichloroethane	<1.	U	1		1.	
Trichloroethylene	9.		1		1.	
Trichlorofluoromethane	<1.	U	1		1.	
Vinyl Chloride	<1.	U	1		1.	
Xylenes (total)	<3.	U	1		3.	

Surrogate	Result	Qual	Col	Limits	Notes
2-Chloropropane (surrogate)	103.%		1	72-123	
Fluorobenzene (surrogate)	100.%		1	81-114	

Notes:

# - Outside control limits. U - Undetected at the reported level.  
J - reported value is estimated.  
E - concentration exceeded the calibration range and is estimated.

Authorized:   
Date: November 3, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting  
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N3308  
Samp. Description: MW-23  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 1 Instrument: 9001

Collected: 10/19/99  
Received: 10/20/99  
Prepared:  
Analyzed: 10/23/99

Matrix: Water  
QC Batch: 102399W1  
% Solids:  
Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL	Notes
Benzene	<1.	U	1		1.	
Bromodichloromethane	<1.	U	1		1.	
Bromoform	<10.	U	1		10.	
Bromomethane	<10.	U	1		10.	
Carbon tetrachloride	<1.	U	1		1.	
Chlorobenzene	<1.	U	1		1.	
Chloroethane	<1.	U	1		1.	
2-Chloroethylvinyl ether	<10.	U	1		10.	
Chloroform	<1.	U	1		1.	
Chloromethane	<10.	U	1		10.	
Dibromochloromethane	<1.	U	1		1.	
1,2-Dichlorobenzene	<5.	U	1		5.	
1,3-Dichlorobenzene	<5.	U	1		5.	
1,4-Dichlorobenzene	<5.	U	1		5.	
Dichlorodifluoromethane	<10.	U	1		10.	
1,1-Dichloroethane	<1.	U	1		1.	
1,2-Dichloroethane	<1.	U	1		1.	
1,1-Dichloroethylene	<1.	U	1		1.	
cis-1,2-Dichloroethylene	<1.	U	1		1.	
trans-1,2-Dichloroethylene	<1.	U	1		1.	
Dichloromethane	<1.	U	1		1.	
1,2-Dichloropropane	<1.	U	1		1.	
cis-1,3-Dichloropropylene	<1.	U	1		1.	
trans-1,3-Dichloropropylene	<1.	U	1		1.	
Ethylbenzene	<1.	U	1		1.	
1,1,2,2-Tetrachloroethane	<1.	U	1		1.	
Tetrachloroethylene	<1.	U	1		1.	
Toluene	<1.	U	1		1.	
1,1,1-Trichloroethane	<1.	U	1		1.	

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J - reported value is estimated.  
E - concentration exceeded the calibration range and is estimated.

Authorized: Monika Santucci  
Date: November 3, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting  
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N3308  
Samp. Description: MW-23  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 1 Instrument: 9001

Collected: 10/19/99  
Received: 10/20/99  
Prepared:  
Analyzed: 10/23/99

Matrix: Water  
QC Batch: 102399W1  
%Solids:  
Sample Size: 5 ml

Number of analytes: 34

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>Col</u>	<u>MDL</u>	<u>RL</u>	<u>Notes</u>
1,1,2-Trichloroethane	<1.	U	1		1.	
Trichloroethylene	<1.	U	1		1.	
Trichlorofluoromethane	<1.	U	1		1.	
Vinyl Chloride	<1.	U	1		1.	
Xylenes (total)	<3.	U	1		3.	

<u>Surrogate</u>	<u>Result</u>	<u>Qual</u>	<u>Col</u>	<u>Limits</u>	<u>Notes</u>
2-Chloropropane (surrogate)	102.%		1	72-123	
Fluorobenzene (surrogate)	99.%		1	81-114	

Notes:

# - Outside control limits. U - Undetected at the reported level.  
J - reported value is estimated.  
E - concentration exceeded the calibration range and is estimated.

Authorized:   
Date: November 3, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting  
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N3317  
Samp. Description: MW-24  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 100 Instrument: 9001

Collected: 10/19/99  
Received: 10/20/99  
Prepared:  
Analyzed: 11/01/99

Matrix: Water  
QC Batch: 110199W1  
%Solids:  
Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL Notes
Benzene	<100.	U	1		100.
Bromodichloromethane	<100.	U	1		100.
Bromoform	<1000.	U	1		1000.
Bromomethane	<1000.	U	1		1000.
Carbon tetrachloride	<100.	U	1		100.
Chlorobenzene	<100.	U	1		100.
Chloroethane	<100.	U	1		100.
2-Chloroethylvinyl ether	<1000.	U	1		1000.
Chloroform	<100.	U	1		100.
Chloromethane	<1000.	U	1		1000.
Dibromochloromethane	<100.	U	1		100.
1,2-Dichlorobenzene	<500.	U	1		500.
1,3-Dichlorobenzene	<500.	U	1		500.
1,4-Dichlorobenzene	<500.	U	1		500.
Dichlorodifluoromethane	<1000.	U	1		1000.
1,1-Dichloroethane	<100.	U	1		100.
1,2-Dichloroethane	<100.	U	1		100.
1,1-Dichloroethylene	<100.	U	1		100.
cis-1,2-Dichloroethylene	3000.		1		100.
trans-1,2-Dichloroethylene	<100.	U	1		100.
Dichloromethane	<100.	U	1		100.
1,2-Dichloropropane	<100.	U	1		100.
cis-1,3-Dichloropropylene	<100.	U	1		100.
trans-1,3-Dichloropropylene	<100.	U	1		100.
Ethylbenzene	<100.	U	1		100.
1,1,2,2-Tetrachloroethane	<100.	U	1		100.
Tetrachloroethylene	<100.	U	1		100.
Toluene	<100.	U	1		100.
1,1,1-Trichloroethane	<100.	U	1		100.

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J - reported value is estimated.  
E - concentration exceeded the calibration range and is estimated.

Authorized: Monika Santucci  
Date: November 3, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting  
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N3317  
Samp. Description: MW-24  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 100 Instrument: 9001

Collected: 10/19/99 Matrix: Water  
Received: 10/20/99 QC Batch: 110199W1  
Prepared: %Solids:  
Analyzed: 11/01/99 Sample Size: 5 ml

Number of analytes: 34

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>Col</u>	<u>MDL</u>	<u>RL</u>	<u>Notes</u>
1,1,2-Trichloroethane	<100.	U	1		100.	
Trichloroethylene	4300.		1		100.	
Trichlorofluoromethane	<100.	U	1		100.	
Vinyl Chloride	<100.	U	1		100.	
Xylenes (total)	<300.	U	1		300.	

<u>Surrogate</u>	<u>Result</u>	<u>Qual</u>	<u>Col</u>	<u>Limits</u>	<u>Notes</u>
2-Chloropropane (surrogate)	113.%		1	72-123	
Fluorobenzene (surrogate)	98.%		1	81-114	

Notes:

# - Outside control limits. U - Undetected at the reported level.  
J - reported value is estimated.  
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Authorized: Monika Santucci  
Date: November 3, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting  
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N3320  
Samp. Description: PZ-1  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 10 Instrument: 9001

Collected: 10/19/99 Matrix: Water  
Received: 10/20/99 QC Batch: 110299W1  
Prepared: % Solids:  
Analyzed: 11/02/99 Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL Notes
Benzene	<10.	U	1		10.
Bromodichloromethane	<10.	U	1		10.
Bromoform	<100.	U	1		100.
Bromomethane	<100.	U	1		100.
Carbon tetrachloride	<10.	U	1		10.
Chlorobenzene	<10.	U	1		10.
Chloroethane	<10.	U	1		10.
2-Chloroethylvinyl ether	<100.	U	1		100.
Chloroform	<10.	U	1		10.
Chloromethane	<100.	U	1		100.
Dibromochloromethane	<10.	U	1		10.
1,2-Dichlorobenzene	<50.	U	1		50.
1,3-Dichlorobenzene	<50.	U	1		50.
1,4-Dichlorobenzene	<50.	U	1		50.
Dichlorodifluoromethane	<100.	U	1		100.
1,1-Dichloroethane	<10.	U	1		10.
1,2-Dichloroethane	<10.	U	1		10.
1,1-Dichloroethylene	<10.	U	1		10.
cis-1,2-Dichloroethylene	<10.	U	1		10.
trans-1,2-Dichloroethylene	<10.	U	1		10.
Dichloromethane	<10.	U	1		10.
1,2-Dichloropropane	<10.	U	1		10.
cis-1,3-Dichloropropylene	<10.	U	1		10.
trans-1,3-Dichloropropylene	<10.	U	1		10.
Ethylbenzene	<10.	U	1		10.
1,1,2,2-Tetrachloroethane	<10.	U	1		10.
Tetrachloroethylene	<10.	U	1		10.
Toluene	<10.	U	1		10.
1,1,1-Trichloroethane	<10.	U	1		10.

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J - reported value is estimated.  
E - concentration exceeded the calibration range and is estimated.

Authorized:   
Date: November 3, 1999 Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting  
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N3320  
Samp. Description: PZ-1  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 10 Instrument: 9001

Collected: 10/19/99 Matrix: Water  
Received: 10/20/99 QC Batch: 110299W1  
Prepared: %Solids:  
Analyzed: 11/02/99 Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL	Notes
1,1,2-Trichloroethane	<10.	U	1		10.	
Trichloroethylene	410.		1		10.	
Trichlorofluoromethane	<10.	U	1		10.	
Vinyl Chloride	<10.	U	1		10.	
Xylenes (total)	<30.	U	1		30.	

Surrogate	Result	Qual	Col	Limits	Notes
2-Chloropropane (surrogate)	97.%		1	72-123	
Fluorobenzene (surrogate)	100.%		1	81-114	

Notes:

# - Outside control limits. U - Undetected at the reported level.  
J - reported value is estimated.  
E - concentration exceeded the calibration range and is estimated.

Authorized:   
Date: November 3, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting  
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N3322  
Samp. Description: PZ-2  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 1 Instrument: 9001

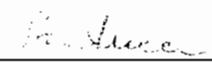
Collected: 10/19/99  
Received: 10/20/99  
Prepared:  
Analyzed: 11/02/99

Matrix: Water  
QC Batch: 110299W1  
% Solids:  
Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL	Notes
Benzene	<1.	U	1		1.	
Bromodichloromethane	<1.	U	1		1.	
Bromoform	<10.	U	1		10.	
Bromomethane	<10.	U	1		10.	
Carbon tetrachloride	<1.	U	1		1.	
Chlorobenzene	<1.	U	1		1.	
Chloroethane	<1.	U	1		1.	
2-Chloroethylvinyl ether	<10.	U	1		10.	
Chloroform	<1.	U	1		1.	
Chloromethane	<10.	U	1		10.	
Dibromochloromethane	<1.	U	1		1.	
1,2-Dichlorobenzene	<5.	U	1		5.	
1,3-Dichlorobenzene	<5.	U	1		5.	
1,4-Dichlorobenzene	<5.	U	1		5.	
Dichlorodifluoromethane	<10.	U	1		10.	
1,1-Dichloroethane	<1.	U	1		1.	
1,2-Dichloroethane	<1.	U	1		1.	
1,1-Dichloroethylene	<1.	U	1		1.	
cis-1,2-Dichloroethylene	<1.	U	1		1.	
trans-1,2-Dichloroethylene	<1.	U	1		1.	
Dichloromethane	<1.	U	1		1.	
1,2-Dichloropropane	<1.	U	1		1.	
cis-1,3-Dichloropropylene	<1.	U	1		1.	
trans-1,3-Dichloropropylene	<1.	U	1		1.	
Ethylbenzene	<1.	U	1		1.	
1,1,2,2-Tetrachloroethane	<1.	U	1		1.	
Tetrachloroethylene	<1.	U	1		1.	
Toluene	<1.	U	1		1.	
1,1,1-Trichloroethane	<1.	U	1		1.	

# - Outside control limits. U - Undetected at the reported level.  
J - reported value is estimated.  
E - concentration exceeded the calibration range and is estimated.

Authorized:   
Date: November 3, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting  
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N3322  
Samp. Description: PZ-2  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 1 Instrument: 9001

Collected: 10/19/99 Matrix: Water  
Received: 10/20/99 QC Batch: 110299W1  
Prepared: %Solids:  
Analyzed: 11/02/99 Sample Size: 5 ml

Number of analytes: 34

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>Col</u>	<u>MDL</u>	<u>RL</u>	<u>Notes</u>
1,1,2-Trichloroethane	<1.	U	1		1.	
Trichloroethylene	18.		1		1.	
Trichlorofluoromethane	<1.	U	1		1.	
Vinyl Chloride	<1.	U	1		1.	
Xylenes (total)	<3.	U	1		3.	

<u>Surrogate</u>	<u>Result</u>	<u>Qual</u>	<u>Col</u>	<u>Limits</u>	<u>Notes</u>
2-Chloropropane (surrogate)	100.%		1	72-123	
Fluorobenzene (surrogate)	100.%		1	81-114	

Notes:

# - Outside control limits. U - Undetected at the reported level.  
J - reported value is estimated.  
E - concentration exceeded the calibration range and is estimated.

Authorized: Monika Santucci  
Date: November 3, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting  
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N3326  
Samp. Description: QC Trip Blank  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 1 Instrument: 9001

Collected: 10/19/99  
Received: 10/20/99  
Prepared:  
Analyzed: 11/02/99

Matrix: Water  
QC Batch: 110299W1  
% Solids:  
Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL Notes
Benzene	<1.	U	1		1.
Bromodichloromethane	<1.	U	1		1.
Bromoform	<10.	U	1		10.
Bromomethane	<10.	U	1		10.
Carbon tetrachloride	<1.	U	1		1.
Chlorobenzene	<1.	U	1		1.
Chloroethane	<1.	U	1		1.
2-Chloroethylvinyl ether	<10.	U	1		10.
Chloroform	<1.	U	1		1.
Chloromethane	<10.	U	1		10.
Dibromochloromethane	<1.	U	1		1.
1,2-Dichlorobenzene	<5.	U	1		5.
1,3-Dichlorobenzene	<5.	U	1		5.
1,4-Dichlorobenzene	<5.	U	1		5.
Dichlorodifluoromethane	<10.	U	1		10.
1,1-Dichloroethane	<1.	U	1		1.
1,2-Dichloroethane	<1.	U	1		1.
1,1-Dichloroethylene	<1.	U	1		1.
cis-1,2-Dichloroethylene	<1.	U	1		1.
trans-1,2-Dichloroethylene	<1.	U	1		1.
Dichloromethane	<1.	U	1		1.
1,2-Dichloropropane	<1.	U	1		1.
cis-1,3-Dichloropropylene	<1.	U	1		1.
trans-1,3-Dichloropropylene	<1.	U	1		1.
Ethylbenzene	<1.	U	1		1.
1,1,2,2-Tetrachloroethane	<1.	U	1		1.
Tetrachloroethylene	<1.	U	1		1.
Toluene	<1.	U	1		1.
1,1,1-Trichloroethane	<1.	U	1		1.

# - Outside control limits. U - Undetected at the reported level.  
J - reported value is estimated.  
E - concentration exceeded the calibration range and is estimated.

Authorized: \_\_\_\_\_  
Date: November 3, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting  
Proj. Desc: Fayetteville, New York

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N3326  
Samp. Description: QC Trip Blank  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 1 Instrument: 9001

Collected: 10/19/99 Matrix: Water  
Received: 10/20/99 QC Batch: 110299W1  
Prepared: %Solids:  
Analyzed: 11/02/99 Sample Size: 5 ml

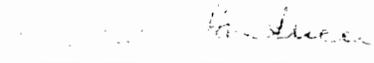
Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL	Notes
1,1,2-Trichloroethane	<1.	U	1		1.	
Trichloroethylene	<1.	U	1		1.	
Trichlorofluoromethane	<1.	U	1		1.	
Vinyl Chloride	<1.	U	1		1.	
Xylenes (total)	<3.	U	1		3.	

Surrogate	Result	Qual	Col	Limits	Notes
2-Chloropropane (surrogate)	97.%		1	72-123	
Fluorobenzene (surrogate)	99.%		1	81-114	

Notes:

# - Outside control limits. U - Undetected at the reported level.  
J - reported value is estimated.  
E - concentration exceeded the calibration range and is estimated.

Authorized:   
Date: November 3, 1999      Monika Santucci

Client: <u>ENGINEERS</u>		Analysis/Method			
Project: <u>FORMER ACCURATE DIE CASTING</u>		VOL. (8218)			
Sampled by: <u>DAVID J. CARNEVALE</u>					
Client Contact: <u>A. FARRELL</u>		Phone #			
Sample Description					
Sample Location	Date Collected	Time Collected	Sample Matrix	Comp. or Grab	No. of Containers
MW-16	10/19/99	0745	WATER	GRAB	2
MW-15		0830			
MW-2		0850			
MW-23		0930			
MW-8		0955			
MW-9		1025			
MW-7		1100			
MW-12		1125			
MW-17		1145			
MW-18		1210			
MW-22		1245			
MW-21		1300			
Relinquished by: <u>David J. Carnevale</u>		Date: 10/20/99	Time: 10:15	Received by:	
Relinquished by:		Date:	Time:	Received by:	
Relinquished by:		Date:	Time:	Received by: <u>Barbara Jambura</u>	
Date: 10/20/99		Time: 10:15		Date: 10/20/99	
Time: 10:15		Time: 10:15		Time: 10:15	
Shipment Method: _____					

Comments: 2 OCT Bred. analyze only 1 per D. Carnevale LPP.

Turnaround Time Required:  Routine  Rush (Specify) \_\_\_\_\_  
Cooler Temperature: 4C

Client: <b>ENGINEERS</b>		Analysis/Method			
Project: <b>FORMER ACCURATE DIE CASTING</b>		VOC (821B)			
Sampled by: <b>DAVID J. CARNEVALE</b>					
Client Contact: <b>AL FARRELL</b>		Phone #			
Sample Description					
Sample Location	Date Collected	Time Collected	Sample Matrix	Comp. or Grab	No. of Containers
MW-24	10/19/99	1310	WATER	GRAB	2
MW-11		1340			
MW-5		1405			
PZ-1		1430			
MW-6		1450			
PZ-2		1530			
MW-10	10/20/99	0820			
MW-14		0850			
MW-13		0915			
TRIP BLANK	10/18/99				
Relinquished by: <b>David J. Carnevale</b>		Date: 10/20/99	Time: 1015	Received by:	
Relinquished by:		Date:	Time:	Received by:	
Relinquished by:		Date:	Time:	Received by Lab: <b>Barbara Pauline</b> Date: 10/20/99 Time: 10:15	
Shipment Method:		Airbill Number:			

Turnaround Time Required: \_\_\_\_\_ Comments: \_\_\_\_\_

Routine \_\_\_\_\_  
 Rush (Specify) \_\_\_\_\_

Cooler Temperature: \_\_\_\_\_



FILE COPY

15 1999

December 10, 1999

Mr. David Crosby, P.E.  
Bureau of Construction Services - Division of Hazardous Waste Remediation  
New York State Department of Environmental Conservation  
50 Wolf Road  
Albany, NY 12233-7010

Re: Former Accurate Die Casting Site  
Fayetteville, NY

File: 2488/23123 #2

Dear Mr. Crosby:

This letter presents the status of groundwater treatment plant operations for the former Accurate Die Casting site in Fayetteville, New York for November 1999. This report is provided as required by the Order on Consent (#A7-0318-94-10). Included are the results of the monitoring activities associated with the SPDES Fact Sheet for the groundwater treatment system.

1. As of November 30, 1999, a total of 30,572,200 gallons of groundwater has been treated since startup on February 5, 1996. Since October 29, 1999, 616,900 gallons of groundwater was treated; 511,120 gallons from recovery well RW-1, 102,900 gallons from recovery well RW-2, and 2,880 gallons from the sump outside the northeast corner of the building. No flow was recovered during the period from the groundwater collection trench constructed in the former VOC/PAH/PCB Soils Area.
2. O'Brien & Gere performed the sampling activities associated with the SPDES Fact Sheet (#734052). The analytical results associated with the SPDES Fact Sheet monitoring activities performed in November 1999 are summarized in Table 1. The laboratory analytical data sheets are provided as Attachment A.

If you have any questions regarding this report, please do not hesitate to call me.

Very truly yours,

O'BRIEN & GERE ENGINEERS, INC.

A handwritten signature in black ink, appearing to read 'Alfred R. Farrell', is written over a light background.

Alfred R. Farrell, P.E.  
Senior Project Engineer

I:\DIV71\PROJECTS\2488\23123\2\_CORRES\11-99MOR.doc  
Attachments



Mr. David Crosby, P.E.

December 10, 1999

Page 2

cc: V. Nattanmai, P.E. - NYSDEC  
A. English - NYSDEC  
T. Male - NYSDEC  
Central Field Unit: Project Attorney Accurate Die Site - NYSDEC  
C. Branagh, P.E. - NYSDEC Region 7  
Director, Bureau of Environmental Exposure Investigation - NYSDOH (2 copies)  
H. Hamel - NYSDOH  
M. Peters, Esq - LeBoeuf, Lamb, Greene & MacRae

**Table 1**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Monitoring Requirements and Effluent Data**

Analyte (units)	Monitoring Requirements				Effluent	Effluent	Effluent	Effluent
	Discharge Limitation Daily Average	Discharge Limitation Daily Maximum	Minimum Measurement Frequency(1)	Sample Type				
Flow (GPD)	Monitor	150000	Continuous	Meter	19920	---	---	---
pH (SU)	6.5 - 8.5		2/Week	Grab	7.91	---	19470	---
Residue, non-filterable (mg/L)	Monitor	20	Weekly	3-hr comp.	---	---	---	5 U
Total dissolved solids (TDS) (mg/L)	Monitor	Monitor	Weekly	3-hr comp.	---	---	---	670
CBOD5 (mg/L)	Monitor	Monitor	Quarterly	3-hr comp.	---	---	---	---
TKN (mg/L)	Monitor	Monitor	Quarterly	3-hr comp.	---	---	---	---
TOD (mg/L)	Monitor	15	Quarterly	Calculated	---	---	---	---
Dissolved Oxygen (mg/L)	Monitor	7 Min.	Quarterly	Grab	---	---	---	---
Aluminum, dissolved (mg/L)	Monitor	0.2	Quarterly	3-hr comp.	---	---	---	---
Antimony, total (mg/L)	Monitor	0.1	Quarterly	3-hr comp.	---	---	---	---
Chromium, total (mg/L)	Monitor	0.5	Quarterly	3-hr comp.	---	---	---	---
Cobalt, total (mg/L)	Monitor	0.01	Quarterly	3-hr comp.	---	---	---	---
Copper, total (mg/L)	Monitor	0.1	Quarterly	3-hr comp.	---	---	---	---
Iron, total (mg/L)	Monitor	0.3	Quarterly	3-hr comp.	---	---	---	---
Lead, total (mg/L)	Monitor	0.02	Quarterly	3-hr comp.	---	---	---	---
Mercury, total (mg/L)	Monitor	0.0008	2/Month	3-hr comp.	---	---	---	---
Nickel, total (mg/L)	Monitor	0.2	Quarterly	3-hr comp.	---	---	---	---
Silver, total (mg/L)	Monitor	0.1	Quarterly	3-hr comp.	---	---	---	---
Vanadium, total (mg/L)	Monitor	0.03	Quarterly	3-hr comp.	---	---	---	---
Zinc, total (mg/L)	Monitor	0.3	2/Month	3-hr comp.	---	---	---	---
cis-1,2-Dichloroethene (ug/L)	Monitor	10	2/Month	Grab	---	---	---	---
trans-1,2-Dichloroethene (ug/L)	Monitor	10	2/Month	Grab	---	---	---	---
Methylene chloride (ug/L)	Monitor	50	2/Month	Grab	---	---	---	---
1,1,2,2-Tetrachloroethane (ug/L)	Monitor	30	2/Month	Grab	---	---	---	---
Tetrachloroethene (ug/L)	Monitor	20	2/Month	Grab	---	---	---	---
Toluene (ug/L)	Monitor	20	2/Month	Grab	---	---	---	---
Trichloroethene (ug/L)	Monitor	10	2/Month	Grab	---	---	---	---
Acetone (ug/L)	Monitor	1000	2/Month	Grab	---	---	---	---
2-Hexanone (ug/L)	Monitor	1000	2/Month	Grab	---	---	---	---
4-Methyl-2-pentanone (MIBK) (ug/L)	Monitor	1000	2/Month	Grab	---	---	---	---
					11/02/99	11/03/99	11/09/99	11/10/99

NOTES: (1) Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.

--- - Not analyzed, NA - Data not available

U - Not Detected, J - Estimated

TOD = 1.5 X CBOD5 + 4.5 X TKN

**Table 1**  
**Accurate Die Casting Site**  
**Fayetteville, New York**  
**Monitoring Requirements and Effluent Data**

Analyte	Effluent	Effluent	Effluent	Effluent
	11/16/99	11/17/99	11/23/99	11/30/99
Flow (GPD)	19054	--	18591	18874
pH (SU)	7.89	--	7.91	7.92
Residue, non-filterable (mg/L)	--	5 U	5 U	--
Total dissolved solids (TDS) (mg/L)	--	710	740	--
CBOD5 (mg/L)	--	--	--	--
TKN (mg/L)	--	--	--	--
TOD (mg/L)	--	--	--	--
Dissolved Oxygen (mg/L)	--	--	--	--
Aluminum, dissolved (mg/L)	--	--	--	--
Antimony, total (mg/L)	--	--	--	--
Chromium, total (mg/L)	--	--	--	--
Cobalt, total (mg/L)	--	--	--	--
Copper, total (mg/L)	--	--	--	--
Iron, total (mg/L)	--	--	--	--
Lead, total (mg/L)	--	--	--	--
Mercury, total (mg/L)	--	.0002 U	--	--
Nickel, total (mg/L)	--	--	--	--
Silver, total (mg/L)	--	--	--	--
Vanadium, total (mg/L)	--	--	--	--
Zinc, total (mg/L)	--	.04	--	--
cis-1,2-Dichloroethene (ug/L)	--	.50 U	--	--
trans-1,2-Dichloroethene (ug/L)	--	.50 U	--	--
Methylene chloride (ug/L)	--	2.0 U	--	--
1,1,2,2-Tetrachloroethane (ug/L)	--	.50 U	--	--
Tetrachloroethene (ug/L)	--	.50 U	--	--
Toluene (ug/L)	--	.50 U	--	--
Trichloroethene (ug/L)	--	.50 U	--	--
Acetone (ug/L)	--	10 U	--	--
2-Hexanone (ug/L)	--	5.0 U	--	--
4-Methyl-2-pentanone (MIBK) (ug/L)	--	5.0 U	--	--

NOTES: (1) Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.

--- - Not analyzed, NA - Data not available

U - Not Detected, J - Estimated

TOD = 1.5 X CBOD5 + 4.5 X TKN

**ATTACHMENT A**

**SPDES PERMIT COMPLIANCE MONITORING  
LABORATORY ANALYTICAL DATA SHEETS**

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8260

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N4276  
Samp. Description: WTP Effluent - Grab  
Instrument: HP5970 GC/MS#2  
Units: ug/L  
Number of analytes: 14

Collected: 11/03/99 Matrix: Water  
Received: 11/03/99 QC Batch: 111299W2  
Prepared: 11/12/99 %Solids:  
Purge volume: 25 mL

Parameter	Result	Surrog		Analyzed	Notes
		Limits	Dilution		
Acetone	<10.		1	11/12/99	
Methylene chloride	<2.0		1	11/12/99	
trans-1,2-Dichloroethene	<.50		1	11/12/99	
cis-1,2-Dichloroethene	<.50		1	11/12/99	
Trichloroethene	<.50		1	11/12/99	
4-Methyl-2-pentanone	<5.0		1	11/12/99	
Toluene	<.50		1	11/12/99	
2-Hexanone	<5.0		1	11/12/99	
Tetrachloroethene	<.50		1	11/12/99	
1,1,2,2-Tetrachloroethane	<.50		1	11/12/99	
Dibromofluoromethane (surrogate)	93.%	70-131	1	11/12/99	
1,2-Dichloroethane-d4 (surrogate)	111.%	81-120	1	11/12/99	
Toluene-d8 (surrogate)	107.%	83-117	1	11/12/99	
Bromofluorobenzene (surrogate)	109.%	78-119	1	11/12/99	

Notes:

# - Outside control limits J-Estimated value

Authorized: Monika Santucci  
Date: November 15, 1999 Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N4274  
Samp. Description: WTP Influent  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 25 Instrument: 9001

Collected: 11/03/99  
Received: 11/03/99  
Prepared:  
Analyzed: 11/16/99

Matrix: Water  
QC Batch: 111699W1  
%Solids:  
Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL Notes
Benzene	<25.	U	1		25.
Bromodichloromethane	<25.	U	1		25.
Bromoform	<250.	U	1		250.
Bromomethane	<250.	U	1		250.
Carbon tetrachloride	<25.	U	1		25.
Chlorobenzene	<25.	U	1		25.
Chloroethane	<25.	U	1		25.
2-Chloroethylvinyl ether	<250.	U	1		250.
Chloroform	<25.	U	1		25.
Chloromethane	<250.	U	1		250.
Dibromochloromethane	<25.	U	1		25.
1,2-Dichlorobenzene	<120.	U	1		125.
1,3-Dichlorobenzene	<120.	U	1		125.
1,4-Dichlorobenzene	<120.	U	1		125.
Dichlorodifluoromethane	<250.	U	1		250.
1,1-Dichloroethane	<25.	U	1		25.
1,2-Dichloroethane	<25.	U	1		25.
1,1-Dichloroethylene	<25.	U	1		25.
cis-1,2-Dichloroethylene	<25.	U	1		25.
trans-1,2-Dichloroethylene	<25.	U	1		25.
Dichloromethane	<25.	U	1		25.
1,2-Dichloropropane	<25.	U	1		25.
cis-1,3-Dichloropropylene	<25.	U	1		25.
trans-1,3-Dichloropropylene	<25.	U	1		25.
Ethylbenzene	<25.	U	1		25.
1,1,2,2-Tetrachloroethane	<25.	U	1		25.
Tetrachloroethylene	<25.	U	1		25.
Toluene	<25.	U	1		25.
1,1,1-Trichloroethane	<25.	U	1		25.

# - Outside control limits. U - Undetected at the reported level.  
J - reported value is estimated.  
E - concentration exceeded the calibration range and is estimated.

Authorized: Monika Santucci  
Date: November 17, 1999     Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N4274  
Samp. Description: WTP Influent  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 25 Instrument: 9001

Collected: 11/03/99 Matrix: Water  
Received: 11/03/99 QC Batch: 111699W1  
Prepared: %Solids:  
Analyzed: 11/16/99 Sample Size: 5 ml

Number of analytes: 34

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>Col</u>	<u>MDL</u>	<u>RL</u>	<u>Notes</u>
1,1,2-Trichloroethane	<25.	U	1		25.	
Trichloroethylene	520.		1		25.	
Trichlorofluoromethane	<25.	U	1		25.	
Vinyl Chloride	<25.	U	1		25.	
Xylenes (total)	<75.	U	1		75.	

<u>Surrogate</u>	<u>Result</u>	<u>Qual</u>	<u>Col</u>	<u>Limits</u>	<u>Notes</u>
2-Chloropropane (surrogate)	98.%		1	72-123	
Fluorobenzene (surrogate)	100.%		1	81-114	

Notes:

# - Outside control limits. U - Undetected at the reported level.  
J - reported value is estimated.  
E - concentration exceeded the calibration range and is estimated.

Authorized: Monika Santucci  
Date: November 17, 1999 Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N4275  
Samp. Description: WTP Between GACs  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 1 Instrument: 9001

Collected: 11/03/99 Matrix: Water  
Received: 11/03/99 QC Batch: 111699W1  
Prepared: %Solids:  
Analyzed: 11/16/99 Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL	Notes
Benzene	<1.0	U	1		1.	
Bromodichloromethane	<1.0	U	1		1.	
Bromoform	<10.	U	1		10.	
Bromomethane	<10.	U	1		10.	
Carbon tetrachloride	<1.0	U	1		1.	
Chlorobenzene	<1.0	U	1		1.	
Chloroethane	<1.0	U	1		1.	
2-Chloroethylvinyl ether	<10.	U	1		10.	
Chloroform	<1.0	U	1		1.	
Chloromethane	<10.	U	1		10.	
Dibromochloromethane	<1.0	U	1		1.	
1,2-Dichlorobenzene	<5.	U	1		5.	
1,3-Dichlorobenzene	<5.	U	1		5.	
1,4-Dichlorobenzene	<5.	U	1		5.	
Dichlorodifluoromethane	<10.	U	1		10.	
1,1-Dichloroethane	<1.0	U	1		1.	
1,2-Dichloroethane	<1.0	U	1		1.	
1,1-Dichloroethylene	<1.0	U	1		1.	
cis-1,2-Dichloroethylene	<1.0	U	1		1.	
trans-1,2-Dichloroethylene	<1.0	U	1		1.	
Dichloromethane	<1.0	U	1		1.	
1,2-Dichloropropane	<1.0	U	1		1.	
cis-1,3-Dichloropropylene	<1.0	U	1		1.	
trans-1,3-Dichloropropylene	<1.0	U	1		1.	
Ethylbenzene	<1.0	U	1		1.	
1,1,2,2-Tetrachloroethane	<1.0	U	1		1.	
Tetrachloroethylene	<1.0	U	1		1.	
Toluene	<1.0	U	1		1.	
1,1,1-Trichloroethane	<1.0	U	1		1.	

# - Outside control limits. U - Undetected at the reported level.  
J - reported value is estimated.  
E - concentration exceeded the calibration range and is estimated.

Authorized: Monika Santucci  
Date: November 17, 1999 Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N4275  
Samp. Description: WTP Between GACs  
Primary column: Y  
Units: ug/L  
Column: DB-VRX 75m x .45mm ID  
Dilution: 1 Instrument: 9001

Collected: 11/03/99  
Received: 11/03/99  
Prepared:  
Analyzed: 11/16/99

Matrix: Water  
QC Batch: 111699W1  
%Solids:  
Sample Size: 5 ml

Number of analytes: 34

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>Col</u>	<u>MDL</u>	<u>RL</u>	<u>Notes</u>
1,1,2-Trichloroethane	<1.0	U	1		1.	
Trichloroethylene	<1.0	U	1		1.	
Trichlorofluoromethane	<1.0	U	1		1.	
Vinyl Chloride	<1.0	U	1		1.	
Xylenes (total)	<3.	U	1		3.	

<u>Surrogate</u>	<u>Result</u>	<u>Qual</u>	<u>Col</u>	<u>Limits</u>	<u>Notes</u>
2-Chloropropane (surrogate)	102.%		1	72-123	
Fluorobenzene (surrogate)	99.%		1	81-114	

Notes:

# - Outside control limits. U - Undetected at the reported level.  
J - reported value is estimated.  
E - concentration exceeded the calibration range and is estimated.

Authorized: Monika Santucci  
Date: November 17, 1999    Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Trace Metals

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N4277  
Samp. Description: WTP Effluent - Composite  
Units: mg/L

Collected: 11/03/99      Matrix: Water  
Received: 11/03/99      %Solids:  
Number of analytes: 2

Parameter	Result	Method	Prepared	Analyzed	QC Batch	Dilut. Note
Mercury	<.0002	245.1	11/11/99	11/11/99	111199W1	1
Zinc	.01	200.7	11/15/99	11/16/99	111599W1	1

Notes:

J-Estimated value

Authorized: Monika Santucci  
Date: November 18, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Wet Chemistry

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Monthly Effluent & Influent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N4277  
Samp. Description: WTP Effluent - Composite

Collected: 11/03/99  
Received: 11/03/99 15:25  
Matrix: Water

Parameter	Result	Qual	MDL	RL	Units	Method	Prepared	Analyzed	QC Batch	Note
Total dissolved solids	620.				mg/L	EPA 160.1		11/10/99	111099W13	
Total suspended solids	<5.	U			mg/L	EPA 160.2		11/10/99	111099W14	

Notes:

U-Undetected at reported level. J-reported value is estimated.

Authorized: Monika Santucci  
Date: November 17, 1999  
Monika Santucci



# O'Brien & Gere Laboratories, Inc.

# Analytical Results Wet Chemistry

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Weekly Effluent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N4911  
Samp. Description: WTP Effluent

Collected: 11/10/99  
Received: 11/10/99 15:25  
Matrix: Water

<u>Parameter</u>	<u>Result Units</u>	<u>Method</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>QC Batch</u>	<u>Note</u>
Total dissolved solids	670. mg/L	EPA 160.1		11/10/99	111099W13	
Total suspended solids	<5. mg/L	EPA 160.2		11/16/99	111699W14	

Notes:

J-Estimated value

Authorized:   
Date: November 29, 1999  
Monika Santucci



# O'Brien & Gere Laboratories, Inc.

# Analytical Results Trace Metals

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Bi-Monthly Effluent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N5331  
Samp. Description: WTP Effluent - Composite  
Units: mg/L

Collected: 11/17/99      Matrix: Water  
Received: 11/17/99      %Solids:  
Number of analytes: 2

<u>Parameter</u>	<u>Result</u>	<u>Method</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>QC Batch</u>	<u>Dilut.</u>	<u>Note</u>
Mercury	<.0002	245.1	11/19/99	11/21/99	111999W1		1
Zinc	.04	200.7	11/23/99	11/29/99	112399W1		1

Notes:

J-Estimated value

Authorized: Monika Santucci  
Date: December 6, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Wet Chemistry

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Bi-Monthly Effluent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N5331  
Samp. Description: WTP Effluent - Composite

Collected: 11/17/99  
Received: 11/17/99 15:55  
Matrix: Water

<u>Parameter</u>	<u>Result Units</u>	<u>Method</u>	<u>Prepared Analyzed</u>	<u>QC Batch Note</u>
Total dissolved solids	710. mg/L	EPA 160.1	11/22/99	112299W11
Total suspended solids	<5. mg/L	EPA 160.2	11/22/99	112299W13

Notes:

J-Estimated value

Authorized: Monika Santucci  
Date: December 6, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Wet Chemistry

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Weekly Effluent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N5597  
Samp. Description: WTP Effluent

Collected: 11/23/99                      Matrix: Water  
Received: 11/23/99 15:25

<u>Parameter</u>	<u>Result Units</u>	<u>Method</u>	<u>Prepared</u>	<u>Analyzed</u>	<u>QC Batch</u>	<u>Note</u>
Total dissolved solids	740. mg/L	EPA 160.1		11/29/99	112999W12	
Total suspended solids	<5. mg/L	EPA 160.2		11/29/99	112999W11	

Notes:

J-Estimated value

Authorized:   
Date: December 6, 1999      Monika Santucci

# O'Brien & Gere Laboratories, Inc.

# Analytical Results Method: 8260

Client: O'Brien & Gere Engineers, Inc.  
Project: Accurate Die Casting - Fayetteville, NY  
Proj. Desc: Bi-Monthly Effluent Sampling

Job No.: 3435.021.517  
Certification NY No.: 10155

Sample: N5330  
Samp. Description: WTP Effluent - Grab  
Instrument: HP5970 GC/MS#2  
Units: ug/L  
Number of analytes: 14

Collected: 11/17/99  
Received: 11/17/99  
Prepared: 11/23/99  
Matrix: Water  
QC Batch: 112399W2  
%Solids:  
Purge volume: 25 mL

<u>Parameter</u>	<u>Result</u>	<u>Surrog</u> <u>Limits</u>	<u>Dilution</u>	<u>Analyzed</u>	<u>Notes</u>
Acetone	<10.		1	11/23/99	
Methylene chloride	<2.0		1	11/23/99	
trans-1,2-Dichloroethene	<.50		1	11/23/99	
cis-1,2-Dichloroethene	<.50		1	11/23/99	
Trichloroethene	<.50		1	11/23/99	
4-Methyl-2-pentanone	<5.0		1	11/23/99	
Toluene	<.50		1	11/23/99	
2-Hexanone	<5.0		1	11/23/99	
Tetrachloroethene	<.50		1	11/23/99	
1,1,2,2-Tetrachloroethane	<.50		1	11/23/99	
Dibromofluoromethane (surrogate)	88.%	70-131	1	11/23/99	
1,2-Dichloroethane-d4 (surrogate)	95.%	81-120	1	11/23/99	
Toluene-d8 (surrogate)	101.%	83-117	1	11/23/99	
Bromofluorobenzene (surrogate)	109.%	78-119	1	11/23/99	

Notes:

# - Outside control limits J-Estimated value

Authorized:   
Date: November 24, 1999    Monika Santucci

## CHECKS MAR06

Ahmed, S.	Lauren "B"	Follett, K.	Michele	2	Momberger G	Marcia "E"	
Albert, Michele	Michele	Franklin B	Kim "C"		Moore, V.	Lisa "A"	
Alden, Larry	Bennett "D"	Freedman, C.	Kathy "Ts"		Moras, J	Bennett "D"	
Anasthas, T.	Kathy "Ts"	Gibbons, T	Lauren "B"	2	Moss M	Marcia "E"	
Artino Ceceilia	Kathy "Ts"	Gibson, V	Michele		Murry-Bonsteel, N.	Marcia "E"	
Aversa, Jack	Lauren "B"	Grathwol, J	Lauren "B"		Mustico, R	Lauren "B"	
Barrie Mary	Kathy "Ts"	Greco, J	Lauren "B"		Nattamal, V	Bennett "D"	
Bayer, Wayne	Kathy "Ts"	Gupta K	Valerie "A"		Ng, C *	Lisa "A"	
Becker, Kiera	Kim "C"	Gupta, S	Michele		Norfleet, A	Michele	
Beilly Ian	Bennett "D"	Hackett, R.	Lisa "A"		Norvik, D	Michele	
Belmore, Ed	Bennett "D"	Haggerty, E	Karen		Obrecht, E	Kathy "Ts"	
Bennett, Bill	Kim "C"	Hale, K	Kathy "Ts"		Obrecht, J	Kathy "Ts"	
Bennett, Ted	Michele	Hampston, E	Bennett "D"		Omorogbe, A	Kim "C"	
Bishop, H.	Lisa "A"	Harrington, D	Lauren "B"		Ottaway, W	Kim "C"	
Bobersky, Guy	Lisa "A"	Harrington, J	Kathy "Ts"	2	Peck, J	Lauren "B"	
Bolesky, Sue	Michele	Harris, G	Marcia "E"		Pelton, J.	Bennett "D"	
Brand, Martin	Bennett "D"	Hausamann, E	Marcia "E"		Perez Mal J	Lauren "B"	
Brausteck, J.	Kathy "Ts"	Heigel, S	Kathy "Ts"	2	Pokrzywka De	Kathy "Ts"	
Brown, B.	Kim "C"	Heitzman, G	Bennett "D"		Ports, W	Karen	
Burger, Ralph	Michele	Helmsset, J	Kim "C"		Priore, S	Kim "C"	
Burke, G	Lisa "A"	Herman, D.	Kim "C"		Putnam, B	Kathy "Ts"	
Callifano, E	Kathy "Ts"	Hesler, D	Lauren "B"		Putnam, N.	Lisa "A"	
Campbell, B.	Bennett "D"	Hoffman, C	Bennett "D"		Quinn, A	Michele	
Candiloro, J	Kim "C"	Hoffman, T	Michele		Quinn, J	Lauren "B"	
Carpenter, Ka	Kathy "Ts"	Honan, J	Michele	2	Quinn, K	Karen	
Carpenter, Ke	Kathy "Ts"	Hough R	Bennett "D"		Reichinger S	Kathy "Ts"	
Cerniglia L	Michele	Hubicki M	Kim "C"		Reinhart, K	Kim "C"	
Chieco, A	Michele	Humphrey, P.	Michele	2	Rider, G	Bennett "D"	
Chiusano, D	Marcia "E"	Hunter, L.	Lisa "A"		Rizzo, L	Michele	
Cook, Joshua	Kim "C"	Jankauskas, B.	Lisa "A"		Rutland, R	Kathy "Ts"	
Corcoran, R	Kathy "Ts"	Jarratt James	Kathy "Ts"		Ryan, M	Kim "C"	
Costopoulos, C	Michele	Jenks, M.	Marcia "E"		Sarnacki M	Michele	
Couser, T	Michele	Johnson, M	Kathy "Ts"		Sarnowicz, K	Lauren "B"	
Cozzy, R	Lauren "B"	Jones, J.	Lisa "A"		Scharf, S	Lisa "A"	
Crosby, D	Kim "C"	Karwiel, A	Kim "C"		Schick, R	Kim "C"	
Cross, G	Kim "C"	Karwiel, S	Michele		Seaman, M.	Lisa "A"	
Cruden, M.	Marcia "E"	Keating, R	Lauren "B"		Shaw, W	Karen	
Curran, C.	Lisa "A"	Kennedy, L	Michele		Smith, P. D	Lauren "B"	
Dagle, W.	Karen	Kenney, K	Michele	2	Smith, T	Lauren "B"	
Davidson, B.	Lauren "B"	Knizek, B	Marcia "E"		Spain, T	Michele	
DeCandia, R.	Lisa "A"	Komoroske, M	Bennett "D"	2	Spath, M	Michele	
DeMarco, G.	Michele	Kyer, K	Kathy "Ts"		Spellman, J.	Kim "C"	
DeNyse, K.	Kim "C"	Lampman, L	Lisa "A"		Strang, J	Lisa "A"	
Desnoyers, D.	Karen	Larson, T	Lauren "B"	2	Swartout, J	Lisa "A"	
Dewes, S.	Lauren "B"	Lasdin, S	Bennett "D"		Sylvester, A	Marcia "E"	
Deyette, S.	Kim "C"	LeBarron, T.	Kathy "Ts"		Tambe Jacob	Kathy "Ts"	
Diaz, T.	Lisa "A"	Lee, R.	Lauren "B"		Trad, J	Marcia "E"	
Dieter, G.	Valerie "A"	Leece, C.	Kathy "Ts"	2	Tromp, D	Karen	
Diligent, K.	Michele	Lewandowski, K	Kathy "Ts"		Vasudevan, C	Lisa "A"	
Dolata, L.	Kim "C"	Lewis Lisa	Michele		Victor, J	Kathy "Ts"	
Drumm, J.	Lauren "B"	Linder-Cantwell, C	Michele		Walter, A.	Lisa "A"	
Duduk, Heidi	Valerie "A"	Lister, J	Lisa "A"		Weigel, D	Michele	
Dunham, M.	Bennett "D"	Livingston, D	Kathy "Ts"		Welling, W	Bennett "D"	
Durnin, J	Lauren "B"	Long, Payson	Bennett "D"	2	Wert W	Marcia "E"	
Dyber, J	Valerie "A"	Ludlam, J	Bennett "D"		White, J	Bennett "D"	
Eastman, K	Kim "C"	Lukowski, E.	Kim "C"	2	Whitcher, R.	Michele	
Eaton, Dan	Lisa "A"	MacCabe M	Lauren "B"		Whitfield, C	Lisa "A"	
Ebong A	Kathy "Ts"	MacDonald, L	Lauren "B"		Wither, S	Kathy "Ts"	
Edwards, R	Lauren "B"	MacNeal, D	Kim "C"	2	Wolosen B	Kathy "Ts"	
Edwards, Sue	Lauren "B"	Magee, C	Kathy "Ts"		Wolosen, T.	Michele	
English A	Kathy "Ts"	Maurano, K	Kim "C"		Woodward, F	Lisa "A"	
Ennis, L	Michele	Maoney K	Lisa "A"		Woodward, V	Bennett "D"	
Ervolina, S	Karen	Mason, M	Marcia "E"		Yavondtte, J	Lisa "A"	
Evans, D	Michele	Mateunas, M	Bennett "D"		Zaleski, J	Kathy "Ts"	
Farrar, D	Kathy "Ts"	McCarthy, P.	Michele		Zeppetelli, L	Michele	
Farrar, K	Karen	McCullough, J	Bennett "D"	2	Zinoman, L	Michele	
Fatato, J.	Kathy "Ts"	Miller, J.	Kim "C"		Zobre, D	Michele	
Festa, T.	Marcia "E"	Mizerak, W	Kim "C"	2	Zuk, E	Kathy "Ts"	
Filkins, R	Lauren "B"	Moloughney, D	Kathy "Ts"				
Finlayson, D	Michele	Moloughney, J	Kim "C"				