

January 14, 1999

19

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

I:\DIV71\PROJECTS\2488731\2\_CORRES\12-98MOR.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: 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

 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

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting - Fayetteville, NY Proj. Desc: Monthly Effluent & Influent Sampling

Sample: K1200

Samp. Description: WTP Effluent - Grab

Instrument: HP5973 GCMS#3

Units: ug/L

Number of analytes: 13

## Analytical Results Method: 8260

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 12/02/98

Matrix: Water

Received: 12/02/98

QC Batch: 120498W1

Prepared: 12/04/98 %Solids:

Purge volume: 25 mL

		Surrog	
Parameter	Result	Limits Dilution	Analyzed Notes
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:

Date: December 7,1998

# - Outside control limits J-Estimated value

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting - Fayetteville, NY Proj. Desc: Monthly Effluent & Influent Sampling

Sample: K1198

Samp. Description: WTP Influent

Primary column: Y

Units: ug/L

Column: DB-VRX 75m X .45mm ID
Dilution: 50 Instrument: 9001

Analytical Results Method: 8021

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 12/02/98

Matrix: Water

Received: 12/02/98

QC Batch: 120898W1

Prepared:

Analyzed: 12/08/98

%Solids:

Purge volume: 5 ml

Number of analytes: 36

			Surrog	
Parameter	Result	Col	Limits	Notes
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: Monks Sanfueur

Date: December 10,1998 Monika Santucci

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting - Fayetteville, NY Proj. Desc: Monthly Effluent & Influent Sampling

Sample: K1199

Samp. Description: WTP Between

Primary column: Y

Units: ug/L

Column: DB-VRX 75m X .45mm ID

Dilution: 1

Instrument: 9001

#### **Analytical Results Method: 8021**

Job No.: 3435.021.517 Certification NY No.: 10155

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

			Surrog	
Parameter	<u>Result</u>	Col	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	<1.	1		
trans-1,2-Dichloroethylene	<1.	1		
Dichloromethane	<1.	1	4	
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

Date: December 10,1998

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting - Fayetteville, NY Proj. Desc: Monthly Effluent & Influent Sampling

Sample: K1198

Samp. Description: WTP Influent

Primary column: Y

Units: ug/L

Column: DB-VRX 75m X .45mm ID Dilution: 50 Instrument: 9001 **Analytical Results** Method: 8021

> Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 12/02/98

Matrix: Water

Received: 12/02/98

OC Batch: 120898W1 %Solids:

Prepared: Analyzed: 12/08/98

Purge volume: 5 ml

Number of analytes: 36

			Surrog	
Parameter	Result	Col	Limits	Notes
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:

Authorized:

Date: December 10,1998

Monika Santucci

**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

Matrix: Water

Sample: K1199

Samp. Description: WTP Between

Primary column: Y Units: ug/L

Received: 12/02/98 QC Batch: 120998W1 %Solids:

Collected: 12/02/98

Prepared: Analyzed: 12/09/98 Purge volume: 5 ml

Column: DB-VRX 75m X .45mm ID Dilution: 1 Instrument: 9001 Number of analytes: 36

Notes

Notes:

# - Outside control limits J-Estimated value

Authorized: Date: December 10,1998 Monika Santucci

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

**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

Units: mg/L

Samp. Description: WTP Effluent - Composite

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

%Solids: Number of analytes: 2

Parameter	Result	Method	Prepared	Analyzed	QC Batch	Dilut. Note
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:

Date: December 15,1998

J-Estimated value

#### 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

Matrix: Water

Received: 12/02/98 15:35

Parameter	Result Units	Method	Prepared Analyzed	QC Batch Note
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

Date: December 8,1998

Monika Santucci

5000 Brittonfield Parkway

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

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pod		///5/		\ \ \	Comments									Date: Time:	Date: Time:	Date: 12/2/2/3 Time: 15:35		
Analysis/Method		CONTRACTOR OF THE PARTY OF THE	されたがある。					×	X	7				)	1			
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	(FORMIESE A.		Phone	on	Time Sample ted Collected Matrix	48 85.4" NATOU	20	48 808 WATER	25	", "				Date:	Date:	Date: 12/2/98		
GERE	FROIT FLAGNET	17 BOLN	8022 6004	Sample Description	ntion Date Collected			12/4/88	FNT 12/98	17/19/8						15 pm	HAND DELIVERYD	
Client: N'BRIEN & GERE	Project: 177 commercial Flugger	Sampled by: JEKK	Client Contact: Jepen		Sample Location	WTP INFLUENT	WTP BETWEEN	WTO EFFLUENT	WTD EFFLUENT	UTP EFFLUENT		·		Relinquished by:	Relinquished by:	Relinquished by: All All Bu	Shipment Method: HAU	

Comments:

Turnaround Time Required:
Routine
Rush (Specify)

205 Cooler Temperature:

Original-Laboratory Copy-Client

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting - Fayetteville, NY Proj. Desc: Bi-Monthly Effluent Sampling

Sample: K2300

Samp. Description: WTP Effluent (Grab)

Instrument: HP5970 GC/MS#2

Units: ug/L

Number of analytes: 13

## Analytical Results Method: 8260

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 12/16/98

Matrix: Water

Received: 12/16/98

QC Batch: 122298W2

Prepared: 12/22/98 %Solids:

7630Hus.

Purge volume: 25 mL

Surrog

Parameter	Result	Limits Dilution	Analyzed Notes
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:

Authorized:

Date: December 23,1998

Monika Santucci

**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

Units: mg/L

Samp. Description: WTP Effluent (Composite)

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

%Solids:

Number of analytes: 2

Parameter	Result	Method	Prepared	Analyzed	QC Batch	Dilut. Note
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

Date: December 30,1998

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

## 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

Matrix: Water

Received: 12/16/98 15:35

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

Notes:

J-Estimated value

Authorized

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

		Monitoring Rec	uirements		Effluent	Effluent	Effluent	Effluent
Analyte (units)	Limitation	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.	Hara en la companya	1100	ga <del>jes</del> a og jalan	<del></del> , 1
CBOD5 (mg/L)	Monitor	Monitor	Quarterly	3-hr comp.				
TKN (mg/L)	Monitor	Monitor	Quarterly	3-hr comp.	ll Ar <del>ae</del> . See t			<b></b> ,
TOD (mg/L)	Monitor	15	Quarterly	Calculated				
Dissolved Oxygen (mg/L)	Monitor	7 Min.	Quarterly	Grab	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			***
Aluminum, dissolved (mg/L)	Monitor	0.2	Quarterly	3-hr comp.	∭ ja <b>ş</b> a ega a e		1. Agricul (1. <del>1. 1. 1.</del> 1.	
Antimony, total (mg/L)	Monitor	0.1	Quarterly	3-hr comp.				
Chromium, total (mg/L)	Monitor	0.5	Quarterly	3-hr comp.		e e e e e e e e e e e e e e e e e e e		
Cobalt, total (mg/L)	Monitor	0.01	Quarterly	3-hr comp.				
Copper, total (mg/L)	Monitor	0.1	Quarterly	3-hr comp.	Haya <del>-</del> dilabay	ayaa <del>ya</del> a yaabaa h	e e e e e e e e e e e e e e e e e e e	<del></del>
Iron, total (mg/L)	Monitor	0.3	Quarterly	3-hr comp.				
Lead, total (mg/L)	Monitor	0.02	Quarterly	3-hr comp.	<b></b>		in the second second	
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.	lling <del></del> yn pinklan	a i <del>n</del> . A si		
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		
■ 24 年、22 付款付出 養養をは合け 要請び								
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	and the second second	
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		n i <del>de</del> nka ki u se
Trichloroethene (ug/L)	Monitor	10	2/Month	Grab		0.50 U		
Acetone (ug/L)	Monitor	1000	2/Month	Grab		10		이 문제 <del>는 -</del> 항공항 경기 (1911년)
2-Hexanone (ug/L)	Monitor	1000	2/Month	Grab		5.0 U		
4-Methyl-2-pentanone (MIBK) (ug/L)	Monitor	1000	2/Month	Grab	Todan II. Helder	5.0 U		
	H				11			

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  $TOD = 1.5 \times CBOD5 + 4.5 \times TKN$ 

Page 1 of 21



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

	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent
	12/10/97	12/11/97	12/16/97	12/17/97	12/18/97	12/23/97	12/30/97	01/06/98
Analyte								
Flow (GPD)		15810	15620		15320	15420	15450	17630
oH (SU)	<del></del>	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	
otal dissolved solids (TDS) (mg/L)	1100	<b></b>	<b>)</b>	1100		1100	1200	***
CBOD5 (mg/L)								
KN (mg/L)	the <del>an</del> an experience	or gal <del>aga</del> "		ing at the second of the secon			,	- 1
OD (mg/L)						-		
Dissolved Oxygen (mg/L)	<del></del>	10 pm	9.07	offit <del>so</del> nt in the second	The state of	ngij, <del></del>		i i i i i i i i i i i i i i i i i i i
Aluminum, dissolved (mg/L)		e e e e e e e e e e e e e e e e e e e	e e e e <del>qua</del> regligio de la	en e	ې د اولاد او <b>سپ</b>	gallar A <del>rra</del> ndonago esta	اد ادیا فراد اف <mark>سس</mark> ان پهوری	4 / <del>44</del> / 11 14 48
Antimony, total (mg/L)						e Transfer •••		
hromium, total (mg/L)	**************************************			e e e e e e e e e e e e e e e e e e e		and the second second	need in the same	-
obalt, total (mg/L)				· •				
Copper, total (mg/L)		y 1 - 1 1 - 1 - 1		اران در استواد کا		en en en garage		
ron, total (mg/L)		•				-		
ead, total (mg/L)	·					1. ••• 11 1 1 1 1		
Mercury, total (mg/L)				0.0002 U			·	
lickel, total (mg/L)				<del></del>			· ,	
Silver, total (mg/L)						:	·	
Vanadium, total (mg/L)							·.	
Zinc, total (mg/L)				0.04				
cis-1,2-Dichloroethene (ug/L)	·			0.50 U		<u></u>		
rans-1,2-Dichloroethene (ug/L)				0.50 U				
Methylene chloride (ug/L)				2.0 U				
,1,2,2-Tetrachloroethane (ug/L)				0.50 U				- 4 1 <u></u>
Tetrachloroethene (ug/L)				0.50 U				
Foluene (ug/L)				0.50 U	 12			
richloroethene (ug/L)				0.50 U				· · · · · · · · · · · · · · · · · · ·
Acetone (ug/L)				10 U				
2-Hexanone (ug/L)			<del></del>	5.0 U			· · · · · · · · · · · · · · · · · · ·	
4-Methyl-2-pentanone (MIBK) (ug/L)				5.0 U				
-ividity i-z-penianone (ividix) (ug/L)	g s <del>ame</del> nger ve			3.0 U		* * * * * * * * * * * * * * * * * * *		

(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

	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent
	01/07/98	01/08/98	01/13/98	01/14/98	01/15/98	01/20/98	01/21/98	01/22/98
Analyte								
Flow (GPD)		17865	19584		20198	20310		20198
pH (SU)	••••	7.61	7.61		7.61	7.61	<del></del>	7.63
Residue, non-filterable (mg/L)	5 U			5 U			5 U	
Total dissolved solids (TDS) (mg/L)	1000	- 13 1 X		970	a y <del></del> a y la più ya.	e <del>co</del> riginal di const	1000	
CBOD5 (mg/L)	5 U							
ΓKN (mg/L)	0.5		20 C C C C	1 (		See John College		
TOD (mg/L)	9.75 J							
Dissolved Oxygen (mg/L)	9.69	per la company	<del>, ag</del> li (agasti ji)	of <del>all</del> of the state		<del>-v-</del> grander	A STATE OF THE STA	1 <del>44</del> (12 )
Aluminum, dissolved (mg/L)	0.1 U	in in the second of the second	en e		t <u>alaman</u> ya maka da sa	and the second	en de Samuel (1988) en 1988 en En 1988 en 19	1 <u></u> .
Antimony, total (mg/L)	0.06 U		. 777. 200	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)		. <del></del>		
Chromium, total (mg/L)	0.01 U	<u> </u>	TILLE S. Francisco		<u> </u>			
Cobalt, total (mg/L)	0.01 U				- 100 mm -			
Copper, total (mg/L)	0.02							
lron, total (mg/L)	0.05 U							
Lead, total (mg/L)	0.005 U				ar 🚉 Names and		The second second	
Mercury, total (mg/L)	0.0002 U	- 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	777. 84 - 3 	<del></del>			0.0002 U	
Nickel, total (mg/L)	0.05 U				n salah di kacamatan salah di kacam Kacamatan salah di kacamatan salah		0.0002 0	
Silver, total (mg/L)	0.01 U					i i i i i i i i i i i i i i i i i i i	: 14. 왕역(왕) 전 5 왕 (4 - 14 ) (1) 	
Vanadium, total (mg/L)	0.03 U	raine		na <u>Al</u> ain Waling Kab	u <u>Li</u> ngthau	vr its are as		1,949 <u></u> 21. 1945
Zinc, total (mg/L)	0.02			(1) 4조로 작용하다 (1) 3 	* 1 TTENED NOTES	· · · · · · · · · · · · · · · · · · ·	0.03	
	0.02				rio Cheno Herrio			e valor av
cis-1,2-Dichloroethene (ug/L)	0.50 U		- 19 - 19 - 4부분 - 19 - 19 - 19 - 19 - 19 - 19 - 19 - 1				0.50 U	lati AMBO Lebber 
trans-1,2-Dichloroethene (ug/L)	0.50 U	wak <u>ii</u> ya ka a San	o Erapidasiya				0.50 U	. 100 <u>- 110 -</u> 110 - 11
Methylene chloride (ug/L)	2.0 U						2.0 U	
1,1,2,2-Tetrachloroethane (ug/L)	0,50 U	**************************************	or III				0.50 U	un kusu it hak it it
Tetrachloroethene (ug/L)	0.50 U					ar Mark Williams	0.50 U	
Toluene (ug/L)	0.50 U	eralis de la companya			en e <u>n d</u> e samt mendet fo		0.50 U	
Trichloroethene (ug/L)	0.50 U						0.50 U	
Acetone (ug/L)	0.50 U		 				0.30 U	ed k <u>ili</u> gas i tribus
2-Hexanone (ug/L)	5.0 U			r i <del>r a</del> tar e estra .			5.0 U	
							5.0 U :::::::5.0.U;:::::::::::::::::::::::::::::::::::	
4-Methyl-2-pentanone (MIBK) (ug/L)	5.0 U		the state of the second		i i <del>Ti</del> rkum Abuma.		3.U U	1 . 777 #

(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 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)	er <del>gur</del> og det også f	960	<b>4-4</b>	. <del>-                                    </del>	1000			960
CBOD5 (mg/L)								
TKN (mg/L)	in <del>an</del> and a second of				40 <del>4</del> 1 1 1 1 1 1 1 1 1 1 1 1			
TOD (mg/L)								
Dissolved Oxygen (mg/L)	i				:	<del></del> · :	+	Make to
Aluminum, dissolved (mg/L)					i <del>in</del>			
Antimony, total (mg/L)								
Chromium, total (mg/L)	ing <del>aga</del>		. e <del></del>			ua <del>ra</del> ya mamba		<del></del> - (2,4,5)
Cobalt, total (mg/L)								
Copper, total (mg/L)	ery <del>ery</del> gruppisch (j. ber		e e <del>jar</del> kej et este et al et	ad <del>p−</del> d to kite.	表 <del>一。</del> 在自治疗不足	ti 🛶 i galaga kati	†. <b>4.</b> 90 j. 0 − 0	
Iron, total (mg/L)								
Lead, total (mg/L)		15 <del>4</del>	i <del>na</del> dia kan	A CONTRACT OF THE PARTY OF THE		·		
Mercury, total (mg/L)					0.0002 U			
Nickel, total (mg/L)			÷		en <del>e e</del> j			
Silver, total (mg/L)								
Vanadium, total (mg/L)		ara <del>na</del> na arang a					an <del>T</del> ara in	
Zinc, total (mg/L)					0.03			
机工作 医乳质性乳腺体系数 医皮肤 医皮肤 医线	Company of the second	Charles and the second	The second second					
cis-1,2-Dichloroethene (ug/L)					0.50 U			
trans-1,2-Dichloroethene (ug/L)	al <del>ge</del> in dijabla				0.50 U	· ••• /		
Methylene chloride (ug/L)					2.0 U			*
1,1,2,2-Tetrachloroethane (ug/L)	g. <del></del> 1000			<del>-</del>	0.50 U			:
Tetrachloroethene (ug/L)					0.50 U			
Toluene (ug/L)					0.50 U		, <del></del> •	
Trichloroethene (ug/L)					0.50 U			
Acetone (ug/L)	g <del>- </del> frist sad	Nyf <del>as</del> tronon'i Artika	er <del>alle</del> griftest (19	ear <del>ta</del> un jui e e ga	10 U		12 <del>   </del>	
2-Hexanone (ug/L)					5.0 U			
4-Methyl-2-pentanone (MIBK) (ug/L)	u <del>-, </del> yh huji ur	agra <del>lia d</del> e partir de la compa		oy 🛶 🗀 sa Aliji ji	5.0 U	ari <del>na di</del> gilah diang		en e <del></del> ie steel in a lieu

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

	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent
	02/12/98	02/17/98	02/18/98	02/19/98	02/25/98	02/26/98	03/03/98	03/04/98
Analyte								
Flow (GPD)	20480	20321	20530	20817		20722	22150	
pH (SU)	7.61	7.63	7.65	7.63	o e <del>ege</del> nde de jo	7.65	8.16	
Residue, non-filterable (mg/L)			<b>5</b> U		5 U			5 U
Total dissolved solids (TDS) (mg/L)		***	.920	tig 🛶 🧓	920			960
CBOD5 (mg/L)								
TKN (mg/L)	<del></del>	· · <del></del>		ang pagamanan di kacamatan di ka			<del></del>	4
TOD (mg/L)								
Dissolved Oxygen (mg/L)			8.29			eri <del>a</del> Cireti		8.33
Aluminum, dissolved (mg/L)	Bara <del>las</del> a sa bag	ggardi <del>gg</del> File g	er e <del>rag</del> n og 800	ian <del>- "</del> " dan b	ji katha <del>riy</del> a ji ili salah	en en 11 m <del>åre</del> måldelde uden mi	e <del>jaal</del> 17 ja Waste.	
Antimony, total (mg/L)								
Chromium, total (mg/L)							ng kar <del>ata</del> alam 1999	e de la 🛶 y pêrese de
Cobalt, total (mg/L)								•••
Copper, total (mg/L)	garan <del>a da</del> da lagados	A	10 10 <del>14 10 10 10 10 10 10 10 10 10 10 10 10 10 </del>	na saa waxaanga	. Tyf f <del>all</del> on, for mygg	ing si <mark>ke ba</mark> kang k		and Lagrange Cont
Iron, total (mg/L)								
Lead, total (mg/L)	ball <del>a,</del> William	Name of the second	والمروادة والسيارا والمساورا		e die die <del>eeg</del> gales de seel			ار آود و پیغرات ای <mark>جاد</mark> دادین این
Mercury, total (mg/L)			0.0002 U					0.0002 U
Nickel, total (mg/L)	ay kar 🚣 📸 ay yatar		National Constitution	Carl <del>- L</del> iberal et e	and filese and the figure		in <del>lu</del> li 14 ki	را مردل آن از الإصبيع في الدار و
Silver, total (mg/L)								• * * * * * * * * * * * * * * * * * * *
Vanadium, total (mg/L)	ko, <del>L</del> okalija,	n de la composición de la composición La composición de la					and Laboratory	a tak <del>u</del> ji kaluakan
Zinc, total (mg/L)			0.05					0.01 U
	1000 - 新进设置		e ara haran	an debenadi	n y enemate	an Language et		
cis-1,2-Dichloroethene (ug/L)			0.50 U					0.50 U
trans-1,2-Dichloroethene (ug/L)		hada <del>ja</del> ka me	0.50 U		jihaji <del>ya</del> Kajiyi			0. <b>5</b> 0 U
Methylene chloride (ug/L)			2.0 U					2.0 U
1,1,2,2-Tetrachloroethane (ug/L)	fr <del>i –</del> President	alui <del>lli</del> Saveini	0.50 U		un m <del>ill</del> d dingg	984 ( <del></del> 1888 <del>) 1</del> 886.	a'i <del>m</del> garian'.	0.50 U
Tetrachloroethene (ug/L)			0.50 U					0.50 U
Toluene (ug/L)	, 1995 <del>"+-</del> , 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1		0.50 U					0.50 U
Trichloroethene (ug/L)			0.50 Ü					0.50 U
Acetone (ug/L)			10 U		۱۱ و <u>ایکن پش</u> وره پرورو		Alagoj <mark>ad</mark> jo objekta	10 U
2-Hexanone (ug/L)			5.0 U					5.0 U
4-Methyl-2-pentanone (MIBK) (ug/L)	a de la calabación de la companyo	Carlo de Caralada (Carlo de Carlo	5.0 U		Appendix of the Control of the Control	e and the second		5.0 U

<sup>(1)</sup> Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.

<sup>--- -</sup> 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

	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent
Analyte	03/05/98	03/10/98	03/11/98	03/12/98	03/17/98	03/18/98	03/19/98	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)	and the second second	general de la company	980			890	7.11	
CBOD5 (mg/L)								
TKN (mg/L)	1 (A <del>re</del> 1 (A) (A 14)		روف آفر منجسورت	ا کا میں ایک میں ان <del>صبی</del> اور کا انتہا	, war j <del>aar</del> 1 'n de je 1	daga		
TOD (mg/L)	en e					er egg, tittle verkitte i 1900. <del>Davi</del>		· · · · · · · · · · · · · · · · · · ·
Dissolved Oxygen (mg/L)	ara pa <del>rin</del> a ara mara	egy e <del>eeg</del> officjeles.		i jina <del>jaj</del> a 1965. ja et		ada <del>r</del> ian d		
Aluminum, dissolved (mg/L)	o to a complete	er i i i i i i i i i i i i i i i i i i i	4 - 84 -				and the second	er e e e e e e e e e e e e e e e e e e
Antimony, total (mg/L)								
Chromium, total (mg/L)						ivanan <u>al</u> film		
Cobalt, total (mg/L)	n in a filter of a see				1 1 1117 July 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	5.000 077 4 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		
Copper, total (mg/L)	<b></b>	and the state of the state of	Bag 2			مرازي المراك ليكوي الما		terni t <u>il</u>
Iron, total (mg/L)		***			eri eri eri eri eri	* : 'Ai' +		:
Lead, total (mg/L)								
Mercury, total (mg/L)						0.0002 U		
Nickel, total (mg/L)			*					
Silver, total (mg/L)								
Vanadium, total (mg/L)			general de de	<del></del> -		an gir <del>af</del> anag		
Zinc, total (mg/L)						0.01 U		
				en e				
cis-1,2-Dichloroethene (ug/L)						0.50 U		
trans-1,2-Dichloroethene (ug/L)						0.50 U		Alban <del>e</del> N. A
Methylene chloride (ug/L)						2.0 U		<b></b>
1,1,2,2-Tetrachloroethane (ug/L)				Talah <del>aya</del> dalah dalah		0.50 U		
Tetrachloroethene (ug/L)						0.50 U		
Toluene (ug/L)			· · · · · · · · · · · · · · · · · · ·			0.50 U		
Trichloroethene (ug/L)					<b></b>	0.50 U	<del></del>	
Acetone (ug/L)	- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1			e de l <del>a es</del> perancia de la composición dela composición de la composición de la composición de la composición dela composición dela composición dela composición de la composición dela composición de la composición de la composición dela		10 U		
2-Hexanone (ug/L)						5.0 U		
4-Methyl-2-pentanone (MIBK) (ug/L)		777				5.0 U		

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

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

	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
Analyte								
Flow (GPD)		22111	22480	***	21879	21527		21630
pH (SU)	in <del>- j</del> e gar je	7.63	7.63	tini <del>- </del> grain in the	7.65	7.61		7.65
Residue, non-filterable (mg/L)	5 U			5 U			5 U	
Total dissolved solids (TDS) (mg/L)	<b>890</b>	gra <del>ges</del> in the project	eda <del>ri</del> , julija ele	910	84. <del>- 20</del> . 827 (1) Navid	ing the second of	1100	s literatura
CBOD5 (mg/L)				5 U				
TKN (mg/L)	j 🛶 🙉 🛒 🖰			0.4 U		(a. 1911)	ri <del>ma</del> lyayi i	4 g 19 <del>44</del>
TOD (mg/L)				9.3 U				
Dissolved Oxygen (mg/L)			e de la composition della comp	<b>8.83</b>	5 ( <del>),,</del> ,,;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;		tees with	<u></u>
Aluminum, dissolved (mg/L)	ga <del>lay</del> Kajajaran s	ur <del>en</del> luidajaija		1 0.1 U 4 5 5 5		egi <del>ul</del> a	jun <del>g </del> tinakka.	
Antimony, total (mg/L)				0.06 U				
Chromium, total (mg/L)	gar <del>ag</del> a Agas Sel			0.01 U	A (A) (A) (A)	A-A : , '		
Cobalt, total (mg/L)				0.01 U				•••
Copper, total (mg/L)	il <del>ij</del> a ji sa	<del></del>	e d <del>eg</del> with e	-4 * 0.01 U		i (	1	and the Comment of the Comment
Iron, total (mg/L)				0.05 U				
Lead, total (mg/L)	급( <del></del> 다 - ) : - :	<del></del> + + + + +		0.005 U		su <del>re</del> of Author		en e
Mercury, total (mg/L)				0.0002 U				
Nickel, total (mg/L)			: <del>:::+</del>	0.05 U	vi v <del>ata</del> ijakejia, (k. a.).			
Silver, total (mg/L)				0.01 U	en-			
Vanadium, total (mg/L)		gy <del>(ar</del> per 1941) de dec		0.03 U			• • • • • • • • • • • • • • • • • • •	
Zinc, total (mg/L)				0.01 U				
		and the second second						
cis-1,2-Dichloroethene (ug/L)	en tentes	Andrew Committee		0.50 U	La College March San		A A Jan 1 .	
trans-1,2-Dichloroethene (ug/L)				0.50 U		uig a <del>y e</del> n it, was injustif		y ivet <del>n</del> i propert
Methylene chloride (ug/L)	<del></del>			2.0 U	and the substitution of th		 1.44 (1.44)	
1,1,2,2-Tetrachloroethane (ug/L)				0.50 U		pa <del>s </del> ingriji ir		
Tetrachloroethene (ug/L)				0.50 U 0.50 U		en egy a en e		***
Toluene (ug/L) Trichloroethene (ug/L)			**************************************	0.50 U			· · · · · · · · · · · · · · · · · · ·	
			er North	0.50 U 10 U spin vijas	 Double méksus an an inver			
Acetone (ug/L)			1 <del>17.</del> 194 <sup>1</sup> 1.4	5.0 U		Na in <del>175</del> 0 and a catalytic		
2-Hexanone (ug/L)	ender Allia Allia III.			5.0 U	ude je je 14149977 kale e	<del></del> 8-11 - Nordon Francisco e e	er i sewaarakii.	
4-Methyl-2-pentanone (MIBK) (ug/L)		- 한 전투 <b>가</b> 를 가면 보세요?	er (gja graf (gjacquaren) e	3.U U				

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

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

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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

	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent
Analyte	04/14/98	04/15/98	04/16/98	04/21/98	04/22/98	04/23/98	04/28/98	04/29/98
Flow (GPD)	21226		21080	21246		21485	21170	
pH (SU)	7.65	<del></del>	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	) a <del>ma</del> f (albaya) i i fi	rioj <del>es</del> in injunction	940	o de <del>agr</del> esa y de de Cal	ar Se <del>tti</del> na a see	980
CBOD5 (mg/L)					<b></b>			
TKN (mg/L)	1. <del></del>	15 <del></del> 회사 14	시간 생생들이 얼마	i <del>a</del> ibbi 14di		agin <del>aw</del> i Alagoria di H		💳 🧀 in
TOD (mg/L)								
Dissolved Oxygen (mg/L)		ade <del>re</del> Milita dad t.	- 11 <del>***</del> 경제, 하노나 [숙발]	[발제 <del>***</del> [1] 남아보고 등급입				<del></del> -
Aluminum, dissolved (mg/L)	o en <u>an</u> al Menero de la co	e do <b>ugais</b> de la Colonia de Sala.	a le <u>alla</u> e de redució	an <u>an</u> a sina niyesi	oste <u>lla</u> in altalee salaa		ola jan <u>a ar</u> mangan a	
Antimony, total (mg/L)	rak <del>No</del> mbre da 1900 			vu Tielu tet tuditë. •••		이 10 전략이 한 10 년 중인 		en e
Chromium, total (mg/L)	ya	ere <del>e s</del> uite o issue		1.1 <del></del>		. 🛶 thá 44 Aust	en de la companya de	
Cobalt, total (mg/L)						- The Control of the		
Copper, total (mg/L)			idili <del>aa</del> tiiben ahee ja	higa <del>ay</del> saging pinyik			Andrew <del>and</del> of the second	
Iron, total (mg/L)								
Lead, total (mg/L)	i i programa de la composición de la c					on <del>the</del> in this early		
Mercury, total (mg/L)		0.0002 U		enter		·		
Nickel, total (mg/L)						<del></del>		
Silver, total (mg/L)			en de la companione de				Salatroniana da l	
Vanadium, total (mg/L)		0.03					•	e w <del>ee</del> net Pilitorik
Zinc, total (mg/L)	 Ndersk britisk blike	CO.U. Constant of the Constant			ara Tarrillani a	u – sie sekuaantiseek	entri Zwa sa 1994	
cis-1,2-Dichloroethene (ug/L)		0,50 U	도, 가능, 이 , 사이를 높이 등록하다. 		garage en la francia de la La francia de la francia d			
trans-1,2-Dichloroethene (ug/L)		0.50 U			<del></del>		1440. <u></u> 1460.	
Methylene chloride (ug/L)	Pripe Percent in the Company was a	2.0 U	control of the second s				erikal izabilitek ya eti içili ili.	e describing a spirit free constitution
1,1,2,2-Tetrachloroethane (ug/L)		0.50 U		<del></del>	-			
Tetrachloroethene (ug/L)		0.50 U						rangan na hisi ya Mariji wa ka sasari. ****
Toluene (ug/L)		0.50 U						
Trichloroethene (ug/L)		0.50 U			No. of the control of			eserations tons a dispr
Acetone (ug/L)	is <del>L</del> ali Carba	10 U	<del></del>			man (A. F. S. L. J. Day		
2-Hexanone (ug/L)		5.0 U		The second of th		The Angelon States	audiona i	
4-Methyl-2-pentanone (MIBK) (ug/L)		5.0 U	·	모르 <del>트</del> (관광경원)				· · · · ·

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

	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent
	04/30/98	05/05/98	05/07/98	05/12/98	05/13/98	05/14/98	05/19/98	05/20/98
Analyte					-			
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)	ing a state of the	850		<del></del> -	920	en e		990
CBOD5 (mg/L)								
TKN (mg/L)		1 julius (1 julius 1		ija - <del></del> (	- A Section	Angeria		
ΓOD (mg/L)								
Dissolved Oxygen (mg/L)	(a) si ka <del>na</del> si nyunu uli	10.72			And who days	Andrew State (Section 2016)		
Aluminum, dissolved (mg/L)		J48-4 <del>a,</del> 483	en i e <del>n d</del> e disposit de		en e	ja n <del>ya</del> , denajy		<del></del>
Antimony, total (mg/L)								·
Chromium, total (mg/L)				Jan Brand Company		edije <del>- j</del> latiji da	in the second of the second	• • • • • • • • • • • • • • • • • • • •
Cobalt, total (mg/L)	•••							
Copper, total (mg/L)	of a factor of the second	*	er of the second of the					
lron, total (mg/L)								
Lead, total (mg/L)			্ৰান্ত কৰা প্ৰতিষ্ঠা কৰিছিল।	er en <del>en</del> d	<b></b>			di da <del>si</del> kabana
Mercury, total (mg/L)		0.0002 U						0.0002 U
Nickel, total (mg/L)			· · · · · · · · · · · · · · · · · · ·			je aj <del>tu</del> kaj ji in i	gasta <del>es</del> residente	ANGEL
Silver, total (mg/L)								
Vanadium, total (mg/L)								
Zinc, total (mg/L)		0.01 U						0.01 U
		1964 USB 15					distribution of	
cis-1,2-Dichloroethene (ug/L)		0.50 U						0.50 U
trans-1,2-Dichloroethene (ug/L)	— — — — — — — — — — — — — — — — — — —	0.50 U		المارية المارية <del>والمارة المارة ا</del>			<del></del>	0.50 U
Methylene chloride (ug/L)		2.0 U						2.0 U
1,1,2,2-Tetrachloroethane (ug/L)		0.50 U		sin — kasa				0.50 U
Fetrachloroethene (ug/L)		0.50 U						0.50 U
Toluene (ug/L)		0.50 U				****	andra <del>tt</del> in e	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	er e sk <del>ar</del> friendsk		<del></del>			5.0 U

(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	mark .	7.69	7.72	Per	7.98	7.82
Residue, non-filterable (mg/L)			5 U			5 U	<b></b>	***
Total dissolved solids (TDS) (mg/L)	-		860	·		1000	<b></b> .	***
CBOD5 (mg/L)								
TKN (mg/L)	Tayler (1997)	er e <del>y j</del> artu		in the second second	in j <del>ara</del> un liberati			
TOD (mg/L)								
Dissolved Oxygen (mg/L)		·*			er englist in pl	8.14		
Aluminum, dissolved (mg/L)			<del></del>	* . <del></del> * .				· wew
Antimony, total (mg/L)								***
Chromium, total (mg/L)	ij z <del></del> sige		and the second	grand the same of	a A <del>laa</del> r	<del></del>		The same of the sa
Cobalt, total (mg/L)								
Copper, total (mg/L)		-			<b></b>	* + <sub>2</sub> - •••		
Iron, total (mg/L)								
Lead, total (mg/L)	***							
Mercury, total (mg/L)						0.0002 U		
Nickel, total (mg/L)				<del></del>	- <del></del>	***		
Silver, total (mg/L)								•••
Vanadium, total (mg/L)	<del></del> ,						· , ,	to each or production
Zinc, total (mg/L)						0.02		
cis-1,2-Dichloroethene (ug/L)						0.50 U		
trans-1,2-Dichloroethene (ug/L)		,	10 10 <u>11 1</u> 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	garanta <del>ana</del> garanta da ka		0.50 U		
Methylene chloride (ug/L)						<b>2</b> .0 U		
1,1,2,2-Tetrachloroethane (ug/L)						0.50 U		and the second second second second
Tetrachloroethene (ug/L)						0.50 U		
Toluene (ug/L)		·				0.50 U	٠ -	) (* j <b>es</b> e)
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)	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1				the second second	5.0 U		

(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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# Accurate Die Casting Site Fayetteville, New York Table 1

Monitoring Requirements and Effluent Data

Effluent 06/25/98	18250
Effluent 06/24/98	1 1 2 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Effluent 06/23/98	18930
Effluent 06/18/98	18313
Effluent 06/17/98	5 U 950 
Effluent 06/16/98	18470
Effluent 06/11/98	19200
Effluent 06/10/98	
Analyte	Flow (GPD) pH (SU) Residue, non-filterable (mg/L) Total dissolved solids (TDS) (mg/L) CBOD5 (mg/L) TOD (mg/L) TOD (mg/L) Dissolved Oxygen (mg/L) Aluminum, dissolved (mg/L) Antimony, total (mg/L) Cobalt, total (mg/L) Copper, total (mg/L) Lead, total (mg/L) Iron, total (mg/L) Lead, total (mg/L) Lead, total (mg/L) Silver, total (mg/L) Xanadium, total (mg/L) Silver, total (mg/L) Zinc, total (mg/L)

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TOD = 1.5 X CBOD5 + 4.5 X TKN NOTES:

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

	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent
	06/30/98	07/01/98	07/02/98	07/07/98	07/08/98	07/09/98	07/14/98	07/15/98
Analyte								
Flow (GPD)	19930		19230	19158		19480	19110	<del></del>
pH (SU)	7.72		7.72	7.71	y ••• yy, ywlig	7.71	7.72	: : :
Residue, non-filterable (mg/L)		5 U			5 U			5 U
Total dissolved solids (TDS) (mg/L)	1, 1, <del>1,</del>	950		Fr .	880		ng a ng 1 <del></del>	1200
CBOD5 (mg/L)		5 U						
TKN (mg/L)		0.4 U		<u></u> ,	a ; :	***		
TOD (mg/L)		9.3 U						
Dissolved Oxygen (mg/L)		7.62		<del></del>			i i jer	
Aluminum, dissolved (mg/L)	ejista <del>nya</del> i taj	0.1 U	ui selete		ر المحروب المرا <del>سبة</del> المراس			. <u></u> ;
Antimony, total (mg/L)		0.06 U						
Chromium, total (mg/L)		0.01 U	e a <del>neg</del> a		•••			•••
Cobalt, total (mg/L)		0.01 U		•••				***
Copper, total (mg/L)		0.02		ee ay an i	. <u> </u>			
Iron, total (mg/L)		0.05 U						
Lead, total (mg/L)	1	0.005 U			egeneral established			
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		<u></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		<del>,</del>	· · · · · · · · · · · · · · · · · ·			0.50 U
Tetrachloroethene (ug/L)		0.50 U		•••				0.50 U
Toluene (ug/L)		2.5			( ) ( )		er j. 15,4	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		The second second	100	and the great		5.0 U

(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 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 Ü		
Total dissolved solids (TDS) (mg/L)			1000			1000		
CBOD5 (mg/L)								
TKN (mg/L)		<del></del> :		<del>-</del> :	North Carlotte	, · ·	,	. <u></u> .
TOD (mg/L)								
Dissolved Oxygen (mg/L)	<u> </u>	<del>rad</del>		erige of <del>thei</del> ng of the	<u> </u>	ر از از از ا <mark>ستا</mark> ی از		
Aluminum, dissolved (mg/L)		<u> </u>		regional	a day <del>aa</del> — wa gib	والرباد سنترارة	agregative and the	
Antimony, total (mg/L)								
Chromium, total (mg/L)	an <del>en</del> 100 garag	Pari <del>tal</del> III di Libera		transfer and the second		Rep.		
Cobalt, total (mg/L)								
Copper, total (mg/L)	<del></del>	4 19 <del></del>			<del></del> -	and the second		and the <del>res</del> earch to the search
lron, total (mg/L)								
Lead, total (mg/L)		and the second	:	er A <del>ras</del> ta III.	<del></del>	<del></del>		the <del>tar</del> e to the second
Mercury, total (mg/L)								
Nickel, total (mg/L)	tin <del>til</del> grundskaf		ing <del>the</del> Barbara	ing the second			n skiju n <del>ese</del> u	
Silver, total (mg/L)								
Vanadium, total (mg/L)		1 1 - 1					4 ( 4 -	
Zinc, total (mg/L)	•				<b></b>			
cis-1,2-Dichloroethene (ug/L)		· · · · · · · · · · · · · · · · · · ·						and a faith and the second
trans-1,2-Dichloroethene (ug/L)	an 🚅 a laka laka	Maria de la composición della	na <b>Li</b> gara na ma	. 1 July 1 State	esi esi ere d			. En 🏎 Nan Gamer - D
Methylene chloride (ug/L)			îrî tu tarî ¥û e		un de cum en ud seem cum un dêtu. ••••		Million was a conflicted sec	
1,1,2,2-Tetrachloroethane (ug/L)	eriin bara a	, da 🛶 william in .		grafija ja ja sa ka		17.785		n a deservición de la company
Tetrachloroethene (ug/L)		an denam et et e e e e e e e e e e e e e e e e	e para, meg mel para en la colo	Marie e e esperante de la companya d	n vitika ni indini ni Ni ilama. •••	ing parameter and the second section of the secti	a trusta — pe pulsus i	u maa Mark Indonésia. ••••
Toluene (ug/L)	ور محمل المن <mark>شیع</mark> ورات	en e	امر الاحترار المع <b>بي</b>			الموادي إيست الروا	Jankati <b>22</b> kwa jili jili t	Geografia
Trichloroethene (ug/L)		out was 174	en e	ere eta tipo (1) eta la 11.		er i var av se tradition pleas. <del>***</del>	an in the later of the	era e i jiraje na niste d <del></del>
Acetone (ug/L)	ا العراق المنظم المستولة ا	jang <u>Li</u> ghtan i Tanggan	s r <u>iii</u> r soosii sa	445. <u>Li</u> ay 1145			ari jak <mark></mark> inta a a	ing to be the track of the section of
2-Hexanone (ug/L)	nga kanalah katabagan salah 	t temperatur en gelik i i		energi en	AAAA W	**************************************	e e e	en de de la companya de la Milia.
4-Methyl-2-pentanone (MIBK) (ug/L)								

(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

	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent
	08/05/98	08/06/98	08/11/98	08/12/98	08/13/98	08/18/98	08/19/98	08/20/98
Analyte								
Flow (GPD)		18916	18730		18489	18605		18557
pH (SU)	of a <del>see</del> of the	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	1 <del>7-4</del> -81		910	- 1 <sub>12</sub> 1
CBOD5 (mg/L)								
TKN (mg/L)				<del>,</del>				
TOD (mg/L)								
Dissolved Oxygen (mg/L)	7.31	- <del></del>	,				in the second	:
Aluminum, dissolved (mg/L)	en e				en e	:' ; <del>•••</del>		
Antimony, total (mg/L)								
Chromium, total (mg/L)			and the second second		- 10 - 10 Julij	or a state of the		
Cobalt, total (mg/L)								
Copper, total (mg/L)	· · · · · · · · · · · · · · · · · · ·				, <b></b>			
lron, total (mg/L)								
Lead, total (mg/L)								
Mercury, total (mg/L)	0.0002 U						0.0002 U	
Nickel, total (mg/L)								, <del></del>
Silver, total (mg/L)								
Vanadium, total (mg/L)	***							
Zinc, total (mg/L)	0.09						0.02	
					The House of the Control			
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					and the first of the second	0.50 U	-,::
Tetrachloroethene (ug/L)	0.50 U			·			0.50 U	
Toluene (ug/L)	0.50 U	,===	*** 1			ay day a <del>ny</del> ay ya day	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		888			<u></u>	5.0 U	

(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

	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent
Analyte	08/25/98	08/26/98	08/27/98	09/01/98	09/02/98	09/03/98	09/08/98	09/09/98
Flow (GPD)	19070		18450	18550		18443	18336	
pH (SU)	7.72		7.72	7.72	in a c <del>ity</del> out larger t	7.72	7.72	and the second
Residue, non-filterable (mg/L)	· ·	5 U			5 U	***		5 U
Total dissolved solids (TDS) (mg/L)	and the second	880	j <b>===</b> 11. g/A		960			950
CBOD5 (mg/L)	•••							
TKN (mg/L)	6대 전, <del></del>			e de <del>La</del>	ing the second second			· ;
TOD (mg/L)								
Dissolved Oxygen (mg/L)	and the second of the second		ing the ***	n de s <del>aar</del> jan hêji jî de		10.79 gm - 4		· · · · · · · · · · · · · · · · · · ·
Aluminum, dissolved (mg/L)			<del></del>		1 <del>4</del> (14.1)		·	·
Antimony, total (mg/L)						·		
Chromium, total (mg/L)	· · · · · · · · · · · · · · · · · · ·				· · · · · · · · · · · · · · · · ·			+
Cobalt, total (mg/L)								
Copper, total (mg/L)				· · · · · · · · · · · · · · · · · · ·	in a <del>ma</del> nife and	ra en <del>- i</del> frage per	10 mg (40 mg)	
Iron, total (mg/L)								
Lead, total (mg/L)			Salar Sa	Series (1)				10 g
Mercury, total (mg/L)	•••				0.0002 U			
Nickel, total (mg/L)			. <del></del> .		<b></b>			
Silver, total (mg/L)								
Vanadium, total (mg/L)				in the <del>age</del> of the second	나 소개를 보고 있다.	ara (M <del>ese</del> )		
Zinc, total (mg/L)					0.02			
			EL REPRESE	1000年第二年				
cis-1,2-Dichloroethene (ug/L)					0.50 U			
trans-1,2-Dichloroethene (ug/L)		au <del></del> an Colomb	e in <del>to</del> m de l'india.		0.50 U			
Methylene chloride (ug/L)					2.0 U			
1,1,2,2-Tetrachloroethane (ug/L)		역 ( <del> )</del> 환역	ļu. <del>s.</del> piletak	en e <del>le</del> el 100 de	0.50 U			
Tetrachloroethene (ug/L)					0.50 U			
Toluene (ug/L)	Magnadi 🕶 i Mujibu	eri e <del>re</del> ggen en stjært	Service of the servic		0.50 U			and the second
Trichloroethene (ug/L)					0.50 U			<b></b>
Acetone (ug/L)	January and States			hara <del>la</del> escisione	10 U	All <del>er</del> printer		
2-Hexanone (ug/L)					5.0 U			***
4-Methyl-2-pentanone (MIBK) (ug/L)	fluativitis <del>in</del> Nuclearing	(199 <del>5) -</del> 19일 중심장.		ang i <del>ga</del> rapatan ar	5.0 U	para ja ja <del>ja ja</del>	and the second of the second	tjasti 🛶 🗀 🗀

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

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

U - Not Detected, J - Estimated

 $TOD = 1.5 \times CBOD5 + 4.5 \times TKN$ 



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

	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
Analyte								
Flow (GPD)	18806	17916		17710	17860		17590	17098
pH (SU)	7.72	7.74	<b></b> :	7.70	7.72		7.74	7.74
Residue, non-filterable (mg/L)			5 U			5 U		
Total dissolved solids (TDS) (mg/L)			940	N 3		1100		
CBOD5 (mg/L)								
TKN (mg/L)			·				ar a <del>sa</del> paren	
TOD (mg/L)								
Dissolved Oxygen (mg/L)	er <del>er e</del> n grø	and the second second			The second secon			
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Copper, total (mg/L)		e design from papers a	· · · · ·	<del></del>	en 🛶 ji tara 🗀 ta			
Iron, total (mg/L)								
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Mercury, total (mg/L)			0.0002 U					
Nickel, total (mg/L)	***	i je <del>jer</del> aja i				444	: ,	
Silver, total (mg/L)								
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Zinc, total (mg/L)			0.02					
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trans-1,2-Dichloroethene (ug/L)			0.50 U					
Methylene chloride (ug/L)			2.0 U					
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2-Hexanone (ug/L)			5.0 U					
4-Methyl-2-pentanone (MIBK) (ug/L)			5.0 U					

(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

	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent
Analyte	09/30/98	10/01/98	10/06/98	10/07/98	10/08/98	10/13/98	10/14/98	10/15/98
					·			
Flow (GPD)		16860	16268		16200	16020		16020
pH (SU)	<del></del>	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	ation to the second sec		990			1100	ji fira sa <del>liyi</del> sasasa
CBOD5 (mg/L)				5 U				
TKN (mg/L)	_		•••	0,4 U		·	· <del></del>	
TOD (mg/L)				9.3 U				
Dissolved Oxygen (mg/L)	<del></del> -	in the second		10.44	ji w <del>a</del> n da jira		katus <sup>er</sup> <del>eva</del> ja	<del></del> , -7, ,
Aluminum, dissolved (mg/L)	e <del>24</del> e e e e e	gar <del>est</del> es e	<del></del>	a a. 0.1⋅U	e de g <del>ara</del> de la composition de		ig fra <del>es</del> trone	
Antimony, total (mg/L)				0.06 U				
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Cobalt, total (mg/L)				0.01 U				
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Iron, total (mg/L)				0.05 U				
Lead, total (mg/L)	<del>- 100</del>		a, . g	0,005 U	· · · · · · · · · · · · · · · · · · ·	1 , ta		
Mercury, total (mg/L)				0.0002 U				•••
Nickel, total (mg/L)	. <del></del>		tan aa <del>aa</del> jah jojito saa	0.05 U	ing th <del>ere</del> to the sale	<del>-u-</del> sharid		
Silver, total (mg/L)				0.01 U				
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Zinc, total (mg/L)				0.04				
	grand and the same of the same	the second second		Surjug Bath Nati	的复数 电电流电流			
cis-1,2-Dichloroethene (ug/L)				0.50 U				
trans-1,2-Dichloroethene (ug/L)		Weight of the		0.50 U	ga g <del>las</del> if etgaj k	y sy <del>ny</del> wylik	Cartin <del>es</del> projekt	ard jul <del>ga</del> rt (deal) julg
Methylene chloride (ug/L)				2.0 U				
1,1,2,2-Tetrachloroethane (ug/L)		49 <del></del> 1, 4 , 200	aya 🛶 🕮 🧃	0,50 U				Taba <del>ra</del> Kabupatèn
Tetrachloroethene (ug/L)				0.50 U				
Toluene (ug/L)	<u>igual</u> jirda ji	Jangar <mark>ke</mark> gy (1998)	an s <del>-4</del> jihaangt	0.50 U	ji na <del></del> gaziji na		erjoj <del>- k</del> rjanali.	elling <del>ee</del> gegint die
Trichloroethene (ug/L)			<del></del>	0.50 U				
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2-Hexanone (ug/L)				5.0 U		***	·	
4-Methyl-2-pentanone (MIBK) (ug/L)			in in Lagrange State	5.0 U	A Series Company	and the area of the later of	wells 12 At 1	or a file <del>que</del> 3 figura

<sup>(1)</sup> Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.

<sup>--- -</sup> 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

	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent
Analyte	10/20/98	10/21/98	10/22/98	10/27/98	10/28/98	10/29/98	11/03/98	11/04/98
ri (CDD)	15740		15550	15200		15510	14022	
Flow (GPD)	15740		15550	15280		15510	14922	
pH (SU) Residue, non-filterable (mg/L)	7.76	 E I I	7.74	7.76	 	7.76	7.76	 
	**** **	5 U 1000			5 U			5 U
Total dissolved solids (TDS) (mg/L)	in the state of th				1000		-	980
CBOD5 (mg/L)	 						***	
TKN (mg/L)							*** ,	
TOD (mg/L)								0.20
Dissolved Oxygen (mg/L)				and the second	i v Ka <b>rrin</b> j Maji Kaji M	***		9.38
Aluminum, dissolved (mg/L)	a para <del>a p</del> ara da		······································	·	e de la <del>Liu</del> e de Africa.		N	, . <del></del> .
Antimony, total (mg/L)								
Chromium, total (mg/L)	patractication in the second	ady 🚤 dy	g a <del>aag</del> ytty jija		grand girang and a second	ger e <del>gaa</del> r e kali te da	(3 1 <del>44</del> .)	·
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Iron, total (mg/L)								•••
Lead, total (mg/L)	alanda <del>- </del> ilai ah	·	english <del>ang</del> arang at		eria di <mark></mark> il di k		·	
Mercury, total (mg/L)		0.0002 U						0.0002 U
Nickel, total (mg/L)	·				e e e e e e e e e e e e e e e e e e e	. <b></b>	·:	
Silver, total (mg/L)			***					
Vanadium, total (mg/L)				- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1		garage and a		
Zinc, total (mg/L)		0.02						0.04
						Barrier Barrier		
cis-1,2-Dichloroethene (ug/L)		0.50 U						0.50 U
trans-1,2-Dichloroethene (ug/L)	grand grand and	0.50 U	ig			1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -		0,50 U
Methylene chloride (ug/L)		2.0 U					, 1 1 41	2.0 U
1,1,2,2-Tetrachloroethane (ug/L)		0.50 U		. <del></del>				0,50 U
Tetrachloroethene (ug/L)		0.50 U			· 	* * * * * * * * * * * * * * * * * * *		0.50 U
Toluene (ug/L)		0.50 U			and the war in the state of the		And the second	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						

(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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Fillent   11/19/98   11/18/98   11/18/98   11/18/98   11/18/98   11/18/98   11/19/98   1	page 19 01
Table 1  Table 1  Table 1  Accurate Die Casting Site  Fayetteville, New York  Frayetteville, New	mit modified March 13, 1997.
	Methyleir etrachloroeur.  1,1,2,2-Tetrachloroethene (ug/L)  Tetrachloroethene (ug/L)  Toluene (ug/L)



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

	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent
	12/01/98	12/02/98	12/03/98	12/08/98	12/09/98	12/10/98	12/15/98	12/16/98
Analyte								
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)	and the second second	agag <del>ad</del> t si gibili		ing the <del>Lan</del> e (1994) and		,		ag da <del>sa</del> ya da ƙasar ƙ
TOD (mg/L)							***	
Dissolved Oxygen (mg/L)	A segretaria	9.25		er d <del>ee</del> voorst	and the property of the state o	يى ئۇرىسىي <del>ئىس</del> ى ھىستى		Maria <del>da</del> presidente
Aluminum, dissolved (mg/L)	e gitter <del>e</del> eggesegge		in in the second of the second		e salah s			ر المحتور والمام المحتور والمام المحتور المام المحتور المام المحتور المحتور المحتور المحتور المحتور المحتور الم
Antimony, total (mg/L)				· .	•••			<del></del>
Chromium, total (mg/L)	e e e 🚅 i e e e e e				•••			• • • • • • • • • • • • • • • • • • •
Cobalt, total (mg/L)								
Copper, total (mg/L)	erie filozofia		an ing terminal section of the sect		. <del></del> 100. 149. 10	7. port	aligned Law State of the	
Iron, total (mg/L)								
Lead, total (mg/L)	an en	1	the transfer of the second		1:		:	file of the second
Mercury, total (mg/L)		0.0002 U						0.0002 U
Nickel, total (mg/L)	-						***	
Silver, total (mg/L)								
Vanadium, total (mg/L)							<u></u>	-
Zinc, total (mg/L)		0.01 U					***	0.01
					and the second			
cis-1,2-Dichloroethene (ug/L)		0.50 U					<del></del>	0.50 U
trans-1,2-Dichloroethene (ug/L)	and the second s	0.50 U		e-au	and the second second	and <del>grades</del> of the co	garan ing <del>gar</del> angan sa	0.50 U
Methylene chloride (ug/L)		2.0 U						<b>2.0</b> U
1,1,2,2-Tetrachloroethane (ug/L)		0.50 U	gar in <del>ag</del> aran mara				eritika pi <del>ran</del> ga ja	0.50 U
Tetrachloroethene (ug/L)		0.50 U						0.50 U
Toluene (ug/L)	er - <u></u>	0.50 U	ta da <del>esp</del> arata per el	ting ny <u>aar</u> ny	The second section is	ieu i <del>szt</del> t titt at		0.50 U
Trichloroethene (ug/L)		0.50 U						0.50 U
Acetone (ug/L)	and the second	10 U 🖟 😅		engalaga a	<u></u> . 12 45.1 34.		and <del>Al</del> gija in A	n, 4g i <b>10 Ú</b> , 24 ja 3 i
2-Hexanone (ug/L)		5.0 U						5.0 U
4-Methyl-2-pentanone (MIBK) (ug/L)	r indi <del>en</del>	5.0 U		- <del></del>	<del></del>	: <sup>17</sup>	garaf ik <b></b> -arji ili sas	5.0 U
							N 72 7	

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

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

U - Not Detected, J - Estimated

 $TOD = 1.5 \times CBOD5 + 4.5 \times TKN$ 

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

	Effluent	Effluent	Effluent	Effluent	Effluent
Analyte	12/17/98	12/21/98	12/23/98	12/29/98	12/31/98
			_		
Flow (GPD)	12720	12563	12830	12700	12590
pH (SU) Residue, non-filterable (mg/L)	7.81	7.81		7.78	
Total dissolved solids (TDS) (mg/L)			1100		
CBOD5 (mg/L)	Lingua de Maria 	**************************************			teri i teri descriptioneration de la seri y granda en la decensión de la figura de la seria de la figura descr 
TKN (mg/L)	M <del>ar</del> Las	ya <del>-</del> kasa in			ort <del>e (</del> filologii 17 g populat i tori filologii 1800 - 3 i tori, sifi
TOD (mg/L)	•••				•••
Dissolved Oxygen (mg/L)					and <del>a gradual state and the state of the st</del>
Aluminum, dissolved (mg/L)	y n <del>as</del> ang with the first	3 3 <del></del> 1, 1, 1, 1 - 1 - 1 - 1		y — in party of the	
Antimony, total (mg/L)					
Chromium, total (mg/L)	si <del>n</del> aill aiv			<del></del>	2001 <del>도</del> 발표(1902년) 1. 2012년 - 1. 1일 2012년 - 1. 1일 12 12 12 12 12 12 12 12 12 12 12 12 12
Cobalt, total (mg/L)	· ····································	en e			ingen – 1900 – 1900 – 1900 – 1900 – 1900 – 1900 – 1900 – 1900 – 1900 – 1900 – 1900 – 1900 – 1900 – 1900 – 1900 Die state of the State of the Company of the
Copper, total (mg/L) Iron, total (mg/L)			garaki <del>lan</del> <sub>dag</sub> aran a		
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Mercury, total (mg/L)					
Nickel, total (mg/L)					
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cis-1,2-Dichloroethene (ug/L)					
trans-1,2-Dichloroethene (ug/L)		repl <del>in</del> a ligade et			
Methylene chloride (ug/L) 1,1,2,2-Tetrachloroethane (ug/L)	tasi <u>Lin</u> nan mayyya yilai y	eren eren eren eren eren eren eren eren	in i	in in the second section of the sect	
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Trichloroethene (ug/L)					
Acetone (ug/L)					
2-Hexanone (ug/L) 4-Methyl-2-pentanone (MIBK) (ug/L)		 			
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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





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	!	Sur	np	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).

## **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,

OBRIEN & GERE ENGINEERS, INC.

James R. Heckathorne, P.E.

Vice President

CC:

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

		Monitoring Red	quirements		Effluent	Effluent	Effluent	Effluent
Analyte (units)	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	<del>-</del> -	15450	15550
pH (SU)	6.5 - 8.5		2/Week	Grab	7.56	20 <del></del> -	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.	H	1100		
CBOD5 (mg/L)	Monitor	Monitor	Quarterly	3-hr comp.				
TKN (mg/L)	Monitor	Monitor	Quarterly	3-hr comp.	i sep <u>il</u> a basi ja	-		·
TOD (mg/L)	Monitor	15	Quarterly	Calculated		****		
Dissolved Oxygen (mg/L)	Monitor	7 Min.	Quarterly	Grab	un <del>im</del> netiin.	ana <del>-</del> nga la	* - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	An <del>er </del> in the figure
Aluminum, dissolved (mg/L)	Monitor	0.2::5::	Quarterly	3-hr comp	 		inners;	
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	1.0	Quarterly	3-hr comp.	lipă 🚐 Augus III			
Iron, total (mg/L)	Monitor	0.3	Quarterly	3-hr comp.			•••	
Lead, total (mg/L)	Monitor	0.02	Quarterly	3-hr comp.	Haramata, Labora	<u></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.	High 🚗 art vojet va	***	+	
Silver, total (mg/L)	Monitor	0.1	Quarterly	3-hr comp.				•••
Vanadium, total (mg/L)	Monitor	0.03	Quarterly	3-hr comp.	Hear-war sek	er en		
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	u de 🚐 de la	
Tetrachloroethene (ug/L)	Monitor	20	2/Month	Grab		0.50 U	i v jak vistor v istol ••••	
Toluene (ug/L)	Monitor	20	2/Month	Grab		0.50 U	and the second	***
Trichloroethene (ug/L)	Monitor	10	2/Month	Grab		0.50 U		
Acetone (ug/L)	Monitor	1000	2/Month	Grab	11 5-4-55	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		
			—: -: <del> </del>	3.44 b	11			

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

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

U - Not Detected, J - Estimated

 $TOD = 1.5 \times CBOD5 + 4.5 \times TKN$ 



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

	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent
	11/12/97	11/13/97	11/18/97	11/19/97	11/20/97	11/25/97	12/02/97	12/03/97
Analyte								
Flow (GPD)		15530	15683		15631	15400	15300	
pH (SU)	8.5 <del>***</del>   1   1	7.56	7.54	· · · · · · · · · · · · · · · · · · ·	7,54	7.56	7.56	a et en
Residue, non-filterable (mg/L)	5 U			5 U		5 U		5 U
Total dissolved solids (TDS) (mg/L)	1100	ta d <del>an</del> a sagatifika	<del>and</del> general contraction	1100	ara <del>ng</del> agali sa	1200	·	1100
CBOD5 (mg/L)								
TKN (mg/L)	· -					- 10		
TOD (mg/L)								•••
Dissolved Oxygen (mg/L)	er <del>eng</del> eg er en e		7.7	*	THE ROLL OF STREET	*=*	****	
Aluminum, dissolved (mg/L)			*** .		<del></del> juha da			·
Antimony, total (mg/L)						•••		•••
Chromium, total (mg/L)		en la <del>lan</del> a de la casa de la			en e			
Cobalt, total (mg/L)								
Copper, total (mg/L)	et d' <del>aus</del> t prés du  d	<del></del>			grigori <del>,</del> eriginali	4 <del></del>		
Iron, total (mg/L)					_			
Lead, total (mg/L)	à 🕶 . 😘 🗀	·		<sub></sub>				
Mercury, total (mg/L)				0.0002 U				0.0002 U
Nickel, total (mg/L)			+-+ , .	and the same of the	Standard Standard	+		
Silver, total (mg/L)								
Vanadium, total (mg/L)	98. <del></del> 12. 1. 1.					gen <del>d</del> a an in d	San Artista	
Zinc, total (mg/L)				0.01				0.02
		Albert Miller British		and the second		Carlotte Control		
cis-1,2-Dichloroethene (ug/L)				0.50 U				0.50 U
trans-1,2-Dichloroethene (ug/L)	ing <del>m</del> winding is	ali N <del>aci</del> li (1916)	41, <b></b>	0.50 U a.a. a.		Paul and H <del>arra</del> ni, the gas <sup>to th</sup>	m 1 1	0.50 U
Methylene chloride (ug/L)				2.0 U				2.0 U
1,1,2,2-Tetrachloroethane (ug/L)	ing <del>pro</del>	: <del></del>	;	0.50 U	and the second second			0.50 U
Tetrachloroethene (ug/L)				0.50 U				0.50 U
Toluene (ug/L)	مان کې د ورود <del>د</del> دې ړ		or <del>to</del> likelyali	0.50 U	티글의 🕶 건물들이	grafija a <del></del> grafija da sa	****	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)	and <del>an</del> are the first	•••	1,	5.0 U	سيرفسر الأربو سوريوه الإهر			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

	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
Analyte								
Flow (GPD)	15440	15494		15810	15620		15320	15420
oH (SU)	7.56	7.58		7.58	<b>7.6</b>		7.6	7.58
Residue, non-filterable (mg/L)			5 U			5 U		5 U
Total dissolved solids (TDS) (mg/L)	and 🕶 to the second of	tan eme	1100	* ***	a sa <del>m</del> endi baya	1100	-	1100
CBOD5 (mg/L)	-							
ΓKN (mg/L)	Mag <del>ad</del> kadaan di Ji		of the second	a a tai	e i je <del>ral</del> ija ji ji			<del></del>
ΓOD (mg/L)								
Dissolved Oxygen (mg/L)		lity <del>est</del> ka jaros ta	er <del>er e</del> r er <sup>e</sup> r er <sub>er</sub> beginnt.	i i <b>ver</b> ri ve smiti	9.07 (**. <sub>18</sub> .72)		······································	***
Aluminum, dissolved (mg/L)	grav <del>ija</del> (2. 1			r j <del>es</del> t jej si da	en de <del>epe</del> de Medicale.	garai 🚣 ji s	e e e	
Antimony, total (mg/L)								
Chromium, total (mg/L)	and <del>and</del> the second		The second second			3 1 - 1 1 1 - 1 1 - 1		
Cobalt, total (mg/L)								
Copper, total (mg/L)		g tr <del>ans</del> ing the second	100 mag (1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	and the second	- 19 - 19 - 19 - 19 - 19 - 19 - 19 - 19		-	
Iron, total (mg/L)								
Lead, total (mg/L)				general professional de la professiona de la professiona de la professiona de la professi		왕의	ing the state of the	All the state of t
Mercury, total (mg/L)						0.0002 U		
Nickel, total (mg/L)	a <del>m</del> a giba			gen <del>in</del> antan			<del>***</del>	ta y 1 to 1
Silver, total (mg/L)								
Vanadium, total (mg/L)	i Mi <del>ra</del> ng Kalupi	e j <del>e </del> i Jan ye z	<del></del>		ola <del>k</del> olege	. Budi <del>ta</del> en evelo i	<del></del> .	
Zinc, total (mg/L)						0.04		
cis-1,2-Dichloroethene (ug/L)				e for a series of	7 - 4.1. 	0.50 U		· · · · · · · · · · · · · · · · · · ·
trans-1,2-Dichloroethene (ug/L)			e de la companya della companya della companya de la companya della companya dell	 ما المراجع الموسول المراجع الم	a at the state	0.50 U	or to Live	
Methylene chloride (ug/L)	- Company of the Comp	Autoritation and the	english service of the first			2.0 U	en e	
1,1,2,2-Tetrachloroethane (ug/L)				a 🗻 saha		0.50 U	d	jw <u></u> .
Tetrachloroethene (ug/L)	ng kalong katalog di Silang. Tanggaran	e de la companya de La companya de la co			an in an ab Magarini.	0.50 U		
Toluene (ug/L)	ا المعامل في <del>ديد</del> عاوات	and the second	s trans transfer	erakar <del>a -</del> 1.79a	k Zili <del>tee</del> (SEBBB).	0.50 U		
Trichloroethene (ug/L)	and the second s					0.50 U	**************************************	
Acetone (ug/L)	Provided in the	and a <del>lso</del> of the color	., — 44× 24°C.	las w— Alinjer B	eranama da Gabari	10 U	ay i di 🚗 Taran	sydnedi <del>a.</del> Zyddenia
2-Hexanone (ug/L)	+ Aug or of the file				ee e zerr e greger)	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

Page 3 of 21



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

	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent
Analysis	12/30/97	01/06/98	01/07/98	01/08/98	01/13/98	01/14/98	01/15/98	01/20/98
Analyte								
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)	er <del>e.</del> Son (1975).	gara <del>- a</del> garatiyya	0.5		ogradij <del>a</del> (Januari	:,		
TOD (mg/L)			9.75 J					
Dissolved Oxygen (mg/L)	in <del>in d</del> esired to the		9.69	1			To the second of	e Territoria
Aluminum, dissolved (mg/L)		n d <del>a.</del> 1 se	0.1 U		on, ily <del>il</del> aybada	a litte da <del>and</del> e gla	er general en	
Antimony, total (mg/L)		·	0.06 U		- De Califer au Novembre (New York) <del></del>			
Chromium, total (mg/L)	. ng 🛶 ti Trans (1,55) g	v si 🛶 mari sh	0.01 U	ara 🚃 📖		1	u i i i i i i i i i i i i i i i i i i i	
Cobalt, total (mg/L)			0.01 U					
Copper, total (mg/L)	ئىر ۋە س <b>ىد</b> ا	1	0.02					
Iron, total (mg/L)			0.05 U					
Lead, total (mg/L)		e de <del>ma</del> dre de la colonia	0.005 U	-		-		
Mercury, total (mg/L)			0.0002 U					
Nickel, total (mg/L)	and the same of th	. I went	0.05 U		r err <del>an</del> elija d	****	•••	
Silver, total (mg/L)			0.01 U		n er trifte flyndiffe diwette. <del></del>			
Vanadium, total (mg/L)		1 <sub>2</sub> ×	0.03 U			and the second second		
Zinc, total (mg/L)			0.02		in disease de Certe du Corte de Certaria. <del>Timo</del>			· 
cis-1,2-Dichloroethene (ug/L)			0.50 U		in the table of the	100		
trans-1,2-Dichloroethene (ug/L)			0.50 U		in the state of th			
Methylene chloride (ug/L)		ere i <del>sal</del> enci i tre	2.0 U			in Milan <del>are</del> i — sa - A		
1,1,2,2-Tetrachloroethane (ug/L)			0.50 U		ing a series of the series of			
Tetrachloroethene (ug/L)	gar <del>gro</del> chtáin a úta. <del></del>	en aj <del>en</del> lijfulationi.	0.50 U			Brown, <del>Tor</del> ath <sub>B</sub> aile and <del></del>	e vertiging <del>ma</del> likeling lee . <del></del>	
Toluene (ug/L)	in 🚗 valajti.	ang 🐜 ng grad	0.50 U	garjar sa <del>ng</del> ur	, vius ap <del>ul</del> aiteati		***	
Trichloroethene (ug/L)			0.50 U		er i de la compania del compania de la compania del compania de la compania del la compania del la compania del la compania del la compania de la compania del			
Acetone (ug/L)		18 18 <del></del> 18 18 18 18 18 18 18 18 18 18 18 18 18	64. sar 10 U (24. a)	yang s <mark>aa</mark> ng baru		get A <del>ll</del> anda.		
2-Hexanone (ug/L)			5.0 U		en da esta esta esta esta esta esta esta est			
4-Methyl-2-pentanone (MIBK) (ug/L)			5.0 U		The second section of the second second			

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

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



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

	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent
A 1 2	01/21/98	01/22/98	01/27/98	01/28/98	01/29/98	02/03/98	02/04/98	02/05/98
Analyte								
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)								
ΓKN (mg/L)	:			<del></del> , ,			***	
TOD (mg/L)								
Dissolved Oxygen (mg/L)	<del></del> 22 - 22		***	er e <del>all</del> er kan de	Mary J <del>ee</del> r ee did	·		<del></del>
Aluminum, dissolved (mg/L)	<del>,</del>		same, salah jiga	ing 🚣 sing 🚡	ng j <u>aal</u> gijing			
Antimony, total (mg/L)			*					,
Chromium, total (mg/L)	and the second	gagar <del>ana</del> ng pal <sup>a</sup> gaga	e General San Grand		se ki s <del>ele</del> j ali selej.			
Cobalt, total (mg/L)			_					
Copper, total (mg/L)		<del></del>	in a <del>lin</del> t of the significant	gradini <del>ali</del> ali para da ga	gara 🛶 garar	+		
Iron, total (mg/L)								
Lead, total (mg/L)	- P 9.							
Mercury, total (mg/L)	0.0002 U						0.0002 U	
Nickel, total (mg/L)	*** :		+=+	ing a <del>sea</del> ng ay a sasa.	end .	***		
Silver, total (mg/L)								
Vanadium, total (mg/L)	i i <del>i s</del> akat di te	in a c <del>om</del> in a second	er vi <del>na</del> l litere	u bar <del>i,</del> a labar	rai v <del>ii</del> airse.	eric ji <b></b>	Alle III <del>and</del> Alle	• • •••
Zinc, total (mg/L)	0.03						0.03	
							Tirku aya Maka in	And the second s
cis-1,2-Dichloroethene (ug/L)	0.50 U						0.50 U	
trans-1,2-Dichloroethene (ug/L)	0.50 U					ee Siri		grada <del>da</del> per esta de
Methylene chloride (ug/L)	2.0 U						2.0 U	
1,1,2,2-Tetrachloroethane (ug/L)	0.50 U	parameter de la companya de la compa	v to 😽 (spak)				0.50 U	이번에 🛖 하는데 다
Tetrachloroethene (ug/L)	0.50 U						0.50 U	
Toluene (ug/L)	0.50 U			kyre d <del>ed</del> lægik, ú	giyata <del>an</del> abiya 10		0.50 U	46 (17 ) A (17 )
Trichloroethene (ug/L)	0.50 U		_				0.50 U	
Acetone (ug/L)	10 U	ijii. <del></del> 141 to ≠		illi i <del>a</del> ileo, si			$\sim 4.9 \pm 10  U_{\odot}  \rm Mpc^{-1}$	Spanish <del>- "</del> " of each
2-Hexanone (ug/L)	<b>5</b> .0 U						5.0 U	
4-Methyl-2-pentanone (MIBK) (ug/L)	5.0 U		of the Cartilla State (194)	udda <del>- </del> am del	Dajiliyan 📖 ing Masupata		5.0 U	t.: <u></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

	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent
	02/10/98	02/11/98	02/12/98	02/17/98	02/18/98	02/19/98	02/25/98	02/26/98
Analyte	02/10/90	02/11/70	02/12/30	02.17.70	02/10/70	02.17/70	02/23/70	02120170
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)	in the second of			<u></u>		4 <b></b> , 12 ,		
TOD (mg/L)		_,						
Dissolved Oxygen (mg/L)		<del></del>	<del></del>		8.29		***	<b></b> .
Aluminum, dissolved (mg/L)	<u> </u>				Mar <del>an</del> (Mar			
Antimony, total (mg/L)								
Chromium, total (mg/L)					<del></del>	m+m	***	
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)				<del>,</del>				
Zinc, total (mg/L)					0.05			
	4 - 4				Tarate			
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	<b></b>		
Tetrachloroethene (ug/L)					0.50 U			
Toluene (ug/L)		***		***	0.50 U		***	
Trichloroethene (ug/L)					0.50 U			
Acetone (ug/L)					10 U	ETE.		
2-Hexanone (ug/L)			***		5.0 U			
4-Methyl-2-pentanone (MIBK) (ug/L)	*. www	-			5.0 U	RP#	570	

(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

	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent
	03/03/98	03/04/98	03/05/98	03/10/98	03/11/98	03/12/98	03/17/98	03/18/98
Analyte								
Flow (GPD)	22150		20910	21731		21062	22110	
pH (SU)	8.16	<del></del>	7.89	7.76	and the second	7.71	7.69	
Residue, non-filterable (mg/L)		5 U			5 U			5 U
Total dissolved solids (TDS) (mg/L)	***	960		<del></del> y <sub>a</sub> ya sa	980			890
CBOD5 (mg/L)							•••	
TKN (mg/L)								***
TOD (mg/L)								
Dissolved Oxygen (mg/L)	i de la composición della comp	8.33		***	Tyle - Harris Control	4 min		
Aluminum, dissolved (mg/L)					<del></del>			
Antimony, total (mg/L)								
Chromium, total (mg/L)		<del></del>		and the second	<del></del>			*
Cobalt, total (mg/L)								
Copper, total (mg/L)	aya <del></del> kabana itt		og and <del>elle</del> rge profit in in	<del></del> ,			L 1	
Iron, total (mg/L)								
Lead, total (mg/L)	A., <del></del>	- * - * - * - * - * - * - * - * - * - *		. <del>-</del>				
Mercury, total (mg/L)	<del></del>	0.0002 U			***			0.0002 U
Nickel, total (mg/L)	organical contraction	√ <del>, • −</del>	and the second of the	ist 🛖 silati	udiani <del>ka</del> silikano.	, i.e	anger ( <del>144</del> ), and a first	
Silver, total (mg/L)						***		
Vanadium, total (mg/L)	ni 🛶 jajasi 🚉		i daga daga daga daga daga daga daga dag	offer 👆 included	akilad <del>a,</del> dakar 4 si	n de la companya di salah di s	ر در در دار در <del>در ب</del> ری از بازی	Maria Janes
Zinc, total (mg/L)		0.01 U						0.01 U
	Albert Leadig - Alb Ford	e de la companya de La companya de la co	1111 2000	145 July 14 14 15 12	1.45\$ J.4040 (B.)			
cis-1,2-Dichloroethene (ug/L)		0.50 U						0.50 U
trans-1,2-Dichloroethene (ug/L)	ا بيندر با ا <del>ب</del> راث	0.50 U		aan 🕳 Liyligh	alabet <del>ia</del> etitorak	use di <del>ge</del> rate di d	descri <del>nd</del> in Sign	0.50 U
Methylene chloride (ug/L)		2.0 U						2.0 U
1,1,2,2-Tetrachloroethane (ug/L)	ele <del>ra</del> a elektrik	0.50 U		- 11 - 12 m	Geri <del></del> Jakob	•••		0.50 U
Tetrachloroethene (ug/L)		0.50 U						0.50 U
Toluene (ug/L)	His area of the second	0.50 U	***	***		***	· •••	0.50 U
Trichloroethene (ug/L)		0.50 U						0.50 U
Acetone (ug/L)		10 U		in the second second	in ty W <del>ar</del> ajsAdayi. L		an di <del>ay</del> 1011 ay 1	10 U
2-Hexanone (ug/L)		5.0 U						5.0 U
4-Methyl-2-pentanone (MIBK) (ug/L)		5.0 U		in the second of	a Taraha <del>La a</del> Mandalah da	166 ( <b></b>		5.0 U

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

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

U - Not Detected, J - Estimated

 $TOD = 1.5 \times CBOD5 + 4.5 \times TKN$ 



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

	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent
Amaluta	03/19/98	03/24/98	03/25/98	03/26/98	03/31/98	04/01/98	04/02/98	04/07/98
Analyte								
Flow (GPD)	22390	22160		22111	22480		21879	21527
pH (SÙ)	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)			***	,	egen <del>en</del> l'arti	8.83		
Aluminum, dissolved (mg/L)	enger <del>(La</del> pyson) er e		<del></del>	· ., -		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)	<b></b>			<u> </u>	<del></del>	0.01 U		
Iron, total (mg/L)						0.05 U		
Lead, total (mg/L)	, <del></del> ,					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		==7
					1.4			
cis-1,2-Dichloroethene (ug/L)						0.50 U		
trans-1,2-Dichloroethene (ug/L)	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -					0.50 U	·	
Methylene chloride (ug/L)						2.0 U		
1,1,2,2-Tetrachloroethane (ug/L)		:				0.50 U	<del></del>	
Tetrachloroethene (ug/L)	· · · · · · · · · · · · · · · · · · ·					0.50 U		
Toluene (ug/L)				· · ·	and the gent of the	0.50 U		
Trichloroethene (ug/L)	·					0.50 U		
Acetone (ug/L)	<del></del>					10 U	. 4	
2-Hexanone (ug/L)						5.0 U		
4-Methyl-2-pentanone (MIBK) (ug/L)						5.0 U		

(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

Page 8 of 21



# 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	7.00	7.03	5 U	7,03	7.03	5 U	7.03
Total dissolved solids (TDS) (mg/L)	1100			910			940	***
CBOD5 (mg/L)					i ya Ti said sa s			
TKN (mg/L)					ovid <u>o</u> no partid			
TOD (mg/L)	· · · · · · · · · · · · · · · · · · ·							
Dissolved Oxygen (mg/L)	garage and the second			a <del></del> garagea	an, Xakar			
Aluminum, dissolved (mg/L)			sa <del>ra</del> yi safiriya	e e e e <del>e e</del> e de e e e e		engan <del>err</del> e de Santonia. Est		
Antimony, total (mg/L)	- <del></del>							′
Chromium, total (mg/L)		***	in the <del>con</del> gress which			-		***
Cobalt, total (mg/L)								***
Copper, total (mg/L)							-	
Iron, total (mg/L)								
Lead, total (mg/L)	· : <del></del>			0.0000.11				
Mercury, total (mg/L)				0.0002 U				
Nickel, total (mg/L)	41 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	P-11		r <del>ir</del> lakk			+++	
Silver, total (mg/L)					***			
Vanadium, total (mg/L)		ing <del></del> grant i						
Zinc, total (mg/L)				0.03		<del></del>		
12 5:41				0.60.11				
cis-1,2-Dichloroethene (ug/L)			<del>-</del>	0.50 U				
trans-1,2-Dichloroethene (ug/L)		at de <del>an</del> eder de d		0.50 U				
Methylene chloride (ug/L)				2.0 U	Today and Table Sald West			
1,1,2,2-Tetrachloroethane (ug/L)				0.50 U		i ka <del>r</del> kyty	in in it <del>or</del> eller som	ra La <del>rr</del> i Pedilim
Tetrachloroethene (ug/L)	enter			0.50 U				
Toluene (ug/L)				0.50 U		ida <del>er</del>	•••••	
Trichloroethene (ug/L)			<del></del>	0.50 U	<del></del> Kanada Maria Barata Kabupatèn			
Acetone (ug/L)	₩ 1 - e ti <del>gere</del> e un justificación			10 U			i i	<del>1-1</del> ·
2-Hexanone (ug/L)				5.0 U				
4-Methyl-2-pentanone (MIBK) (ug/L)	in the <del>cont</del> oring of the contoring			5.0 U				

NOTES:

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

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



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	7.05	5 U			5 U	7.05
Total dissolved solids (TDS) (mg/L)		980		850			920	
CBOD5 (mg/L)		700						
TKN (mg/L)	:							
TOD (mg/L)	· · · · · · · · · · · · · · · · · · ·							
Dissolved Oxygen (mg/L)		· <del></del>	***	10.72	·			
70 (0)								
Aluminum, dissolved (mg/L)	<del></del> ,							
Antimony, total (mg/L)			•••					
Chromium, total (mg/L)	- <u></u>	<del></del>				., 1 <del></del>		
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)	<del></del>			ing <del>an</del> english	<del></del>	*** ,		
Zinc, total (mg/L)				0.01 U				
		•						
cis-1,2-Dichloroethene (ug/L)				0.50 U				
trans-1,2-Dichloroethene (ug/L)			wes	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	the second second			
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				<del></del> .

<sup>(1)</sup> Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.

<sup>--- -</sup> 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	
oH (SU)	7.65	***	7.67	7.62		7.69	7.72	***
Residue, non-filterable (mg/L)		5 Ü			5 U			5 U
Total dissolved solids (TDS) (mg/L)	n namen a naga jiya.	990			860	<b>=+=</b> -,		1000
CBOD5 (mg/L)						***		
rkn (mg/L)								
rod (mg/L)								
Dissolved Oxygen (mg/L)				<del></del> ;			. +	8.14
Aluminum, dissolved (mg/L)	<del>aga</del> gerakti					:	· · · ·	
Antimony, total (mg/L)				·				
Chromium, total (mg/L)	grama ar tali,			ala 🚤 jeoloo		and the second second second second		•••
Cobalt, total (mg/L)								
Copper, total (mg/L)	و کرد گیری چ	-	الرجارة الأفاسيين المحا	والعراق أحسان		. A. s		
ron, total (mg/L)								
Lead, total (mg/L)	ali <del>al</del> goria	and the second	. • <del></del> • •		n in the second	- Company		
Mercury, total (mg/L)		0.0002 U						0.0002 U
Nickel, total (mg/L)	All <del>es</del> de Brigh		10 to	Maria Maria	an and <del>and</del> the site	agar <del>ia</del> na, sa		
Silver, total (mg/L)								
Vanadium, total (mg/L)	(4 <del>등</del> 역 (영화		and the second of the second	et j <del>a</del> ja 195		ranga <del>ja</del> kabupat	· j · · · · · · · · · · · · · · · · · ·	
Zinc, total (mg/L)		0.01 U						0.02
cis-1,2-Dichloroethene (ug/L)		0.50 U			Maka at 1911	the second second		0.50 U
rans-1,2-Dichloroethene (ug/L)		0.50 U		* *		 -1::::::::::::::::::::::::::::::::		0.50 U
Methylene chloride (ug/L)		2.0 U	erri eta er <del>iki</del> alakaran az 				e fate d <del>est</del> de la colonia.	2.0 U
1,1,2,2-Tetrachloroethane (ug/L)		0.50 U			ing			0,50 U
r,1,2,2-Tetrachioroctilane (ug/L)  Tetrachloroethene (ug/L)		0.50 U		. 2011년 1월 1일		etti erigitti eriki oleh oleh oleh eriki eri 	terisi te <del>rsi</del> arti dari. ——	0.50 U
Tetractiforoethene (ug/L)  Foluene (ug/L)	alian III. Manalana di S	0.50 U	in er e <u>lle</u> den eller		in felicina esta e di Ass	int of k as Late Colors		0.50 U
Trichloroethene (ug/L)		0.50 U	n a til (本語できた) かんしょうしん 	ng jih <del>an</del> yesiyir ay. 		enggg 12 <del>55</del> : 1 156 : 1		0.50 U
Acetone (ug/L)		0.50 U □ 10 U , □		 Mari <u></u> - dogin				10 U
2-Hexanone (ug/L)		5.0 U						5.0 U
4-Methyl-2-pentanone (MIBK) (ug/L)		5.0 U		<del></del>				5.0 U

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

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



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	A	7.78	7.72	we'r	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)	<del>-</del> -	er en	<del></del>		e e e <del>e e</del> geligiës		<del></del> ,	
TOD (mg/L)								
Dissolved Oxygen (mg/L)	*** /	· ′		about .	The same of the same			· ·
Aluminum, dissolved (mg/L)		***	****					
Antimony, total (mg/L)								
Chromium, total (mg/L)		***	<del></del>				***	
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)	<del></del>	•				•		
Zinc, total (mg/L)						0.34		·
								*
cis-1,2-Dichloroethene (ug/L)						0.50 U		
trans-1,2-Dichloroethene (ug/L)					and the <del>an</del> est of the first	0.50 U		
Methylene chloride (ug/L)						2.0 U		
1,1,2,2-Tetrachloroethane (ug/L)			<del></del>		And the second	0.50 U		
Tetrachloroethene (ug/L)						0.50 U		
Toluene (ug/L)	***		***		a da <del>en</del> las las c	0.50 U	-	
Trichloroethene (ug/L)				-		0.50 U		
Acetone (ug/L)	·	***			8 (88) <del>444</del> 8 8 <u>11</u> 7	10 U		
2-Hexanone (ug/L)				***		5.0 U		
4-Methyl-2-pentanone (MIBK) (ug/L)		***				5.0 U		****

<sup>(1)</sup> Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.

<sup>--- -</sup> 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	nen :	7.71
Residue, non-filterable (mg/L)	5 U	•••		5 U			5 U	
Fotal dissolved solids (TDS) (mg/L)	990			950	and <del>and</del> and the second	pen .	880	
CBOD5 (mg/L)				5 U				
TKN (mg/L)		n and	·	0.4 U	ing 🚤 garaji k	· · · · · · · · · · · · · · · · · · ·	-ne 1 j.	
TOD (mg/L)				9.3 U				
Dissolved Oxygen (mg/L)	- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	· <del></del>	<b>+P+</b>	7.62				
Aluminum, dissolved (mg/L)			•••	0.1 U	<b></b>			
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	er <del>er </del> alle de de			
lron, total (mg/L)				0.05 U				
Lead, total (mg/L)	. <del></del>			0.005 U	and <del>and</del> the first of the		<del></del> -	menter.
Mercury, total (mg/L)				0.0002 U				
Nickel, total (mg/L)	Barrier <del>and</del> ari galak sag	ja od <del>pos</del> ta oj gelod		0.05 U		aa <del>to</del> east i		the strawer of the second
Silver, total (mg/L)			***	0.01 U				•••
Vanadium, total (mg/L) Zinc, total (mg/L)		erika <del>ja</del> malu .		0.03 U 0.05				
cis-1,2-Dichloroethene (ug/L)	ezhoù ende			0.50 U	ke <u>r</u> alah Siri J			海泉 的复数人名
trans-1,2-Dichloroethene (ug/L)				0.50 U	files <u></u> attat salaunt - n	4 - <u>II</u> - Najawa 14	Adam of Edition	
Methylene chloride (ug/L)		enten j <del>ar</del> en medere. <del></del>	하다. (조건 1241. 년 12. 17 	2.0 U	e Militaria de de Carlo de Car 			
1,1,2,2-Tetrachloroethane (ug/L)	KANAN ETRA TOR			2.5 U	aketa <u></u> an kuatuu a	uk II. a. e.e.		
Tetrachloroethene (ug/L)	### 1 ( T硕 왕 1 년 - 1241) 			0.50 U	4 <del>ग</del> 1.1115 (1946) —	기계하는 <del>187</del> 시설에 1, 1362 	해보는 1983년 <mark>177</mark> 시간이 동생 다. 	<del></del>
Toluene (ug/L)		energia. An Single-Alexander (1997)		4 4 - <b>2.5</b>				
Trichloroethene (ug/L)				0.50 U				
Acetone (ug/L)	 444		in a <del>ree</del> na dis <b>a</b> ad	0.50 U 10 U 14, 1851 L	ing in the second of the secon	11, 24,		
2-Hexanone (ug/L)			en de mase jajoe 1. dawi. 	5.0 U	. water was supplied	<del></del>		
4-Methyl-2-pentanone (MIBK) (ug/L)	<del></del>	<del></del>		5.0 U ii. 11 mil				

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

	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent
Analyte	07/14/98	07/15/98	07/16/98	07/21/98	07/22/98	07/23/98	07/28/98	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		7.71	5 U
Total dissolved solids (TDS) (mg/L)	***	1200			1000		****	1000
CBOD5 (mg/L)								
TKN (mg/L)	·							
TOD (mg/L)	•••				-			
Dissolved Oxygen (mg/L)		<del>*************************************</del>		***	<del>***</del> : : :			***
Aluminum, dissolved (mg/L)								
Antimony, total (mg/L)								,
Chromium, total (mg/L)	, <del>,</del>		444			n=7	- marel	
Cobalt, total (mg/L)								
Copper, total (mg/L)	ang w <mark>aan</mark> g galamag		and the second second	,	a Baa <del>al</del> Baaraa			
Iron, total (mg/L)								
Lead, total (mg/L)					garage de la companya del companya del companya de la companya	·		
Mercury, total (mg/L)		0.0002 U						
Nickel, total (mg/L)	J."						***	
Silver, total (mg/L)								
Vanadium, total (mg/L)	- 19 - 19 - 19 - 19 - 19 - 19 - 19 - 19	· · · · · · · · · · · · · · · · · · ·		رئى يېدا س <del>ىدا</del> داداد			حبت	
Zinc, total (mg/L)		0.06						
cis-1,2-Dichloroethene (ug/L)		0.50 U		· · ·				
trans-1,2-Dichloroethene (ug/L)	and the second	0.50 U	-					····
Methylene chloride (ug/L)		2.0 U						
1,1,2,2-Tetrachloroethane (ug/L)		0.50 U		****			· wad	
Tetrachloroethene (ug/L)		0.50 U						
Toluene (ug/L)	ali a 🛶 tayayata	0.50 U			egyleta <del>ye</del> r iyota ka			and the second second
Trichloroethene (ug/L)		0.50 U						***
Acetone (ug/L)	19 . <del>- 1</del> . 19	10 U	<del></del>	<del></del> . '				
2-Hexanone (ug/L)		5.0 U						
4-Methyl-2-pentanone (MIBK) (ug/L)	entre en	5.0 U			er ege <del>le <u></u></del>	NWR .	· www.	

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

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

U - Not Detected, J - Estimated

 $TOD = 1.5 \times CBOD5 + 4.5 \times TKN$ 

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

	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent
Analyte	07/30/98	08/04/98	08/05/98	08/06/98	08/11/98	08/12/98	08/13/98	08/18/98
Flow (GPD)	19085	19025		18916	18730		18489	18605
ын (SÙ)	7.72	7.72	nes	7.71	7.69	- Chipman	7.72	7.72
Residue, non-filterable (mg/L)			5 U			5 U		
Total dissolved solids (TDS) (mg/L)		***	910	***	••• ·	900	****	***
CBOD5 (mg/L)								
ΓKN (mg/L)				<del></del>		· ,		
ΓOD (mg/L)								
Dissolved Oxygen (mg/L)	e <del>- t</del> ere je e	<del>!!**</del> ' ::	7.31	and <del>the</del> desired and		ja koja <del>kor</del> j	<del></del> .	
Aluminum, dissolved (mg/L)		in the state of th		Sanga <del>lag</del> englesig	en de la <del>graf</del> igações grafid	ere e e e e e e e e e e e e e e e e e e		en e
Antimony, total (mg/L)							***	/
Chromium, total (mg/L)	and the second	je i je <del>ma</del>	A-H	garage and the	and the second second			
Cobalt, total (mg/L)								
Copper, total (mg/L)	ر بر <del>ا سے</del> او	an n <del>a</del>		ger a signatura (iliang sa si	and <del>al</del> ginery.		-	
Iron, total (mg/L)								
Lead, total (mg/L)	Allega Barrella				artin ( <del>Leg</del> island) (1984)		·	
Mercury, total (mg/L)			0.0002 U					
Nickel, total (mg/L) Silver, total (mg/L)	Angelong (	· · · · · · · · · · · · · · · · · · ·		gar <sup>ti</sup> ej <del></del> t <sub>i</sub> e to gel		en e	111 <del>111</del> 111 111 111	
Vanadium, total (mg/L)	gar <del>La</del> ir de la la	ار در در د <del>ست</del> الارزاد در ا	ing. Ang diamanah taga magagan		W <u>u</u> Bakang	la top <u>as</u> e ee ee	an a	
Zinc, total (mg/L)	entropy of the state of the sta		0.09	entropy of the second	nn na special personal (1971)		en e	a de di iliani y
		494		t de la de	ada Allina	gradient specified in the	A TERMINATION	
cis-1,2-Dichloroethene (ug/L)			0.50 U			A 7 (8.4) :	i kyma yn i ddy.	elinin en en Establica. Tura
trans-1,2-Dichloroethene (ug/L)	garaa (d. 1911)	Carrie eee o	0.50 U	rayan ayar	ed da 🚅 den 🛴 st	ر در ایمان ا <mark>سمار</mark> دادر		ا المراجع المراجع <del>مسم</del> المراجع
Methylene chloride (ug/L)			2.0 U					
1,1,2,2-Tetrachloroethane (ug/L)		g dan <del>am</del>	0.50 U	ara in 🚣 ala ji bi	t was 🚣 was Alain	a 25 a <u></u> 3 \$ 1, 5	english Salaharan	galaty <u></u> galaty
Tetrachloroethene (ug/L)		ga ar an r	0.50 U	en en anglasen ang le Sin da 	er inter interes es com Rei.	. servición	ere	n na an 1 mar 1 an Aigh agus a 
Toluene (ug/L)	ya 🛶 et gelek k	Single was girls of the	0.50 U	ida 🛶 Nasar S				aking Lawar at Managarin
Trichloroethene (ug/L)	And the second second		0.50 U	en grande de la companya de la comp Transportation de la companya de la	m with a Mail of	er a ya sa a sa	nd fyr ar the med at 12 feb	
Acetone (ug/L)	asaa. <mark>—</mark> ajirad u ri su	alaba. <del></del> ne	10 U		ari da 🛶 🖰 da Andi	ga kari k <b>asa</b> 1900 ka da		
2-Hexanone (ug/L)	ranko hija ninitya 1 <del>***</del>	en eg www e e e e e e e e e ge	5.0 U				n in de la	er er i de er
4-Methyl-2-pentanone (MIBK) (ug/L)			5.0 U				<del>-</del>	and the second second

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

 $TOD = 1.5 \times CBOD5 + 4.5 \times TKN$ 



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

	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent
	08/19/98	08/20/98	08/25/98	08/26/98	08/27/98	09/01/98	09/02/98	09/03/98
Analyte								
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)	6				1 🚣 1865 II.			
TOD (mg/L)			· 					
Dissolved Oxygen (mg/L)	. <del>40.4</del>		*	<del></del>	er e			10.79
Aluminum, dissolved (mg/L)	-				and the second of the second			
Antimony, total (mg/L)								
Chromium, total (mg/L)								
Cobalt, total (mg/L)							. 404	
Copper, total (mg/L)								
Iron, total (mg/L)	<del></del>			<del></del>				
Lead, total (mg/L)								
Mercury, total (mg/L)	0.0002 U			<del></del>	<del></del>		0.0002 U	·
Nickel, total (mg/L)	0.0002 0					***		
Silver, total (mg/L)					an in <del>Fre</del> nchister and			
								<del>₽=#</del>
Vanadium, total (mg/L)	0.03						0.00	
Zinc, total (mg/L)	0.02						0.02	***
12 5:41	0.6011					with the first	0.50 **	
cis-1,2-Dichloroethene (ug/L)	0.50 U		~ <del>~~</del>				0.50 U	***
trans-1,2-Dichloroethene (ug/L)	0.50 U	·		·	i programa (i stalina ji	·	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			<del></del>			0.50 U	
Trichloroethene (ug/L)	0.50 U						0.50 U	
Acetone (ug/L)	10 U				and the second		10 U	
2-Hexanone (ug/L)	5.0 U						5.0 U	
4-Methyl-2-pentanone (MIBK) (ug/L)	5.0 U		/	**** · · ·	ing the state of t		5.0 U	

(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 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	7.70		5 U
Total dissolved solids (TDS) (mg/L)		950		Ji (A)				1100
CBOD5 (mg/L)	717 v							1100
KN (mg/L)				<u> </u>			·	
ΓΟD (mg/L)								
Dissolved Oxygen (mg/L)					n in		·	
olisiotred Oxygen (mg/L)					ange Medicarian	<del></del>		
Aluminum, dissolved (mg/L)		<u></u>		🕳 û Law.				· · ·
Antimony, total (mg/L)		•••						
Chromium, total (mg/L)		<b></b>				600		***
Cobalt, total (mg/L)								
Copper, total (mg/L)		***				-		
Iron, total (mg/L)								
Lead, total (mg/L)					Mark Landson	-		
Mercury, total (mg/L)					0.0002 U		•	
Nickel, total (mg/L)		ang	unda <del>ese</del> di productioni	ana 🛶 ji Amaja	Talligue Heem		***	
Silver, total (mg/L)		o ded nikyana yalin oleh <del></del>	om un film maus la como film. <del></del>	ti ti ti ka ji kala saka i 1874 	assit i den till i han hadalisi	e tip ve finite velo		
Vanadium, total (mg/L)	g kan <u>ua</u> n gali sa ji	g Nor 🚣 de la distan				alay ka <mark>Li</mark> rayan bara		
Zinc, total (mg/L)	en en en en par, anno a , ar	ti s statilisi i s	on of each one of the	on the contract of the contrac	0.02	in the state of th		
	A SHOUNTER HOLD	6.7 (1.84%)	Radio Laboration	and the second	syones i la discente la	and the second	Sec. 40. 188	
cis-1,2-Dichloroethene (ug/L)		#141), 11		er de la companya de la com-	0.50 U	and the second s	etter för en forsk och en en e	
trans-1,2-Dichloroethene (ug/L)	المارية المراجعة المسيحة والإسارة المراجعة المراجعة المراجعة المراجعة المراجعة المراجعة المراجعة المراجعة الم		والروادة فراويسية أأسيا		0.50 U			en e
Methylene chloride (ug/L)	en e		en e	ALC MITTER TO	2.0 U		en destinativa	
1,1,2,2-Tetrachloroethane (ug/L)	Butu <del>n,</del> segui bas	and a second	againt 🛶 ann aige		0.50 U		and a second	
Tetrachloroethene (ug/L)	oren oren eta eta elektriakoa. ••••	n sa kalantu ka 186			0.50 U		* * *** · · · · · · · · · · · · · · · ·	
Foluene (ug/L)	i sa 🚙 ay siyay	: <del>н-н</del> ,:	, <del>•</del> #•	<b></b> (1.5 m)	0.50 U			ward
Trichloroethene (ug/L)				₽ ', <del>*==</del>	0.50 U			
Acetone (ug/L)				, <del></del> ,	10 U	e gradina di Salaharan di Salah		en grande de la companya de la comp
2-Hexanone (ug/L)			- 1+ 		5.0 U			
4-Methyl-2-pentanone (MIBK) (ug/L)					5.0 U			

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

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



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)	7.77	7.74	5 U	7.74	7.70	5 U	7.74	7.70
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)			*** · · · · · · · · · · · · · · · · · ·	***	. <del></del>	10.44		
Aluminum, dissolved (mg/L)	i <del></del> gradina a rij	<del></del> , ,	<u></u>		r See an standard	0.1 U	en e	
Antimony, total (mg/L)				e de la composition della comp		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)	***			****	Paul .	0.05 U	***	
Silver, total (mg/L)						0.01 U		
Vanadium, total (mg/L)						0.03 U		
Zinc, total (mg/L)						0.04		
					Part of the second			
cis-1,2-Dichloroethene (ug/L)						0.50 U		***
trans-1,2-Dichloroethene (ug/L)	· · · ·			· ·	and 🚟 😘 💮	0.50 U		
Methylene chloride (ug/L)					740	2.0 U		
1,1,2,2-Tetrachloroethane (ug/L)			•••			0. <b>5</b> 0 U		
Tetrachloroethene (ug/L)						0.50 U		
Toluene (ug/L)	•••• · · · · · · · · · · · · · · · · ·		,		and the state of t	0.50 U		
Trichloroethene (ug/L)				***		0.50 U		
Acetone (ug/L)	·, 💳		10 10 10 10 10 10 10 10 10 10 10 10 10	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 - 1 <sub>1</sub>	10 U	resident to the second	Name of the second
2-Hexanone (ug/L)						5.0 U		
4-Methyl-2-pentanone (MIBK) (ug/L)				·	-mar 11	5.0 U		***

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

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



# 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	7.70	7.70	5 U	7,74	7.70	5 U	7.70
Fotal dissolved solids (TDS) (mg/L)	1100	·		1000			1000	
CBOD5 (mg/L)				1000 %			1000	
ΓKN (mg/L)	·							
rod (mg/L)	<del></del>				i. <del>Ti</del> liy wi			· <del></del> .
Dissolved Oxygen (mg/L)								
Dissolved Oxygen (mg/L)			. *					
Aluminum, dissolved (mg/L)	war <del></del> e inny der		ere i		راياد داديم ورايا <del>د دا</del> دي	1	- <del></del> -	, <del></del> , ,
Antimony, total (mg/L)								
Chromium, total (mg/L)	og 🛶 talah ja			ali e 🛶 e a jaren ili 🦆	talaa ka ga ka sa			
Cobalt, total (mg/L)								
Copper, total (mg/L)		٠	1 w 1 a		gar <del>i, e</del> r iba dalah s			
ron, total (mg/L)								
Lead, total (mg/L)	·				<del></del>			
Mercury, total (mg/L)				0.0002 U				
Nickel, total (mg/L)	***	***	***		. A <del>res</del> de ed			
Silver, total (mg/L)								
Vanadium, total (mg/L)	اگري جو ايري پي <del>سو</del>		an an <del>ag</del> di sadi gaji	ele <del>L</del> a algodati.			in in the second second	
Zinc, total (mg/L)	<del></del>			0.02				<del></del>
	ata kata 1990	POLICE HE CONTRACT		The Constant College	Asto distribution	and the second	e seletel al	garage and agreement
cis-1,2-Dichloroethene (ug/L)	· · · —			0.50 U				
trans-1,2-Dichloroethene (ug/L)		grad <del>i L</del> gradia	n ka a <del>sa</del> até é saté	0.50 U	(a) <u>—</u> 1,100,00,00,00	ageng <del>Lag</del> nyang ng Pays		er er en <u>Li</u> tter van de
Methylene chloride (ug/L)	<u> </u>			2.0 U				
1,1,2,2-Tetrachloroethane (ug/L)	tag <del>- j</del> e ky jelest	y rot <del>ala</del> yaa ta ark		0.50 U		g agai <del>ne g</del> airtí la carrai	e prem <del>al</del> priore	1945년 <del>- 19</del> 13년 1일 :
Tetrachloroethene (ug/L)				0.50 U				en jaro de la compressión de la compre La compressión de la
Foluene (ug/L)	n ji 🛶 ji bu dush	rodinamental co	10 mag 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0.50 U	udi <del>ala</del> gniğiş çileşti.	Mara <del>lia i</del> Nya jia in ke	i et u lat <del>ere</del> Ålaterii nar	garan <del>ala</del> nda, ar
Trichloroethene (ug/L)				0.50 U	te de la trapación (esta la companion de la co			
Acetone (ug/L)	interpolation	iliaa hi <del>yoo</del> kka ili	ing the second of the second	10 U		ا ماران ب <del>نی</del> ار بره	ignorial de la compansión de la compansi	
2-Hexanone (ug/L)			en e	5.0 U	and the second second			
4-Methyl-2-pentanone (MIBK) (ug/L)	on the second of the second		Some and the second	5.0 U : 14 - 4.	ing <del>and</del> general sections		2.	

NOTES:

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

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



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

	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent
	11/03/98	11/04/98	11/05/98	11/10/98	11/11/98	11/12/98	11/17/98	11/18/98
Analyte								
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	, gan	: .	1300			1000
CBOD5 (mg/L)								
TKN (mg/L)	·		<del></del>	والمراجع والمستعلق	4 <u></u> 4, 1,	+		
TOD (mg/L)								
Dissolved Oxygen (mg/L)		9.38	***	er e e		****		
Aluminum, dissolved (mg/L)		<del></del>	***	·		***		
Antimony, total (mg/L)								/
Chromium, total (mg/L)	al, <del>L</del> italiti				and the second	·	1	***
Cobalt, total (mg/L)								
Copper, total (mg/L)	, . <del></del>			, · · ,	- 200 1 - 1 - 1 - 4		, : <del></del>	
Iron, total (mg/L)						·		
Lead, total (mg/L)				·	<del></del>			
Mercury, total (mg/L)		0.0002 U						0.0002 U
Nickel, total (mg/L)			. ***			+-+	+	
Silver, total (mg/L)								
Vanadium, total (mg/L)	·, <u>—</u>		and the second of the second o	a l <u>a</u> ing la		ng saaring s		-
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)	ر در این از در است. این در این از در است.	0.50 U			eri 🚣 ti si. i e		14 dy <b>===</b> 14 dy 14 dy 14 dy	0.50 U
Methylene chloride (ug/L)		2.0 U					• • • • • • • • • • • • • • • • • • •	2.0 U
1,1,2,2-Tetrachloroethane (ug/L)		0.50 U	,	<del></del> 1.5				0.50 U
Tetrachloroethene (ug/L)		0.50 U						0.50 U
Toluene (ug/L)	***	0.50 U		+=+	press .	+	***	0.50 U
Trichloroethene (ug/L)	<u> </u>	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

<sup>(1)</sup> Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.

<sup>--- -</sup> 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

	Effluent	Effluent
	11/19/98	11/24/98
Analyte		
Flow (GPD)	13940	13690
pH (SU)	7.85	7.79
Residue, non-filterable (mg/L) Total dissolved solids (TDS) (mg/L)		5 U 1100
CBOD5 (mg/L)		
TKN (mg/L)		<del></del>
TOD (mg/L)		
Dissolved Oxygen (mg/L)	<del></del>	
Aluminum, dissolved (mg/L)	, <del>-</del>	a <del>al</del> constitue de la companya de la
Antimony, total (mg/L)		en <mark>ene</mark> n en
Chromium, total (mg/L) Cobalt, total (mg/L)	e e <del>Tra</del> de, de la re	of <del>all</del> and a second control of the second was the second of the second
Copper, total (mg/L)	<u> </u>	an <del>an</del> fariginal and a substitution of the property of the contract of the co
lron, total (mg/L)		
Lead, total (mg/L)		: Anglander - Company of Anglander (1995) - Salander (1995) - Anglander (1995) - Anglander (1995) - Anglander (1995)
Mercury, total (mg/L) Nickel, total (mg/L)	energe entre en en en en	
Silver, total (mg/L)	i dia antoin agines, ese <del></del>	entre variation and a transfer and the fertile of the second of the factor of the second of the fertile of the
Vanadium, total (mg/L)	K <del>a</del> jalan	연구 <mark></mark>
Zinc, total (mg/L)	in <del>all</del> Nation (Note of	en <del>en</del> en
cis-1,2-Dichloroethene (ug/L)	este a transition de la company. La company	ログラング、 Dept. Mac Company Comp - Company Comp
trans-1,2-Dichloroethene (ug/L)	Sar <del>-</del> događejo	So <del>nd</del> Grand Control of the Control of the Market Market Control of the Control o
Methylene chloride (ug/L)		en <del>de la composition de la composition della co</del>
1,1,2,2-Tetrachloroethane (ug/L) Tetrachloroethene (ug/L)		as <u>t</u> vitorom of the particular actions as which with the properties of the properties of the properties of the
Toluene (ug/L)	er 🚚 Josefele, .	
Trichloroethene (ug/L)		
Acetone (ug/L)		
2-Hexanone (ug/L) 4-Methyl-2-pentanone (MIBK) (ug/L)	inii <del></del> Sanii <del></del> dasa sanii 1990	으로 <del>하는</del> - 10 <del>- 10</del> - 10 - 10 - 10 - 19 - 14 - 15 - 15 - 15 - 15 - 15 - 15 - 15
i moust a pominione (marx) (ug b)	er en	and the second of the second of the second of the Mark Ward Mark Second of the second

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

 $TOD = 1.5 \times CBOD5 + 4.5 \times TKN$ 

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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 N	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 vy z	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



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

WELL#	Ground Water Elevation ( 11/02/94	Ground Water ft) 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		ang Sanger							ي فالشهار يومه
MW-03	AB	AB	AB	AB	AB	AB	AB	AB	AB
MW-04						<del></del>	. 4[4] <del>1</del> .		11 11 11 11 11 11 11 11 11 11 11 11 11 11 11 11
MW-05									. er
MW-06	10 <u>21</u> 20 21	<del></del> + ;		· ·	<u> </u>			· · · · · · · · · · · · · · · · · · ·	189 <u></u> 240, 1
MW-07 (B)									
MW-08	<del>!                                  </del>	•••• · · · · · · · · · · · · · · · · ·				<u> </u>	; <u>4</u>		
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	1 1 <del>1</del>	# . # # · ·		:		. <u>24.</u>			1
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)	: 				. <del></del> .				<u></u>
MW-17									·
MW-18	NI	NI	NI	NI	NI	NI	NI	NI	NI :
MW-19	NI	NI	N1	NI	NI	NI	NI	NI	NI
MW-20	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-21	NI	NI	N1	NI	NI	NI	NI	NI	NI
MW-22	NI.	NI	NI	NI NI	NI	NI	NI	NI as the	NI
MW-23 (B)	NI	NI	NI	NI	NI	NI	NI	NI	NI
PZ-01		<u> </u>			<del></del>	<del></del>	e e gas		aligned the state of the state
PZ-02									
RW-01			;;; <del></del> '	4 2 4 1 3 4 A	<del></del>			<b></b> '	
RW-02 (B)	NI	NI	NI	NI	NI	NI	NI	NI	NI
SUMP	76.04	74.83	75.00	75.17	74.83	75.00	75.00	74.88	75.00



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	- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	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)	<u> </u>	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	NI	NI :	NI	NI	NI THE	NI	: NI	NI
MW-19	NI								
MW-20	NI	NI	NI	NI :	NI	NI	NI	NI	NI
MW-21	NI								
MW-22	NI NI	NI	NI	NI	NI d	NI .	NI	NI	NI
MW-23 (B)	NI								
PZ-01	A. 4	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		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



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	NI	NI	NI :	NI	NI	NI NI	NI	72.95
MW-19	NI	DRY							
MW-20	NI	NI	NI	NI .	NI	NI	NI	NI	DRY
MW-21	NI								
MW-22	NI	NI	NI .	NI .	NI	NI	NI	NI	NI 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

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

Table 2

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	1	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
90-MW	58.13	54.95	53.71	55.61	58.39	4	59.34	58.58	57.97
MW-07 (B)	53.95	52.44	51.22	52.68	54.28	ł	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	1	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	1	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	89.08	80.49		80.33	79.84	79.53
MW-14	99'08	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	I	59.83	56.63	50.48
MW-16 (B)	65.57	63,31	60.09	61.06	66.13	1	68.99	64.43	58.45
MW-17	58.46	57.89	55.96	58.02	59.33	ı	59.64	58.33	DRY
MW-18	72.32	70.81	70.77	73.04	73,31	72.78	73.60	71.34	12.69
MW-19	DRY								
MW-20	50.26	DRY	DRY	DRY	DRY		AB	AB	AB
MW-21	Ī	Z	Z	Z	Z	63.69	63.74	63.06	62.93
MW-22	7 6 7 7 8 8 8 8 8	Z	i Z	Z	Z	63.69	67.92	67.35	65.96
MW-23 (B)	Ī	Z	ĪZ	Z	Z	Z	37.71	35.61	32.29
PZ-01	58.31	55.13	53.90	55.83	58.57	1	59.51	58.70	58.01
PZ-02	57.97	54.90	53.53	55.25	58.23	1	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	1	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 (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.

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Page



# Accurate Die Casting Site Fayetteville, New York Table 2

**Ground Water Elevation Summary Table** 

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(tt)		v.		1424	). P																			100.5				job.	e, AB talled iber 1 e aba
Ground Water Elevation (ft) 10/20/98	DRY	83.54	ΑB	AB	60.04	69.69	51.76	59.86	59.71	51.88	53.98	59.89	78.31	80.64	52.58	61.84	57.93	70.74	DRY	AB	63.23	67.83	33.57	59.70	59.46	32.36	44.33	75.20	ailable 16 ins eptem 0 wer
Ground Water Elevatio 10/20/9		83	1		9	59	51	. 59	59	51	53	59	78	80	52	61	57	20	D		63	<i>P</i>	33	59	59	32	4	75	not av MW- d in S AW-2
				Ž.						· ·																			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 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.
Ground Water Elevation (ft) 04/15/98						V 13																						-	i, NA- 01 thr 1) con W-04
Ground Water Elevatior 04/15/98	DRY	83.52	AB	AB	61.05	60.57	53.82	67.17	60.56	61.08	61.73	60.80	78.67	80.78	62.10	68.03	59.51	73.29	DRY	AB	63.54	68:36	37.95	60.61	60.34	32.60	59.94	74.96	Oring MW-( (IRN 6. M
Ç., 2, 2, 2, 3, 3, 4, 4, 4, 4, 4, 4, 4, 4, 4, 4, 4, 4, 4,		∞			9	Õ	3	9	Õ	9	9	Ø	7	<b>∞</b>	9	9	. 5	7	Т		9	9	3	9	9		5	7	monit ttum. asure 3/06/9
(£)				2																									ne of ted da al Me ged 06
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Ground Water Elevation (ft) 01/29/98	DRY	83.47	AB	AB	98.09	60.46	52.90	64.98	60.51	55.78	56.75	60.67	78.87	80.78	56.34	65.71	59.70	73.50	DRY	AB	63.82	68.51	34.95	60.50	60.22	43.13	52.74	74.89	stalled ed on a im Re elev.
5≅≅5		~~.		7.			۷,		_	71	-,	•		~	٠,	_	-,				_				_	7	- '	љ. 1 М	ot ins s base i Inter asing
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**		. ·	. ~		ν.	5	7 (B)	∝^	6	(B)	1 (B)	C1	~	₹	5 (B)	5 (B)	7	200	6	6	_	2	3 (B)				(B)		NI-V Elev TCE MW
WELL#	MW-01	MW-02	MW-03	MW-04	MW-05	MW-06	MW-07 (B)	MW-08	60-MW	MW-10 (B)	MW-11 (B)	MW-12	MW-13	MW-14	MW-15 (B)	MW-16 (B)	MW-17	MW-18	MW-19	MW-20	MW-21	MW-22	MW-23 (B)	PZ-01	PZ-02	RW-01	RW-02 (B)	SUMP	TES:
≥	Σ	Σ	Σ	Σ	Σ	Σ	Σ	Σ	Σ	Σ	Σ	Σ	Σ	Σ	Σ	Σ	Σ	Σ	Σ	Σ	Σ_	Σ	Σ	Ъ	<u>'Z</u>	~	<b>X</b>	∞.	o Z



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

Date Sampled:	08/89 TCE	12/89 TCE	05/90 TCE	05/92 TCE	07/94 TCE	10/94 TCE	02/95 TCE	04/95 TCE	07/95 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: 11: 11: 11:	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	1000
MW-05		340	344	110	330	410	290	280	
MW-06		700	454	510	390	360	330	280	270
MW-07 (B)	- 11 de 41 1	ND	ND	ND	ND	ND	ND	ND	ND
MW-08	****	ND .	ND	ND		ND	ND	and the second	ND
MW-09	: ' '	109	106	60	72	74	74	84	75
MW-10 (B)			31 :	4500	1600	1300	1400	1200	900
MW-11 (B)		· ·		5200	5500	5300	4300	3900	4000
MW-12		4 ; : : : : : :		36 2 3 3 3	44	35	33	30 %	25
MW-13		- <u></u>	<u> </u>	110	740	510		DRY	DRY
MW-14	f <b></b>		<u> </u>	67	150	120	79	95	140
MW-15 (B)				NI		14	11	10	17
MW-16 (B)	<del></del>		* * * *	NI		6	17	7	18
MW-17	- <del></del>			NI	260	140	200	130	160
MW-18				and the second second	NI	NI		NI	NI
MW-19			- <del></del>	NI NI	NI	NI	NI NI	NI	NI
MW-20			II oktober	NI S	NI	NI	NI	NI	NIE 5
MW-21				NI	NI	NI	NI	NI	NI
MW-22	) <u></u> ) <u></u>			NI 1	NI .	NI	NI	NI NI	NI 3
MW-23 (B)	1977 - Julius III. 19 <del>77</del> -				EVI.			1N1	*** n. 41
MW-24	 NI	NI ··· · · · · · ·	NI 1 44 A	NI	NI -	NI:	NI.	NI	NI
PZ-01	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	141		141					120
PZ-02	in a care in		est v		- <del></del> 1 372			490	400
RW-01	<del></del>	<del></del>	N	in <del>g t</del> erminan pagkan an Nij	19 <del>101</del>	<del></del>	<del></del>	490	
RW-02 (B)				NI			NII	NII di	
SUMP	- <del></del>	w		NI NI	NI NI	NI NI	NI	NI	NI
SUMI				NI 	INI see all ass	INI			n se A
	1.0								

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.

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

Date Sampled:	10/95 TCE	01/96 TCE	04/96 TCE	05/96 TCE	07/96 TCE	10/96 TCE	01/97 TCE	04/97 TCE	07/97 TCE
WELL#	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MW-01	DRY		DRY		DRY	DRY			DRY
MW-02	ND			1 <u>44</u> 5 (1966)	i 🌉 Sanguri	ND			م کار این این ا <mark>لمشا</mark> م
MW-03	AB	AB	AB	AB	AB	AB	AB	AB	AB
MW-04	15	. <del></del>		in <u>uu</u> min ja kala la		62	. <del>4.</del> a. a Na a	AB	AB
MW-05			ering and the second of the se	eta esperante de la composition de la c La composition de la		180	e de la companya de La companya de la co	a manakura T <del>ara</del>	
MW-06	180	170	110	g <u>ar</u> a gala	98	<b>71</b> 2	75	52	ili
MW-07 (B)	ND	- 141,414	. 11 1411 - 11 1 1 1 1 1 1 1 1 1 1 1 1 1	Territoria de la compansión de la compan	:	ND	Billion de la companya del companya del companya de la companya de		*
MW-08	ND	. <b></b> 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			:	ND	. 👊 - Mala Tilla		
MW-09	68	100	64		65	50	95	83	66
MW-10 (B)	890	900	820	18 18 18 18 18 18 18 18 18 18 18 18 18 1	960	1700	1900	1200	enin i bila je je
MW-11 (B)	2600	2500	1500		1400	1600	1500	800	
MW-12	29		. <u></u>	3 <b>11</b> 4,10 , 38		17		# <b>2_</b>	4 <u>4.4)</u> (
MW-13	DRY	er of hardholds to the second	후 제 (2년) 	of the state of the second of		370		fa elle of a 	e de la companya de La companya de la companya de l
MW-14	78	84	250	r <del>ig</del> e e egita.	230	170	390	400	260
MW-15 (B)	7		- 1	· · · · · · · · · · · · · · · · · · ·		20	outer of unit of the state of t	t Dyster in 1996 och 19 <del>98</del>	
MW-16 (B)	20	<u></u>		<u>. 241</u>	. <del></del>	11.		· 研练	
MW-17		180	350		460	300	450	220	150
MW-18	NI	NI	NI	1200	u <u>uul</u> 1999 Shiili	2900	850	410	1800
MW-19	NI	NI	NI		DRY	DRY	DRY	DRY	DRY
MW-20	NI	NI.	NI de la	70		DRY	DRY	AB	AB
MW-21	NI	NI	NI	NI	NI	NI	NI	520	310
MW-22	ΝI	NI	NI	NI	NI	NI -	NI	1	3
MW-23 (B)	7-67 d	- 1155 기 :			- 1775, 1	usīdī ir no produksi. T <del>as</del>	ti Tiffiya yali etti isaya. Ti <del>las</del>	ND	ND
MW-24	NI	o <b>N</b> IGA de la como	NI S	NI	NI	NI	NI	NI di Seriesi i	NI CARA
PZ-01	. 13 7 1	1 13 s 12		n Till og skile det. H <del>ere</del>		32			
PZ-02			<u></u>	gar <u>an</u> a an an an	na	540	en in		
RW-01	guardo Como dos combios. O <del></del>	- 19 - 19 - 19 - 19 - 19 - 19 - 19 - 19	u od kosti od moteti od S <del>eco</del>	95 :					a managaran sa
RW-02 (B)	1 <b>4.</b> j		A		<u></u>	a <u>ra</u> sa sagais	erande de la companya	, e jart e	
SUMP	a de la compania de l La compania de la co	170	180	and the state of t	1000	e de la companya de La companya de la co	320	180	- 5
	100			e un tera in in in in		and the second		i maga ili degi ili.	

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MW-01 through MW-16 installed during Remedial Investigation (Steams & Wheler).

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### 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	
WELL#	ug/L	ug/L	ug/L	ug/L	ug/L	
MW-01	DRY	DRY	DRY	DRY	DRY	
MW-02	ND		1 <del></del>	ND		
MW-03	AB	AB	AB	AB	AB	
MW-04	AB	AB	AB	AB	AB	
MW-05	220			200		
MW-06	ND	1 <del>1 2 1</del> 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	140	92		보통하는 불자한 12분들은 100mm :
MW-07 (B)	ND			ND		
MW-08				ND	<del></del>	中,他 <b>"维</b> 拉,为"连续说:"一场中的一大,一个特别的是要说道
MW-09	61	140	120	80		
MW-10 (B)	1300		930	880	<u> 188</u>	· · · · · · · · · · · · · · · · · · ·
MW-11 (B)	1600		920	1100		
MW-12	19			22	1: <del>-11</del>	
MW-13	760			480		
MW-14	560	560	460	400		
MW-15 (B)	18			21		
MW-16 (B)	14			4 + 1 + 1	= <u>2.2</u> 25.2	·阿鲁霍·利廉州 秦州 《四》中的《福嘉和》中《《山麓书》李明·
MW-17		270	800	250		
MW-18	3100	1000	1100	3600		그냥 열실됐다. 뿔이 그는 그의 상현소에 대한됐다면 다
MW-19	DRY	DRY	DRY	DRY	DRY	
MW-20	AB	AB	AB	AB	AB	그래 이 선물 전환하다 그는 그는 그렇지 경로들에 그리를 마음하다
MW-21	450	120	1300	180		
MW-22	8	5	-10) Light A - 1	14	F -4"	· 特尔勒斯 电分离波力 人名西尔 电放射系统 心经的现在分词
MW-23 (B)	ND	ND		ND		
MW-24	NI	NI	NI	NI	6000	
PZ-01	48			85		
PZ-02	420	. The	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	250		· 接続 [] 自以確立 ( ) 以數 ( ) ( ) ( ) [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [
RW-01						
RW-02 (B)					<del>11</del>	化袋子医乳皮素 医特别氏 医二氏性 医二角 身份 医髓质重量
SUMP	2600		560	850		
	<u> </u>	<u> </u>	al di San			

NOTES: ND - Not detected above method detection limit, --- - Not analyzed, Nl - 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 Steams & 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.

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

	 MW-04	MW-17							
Analuta	10/22/96	04/10/96	10/22/96	01/16/97	04/15/97	07/08/97	01/29/98	10/20/98	
Analyte	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	
cis-1,2-Dichloroethene	12		7						
Tetrachloroethene	_44	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.

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

Analyte MW-18 MW-18 MW-19 MW-20 MW-21 MW-2				1									-45, L		411
## MW-18 MW-18 MW-20 MW-21 MW-			l												
## MW-18 MW-18 MW-20 MW-21 MW-											4.5		4.1%		
## MW-18 MW-18 MW-20 MW-21 MW-	7		1												
### MW-18 MW-18 MW-20 MW-20 MW-21 MW	-21 3/9														
### MW-18 MW-18 MW-20 MW-20 MW-21 MW	<u>8</u> 8	ž	108	1	•										
## MW-18 MW-21 MW-	ΣΞ	3n	**	•	•										
## MW-18   MW-21   MW-															
## MW-18 MW-21 MW-				٠.,											
## MW-18   MW-21   MW-															
## MW-18   MW-21   MW-	1 97								2.						
## MW-18 MW-21 MW-	7-7	. 1	0	2.7	_										
## MW-18   MW-21   MW-	\$ \$		77	i	i						25.5				
1022/96   07/08/97   10/21/98   07/24/96   01/21/97	<b>~</b> °												1.46		
1022/96   07/08/97   10/21/98   07/24/96   01/21/97				÷											
1022/96   07/08/97   10/21/98   07/24/96   01/21/97															
1022/96   07/08/97   10/21/98   07/24/96   01/21/97	_		1												
1022/96   07/08/97   10/21/98   07/24/96   01/21/97	21		1	3.7									1.0		20.00
1022/96   07/08/97   10/21/98   07/24/96   01/21/97	₩- /16	7	18	•											
#W-18 MW-18 MW-20  10.22/96 07/08/97 10.21/98 05/24/96  -Dichloroethene 81 66 160 46	$\Sigma$ 9	gu	9		i										1. 11
#W-18 MW-18 MW-20  10.22/96 07/08/97 10.21/98 05/24/96  -Dichloroethene 81 66 160 46								19	4						
#W-18 MW-18 MW-20  10.22/96 07/08/97 10.21/98 05/24/96  -Dichloroethene 81 66 160 46			1												
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#W-18 MW-18 MW-20  10.72.96 07.08/97 10.21/98 05.724/96  -Dichloroethene	1 97		1												
MW-18 MW-18 MW-20  10.22/96 07/08/97 10/21/98 05/24/96  Ug/L ug/L ug/L ug/L ug/L  Ultimoethene 81 66 160 46  Ultimoethene	7-2 21/2	ٔ ۔	6								, <u>3</u> , 1				
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##-18 MW-18 MW-18    10/22/96   07/08/97   10/21/98					44.00								- 10		
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##-18 MW-18 MW-18    10/22/96   07/08/97   10/21/98	٧,									114					
##-18 MW-18 MW-18    10/22/96   07/08/97   10/21/98	28		l			2 10				Y. N					
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##-18  10/22/96  07/08/97  -Dichloroethene  81  66  Horoethene														20	
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##-18  10/22/96  07/08/97	<b>8</b> 86											1871			
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##-18  10/22/96  07/08/97	\$ 6	lg.	16					4.							
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		A.	Ci.	<u>e</u> :	= 1170.1 > 0.120.11							- 248			19.79

NOTES:

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

2 of 4

Page



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

	MW-21	MW-21	MW-21	MW-22	MW-22	MW-22	MW-22	MW-22	
Analyte	01/29/98	04/16/98	10/21/98	01/21/97	04/16/97	07/08/97	10/23/97	01/29/98	
Analyte	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	١
cis-1,2-Dichloroethene	350	1400	340	5	4	9	22	11	
Tetrachloroethene			, i <del>a</del> ii iya		Year <del>A</del> liye işirili				2.3
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.

Page 3 of 4



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

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MW-22	10/21/98 ug/L	1	ŀ											
₹	10/21 ug/L	35	1:	İ						- 1				+ 1
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MW-22	04/16/98 ug/L													7
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	Analyte	cis-1,2-Dichloroethene	Tetrachloroethene	Vinyl chloride		5 3 4								14 Tu
		L		<u> </u>		<u> </u>			11	117%		1,347		W 1.

Page 4 of 4

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

NOTES:

### FIGURE 2



### **LEGEND**

PROPERTY LINE

MW-4 ♦ MONITORING WELL LOCATION

MW−3 ♦ FORMER MONITORING WELL LOCATION

RW-1 ● OVERBURDEN AQUIFER RECOVERY WELL

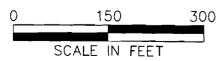
RW-2 ● BEDROCK GROUND WATER RECOVERY WELL

PZ-1 ◆ PIEZOMETER LOCATION

NOTE: MW-24 LOC

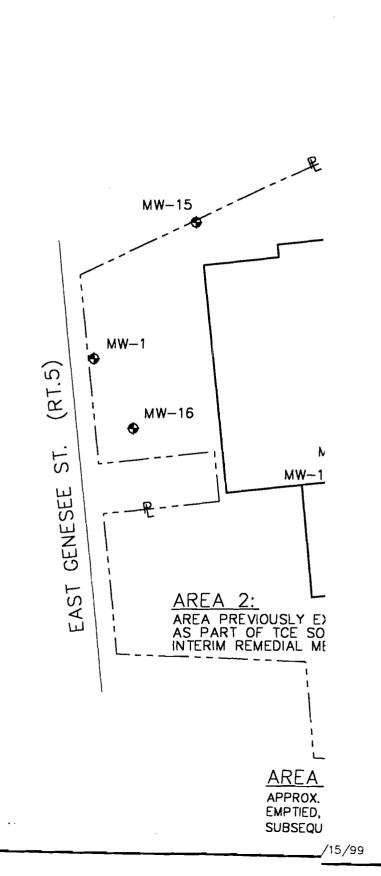
ACCURATE DIE CASTING FAYETTEVILLE, NEW YORK

SITE PLAN



DATE: JANUARY 1999 FILE NO. 2488.731,021





### FIGURE 3



### **LEGEND**

PROPERTY LINE

MW−1 **⊕** MONITORING WELL LOCATION

FORMER MONITORING WELL LOCATION MW-4 ⊕

RW-1 **⊚** OVERBURDEN AQUIFER RECOVERY WELL

RW-2 **⊚** BEDROCK GROUND WATER RECOVERY WELL

PZ-1 PIEZOMETER LOCATION

---- 75

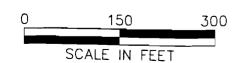
(58.01)GROUND WATER ELEVATION IN FI

> GROUND WATER ELEVATION CONTOUR (DASHED WHERE INFERRED)

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

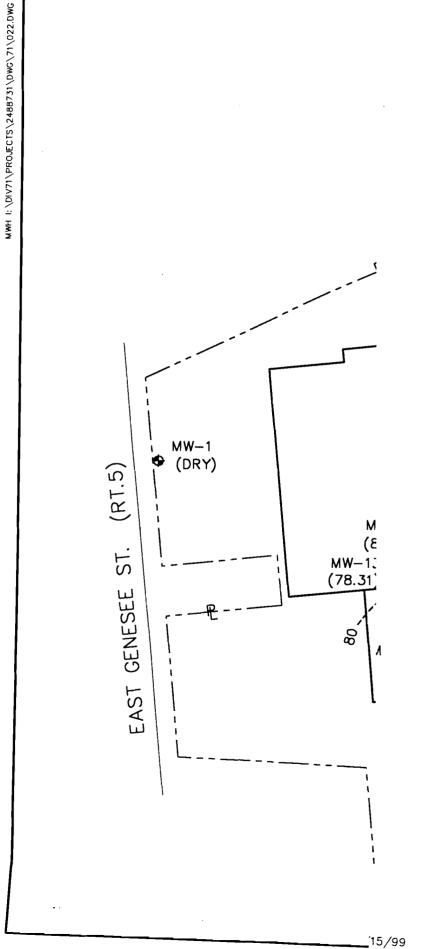
ACCURATE DIE CASTING FAYETTEVILLE, NEW YORK

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



DATE: JANUARY 1999 FILE NO. 2488.731.022





### FIGURE 4



### **LEGEND**

PROPERTY LINE

WW-4 ♦ FORMER MONITORING WELL LOCATION

RW-1 OVERBURDEN AQUIFER RECOVERY WELL

RW-2 ● BEDROCK GROUND WATER RECOVERY WELL

PZ-1 

◆ PIEZOMETER LOCATION

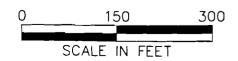
(58.01) GROUND WATER ELEVATION IN FEET

GROUND WATER ELEVATION
CONTOUR (DASHED WHERE
INFERRED)

NOTE: MW-18, 21 & 22 NOT CONTOURED

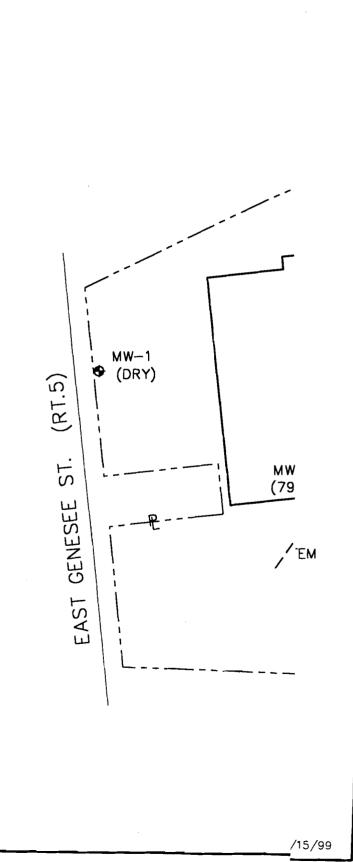
ACCURATE DIE CASTING FAYETTEVILLE, NEW YORK

OVERBURDEN
GROUND WATER
ELEVATION MAP
10/22/97



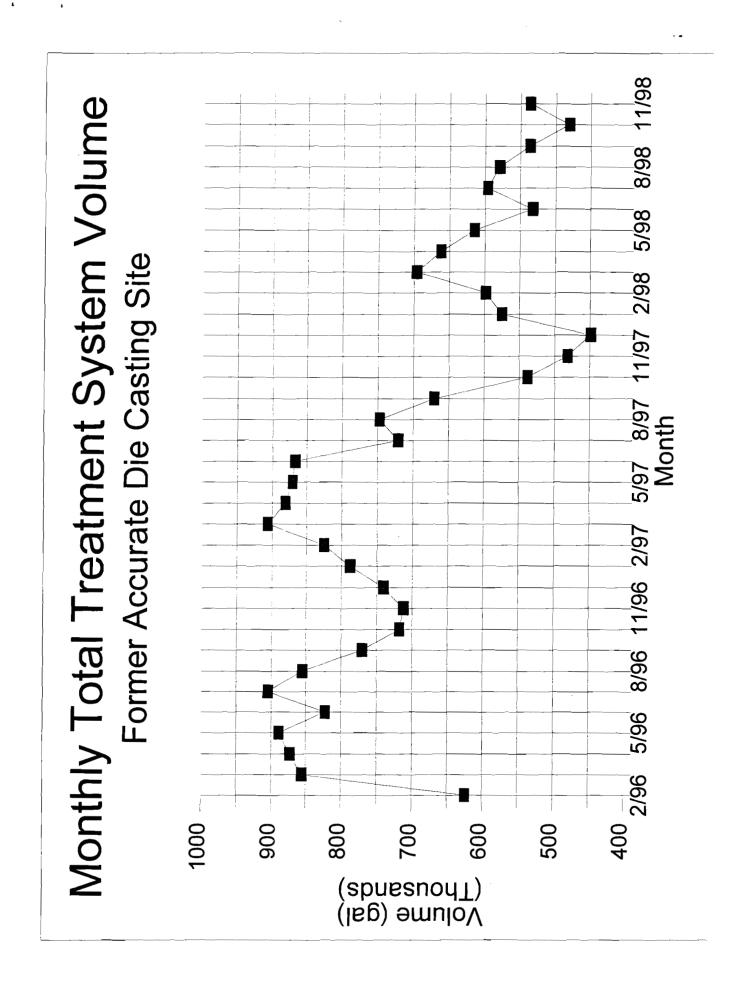
DATE: JANUARY 1999 FILE NO. 2488.731.023





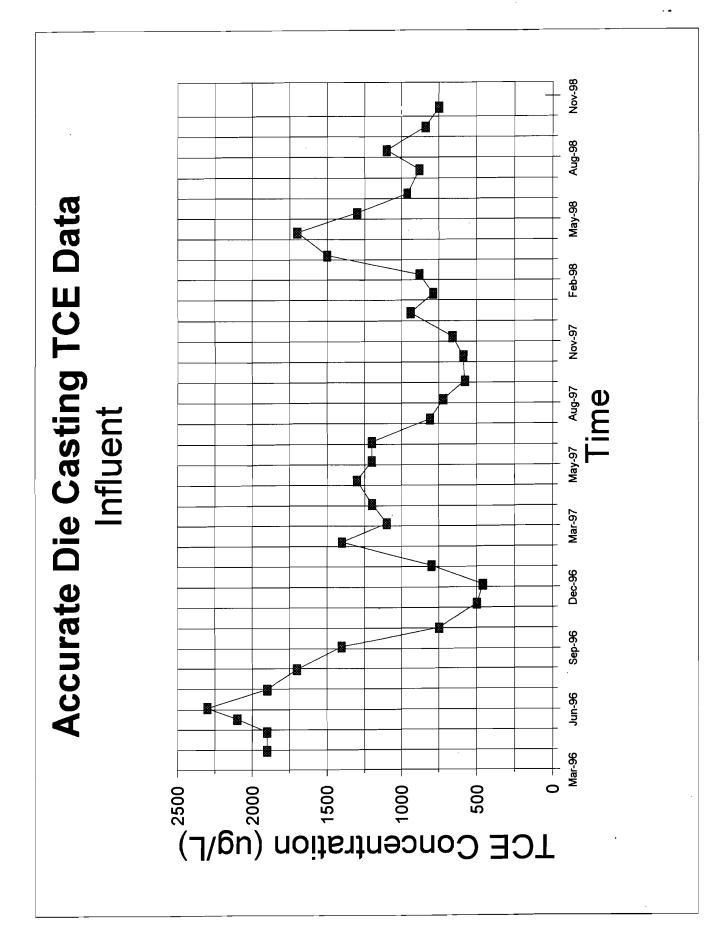
### Attachment 1

Monthly Total Treatment System Volume Graph



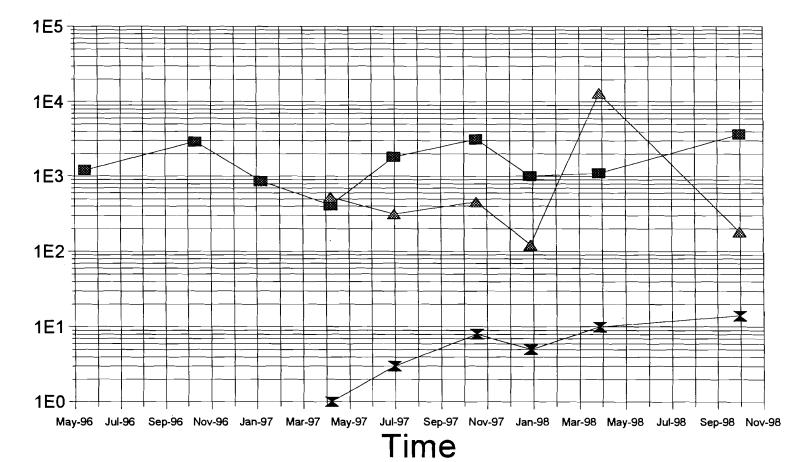
### Attachment 2

**TCE Concentration Data Graphs** 

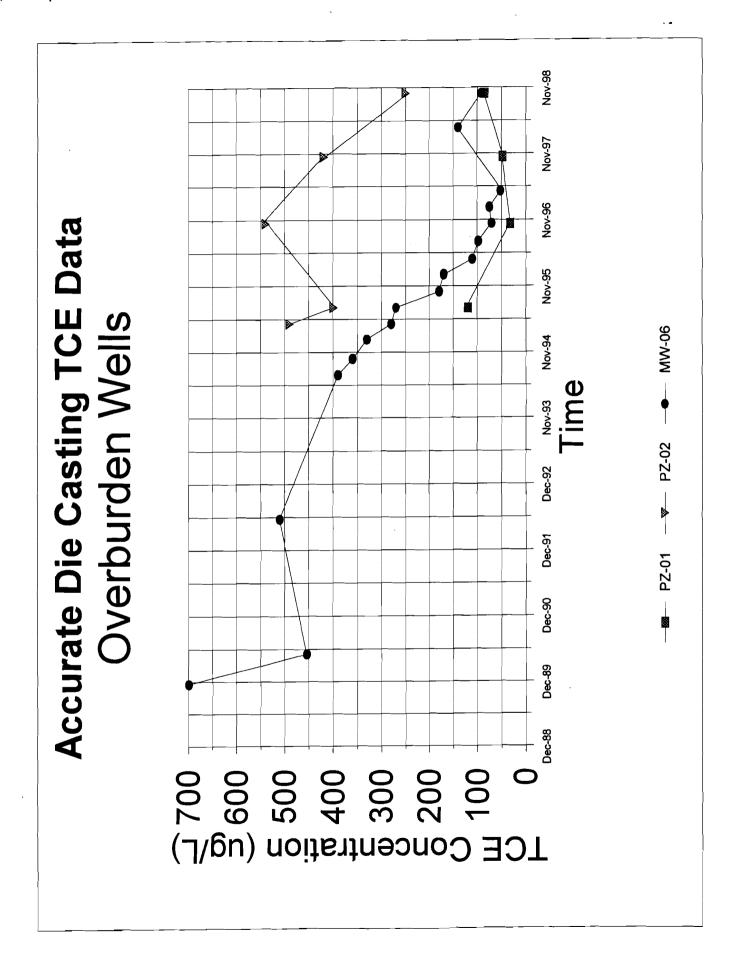


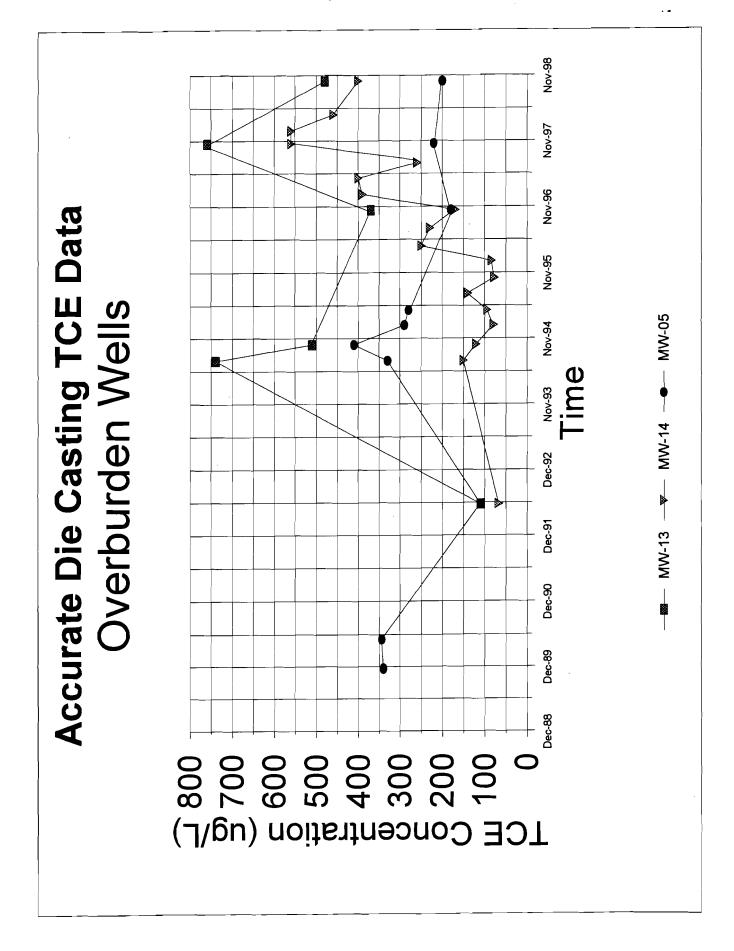
# Accurate Die Casting TCE Data PCB/PAH/VOC Area Wells



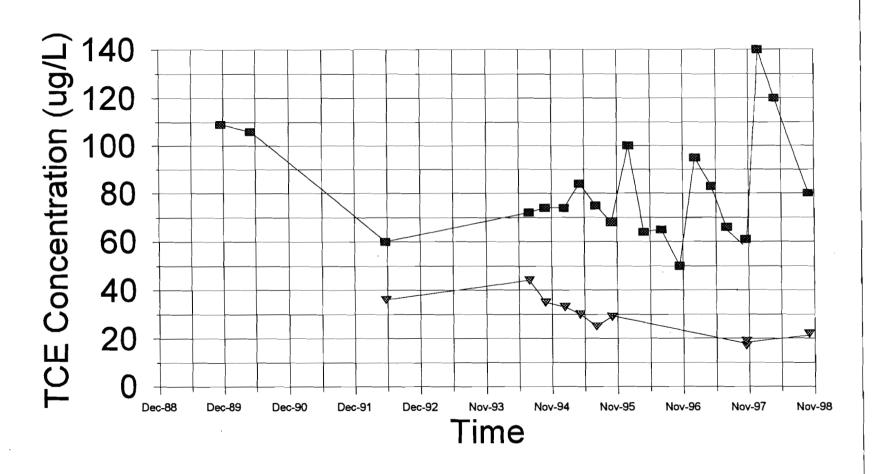


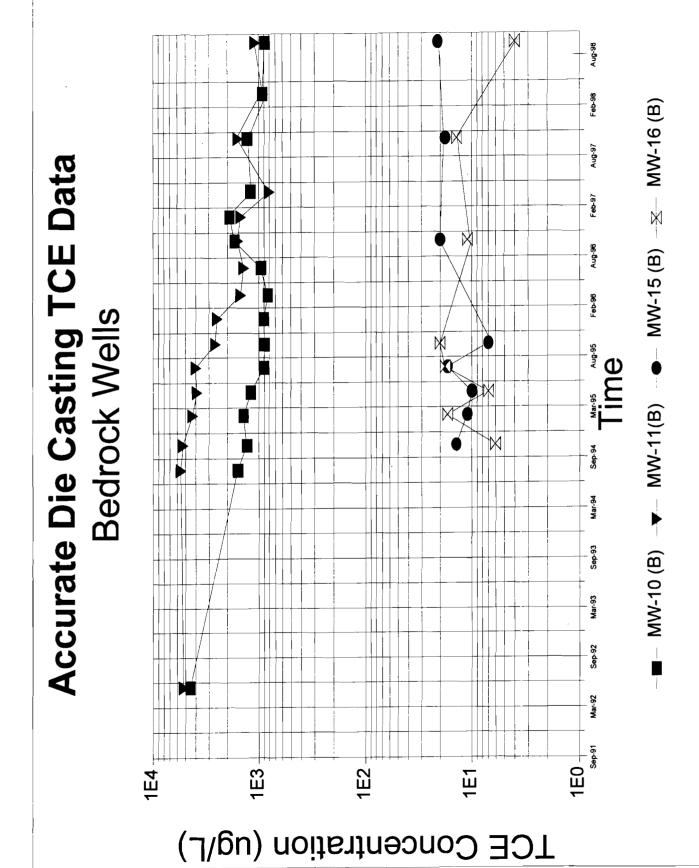
── MW-18 ── MW-21 ─**X** MW-22





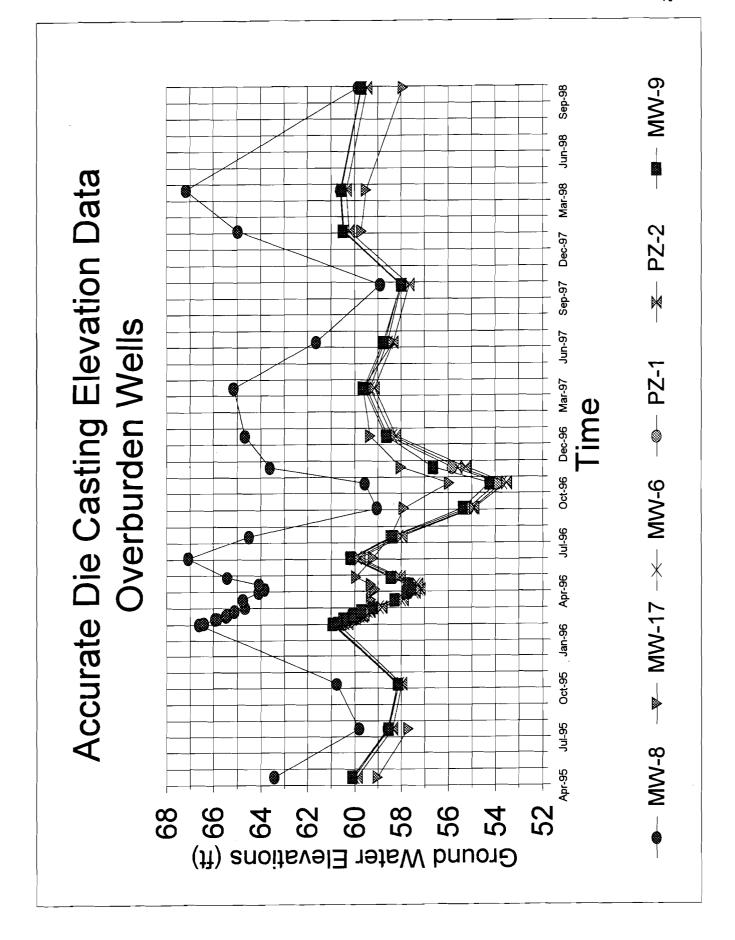
### Accurate Die Casting TCE Data Overburden Wells



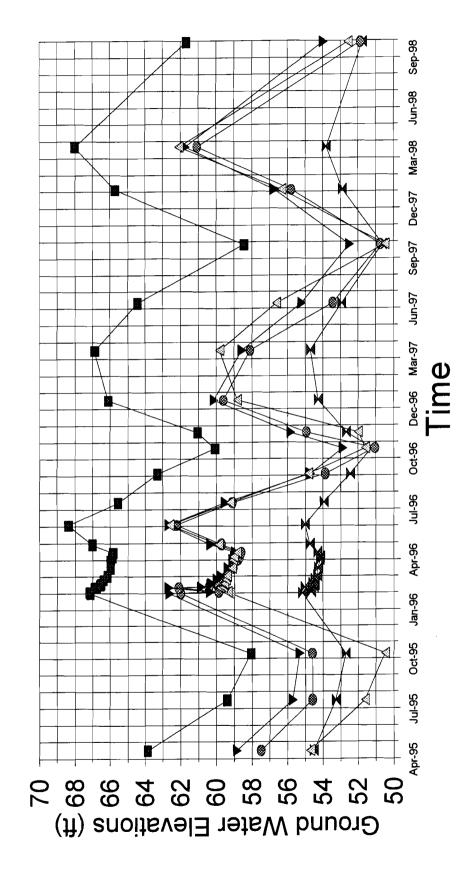


### Attachment 3

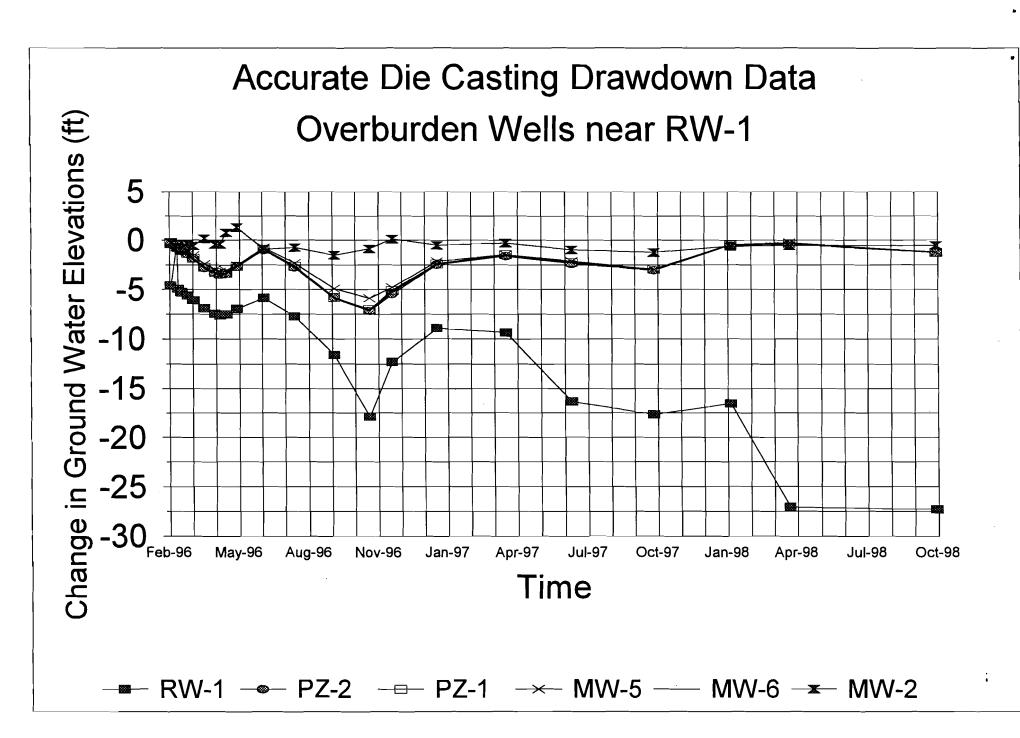
**Ground Water Elevation Data Graphs** 

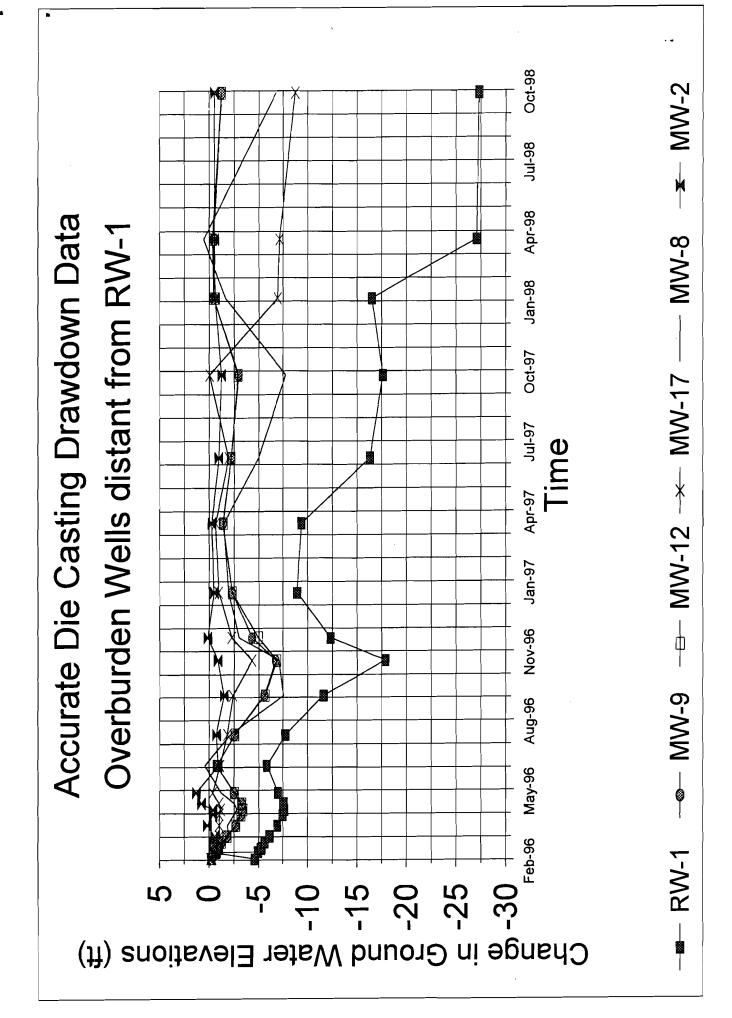


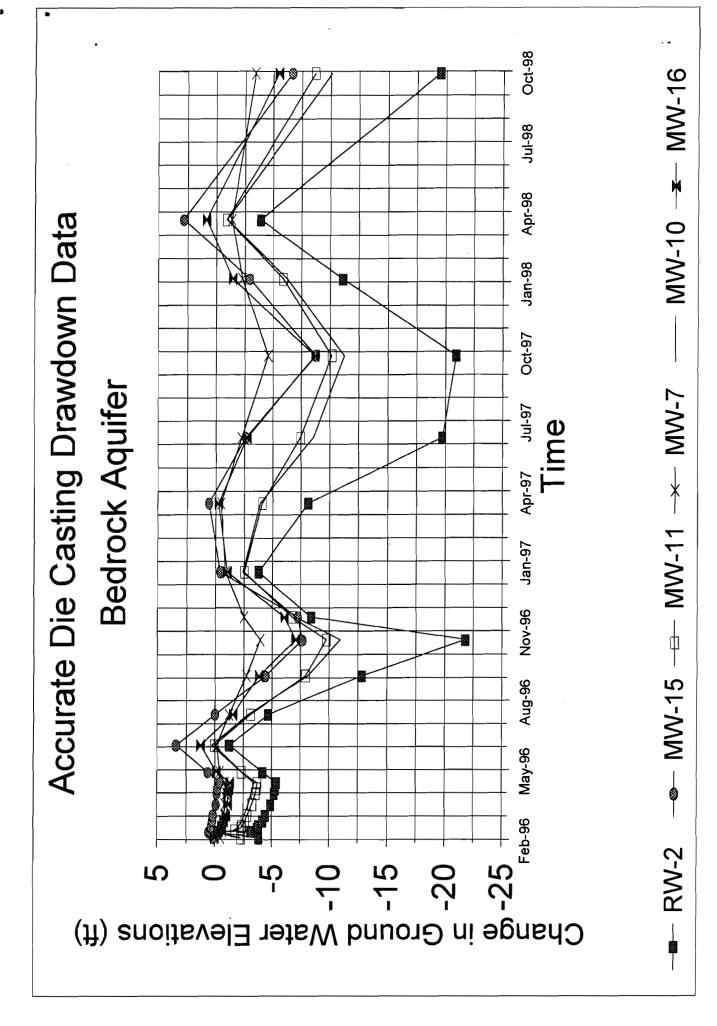
# Accurate Die Casting Elevation Data **Bedrock Wells**

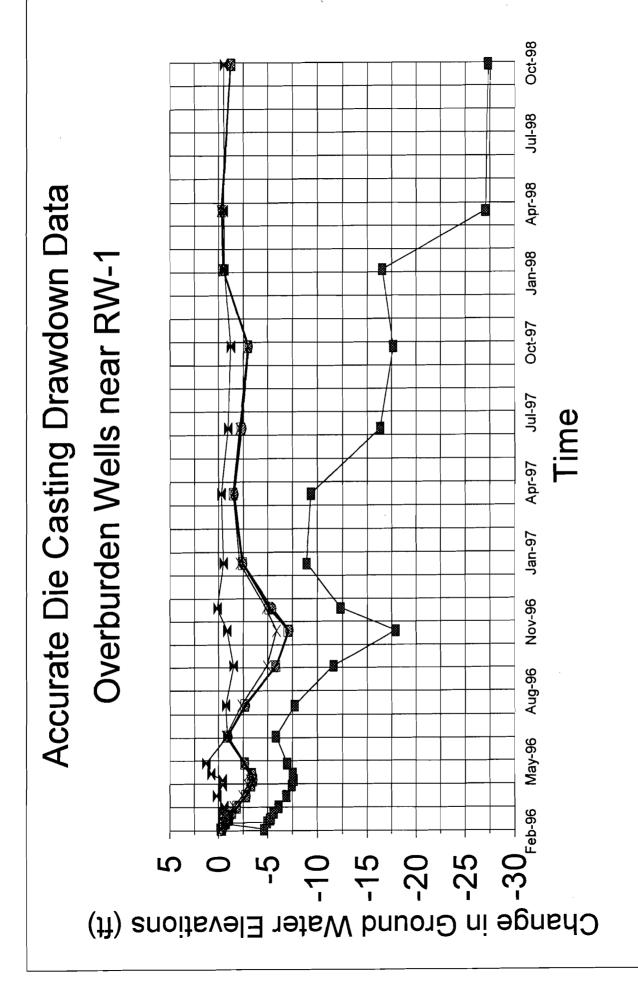


-⊛- MW-10(B) -▼- MW-11(B) -∞- MW-15(B) -■- MW-16(B) **≈** – MW-7(B)









MW-6 -\*- MW-2

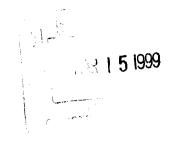
→ MW-5

—— PZ-1

-■- RW-1 -®- PZ-2



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

1:\DIV71\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

- 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

- 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

		Monitoring Rec	quirements		Effluent	Effluent	Effluent	Effluent
Analyte (units)	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	. <b>4.</b> 11. 25. 44. 4. 4. 4. 3	2/Week	Grab	7.85		7.85	7.85
Residue, non-filterable (mg/L)	Monitor	20	Weekly	3-hr comp.	<b></b>	<b>5</b> U		
Total dissolved solids (TDS) (mg/L)	Monitor	Monitor	Weekly	3-hr comp.	January Company	480		
CBOD5 (mg/L)	Monitor	Monitor	Quarterly	3-hr comp.		•••		entre from the large state of the large
TKN (mg/L)	Monitor	Monitor	Quarterly	3-hr comp.				
TOD (mg/L)	Monitor	15	Quarterly	Calculated		# 411		
Dissolved Oxygen (mg/L)	Monitor	7 Min.	Quarterly	Grab		7.90	and the state of t	
Aluminum, dissolved (mg/L)	Monitor	0.2	Quarterly	3-hr comp.			. <u>18</u> 288 - 179	n i <u>Ll</u> eben y konski se
Antimony, total (mg/L)	Monitor	0.1	Quarterly	3-hr comp.	li	4 TREE   4   4   4   4   4   4   4   4   4		
Chromium, total (mg/L)	Monitor	0.5	Quarterly	3-hr comp.				
Cobalt, total (mg/L)	Monitor	0.01	Quarterly	3-hr comp.	1			
Copper, total (mg/L)	Monitor	0.1	Quarterly	3-hr comp.				ana aratta ara dari ses
Iron, total (mg/L)	Monitor	0.3	Quarterly	3-hr comp.		SatisTF and	<del></del>	
Lead, total (mg/L)	Monitor	0.02	Quarterly	3-hr comp.	Hr HEE St. a	Just N. 19		His control of the state of
Mercury, total (mg/L)	Monitor	0.0008	2/Month	3-hr comp.		0.0002 U		
Nickel, total (mg/L)	Monitor	0.0008	Quarterly	3-hr comp.		0.0002 0		
Silver, total (mg/L)	Monitor	0.1	Quarterly	3-hr comp.				. waith of <del>1971</del> of the confidence
Vanadium, total (mg/L)	Monitor	0.03	Quarterly	3-hr comp.	H = 3 = 4. sa		. 588	
Zinc, total (mg/L)	Monitor	0.03	2/Month	3-hr comp.		0.03	hwards	
Zinc, wai (ing L)	Withitti		2/WOIIII	3-in comp.	8 4 F 1 1 4 2 1 4 4 9	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	<b></b>	0.50 U	. 1999	
Methylene chloride (ug/L)	Monitor	50	2/Month	Grab		2.0 U	- <del>17</del> - #6.1	
1,1,2,2-Tetrachloroethane (ug/L)	Monitor	30	2/Month	Grab	∥ v <u>II</u> as made	0.50 U		
Tetrachloroethene (ug/L)	Monitor	20	2/Month	Grab	The state of the s	0.50 U		
Toluene (ug/L)	Monitor	20	2/Month	Grab		0.50 U		ere. Di serra desperanta de entre de entre de entre de entre de entre de entre de entre de entre de entre de entre d
Trichloroethene (ug/L)	Monitor	10	2/Month	Grab		0.50 U		
Acetone (ug/L)	Monitor	1000	2/Month	Grab	Harate in the	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	Harata ya sancial	5.0 U	 : pwg	racio al despeto de Porto
	WIGHTON	TANA MERITAN	Z/WiOhili	Giau		3.0 U	. <del>177</del> . 413	

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

Page 1 of 2



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

	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent
Analyte	02/10/99	02/11/99	02/16/99	02/17/99	02/18/99	02/23/99	02/24/99	02/25/99
Flow (GPD)		9970	10258		10530	10798		11010
pH (SU)	r Ingeria	7.85	7.85		7.85	7.87	 	7.87
Residue, non-filterable (mg/L)	5 U	0.000 to 10.00 to 10.		5 U	1965/50 -011, 2011 	**************************************	5 U	1 . 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Total dissolved solids (TDS) (mg/L)	480			430		Hadalag <del>e-e</del> ptid Malinat DV	440	
CBOD5 (mg/L)								
TKN (mg/L)					iller amerikan 🎉		raji u <del>ru-</del>	다음 1 <del>2 1</del> 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
TOD (mg/L)								
Dissolved Oxygen (mg/L)							<del></del>	
Aluminum, dissolved (mg/L)	4-31 2010			ing the second		en en en en en en en en en en en en en e		i di <del>ul</del> i ja kaita
Antimony, total (mg/L)								
Chromium, total (mg/L)	· 🚣 🚶 · · ·			)		8 기 <del>속</del> 1기 : 존	,	
Cobalt, total (mg/L)	<del></del>	<del></del>						<b></b>
Copper, total (mg/L)			•••		· 🐇	ing		
Iron, total (mg/L)		 	e i de esta		<del></del>			No. No. No. No. 10
Lead, total (mg/L) Mercury, total (mg/L)				0.0002 U	·	하는 경우 (1 <del>884</del> 년) 전 기계를 살	jud <del>sti</del> lije e is	
Nickel, total (mg/L)				0.0002 U			 	 
Silver, total (mg/L)				4 <del>201</del> 0 1 10 			7774 (1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Vanadium, total (mg/L)							g . <u>14</u> 15	
Zinc, total (mg/L)				0.01 U				
					Ti iii			
cis-1,2-Dichloroethene (ug/L)				0.50 U				
trans-1,2-Dichloroethene (ug/L)				0.50 U				
Methylene chloride (ug/L)	 DB 120 A 1 A 1 A 1 A 1 A 1 A 1 A 1 A 1 A 1 A	**************************************	.00.11 1000-	2.0 U			Lener Lie Liuerenseus	• * * * * * * * * * * * * * * * * * * *
1,1,2,2-Tetrachloroethane (ug/L) Tetrachloroethene (ug/L)	설레 <del>설립</del> 하고 보는 이 현실되고			0.50 U 0.50 U				
Toluene (ug/L)		- 100002 E E		0.50 U			 _ 6455775 KL 138.	
Trichloroethene (ug/L)	:	전문 <sup>201</sup> . ' 15'	(A. 1)	0.50 U				
Acetone (ug/L)			("rapp")	10 U	Bul <u>li</u> ngski (j			
2-Hexanone (ug/L)				5.0 U				un in in um di presentation del 100 films <del></del>
4-Methyl-2-pentanone (MIBK) (ug/L)		in <del>de</del> ree 90		5.0 U	4 <del>- ,</del> 4 : <u>1</u>		gara <u>il</u> ag <mark>an</mark> s	And Allerand Agency

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

Page 2 of 2

# 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

Samp. Description: WTP Effluent

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 01/27/99

Matrix: Water

Received: 01/27/99 15:30

Parameter	Result Units	Method	Prepared Analyzed	QC Batch Note
Total dissolved solids	560. mg/L	EPA 160.1	02/01/99	020199 <b>W</b> 13
Total suspended solids	<5. mg/L	EPA 160.2	01/28/99	012899W11

Notes:

Sample: K4907

J-Estimated value

Authorized: // Date: February 3,1999

Monika Santucci

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

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

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-	• •

### **Chain of Custody**

Client: O'BIZIEN Y GERE TECHNICAL SERV, INC Project: ITT FINANCIAL (FORMER ACCULATE DIE) Analysis/Method Sampled by: JERRY BORN Client Contact: JERRY BORN FDDY Phone # 637 0109 **Sample Description** No. of Date Time Sample Comp. Sample Location Comments Collected | Collected Matrix or Grab Containers 1/27/99 10:50 WATER COMO WTP EFFLUENT Relinquished by: Date: Time: Date: Time: Received by: Relinquished by: Received by: Date: Time: Time: Date: e: 1/21/99 Time. 15:30

Relinquished by:	Date: 1/27/99 Time:/530	Received by Lab: Marts F. Jardson	Date
Shipment Method: HAND DELIVERED		Airbill Number:	
Turnaround Time Required:  Routine Rush (Specify)	Comments:		
Cooler Temperature:			Origina

## O'Brien & Gere Laboratories, Inc.

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting - Fayetteville, NY Proj. Desc: Monthly Effluent & Influent Sampling

Sample: K5433

Samp. Description: WTP Effluent - Grab

Instrument: HP5973 GCMS#3

Units: ug/L

Number of analytes: 13

### Analytical Results Method: 8260

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 02/03/99

/03/99 Matrix: Water

Received: 02/03/99 Prepared: 02/05/99 QC Batch: 020599W1

% Solids:

Purge volume: 25 mL

Surrog

	- · · · · · · · · · · · · · · · · · · ·		
Parameter	Result	Limits Dilution	Analyzed Notes
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:

Authorized: 1000 Maril

Date: February 9,1999 Mon

Monika Santucci

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting - Fayetteville, NY Proj. Desc: Monthly Effluent & Influent Sampling

Sample: K5431

Samp. Description: WTP Influent

Primary column: Y

Units: ug/L

Column: DB-VRX 75m X .45mm ID

Dilution: 50

Instrument: 9001

## **Analytical Results Method: 8021**

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 02/03/99

Received: 02/03/99

Prepared:

Analyzed: 02/11/99

Matrix: Water

QC Batch: 021199W1

%Solids:

Purge volume: 5 ml

Number of analytes: 36

			Surrog	
Parameter	<u>Result</u>	Col	<u>Limits</u>	Notes
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

Date: February 16,1999

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

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting - Fayetteville, NY

Proj. Desc: Monthly Effluent & Influent Sampling

Sample: K5431

Samp. Description: WTP Influent

Primary column: Y

Units: ug/L

Column: DB-VRX 75m X .45mm ID Dilution: 50 Instrument: 9001 **Analytical Results Method: 8021** 

> Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 02/03/99

Received: 02/03/99

Matrix: Water

OC Batch: 021199W1

Prepared: % Solids:

Analyzed: 02/11/99

Purge volume: 5 ml

Number of analytes: 36

			Surrog	
Parameter	<u>Result</u>	Col	Limits	Notes
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:

Date: February 16,1999

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting - Fayetteville, NY Proj. Desc: Monthly Effluent & Influent Sampling

Sample: K5432

Samp. Description: WTP Between GACs

Primary column: Y

Units: ug/L

Column: DB-VRX 75m X .45mm ID
Dilution: 1 Instrument: 9001

# Analytical Results Method: 8021

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 02/03/99

Received: 02/03/99

Matrix: Water

QC Batch: 021199W1

Prepared: %Solids:

Analyzed: 02/11/99 Purge volume: 5 ml

Number of analytes: 36

			Surrog	
Parameter	Result	Col	<u>Limits</u>	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	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: North Sanfucci

Date: February 16,1999 Monika Santucci

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting - Fayetteville, NY Proj. Desc: Monthly Effluent & Influent Sampling

Sample: K5432

Samp. Description: WTP Between GACs

Primary column: Y

Units: ug/L

Column: DB-VRX 75m X .45mm ID

Dilution: 1

Instrument: 9001

# Analytical Results Method: 8021

Job No.: 3435.021.517

Certification NY No.: 10155

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

			Surrog	
Parameter	Result	Col	<u>Limits</u>	Notes
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:

Autl

Date: February 16,1999

Monika Santucci

# - Outside control limits J-Estimated value

**Analytical Results Trace Metals** 

Job No.: 3435.021.517

Certification NY No.: 10155

%Solids:

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting - Fayetteville, NY Proj. Desc: Monthly Effluent & Influent Sampling

Collected: 02/03/99

Matrix: Water

Received: 02/03/99

Number of analytes: 2

Sample: K5434

Samp. Description: WTP Effluent - Composite

Units: mg/L

Parameter	Result	Method	Prepared	Analyzed	QC Batch	Dilut. Note
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:

Date: February 17,1999

Monika Santucci

## **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

Matrix: Water

Received: 02/03/99 15:30

Parameter	Result Units	Method	Prepared Analyzed	OC Batch Note
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

Date: February 9,1999

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

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## O'Brien & Gere Laboratories, Inc.

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

Chain	of	Cus	tody

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Project: IFT FINANCIAL (FOR	MER	ncci	PATE	DIE				, Al	8 /	S AN	7		////
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Client Contact: TEPRY BORN TIMEDDY	-	Ph	one#	370	109		Į.	?~{\\ }			×9/	$\mathcal{N}$	
Sample Des	cription	•				<i>K</i>	(6)	(5)/(		78/ 1/8/		/ /	
Sample Location	Date Collected	Time Collected	Sample Matrix	Comp. or Grab	No. of Containers					NY K		$\angle$	Comments
WTP INFLUENT	2/3/99	101 HM	WATER			X							
WTP BETWEEN GACS	2/3/99	6156 AM	WATER	•			X						
WTP EFFLUENT	2/3/99	6:50 AM	WATER		2			メ					
WTP EFFLUENT	2/3/99	10:05 AM	4HTER	· ·					X				
WTP EFFLUENT	2/3/99	AM	WATER	comp	1					X			
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Cooler Temperature: 3°

Comments:

**Turnaround Time Required;** 

Routine\_\_\_\_\_ Rush (Specify)\_

# **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

Matrix: Water

Received: 02/10/99 15:40

Parameter	Result Units	Method	Prepared Analyzed	OC Batch Note
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

Date: February 19,1999

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

5000 Brittonfield Parkway
East Syracuse, New York 13057

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Client: O'BLIEN YOURE TECHNISH SERV.	15th 55	700-	120						Analy	Analysis/Method	poq	
Project: ITT FINANCIAL (FORMER ACLUER)	NEK A	202	3/4	SIC							/	
Sampled by: JENLY SAPA										\	\	\ \ \
Client Contact: インストロット アッドル		Pho	Phone # 🢪	63701	6107		N. C.	S		\		\
Sample Description	ription					1/2						
Sample Location	Date Collected C	Time Collected	Sample Matrix	Comp. or Grab	No. of Containers			\	\			Comments
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Comments:

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Original-Laboratory Copy-Client

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting - Fayetteville, NY Proj. Desc: Bi-Monthly Effluent Sampling

Sample: K6219

Samp. Description: WTP Effluent - Grab

Instrument: HP5970 GC/MS#2

Units: ug/L

Number of analytes: 14

## Analytical Results Method: 8260

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 02/17/99

Received: 02/17/99

Matrix: Water

QC Batch: 022499W2

Prepared: 02/24/99 % Solids:

Purge volume: 25 mL

Surrog

Result	Limits Dilution	Analyzed Notes
<10.	1	02/24/99
<2.0	1	02/24/99
<.50	1	02/24/99
<.50	1	02/24/99
<.50	1	02/24/99
<5.0	1	02/24/99
<.50	1	02/24/99
<5.0	1	02/24/99
<.50	. 1	02/24/99
<.50	1	02/24/99
113.%	80-135 1	02/24/99
108.%	61-136 1	02/24/99
109.%	84~114 1	02/24/99
103.%	77-117 1	02/24/99
	<10. <2.0 <.50 <.50 <.50 <5.0 <.50 <5.0 <13.% 108.% 109.%	<10. 1 <2.0 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1 <.50 1

Notes:

Anthorized

Date: February 25,1999

Monika Santucc:

**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

Collected: 02/17/99 Received: 02/17/99 Matrix: Water %Solids:

Units: mg/L

Number of analytes: 2

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

Notes:

Date: February 27,1999

# **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

Collected: 02/17/99

Matrix: Water

Samp. Description: WTP Effluent - Composite

Received: 02/17/99 15:35

Parameter	Result Units	Method	Prepared Analyzed	QC Batch Note
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:

Sample: K6220

Authorized:

Date: February 27,1999

Aonika Santucci

J-Estimated value

5000 Brittonfield Parkway

**Chain of Custody** 

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

Client: O'BRIENY GERE TECHNICHT SERVICESING					Analysis/Method								
Project: ITT FINANCIA L (FO	MINIER I	ACC JRH	TE DIE	E)				, A	0				7//
Sampled by: JENRY BORN								PH MY C	<b>y</b> /				
Client Contact: TIMERIPERON		Ph	one#	2467 ,3701	09		/ (	6H 47		5/			
Sample Des	Sample Description					\    }			55/	Y /	//	/ /	
Sample Location	Date Collected	Time Collected	Sample Matrix	Comp. or Grab	No. of Containers			$\nearrow \nearrow \checkmark$	/				Comments
WITP EFFLUENT	2/17/99	7.30	WATER	GRAB	2	X							
MTPEFFLUENT	2/17/59	1:57 Pin	WATER	Comp	ŧ		X						
WTP EFFLUENT WTP EFFLUENT	2/17/99	1:55	WATER	Comp	Γ		-	X		-		ļ	
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Relinquished by:	D	ate:	Time	e:	Received	l by:					Da	ite:	Time:
Relinquished by:	D	ate:	Time	e:	1	ceived by:				Da	ate:	Time:	
Relinquished by: River School	D	ate:2/17	190, Time	e: 1535	Received	by Lab	): M	nh E	Maroline	son	Da	ate: 2 1	1/99 Time: 15:35
Shipment Method: HAND DELIVERED					Airbill Nu				1				

Turnaround Time Required:	
RoutineX	
Rush (Specify)	

Comments:

	(30
Cooler Temperature:	



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

1:\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

A 1.4. (	Discharge	D: 1			Effluent		Effluent	Effluent	
Analyte (units)	Limitation Daily Average	Discharge Limitation Daily Maximum	Minimum Measurement Frequency(1)	Sample Type	03/02/99	Effluent 03/03/99	03/04/99	03/09/99	
Flow (GPD)	Monitor	150000	Continuous	Meter	11140		11610	11320	
pH (SU)	6.5 - 8.5		2/Week	Grab	7.85		7.92	7.89	91.
Residue, non-filterable (mg/L)	Monitor	<b>2</b> 0	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.					٠
TOD (mg/L)	Monitor	15	Quarterly	Calculated				·	
Dissolved Oxygen (mg/L)	Monitor	7 Min.	Quarterly	Grab	<del> </del>	12.05		4. <del>-4 4</del>	
Aluminum, dissolved (mg/L)	Monitor	0.2	Quarterly	3-hr comp.					
Antimony, total (mg/L)	Monitor	0.1	Quarterly	3-hr comp.	<b>∐</b>				
Chromium, total (mg/L)	Monitor	0.5	Quarterly	3-hr comp.				in in the second of the second	
Cobalt, total (mg/L)	Monitor	0.01	Quarterly	3-hr comp.					
Copper, total (mg/L)	Monitor	0.1	Quarterly	3-hr comp.	1				
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.	]]	or a <del>la c</del> onstituit de la constituit de	<u></u>		
Silver, total (mg/L)	Monitor	0.1	Quarterly	3-hr comp.		·			
Vanadium, total (mg/L)	Monitor	0.03	Quarterly	3-hr comp.				· <del></del>	
Zinc, total (mg/L)	Monitor	0.3	2/Month	3-hr comp.		0.01 U			
							그냥 기계 끝났다	•	٠.
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	<u> </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	1	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	<b></b> 1 3 5	5.0 U		- <del></del>	

NOTES:

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

U - Not Detected, J - Estimated TOD = 1.5 X CBOD5 + 4.5 X TKN

Page 1 of 3

<sup>--- -</sup> Not analyzed, NA - Data not available



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
<u> </u>				<u> </u>				
Flow (GPD)		11570	11450		11550	11320		11660
pH (SU)	77.	7.88	7.85		7.85	7.85		7.85
Residue, non-filterable (mg/L)	5 U		 191.9	5 U			5 U	
Total dissolved solids (TDS) (mg/L)	420	*** *** * 1, 13		400			400	
CBOD5 (mg/L)	 :::::::::::::::::-		***					
TKN (mg/L)		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				- <del>1</del>		4 <del>4</del> 1 48
TOD (mg/L)						EE		
Dissolved Oxygen (mg/L)		· · · · · · · · · · · · · · · · · ·				+=+ *		
Aluminum, dissolved (mg/L)	8 J <u>. 1</u> 1 J. 6				<b></b> . * 4		1 1 22 1	e. 🛶 e e e
Antimony, total (mg/L)								
Chromium, total (mg/L)	a 👆 i i i i i i i i i i i i i i i i i i				444			
Cobalt, total (mg/L)								
Copper, total (mg/L)	<u> </u>	·		\ ,		1. <del>4.</del> 40 4 3 5 6	,	
Iron, total (mg/L)								
Lead, total (mg/L)		<del></del>					V	. <u> </u>
Mercury, total (mg/L)				0.0002 U		*==		
Nickel, total (mg/L)								ti d <del>al</del> da tipo tanà
Silver, total (mg/L)								
Vanadium, total (mg/L)			+					
Zinc, total (mg/L)				0.02				
cis-1,2-Dichloroethene (ug/L)		<del></del>		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)	<del></del>			0.50 U				<del></del>
Tetrachloroethene (ug/L)				0.50 U				
Toluene (ug/L)				0.50 U	<del></del> , '	<del>-1-</del> verify a		
Trichloroethene (ug/L)				0.50 U				
Acetone (ug/L)	.: <del></del> :			10 U				and the state of t
2-Hexanone (ug/L)				5.0 U				
4-Methyl-2-pentanone (MIBK) (ug/L)	1	· · · · · · · · · · · · · · · · · · ·	in <del>the</del> market and	5.0 U	4. <del></del>	(a) (b) (b)		그 🚣 - 중하는 일을

NOTES:

<sup>(1)</sup> Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.

<sup>--- -</sup> Not analyzed, NA - Data not available

U - Not Detected, J - Estimated

 $TOD = 1.5 \times CBOD5 + 4.5 \times TKN$ 



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

	Effluent
Analyte	03/30/99
Flow (GPD) pH (SU)	11170 7:85 (1-1)
рн (30) Residue, non-filterable (mg/L)	- <b>7.85</b> 气态等量 电阻 (4.1) 第二 (4.1) 第二 (4.1) 1 (4
Total dissolved solids (TDS) (mg/L)	
CBOD5 (mg/L)	
TKN (mg/L)	
TOD (mg/L) Dissolved Oxygen (mg/L)	으 <del>로</del> 소프트, 그는 그리고, 1997년 전화 기본 - 전화 전문 기본 기본 기본 1997년 - 그리고 1978년 제 1월 제 1월 제 1월 1일 시원 제 1월 1일 1일 1일 1일 1일 1일 1일 1일 1
Dissolved Oxygen (mg/g)	
Aluminum, dissolved (mg/L)	
Antimony, total (mg/L) Chromium, total (mg/L)	a <del>nder</del> D <u>an</u> a seria di Santa d
Cobalt, total (mg/L)	e <del>To</del> rres de la companya de la companya de la companya de la companya de la companya de la companya de la companya Desente
Copper, total (mg/L)	·
Iron, total (mg/L)	
Lead, total (mg/L) Mercury, total (mg/L)	
Nickel, total (mg/L)	
Silver, total (mg/L)	en en en en en en en en en en en en en e
Vanadium, total (mg/L)	
Zinc, total (mg/L)	
cis-1,2-Dichloroethene (ug/L)	en de la companya de la companya de la companya de la companya de la companya de la companya de la companya de La companya de la co
trans-1,2-Dichloroethene (ug/L)	
Methylene chloride (ug/L)	
1,1,2,2-Tetrachloroethane (ug/L)	
Tetrachloroethene (ug/L) Toluene (ug/L)	o <del>rio</del> D <del>ia</del> ngle of the state
Trichloroethene (ug/L)	e <sup>tot</sup> de la companya de la companya de la companya de la companya de la companya de la companya de la companya D <del>esc</del> o
Acetone (ug/L)	
2-Hexanone (ug/L)	
4-Methyl-2-pentanone (MIBK) (ug/L)	- <del>실</del> 경기 - 그리 [16명] - 교리 - 스크리스 - 스크리스 - 스크리스 - 스크리스 - 스크리스 - 스크리스 - 스크리스 - 스크리스 - 스크리스 - 스크리스 - 스크리스 - 스크리스 - 스크리스

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# ATTACHMENT A LABORATORY ANALYTICAL DATA SHEETS

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting - Fayetteville, NY Proj. Desc: Monthly Effluent & Influent Sampling

Sample: K7096

Samp. Description: WTP Effluent - Grab

Instrument: HP5970 GC/MS#2

Units: ug/L

Number of analytes: 14

## Analytical Results Method: 8260

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 03/03/99

Matrix: Water

Received: 03/03/99

QC Batch: 030599W2

Prepared: 03/05/99 %Solids:

Purge volume: 25 mL

Surrog

Parameter	Result	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:

Authorized:

Monika Santucci

# - Outside control limits J-Estimated value

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting - Fayetteville, NY Proj. Desc: Monthly Effluent & Influent Sampling

Instrument: 9001

Sample: K7094

Samp. Description: WTP Influent

Primary column: Y

Units: ug/L

Column: DB-VRX 75m X .45mm ID

Dilution:

50

**Analytical Results Method: 8021** 

Job No.: 3435.021.517

Certification NY No.: 10155

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

			Surrog	
Parameter	Result	Col	Limits	Notes
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

Date: March 12,1999

**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

			Surrog	
Parameter	Result	Col	<u>Limits</u>	Notes
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:

Authorized: Date: March 12,1999

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting - Fayetteville, NY Proj. Desc: Monthly Effluent & Influent Sampling

Sample: K7095

Samp. Description: WTP Between GACs

Primary column: Y

Units: ug/L

Column: DB-VRX 75m X .45mm ID

Dilution: 1

Instrument: 9001

## Analytical Results Method: 8021

Job No.: 3435.021.517

Certification NY No.: 10155

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

			Surrog	
Parameter	Result	Col	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: 1000

Monika Santucci

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: %5

%Solids:

Analyzed: 03/11/99

Purge volume: 5 ml

Number of analytes: 36

			Surrog	
Parameter	Result	Col	<u>Limits</u>	Notes
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:

Authorized:

Date: March 12,1999

Monika Santucci

**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

110j. Desc. Wollding Efficient & finitional Sampling

Collected: 03/03/99

Matrix: Water %Solids:

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

Received: 03/03/99

Number of analytes: 2

Parameter	Result	Method	Prepared	Analyzed	QC Batch	Dilut. Note
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:

Sample: K7097

J-Estimated value

Authorized:

Date: March 12,1999

Monika Santucci

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## **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

Parameter	Result Units	Method	Prepared Analyzed	QC Batch Note
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:

Date: March 11,1999

Monika Santucci

5000 Brittonfield Parkway
East Syracuse, New York 13057

**Chain of Custody** 

(315) 437-0200 Client: O'BRIENYGERE TECHNICAL SERVICES INC Analysis/Method Project: ITT FINANCIAL (FOIZMER ACCURATE DIE) Sampled by: TERRY BORN 2467 Client Contact: TIME TOURN Phone # Sample Description Sample Comp. No. of Date Time Sample Location Comments Containers Collected Collected Matrix or Grab 7:81 GRAB INFLUENT 6:58AM WATER GRAB 3/3/97 2 BETWEEN GAC'S WHIER 6RA13 EFFLUENT X COMP WATER X WATEZ Comp Relinquished by: Received by: Date: Time: Date: Time: Relinquished by: Date: Time: Received by: Date: Time: Received by Lab: Mals f Jackson Date: 3/3/29 Time. 15:30 Relinquished by: Date: 3/2 /GC, Time: 15.30 Shipment Method: Airbill Number: HAND

Turnaround Time-Required:	Comments
Routine ×	
Rush (Specify)	

Cooler Temperature:\_

## **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

Matrix: Water

Received: 03/10/99 15:50

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

Notes:

J-Estimated value

Monika Santucci

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

5000 Brittonfield Parkway East Syracuse. New York 13057

**Chain of Custody** 

(315) 437-0200 Client: PBRIEN YGERE TECHNICAL SERV. INC.
Project: ITT FINANCIAL (FORMER ACCURATE DIE Analysis/Method Sampled by: JERRY BORN Phone # 2467 Client Contact: TIM FUDY Sample Description Date Time Sample Comp. No of Sample Location Comments Collected Collected Matrix or Grab Containers 3/10/99 10120 BM 4ATER comp UTP EFFLUENT Relinquished by: Date: Date: Time: Received by: Time: Relinquished by: Date: Time: Received by: Date: Time: Marts [ ] uclsson Date: 3/10/99 Time: 15.50 Relinquished by: Received by Lab: Shipment Method: Airbill Number: HAND PELIVERED **Turnaround Time Required:** 

Routine	Х
Rush (Specif	y)
	,,
Cooler Temperature:	20 =
oolo: Temperatare.	

Comments:

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting - Fayetteville, NY Proj. Desc: Bi-Monthly Effluent Sampling

Sample: K7987

Samp. Description: WTP Effluent (Grab)

Instrument: HP5970 GC/MS#2

Units: ug/L

Number of analytes: 14

## **Analytical Results Method: 8260**

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 03/17/99

Matrix: Water

Received: 03/17/99

OC Batch: 031999W2

Prepared: 03/19/99 % Solids:

Purge volume: 25 mL

Surrog

Parameter	Result	Limits Dilution	Analyzed Notes
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:

Authorized: North Inflecen Date: March 22,1999

Monika Santucci

# - Outside control limits J-Estimated value

**Analytical Results Trace Metals** 

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting - Fayetteville, NY

Proj. Desc: Bi-Monthly Effluent Sampling

Sample: K7988

Samp. Description: WTP Effluent (Composite)

Units: mg/L

Collected: 03/17/99

Matrix: Water

Received: 03/17/99

% Solids:

Certification NY No.: 10155

Job No.: 3435.021.517

Number of analytes: 2

Parameter	Result	Method	Prepared	_ Analyzed	QC Batch	Dilut. Note
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

Date: March 27, 1999

## **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

Matrix: Water

Received: 03/17/99 15:50

Parameter	Result Units	Method	Prepared Analyzed	QC Batch Note
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

Date: March 25,1999

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

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



Client: O'BRIEN & GEAR TECHNICH SFRUICES INC	HNICH SFRV	1'CRS IN		Analy	Analysis/Method	
Project: ITT FINANCIAL (	FORMER ACCORDE DIE	MATE 1	10	/ ※		
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Client Contact: チャタンを多ん	Phone	Phone # 6370109			\ \ \	\
Sample Description						
Sample Location	Date Time Sa Collected Collected M	Sample Comp. Matrix or Grab C	No. of Containers	をなる		Comments
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Original-Laboratory Copy-Client

# **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

Parameter	Result Units	Method	Prepared Analyzed	QC Batch Note
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

Date: March 27,1999

Monika Santucci

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

5000 Brittonfield Parkway

East Syracuse, New York 13057/

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Custody

Hient: O'BRIENY GENZ TECHNICH SERVICESING	HNICK	86.5	ERVIC	153	Ne			•	nalysis	Analysis/Method	
roject: ITT Flydlyciac (	FORMER ACCURATE DIE	M M	CUR	MTE	DE						
sampled by: $\int \mathcal{F} R R \times \mathcal{B} \mathcal{O} R \mathcal{O}$								\	\	\ \	\ \ \
Slient Contact: 71. たんタスのAV		Pho	hone #	370109	56		\ 25	\		\	
Sample Description	scription					× 5.					
Sample Location	Date Time Collected	Time	Sample Matrix	Comp. or Grab	No. of Containers				\		Comments
UTP EIFLUENT	3/24/99	1:29.40	WHIFE	duo	_	7					
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urnaround Time Required:	Comments:										

Turnaround Time Required:

Routine Rush (Specify)\_

Original-Laboratory Common

Cooler Temperature:



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MAY 17 1009

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 corrrespondence 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

		Monitoring Re	quirements		Effluent		Effluent	Effluent	Effluent
Analyte (units)	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	- <del></del> -	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.	H: :===	13 3	s <b></b>	460	
CBOD5 (mg/L)	Monitor	Monitor	Ouarterly	3-hr comp.			·	5 U	
TKN (mg/L)	Monitor	Monitor	Quarterly	3-hr comp.	<u> </u>		( ) ( ) ( ) ( ) ( ) ( )	0.4 U	
TOD (mg/L)	Monitor	15	Quarterly	Calculated				9.3 U	
Dissolved Oxygen (mg/L)	Monitor	7 Min.	Quarterly	Grab			; ;- ; <del></del>	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.			a=a	0.01 U	d v v
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.			, <b></b>	0.005 U	(a e
Mercury, total (mg/L)	Monitor	0.0008	2/Month	3-hr comp.				0.0002 U	119 LT
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	
				1					
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	:	8 -	·.	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	
				,	II .			2.00	

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

Page 1 of 2



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

	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent
Analyte	04/13/99	04/14/99	04/15/99	04/20/99	04/21/99	04/22/99	04/27/99	04/29/99
7 mary &								
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		· , i.e	400		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	a g <del>ay</del> aka ilijida sa
CBOD5 (mg/L)								
TKN (mg/L)	· · ·	<del></del> -aggarta	, i,				A	g Mar 🛶 👝 👾 🕏
TOD (mg/L)								•••
Dissolved Oxygen (mg/L)	<del></del>	·	**		<u></u>	ta <del>la</del> en e	4,4 <del></del> >=	, <del></del> 20 3
Aluminum, dissolved (mg/L)	:		<u></u>		n engles en en en en en en en en en en en en en	و المناطق المن	<u></u> 2	4 44 - x
Antimony, total (mg/L)								
Chromium, total (mg/L)					÷== ,		·	
Cobalt, total (mg/L)								
Copper, total (mg/L)		444						1 44 A
Iron, total (mg/L)								
Lead, total (mg/L)					www.			
Mercury, total (mg/L)					0.0002 U			
Nickel, total (mg/L)			7-5	<del></del> -				Salara Salara
Silver, total (mg/L)					· 			
Vanadium, total (mg/L)	***		-4					in the second second
Zinc, total (mg/L)					0.04	. 4		·
								\$1 - \$1 \text{\$\frac{1}{2}\$}.
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			: 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
Tetrachloroethene (ug/L)			•••		0.50 U			•••
Toluene (ug/L)	·		<u></u>		0.50 U			8 - <del>2.</del>
Trichloroethene (ug/L)					0.50 U			
Acetone (ug/L)	<u></u>		- <u> </u>		10 U			144 <u>4</u> - 12 - 1
2-Hexanone (ug/L)			***		5.0 U			
4-Methyl-2-pentanone (MIBK) (ug/L)	5		:		5.0 U		The second second	August and a second

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

Page 2 of 2

#### 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

Collected: 04/14/99

Matrix: Water

Samp. Description: WTP Effluent

Received: 04/14/99 15:45

Parameter	Result Qual	Units	Method	Prepared Analyzed	OC Batch Note
Total dissolved solids	380.	mg/L	EPA 160.1	04/19/99	041999W12
Total suspended solids	<5. Ŭ	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

Matrix: Water

Received: 03/31/99 15:48

Parameter	Result Units	Method	Prepared Analyzed	QC Batch Note
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.

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting - Fayetteville, NY Proj. Desc: Monthly Effluent & Influent Sampling

Sample: K9143

Samp. Description: WTP Effluent - Grab

Instrument: HP5973 GCMS#3

Units: ug/L

Number of analytes: 14

## Analytical Results Method: 8260

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 04/07/99

Matrix: Water

Received: 04/07/99

QC Batch: 041299W1

Prepared: 04/12/99 %Solids:

Purge volume: 25 mL

		Surrog		
Parameter	<u>Resul</u> t	<u>Limits Diluti</u>	on	Analyzed Notes
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:

Authorized: Kouks

lonika Sannicci

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

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting - Fayetteville, NY Proj. Desc: Monthly Effluent & Influent Sampling

Sample: K9141

Samp. Description: WTP Influent

Primary column: Y

Units: ug/L

Column: DB-VRX 75m x .45mm ID Dilution: 50 Instrument: 9001

#### **Analytical Results Method: 8021**

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 04/07/99

Received: 04/07/99

Matrix: Water

QC Batch: 042199W1 %Solids:

Prepared:

Analyzed: 04/21/99

Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL RI	<u>Notes</u>
Benzene	. 50.	U	1	50	)
Bromodichloromethane	50.	Ŭ	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	כ
Dichloromethane	50.	U	1	50	)
1,2-Dichloropropane	50.	U	1	50	0
cis-1,3-Dichloropropylene	50.	U	1	50	0
trans-1,3-Dichloropropylene	50.	U	1	5	0
Ethylbenzene	50.	U	1	5	0
1,1,2,2-Tetrachloroethane	50.	U	1	5	0
Tetrachloroethylene	50.	U	1	5	0
Toluene	50.	Ū	1	5	0
1,1,1-Trichloroethane	50.	U	1	5	0

# - Outside control limits J-Estimated value

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

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting - Fayetteville, NY Proj. Desc: Monthly Effluent & Influent Sampling

Sample: K9141

Samp. Description: WTP Influent

Primary column: Y

Units: ug/L

Column: DB-VRX 75m x .45mm ID Dilution: 50 Instrument: 9001

**Analytical Results** Method: 8021

Job No.: 3435.021.517

Certification NY No.: 10155

Collected: 04/07/99

Received: 04/07/99

Matrix: Water

QC Batch: 042199W1

Prepared: %Solids:

Analyzed: 04/21/99

Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col_	MOL	RL	Notes
1,1,2-Trichloroethane	50.	ט	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>	Result Qual	Col	Limits	Notes
2-Chloropropane (surrogate)	105.%	1	69-118	
Fluorobenzene (surrogate)	99.%	1	85-119	

Notes:

# - Outside control limits J-Estimated value

Date: April 21,1999

## O'Brien & Gere Laboratories, Inc.

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting - Fayetteville, NY Proj. Desc: Monthly Effluent & Influent Sampling

Sample: K9142

Samp. Description: WTP Between GACs

Primary column: Y

Units: ug/L

Column: DB-VRX 75m x .45mm ID Dilution: 1 Instrument: 9001

## Analytical Results Method: 8021

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 04/07/99

Received: 04/07/99

Matrix: Water

QC Batch: 042099W1

Prepared: %Soil

%Solids:

Analyzed: 04/20/99 Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL 1	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: Date: April 21,1999

Monika Santucci

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

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting - Fayetteville, NY Proj. Desc: Monthly Effluent & Influent Sampling Job No.: 3435.021.517

**Analytical Results** 

**Method: 8021** 

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	Qua1	Col	MDL	RL Notes
1,1,2-Trichloroethane	1.	ט	1		1
Trichloroethylene	1.	Ü	1		1
Trichlorofluoromethane	1.	Ü	1		1
Vinyl Chloride	1.	Ü	1		1
Xylenes (total)	3.	U	1		3

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

Notes:

# - Outside control limits J-Estimated value

Date: April 21,1999

Monika Santucci

## O'Brien & Gere Laboratories, Inc.

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting - Fayetteville, NY Proj. Desc: Monthly Effluent & Influent Sampling

Sample: K9144

Samp. Description: WTP Effluent - Composite

Units: mg/L

#### **Analytical Results Trace Metals**

Job No.: 3435.021.517

Certification NY No.: 10155

Collected: 04/07/99

Matrix: Water

Received: 04/07/99 %Solids:

Number of analytes: 11

Parameter	Result	Method	Prepared	Analyzed	QC Batch	Dilut. Note
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: North Sanfucci

Date: April 26,1999 Monika Sanfucci

## 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 Received: 04/07/99 15:30

Matrix: Water

Parameter	Result Qual	Units	Method	Prepared Analyzed_	QC Batch Note
CBOD5	<5. Ŭ	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	BPA 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

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)

Matrix: Water

Units: mg/L

Collected: 04/07/99 Received: 04/07/99 %Solids:

Number of analytes: 1

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

Notes:

J-Estimated value

## O'Brien & Gere Laboratories, Inc.

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting - Fayetteville, NY Proj. Desc: Bi-Monthly Effluent Sampling

Sample: M0252

Samp. Description: WTP Effluent - Grab

Instrument: HP5970 GC/MS#2

Units: ug/L

Number of analytes: 14

## Analytical Results Method: 8260

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 04/21/99

Matrix: Water

Received: 04/21/99

QC Batch: 042899W2

Prepared: 04/28/99 % Solids:

Purge volume: 25 mL

Surrog

Parameter	Result	Limits Dilution	Analyzed Notes
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)	87.8	84-114 1	04/28/99
Bromofluorobenzene (surrogate)	85.%	77-117 1	04/28/99

Notes:

# - Outside control limits J-Estimated value

Au

Authorized

Jonika Santucc

Date: April 30, 1999

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

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting - Fayetteville, NY Proj. Desc: Bi-Monthly Effluent Sampling

Sample: M0253

Samp. Description: WTP Effluent - Composite

Units: mg/L

#### **Analytical Results Trace Metals**

Job No.: 3435.021.517

Certification NY No.: 10155

Collected: 04/21/99

Matrix: Water

Received: 04/21/99

%Solids:

Number of analytes: 2

Parameter	Result	Qual	MDL	RL	Method	Prepared	Analyzed	QC Batch	Dilut. Note
Mercury	<.0002	υ	.0001	.0002	245.1	04/27/99	04/28/99	042799W1	1
Zinc	.04		.002	.01	200.7	04/27/99	04/28/99	<b>04</b> 2799W1	1

Notes:

J-Estimated value

Authorized

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

: MU255

Collected: 04/21/99

Matrix: Water

Samp. Description: WTP Effluent - Composite

Received: 04/21/99 15:35

Parameter	Result Qual	Units	Method	Prepared Analyzed	QC Batch Note
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: North San





June 14, 1999

1709

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:\DIV71\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

		Monitoring Rec	uirements		Effluent	Effluent	Effluent	Effluent
Analyte (units)	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	ovinski i seve	2/Week	Grab	<b></b>	7.82	7.8	<del></del>
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.	<u>                                     </u>			
TKN (mg/L)	Monitor	Monitor	Quarterly	3-hr comp.	1			
TOD (mg/L)	Monitor	15	Quarterly	Calculated				
Dissolved Oxygen (mg/L)	Monitor	7 Min.	Quarterly	Grab	<del>                                     </del>	<del></del>	·	, i ,
Aluminum, dissolved (mg/L)	Monitor	0.2	Quarterly	3-hr comp.	<b></b>			<b>u</b>
Antimony, total (mg/L)	Monitor	0.1	Quarterly	3-hr comp.	]]			
Chromium, total (mg/L)	Monitor	0.5	Quarterly	3-hr comp.				<del></del>
Cobalt, total (mg/L)	Monitor	0.01	Quarterly	3-hr comp.				
Copper, total (mg/L)	Monitor	0.1	Quarterly	3-hr comp.		· ,	. j. 444 . j.	
Iron, total (mg/L)	Monitor	0.3	Quarterly	3-hr comp.	<b> </b>			
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.	. <b>H</b>			
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			<del></del>
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	, <del>4</del> 1 , 1 , <sub>5</sub> ,		
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		1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	
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			
and the second s		***						

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

Page 1 of 2



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)	7.62	7.02	5 U	7.62	7.62	5 U	1.63	1.03
Total dissolved solids (TDS) (mg/L)						480		i versione de la com-
CBOD5 (mg/L)		- War			<del></del>	400	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
TKN (mg/L)	<u> </u>	in t <u>al</u> ya ya is					·	
TOD (mg/L)		1 . <del>171</del> .4 - 144.				1971).		
Dissolved Oxygen (mg/L)					- <u>II</u> , a, t			
Dissolved Oxygen (mg/b)			N	**************************************	- <del></del>			
Aluminum, dissolved (mg/L)	·	nan yaan		<u></u>		<u></u>		
Antimony, total (mg/L)								
Chromium, total (mg/L)	, <del>,</del>	- m-	Nga <mark>ara</mark> ay ing kalaba	* <b>4</b>		: <u></u>	BT2	
Cobalt, total (mg/L)								
Copper, total (mg/L)		1 <u>- 1</u> 37 - 1 - 1 - 1 - 1	August 1	و و الأراكيس	t ee st			والأناكية والمست
Iron, total (mg/L)						***		
Lead, total (mg/L)		·····		a 🚅 in an	and the second			خوار رائون اسم
Mercury, total (mg/L)			0.0002 U					
Nickel, total (mg/L)		1		·		* -,		
Silver, total (mg/L)								
Vanadium, total (mg/L)		and the second	·	a <u></u> - 11	- Jan 1986			اد اور وادار کی و <b>ید</b>
Zinc, total (mg/L)			0.04					
				KALIBET KLAT		ega egan,		
cis-1,2-Dichloroethene (ug/L)		*	0.50 U	1. P '				
trans-1,2-Dichloroethene (ug/L)		. Na <del>Kala</del> an di Najarah	0.50 U	[발 <del>표</del> 조기] - 보통하	a <del>Li</del> nga ya 1 da	- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	ai <u>4</u> - Andrew	
Methylene chloride (ug/L)			2.0 U			***		
1,1,2,2-Tetrachloroethane (ug/L)		ejat j <del>aja</del> n ja kampun.	0.50 U			* 4 g * * * * * * * * * * * * * * * *	a " 🚅 📜 jou	
Tetrachloroethene (ug/L)			0.50 U					
Toluene (ug/L)	- 1 <u></u> 1 - 1		0.50 U			المرابع من <sup>المرابع</sup> ال <del>كني</del> ر	·	
Trichloroethene (ug/L)			0.50 U					
Acetone (ug/L)	are <del>da</del> e jedije	10 Jan 1988	10 U		ar <del>ia,</del> i earla i	eren .		<b></b>
2-Hexanone (ug/L)			5.0 U					
4-Methyl-2-pentanone (MIBK) (ug/L)	e e 🚉 i e e e e e		5.0 U					

NOTES:

<sup>(1)</sup> Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.

<sup>--- -</sup> 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

99.36         101.11         754-854         DRY         DRY         Py69           91.80         94.68         766-866         83.21         82.81         84.32         83           91.80         94.68         766-866         83.21         82.81         84.32         83           1         65.62         68.52         766-866         81.08         49.95         50.81         47           1         65.62         68.22         60.71         63.76         61.22         59           1         77.46         79.38         46.4-56.4         60.50         60.49         60.46         60.46           1         77.74         79.38         46.4-56.4         60.50         60.49         60.46         60.47         60.47         60.47         60.47         60.47         60.47	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
9180         9468         766-866         8321         8281         8432         8310           9 65         965         777-83.7         8044         8099         8163         AB           4 656.2         665.2         665.6         6832         665-56         6010         6122         5981           4 8821         9042         492-99         6039         6049         6046         501           7 746         7938         464-564         6050         6049         6046         5931           8 821         9178         343-443         5459         5455         5447         5390           8 821         9178         343-443         5459         5459         5447         5390           10 1 24         9178         343-443         5459         6638         6683         6683         6683         6683         6683         6683         6683         6683         6683         6683         6683         6683         6159           10 1 2 24         91.48         91.49         51.9619         62.34         60.31         61.39         76.39           10 1 2 24         91.48         91.48         91.48         91.58         91.44	MW-01	99.36	101.11	75.4 - 85.4	DRY	DRY	69.62	1		DRY
9 (5)         99 (5)         737-837         80 (4)         80 (5)         81 (5)         AB           1 (5) (5)         68 (2)         46 (5) (6)         50 (4)         60 (7)         60 (7)         60 (7)         60 (12)         59 (8)           1 (2)         48 (2)         46 (5) (6)         60 (4)         60 (5)         60 (4) <td>MW-02</td> <td>91.80</td> <td>94.68</td> <td>76.6 - 86.6</td> <td>83.21</td> <td>82.81</td> <td>84.32</td> <td>83.10</td> <td>83.28</td> <td>80.12</td>	MW-02	91.80	94.68	76.6 - 86.6	83.21	82.81	84.32	83.10	83.28	80.12
4         6562         6852         466-566         5108         4995         5081         4722           8         8821         9042         492-592         6071         6376         6122         5987           7         746         7938         464-564         6050         6049         6046         5951           7         75.66         7834         34-443         54.89         5447         5390           8         8821         91.78         339-63.9         6638         6638         66.83         66.35         61.59           9         102.44         104.03         497-53.7         6046         60.51         61.83         5390           10         97.51         97.27         60.46         60.51         61.83         66.39         66.83         66.83         66.83         66.83         66.83         66.83         66.83         66.39	MW-03	97.65	99.63	73.7 - 83.7	80.44	80.09	81.63	AB	AB	AB
88.21         90.42         492-59.2         60.71         63.76         61.22         59.87           77.46         77.38         464-56.4         60.50         60.49         60.46         59.51           7(B)         75.6         78.34         34.3-44.3         54.55         54.7         53.90           8 88.21         91.78         53.44         66.38         66.38         66.83         61.59           9 102.44         104.03         49.7-59.7         60.46         60.31         61.89         61.59           1(B)         91.48         93.80         43.1-53.1         62.34         63.70         63.66         58.41           1(B)         91.48         93.80         43.1-53.1         62.34         60.74         62.77         59.77           1(B)         93.62         94.14         51.9-61.9         62.24         60.74         62.77         59.77           1(B)         93.62         100.62         77.7-87.7         DRY         80.50         8.41           1(B)         94.10         51.9-61.9         NI         NI         NI         NI         NI           1(B)         96.10         98.80         37.7         NI         NI <td>MW-04</td> <td>65.62</td> <td>68.52</td> <td>46.6 - 56.6</td> <td>51.08</td> <td>49.95</td> <td>50:81</td> <td>47.22</td> <td>52.21</td> <td>46.79</td>	MW-04	65.62	68.52	46.6 - 56.6	51.08	49.95	50:81	47.22	52.21	46.79
(B)         75.66         79.38         46.4-56.4         60.50         60.49         60.46         59.51           (B)         75.66         78.34         34.3-44.3         54.59         54.55         54.75         53.90           3         88.21         91.78         53.9-63.9         66.38         66.83         67.61         89.71         89.71         89.71         89.72         89.71         89.72         89.72         89.72         89.72         89.72         89.	MW-05	88.21	90.42	49.2 - 59.2	60.71	63.76	61.22	59.87	59.91	59.45
(B)         75.66         78.34         343-44.3         54.59         54.55         54.47         5390           88.21         91.78         539-63.9         66.38         66.38         66.38         61.59         61.59           9         102.44         104.03         497-59.7         60.46         60.51         61.39         61.59         61.	MW-06	77.46	79.38	46.4 - 56.4	60.50	60.49	60.46	59.51	59.52	59.05
88 21         91.78         539-639         66.38         66.38         66.38         61.59           91 24         102.44         104.03         497-59.7         60.46         60.51         61.83         59.57           18         97.51         497-59.7         60.46         60.51         61.83         59.57           18         97.51         430-53.0         61.15         61.99         61.69         —           18         91.48         93.80         431-53.1         62.34         60.74         62.77         59.71           18         93.62         94.14         519-61.9         DRY         80.62         80.27         —           18         98.70         177-87.7         DRY         80.62         80.92         —           5         98.70         100.62         174-84.6         75.11         79.07         81.54         —           5         99.10         98.50         100.88         508-60.8         NI         NI         NI         NI           6         99.00         12.7         46.5-56.5         NI         NI         NI         NI           1         69.90         71.87         59.5-64.5         NI	MW-07 (B)	75.66	78.34	34.3 - 44.3	54.59	54.55	54.47	53.90	53.97	53.55
(B)         97.51         497.597         60.46         60.51         61.83         59.57           (B)         97.51         97.27         430-53.0         61.15         61.99         61.69         -           (B)         97.51         93.80         431-53.1         62.34         63.70         63.66         58.41           (B)         93.62         94.14         51.9-61.9         62.24         60.74         62.77         59.77           (B)         98.80         98.70         77.7-87.7         DRY         80.62         80.92         -           (B)         98.70         77.7-87.7         DRY         80.62         80.92         -           (B)         98.70         77.7-87.7         DRY         80.62         80.92         -           (B)         98.70         74.6-846         75.11         79.07         81.54         -           (B)         98.50         100.85         50.8-60.8         NI         NI         NI         NI           (B)         70.98         71.27         46.5-56.5         NI         NI         NI         NI           (B)         71.50         73.34         60.9-65.9         NI         NI <td>MW-08</td> <td>88.21</td> <td>91.78</td> <td>53.9 - 63.9</td> <td>86.38</td> <td>66.38</td> <td>66.83</td> <td>61.59</td> <td>61.65</td> <td>66.09</td>	MW-08	88.21	91.78	53.9 - 63.9	86.38	66.38	66.83	61.59	61.65	66.09
(B)         97.51         43.0-53.0         61.15         61.99         61.69         —           (B)         91.48         93.80         431-53.1         62.34         63.70         63.66         58.41           2         93.62         94.14         51.9-61.9         62.24         60.74         62.77         59.77           3         98.80         98.70         77.7-87.7         DRY         80.62         80.92         —           4         98.76         100.62         74.6-84.6         75.11         79.07         81.54         —           5(B)         96.10         98.90         32.7-42.7         NI         NI         NI         NI           5(B)         96.10         100.85         50.8-60.8         NI         NI         NI         NI           5(B)         96.20         100.85         50.8-60.8         NI         NI         NI         NI           5(B)         96.20         100.85         50.7-63.7         NI         NI         NI         NI           5(B)         96.20         100.85         50.4-63.9         NI         NI         NI         NI           5(B)         96.20         10.85 <td< td=""><td>MW-09</td><td>102.44</td><td>104.03</td><td>49.7 - 59.7</td><td>60.46</td><td>60.51</td><td>61.83</td><td>59.57</td><td>59.59</td><td>80.65</td></td<>	MW-09	102.44	104.03	49.7 - 59.7	60.46	60.51	61.83	59.57	59.59	80.65
(B)         9148         93.80         431-53.1         62.34         63.70         63.66         58.41           2         93.62         94.14         51.9-61.9         62.24         60.74         62.77         59.77           3         98.80         98.70         77.7-87.7         DRY         80.62         80.92         —           4         98.76         100.62         74.6-84.6         75.11         79.07         81.54         —           5(B)         96.10         98.90         32.7-42.7         NI         NI         NI         NI           5(B)         96.10         98.90         32.7-42.7         NI         NI         NI         NI           5(B)         98.50         100.85         50.8-60.8         NI	MW-10 (B)	97.51	97.27	43.0 - 53.0	61.15	66.19	69'19		1	56.02
2         93.62         94.14         519-619         62.24         60.74         62.77         59.77           3         98.80         98.70         77.7-87.7         DRY         80.62         80.92         —           4         98.76         100.62         745-84.6         75.11         79.07         81.54         —           5 (B)         96.10         98.90         32.7-42.7         NI         NI         NI         —           5 (B)         98.50         100.85         50.8-60.8         NI         NI         NI         —           5 (B)         98.50         100.85         50.8-60.8         NI         NI         NI         NI           6 (50)         69.24         53.7-63.7         NI         NI         NI         NI           8 (60)         69.24         53.5-63.5         NI         NI         NI         NI           9 (65.0)         71.27         465-66.9         NI         NI         NI         NI           1 (15)         70.98         72.89         51.9-61.9         NI         NI         NI           1 (15)         71.50         73.34         60.9-65.9         NI         NI         NI	MW-11 (B)	91.48	93.80	43.1 - 53.1	62.34	63.70	63.66	58.41	58.39	57.47
3         98.80         98.70         77.7-87.7         DRY         80.62         80.92         —           4         98.76         100.62         74.6-84.6         75.11         79.07         81.54         —           5 (B)         96.10         98.90         32.7-42.7         NI         NI         NI         —           5 (B)         98.50         100.85         50.8-60.8         NI         NI         NI         —           7 (6.90)         69.24         53.7-63.7         NI         NI         NI         NI         NI           8 (9.50)         71.27         46.5-56.5         NI         NI         NI         NI         NI           9 (9.50)         71.27         46.5-56.5         NI         NI         NI         NI         NI           1 (9.90)         71.27         46.5-56.5         NI         NI         NI         NI         NI           2 (9.90)         71.87         59.5-64.5         NI         NI         NI         NI         NI           3 (B)         71.50         73.34         60.9-65.9         NI         NI         NI         NI           4 (B)         89.80         91.53 <t< td=""><td>MW-12</td><td>93.62</td><td>94.14</td><td>51.9 - 61.9</td><td>62.24</td><td>60.74</td><td>62.77</td><td>59.77</td><td>59.79</td><td>59.31</td></t<>	MW-12	93.62	94.14	51.9 - 61.9	62.24	60.74	62.77	59.77	59.79	59.31
4         98.76         100.62         746-846         75.11         79.07         81.54         —           5(B)         96.10         98.90         327-42.7         NI         NI         NI         —           5(B)         98.50         100.85         50.8-60.8         NI         NI         NI         —           7         66.90         69.24         53.7-63.7         NI         NI         NI         NI           8         76.50         78.29         61.5-71.5         NI         NI         NI         NI           9         69.50         71.27         46.5-56.5         NI         NI         NI         NI           1         69.90         71.87         59.5-64.5         NI         NI         NI         NI           2         71.50         73.34         60.9-65.9         NI         NI         NI         NI           3         (B)         89.80         91.72         173-22.3         NI         NI         NI         NI           4         81.80         83.95         49.8-59.8         NI         NI         NI         NI           80.60         80.28         29.4-39.4-45.4-50.4 <td< td=""><td>MW-13</td><td>08.86</td><td>98.70</td><td>77.7 - 87.7</td><td>DRY</td><td>80.62</td><td>80.92</td><td>1</td><td></td><td>78.70</td></td<>	MW-13	08.86	98.70	77.7 - 87.7	DRY	80.62	80.92	1		78.70
5(B)         96.10         98.90         32.7-42.7         NI         NI         NI         III         III <th< td=""><td>MW-14</td><td>98.76</td><td>100.62</td><td>74.6 - 84.6</td><td>75.11</td><td>79.07</td><td>81.54</td><td></td><td></td><td>86.18</td></th<>	MW-14	98.76	100.62	74.6 - 84.6	75.11	79.07	81.54			86.18
5(B)         98.50         100.85         50.8-60.8         NI         NI         NI	MW-15 (B)	96.10	06.86	32.7 - 42.7	Z	Z	Z	<b>!</b>		53.47
7         66.90         69.24         53.7-63.7         NI	MW-16 (B)	98.50	100.85	50.8 - 60.8	Z	IX	ź	1	1	61.67
8         76.50         78.29         61.5-71.5         NI	MW-17	06:99	69.24	53.7 - 63.7	ī	N	Z	54.61	54.61	54.08
9         69.50         71.27         46.5-56.5         NI	MW-18	76.50	78.29	61.5 - 71.5	Ŋ	Z	Ę	N	ž	Z
1 69.90 71.87 59.5-64.5 NI NI NI NI NI NI NI NI NI NI NI NI NI	MW-19	69.50	71.27	46.5 - 56.5	Z	Z	Z	Z	Z	Ŋ
1 69.90 71.87 59.5-64.5 NI NI NI NI NI NI NI NI NI NI NI NI NI	MW-20	70.98	72.89	51.9-61.9	Z	Z	Z	Z	N	Ī
2 71.50 73.34 60.9-65.9 NI NI NI NI NI NI NI NI NI NI NI NI NI	MW-21	06.69	71.87	59.5 - 64.5	ź	Z	Z	Z	Z	Z
4 (B)         89.80         91.72         17.3-22.3         NI         NI         NI         NI           4 (B)         91.58         95.80         97.3-22.3         NI         NI         NI         NI         S9.56           78.40         80.28         29.4-39.4-45.4-50.4         NI         NI         NI         S6.88           (B)         91.58         95.18         NA-NA         NI         NI         NI         NI	MW-22	71.50	73.34	6.59 - 6.09	Į.	Z	N.	<b>Z</b>	N	Z
80.60 83.95 49.8-59.8 NI NI S9.56 80.60 83.06 42.8-52.8 NI NI NI S9.35 78.40 80.28 29.4-39.4-45.4-50.4 NI NI S6.88 (B) 91.58 95.18 NA-NA NI NI NI NI NI NI NI NI NI NI NI NI NI	MW-23 (B)	89.80	91.72	17.3 - 22.3	ž	N	Z	N	Z	N
81.80 83.95 49.8-59.8 NI NI NI 59.56 80.60 83.06 42.8-52.8 NI NI NI 59.35 78.40 80.28 29.4-39.4-45.4-50.4 NI NI 56.88 (B) 91.58 95.18 NA-NA NI NI NI NI NI NA NA NA NA NI NI NI NI NI NI NI NA NA NA NA NI NI NI NI NI NI NI NI NI NI NI NI NI	MW-24					1	1		•	1
(B) 91.58 95.18 NI NI S9.35 (B) N3.06 80.28 29.4-39.4 - 45.4-50.4 NI NI NI S6.88 (C) NA-NA NI NI NI NI NI NI NI NI NI NI NI NI NI	PZ-01	81.80	83.95	49.8 - 59.8	Z	Z	ź	59.56	59.57	59.10
(B) 91.58 80.28 29.4-39.4 - 45.4-50.4 NI NI 56.88 NI NI NI NI NI NI NI NI NI NI NI NI NI	PZ-02	80.60	83.06	42.8 - 52.8	Ż	Z	Z	59.35	59.36	58.89
(B) 91.58 NA NA NA NA NA NI NI NI NI NI NI NI NI NI NI NI NI NI	RW-01	78.40	80.28	29,4-39,4 - 45,4-50,4	Z	Z	Z	56.88	56.89	58.22
NA NA NA NA NA NA NA NA NA NA NA NA NA N	RW-02 (B)	91.58	95.18	NA-NA	<b>X</b>	Z	Ž.		。 。 <b>涅</b> 、	IN.
141 141 141 141 141 141 141 141 141 141	SUMP	NA	97.93	NA - NA	Z	Z	Z	Ĭ	Z	Z

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.

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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								- 11 . <del></del> [11].	
MW-03	AB	AB	AB	AB	AB	AB	AB	AB	AB
MW-04			A Property	ang taw <del>as</del> alika s					
MW-05									
MW-06							<del>44</del>		
MW-07 (B)		<del></del>							
MW-08		والمرافع المستقد المراب	<u> </u>		and the state of	r v r <del>l.</del> 11982	Maria <del>ja</del> lajana	y la <del>la</del> et e	
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						a Section 1999 Section 1999			
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)	- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1		ete.		<u>. 1</u> 2 %				
MW-17									
MW-18	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-19	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-20	NI NI	NI	NI	NI	NI	NI	NI a	NI	NI .
MW-21	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-22	NI	NI	NI	NI	NI	NI NI	NI	NI	NI
MW-23 (B)	NI	NI	NI	NI	NI	NI	NI	NI	NI
MW-24		4 - 4 - 2 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1				garaga <del>aga</del> sas <sup>an</sup> sa	1 1 <u>22</u> 1 1 1		
PZ-01		<del></del>		<del></del>					
PZ-02		The State of the Control of the Cont	يُ الكيارَ و	salaja ( <del>j. j.</del> jiho ji					
RW-01									
RW-02 (B)	NI NI	NI	NI	NI	NI	NI	Page NI Salas	NI	NI 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.



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

Ground Water Elevation (ft) 02/20/96	\ \	2	В	9		0	5	7	71	9	5		. 80	.5	9.	1.	12				L	<del></del>			6	9		2	33
	DRY	83.15	AB	52.46	60.50	59.80	54.45	65.47	60.07	59.96	60.35	60.21	79.88	80.35	59.56	66.57	59.52	Z	Z	Z	Z	Z	Z		59.99	59.66	54.40	60.09	74.63
Ground Water Elevation (ft) 02/16/96	DRY	83.34	AB	54.43	60.73	60.11	54.52	65.84	60.35	60.42	88.09	60.50	79.90	80.29	59.63	62.99	59.70	Z	Z Z	Z	Z	<b>7</b>	Z		60.28	59.97	54.71	60.67	74.63
Ground Water Elevation (ft) 02/15/96	75.30	83.41	AB	55.39	08.09	60.41	55.03	65.93	60.48	62.11	62.67	60.65	79.91	80.28	59.79	06.99	59.75	Z	Z	N	Z	Z	IZ		60.46	60.26	59.22	63.83	74.64
Ground Water Elevation (ft) 02/07/96	76.64	83.87	AB	52.06	61.01	60.44	54.67	66.40	02.09	59.88	60.37	60.83	79.98	80.02	59.37	21.12	60.17	N	Z	Z	ž	<b>X</b>	Z		60.61	60.30	55.04	86.65	74.68
Ground Water Elevation (ft) 02/05/96	77.06	84.04	AB	53.60	61.26	98.09	55.16	66.61	60.95	62.00	62.63	61.11	80.00	79.91	59.24	67.14	60.29	M	Z	Z	Ŋ	Z	Z		60.92	60.70	59.64	63.80	74.67
Ground Water Elevation (ft) 10/17/95	DRY	84.22	AB	50.05		58.10	52.71	92:09	58.16	54.61	55.31	58,35	DRY	80.72	50.47	58.06	DRY	Z	Z	IX	Z	Z	Z		58.16	57.97	57.11	56.05	76.94
Ground Water Elevation (ft) 07/25/95	DRY	82.42	AB	45.94	58.78	58.52	53.27	59.82	58.56	54.60	55.72	58.76	DRY	19.08	51.60	59.41	57.71	Z	Z	Z	Z	Z	Z		58.58	58.37	27.60	Z	75.25
Ground Water Elevation (ft) 04/26/95	DRY	83.28	AB	51.44	60.34	60.02	54.51	63.41	60.10	57.49	58.86	60.30	DRY	19.08	54.71	63.86	59.05	Z	Z	Ę	īz	Z	Z		80.09	59.88	59.14	Z	75.09
Ground Water Elevation (ft) 03/09/95	-		AB		1		1	I i	I	55.02	56.55		77.67	80.12	1	1	I	Z	Z	<b>X</b>	Ĭ	Z	Z		1		1	Į.	78.00
WELL#	MW-01	MW-02	MW-03	MW-04	MW-05	MW-06	MW-07 (B)	MW-08	MW-09	MW-10(B)	MW-11 (B)	MW-12	MW-13	MW-14	MW-15(B)	MW-16 (B)	MW-17	MW-18	MW-19	MW-20	MW-21	MW-22	MW-23 (B)	MW-24	PZ-01	PZ-02	RW-01	RW-02 (B)	SUMP

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.

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# Table 2 Accurate Die Casting Site Fayetteville, New York

Ground Water Elevation Summary Table

B3.68  AB  AB  AB  AB  52.66  54.43  58.32  58.32  58.14  57.48  57.48  57.28  54.17  54.15  64.10  63.83  57.78  57.79  59.10  59.01  59.01  59.07  59.04  65.99  65.90  65.90  65.90  65.90  65.90  MI  MI  MI  MI  MI  MI  MI  MI  MI  M	77.34  84.24  AB 59.26 58.02 58.02 54.29 64.76 59.07 59.38 79.68 80.49	DRY 84.86 AB 60.28 58.20 57.41 54.08 57.73 58.61 58.64 79.52	77.73     DRY       85.35     83.17       AB     AB       59.70     51.63       58.71     60.54       58.17     59.91       54.75     55.02       65.43     67.07       58.46     60.18       59.72     62.25       60.35     62.25       79.44     79.28       79.29     80.56
83.32         83.67         83.50         84.24         83.68         83.68           AB         AB <th>84.24 AB 59.26 58.02 54.29 64.76 59.07 59.38 58.44 79.68</th> <th>84.86 AB 60.28 58.20 57.41 54.32 64.08 57.73 58.61 58.94 79.52</th> <th></th>	84.24 AB 59.26 58.02 54.29 64.76 59.07 59.38 58.44 79.68	84.86 AB 60.28 58.20 57.41 54.32 64.08 57.73 58.61 58.94 79.52	
AB         AB<	AB 59.26 58.85 58.02 54.29 64.76 59.07 59.38 79.68 80.49	AB 60.28 58.20 57.41 54.32 64.08 57.73 57.73 58.61 58.94 79.52	
6037         58.14         55.10         59.26         52.66         54.43           6040         60.14         59.73         58.85         58.25         58.14           59.75         59.45         58.96         58.02         57.48         57.28           80         54.38         54.46         54.32         54.17         54.15           60.02         59.46         54.20         54.17         54.15         57.28           (B)         56.42         65.12         64.68         64.76         64.10         63.83         57.28           (B)         65.42         65.12         64.68         64.76         64.10         63.83         57.59         59.83         57.59         59.83         57.59         63.83         64.76         64.76         64.10         63.83         59.14         59.01         59.14         59.01         59.14         59.01         59.14         59.01         59.14         59.04         59.04         59.04         59.04         59.04         59.04         65.99         65.99         65.99         65.99         65.99         65.90         65.90         65.90         65.90         65.90         65.90         65.90         65.90         65.90 <th>59.26 58.85 58.02 54.29 64.76 59.07 59.38 79.68</th> <th>60.28 58.20 57.41 54.32 64.08 57.73 58.61 58.94 57.86 79.52</th> <th></th>	59.26 58.85 58.02 54.29 64.76 59.07 59.38 79.68	60.28 58.20 57.41 54.32 64.08 57.73 58.61 58.94 57.86 79.52	
6040         6014         59.73         58.85         58.82         58.14           59.75         59.45         58.96         58.02         57.48         57.28           (B)         54.58         54.29         57.48         57.28           (6.02         59.71         59.22         58.30         57.78         57.59           (B)         59.91         59.43         59.10         59.01         57.73         57.59           (B)         59.91         59.44         59.43         59.10         57.73         57.59           (B)         59.91         59.43         59.40         59.10         59.01         59.01           (B)         59.92         59.78         59.34         59.10         59.01         59.01           (B)         56.16         59.46         59.40         59.07         59.04         59.04           (B)         59.56         59.40         59.14         59.07         59.04         59.04           (B)         56.52         66.39         66.17         66.39         66.19         65.99         65.99         65.99         65.90           (B)         MI         MI         MI         MI         MI <th>58.85 58.02 54.29 58.30 59.07 59.38 58.44 79.68</th> <th>58.20 57.41 54.32 64.08 57.73 58.61 58.94 57.86 79.52</th> <th></th>	58.85 58.02 54.29 58.30 59.07 59.38 58.44 79.68	58.20 57.41 54.32 64.08 57.73 58.61 58.94 57.86 79.52	
(B)         59.75         59.45         58.96         58.02         57.28         57.28           (B)         54.88         54.46         54.29         54.17         54.15         54.15           (6.42         65.12         64.68         64.76         64.10         63.83         54.15         57.33         57.74         57.25         57.24         57.24         57.24         57.24         57.14         58.17         58.17         58.17         58.17         58.17         58.14         57.47         59.14         57.19         57.19         57.19         57.19         57.19         57.19         57.19         57.19	58.02 54.29 64.76 58.30 59.07 59.38 58.44 79.68	57.41 54.32 64.08 57.73 58.61 58.94 57.86 79.52	
(B)         54.58         54.46         54.32         54.29         54.17         54.15           65.12         64.68         64.76         64.10         63.83           60.02         59.71         59.22         58.30         57.78         57.59           (B)         59.91         59.64         59.43         59.77         58.81         57.39           (B)         60.16         59.86         59.37         58.44         57.93         57.74           (B)         60.16         59.86         59.37         58.44         57.93         57.74           (B)         60.16         59.86         59.37         58.44         57.93         57.74           (B)         56.16         59.37         58.44         57.93         57.74           (B)         58.56         59.40         59.14         59.07         59.04           (B)         59.56         59.94         59.14         59.07         59.14           (B)         56.59         66.39         66.17         65.99         65.99         65.99           (B)         MI         MI         MI         MI         MI         MI           MI         MI <td< th=""><th>54.29 64.76 58.30 59.07 59.38 58.44 79.68</th><th>54.32 64.08 57.73 58.61 58.94 57.86 79.52</th><th></th></td<>	54.29 64.76 58.30 59.07 59.38 58.44 79.68	54.32 64.08 57.73 58.61 58.94 57.86 79.52	
65.42         65.12         64.68         64.76         64.10         63.83           60.02         59.71         59.22         58.30         57.78         57.59           (B)         59.91         59.64         59.43         59.07         58.81         58.72           (B)         60.29         59.99         59.78         59.38         59.10         59.01           (B)         60.16         59.86         59.37         58.44         57.93         57.74           79.87         79.87         79.68         79.07         79.68         79.07         79.67           80.38         80.44         80.45         80.49         80.52         80.55           (B)         59.56         59.40         59.14         59.07         59.04           (B)         66.52         66.39         66.17         65.99         65.99         65.90           (B)         66.52         66.39         66.17         65.99         65.99         65.90           (B)         MI         MI         MI         MI         MI         MI           MI         MI         MI         MI         MI         MI         MI           MI	58.30 59.07 59.38 58.44 79.68	64.08 57.73 58.61 58.94 57.86 79.52	
(B)         59.91         59.42         58.30         57.78         57.59           (B)         59.91         59.44         59.43         59.07         58.81         58.72           (B)         60.29         59.99         59.78         59.38         59.10         59.01           (B)         60.16         59.86         59.37         58.44         57.93         57.74           (B)         59.56         59.46         59.40         59.14         59.60         59.04           (B)         66.52         66.39         66.17         65.99         65.99         65.90         65.90           (B)         MI         MI         MI         MI         MI         MI         MI           (B)         MI         MI         MI         MI         MI         MI         MI         MI           (B)         MI           (B)         MI           (B)         MI         MI         MI         MI	59.07 59.07 59.38 58.44 79.68 80.49	57.73 58.61 58.94 57.86 79.52	
(B)         59.91         59.64         59.43         59.07         58.71         58.72           (B)         60.29         59.99         59.78         59.38         59.10         59.01           (60.16         59.86         59.37         58.44         57.93         57.74           (60.16         59.86         59.37         58.44         57.93         57.74           (8)         60.16         79.77         79.68         79.57         79.57           (8)         59.56         59.46         59.40         59.04         59.04           (B)         66.59         66.39         66.17         65.99         65.90         65.90           (B)         MI         MI         MI         MI         MI         MI         MI           (B)         MI         MI         MI         MI         MI         MI         MI         MI         MI           (B)         MI         MI         MI         MI         MI         MI         MI         MI         MI           (B)         MI         MI         MI         MI         MI         MI         MI         MI           (B)         MI         MI	59.07 59.38 58.44 79.68	58.61 58.94 57.86 79.52 78.14	
(B)         60.29         59.98         59.78         59.38         59.10         59.01           60.16         59.86         59.37         58.44         57.93         57.74           79.87         79.86         79.60         79.57         79.68         79.60         79.77           80.38         80.44         80.45         80.49         80.55         80.55         80.55           (B)         59.56         59.46         59.40         59.14         59.04         59.04         59.14           (B)         66.39         66.17         65.99         65.99         65.90         65	59.38 58.44 79.68 80.49	58.94 57.86 79.52 78.14	
60.16         59.86         59.37         58.44         57.93         57.74           79.87         79.86         79.77         79.68         79.60         79.57           80.38         80.44         80.45         80.49         80.52         80.55           80.38         80.44         80.45         80.49         80.52         80.55           (B)         59.56         59.46         59.40         59.14         59.07         59.04           (B)         (A)         (A)         (A)         (A)         (A)         (A)           (B)         (A)         (A)	58.44 79.68 80.49	79.52	
79.87         79.86         79.77         79.68         79.67         79.57           80.38         80.44         80.45         80.49         80.52         80.55           80.38         80.46         80.46         80.49         80.52         80.55           80         59.46         59.40         59.14         59.04         59.04           80         66.52         66.39         65.99         65.90         65.90           80         66.47         65.99         65.90         65.90         65.90           80         MI         MI         MI         MI         MI           NI         NI         NI         NI         NI         NI           S9.53         59.63         59.39         57.19         57.19	79.68	79.52	
80.38         80.44         80.45         80.45         80.55         80.55           (B)         59.56         59.46         59.40         59.14         59.07         59.04           (B)         66.52         66.39         66.17         65.99         65.99         65.90           59.64         59.42         59.28         59.30         59.14         59.14           NI         NI         NI         NI         NI         NI           NI         NI         NI         NI         NI           NI         NI         NI         NI         NI           NI         NI         NI         NI         NI           NI         NI         NI         NI         NI           NI         NI         NI         NI         NI           NI         NI         NI         NI         NI           S9.63         59.63         57.90         57.79         57.19	80.49	78.14	
(B)         59.56         59.46         59.40         59.14         59.07         59.04           (B)         66.22         66.39         66.17         65.99         65.99         65.90 </th <th></th> <th></th> <th></th>			
(B)       66:52       66:39       66:17       65:99       65:99       65:90       6	59.14	28.84	59.87 62.62
S9.64         S9.42         S9.28         S9.30         S9.14           NI         NI         NI         NI         NI           NI         NI         NI         NI         NI           NI         NI         NI         NI         NI           (B)         NI         NI         NI         NI           (B)         NI         NI         NI         NI           S9.53         S9.63         S9.31         S8.35         S7.30         S7.39         S7.19	65.99	65.84	67.02 68.40
NI	59.30	59.30	59.95 59.22
NI		IN	NI 72.95
NI	IZ	NI NI	NI DRY
NI		N	NI
(B) NI NI NI NI NI NI NI (B) (C) (S) (S) (S) (S) (S) (S) (S) (S) (S) (S	īz	IZ IZ	IZ IZ
(B) NI NI NI NI NI NI NI SEL S9.93 S9.63 S9.83 S7.90 S7.39 S7.19	N. S.	IZ IN	Z
59.93 59.43 58.21 57.39 57.19 57.39 57.19	ĪZ	NI NI	IZ IZ
59.93     59.63     59.14     58.21     57.67     57.47       59.61     59.33     58.83     57.90     57.39     57.19			
59.61 59.33 58.83	58.21	57.60	58.34 60.09
	57.90 57.39	57.19 57.30 5	58:04 59:77
RW-01 54.35 54.05 53.58 52.76 52.24 52.03 55	52.76	52.11	52.69 53.82
RW-02(B) 59.97 59.63 59.41 58.95 58.63 58.52 31	26,85	5841	59.63 62.56
SUMP 75.30 74.90 74.65 74.87 74.69 74.99 75	74.87	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. AW-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.

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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	AB	AB	AB	AB	AB	AB	AB	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	afan da <del>fil</del> a da di	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	ing the second s	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	<b>7</b> 0.77	73.04	73.31	72.78	73.60	71.34	69.71
MW-19	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
MW-20	50.26	DRY	DRY	DRY	DRY	y de <del>P</del> arana.	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 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	4 1 <del>4</del> 1 15						. را به ۱۹۹۰ <u>- ب</u> ایی از		
PZ-01	58.31	55.13	53.90	55.83	58.57	en general en en en en en en en en en en en en en	59.51	58.70	58.01
PZ-02	57.97	54.90	53.53	55.25	58.23	oring 🗸 greek	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	. Villaria Biblio 1967 	74.94	75.01	74.75

NOTES: N1-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.

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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	26. <b>83.38</b> The specific of the second of th	
MW-03	AB	AB	AB	AB	
MW-04	AB	AB	AB		4 14 20 11 12 11 15 48 11 11 11 11 11 11 11 11 11 11 11 11 11
MW-05	60.86	61.05	60.04	59.91	*
MW-06	60.46	60.57	59,69	[1] <b>59.1</b> (1) [1] [1] [1] [1] [1] [1] [1] [1] [1] [1]	a ar
MW-07 (B)	52.90	53.82	51.76	54.57	
MW-08	64.98	67.17	59.86		
MW-09	60.51	60.56	59.71	59.68	
MW-10 (B)	55.78	61.08	51.88		
MW-11 (B)	56.75	61.73	53.98	58.36	
MW-12	60.67	60.80	59.89		
MW-13	78.87	78.67	78.31	78.08	
MW-14	80.78	80.78	80.64	and <b>80.54</b> (4) in this way the equation given in the latest time of the latest time of the latest time and the latest time.	
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	(1998- <b>72.46</b> 한다는 11) 전 종본 작은 유리 대한 경우 전 전 전 경우 이 나는 사람들이 되었다.	
MW-19	DRY	DRY	DRY	DRY	
MW-20	AB	AB	AB		
MW-21	63.82	63.54	63.23	63.31	
MW-22	68.51	68.39	67.83	고 : 5 <b>68.05</b> ) - 1 : 공고 및 11 : 남화, 하는 1 : 유입, 12 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1 : 1	
MW-23 (B)	34.95	37.95	33.57	36.76	
MW-24			and the second of the second o	n kija <b>-7.38</b> ) i king gjala dijaka kija kaja naja <sup>60</sup> ana Maja kija kija kina na na na na najak	
PZ-01	60.50	60.61	59.70	59.30	
PZ-02	60.22	60.34	59.46	事 (5. <b>59.03</b> )	
RW-01	43.13	32.60	32.36	54.69	
RW-02 (B)	52.74	59.94	44.33	· 1985-56.74 [[[[[[]]]]] [[[]] [[]] [[] [[]] [[] [[	
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

07/95 TCE ug/L	)4/95 ΓCE 1g/L	,	02/95 TCE ug/L	,	10/94 TCE ug/L	07/94 TCE ug/L	05/9 <b>2</b> TCE ug/L	TCE	TCE	08/89 TCE ug/L	Date Sampled: WELL #
DRY	DRY				DRY		ND			112	MW-01
ND	۷D		ND		ND	, <del></del>	ND		The state of the s	ND	MW-02
AB	AB		AB		AB	AB	340000			Product	MW-03
	16		13		23	270	6				MW-04
	280		290		410	330	110				MW-05
270	280		330	d. A. Ha	360	390	510	1. 10 PM 1. CO 15	and the second s		MW-06
ND	ND		ND		ND	ND	ND				MW-07 (B)
ND	۷D		ND	2 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ND	j. <del></del> 1	ND				MW-08
75	34		74		74	72	60	106	109		MW-09
900	200		1400	)	1300	1600	4500		·		MW-10 (B)
4000	3900		4300	)	5300	5500	5200				MW-11 (B)
25	30	a	33 :		35 :	44	36	<del>a </del> light of the	<del>,</del>		MW-12
DRY	DRY				510	740	110				MW-13
140	95	27 J	79		120	150	67	***	<del></del> -		MW-14
17	10		11		14		NI				MW-15 (B)
18	7	1.	17		6		NI				MW-16 (B)
160	130		200		140	260	NI				MW-17
NI	NI .		NI		· NI	NI	NI		· .	,aaa , 1 , ,	MW-18
NI	NI		N1		NI	NI	NI				MW-19
NI	NI		NI		NI	NI	NI -		<u></u>		MW-20
NI	NI		NI		NI	NI	NI				MW-21
NI	VI same jame		NI		NI	NI	NI				MW-22
* : * · · · · · · · · · · · · · · · · ·	: 15 						797 is 157 - 157 - 157 -			97 - 197 	MW-23 (B)
NI NI	NI Arra gar	18 No. 18 No. 18	NI		NI NI	NI	NI	NI	NI	NI	MW-24
120	···				**************************************					: 1417 	PZ-01
400	190			s :	a e		<u></u>	444			PZ-02
							NI			. 1 1	RW-01
NI NI					NII	NI			<u></u>	<u></u> 2.	
TAR 1			141				the state of the s		- 1		
	 NI:-::::::::::::::::::::::::::::::::		 NI 		NI NI	NI NI	NI NI NI				RW-01 RW-02 (B) SUMP

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 (Steams & 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.

Page 1 of 3



## 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 ug/L	TCE ug/L	TCE ug/L	TCE ug/L	TCE ug/L	TCE ug/L	TCE ug/L	TCE ug/L	TCE ug/L
WELL#	ug/L	ug/L	ug/15	ug L	<b>u</b> g/D	ug D	<b>u</b> g E	ug D	ugı
MW-01	DRY		DRY		DRY	DRY			DRY
MW-02	ND	i 🛶 🔭 💮			<del></del> organization	ND			
MW-03	AB	AB	AB	AB	AB	AB	AB	AB	AB
MW-04	15				<del></del>	62		AB	AB
MW-05		•••				180			
MW-06	180	170	110		98	71	75	52	
MW-07 (B)	ND					ND			
MW-08	ND	. <u></u>			a <del>aa</del> , ahiyahiya	ND	i <del>al</del> de la companya	i <del>ll</del> and the same	<del></del> * * * * * * * * * * * * * * * * *
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	-			<u></u>	17:			1 1
MW-13	DRY			·		370			
MW-14	78	84	250	The Control	230	170	390	400	260
MW-15 (B)	7					20			
MW-16 (B)	20	. <u></u> .		, .	·	. 111° - 2° - 3° - 3° - 3° - 3° - 3° - 3° - 3		<u></u>	. <del></del>
MW-17		180	350		460	300	450	220	150
MW-18	NI	NI	NI : E	1200	inger i jaki saki	2900	850	410	1800
MW-19	NI	NI	NI		DRY	DRY	DRY	DRY	DRY
MW-20	NI	NI	NÎ jî jî bi kê wê	70 🖖 🛒	ر د وهي الم <u>سوي</u>	DRY	DRY	AB	AB .
MW-21	NI	NI	NI	NI	NI	NI	NI	520	310
MW-22	NI	NI	NI	NI 1	NI .	NI	NÍ	421 Sym	<b>3</b> A 1.51
MW-23 (B)					r ynne y re - <del></del>	n de la filología de la filolo		ND	ND
MW-24	NI de la la la la	NI	NI STATE OF THE	NI .	NI PLEET L	NI	NI	NI	NI · · · · · ·
PZ-01	Fu (1)					32		· 66.	e di salah di salah di salah di salah di salah di salah di salah di salah di salah di salah di salah di salah d Tanggaran
PZ-02		<del></del>		Land State of the		540	e <del>ste</del> in set	* <del>**</del> 1.	J 10 / J /
RW-01					* 1 50 		. :	***	
RW-02 (B)	Salah Salah Salah Salah Salah Salah Salah Salah Salah Salah Salah Salah Salah Salah Salah Salah Salah Salah Sa	<u> </u>	: <u></u> .	.47	المام الرواد أن المراكز الأراد المستوي			. <u></u>	. <u></u> is 1,7,4,3
	A CONTRACTOR OF THE CONTRACTOR	Factor 1					9		
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.

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

Date Sampled:	10/97 TCE	01/98 TCE	04/98 TCE	10/98 TCE	11/98 TCE	04/99 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	
MW-05	220			200		
MW-06	ND	. 🚅 is in the second	140	92		# <b>63</b> 000
MW-07 (B)	ND			ND		
MW-08	12 . j		<del>ag</del> t <sub>spe</sub> ake	ND		
MW-09	61	140	120	80		120
MW-10 (B)	1300		930	880		720 (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)
MW-11 (B)	1600		920	1100		740
MW-12	19			22		
MW-13	760			480		
MW-14	560	560	460	400	) <u></u>	460 ****
MW-15 (B)	18	•••		21		en en en en en en en en en en en en en e
MW-16 (B)	14			<b>4</b> Å Æ		
MW-17		270	800	250		280
MW-18	3100	1000	1100	3600		620 m. 19 m.
MW-19	DRY	DRY	DRY	DRY	DRY	DRY
MW-20	AB	AB	AB	AB	AB	AB: 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000
MW-21	450	120	1300	180		510
MW-22	8	5 10 15	10	14	<u></u>	100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to 100 to
MW-23 (B)	ND	ND		ND	ti i i i i i i i i i i i i i i i i i i	n Filippe de la companya de la companya de la companya de la companya de la companya de la companya de la comp La <del>com</del> panya de la companya de la comp
MW-24	NI	NI.	NI	NI	6000	# <b>4300</b> #88 1 10 14 15 15 15 15 15 15 16 16 16 16 16 16 16 16 16 16 16 16 16
PZ-01	48		1	85	o nagratiko k H <del>ara</del>	
PZ-02	420		i <del>lig</del> a digila kan .	250		
RW-01	· 3557 					on the second of
RW-02 (B)	4	<u></u> 41			<u>. 184</u> 0 (1847)	
SUMP	2600		560	850	- 1941 	400
	2300			A estre de la comp		

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 Steams & 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.

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

	MW-04	MW-10 (B)	MW-11 (B)	MW-17	MW-17	MW-17	MW-17	MW-17
Analyse	10/22/96	04/29/99	04/29/99	04/10/96	10/22/96	01/16/97	04/15/97	07/08/97
Analyte	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		<u>-1</u>			
Tetrachloroethene				20	12	22	15	18
Vinyl chloride						₩. <del></del>		그리는 그 사람들이 얼마를 살아 없다.

NOTES: --- Not detected.

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

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

	MW-17	MW-17	MW-17	MW-18	MW-18	MW-18	MW-18	MW-20
Amahuta	01/29/98	10/20/98	04/29/99	10/22/96	07/08/97	10/21/98	04/29/99	05/24/96
Analyte	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
cis-1,2-Dichloroethene				81	66	160	37	46
Chloroform								
Tetrachloroethene	12	17	23					
Vinyl chloride		i <del>ne</del>		a, in <del>pro</del> session				

NOTES:

--- Not detected.

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

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

	MW-21	MW-21	MW-21	MW-21	MW-21	MW-21	MW-21	MW-21
Analyte	01/21/97	04/16/97	07/08/97	10/23/97	01/29/98	04/16/98	10/21/98	04/29/99
Allalyte	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
cis-1,2-Dichloroethene	650	630	770	800	350	1400	340	2100
Chloroform							e i 💴 🕮 👾	
Tetrachloroethene		***						
Vinyl chloride		그 표근 등		taga <del>al</del> gangan		ar sy fili. En la <del>Titt</del> e ty e eust	en en en en en en en en en en en en en e	u 11 <del></del> ji jalijaku

NOTES: --- Not detected.

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

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

	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	MW-22	
Amalada	01/21/97	04/16/97	07/08/97	10/23/97	01/29/98	04/16/98	10/21/98	04/29/99	
Analyte	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	
cis-1,2-Dichloroethene	5	4	9	22	11	22	35	24	
Chloroform			and the second second			a de la companie de la companie de la companie de la companie de la companie de la companie de la companie de La companie de la co			
Tetrachloroethene									]
Vinyl chloride	<del></del> -	ar <del>4.</del> j. sply	*	<b>3</b> 5,55 - 55					

NOTES: --- Not detected.

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

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# Other Detected Volatile Organic Compounds Accurate Die Casting Site Fayetteville, New York

Analyte		MW-24 11/09/98	MW-24 04/29/99	-24 3/99								
		ng/c	7/8n									
cis-1,2-Dichloroethene	roethene	7600	1900									
Chlorotorm	AT THE STATE OF TH	1	1				Tak Maja Takan				**************************************	
Viny! chloride				HAT I		54.4 4.737 4.07	1,345 4), 41 <u>4</u>					No.
										42.7 44.7 46.		
'												
1. T			tie Na Na									
					1915 1915 1916			100 mg/mg/mg/mg/mg/mg/mg/mg/mg/mg/mg/mg/mg/m				
	High ethics the control ethics ethics the control											
						.v.T .v.ex			tir k			
4* 4* 												Meses Description
o difficult												

NOTES:

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

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Page

#### ATTACHMENT A

### SPDES PERMIT COMPLIANCE MONITORING LABORATORY ANALYTICAL DATA SHEETS

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting - Fayetteville, NY Proj. Desc: Monthly Effluent & Influent Sampling

Sample: M1567

Samp. Description: WTP Effluent - Grab

Instrument: HP5970 GC/MS#2

Units: ug/L

Number of analytes: 14

### **Analytical Results Method: 8260**

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 05/05/99

Received: 05/05/99

Matrix: Water

QC Batch: 051199W2

Prepared: 05/11/99 % Solids:

Purge volume: 25 mL

Surrog

Parameter	Re <u>sult</u>	Limits Dilution	Analyzed Notes
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:

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting - Fayetteville, NY Proj. Desc: Monthly Effluent & Influent Sampling

Sample: M1565

Samp. Description: WTP Influent

Primary column: Y

Units: ug/L

Column: DB-VRX 75m x .45mm ID Dilution: 50 Instrument: 9001

#### **Analytical Results Method: 8021**

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 05/05/99

Received: 05/05/99

Matrix: Water

QC Batch: 051899W1

Prepared:

% Solids:

Analyzed: 05/18/99

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.	Ū	1	500.
Carbon tetrachloride	<50.	Ū	1	50.
Chlorobenzene	<50.	Ū	1	50.
Chloroethane	<50.	Ū	1	50.
2-Chloroethylvinyl ether	<500.	U	1	500.
Chloroform	<50.	U	1	50.
Chloromethane	<500.	Ü	1	500.
Dibromochloromethane	<50.	U	1	50.
1,2-Dichlorobenzene	<250.	U	1	250.
1,3-Dichlorobenzene	<250.	Ū	1	250.
1,4-Dichlorobenzene	<250.	U	1	250.
Dichlorodifluoromethane	<500.	Ū	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.

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

<sup># -</sup> Outside control limits. U - Undetected at the reported level.

J - reported value is estimated.

E - concentration exceeded the calibration range and is estimated.

**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
1,1,2-Trichloroethane	<50.	Ū	1	50.
Trichloroethylene	590.		1	50.
Trichlorofluoromethane	<50.	U	1	50.
Vinyl Chloride	<50.	U	1	50.
Xylenes (total)	<150.	Ū	1	150.

Surrogate	Result Qual	Col	<u>Limits</u>	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.

Date: May 19,1999

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting - Fayetteville, NY Proj. Desc: Monthly Effluent & Influent Sampling

Sample: M1566

Samp. Description: WTP Between GACs

Primary column: Y

Units: ug/L

Column: DB-VRX 75m x .45mm ID Dilution: 1 Instrument: 9001

#### **Analytical Results Method: 8021**

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 05/05/99

Received: 05/05/99

OC Batch: 051899W1 %Solids:

Matrix: Water

Prepared: Analyzed: 05/18/99

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.	Ū	1	10.
Dibromochloromethane	<1.	Ŭ	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.	Ŭ	1	1.
1,2-Dichloroethane	<1.	U	1	1.
1,1-Dichloroethylene	<1.	Ü	1	1.
cis-1,2-Dichloroethylene	<1.	U	1	1.
trans-1,2-Dichloroethylene	<1.	Ŭ	1	1.
Dichloromethane	<1.	U	1	1.
1,2-Dichloropropane	<1.	Ü	1	1.
cis-1,3-Dichloropropylene	<1.	U	1	1.
trans-1,3-Dichloropropylene	<1.	U	1	1.
Ethylbenzene	<1.	Ü	1	1.
1,1,2,2-Tetrachloroethane	<1.	Ŭ	1	1.
Tetrachloroethylene	<1.	Ŭ	1	1.
Toluene	<1.	Ŭ	1	1.
1,1,1-Trichloroethane	<1.	Ü	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

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
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)	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: North Sanfucci

Date: May 19,1999 Monika Santucci

**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

Collected: 05/05/99 Received: 05/05/99 Matrix: Water %Solids:

Units: mg/L

Number of analytes: 2

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

Notes:

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

Authorized: North Parlice.

Date: May 15,1999 Monika Santucci

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

### **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

Matrix: Water

Received: 05/05/99 15:25

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

Notes:

J-Estimated value

Authorized:

Date: May 18,1999

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

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

**Chain of Custody** 

1693

Project: ITT FINANCIAL (FORMER ACCULATE DIE)				Analysis/Method									
Project: ITT FINANCIAL (FO	nmill	2 ACC	NATE	= D12	Ē)			Ŕ	· /		$\overline{}$		
Sampled by: JERRY BORN		-	_					Ver,	MAN			/	///
Client Contact: AL FAILIELL Phone # 6370109				09			3,000	1,0%	47	\\\/			
Sample De	scription			•	<u>-</u>			)() ()) [()	*\(\)\ \\\	U 4/ \] \	(5)	$\gamma_{/}$	
Sample Location	Date Collected	Time Collected	Sample Matrix	Comp. or Grab	No. of Containers		100				$\sum_{i}$		Comments
WTP INFLUENT	5/5/99	, ,, ,	WATER	614B	2	+							
WTP INFLUENT WTP BATWEEN GACS	5/5/99	6.55 AM		C12H13	2		メ						
47P EFFLUENT	5/3/95	6;59 4m	WATER	6121713				+					
WIP EFFLUENT	2/5/29	10:02 AM	uHIEN	Comp	1				7				
WTP EFFLUENT	5/5/99	10,05 AM	WATER	comp						X			
,										_			
												<u>.</u>	
•													
						_							
Relinquished by:	Di	ate:	Time	e:	Received	d by:	,				Da	ite:	Time:
Relinquished by:	D	ate:	Time	e:	Received	-					Da	ite:	Time:
Relinquished by:	D	ate: <u>\$</u> /\$	99 Time	:1525	Receive	d by Lab	Mu	JoF.	Jack	sa	Da	te: 5/5	9 Time: 15:25
Shipment Method: HAND DELIVER	ED				Airbill Nu				ī				
Turnaround Time Required:	Comments	:											

Routine\_\_\_\_\_ Rush (Specify)

**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

Matrix: Water

Received: 05/12/99 15:35

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

Notes:

J-Estimated value

Date: May 24,1999

Monika Santucci

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

5000 Brittonfield Parkway



### **Chain of Custody**

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

Client: O'BRIEN + GERE TEC	HNICK	AL SE	FRUIC	ES ,	/NC				Ar	alysis	/Metho	bc	
Project: TTT FINANCIAL (	FORER	IR A	CCUR	ME	DIE								
Sampled by:								15					
Client Contact: AL FAIRELL JERRY 130 RIV		Ph	one # $\hat{\epsilon}$	2316 370	109			\Y					
Sample Des	cription	1					(5)	7	//	/ /	//	//	
Sample Location	Date Collected	Time Collected	Sample Matrix		No. of Containers		$\bigvee$						Comment
UTP EFFLUENT	5/12/9	11:00 Hin	WATER	comp		X							
										<u> </u>			
	1	1									-		<u> </u>
				-		<u> </u>					<u> </u>		
					<u> </u>	_	<u> </u>	<u> </u>	<u> </u>		<u> </u>		<u> </u>
	-							_	<u> </u>			<del>                                     </del>	
· ·	1	Le Company		-						<del>                                     </del>			<u> </u>
							<u> </u>					1	
												<u> </u>	
Relinquished by:	D	ate:	Time	<b>e</b> :	Received	d by:				_	Da	ite:	Time:
Relinquished by:		ate:	Time		Received	-					Da	ite:	Time:
Relinquished by:		)ate: 5//	ZFCTIM	e:1 <b>5</b> 35	Receive	d by Lat	: Ma	ah F.(	aclass	an_	Da	ite:5/12	95 Time. 15:35
Shipment Method: 44ND DELIVER	ED				Airbill Nu	ımber:			1	_			

Rush (Specify)	
Cooler Temperature:	300

Routine X

**Turnaround Time Required:** 

Comments:

#### ATTACHMENT B

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

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting Proj. Desc: Fayetteville, New York

Sample: M1121

Samp. Description: MW-6

Primary column: Y

Units: ug/L

Column: DB-VRX 75m x .45mm ID Dilution: 2 Instrument: 9001

#### **Analytical Results Method: 8021**

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 04/29/99

Received: 04/29/99

% Solids:

Prepared: Analyzed: 05/12/99

Sample Size: 5 ml

Matrix: Water

Number of analytes: 34

QC Batch: 051299W1

Parameter	Result	Qua1	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.
l,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: May 14,1999

Monika Santucci

Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting
Proj. Desc: Favetteville, New Y

Job No.: 3435.021.517 Certification NY No.: 10155

Proj. Desc: Fayetteville, New York

Sample: M1121 Samp. Description: MW-6 Primary column: Y

Received: 04/29/99 Prepared:

Collected: 04/29/99

Matrix: Water QC Batch: 051299W1

% Solids:

Units: ug/L Column: DB-VRX 75m x .45mm ID Analyzed: 05/12/99

Sample Size: 5 ml

Dilution: 2 Instrument: 9001 Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL Notes
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.

Surrogate	Result Qu	al Col	Limits	Notes
2-Chloropropane (surrogate)	92.%	1	69-118	
Fluorobenzene (surrogate)	100.%	1	85-119	

Notes:

 $\ensuremath{\text{\#}}$  - Outside control limits. U - Undetected at the reported level.

J - reported value is estimated.

E - concentration exceeded the calibration range and is estimated.

Authorized: North Sanfucci

Date: May 14,1999 Monika Santucci

Client: O'Brien & Gere Engineers, Inc. Project: Accurate Die Casting

Proj. Desc: Fayetteville, New York

Sample: M1117

Samp. Description: MW-9 Primary column: Y

Units: ug/L

Column: DB-VRX 75m x .45mm ID Dilution: 2 Instrument: 9001

### Analytical Results Method: 8021

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 04/29/99

Received: 04/29/99

Matrix: Water QC Batch: 051299W1

Prepared: 04/29/99

% Solids:

Analyzed: 05/12/99

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.	Ü	1	2.
Chlorobenzene	<2.	Ü	1	2.
Chloroethane	<2.	U	. 1	2.
2-Chloroethylvinyl ether	<20.	Ü	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.	Ü	1	2.
Dichloromethane	<2.	U	1	2.
1,2-Dichloropropane	<2.	Ü	1	2.
cis-1,3-Dichloropropylene	<2.	Ü	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.

J - reported value is estimated.

Authorized: North Sanfucci

Date: May 14,1999 Monika Santucci

<sup># -</sup> Outside control limits. U - Undetected at the reported level.

E - concentration exceeded the calibration range and is estimated.

**Analytical Results Method: 8021** 

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting

Samp. Description: MW-9

Sample: M1117

Job No.: 3435.021.517 Certification NY No.: 10155

Proj. Desc: Fayetteville, New York

Matrix: Water

Collected: 04/29/99 Received: 04/29/99

Analyzed: 05/12/99

QC Batch: 051299W1

Prepared:

%Solids:

Primary column: Y Units: ug/L

Sample Size: 5 ml

Column: DB-VRX 75m x .45mm ID 2 Instrument: 9001 Dilution:

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:

# - 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

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

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting
Proj. Desc: Fayetteville, New York

Sample: M1115

Samp. Description: MW-10

Primary column: Y Units: ug/L

Column: DB-VRX 75m x .45mm ID Dilution: 25 Instrument: 9001

Analytical Results Method: 8021

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 04/29/99

Analyzed: 05/10/99

Received: 04/29/99

Matrix: Water

QC Batch: 051099W1

Prepared: %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	2,5
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.	Ŭ	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

J - reported value is estimated.

Authorized: North Sanfuce

Date: May 14,1999 Monika Santucci

<sup># -</sup> Outside control limits. U - Undetected at the reported level.

E - concentration exceeded the calibration range and is estimated.

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

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
Xvlenes (total)	<75.	U	1		75

Surrogate	Result Qual	Col	<u>Limits</u>	Notes
2-Chloropropane (surrogate)	98.%	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: North Sanfucer

Date: May 14,1999 Monika Santucci

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting Proj. Desc: Fayetteville, New York

Sample: M1116

Samp. Description: MW-11

Primary column: Y

Units: ug/L Column: DB-VRX 75m x .45mm ID

Dilution: 50 Instrument: 9001

#### **Analytical Results Method: 8021**

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 04/29/99

Prepared:

Received: 04/29/99

Matrix: Water

OC Batch: 051099W1

% Solids:

Analyzed: 05/10/99 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

Date: May 14,1999 Monika Santucci

<sup># -</sup> Outside control limits. U - Undetected at the reported level.

J - reported value is estimated.

E - concentration exceeded the calibration range and is estimated.

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

Analyzed: 05/10/99

Prepared:

Received: 04/29/99

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	<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

Surrogate	Result Qual	Col	<u>Limits</u>	Notes
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.

Monika Santucci

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting Proj. Desc: Fayetteville, New York

Sample: M1119

Samp. Description: MW-14

Primary column: Y Units: ug/L

Column: DB-VRX 75m x .45mm ID Dilution: 10 Instrument: 9001

#### **Analytical Results Method: 8021**

Job No.: 3435.021.517 Certification NY No.: 10155

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.	Ū	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.

J - reported value is estimated.

Authorized:

Date: May 14,1999

<sup># -</sup> Outside control limits. U - Undetected at the reported level.

E - concentration exceeded the calibration range and is estimated.

**Analytical Results Method: 8021** 

Client: O'Brien & Gere Engineers, Inc. Project: Accurate Die Casting

Job No.: 3435.021.517 Certification NY No.: 10155

Proj. Desc: Fayetteville, New York

Collected: 04/29/99

Matrix: Water

Sample: M1119 Samp. Description: MW-14

Received: 04/29/99

QC Batch: 051299W1

Primary column: Y

Prepared:

%Solids:

Units: ug/L

Analyzed: 05/12/99

Sample Size: 5 ml

Column: DB-VRX 75m x .45mm ID Dilution: 10 Instrument: 9001

Number of analytes: 34

Parameter	<u>Result</u>	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	<u>Limits</u>	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

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting Proj. Desc: Fayetteville, New York

Sample: M1120

Samp. Description: MW-17

Primary column: Y Units: ug/L

Column: DB-VRX 75m x .45mm ID

Dilution: 10 Instrument: 9001

### Analytical Results Method: 8021

Job No.: 3435.021.517 Certification NY No.: 10155

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	<u>Result</u>	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.	Ü	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.

 $\mbox{\it\#}$  - Outside control limits.  $\,$  U - Undetected at the reported level.

J - reported value is estimated.

E - concentration exceeded the calibration range and is estimated.

Authorized: North Sanfucci

Date: May 14,1999 Monika Santucci

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

Prepared:

Received: 04/29/99

Matrix: Water QC Batch: 051299W1

%Solids:

Analyzed: 05/12/99

Sample Size: 5 ml

Number of analytes: 34

Parameter	<u>Result</u>	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	<u>Result Qual</u>	Col	<u>Limits</u>	Notes
2-Chloropropane (surrogate)	86.%	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: North Sanfucci

Date: May 14,1999 Monika Santucci

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting Proj. Desc: Fayetteville, New York

Sample: M1122

Samp. Description: MW-18

Primary column: Y

Units: ug/L

Column: DB-VRX 75m x .45mm ID Dilution: 25 Instrument: 9001

#### **Analytical Results Method: 8021**

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 04/29/99

Received: 04/29/99

Prepared: Analyzed: 05/13/99 % Solids:

Matrix: Water

Sample Size: 5 ml

Number of analytes: 34

QC Batch: 051399W1

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.

Date: May 14,1999

<sup># -</sup> Outside control limits. U - Undetected at the reported level.

J - reported value is estimated.

E - concentration exceeded the calibration range and is estimated.

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.	Ū	1		25.
Trichloroethylene	620.		1		25.
Trichlorofluoromethane	<25.	U	1		25.
Vinyl Chloride	<25.	Ū	1		25.
Xylenes (total)	<75.	Ū	1		75.

Surrogate	Result Qual	Col	Limits Not	es.
2-Chloropropane (surrogate)	92.%	. 1	69-118	
Fluorobenzene (surrogate)	94.%	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: North Saffred

Date: May 14,1999 Monika Santucci

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting Proj. Desc: Fayetteville, New York

Sample: M1123

Samp. Description: MW-21

Primary column: Y

Units: ug/L

Column: DB-VRX 75m x .45mm ID Dilution: 100 Instrument: 9001

#### **Analytical Results Method: 8021**

Job No.: 3435.021.517 Certification NY No.: 10155

Matrix: Water

Collected: 04/29/99

Received: 04/29/99

Prepared:

% Solids:

Analyzed: 05/13/99

Sample Size: 5 ml

QC Batch: 051399W1

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.	Ü	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.

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

J - reported value is estimated.

E - concentration exceeded the calibration range and is estimated.

Date: May 14,1999

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

Prepared:

Received: 04/29/99

Matrix: Water

QC Batch: 051399W1

% Solids:

Analyzed: 05/13/99

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	<u>Result Qual</u>	Col	Limits_	<u>Notes</u>
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: North Safficer

Date: May 14,1999 Monika Santucci

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting Proj. Desc: Fayetteville, New York

Sample: M1125

Samp. Description: MW-22

Primary column: Y Units: ug/L

Column: DB-VRX 75m x .45mm ID Dilution: 1 Instrument: 9001

**Analytical Results** Method: 8021

> Job No.: 3435.021.517 Certification NY No.: 10155

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.

Date: May 14, 1999

<sup># -</sup> Outside control limits. U - Undetected at the reported level.

J - reported value is estimated.

E - concentration exceeded the calibration range and is estimated.

**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
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.

Surrogate	<u>Result Qual</u>	Col	Limits Notes	
2-Chloropropane (surrogate)	93.%	1	69-118	
Fluorobenzene (surrogate)	102.%	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

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting Proj. Desc: Fayetteville, New York

Sample: M1124

Samp. Description: MW-24

Primary column: Y

Units: ug/L

Column: DB-VRX 75m x .45mm ID Dilution: 100 Instrument: 9001

#### **Analytical Results Method: 8021**

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 04/29/99

Received: 04/29/99

QC Batch: 051399W1

Prepared:

%Solids:

Matrix: Water

Analyzed: 05/13/99

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.	Ū	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.	Ū	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.	Ū	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.

J - reported value is estimated.

Date: May 14,1999

<sup># -</sup> Outside control limits. U - Undetected at the reported level.

E - concentration exceeded the calibration range and is estimated.

**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

OC Batch: 051399W1

% Solids:

Sample Size: 5 ml

Number of analytes: 34

Parameter	<u>Resul</u> t	Qual	Col	MDL RL Notes
1,1,2-Trichloroethane	<100.	U	1	100.
Trichloroethylene	4300.		1	100.
Trichlorofluoromethane	<100.	U	. 1	100.
Vinyl Chloride	<100.	Ū	1	100.
Xylenes (total)	<300.	U	1	300.

Surrogate	Result Qual	Col	<u>Limits Not</u>	:es
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.

Date: May 14,1999

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting Proj. Desc: Fayetteville, New York

Sample: M1118

Samp. Description: Sump Primary column: Y

Units: ug/L

Column: DB-VRX 75m x .45mm ID Dilution: 25 Instrument: 9001

## Analytical Results Method: 8021

Job No.: 3435.021.517 Certification NY No.: 10155

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.	Ū	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.

J - reported value is estimated.

Authorized: Nonka Janfucer

<sup># -</sup> Outside control limits. U - Undetected at the reported level.

E - concentration exceeded the calibration range and is estimated.

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting Proj. Desc: Fayetteville, New York

Sample: M1118

Samp. Description: Sump

Primary column: Y

Units: ug/L

Column: DB-VRX 75m x .45mm ID Dilution: 25 Instrument: 9001

#### **Analytical Results Method: 8021**

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 04/29/99

Received: 04/29/99

QC Batch: 051399W1

Prepared:

%Solids:

Matrix: Water

Analyzed: 05/13/99

Sample Size: 5 ml

Number of analytes: 34

Parameter_	Result	Qual	Col	MDL	RL Notes
1,1,2-Trichloroethane	<25.	U	1		25.
Trichloroethylene	400.		1		25.
Trichlorofluoromethane	<25.	U	1		25.
Vinyl Chloride	<25.	U	. 1		25.
Xylenes (total)	<75.	U	1		75.

<u>Surrogate</u>	Result Qual	Col	Limits	Notes
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.

Date: May 14,1999 Monika Santucci

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting Proj. Desc: Fayetteville, New York

Sample: M1126

Samp. Description: QC Trip Blank

Primary column: Y

Units: ug/L

Column: DB-VRX 75m x .45mm ID Dilution: 1 Instrument: 9001

# Analytical Results Method: 8021

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 04/29/99

Received: 04/29/99

Prepared: % Solids:

Analyzed: 05/12/99

Matrix: Water

QC Batch: 051299W1

Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL RL Notes
Benzene	<1.	U	1	1.
Bromodichloromethane	<1.	Ŭ	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.

J - reported value is estimated.

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

<sup># -</sup> Outside control limits. U - Undetected at the reported level.

E - concentration exceeded the calibration range and is estimated.

**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

OC Batch: 051299W1

% 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.

Surroqate	Result Qual	Col	Limits No	<u>otes</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.

ırk 13057 5000 Brittonfield Parkway

(	750

**Chain of Custody** 

New Yor	
East Syracuse,	(315) 437-0200

Client: OBRIEN & Gere FUETNEERS, INC.	ERS, IN	(2)					Analysis/Method	lethod	
Project: FORMER ACCHINGE DIE CASTING	CASTIL	Ø					\		
Sampled by: CHAWN ODELL		!				(4)	\	\ \ \	\ \
12		Phc	hone #35) 437-6100	5)437-6	00)				
Sample Description	scription								
Sample Location	Date Collected	Date Time Collected Collected	Sample Matrix	Comp. or Grab	No. of Containers	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	\		Comments
01-01/	4-29-8	4-29-910750	WINTER		2	ス ス			
11-MM		0830	/	/	/	7			
MW-9	· · ·	BIIS			/	<u>_</u>			
Sums		0860				A			
17/1-11/1		0955				4			
MW-17		1030				4			
MW-6		0011				4			
MW-18		1130				7			
MW-21		1150				+			
MW-24		1210				4			
MW-22		1240			X	7			
TRIP BLANK	-		$\wedge$		/	1			
Relinquished by: (Jaun ODell)	Q	Date: 4-29-	9-94 Time: 1325	:1325	Received by:	by:		Date:	Time:
Relinquished by:	Q	Date:	Time:	::	Received by:	by:		Date:	Time:
Relinquished by:	D	Date:	Time:		Received	Received by Lab: McJason	uchasan	Date: 4/29/	99 Time. 13:25
Shipment Method:					Airbill Number:	mber:			

Routine\_\_\_\_\_\_Rush (Specify)\_\_

Comments:

Cooler Temperature:\_\_

Original-Laboratory Copy-Client

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting - Fayetteville, NY Proj. Desc: Bi-Monthly Effluent Sampling

Sample: M2563

Samp. Description: WTP Effluent - Grab

Instrument: HP5970 GC/MS#2

Units: ug/L

Number of analytes: 14

## Analytical Results Method: 8260

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 05/19/99

Matrix: Water

Received: 05/19/99

QC Batch: 052499W2

Prepared: 05/24/99 % Solids:

Purge volume: 25 mL

Surrog

Parameter	Result	Limits Dilution	Analyzed Notes
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:

Authorized:

Date: May 25,1999

**Analytical Results** Trace Metals

Job No.: 3435.021.517

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting - Fayetteville, NY

Proj. Desc: Bi-Monthly Effluent Sampling

Sample: M2564 Samp. Description: WTP Effluent - Composite

Units: mg/L

Certification NY No.: 10155

Collected: 05/19/99 Matrix: Water Received: 05/19/99 %Solids:

Number of analytes: 2

Parameter	Result	Qual	MDL	RL	Method	Prepared	Analyzed	QC Batch	Dilut. Note
Mercury	<.0002	U	.0001	.0002	245.1	05/26/99	05/27/99	052699 <b>W</b> 1	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:

Date: June 2,1999

# **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

Matrix: Water

Received: 05/19/99 15:22

Parameter	Result Units	Method	Prepared Analyzed	QC Batch Note
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

5000 Brittonfield Parkway East Syracuse, New York 13057 **Chain of Custody** 

(315) 437-0200

Client: O'BRIEN V GERE TECHI	NICHL	SFNV	INC	<u> </u>					An	alysis	/Meth	od	
Project: TTT FINANCIAL (FOR	MER	ACCUY	2015	DIE	)					18			
Sampled by: JERRY BORN	Sampled by: JERRY BORN									WA	/		
Sampled by: JERRY BORN  Client Contact: AL FARELL JEI212X 130 RN	Phone # 2316									27			
Sample Description						/	5		DL7	/ /	//	/ /	
Sample Location	Date Collected	Time Collected	Sample Matrix	Comp. or Grab	No. of Containers				/_				Comments
WTP EFFLUENT	3/9/99		WATEIL	643	2			1					
WIP EFF LUENT	5/19/90	10:13AM	WATER	בן משי	1		<u>X</u>						
WIP EFFLUENT	5/17/2	10:10pl	WATEIL	comp	1	X	<del> </del>					\	
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Relinquished by:	D	ate:	Time	e:	Received	d by:		\ <u> </u>			Da	ate:	Time:
Relinquished by:	D	ate:	Tim	e:	Received	d by:					Da	ate:	Time:
Relinquished by: Druf Sen	D	ate: 5/19	199 Tim	e:452Z	Receive	d by Lal	b: Yu	als F	Jack	Lee-	Da	ate: 5/19	9/99 Time. 15: 2]
Shipment Method: HAND DELIVERY	P				Airbill Nu				t =				
- <del> </del>													

Turnaround Time Required:  Routine	Comments:
Rush (Specify)	

#### **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

Matrix: Water

Received: 05/26/99 15:25

Parameter	Result Qual	MDL	RL Units	Method	Prepared Analyzed	QC Batch Note
Total dissolved	480.		10 mg/L	EPA 160.1	06/02/99	060299W12
solids						
Total suspended	<5. Ŭ		5 mg/L	EPA 160.2	05/28/99	052899W18
solids						

Notes:

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

Date: June 5,1999

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

### **Chain of Custody**

Client: O'BRIEN Y GERE TECHNICIAL SERV INC  Project: ITT FIVANCIAL (FOIZINEIL ACCUIZIATE DIE)  Sampled by: JERRY BOIZN  Client Contact: DL FAIZIZELL  Phone # 2316 6370107									Ar	alysis	/Meth	od	
Project: ITT FIVANCIAL (FO	1211161	2 ACC	U12191	E DI	(j; -)								
Sampled by: JERRY BOIZN					- /		,					/ .	
Client Contact: AL FARRELL JEIRY BORN		Ph	one#	2316 370	107			N.					
Sample Description						/	(5)	<b>"</b> /	//	/ /	//	//	
Sample Location	Date Collected	Time Collected	Sample Matrix	Comp. or Grab	No. of Containers		Ý_						Comments
WTP EFFLUENT	S/26/99	10:05 19m	WATEIL	comp	1	X							
<u> </u>	<u> </u>							ļ <u></u> -		<u> </u>		ļ	
	<del> </del>	<del> </del>		 						<del>  -</del>	<del> </del>	<u> </u>	
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Relinquished by:	D	ate:	Time	e: 	Received							ite:	Time:
Relinquished by:	D	ate: S/2a	./99, Time	:1525	Receive	d by Lab	: Ma	Set.	icher	٠	Da	te:5/34	/qq Time. 15: 25
Shipment Method: HAND DELIVERED	)				Airbill Nu	ımber:		1					
Turnaround Time Required:	Comments	s:											

Rush (Speci	ry)
Cooler Temperature:	3°c



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:\DIV71\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

		Monitoring Re	quirements		Effluent	Effluent	Effluent	Effluent
Analyte (units)	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	A-A	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.	* <u></u> * *			
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:

Page 1 of 3

<sup>(1)</sup> Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.

<sup>--- -</sup> 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

	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	
	06/09/99	06/10/99	06/15/99	06/16/99	06/17/99	06/22/99	06/23/99	06/24/99	
Analyte	00/05/55	00/10/99	00/13/77	00/10///	00/1///	00/22/99	00/25/99	00/ <b>2</b> (/)	
Flow (GPD)		27350	27130		26804	26340		26270	
pH (SU)		7.85	7.85	ing in <del>an</del> g in the set	7.85	7.87	:	7.85	
Residue, non-filterable (mg/L)	5 U			<b>5</b> U		·	5 U		
Total dissolved solids (TDS) (mg/L)	490			560	i.,	,	510		
CBOD5 (mg/L)				-					
TKN (mg/L)	:			<del></del>					
TOD (mg/L)									
Dissolved Oxygen (mg/L)		100		:		<del></del>			
Aluminum, dissolved (mg/L)		: <b></b>							
Antimony, total (mg/L)									
Chromium, total (mg/L)	<del></del>	<del></del> .							
Cobalt, total (mg/L)									
Copper, total (mg/L)		':	سن	;					
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)	<del></del>			· : : : : : : : : : : : : : : : : : : :			***		
Zinc, total (mg/L)				0.02					
in en de la companya de la companya de la companya de la companya de la companya de la companya de la companya									
cis-1,2-Dichloroethene (ug/L)				0.50 U					
trans-1,2-Dichloroethene (ug/L)	•••			0.50 U			, . <del></del>		
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		4	<del></del>		
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)	<del></del>			5.0 U		en y in <del>non</del> en e			

NOTES:

Page 2 of 3

<sup>(1)</sup> Minimum monitoring requirements based on the SPDES permit modified March 13, 1997.

<sup>--- -</sup> 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

	Effluent	
	06/29/99	
Analyte		
Flow (GPD)	26148	
pH (SU)	7.89	
Residue, non-filterable (mg/L)		
Total dissolved solids (TDS) (mg/L)	( <del></del> ), 그는 사람들은 사람들이 다른 사람들이 되었다. 그 사람들이 사람들이 다른 사람들이 되었다.	
CBOD5 (mg/L)		
TKN (mg/L)		
ΓOD (mg/L)	<del></del>	
Dissolved Oxygen (mg/L)		
Aluminum, dissolved (mg/L)		4 - 1
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)	<del></del>	
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)	그는 사람들은 사람들이 얼마나 나는 사람들이 가장 하는 사람들이 가장 하는 것이 되었다.	
Tetrachloroethene (ug/L)		
Toluene (ug/L)	***	
Trichloroethene (ug/L)		
Acetone (ug/L)		
2-Hexanone (ug/L)		
4-Methyl-2-pentanone (MIBK) (ug/L)	e <del>de</del> la companya de la companya de la companya de la companya de la companya de la companya de la companya de la	

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

Page 3 of 3

#### ATTACHMENT A

## SPDES PERMIT COMPLIANCE MONITORING LABORATORY ANALYTICAL DATA SHEETS

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting - Fayetteville, NY Proj. Desc: Monthly Effluent & Influent Sampling

Sample: M3531

Samp. Description: WTP Effluent - Grab

# - Outside control limits J-Estimated value

Instrument: HP5970 GC/MS#2

Units: ug/L

Number of analytes: 14

## Analytical Results Method: 8260

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 06/02/99

Received: 06/02/99 Prepared: 06/04/99 Matrix: Water QC Batch: 060499W2

% Solids:

/0 SOHus.

Purge volume: 25 mL

	Surrog								
Parameter	Result _	Limits Dilution	Analyzed Notes						
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:

Authorized:

Date: June 8,1999

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting - Fayetteville, NY Proj. Desc: Monthly Effluent & Influent Sampling

Sample: M3529

Samp. Description: WTP Influent

Primary column: Y

Units: ug/L

Column: DB-VRX 75m x .45mm ID Dilution: 50 Instrument: 9001

## Analytical Results Method: 8021

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 06/02/99

Prepared:

Received: 06/02/99

Matrix: Water

QC Batch: 061199W1 %Solids:

Analyzed: 06/11/99

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: Monik

Date: June 14,1999 Monik

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting - Fayetteville, NY Proj. Desc: Monthly Effluent & Influent Sampling

Sample: M3529 Collected: 06/02/99
Samp. Description: WTP Influent Received: 06/02/99

Primary column: Y Units: ug/L

Column: DB-VRX 75m x .45mm ID Dilution: 50 Instrument: 9001

Analytical Results Method: 8021

Job No.: 3435.021.517 Certification NY No.: 10155

ected: 06/02/99 Matrix: Water eived: 06/02/99 QC Batch: 061199W1

Prepared: %Solids:

Analyzed: 06/11/99 Sample Size: 5 ml

Number of analytes: 34

Parameter	<u>Re</u> sult	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	<u>Limits</u>	<u>Notes</u>
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.

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting - Fayetteville, NY Proj. Desc: Monthly Effluent & Influent Sampling

Sample: M3530

Samp. Description: WTP Between GACs

Primary column: Y

Units: ug/L

Column: DB-VRX 75m x .45mm ID Dilution: 1 Instrument: 9001

**Analytical Results Method: 8021** 

> Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 06/02/99

Received: 06/02/99

QC Batch: 061199W1 %Solids:

Prepared:

Matrix: Water

Analyzed: 06/11/99

Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	<u>Col</u>	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: June 14,1999

**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

Collected: 06/02/99 Received: 06/02/99 Matrix: Water

Primary column: Y

Prepared:

QC Batch: 061199W1 %Solids:

Units: ug/L

Column: DB-VRX 75m x .45mm ID Dilution: 1 Instrument: 9001

Analyzed: 06/11/99 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)	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: Date: June 14,1999

**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

Units: mg/L

Samp. Description: WTP Effluent - Composite

Collected: 06/02/99 Received: 06/02/99 Matrix: Water % Solids:

Received:

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:

Date: June 11,1999

Monika

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

#### **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

Matrix: Water

Received: 06/02/99 15:20

Parameter	Result Qual	MDL RL Units	Method	Prepared Analyzed	QC Batch Note
Total dissolved	520.	10 $mg/L$	EPA 160.1	06/07/99	060799W11
solids					
Total suspended	<5. Ŭ	5 mg/L	EPA 160.2	06/08/99	060899W11
solids					

Notes:

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

Date: June 11,1999

5000 Brittonfield Parkway

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



**Chain of Custody** 

Sampled by: \$\frac{1}{2} \frac{1}{2} \frac	Client: 0'13/21/2046/2/1/ TECHNICAL SEXVICES	HNICHE S	EKVÍC	7/ 53	7			Analys	Analysis/Method		
Phone # 23/6 9  Phone # 23/6 9  Date Collected Matrix or Grab Containers  (1) 19 19 19 19 19 19 19 19 19 19 19 19 19	Project: ITT FINANCIAL (FO	emer Acco	316470				*		\ \*	\	
Phone # 637 6, 09   10 mg	Sampled by: TFRRY BORN									/2/	\ \
Sample Description	PAREIC PY 80RV	4 4	one #	370109						4	
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Date:         Time:         Received by:           Date:         Time:         Received by:           Date:         √2/qç Time:/32∪         Received by Lab:           Airbill Number:         Airbill Number:											
Date: c/2/qc, Time: // Airbill Number:											
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Date:       Time:       S20       Received by Lab:       Mod F (ραλων)       Date:       Up/q 9         Airbill Number:       Airbill Number:		Date:	Time		sceived by	<i>'</i> :			Date		Time:
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	1 061 WEW ED			Ai	rbill Num	Jer:	-				

Turnaround Time Required:

Comments:

Routine\_\_\_\_\_\_Rush (Specify)\_

3 Cooler Temperature:\_\_

Original-Laboratory Copy-Client

# **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

Matrix: Water

Received: 06/09/99 15:30

Parameter	Result Qual M	IDL RL Units	Method	Prepared Analyzed	QC Batch Note
Total dissolved	490.	10 mg/L	EPA 160.1	06/14/99	061499W19
solids					
Total suspended	<5. U	5 mg/L	EPA 160.2	06/11/99	061199₩18
201342					

Notes:

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

Authorized:
Date: June 17,1999

5000 Brittonfield Parkway

عارے Chain of Custody

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

Client: O'SRIEN Y GERE T	ECHNI	CAL S	SERU	CF3	INC.				An	alysis	/Metho	od	
Project: ITT FINANCIAL (FO	umer	- ACC	CURA	TE D	$(\bar{z})$						$\overline{}$		////
Sampled by: JERRY BORN								/5					///
Sampled by: JERRY BORN Client Contact: JENRY BORN Client Contact: JENRY BORN		Ph	one#	3701	109			$\chi V$					
Sample Do	escription		•				(5)	У /	/ /	//	//	/ /	
Sample Location		Time Collected	Sample Matrix	Comp. or Grab	No. of Containers	<i>  '</i>	$\angle$						Comments
WTP EFFLUENT	6/9/99	11:32	WATER	comp	1	7							
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Relinquished by:	D	ate:	Time	e:	Received	i by:					Da	ite:	Time:
Relinquished by:	D	ate:	Time	e:	Received	by:				<u> </u>	Da		Time:
Relinquished by:	D	ate:4/9/	99 Time	:1530	Received	byLab	Ba	Baro	Van	ling	Da	ite: 6/9	199 Time. 15:3
Shipment Method: HAND DELIVERE					Airbill Nu	ımber:						ار المستج	
Turnaround Time Required:	Comments	:							,			_	

Cooler Temperature:

Routine\_ Rush (Specify)

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting - Fayetteville, NY Proj. Desc: Bi-Monthly Effluent Sampling

Sample: M4506

Samp. Description: WTP Effluent - Grab

Instrument: HP5970 GC/MS#2

Units: ug/L

Number of analytes: 14

# Analytical Results Method: 8260

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 06/16/99

Matrix: Water

Received: 06/16/99 (

QC Batch: 062399W2

Prepared: 06/23/99 % Solids:

Purge volume: 25 mL

Surrog

Parameter	Result_	Limits Dilution	Analyzed Notes
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

**Analytical Results Trace Metals** 

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting - Fayetteville, NY Proj. Desc: Bi-Monthly Effluent Sampling

Samp. Description: WTP Effluent - Composite

Sample: M4507

Units: mg/L

Collected: 06/16/99 Received: 06/16/99 Matrix: Water

%Solids:

Certification NY No.: 10155

Job No.: 3435.021.517

Number of analytes: 2

Parameter	Result	Qual	MDL	RL_	Method	Prepared	Analyzed	QC Batch	Dilut. Note
Mercury	<.0002	U	.0001	.0002	245.1	06/22/99	06/23/99	062299W2	ı
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: Monki Sanflecen Date: June 25,1999

# **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

j j

Sample: M4507 Collected: 06/16/99

Samp. Description: WTP Effluent - Composite Received: 06/16/99 15:40

Matrix: Water

Parameter	Result Qual	MDL RL Units	Method	Prepared Analyzed	QC Batch Note
Total dissolved	560.	10 mg/L	EPA 160.1	06/21/99	062199W13
solids					
Total suspended	<5. Ŭ	5 mg/L	EPA 160.2	06/21/99	062199₩11
solids					

Notes:

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

Authorized: North Santucci

Date: June 24,1999 Monika Santucci

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

5000 Brittonfield Parkway
East Syracuse, New York 13057

2180

**Chain of Custody** 

(315) 437-0200 Analysis/Method Client: OBDIEN & GERE TECHNICAL SERVICES INC Project: FINANCIAL (FORMER ACCUPATE DE Sampled by: Phone # 2316 **Client Contact: Sample Description** No. of Date Time Sample Comp. Sample Location Comments or Grab Containers Collected Collected Matrix C141B E FFLUEN WATER com? WATER COM 11 H Received by: Date: Time: Relinquished by: Date: Time: Date: Time: Received by: Relinquished by: Date: Time: Date: 4//6/99/ Time:/540 Received by Lab: Relinquished by: Date: Shipment Method: DELIBERED Airbill Number: Turnaround Time Required: Comments:

	20/
Cooler Temperature:	> (

Routine\_\_\_\_\_\_

# **Analytical Results Wet Chemistry**

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting - Fayetteville, NY

Proj. Desc: Weekly Effluent Sampling

Samp. Description: WTP Effluent

Job No.: 3435.021.517 Certification NY No.: 10155

Received: 06/23/99 15:35

Collected: 06/23/99

Matrix: Water

Parameter	Result Qual	MDL RL Units	<u>Method</u>	Prepared Analyzed	QC Batch Note
Total dissolved	510.	10 mg/L	EPA 160.1	06/29/99	062999W20
solids					
Total suspended	<5. U	5 $mg/L$	EPA 160.2	06/30/99	063099W11
solids					

Notes:

Sample: M4889

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

Authorized:

Date: July 3,1999

Aonika Santucci

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

5000 Brittonfield Parkway

**Chain of Custody** 

East Syracuse, New York 13057

York 13057	Analysis/Method					Comments	\ \ \ \						by: Date: Time:	by: Date: Time:	Received by Lab: Macha f (11/6000 Date: 6/23/19 Time.15:35
East Syracuse, New York 13057 (315) 437-0200	, c-			6103		Comp. No. of or Grab Containers	1 cha						Received by:	Received by:	
East Syracuse, (315) 437-0200	EN INC			Phone # 23/6/		Sample	WHEELS.						Time:	Time:	12/903 Time: 1535
	ItL SEN	3/12		Ph	otion	Date Time Collected	C/23/2/11/2/2012						Date:	Date:	Date: 6/7,
	Client: O'BRIEN & GENE TEHNACHL SEPON	Project: (FOKINGA 19CCL' 12HTF DIE	Sampled by: TEINY SORN	Client Contact: パルデルボル・	Sample Description	Sample Location Col	4 TO EFFLUENT						Relinquished by:	Relinquished by:	Relinquished by:

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Comments:

300 Cooler Temperature:\_

Original-Laboratory Copy-Client



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

1:\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

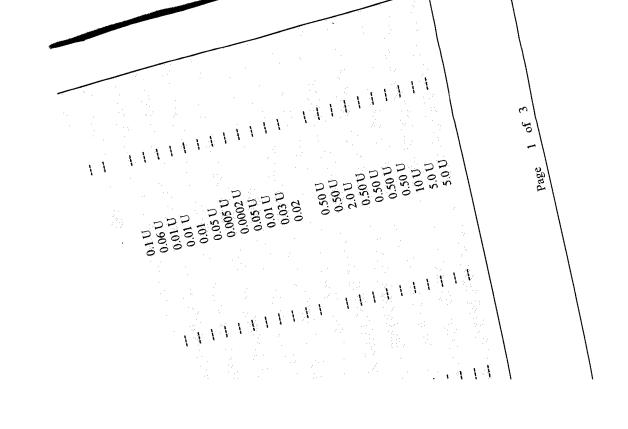
C. Johnson, Esq. - ITT Industries, Inc.

T. Brown, P.E. - O'Brien & Gere Technical Services, Inc.

R. Cheesman, P.E. - O'Brien & Gere Technical Services, Inc



#### FORMAYETTEVILLE, NEW YORK During the month of July 1999, O'Brien & Gere continued operating the ground water As of July 30,1999, a total of 28,089,110 gallons of collection and treatment system. During the month of July 1999, O'Brien & Gere continued operating the ground water of 28,089,110 gallons of July 30,1999, a total of 28,089,110 gallons on February 5, 1996. Since July 1, 1999 collection and treatment system. As of July 30,1999, a total of 28,089,110 gallons on February 5, 1996. Since July 1, 1999 collection and treatment system. As of July 30,1999, a total of 28,089,110 gallons on February 5, 1996. Since July 1, 1999 collection and treatment system. collection and treatment system. As of July 30,1999, a total of 28,089,110 gallons of 1999, on February 5, 1996. Since July 1, 1, 1999. As of July 30,1999, a total of 28,089,110 gallons of February 5, 1996. Since July 1, 1999. As of July 30,1999, a total of 28,089,110 gallons of February 5, 1996. Since July 1, 1999. 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Since July 1, 1999, on February 5, 1999, on February 5, 1999, on February 5, 1999, on February 5, 1999, 732,070 gallons of groundwater was treated; 561,030 gallons from recovery well RW-1, treated; 561,030 gallons from the sump outside the northeast corner trench to the proundwater collection trench to the groundwater collection trench tr om RW-2, and 2,210 gallons from the sump outside the northeast corner trench the groundwater collection trench from the groundwater recovered from the neriod No flow was recovered Area during the neriod trench former VOC/PAH/PCR Soils Area during the neriod 168,830 gallons from RW-2, and 2,210 gallons from the groundwater color the building. No flow was recovered from the during the period. To the building former VOC/PAH/PCB Soils Area during the former VOC/PAH/PCB soils Area during the period. During the month of July 1999, O'Brien & Gere performed the sampling activities associated by the Consent Order. The results of the with the SPDES Fact Sheet (#734052) required by During the month of July 1999, O'Brien & Gere performed the sampling activities associated The results of the with the SPDES Fact Sheet (#734052) required by the effluent are discussed in Item b. With the SPDES Fact Sheet (#734052) with the SPDES sampling of the groundwater treatment system effluent are discussed in Item b. with the SPDES Fact Sheet (#734052) required by the Consent Order. The results of the SPDES Fact Sheet (#734052) required by the Consent are discussed in Item b. SPDES sampling of the groundwater treatment system effluent are discussed in Item b. O'Brien & Gere Technical Services placed approximately 300 cubic yards of soil, excavated collection trench. into the Corrective Action during construction of the groundwater collection trench. O'Brien & Gere Technical Services placed approximately 300 cubic yards of soil, excavated into the Corrective Action into the NySDEC in the NySDEC in the groundwater collection of the groundwater collection of the groundwater. Approval to do so was provided by the NySDEC in during construction of the site. Approval to do so was provided by the NySDEC in Management Unit (CAMU) at the site. 1. during construction of the groundwater collection trench, into the Corrective Action trench, into the PysDEC in Action trench, into the Corrective Action trench, into the Corrective Action trench, into the Corrective Action trench, into the Corrective Action trench, into the Corrective Action trench, into the Corrective Action trench, into the Corrective Action trench, into the Corrective Action trench, into the Corrective Action trench, into the Corrective Action trench, into the Corrective Action trench, into the Corrective Action trench, into the Corrective Action trench, into the Corrective Action are also account to the NYSDEC in Approval to do so was provided by the NYSDEC in Approval to • The analytical results associated with the SPDES Fact Sheet monitoring activities are provided in Table 1. The laboratory analytical data sheets are in July 1999 are summarized in Table 1. The analytical results associated with the SPDES Fact Sheet monitoring activities performed. The laboratory analytical data sheets are provided in Table 1. The laboratory analytical data sheets are provided in July 1999 are summarized in Table 1. The laboratory analytical data sheets are provided in July 1999 are summarized in Table 1. The laboratory analytical data sheets are provided in July 1999 are summarized in Table 1. 2. a letter dated July 14, 1999. The treatment system performance monitoring will continue to be conducted in accordance monitoring will continue to be conducted in accordance monitoring will continue to be conducted in accordance will be conducted in accordance will be conducted in accorda 3. Sampling and Test Results The treatment system performance monitoring will continue to be conducted in according to the system performance monitoring will continue to be conducted in according to the system performance monitoring will continue to be conducted in according to the system of the Projected Activities within next 45 days Continue operation of the groundwater recovery and treatment system. *(d)* 1. (c) Activities in support of Community Relations Plan ١. 2. Exceedences to SPDES Fact Sheet Limits **(b)** ١. None (e) 1.





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

1:\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)

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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

7 6 - 6

#### (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

		Monitoring Re	quirements		Effluent	Effluent	Effluent	Effluent
Analyte (units)	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	da union
CBOD5 (mg/L)	Monitor	Monitor	Quarterly	34hr 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	- Prints		9.19	
Aluminum, dissolved (mg/L)	Monitor	0.2	Quarterly	3-hr comp.	<u> </u>	11	0.1 U	, <del></del> -
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.	٠٠ ځتر [	n=n	0.01 U	
Cobalt, total (mg/L)	Monitor	0.01	Quarterly	3-hr cozinp.	``}	-~-	0.01 U	
Copper, total (mg/L)	Monitor	0.1	Quarterly	3-1-ar comp.		and the second	0.01	والمراجع والمحكم والمراجع والمراجع
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.	1)		0.05 U	
Silver, total (mg/L)	Monitor	0.1	Quarter 7ly	3-hr comp.	11		0.01 U	
Vanadium, total (mg/L)	Monitor	0.03	Overterly	3-hr comp.			0.03 U	
Zinc, total (mg/L)	Monitor	0.3	2/Month	3-hr comp.	11		0.02	
	<b>₩</b>				- []		en esta esta esta esta esta esta esta esta	
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		44	0.50 U	
Methylene chloride (ug/L)	Monitor	50	2/Month	Grab	<b>}</b> }	•	2.0 U	
1,1,2,2-Tetrachloroethane (ug/L)	Monitor	30	2/Month	Grab	11		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	<b> </b>		10 U	
2-Hexanone (ug/L)	Monitor	1000	2/Month	Grab	<b> </b>		5.0 U	·
4-Methyl-2-pentanone (MIBK) (ug/L)	Monitor	1000	2/Month	Grab	11	Para de la maria	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

 $TOD = 1.5 \times CBOD5 + 4.5 \times TKN$ 

Page 1 of 3



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
	25580		25469	25110		24060	24610	
Flow (GPD)	23380 7. <b>8</b> 9		25469 7. <b>8</b> 9	7.89	 N	24960 7.89	24618	
pH (SU) Residue, non-filterable (mg/L)	7.09				 		7.89	5 U
		5.0 U			5 U			
Total dissolved solids (TDS) (mg/L)	<del>:</del> -1a	540	*** .		580	A A		700
CBOD5 (mg/L)			 	<del></del>	**************************************			1.00
TKN (mg/L)								
TOD (mg/L)				•••				
Dissolved Oxygen (mg/L)	·				<del>-</del>		'	
Aluminum, dissolved (mg/L)		e l <del>ijil</del> ari.		in the second of	4 - <del></del> 1860 -	5 Luc	· <del></del>	
Antimony, total (mg/L)								
Chromium, total (mg/L)					- <del></del> )			
Cobalt, total (mg/L)								
Copper, total (mg/L)					4 145.			` <u></u>
Iron, total (mg/L)								
Lead, total (mg/L)					<b>-∔</b> }}			
Mercury, total (mg/L)					0.0002 U			***
Nickel, total (mg/L)			,		·			·
Silver, total (mg/L)								
Vanadium, total (mg/L)	-	الرياق في المحاجب					1	: 
Zinc, total (mg/L)					0.02			
		till a sea						
cis-1,2-Dichloroethene (ug/L)		•••			0.50 U			
trans-1,2-Dichloroethene (ug/L)		- Yangi		garage and the second	0.50 U			4. <del>4</del> 44 8 33
Methylene chloride (ug/L)					2.0 U			
1,1,2,2-Tetrachloroethane (ug/L)		general and the second	1	in the second of the second	0.50 U			ATA
Tetrachloroethene (ug/L)					0. <b>5</b> 0 U			
Toluene (ug/L)					0.50 U			
Trichloroethene (ug/L)				1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0. <b>5</b> 0 U			
Acetone (ug/L)				<u></u>	10 U			4.5 <u></u> 6
2-Hexanone (ug/L)	79 	# 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1 1 144 A. A. A. A. A. A. A. A. A. A. A. A. A.	5.0 U		1 <sup>17</sup>	- 17 · 1 <del>7 · 1</del>
4-Methyl-2-pentanone (MIBK) (ug/L)	e d				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

 $TOD = 1.5 \times CBOD5 + 4.5 \times TKN$ 

Page 2 of 3



# Table 1 Accurate Die Casting Site

# Fayetteville, New York Monitoring Requirements and Effluent Data

	Effluent											
Analyte	04/29/99											
Flow (GPD) pH (SU)	24080	 \$4.	7 47 A					20	2.5 2.5 5.0			
Total dissolved solids (TDS) (mg/L)		# 15 min										
CBOLD (mg/L) TKN (mg/L) TOB (mg/L)				en en en en en en en en en en en en en e								
Dissolved Oxygen (mg/L)	1 1				Ş-							
Aluminum, dissolved (mg/L)												
Chromium, total (mg/L)	}											
Copper, total (mg/L)	1 1	*					1					
Lead, total (mg/L)  Maroura: total (mg/L)	-											
Nickel, total (mg/L)	l I											
Vanadium, total (mg/L)	1 1											
Zinc, total (mg/L)	Ι.				4.						e.	
trans-1,2-Dichloroethene (ug/L)  Most-right (ug/L)												
1,1,2,2-Tetrachloroethane (ug/L) Tetrachloroethane (ug/L)						÷						
Toluene (ug/L) Tricklandthang (ug/L)	l											
Acetone (ug/L)  2. Hazanone (ug/L)									- 1 - 1 - 1			
4-Methyl-2-pentanone (MIBK) (ug/L)	** 											w <sup>**</sup>

3 of 3

Page

(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

NOTES:

#### ATTACHMENT A

### SPDES PERMIT COMPLIANCE MONITORING LABORATORY ANALYTICAL DATA SHEETS

**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

Collected: 07/07/99 11:10

Matrix: Water

Samp. Description: WTP Effluent - Composite

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

19

Aonika Santucci

**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

Units: mg/L

Samp. Description: WTP Effluent - Composite

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	071199 <b>W</b> 1	1

Notes:

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

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)

Collected: 07/07/99 Received: 07/07/99 Matrix: Water % Solids:

Units: mg/L

Number of analytes: 1

Parameter	Resu <u>lt</u>	Qual	MDL	RĹ	Method	Prepared	Analyzed	QC Batch	Dilut. Note
Aluminum, filtered	< . 1	U	.02	. 1	200.7	07/11/99	07/12/99	071199 <b>W</b> 1	1

Notes:

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

Date: July 16,1999

Monika Santucci

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting - Fayetteville, NY Proj. Desc: Monthly Effluent & Influent Sampling

Sample: M6094

Samp. Description: WTP Influent

Primary column: Y

Units: ug/L

Column: DB-VRX 75m x .45mm ID Dilution: 50 Instrument: 9001

### Analytical Results Method: 8021

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 07/07/99

Received: 07/07/99

Prepared:

Matrix: Water QC Batch: 071699W1

QC Ball

%Solids:

Analyzed: 07/16/99

Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL RL Notes
Benzene	<50.	U	1	50.
Bromodichloromethane	<50.	Ŭ	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: July 19,1999

Monika Santuc

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting - Fayetteville, NY Proj. Desc: Monthly Effluent & Influent Sampling

Sample: M6094

Samp. Description: WTP Influent

Primary column: Y

Units: ug/L

Column: DB-VRX 75m x .45mm ID Dilution: 50 Instrument: 9001

**Analytical Results** Method: 8021

> Job No.: 3435.021.517 Certification NY No.: 10155

> > Matrix: Water

Collected: 07/07/99

Received: 07/07/99

OC Batch: 071699W1 Prepared:

%Solids:

Analyzed: 07/16/99

Sample Size: 5 ml

Number of analytes: 34

Parameter	<u>Result</u>	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.

Date: July 19,1999 Monika Santucci

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting - Fayetteville, NY Proj. Desc: Monthly Effluent & Influent Sampling

Sample: M6095

Samp. Description: WTP Between GACs

Primary column: Y

Units: ug/L

Column: DB-VRX 75m x .45mm ID Dilution: 1 Instrument: 9001

#### **Analytical Results Method: 8021**

Job No.: 3435.021.517 Certification NY No.; 10155

Collected: 07/07/99

Received: 07/07/99

Matrix: Water QC Batch: 071699W1

Prepared:

% Solids:

Analyzed: 07/16/99

Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qua1	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.	Ŭ	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.	Ū	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.

Date: July 19,1999

**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

OC 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	<u>Result Qual</u>	_ Col_	<u> Limits Notes</u>
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

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting - Fayetteville, NY Proj. Desc: Monthly Effluent & Influent Sampling

Sample: M6096

Samp. Description: WTP Effluent - Grab

Instrument: HP5970 GC/MS#2

Units: ug/L

Number of analytes: 14

### Analytical Results Method: 8260

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 07/07/99

Matrix: Water

Received: 07/07/99

QC Batch: 071499W2

Prepared: 07/14/99 %Solids:

Purge volume: 25 mL

Surrog

Parameter	Result	Limits Dilution	Analyzed Notes
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)	99.8	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:

Date: July 15,1999

Monika Santucci

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

Collected: 07/14/99

Matrix: Water

Received: 07/14/99 15:40

Samp. Description: WTP Effluent

Parameter	Result Qual	MDL RI	Units	<u>Method</u>	Prepared	Analyzed	QC Batch Note
Total dissolved	540.	10	mg/L	EPA 160.1		07/20/99	072099W14
solids							
Total suspended	<5.0 U	9	mg/L	EPA 160.2		07/19/99	071999W12
solids							

Notes:

Sample: M7102

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

Authorized: Date: July 24,1999

Monika Santucci

### **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

Matrix: Water

Received: 07/21/99 15:20

Parameter	Result Units	Method	Prepared Analyzed	QC Batch Note
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

Date: August 5,1999

Aonika Santucci

Analytical Results
Trace Metals

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting - Fayetteville, NY

Proj. Desc: Bi-Monthly Effluent Sampling

Sample: M7733
Samp. Description: WTP Effluent - Composite

Units: mg/L

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 07/21/99 Received: 07/21/99 Matrix: Water

% Solids:

Number of analytes: 2

Parameter	Result	Qual	MDL	RL	Method	Prepared	Analyzed	OC Batch	Dilut. Note
Mercury	<.0002	σ	.0001	.0002	245.1	07/29/99	07/28/99	072799 <b>W</b> 3	1
Zinc	.02		.002	.01	200.7	07/26/99	07/28/99	072699 <b>W</b> 1	1

Notes:

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

Authorized:

Date: August 3,1999

Aonika Sannicci

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting - Fayetteville, NY Proj. Desc: Bi-Monthly Effluent Sampling

Sample: M7732

Samp. Description: WTP Effluent - Grab

Instrument: HP5970 GC/MS#2

Units: ug/L

Number of analytes: 14

### Analytical Results Method: 8260

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 07/21/99

Matrix: Water

Received: 07/21/99

QC Batch: 072399W2

Prepared: 07/23/99 % Solids:

Purge volume: 25 mL

Surrog

Parameter	Result	<u>Limits Dilution</u>	Analyzed Notes
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

**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

Matrix: Water

Received: 07/28/99 15:15

Parameter	Result Units	Method	Prepared Analyzed	QC Batch Note
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

Date: August 7,1999

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



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.

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

I:\DIV71\PROJECTS\2488\23123\2 CORRES\8-99MOR.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

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

		Monitoring Re	quirements		Effluent	Effluent	Effluent	Effluent
Limitation	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.				minutes.
Antimony, total (mg/L)	Monitor	0.1	Quarterly	3-hr comp.				
Chromium, total (mg/L)	Monitor	0.5	Quarterly	3-hr comp.			<u></u>	
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	22	
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  $TOD = 1.5 \times CBOD5 + 4.5 \times TKN$ 

Page 1 of 3



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

	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent
	08/11/99	08/12/99	08/17/99	08/18/99	08/19/99	08/24/99	08/25/99	08/26/99
Analyte								
Flow (GPD)		21890	21210		20900	20310		20050
pH (SU)		7.89	7.89		7.89	7.89	<del></del>	7.89
Residue, non-filterable (mg/L)	<b>5</b> 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)			<del></del>				~~- <sub>.</sub>	
Antimony, total (mg/L)								
Chromium, total (mg/L)	-		- <del></del> -			***	<b>444</b> .	· · · ·
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)		'		<del></del>	y			
Silver, total (mg/L)								
Vanadium, total (mg/L)	خست							
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-		
4-Methyl-2-pentanone (MIBK) (ug/L)		-87	. BPR	5.0 U	_ <u></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

	Effluent					
	08/31/99					
Analyte						
Flow (GPD)	19480					
pH (SÙ)	7.93					
Residue, non-filterable (mg/L)						
Total dissolved solids (TDS) (mg/L)						
CBOD5 (mg/L)						
TKN (mg/L)						10 mg - 10 mg
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)						
-: 12 Disklandshand (12/1)						
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)		-				
Tetrachioroethene (ug/L) Toluene (ug/L)			Service Control of the			
Trichloroethene (ug/L)						
Acetone (ug/L)						
2-Hexanone (ug/L)						
4-Methyl-2-pentanone (MIBK) (ug/L)					The second secon	And the second

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

Page 3 of 3

#### **ATTACHMENT A**

### SPDES PERMIT COMPLIANCE MONITORING LABORATORY ANALYTICAL DATA SHEETS

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting - Fayetteville, NY Proj. Desc: Bi-Monthly Effluent Sampling

Sample: M8792

Samp. Description: WTP Influent

Primary column: Y

Units: ug/L

Column: DB-VRX 75m x .45mm ID Dilution: 25 Instrument: 9001

### Analytical Results Method: 8021

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 08/04/99

Received: 08/04/99

Matrix: Water OC Batch: 081799W1

Prepared: 9

% Solids:

Analyzed: 08/17/99

Sample Size: 5 ml

Number of analytes: 34

Parameter	<u>Result</u>	Qual	Col	MDL RL Notes
Benzene	<25.	U	1	25.
Bromodichloromethane	<25.	Ū	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.	Ŭ	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.	Ŭ	1	25.
1,1,1-Trichloroethane	<25.	U	1	25.

J - reported value is estimated.

Authorized: Morika Santucci

Date: August 18,1999 Monika Santucci

<sup>#</sup> - Outside control limits. U - Undetected at the reported level.

E - concentration exceeded the calibration range and is estimated.

**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:

QC Batch: 081799W1 %Solids:

Analyzed: 08/17/99

Sample Size: 5 ml

Matrix: Water

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: Norto Sortucer Date: August 18,1999

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting - Fayetteville, NY Proj. Desc: Bi-Monthly Effluent Sampling

Sample: M8793

Samp. Description: WTP Between GACs

Primary column: Y

Units: ug/L

Column: DB-VRX 75m x .45mm ID Dilution: 2 Instrument: 9001

### Analytical Results Method: 8021

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 08/04/99

Received: 08/04/99

Prepared:

Analyzed: 08/18/99

Matrix: Water

OC 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.	Ŭ	1	2.

J - reported value is estimated.

Authorized: Norika Sonlucei

Date: August 18,1999 Monika Santucci

 $<sup>\</sup>ensuremath{\text{\#}}$  - Outside control limits. U - Undetected at the reported level.

E - concentration exceeded the calibration range and is estimated.

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

Matrix: Water

%Solids:

QC Batch: 081799W1

Sample: M8793 Collected: 08/04/99

Samp. Description: WTP Between GACs Received: 08/04/99

Primary column: Y Prepared:

Units: ug/L Analyzed: 08/18/9

Column: DB-VRX 75m x .45mm ID

Analyzed: 08/18/99 Sample Size: 5 ml

Dilution: 2 Instrument: 9001 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: Norika Sanlucei

Date: August 18,1999 Monika Santucci

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting - Fayetteville, NY Proj. Desc: Bi-Monthly Effluent Sampling

Sample: M8794

Samp. Description: WTP Effluent - Grab

Instrument: HP5970 GC/MS#2

Units: ug/L

Number of analytes: 14

#### **Analytical Results Method: 8260**

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 08/04/99

Matrix: Water Received: 08/04/99

Prepared: 08/10/99

QC Batch: 081099W2

% Solids:

Purge volume: 25 mL

		Surrog	
Parameter	Result	Limits Dilution	Analyzed Notes
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:

Date: August 10,1999

Monika Santucci

# - Outside control limits J-Estimated value

**Analytical Results Trace Metals** 

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting - Fayetteville, NY

Samp. Description: WTP Effluent - Composite

Proj. Desc: Bi-Monthly Effluent Sampling

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 08/04/99

Matrix: Water %Solids:

Received: 08/04/99

Number of analytes: 2

Par <u>ameter</u>	<u>Result</u>	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:

Sample: M8795

Units: mg/L

J-Estimated value

Authorized: \_\_\_\_\_ Sanluce

Date: August 19,1999

### **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

Matrix: Water

Received: 08/04/99 15:35

Parameter	Result Units	Method	Prepared Analyzed	QC Batch Note
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

Date: Angust 19 1999

Monika Santucci

5000 Brittonfield Parkway East Syracuse, New York 13057 2766 Chain of Custody

(315) 437-0200

Client: O'BRIEN& GERE, TECHT	VICAL	SERI	VICES	IN	<u>_</u>	Analysis/Method							
Project: FORMER ACCURATE DIE									N /x		7	$\overline{}$	$\overline{777}$
Sampled by: JERRY BORN								AMP.	No.	(A)			
Client Contact: FERRY BORN		Ph	one#	37010	9		Ti)	3,7%				7/	
Sample Des	scription										,5	7	
Sample Location	Date Collected	Time Collected	Sample Matrix	Comp. or Grab	No. of Containers		1/1/	1	\// X	SY X	/		Comments
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Rush (Specify)_	
Cooler Temperature	4°C

Comments:

#### **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

Parameter	Result Units	<u>Method</u>	Prepared Analyzed	QC Batch Note
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 North Sortuce

Monika Santucci

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

D'Brien & Gere Lat	ooratories, Inc.
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5000 Brittonfield Parkway

**Chain of Custody** 

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

(21.0)

Client: OBRIEN & GERE TE	CHMO	OAL S	FRUK	ES	INC.				An	alysis	/Meth	od	
Project: FORMER MCURATE DIE												$\overline{}$	
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Client Contact: AL I= HERELL ZORN		Ph	one# 2	316	105								
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Sample Location	Date Collected	Time Collected	Sample Matrix	Comp. or Grab	No. of Containers	1	$\mathcal{Y}$						Comments
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Routine Rush (Specify)_	<u> </u>
Cooler Temperature:	200

Comments:

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting - Fayetteville, NY Proj. Desc: Bi-Monthly Effluent Sampling

Sample: M9792

Samp. Description: WTP Effluent - Grab

Instrument: HP5973 GCMS#3

Units: ug/L

Number of analytes: 14

#### **Analytical Results Method: 8260**

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 08/18/99 Received: 08/18/99 Matrix: Water

OC Batch: 082599W1

Prepared: 08/25/99 % Solids:

Purge volume: 25 mL

Surrog

Parameter	<u>Result</u>	Limits Dilution	Analyzed Notes
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:

Authorized: Nozeka Santucci

Date: August 27,1999 Monika Santucci

# - Outside control limits J-Estimated value

**Analytical Results Trace Metals** 

Job No.: 3435.021.517

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting - Fayetteville, NY

Proj. Desc: Bi-Monthly Effluent Sampling

Sample: M9793 Samp. Description: WTP Effluent - Composite

Units: mg/L

Certification NY No.: 10155

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: / Koz

Monika Santucci

**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

Parameter	Result Units	<u>Meth</u> od	Prepared Analyzed	OC Batch Note
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

Date: August 30,1999

Monika Santucci

Moreta Sontuce

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

5000 Brittonfield Parkway
East Syracuse, New York 13057

#### **Chain of Custody**

(315) 437-0200

Client: O'BRIEN Y GERE TEC	MNIC	AL S	SERVI	CES						alysis	/Meth	od	
Project: FORMER ACCURA	TE	DIE						M	<u>* /</u>				
Sampled by: JEKRY BORN  Client Contact: ALFARREL  JEKRY BORN								Min	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	<b>Y</b>			/ / /
Client Contact: #4 FARREL Phone # 2316 37010				109		/4		18/					
Sample Description					A	17			//	//			
Sample Location	Date Collected	Time Collected	Sample Matrix	Comp. or Grab	No. of Containers		1/1/		/				Comments
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Comments:

Cooler Temperature:

**Analytical Results Wet Chemistry** 

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting - Fayetteville, NY

Proj. Desc: Weekly Effluent Sampling

Samp. Description: WTP Effluent

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 08/25/99

Matrix: Water

Received: 08/25/99 15:10

Parameter	Result Units	Method	Prepared Analyzed	QC Batch Note
Total dissolved solids	690. mg/L	EPA 160.1	09/01/99	090199W14
Total suspended solids	<5. mg/L	BPA 160.2	09/01/99	090199W11

Notes:

Sample: N0426

J-Estimated value

Date: September 9,1999

Ionika Santucci



OCT 1 1959

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.

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

af Cand

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

		Monitoring Re	quirements	-	Effluent	Effluent	Effluent	Effluent
Analyte (units)	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 (SÙ)	6.5 - 8.5	化黄色电影	2/Week	Grab	7.89	7.91	· · · · · · · · · · · · · · · · · · ·	7.94
Residue, non-filterable (mg/L)	Monitor	20	Weekly	3-hr comp.	] 5 U		5 U	en in in the second of the sec
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.		an <b></b> Na H		
TOD (mg/L)	Monitor	15	Quarterly	Calculated		*		- 1 1 1 1 1 2 2 2 1 2 1 4 2 4 4 4 4 4 4 4
Dissolved Oxygen (mg/L)	Monitor	7 Min.	Quarterly	Grab	i i <del>sit</del> a ta ma	regis <del>er</del> , ejetin,	9.13	og 🗝 tolik 🤻
Aluminum, dissolved (mg/L)	Monitor	0.2	Quarterly	3-hr comp.		gradien berg		
Antimony, total (mg/L)	Monitor	0.1	Quarterly	3-hr comp.		***		
Chromium, total (mg/L)	Monitor	0.5	Quarterly	3-hr comp.	# 3	(		
Cobalt, total (mg/L)	Monitor	0.01	Quarterly	3-hr comp.				
Copper, total (mg/L)	Monitor	0.1	Quarterly	3-hr comp.		1 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	<u> </u>	용당했다. 그리 기계를 되
Iron, total (mg/L)	Monitor	0.3	Quarterly	3-hr comp.				
Lead, total (mg/L)	Monitor	0.02	Quarterly	3-hr comp.		₽ Y 1 <b>.4</b> . 178 .		i in <del>p</del> ost eligibl
Mercury, total (mg/L)	Monitor	0.0008	2/Month	3-hr comp.	0.0002 U			to de la companya de la companya de la companya de la companya de la companya de la companya de la companya de
Nickel, total (mg/L)	Monitor	0.2	Quarterly	3-hr comp.		, j		
Silver, total (mg/L)	Monitor	0.1	Quarterly	3-hr comp.			· · · · · · · · · · · · · · · · · · ·	e i e e e e e e e e e e e e e e e e e e
Vanadium, total (mg/L)	Monitor	0.03	Quarterly	3-hr comp.		P.A. Br		
Zinc, total (mg/L)	Monitor	0.3	2/Month	3-hr comp.	0.04			The fact and the second of the
cis-1,2-Dichloroethene (ug/L)	Monitor	10	2/Month	Grab	0.50 U	ese en altra in Linera		* * * * * * * * * * * * * * * * * * *
trans-1,2-Dichloroethene (ug/L)	Monitor	10	2/Month	Grab	0.50 U		ger Maraille en	
Methylene chloride (ug/L)	Monitor	50	2/Month	Grab	2.0 U		**************************************	. The state of the
1,1,2,2-Tetrachloroethane (ug/L)	Monitor	30	2/Month	Grab	0.50 U		- r <u>vil</u> je jes <sub>t</sub> ja	4. 19일, 🚣 🖫 🦸 🗸 🗯 -
Tetrachloroethene (ug/L)	Monitor	20	2/Month	Grab	0.50 U			n 1999 austria – Prince Prince (1994) i 1994 i <del>1994</del>
Toluene (ug/L)	Monitor	20	2/Month	Grab	0.50 U		in <b>li</b> y s y	and and 🛶 and and and
Trichloroethene (ug/L)	Monitor	10	2/Month	Grab	0.50 U	and action for the Control Con		
Acetone (ug/L)	Monitor	1000	2/Month	Grab	10 U		59   1   1   1   1   1   1   1   1   1	
2-Hexanone (ug/L)	Моліtor	1000	2/Month	Grab	5.0 U	turisan 1806-1800 - Amerikan 1946-1951 ———		valante parudal. p 10- e - 6- 50 5
4-Methyl-2-pentanone (MIBK) (ug/L)	Monitor	1000	2/Month	Grab	5.0 U			
and the state of t	NAME OF TAXABLE PARTY.	7 = a 202 m · · · · · ·	·	: <i>ক্ৰিক্ৰ</i> (1918)	7.5007 100.0			

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

Page 1 of 2



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

	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent
Analyte	09/14/99	09/15/99	09/16/99	09/21/99	09/22/99	09/23/99	09/28/99	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)	<b></b>	840	:		580			
CBOD5 (mg/L)								
TKN (mg/L)						<del></del>		
TOD (mg/L)								
Dissolved Oxygen (mg/L)								ar <del>ii</del> ii fa ii
Aluminum, dissolved (mg/L)			المراجعة المناسب	a <u></u>	- 448,805 (86)		1일이 <del>11일</del> - 기계를 기계하다.	종. <b>교</b> 등통 - 중점은
Antimony, total (mg/L)				·		Otto Villago de la companya della companya de la companya della co	urbort dirbeit für 	i aad ka sii Bir ibir kira iii •••
Chromium, total (mg/L)				§ <del></del> ## 54				
Cobalt, total (mg/L)								
Copper, total (mg/L)				:2 <del></del>	가 <del>성</del> 인 충입되다.			
lron, total (mg/L)								
Lead, total (mg/L)		# # [[[#]		4 <del></del> .				
Mercury, total (mg/L)		0.0002 U						
Nickel, total (mg/L)	<del></del> 기타		i <del>ti</del> rri şir şir					<b></b> -
Silver, total (mg/L)	**************************************	1 80 1 1 1 1 2 1		 		ere		
Vanadium, total (mg/L)	( )	# <del>-</del>		v <del>-</del> kii				
Zinc, total (mg/L)	19 01 50 1 1041	0.01 U		 8 JJ: 80 F		A 14 A	**************************************	
cis-1,2-Dichloroethene (ug/L)	i i kanakan ada	0.50 U						
trans-1,2-Dichloroethene (ug/L)		0.50 U	<del></del> 	 2	ing a congression in			
Methylene chloride (ug/L)	. <del>171</del> 6 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	2.0 U						
1,1,2,2-Tetrachloroethane (ug/L)	:	0.50 U		A at the said				TALA SU SA ABUSA
Tetrachloroethene (ug/L)		0.50 U				* 1979 SEE 97 61 		
Toluene (ug/L)		0.50 U						
Trichloroethene (ug/L)		0.50 U			1			
Acetone (ug/L)		10 U						84. <b>4.</b> 1 20.454.
2-Hexanone (ug/L)		5.0 U	na mengana menganak dalah ber Menganak		- recurse reprint in Francisco	99990 to 1, 1925 154	n. enne 1 1 1 kr 	
4-Methyl-2-pentanone (MIBK) (ug/L)		5.0 U				<b>444</b> 8888 1515 (1888)	- <b>#-</b> verdiakt om	

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

Page 2 of 2

#### ATTACHMENT A

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

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting - Fayetteville, NY Proj. Desc: Monthly Effluent & Influent Sampling

Sample: N0781

Samp. Description: WTP Effluent - Grab

Instrument: HP5970 GC/MS#2

Units: ug/L

Number of analytes: 14

### Analytical Results Method: 8260

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 09/02/99

Matrix: Water

Received: 09/02/99

QC Batch: 091099W2

Prepared: 09/10/99 % Solids:

77-117

Purge volume: 25 mL

1 09/10/99

		Surrog	
<u>Parameter</u>	Result	Limits Dilution	Analyzed Notes
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

96.%

Notes:

Authorized: Monike Souline

Date: September 14,1999 Monika Santucci

Bromofluorobenzene (surrogate)

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting - Fayetteville, NY Proj. Desc: Monthly Effluent & Influent Sampling

Sample: N0779

Samp. Description: WTP Influent

Primary column: Y

Units: ug/L

Column: DB-VRX 75m x .45mm ID Dilution: 25 Instrument: 9001

#### **Analytical Results Method: 8021**

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 09/02/99

Received: 09/02/99

Matrix: Water

QC Batch: 091399W1

Prepared:

%Solids:

Analyzed: 09/13/99

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: Norite Sortuen Date: September 14,1999 Monika Santucci

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

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting - Fayetteville, NY Proj. Desc: Monthly Effluent & Influent Sampling

Sample: N0779

Samp. Description: WTP Influent

Primary column: Y

Units: ug/L

Column: DB-VRX 75m x .45mm ID Dilution: 25 Instrument: 9001

**Analytical Results Method: 8021** 

> Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 09/02/99

Prepared:

Received: 09/02/99

Matrix: Water

QC Batch: 091399W1

% Solids:

Analyzed: 09/13/99 Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL_	RL Notes
1,1,2-Trichloroethane	<25.	U	1		25.
Trichloroethylene	470.		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)	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: Montes Soulineer Date: September 14,1999

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting - Fayetteville, NY Proj. Desc: Monthly Effluent & Influent Sampling

Sample: N0780

Samp. Description: WTP Between GACs

Primary column: Y

Units: ug/L

Column: DB-VRX 75m x .45mm ID 1 Instrument: 9001 Dilution:

#### **Analytical Results Method: 8021**

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 09/02/99

Received: 09/02/99

Matrix: Water

Prepared:

QC Batch: 091399W1

%Solids:

Analyzed: 09/14/99

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.	Ū	1	5.
Dichlorodifluoromethane	<10.	Ū	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.	Ū	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.	Ū	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: North Sonline Date: September 14,1999 Monika Santucci

**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 1 Instrument: 9001 Dilution:

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
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	<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: North Sontuce Date: September 14,1999 Monika Santucci

**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

Units: mg/L

Samp. Description: WTP Effluent - Composite

Collected: 09/02/99 Received: 09/02/99 Matrix: Water

% Solids:

Number of analytes: 2

Parameter	Result	Qual	MDL	RL	<u>Met</u> hod	Prepared	Analyzed	OC Batch	Dilut. Note
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.

Date: September 11,1999 Monika Santucci

#### **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

Matrix: Water

Received: 09/02/99 15:30

Parameter	Result Units	Method_	Prepared Analyzed	QC Batch Note
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: Norika Santucci Date: September 11,1999 Monika Santucci

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

5000 Brittonfield Parkway

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

**Chain of Custody** 100 mg/

Slient: O'BRING & GERE TECHNICHE	CHIN	741	SEAR	SEADILCES				4	nalysis	Analysis/Method		
Project: LORMER ACCURATE DIE	MT12.	SIE					7		\	Ò		/
Sampled by: $\Im F p p \chi / 20 R  angle$							Q.		\ \ \	\ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	5	\
Slient Contact: 先にたけばなんにし		Pho	Phone #	23/6	60				Tox			\
Sample Description	cription					TO THE STATE OF TH			V W	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		
Sample Location	Date Collected	Time	Sample Matrix	Comp. or Grab	No. of Containers	23	10 m		\	<u>\</u>		Comments
WTP INFLUERT	112/99	4.3.7	WATER GLAB	_		+	-	_	_		_	
WTP SETWEED GACE	9/2/89	9,35	WATER COMB	como		<b>'</b>	+	·				
WITP REFLUENT	9/2/69	9:43h	WATERSONA	5PA96	2		7					
WIP EFFLUENT	64/2/	54:1	WAR.	Hua	-		_	7				
WITO EFFLUENT	12/20	851	WARK	dus				-	ィ			
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Relinquished by:	Ď	Date:	Time:		Received by:	py:				Date:		Time:
Relinquished by:	Di	Date:	Time:		Received by:	by:				Date:		Time:
Relinquished by:	Di	Date: 9/2/	0851:amil 66	1530	Received by Lab: Week, P. Nacloson	by Lab: \	Much	. Caclas	ž	Date	Date: 4/2/49	Time. 15:30
Shipment Method: HAND SPLIUFAED	Q.				Airbill Number:	nber:						

Turnaround Time Required:
Routine
Rush (Specify)

200 Cooler Temperature:\_

Comments:

Original-Laboratory Copy-Client

#### **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

Matrix: Water

Received: 09/08/99 15:10

Parameter	Result Qual	MDL RL Units	<u> Method</u>	Prepared Analyzed	OC Batch Note
Total dissolved	830.	10 mg/L	EPA 160.1	09/13/99	091399W13
solids					
Total suspended	<5. U	5 mg/L	BPA 160.2	09/15/99	091599W11
solids					

Notes:

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

Authorized: Morika Sanlucei Date: September 17,1999 Monika Santucci

5000 Brittonfield Parkway

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

**Chain of Custody** 3145

					Comments:		urnaround Time Required:
	mber:	Airbill Number:				HAND DELIVERED	Shipment Method:
Date: $q[s]_{q,q}$ Time. (5:10	Received by Labim Asilo F. Janleson		Time:/5/2	Date: 7/8/99	Da	James Som	Relinquished by:
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Comments		No. of Containers	Sample Comp. Matrix or Grab	Time Sa Collected Ma	Date Collected	Sample Location	S
///	// /5/				cription	Sample Description	
		20%	Phone # 2316 0109	Phone		AL FARES	Client Contact:
/////	/ /5/					JEPRY BORN	sampled by:
					16	FORMER ACCURATE	roject: $arnothing$
Analysis/Method	Analysi	VC.	SERU, IUC.	•	ECHN	CHAIRD + GERE TIECHMORL	lient: $O'3/$

Turnaround Time Required:

Routine\_\_\_\_\_\_Rush (Specify)\_\_

700 Cooler Temperature:

Original-Laboratory Copy-Client

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting - Fayetteville, NY Proj. Desc: Bi-Monthly Effluent Sampling

Sample: N1406

Samp. Description: WTP Effluent - Grab

Instrument: HP5973 GCMS#3

Units: ug/L

Number of analytes: 14

#### **Analytical Results Method: 8260**

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 09/15/99

Received: 09/15/99

Matrix: Water

QC Batch: 091699W1

Prepared: 09/17/99 % Solids:

Purge volume: 25 mL

		Surrog	
Parameter	<u>Result</u>	Limits Dilution	Analyzed Notes
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/Kozika Sonlice

Date: September 20,1999 Monika Santucci

**Analytical Results Trace Metals** 

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting - Fayetteville, NY Proj. Desc: Bi-Monthly Effluent Sampling

Collected: 09/15/99

Matrix: Water

Sample: N1407

Samp. Description: WTP Effluent - Composite

Result Qual MDL RL

.0001 .0002 245.1

200.7

.002 .01

<.0002 U

<.01 U

Received: 09/15/99

09/27/99

09/17/99

% Solids: Number of analytes: 2

092799W1

091799W1

1

Units: mg/L

Parameter\_

Mercury

			•	
Method	Prepared	Analyzed	QC Batch	Dilut. Note

09/27/99

09/20/99

Job No.: 3435.021.517

Certification NY No.: 10155

Notes:

Zinc

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

Authorized: Nowton Sontucei

Date: September 28,1999 Monika Santucci

# 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

Collected: 09/15/99

Matrix: Water

Sample: N1407

Samp. Description: WTP Effluent - Composite

Received: 09/15/99 15:25

Parameter	Result Units	Method	Prepared Analyzed	QC Batch Note
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

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

5000 Brittonfield Parkway

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



CHIEFTE O'BUTEN Y GENE, TECHNICHL ST	7400	SB	90/CES	Υ	2/2/			₹	nalysis/	Analysis/Method			
Project: FORIMER MCLURATE DIE	DiE						`	\ \*		\			
Sampled by:							1	5	\	\		\	
Client Contact: AL PREPER		Æ	hone # 2	23/6 109	8		100	<u>)</u> §	Ž	\		\	
Sample Description	ription					13			<u>\</u>			\	
Sample Location		Time	Sample	Comp.	No. of Containers	P	3	3			\	Comments	
WIP EFFLUENT	545116		1		2	*	-	Ļ		$\vdash$	-		
7	1 66/51/6	25	MALER	Hus	-	+	_	_		-	-		
	6/5/6	Se Se	WATER	dhas	-		+				_		
								_			_		<u> </u>
								·					
											_		
Relinquished by:	Date:	ini	Time:		Received by:	by:				Date:		Time:	
Relinquished by:	Date:	es .	Time:		Received by:	by:				Date:		Time:	
Relinquished by: Church	Dat	Date: 9/15	/gg Time:1525	:1525	Received	Received by Lab: Dannel D. Letter	ame!	70. L	Kit .	Date: q	_	15/99Time. 15	125
Shipment Method: KAND DELLUTOF					Airbill Number:	nber:				·			
									-				

Turnaround Time Required:

Routine Rush (Specify)\_

Comments:

Ú

Cooler Temperature:\_

Original-Laboratory Copy-Client

# **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

Parameter	Result Units	<u>Method</u>	Prepared Analyzed	QC Batch Note
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 Konka Santucci

Date: October 6,1999 Monika Santucci

**Chain of Custody** 3) 88

# O'Brien & Gere Laboratories, Inc.

5000 Brittonfield Parkway

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

U15/2/2/2004 6/2/10 1/2	I SFR	566	7	`				¥	Analysis/Method	Method		
Project: FORMER ACCIPATE	Die.									/		//
Sampled by: JENLY BORN								>	\	\	\	\ \
Client Contact: JENAY BOLD		Pho	Phone #	2316	90.09		\$	<i>\</i>		\	\	\
Sample Description	cription											
Sample Location	Date Collected	Time	Sample Matrix	Comp. or Grab	No. of Containers	3		\		\	\ \ '	Comments
UTP EFFLUENT	9/22/pg/11/40		HILLIM	dwas	~	X						
		,				,						
										_		
Relinquished by:	Di	Date:	Time:	:	Received by:	by:				Date:		Time:
Relinquished by:	D	Date:	Time:	;	Received by:	by:				Date:		Time:
Relinquished by:	Ď	Date: 9/22 /99, Time: 1520	/99, Time	: 1520	Received	by Lab:	Received by Lab: Moul F. Jackson	F. Cack	April.	Date: 9/22/99		Time, 15: 20
Shipment Method: / Hand Dec. JeneD	<u> </u>				Airbill Number:	nber:		-		,		

Required:	
Time	
Turnaround	

Routine Rush (Specify)\_

100 Cooler Temperature:\_

Original-Laboratory Copy-Client

Comments:



\* 1990

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.

- 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.
- 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.
- 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.



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



Accurate Die Casting Site Fayetteville, New York Table 1

Monitoring Requirements and Effluent Data

		Monitoring Requirements	quirements		Effluent	1		Eminer
Analyte (units)	Discharge Limitation Daily Average	Discharge Limitation Daily Maximum	Minimum Measurement Frequency(1)	Sample Type	66/\$0/01	66/90/01	10/07/99	10/12/99
Flow (GPD)	Monitor 6.5 - 8.5	150000	Continuous 2/Week	Meter	20546		20095	19750
Residue, non-filterable (mg/L)	Monitor	20	Weekly	3-hr comp.	<u> </u>	5 U	<u>}</u>	5 U
Total dissolved solids (TDS) (mg/L)	Monitor	Monitor	Weekly	3-hr comp.	1	630	ı	630
CBOD5 (mg/L)	Monitor	Monitor	Quarterly	3-hr comp.	;	S U	i	!
TKN (mg/L)	Monitor	Monitor	Quarterly	3-hr comp.	ŀ	0.4 U	ŀ	;
TOD (mg/L)	Monitor	15	Quarterly	Calculated	!	9.3 U	i	ŀ
Dissolved Oxygen (mg/L)	Monitor	7 Min.	Quarterly	Grab	!	10.48	1	ı
Aluminum, dissolved (mg/L)	Monitor	0.2	Quarterly	3-hr comp.	}	0.1 U	ł	1
Antimony, total (mg/L)	Monitor	0.1	Quarterly	3-hr comp.	1	0.06 U	ì	;
Chromium, total (mg/L)	Monitor	0.5	Quarterly	3-hr comp.	!	0.01 U	ì	:
Cobalt, total (mg/L)	Monitor	0.01	Quarterly	3-hr comp.	ı	0.01 U	ì	!
Copper, total (mg/L)	Monitor	0.1	Quarterly	3-hr comp.	!	0.01 U	1	į
Iron, total (mg/L)	Monitor	0.3	Quarterly	3-hr comp.	1	0.05 U	ł	!
Lead, total (mg/L)	Monitor	0.02	Quarterly	3-hr comp.	1	0.005 U	ŀ	
Mercury, total (mg/L)	Monitor	8000.0	2/Month	3-hr comp.	1	0.0002 U	i	i
Nickel, total (mg/L)	Monitor	0.2	Quarterly	3-hr comp.	1	0.05 U	ŀ	i
Silver, total (mg/L)	Monitor	0.1	Quarterly	3-hr comp.	ı	0.01 U	;	;
Vanadium, total (mg/L)	Monitor	0.03	Quarterly	3-hr comp.	ì	0.03 U	1	ł
Zinc, total (mg/L)	Monitor	0.3	2/Month	3-hr comp.	ì	0.01 U	!	
cis-1,2-Dichloroethene (ug/L)	Monitor	10	2/Month	Grab	!	0.50 U	1	ŀ
trans-1,2-Dichloroethene (ug/L)	Monitor	10	2/Month	Grab	ı	0.50 U	ł	:
Methylene chloride (ug/L)	Monitor	50	2/Month	Grab	ļ	2.0 U	1	ì
1,1,2,2-Tetrachloroethane (ug/L)	Monitor	30	2/Month	Grab	ł	0.50 U	;	i
Tetrachloroethene (ug/L)	Monitor	20	2/Month	Grab	ŀ	0.50 U	;	i
Toluene (ug/L)	Monitor	20	2/Month	Grab	!	0.50 U	:	;
Trichloroethene (ug/L)	Monitor	10	2/Month	Grab	ŧ	0.50 U	;	ł
Acetone (ug/L)	Monitor	1000	2/Month	Grab	ŀ	10 N	1	ł
2-Hexanone (ug/L)	Monitor	1000	2/Month	Grab	!	5.0 U	!	i
4-Methyl-2-pentanone (MIBK) (ug/L)	Monitor	1000	2/Month	Grab	!	5.0 U	i	ı
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 NOTES:

Page 1 of 2



# Accurate Die Casting Site Fayetteville, New York

Monitoring Requirements and Effluent Data

	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	Effluent	
Analyte	10/14/99	10/19/99	10/20/99	10/21/99	10/26/99	10/27/99	10/28/99	
Flow (GPD)	19950	20509	Í	20609	20270		20200	
Pri (30)   Residue non-filterable (ma/l )	70.7	.07	-	16.7	1.6.7		16.7	
Total dissolved solids (TDS) (mg/L)			260			009	1 1	
CBOD5 (mg/L)	ŀ	ŀ	i	1	i	ı	i	
TKN (mg/L)	i	ł	ŀ	ŀ	:	;	i	
TOD (mg/L)	!	i	ı	ŀ	;	ŀ	1	
Dissolved Oxygen (mg/L)	1	1	1	;	1	;	;	
Aluminum dissolved (mo/1.)	į	į	į	i	ļ	į		
Antimony total (mg/L)	۱ ا	: 1			! !	•	!	
Chromium total (mg/L)		1					<b>!</b>	
Cobalt total (mg/l.)			}	!	i	ł	l	
Copper total (mg/L)	1	•		! !		! ;		
fron. total (mg/L)	ı	ł	ı	ŀ	ł	;	: 1	
Lead, total (mg/L)	ı	i	ţ	i	ł	ł	ì	
Mercury, total (mg/L)	I	;	0.0002 U	1	1	ł	ŀ	
Nickel, total (mg/L)	1	}	:	i	:	i	1	
Silver, total (mg/L)	ŀ	ŀ	i	i	:	;	i	
Vanadium, total (mg/L)	i	;	i	i	į	i	-	
Zinc, total (mg/L)	:	;	0.01 U	1	;	i	i	
cis-1,2-Dichloroethene (ug/L)	i	ı	0.50 U	I	I	ŀ	ŀ	
trans-1,2-Dichloroethene (ug/L)	ì	i	0.50 U	ł	i	;	!	
Methylene chloride (ug/L)	ŀ	i	2.0 U	i	1	1	i	
1,1,2,2-Tetrachloroethane (ug/L)	1	ł	0.50 U	1	i	i	-	
Tetrachloroethene (ug/L)	1	;	0.50 U	ŀ	;	ł	;	
Toluene (ug/L)	ł	i	0.50 U	i	i	;	!	
Trichloroethene (ug/L)	!	ļ	0.50 U	i	:	i	:	
Acetone (ug/L)	ļ	ŀ	10 N	ì	1	ŧ	1	
2-Hexanone (ug/L)	;	;	5.0 U	i	;	;	;	
4-Methyl-2-pentanone (MIBK) (ug/L)	ı	I	5.0 U	l	ŀ	1	ł	_
NOTES: (1) Minimum monitoring requirements based on the SPDES	quirements based or	n the SPDES permi	permit modified March 13, 1997.	13, 1997.				
Not analyzed, NA - Data not available	a not available							
TOD = 1.5 X CBOD5 + 4.5 X TKN	XTKN							
							Page 2 of 2	

# **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

Parameter	Result Units	Method	Prepared Analyzed	QC Batch Note
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 Norika Santucci

Date: October 15,1999 Monika Santucci

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

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

Chain of Custody

:

3394

Client: OBRIEN & GENE TECHNICHL	THV		SEPLICES INC	CES	lail.		Analysis	Analysis/Method	
Project: FORMER ACCORATE DIE	7 3/1	7.12					/		
Sampled by: JENNY 1304						2	\	\ \	\
Client Contact: RENEWS 3014		Pho	Phone # 2	2316	69	Q.	\	\	\ \
Sample Description	cription					1/22/			\
Sample Location	Date Time Collected Collected	Time	Sample Matrix	Comp. or Grab	No. of Containers	\ *\ \	\	\	Comments
UNP EFFLUENT	8/25/p 10:05	10,05	MHOS COM	chio,	1	X			
									·
Relinquished by:		Date:	Time:	],,	Received by:	þy:		Date:	Time:
Relinquished by:	Da	Date:	Time:		Received by:	by:		Date:	Time:
Relinquished by: KMG188.	Ď	Date: 9/29	/ggTime	152D	Received	25/99 Time: 1520 Received by Lab: Make F. Juckson	ackson	Date: q/s	Date: 9/29 Time. 15:30
Shipment Method: HOTAD DELIVERE	Œ				Airbill Number:	nber:			
Turnaround Time Required:	Comments:								

Turnaround Time Required:

Routine\_\_\_\_\_\_Rush (Specify)\_\_

Cooler Temperature:\_

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting - Fayetteville, NY Proj. Desc: Monthly Effluent & Influent Sampling

Sample: N2646

Samp. Description: WTP Effluent - Grab

Instrument: HP5970 GC/MS#2

Units: ug/L

Number of analytes: 14

### Analytical Results Method: 8260

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 10/06/99

Matrix: Water

Received: 10/06/99

QC Batch: 101499W2

Prepared: 10/14/99 % Solids:

Purge volume: 25 mL

Surrog

Parameter	Result	Limits Dilution	Analyzed Notes
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:

Authorized: North Sorlucei

Date: October 15,1999

Monika Santucci

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting - Fayetteville, NY Proj. Desc: Monthly Effluent & Influent Sampling

Sample: N2644

Samp. Description: WTP Influent

Primary column: Y

Units: ug/L

Column: DB-VRX 75m x .45mm ID Dilution: 50 Instrument: 9001

### Analytical Results Method: 8021

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 10/06/99

Received: 10/06/99

Matrix: Water

QC Batch: 101999W1

Prepared:

Analyzed: 10/19/99

% 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.	Ū	1	50.
cis-1,3-Dichloropropylene	<50.	Ū	1	50.
trans-1,3-Dichloropropylene	<50.	Ū	1	50.
Ethylbenzene	<50.	Ū	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.	Ū	1	50.

J - reported value is estimated.

Authorized: Norita Souluce

Date: October 20,1999 Monika Santucc

<sup># -</sup> Outside control limits. U - Undetected at the reported level.

E - concentration exceeded the calibration range and is estimated.

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting - Fayetteville, NY Proj. Desc: Monthly Effluent & Influent Sampling

Sample: N2644
Samp. Description: WTP Influent

Primary column: Y Units: ug/L

Column: DB-VRX 75m x .45mm ID Dilution: 50 Instrument: 9001

Method: 8021

**Analytical Results** 

Job No.: 3435.021.517 Certification NY No.: 10155

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 1	RL Notes
1,1,2-Trichloroethane	<50.	U	1	50	Ο.
Trichloroethylene	350.		1	50	Ο.
Trichlorofluoromethane	<50.	U	1	50	0.
Vinyl Chloride	<50.	U	1	50	Ο.
Xylenes (total)	<150.	U	1	150	0.

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: North Sollies

Date: October 20,1999 Monika Santucci

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting - Fayetteville, NY Proj. Desc: Monthly Effluent & Influent Sampling

Sample: N2645

Samp. Description: WTP Between GACs

Primary column: Y

Units: ug/L

Column: DB-VRX 75m x .45mm ID Dilution: 1 Instrument: 9001

### Analytical Results Method: 8021

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 10/06/99

Received: 10/06/99

Matrix: Water

QC Batch: 101999W1

Prepared:

Analyzed: 10/19/99

% 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.

 $\mbox{\it\#}$  - Outside control limits.  $\,$  U - Undetected at the reported level.

J - reported value is estimated.

E - concentration exceeded the calibration range and is estimated.

Authorized: North Sonlucei

Date: October 20,1999 Monika Santuc

**Method: 8021** 

Client: O'Brien & Gere Engineers, Inc. Project: Accurate Die Casting - Fayetteville, NY

Proj. Desc: Monthly Effluent & Influent Sampling

Sample: N2645 Samp. Description: WTP Between GACs Primary column: Y

Units: ug/L Column: DB-VRX 75m x .45mm ID

Dilution: 1 Instrument: 9001

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 10/06/99 Matrix: Water QC Batch: 101999W1 Received: 10/06/99

**Analytical Results** 

Prepared: %Solids:

Sample Size: 5 ml Analyzed: 10/19/99

Number of analytes: 34

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

Surrogate	Result Qual	Col	Limits	Notes
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.

Date: October 20,1999

**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

Collected: 10/06/99 M Received: 10/06/99 %

Matrix: Water %Solids:

Units: mg/L

Number of analytes: 11

Result	Qual	MDL	RL	Method	Prepared	Analyzed	QC Batch	Dilut. Note
<.06	υ	.0026	.06	200.7	10/15/99	10/18/99	101599W2	1
<.01	υ	.0015	.01	200.7	10/15/99	10/18/99	101599W2	1
<.01	υ	.0012	.01	200.7	10/15/99	10/18/99	101599W2	1
<.01	υ	.0006	.01	200.7	10/15/99	10/18/99	101599W2	1
<.05	υ	.0175	.05	200.7	10/15/99	10/18/99	101599W2	1
<.005	υ	.0021	.005	200.7	10/15/99	10/18/99	101599W2	1
<.0002	υ	.0001	.0002	245.1	10/14/99	10/15/99	101499W2	1
<.05	υ	.001	.05	200.7	10/15/99	10/18/99	101599W2	ı
<.01	U	.0006	.01	200.7	10/15/99	10/18/99	101599W2	1
<.03	υ	.0003	. 03	200.7	10/15/99	10/18/99	101599W2	1
<.01	υ	.002	.01	200.7	10/15/99	10/18/99	101599W2	1
	<.06 <.01 <.01 <.05 <.005 <.0002 <.05 <.01 <.03	<.06 U <.01 U <.01 U <.01 U <.05 U <.005 U <.0002 U <.05 U <.05 U <.01 U <.05 U	<.06 U .0026 <.01 U .0015 <.01 U .0012 <.01 U .0006 <.05 U .0175 <.005 U .0021 <.0002 U .0001 <.05 U .001 <.05 U .001 <.05 U .0006 <.01 U .0006 <.03 U .0003	<.06 U .0026 .06 <.01 U .0015 .01 <.01 U .0012 .01 <.01 U .0006 .01 <.05 U .0175 .05 <.005 U .0021 .005 <.0002 U .0001 .0002 <.05 U .001 .05 <.01 U .0006 .01 <.03 U .0003 .03	<.06 U .0026 .06 200.7 <.01 U .0015 .01 200.7 <.01 U .0012 .01 200.7 <.01 U .0006 .01 200.7 <.05 U .0175 .05 200.7 <.005 U .0021 .005 200.7 <.0002 U .0001 .0002 245.1 <.05 U .001 .05 200.7 <.01 U .0006 .01 200.7 <.03 U .0003 .03 200.7	<pre> &lt;.06  U    .0026 .06  200.7</pre>	<pre> &lt;.06 U .0026 .06 200.7</pre>	<.06

Notes:

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

Authorized: North Sanluce

ate: October 19,1999 Monika Santucc

# **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

Parameter	Result Units	Method	Prepared Analyzed	QC Batch Note
CBOD5	<5. mg/L	BPA 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	BPA 160.1	10/12/99	101299W15
Total suspended solids	<5. mg/L	<b>BPA</b> 160.2	10/13/99	101399W13

Notes:

J-Estimated value

Date: October 22,1999 Monika Santucci

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

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)

Collected: 10/06/99 Received: 10/06/99 Matrix: Water

Units: mg/L

% Solids: Number of analytes: 1

Parameter	Result	Qual	MDL	RL	Method	Prepared	Analyzed	QC Batch	Dilut. Note
Aluminum, filtered	<.1	υ	.019	.1	200.7	10/15/99	10/18/99	101599W2	1

Notes:

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

Date: October 19 1999

3456.

**Chain of Custody** 

# O'Brien & Gere Laboratories, Inc.

5000 Brittonfield Parkway

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

Date: 10 6 99 Time. 15:40 Comments Time: Time: Date: Date: Analysis/Method  $\hat{c^{z}}$ Dale: 10/6/99 Time: 1540 Received by Lab: Wala A. asol. Airbill Number: Received by: Received by: Comp. No. of or Grab Containers Phone # 23/6/09 WATER COMP WATER COMP WHER COMP WATER GRAPS WATER CRAB WATER COMP WATER GRAG Time: Time: Sample Matrix Collected Collected 10/6/19 1:03 10/6/19 1:85 10/6/99 855 10/6/45 1:00 10/6/20 8:57 15/5/1/26/19/01 Date: Date: Sample Description Client: O'BRIENTGERE TECH ROUPHIE DELIVENTED Client Contact: He Fly Bolo NFLUENS FFFLUENT Sample Location Project: FORMER 500 EFFLUENT Sampled by: JERRY Relinquished by: Ann TP FFFLUENT HANY Shipment Method: Relinquished by: Relinquished by:

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Comments:

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Original-Laboratory Copy-Client

# **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

Parameter	Result Units	Method	Prepared Analyzed	QC Batch Note
Total dissolved solids	630. mg/L	BPA 160.1	10/15/99	101599W13
Total suspended solids	<5. mg/L	<b>BPA</b> 160.2	10/15/99	101599W12

Notes:

J-Estimated value

Authorized: No. 22,1999 Monika Santucci

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

5000 Brittonfield Parkway

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

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**Chain of Custody** 

Client: O'BRIEN & GERVE TECHNICHL	CHNICHL	SERVICEINE	SINC			Analysis/Method	/Method		
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Sampled by: JERRY (2012)					/, /		\	\ \ \	
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Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting - Fayetteville, NY Proj. Desc: Bi-Monthly Effluent Sampling

Sample: N3386

Samp. Description: WTP Effluent - Grab

Instrument: HP5973 GCMS#3

Units: ug/L

Number of analytes: 14

# Analytical Results Method: 8260

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 10/20/99 Received: 10/20/99

: 10/20/99 Matrix: Water

Prepared: 11/01/99 %S

QC Batch: 103199W1

%Solids:

Purge volume: 25 mL

•		Surrog	•
Parameter	Result	Limits Dilution	Analyzed Notes
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:

Date: November 5,1999

**Analytical Results Trace Metals** 

Job No.: 3435.021.517

Certification NY No.: 10155

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting - Fayetteville, NY

Proj. Desc: Bi-Monthly Effluent Sampling

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>	Resul t	Method	Prepared	Analyzed	QC Batch	Dilut. Note
Mercury	<.0002	245.1	10/25/99	10/26/99	102599¥1	1
Zinc	<.01	200.7	10/26/99	10/27/99	102699⊌1	1

Notes:

J-Estimated value

Authorized: Now (2)

Date: November 6,1999

### **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

Parameter	Result Qual	MDL	RL Units	Method_	Prepared Analyzed_	QC Batch Note
Total dissolved	560.		mg/L	EPA 160.1	10/27/99	102799W12
solids						
Total suspended	<5. U		mg/L	EPA 160.2	10/25/99	102599W11
golida						

Notes:

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

Authorized: Norika Santucci Date: October 30,1999 Monika Santucci

East Syracuse, New York 13057 5000 Brittonfield Parkway

Chain of Custody 36/2

(315) 437-0200

Client: O'BRIEN & GERE TECHNICH SERVICES	ECHNI	CAL	SERU	1,ce	10			Ans	Analysis/Method	lethod		- 1
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Sampled by: JERPY 180PN	•				-		E &		5		\ \ \	
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Original-Laboratory Copy-Client

### **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

Matrix: Water

Received: 10/27/99 15:40

Parameter	Result Qual	MDL	RL Units	Method	Prepared Analyzed	QC Batch Note
Total dissolved	600.		mg/L	EPA 160.1	11/01/99	110199W12
solids						
Total suspended	<5. U		mg/L	EPA 160.2	10/29/99	102999W12
solids						

Notes:

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

Authorized Norika Sanluce Date: November 4,1999

5000 Brittonfield Parkw

East Syracuse, New Y (315) 437-0200

**Chain of Custody** 

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Client: CYZRIEN Y GENE TECHNICH SEALICES	HMICHL SE	AUCES	11/5		Ana	Analysis/Method	poul	
Project: FORMER ACLURA	ACLUME DIE							/
Sampled by: JENRY 15 ORN	. (				150	\	\	<u> </u>
Client Contact: AL FAREYER BOIZN		Phone # 23/6	601	_		\		<u></u>
Sample Description	cription			2	\ \ X			\
Sample Location	Date Time Collected	Sample Comp. Matrix or Grab	No. of Containers		\	\	\	Comments
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Turnaround Time Required:
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Original-Laboratory Copy-Client

## ANNUAL GROUNDWATER SAMPLING & ANALYSES LABORATORY ANALYTICAL DATA SHEETS

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting Proj. Desc: Fayetteville, New York

Sample: N3307

Samp. Description: MW-2

Primary column: Y

Units: ug/L

Column: DB-VRX 75m x .45mm ID Dilution: 1 Instrument: 9001

# Analytical Results Method: 8021

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 10/19/99

Received: 10/20/99

Matrix: Water

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.	Ū	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: Merita Sonlucei

Date: November 3,1999 Monika Santucci

**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

Matrix: Water 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.

Surroqate	<u>Result Qual</u>	Col	<u>Limits</u>	<u>Notes</u>
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: / Koreta Landucer

Date: November 3,1999

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting Proj. Desc: Fayetteville, New York

Sample: N3319

Samp. Description: MW-5

Primary column: Y

Units: ug/L

Column: DB-VRX 75m x .45mm ID Dilution: 10 Instrument: 9001

### **Analytical Results Method: 8021**

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 10/19/99

Received: 10/20/99

Matrix: Water

OC Batch: 110199W1

Prepared: % Solids:

Analyzed: 11/01/99 Sample Size: 5 ml

Number of analytes: 34

Parameter	<u>Result</u>	Qual	<u>Col</u>	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: Noute to luca

Date: November 3,1999 Monika Santucci

Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting

Certification NY No.: 10155

Job No.: 3435.021.517

Proj. Desc: Fayetteville, New York

Collected: 10/19/99

Matrix: Water

Samp. Description: MW-5

Received: 10/20/99

QC Batch: 110199W1

Primary column: Y

Sample: N3319

Prepared:

% Solids: Sample Size: 5 nıl

Units: ug/L Column: DB-VRX 75m x .45mm ID

Dilution: 10 Instrument: 9001

Analyzed: 11/01/99

Number of analytes: 34

Parameter	Result	Qual	Col	MDL_	RL Notes
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.

Surrogate	Result Qual	_Col_	<u>Limits</u>	Notes
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: 100 to the tice

Date: November 3,1999 Monika Santucci

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting Proj. Desc: Fayetteville, New York

Sample: N3321

Samp. Description: MW-6

Primary column: Y

Units: ug/L

Column: DB-VRX 75m x .45mm ID Dilution: 2 Instrument: 9001

### **Analytical Results** Method: 8021

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 10/19/99

Matrix: Water

Received: 10/20/99

QC Batch: 110199W1

Prepared: % Solids:

Analyzed: 11/02/99

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

**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

Analyzed: 11/02/99

Received: 10/20/99

Matrix: Water

QC Batch: 110199W1

Prepared: % 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	<u>Limits</u>	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

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting Proj. Desc: Fayetteville, New York

Sample: N3311

Samp. Description: MW-7

Primary column: Y

Units: ug/L

Column: DB-VRX 75m x .45mm ID Dilution: 1 Instrument: 9001

Analytical Results Method: 8021

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 10/19/99

Received: 10/20/99

QC Batch: 102399W1 %Solids:

Prepared: Analyzed: 10/23/99

Sample Size: 5 ml

Matrix: Water

Number of analytes: 34

Parameter	<u>Result</u>	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: / Konta Sonlineer

Date: November 3,1999 Monika Santucci

**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

Matrix: Water

QC Batch: 102399W1

Units: ug/L

Prepared: Analyzed: 10/23/99

Collected: 10/19/99

Received: 10/20/99

% Solids: Sample Size: 5 ml

Column: DB-VRX 75m x .45mm ID Dilution: 1 Instrument: 9001

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:

Date: November 3,1999 Monika Santucci

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting Proj. Desc: Fayetteville, New York

Sample: N3309

Samp. Description: MW-8

Primary column: Y

Units: ug/L

Column: DB-VRX 75m x .45mm ID Dilution: 1 Instrument: 9001

Analytical Results Method: 8021

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 10/19/99

Received: 10/20/99

Matrix: Water

QC Batch: 102399W1

Prepared: % Solids:

Analyzed: 10/23/99 Sample Size: 5 ml

Number of analytes: 34

Parameter	<u>Result</u>	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: (A. J. John Monika Santucci

**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:

Matrix: Water QC Batch: 102399W1

% 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)	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.

Date: November 3,1999

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting Proj. Desc: Fayetteville, New York

Sample: N3310

Samp. Description: MW-9

Primary column: Y

Units: ug/L

Column: DB-VRX 75m x .45mm ID Dilution: 5 Instrument: 9001

# Analytical Results Method: 8021

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 10/19/99

Received: 10/20/99

Matrix: Water

0/99 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	<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.	Ū	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.

Authorized: Norta Sonlucci

Date: November 3,1999 Monika Santucci

<sup># -</sup> Outside control limits. U - Undetected at the reported level.

J - reported value is estimated.

E - concentration exceeded the calibration range and is estimated.

**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

Collected: 10/19/99

Matrix: Water

Sample: N3310 Samp. Description: MW-9

Received: 10/20/99

QC Batch: 102399W1

Primary column: Y

Prepared:

% Solids:

Units: ug/L

Analyzed: 10/23/99

Sample Size: 5 ml

Column: DB-VRX 75m x .45mm ID 5 Instrument: 9001 Dilution:

Number of analytes: 34

Parameter	<u>Resul</u> t	Qual	Col	MDL_	RL Notes
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.

Surrogate	Result Qual	Col	_Limits	Notes
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: Mozika Date: November 3,1999 Monika Santucci

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

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting Proj. Desc: Fayetteville, New York

Sample: N3323

Samp. Description: MW-10

Primary column: Y

Units: ug/L

Column: DB-VRX 75m x .45mm ID 25 Instrument: 9001 Dilution:

### **Analytical Results Method: 8021**

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 10/20/99

Analyzed: 11/02/99

Received: 10/20/99

Matrix: Water

QC Batch: 110199W1 % Solids:

Prepared:

Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL _RL Notes
Benzene	<25.	Ū	1	25.
Bromodichloromethane	<25.	Ŭ	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.	Ŭ	1	250.
Chloroform	<25.	Ū	1	25.
Chloromethane	<250.	Ŭ	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.	Ŭ	1	125.
Dichlorodifluoromethane	<250.	Ŭ	1	250.
1,1-Dichloroethane	<25.	Ŭ	1	25.
1,2-Dichloroethane	<25.	Ū	1	25.
1,1-Dichloroethylene	<25.	U	1	25.
cis-1,2-Dichloroethylene	<25.	U	1	25.
trans-1,2-Dichloroethylene	<25.	Ŭ	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.	Ŭ	1	25.
Ethylbenzene	<25.	Ū	1	25.
1,1,2,2-Tetrachloroethane	<25.	Ŭ	1	25.
Tetrachloroethylene	<25.	U	1	25.
Toluene	<25.	Ū	1	25.
1,1,1-Trichloroethane	<25.	Ū	1	25.

J - reported value is estimated.

Authorized:

Date: November 3,1999 Monika Santucci

<sup># -</sup> Outside control limits. U - Undetected at the reported level.

E - concentration exceeded the calibration range and is estimated.

**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:

Matrix: Water

QC Batch: 110199W1

% Solids:

Sample Size: 5 ml Analyzed: 11/02/99

Number of analytes: 34

Parameter	Result	Qual	<u>Col</u>	MDL	RL Notes
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.

Surrogate	Result Qual	Col	<u>Limits</u>	Notes
2-Chloropropane (surrogate)	112.%	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:

Date: November 3,1999

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting Proj. Desc: Fayetteville, New York

Sample: N3318

Samp. Description: MW-11

Primary column: Y

Units: ug/L

Column: DB-VRX 75m x .45mm ID Dilution: 25 Instrument: 9001

### **Analytical Results Method: 8021**

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 10/19/99

Received: 10/20/99

Matrix: Water OC Batch: 110199W1

Prepared:

% Solids:

Analyzed: 11/01/99

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.

J - reported value is estimated.

Date: November 3,1999

<sup># -</sup> Outside control limits. U - Undetected at the reported level.

E - concentration exceeded the calibration range and is estimated.

**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

Prepared:

Received: 10/20/99

Matrix: Water

QC Batch: 110199W1

% Solids:

Analyzed: 11/01/99

Sample Size: 5 ml

Number of analytes: 34

Parameter	Re <u>sult</u>	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	<u>Limits</u>	Notes
2-Chloropropane (surrogate)	110.%	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

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting Proj. Desc: Fayetteville, New York

Sample: N3312

Samp. Description: MW-12

Primary column: Y

Units: ug/L

Column: DB-VRX 75m x .45mm ID Dilution: 1 Instrument: 9001

# Analytical Results Method: 8021

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 10/19/99

Received: 10/20/99

Analyzed: 10/23/99

Matrix: Water

QC Batch: 102399W1

Prepared: % Solids:

Sample Size: 5 ml

Number of analytes: 34

Parameter	<u>Result</u>	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.	Ŭ	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.	Ū	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: How to Sandween

Date: November 3,1999 Monika Santucci

**Analytical Results Method: 8021** 

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting

Job No.: 3435.021.517

Certification NY No.: 10155

Proj. Desc: Fayetteville, New York

Samp. Description: MW-12

Sample: N3312

Units: ug/L

Primary column: Y

Collected: 10/19/99

Matrix: Water

QC Batch: 102399W1 Received: 10/20/99

Prepared: % Solids:

Analyzed: 10/23/99 Sample Size: 5 ml

Column: DB-VRX 75m x .45mm ID Dilution: 1 Instrument: 9001

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)	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: / Korika Sonlucei

Date: November 3,1999 Monika Santucci

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting Proj. Desc: Fayetteville, New York

Sample: N3325

Samp. Description: MW-13

Primary column: Y

Units: ug/L

Column: DB-VRX 75m x .45mm ID Dilution: 20 Instrument: 9001

## Analytical Results Method: 8021

Job No.: 3435.021.517 Certification NY No.: 10155

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.	Ŭ	1	20.
trans-1,2-Dichloroethylene	<20.	Ŭ	1	20.
Dichloromethane	<20.	U	1	20.
1,2-Dichloropropane	<20.	U	1	20.
cis-1,3-Dichloropropylene	<20.	Ü	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.

<sup># -</sup> Outside control limits. U - Undetected at the reported level.

J - reported value is estimated.

E - concentration exceeded the calibration range and is estimated.

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
1,1,2-Trichloroethane	<20.	Ū	1		20.
Trichloroethylene	430.		1		20.
Trichlorofluoromethane	<20.	U	1		20.
Vinyl Chloride	<20.	U	1		20.
Xylenes (total)	<60.	U	ì		60.

Surrogate	Result Qual	Col	Limits	Notes
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

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting Proj. Desc: Fayetteville, New York

Sample: N3324

Samp. Description: MW-14

Primary column: Y

Units: ug/L

Column: DB-VRX 75m x .45mm ID Dilution: 10 Instrument: 9001

### **Analytical Results Method: 8021**

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 10/20/99

Received: 10/20/99

Prepared:

Analyzed: 11/02/99

Matrix: Water

OC 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.

J - reported value is estimated.

Authorized: Date: November 3,1999 Monika Santucci

<sup># -</sup> Outside control limits. U - Undetected at the reported level.

E - concentration exceeded the calibration range and is estimated.

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting Proj. Desc: Fayetteville, New York

Sample: N3324

Samp. Description: MW-14

Primary column: Y

Units: ug/L

Column: DB-VRX 75m x .45mm ID Dilution: 10 Instrument: 9001

# Analytical Results Method: 8021

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 10/20/99

Received: 10/20/99

Prepared:

Matrix: Water

QC Batch: 110299W1

% 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	260.		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)	96.%	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

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting Proj. Desc: Fayetteville, New York

Sample: N3306

Samp. Description: MW-15

Primary column: Y

Units: ug/L

Column: DB-VRX 75m x .45mm ID Dilution: 1 Instrument: 9001

### **Analytical Results Method: 8021**

Job No.: 3435.021.517 Certification NY No.: 10155

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.

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

J - reported value is estimated.

E - concentration exceeded the calibration range and is estimated.

Date: November 3,1999 Monika Santucci

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:

Matrix: Water

QC Batch: 110199W1

% Solids:

Analyzed: 11/01/99 Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL Notes
1,1,2-Trichloroethane .	<1.	U	1		1.
Trichloroethylene	13.		1		1.
Trichlorofluoromethane	<1.	U	1		1.
Vinyl Chloride	<1.	U	1		1.
Xylenes (total)	<3.	U	1		3.

Surrogate	Result Qual	Col	<u>Limits 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: Moreta Santucci

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting Proj. Desc: Fayetteville, New York

Sample: N3305

Samp. Description: MW-16

Primary column: Y

Units: ug/L

Column: DB-VRX 75m x .45mm 1D Dilution: 1 Instrument: 9001

# Analytical Results Method: 8021

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 10/19/99

Received: 10/20/99

Matrix: Water

QC Batch: 102399W1

Prepared: Analyzed: 10/23/99

% 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.

Authorized Norika Sonluce

<sup># -</sup> Outside control limits. U - Undetected at the reported level.

J - reported value is estimated.

E - concentration exceeded the calibration range and is estimated.

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

Received: 10/20/99

Prepared:

Matrix: Water

QC Batch: 102399W1

% 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.

J - reported value is estimated.

E - concentration exceeded the calibration range and is estimated.

Authorized North Santucci

Date: November 3,1999 Monika Santucci

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting Proj. Desc: Fayetteville, New York

Sample: N3313

Samp. Description: MW-17

Primary column: Y Units: ug/L

Column: DB-VRX 75m x .45mm ID Dilution: 10 Instrument: 9001

# Analytical Results Method: 8021

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 10/19/99

Received: 10/20/99

Matrix: Water QC Batch: 102399W1

Prepared: Analyzed: 10/23/99

% Solids: Sample Size: 5 ml

Number of analytes: 34

Parameter	<u>Result</u>	Qual	Col	MDL RL Notes
Benzene	<10.	U	1	10.
Bromodichloromethane	<10.	Ŭ	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: / Kontra Sontucci

Date: November 3,1999 Monika Santucci

Analytical Results Method: 8021

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting Proj. Desc: Fayetteville, New York

Column: DB-VRX 75m x .45mm ID

Dilution: 10 Instrument: 9001

Job No.: 3435.021.517 Certification NY No.: 10155

Proj. Desc: rayettevine, New

Sample: N3313
Samp. Description: MW-17
Primary column: Y

Received: 10/20/99 Prepared:

Collected: 10/19/99

Matrix: Water QC Batch: 102399W1

%Solids:

Analyzed: 10/23/99

Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL_Notes
1,1,2-Trichloroethane	<10.	U	1		10.
Trichloroethylene	180.		1		10.
Trichlorofluoromethane	<10.	U	1		10.
Vinyl Chloride	<10.	U	1		10.
Xylenes (total)	<30.	Ŭ	1		30.

Surrogate	Result Qual	Col	Limits	Notes
2-Chloropropane (surrogate)	96.%	1	72-123	
Fluorobenzene (surrogate)	100.%	1	81-114	

Notes:

Units: ug/L

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

J - reported value is estimated.

E - concentration exceeded the calibration range and is estimated.

Authorized: / X & Far Lucci

Date: November 3,1999 Monika Santucci

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting Proj. Desc: Fayetteville, New York

Sample: N3314

Samp. Description: MW-18

Primary column: Y

Units: ug/L

Column: DB-VRX 75m x .45mm ID Dilution: 100 Instrument: 9001

### **Analytical Results Method: 8021**

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 10/19/99

Received: 10/20/99

Matrix: Water

QC Batch: 110199W1

Prepared: % Solids:

Analyzed: 11/01/99 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.	Ŭ	1	100.
Dichloromethane	<100.	Ŭ	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.

Authorized: Menta Sa. Luce

Date: November 3,1999

<sup># -</sup> Outside control limits. U - Undetected at the reported level.

J - reported value is estimated.

E - concentration exceeded the calibration range and is estimated.

**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:

Matrix: Water

OC Batch: 110199W1

% Solids:

Analyzed: 11/01/99 Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL RL Notes
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.

Surrogate	Result Qual	Col	Limits	Notes
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.

Date: November 3,1999

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting Proj. Desc: Fayetteville, New York

Sample: N3316

Samp. Description: MW-21

Primary column: Y

Units: ug/L

Column: DB-VRX 75m x .45mm ID Dilution: 20 Instrument: 9001

## Analytical Results Method: 8021

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 10/19/99

Received: 10/20/99

Matrix: Water

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.

Authorized: 10 La La Carlucei

<sup># -</sup> Outside control limits. U - Undetected at the reported level.

J - reported value is estimated.

E - concentration exceeded the calibration range and is estimated.

**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

Parameter	Result	Qual	Col	MDL	RL Notes
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.

Surrogate	Result Qual	Col	Limits Note	s
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.

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting Proj. Desc: Fayetteville, New York

Sample: N3315

Samp. Description: MW-22

Primary column: Y

Units: ug/L

Column: DB-VRX 75m x .45mm ID Dilution: 1 Instrument: 9001

# Analytical Results Method: 8021

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 10/19/99

Received: 10/20/99

Matrix: Water

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.	$\mathbf{U}_{,\bullet}$	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: / Var. F. Sonluce.

Date: November 3,1999 Monika Santucci

**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 1 Instrument: 9001 Dilution:

Collected: 10/19/99

Received: 10/20/99

Prepared:

Matrix: Water

QC Batch: 102399W1

% Solids:

Sample Size: 5 ml Analyzed: 10/23/99

Number of analytes: 34

Parameter	Result	Qual	<u>Col</u>	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.	Ū	1		3.

Surrogate	Result Qual	Col	<u>Limits</u>	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.

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting Proj. Desc: Fayetteville, New York

Sample: N3308

Samp. Description: MW-23

Primary column: Y

Units: ug/L

Column: DB-VRX 75m x .45mm ID Dilution: 1 Instrument: 9001

### **Analytical Results** Method: 8021

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 10/19/99

Received: 10/20/99

Prepared:

Matrix: Water

OC Batch: 102399W1

% 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.	Ŭ	1	10.
Chloroform	<1.	U	1	1.
Chloromethane	<10.	Ŭ	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.	Ü	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.	Ŭ	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.

**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

Collected: 10/19/99

Matrix: Water

Samp. Description: MW-23

Received: 10/20/99

QC Batch: 102399W1

Primary column: Y Units: ug/L

Sample: N3308

Prepared: Analyzed: 10/23/99 % Solids: Sample Size: 5 ml

Column: DB-VRX 75m x .45mm ID Dilution: 1 Instrument: 9001

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)	102.8	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: / Koreta Santuce

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting Proj. Desc: Fayetteville, New York

Sample: N3317

Samp. Description: MW-24

Primary column: Y

Units: ug/L

Column: DB-VRX 75m x .45mm ID Dilution: 100 Instrument: 9001

#### **Analytical Results Method: 8021**

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 10/19/99

Received: 10/20/99

Matrix: Water

Prepared:

QC Batch: 110199W1

% Solids:

Analyzed: 11/01/99

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.

Date: November 3,1999

<sup># -</sup> Outside control limits. U - Undetected at the reported level.

J - reported value is estimated.

E - concentration exceeded the calibration range and is estimated.

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: Matrix: Water

QC Batch: 110199W1

% Solids:

Analyzed: 11/01/99 Sample Size: 5 ml

Number of analytes: 34

<u>Parameter</u>	Result	Qual	Col	MDL	RL Notes
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.

Surrogate	Result Qual	Col	Limits	Notes
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.

E - concentration exceeded the calibration range and is estimated.

Authorized: Authorized: Monika Santucci

Monika Santucci

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting Proj. Desc: Fayetteville, New York

Sample: N3320

Samp. Description: PZ-1 Primary column: Y

Units: ug/L

Column: DB-VRX 75m x .45mm ID Dilution: 10 Instrument: 9001

## Analytical Results Method: 8021

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 10/19/99

Received: 10/20/99

Matrix: Water

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.	Ū	1	10.

J - reported value is estimated.

Authorized: 13 Manuel

 $<sup>\</sup>ensuremath{\text{\#}}$  - Outside control limits. U - Undetected at the reported level.

E - concentration exceeded the calibration range and is estimated.

**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

Prepared:

Received: 10/20/99

QC Batch: 110299W1 % Solids:

Matrix: Water

Sample Size: 5 ml Analyzed: 11/02/99

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: 15 U. T.

Date: November 3,1999

Monika Santucci

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting Proj. Desc: Fayetteville, New York

Sample: N3322

Samp. Description: PZ-2 Primary column: Y

Units: ug/L

Column: DB-VRX 75m x .45mm ID Dilution: 1 Instrument: 9001

### Analytical Results Method: 8021

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 10/19/99

Received: 10/20/99

Analyzed: 11/02/99

Matrix: Water

QC Batch: 110299W1

Prepared: % 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	<b>&lt;</b> 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.

Authorized:

Date: November 3,1999 Monika Santucci

<sup># -</sup> Outside control limits. U - Undetected at the reported level.

J - reported value is estimated.

E - concentration exceeded the calibration range and is estimated.

**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

Dilution: 1 Instrument: 9001

Collected: 10/19/99

Matrix: Water

Samp. Description: PZ-2 Primary column: Y

Sample: N3322

Received: 10/20/99

QC Batch: 110299W1

Prepared: Analyzed: 11/02/99

% Solids: Sample Size: 5 ml

Units: ug/L

Column: DB-VRX 75m x .45mm ID

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL Notes
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.

Surrogate	Result Qual	Col	Limits Not	ės
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: Date: November 3,1999 Monika Santucci

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting Proj. Desc: Fayetteville, New York

Sample: N3326

Samp. Description: QC Trip Blank

Primary column: Y

Units: ug/L

Column: DB-VRX 75m x .45mm ID 1 Instrument: 9001 Dilution:

#### **Analytical Results Method: 8021**

Job No.: 3435.021.517 Certification NY No.: 10155

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.	Ū	1	1.
Bromodichloromethane	<1.	Ū	1	1.
Bromoform	<10.	Ū	1	10.
Bromomethane	<10.	Ū	1	10.
Carbon tetrachloride	<1.	U	1	1.
Chlorobenzene	<1.	Ū	1	1.
Chloroethane	<1.	Ū	1	1.
2-Chloroethylvinyl ether	<10.	Ū	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.	Ū	1	1.
cis-1,2-Dichloroethylene	<1.	U	1	1.
trans-1,2-Dichloroethylene	<1.	Ū	1	1.
Dichloromethane	<1.	Ū	1	1.
1,2-Dichloropropane	<1.	U	1	1.
cis-1,3-Dichloropropylene	<1.	U	1	1.
trans-1,3-Dichloropropylene	<1.	Ū	1	1.
Ethylbenzene	<1.	Ū	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.	Ū	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

**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
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	<u> Limits Notes</u>
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

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

Chain of Custody 3549

Client: ENENDERS							Ā	Analysis/Method	ethod	
Project: FARMER ALLINATE DE CASTING	ASTIN 6	J			·		//		//	///
Sampled by: DAVID J. CARNEVALE							(8)	\ \	\	<u> </u>
Client Contact: A FALLELL		Ph	Phone #			\.	720	\	\	\ \
Sample Description	ription									_
Sample Location	Date Collected	Date Time Collected Collected	Sample Matrix	Comp. or Grab	No. of Containers	<b>》</b>	/			Comments
MW-16	11/18/99	-S450 8/8/11	WATER	GRAB	2	X				
	, 1	0830			-	X				
7-MW		0880				×				
E7-MW		0930				×				
MW-8		5560				×				
6-MW		5201				×				
t-mw		1100				X				
71-MW		1125				. >				
#1-MW		1145				×				
MW-18		1210				×			-	
77-MW		1245				٧			<del> </del>	
MW-21 1	<b>→</b>	300	1	<b>→</b>	<b>→</b>	_				
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Relinquished by:	Õ	Date:	Time:	:6	Received by:	l by:			Date:	Time:
Relinquished by:	٥	Date:	тіте:	.; 60	Received	by Lab.	Received by Labi Cabarra Jawline	Dung	Date: 1D/ス(	Date: 10/20/99 Time. 10:15
Shipment Method:					Airbill Number:	mber:				
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Turnaround Time Required:
Routine
Rush (Specify)

comments: 2 act Bree'd. . enalyage only I per D. Carnewale (Opp.

Cooler Temperature:\_

Original-Laboratory Copy-Client

5000 Brittonfield Parkway

Chain of Custody

13057 East Syracuse, New York

(315) 437-0200

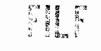
Date: 10 20 0pg Time. 10 15 Comments Time: Time: Date: Date: Analysis/Method Barbare, Townline STREE 301 Received by Lab: Airbili Number: Date: /b/20/97 Time: /u/5 Received by: Received by: Comp. No. of or Grab Containers S WATER GRAB Time: Time: Sample Matrix Phone # Collected Collected 10/19/19/13/0 1450 0850 2115 1340 0820 1405 1530 133 Date: Project: FRANER ACCURATE DIE CASTINE 13/20/199 Sample Description Sampled by: DAVID J. CARNEVALE Client Contact: AL FARRELL Sample Location Client: ENGINEERS Relinquished by: //wild BLANK Shipment Method: Relinquished by: Relinquished by: サル・ベビ 7-7 ナースス MW-13 MW-AD MW-S M W~6 MW-1 P=-1 TRIP

Turnaround Time Required:

Cooler Temperature:\_

Comments:

Original-Laboratory Copy-Client





1 5 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.

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



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

Efflient	11/10/99	11261111 111111111111111111111111111111
Effluent	11/09/99	19470
Effluent	11/03/99	5.00 5.00
Ffflient	11/02/99	19920
	Sample Type	Meter Grab 3-hr comp. 3-hr comp. 3-hr comp. Calculated Grab 3-hr comp. 3-hr comp. 3-hr comp. 3-hr comp. 3-hr comp. 3-hr comp. 3-hr comp. 3-hr comp. 3-hr comp. 3-hr comp. Grab Grab Grab Grab Grab Grab Grab Grab
quirements	Minimum Measurement Frequency(1)	Continuous 2/Week Weekly Weekly Weekly Quarterly Z/Month
Monitoring Requirements	Discharge Limitation Daily Maximum	150000 20 Monitor Monitor 15 15 7 Min. 0.2 0.1 0.3 0.01 0.1 0.3 0.02 0.008 0.2 0.008 0.2 0.0008 0.2 0.000 0.0000 0.0000 0.00000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.00000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.00000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.00000 0.00000 0.00000 0.000000
	Discharge Limitation Daily Average	Monitor 6.5 - 8.5 Monitor
	Analyte (units)	Flow (GPD)  pH (SU)  Residue, non-filterable (mg/L)  Total dissolved solids (TDS) (mg/L)  CBOD5 (mg/L)  TOD (mg/L)  TKN (mg/L)  Dissolved Oxygen (mg/L)  Aluminum, dissolved (mg/L)  Chomium, total (mg/L)  Copper, total (mg/L)  Lead, total (mg/L)  Lead, total (mg/L)  Nickel, total (mg/L)  Nickel, total (mg/L)  Zinc, total (mg/L)  Silver, total (mg/L)  Zinc, total (mg/L)

(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 NOTES:

1 of 2 Page



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

	Effluent	Effluent	Effluent	Effluent	
Analyte	11/16/99	11/17/99	11/23/99	11/30/99	
Flow (GPD) pH (SU)	19054 7.89		18591 7.91	18874 20.7.92	
Total dissolved solids (TDS) (mg/L)		710	740		
CBOLD (mgL) TKN (mgL) TOD (mgl)	1				
Dissolved Oxygen (mg/L)		 ; [ ]	14		
Aluminum, dissolved (mg/L)		1			
Antimony, total (mg/L) Chromium, total (mg/L)	3 1 1		ı ji		
Cobalt, total (mg/L) Copper, total (mg/L)					(1) (1) (1) (2) (2) (2) (3) (3) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4
Iron, total (mg/L) Lead, total (mg/L)			1		
Mercury, total (mg/L) Nickel, total (mg/L)	i i	0.0002.0	1 1		
Vanadium, total (mg/L)	1	1 1 3			
Zinc, total (mg/L)	\$17 \$17 1 224	.04	- 55 - 75 - 15 - 15		
trans-1,2-Dichloroethene (ug/L)	1	ू २००५ ११			
1,1,2,2-Tetrachioroethane (ug/L)		50 U			
Toluene (ug/L)		20 C			
Acetone (ug/L)		. 20 U			
4-Methyl-2-pentanone (MIBK) (ug/L)		5.0 U		- 44 - 444 - 48 - 48 - 48 - 48 - 48 - 4	· 一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个
NOTES: (1) Minimum monitoring requirements based on the SPDES Not analyzed, NA - Data not available U - Not Detected, J - Estimated TOD = 1.5 X CBOD5 + 4.5 X TKN	rements based on the ot available d		permit modified March 13, 1997	77.	Dane 7 of 7

Page 2 of 2

#### ATTACHMENT A

### SPDES PERMIT COMPLIANCE MONITORING LABORATORY ANALYTICAL DATA SHEETS

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting - Fayetteville, NY Proj. Desc: Monthly Effluent & Influent Sampling

Sample: N4276

Samp. Description: WTP Effluent - Grab

Instrument: HP5970 GC/MS#2

Units: ug/L

Number of analytes: 14

#### **Analytical Results Method: 8260**

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 11/03/99

Received: 11/03/99

Matrix: Water

QC Batch: 111299W2

Prepared: 11/12/99 % Solids:

Purge volume: 25 mL

Surrog

Parameter	Result	Limits Dilution	Analyzed Notes
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:

Authorized: Norika Sanluce Date: November 15,1999

# - Outside control limits J-Estimated value

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting - Fayetteville, NY Proj. Desc: Monthly Effluent & Influent Sampling

Sample: N4274

Samp. Description: WTP Influent

Primary column: Y

Units: ug/L

Column: DB-VRX 75m x .45mm ID Dilution: 25 Instrument: 9001

### Analytical Results Method: 8021

Job No.: 3435.021.517 Certification NY No.: 10155

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:

Date: November 17,1999

Monika Santucci

**Analytical Results Method: 8021** 

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting - Fayetteville, NY

Job No.: 3435.021.517 Certification NY No.: 10155

Proj. Desc: Monthly Effluent & Influent Sampling

Sample: N4274 Samp. Description: WTP Influent Primary column: Y Units: ug/L

Collected: 11/03/99 Matrix: Water Received: 11/03/99 QC Batch: 111699W1 Prepared: % Solids:

Analyzed: 11/16/99

Sample Size: 5 ml

Column: DB-VRX 75m x .45mm ID Dilution: 25 Instrument: 9001

Number of analytes: 34

Parameter	Result	Qual	Col_	MDL RL Notes
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.

Surrogate	Result Qual	Col	<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: Norika Sontuce Date: November 17,1999 Monika Santucci

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting - Fayetteville, NY Proj. Desc: Monthly Effluent & Influent Sampling

Sample: N4275

Samp. Description: WTP Between GACs

Primary column: Y

Units: ug/L

Column: DB-VRX 75m x .45mm ID Dilution: 1 Instrument: 9001

## Analytical Results Method: 8021

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 11/03/99

Received: 11/03/99

Prepared:

Matrix: Water

QC Batch: 111699W1

% 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:

Date: November 17,1999

Monika Santucci

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting - Fayetteville, NY Proj. Desc: Monthly Effluent & Influent Sampling

Sample: N4275

Samp. Description: WTP Between GACs

Primary column: Y

Units: ug/L

Column: DB-VRX 75m x .45mm ID Dilution: 1 Instrument: 9001

### Analytical Results Method: 8021

Job No.: 3435.021.517

Certification NY No.: 10155

Collected: 11/03/99

Prepared:

Received: 11/03/99

Matrix: Water QC Batch: 111699W1

%Solids:

Analyzed: 11/16/99

Sample Size: 5 ml

Number of analytes: 34

Parameter	Result	Qual	Col	MDL	RL Notes
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.

Surrogate	Result Qual	_Col_	Limits	Notes
2-Chloropropane (surrogate)	102.%	1	72-123	
Fluorobenzene (surrogate)	99.8	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 17,1999

Monika Santucci

Moreka Sontuca

**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

Units: mg/L

Samp. Description: WTP Effluent - Composite

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	111199µ1	1
Zinc	.01	200.7	11/15/99	11/16/99	111599W1	1

Notes:

J-Estimated value

Authorized://Xoxika Santucci

Date: November 18,1999 Monika Santucci

**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

Matrix: Water

Received: 11/03/99 15:25

Parameter	Result Qual	MDL RL Units	Method	Prepared Analyzed_	QC Batch Note
Total dissolved	620.	mg/L	EPA 160.1	11/10/99	111099W13
solids					
Total suspended	<5. U	mg/L	EPA 160.2	11/10/99	111099W14
- 1 4 3					

Notes:

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

Authorized: / Konto Sonlinear

Date: November 17,1999

Monika Santucci

5000 Brittonfield Parkway East Syracuse, New York 13057

**Chain of Custody** 

Date:1/3内 Time.15:2 Comments Time: Date: Date: Analysis/Method Date: 11/3/99 Time: 1525 Received by Date: Tary and Tawking egAirbill Number: Received by: Received by: Container <u>8</u> SEMUICES INC Phone # 2316109 (315)437-0200GRAHB Comp. or Grab 6248 SH119 WATER COMP CHO DELLAND Time: Time: ATER Sample Matrix Collected Collected 11/3/8/11/11 113/84 7:04 26.6 26/2/11 13/95 16:10 Date: Date: Client: O'3PIEWY GEKE, TECHNICHL Project: FORMIER ACCURATE DIE Sample Description Shipment Method: 4 ALD DELLUERED Sampled by: JERLY 150PH Client Contact: サイト F472RELL TSORN SELLVEEN GIR どしなり バドドハンタア で作して NFLUEN Sample Location Relinquished by: Relinquished by: Relinquished by:

uired:	
Red	
Time	
around	(
E	

Comments:

Routine Rush (Specify)

Cooler Temperature: 2 C

Original-Laboratory Copy-Clien

**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

Collected: 11/10/99

Matrix: Water

Samp. Description: WTP Effluent

Received: 11/10/99 15:25

Parameter	Result Units	Method	Prepared Analyzed	QC Batch Note
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 Norika Sonluce Date: November 29,1999

Monika Santucci

5000 Brittonfield Parkway
East Syracuse, New York 13057 386
(315) 437-0200

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Client: O'SPIEN + GERE TECHNICHL SERV	NICHT	SERVICE	ES INC	7/				ď	nalysis	Analysis/Method	þ	
Project: ACCURATE DIE (FI	FORMER	(2)										
Sampled by: VANATO: Va Bell							\	\	\	\	\	\
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Sample Description	cription					1						_
Sample Location	Date Collected	Time Collected	Sample Matrix	Comp. or Grab	No. of Containers	X	<i>\</i>		\	\	\	Comments
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Relinquished by: Anna A Son	۵	Date: 11/10	0/pg_TIMB:2525		Received by Lab: Mach F. Celhacu	by Lab:	Mach	f)	Bach	Dat	Date: 11/10/29	<b>Zでらり</b> 。
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Required:	
Time	
urnaround	

Comments:

700 Cooler Temperature:\_\_

Original-Laboratory Copy-Client

**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

Collected: 11/17/99 Received: 11/17/99 Matrix: Water

Units: mg/L

%Solids:

Number of analytes: 2

Parameter	Result	Method	Prepared	Analyzed	QC Batch	Dilut. Note
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: Nozika Santucci

# **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

Certification NY No.: 10155

Sample: N5331

Samp. Description: WTP Effluent - Composite

Collected: 11/17/99

Matrix: Water

Received: 11/17/99 15:55

<u>Parameter</u>	<u>Result Units</u>	Method	Prepared Analyzed	QC <u>Batch</u> Note
Total dissolved solids	710. mg/L	EPA 160.1	11/22/99	112299₩11
Total suspended solids	<5. mg/L	EPA 160.2	11/22/99	112299W13

Notes:

J-Estimated value

Authorized: \_\_\_\_\_ Sanlucei

Date: December 6,1999

Monika Santucci

### **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

Collected: 11/23/99

Matrix: Water

Samp. Description: WTP Effluent

Received: 11/23/99 15:25

<u>Parameter</u>	Result Units	Method	Prepared Analyzed	QC Batch Note
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

kw Sontuce Date: December 6,1999

Monika Santucci

Client: O'Brien & Gere Engineers, Inc.

Project: Accurate Die Casting - Fayetteville, NY Proj. Desc: Bi-Monthly Effluent Sampling

Sample: N5330

Samp. Description: WTP Effluent - Grab

Instrument: HP5970 GC/MS#2

Units: ug/L

Number of analytes: 14

### Analytical Results Method: 8260

Job No.: 3435.021.517 Certification NY No.: 10155

Collected: 11/17/99

Matrix: Water

Received: 11/17/99

QC Batch: 112399W2

Prepared: 11/23/99 %Solids:

Purge volume: 25 mL

Surrog

Parameter	Result	Limits Dilution	Analyzed Notes
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:

Authorized: Morika Sontucci

Date: November 24,1999

Monika Santucci

# - Outside control limits J-Estimated value

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				Kathy "Ts" Kim "C"	Moloughney, D	<u>_</u>	Michele	-ilkins, R
_	CI Almayi	Znk, E	<del></del>	Kim "C"			Lauren "B"	-esta, T.
	Kathy "Ts"				Miller, J.		Marcia "E"	
	Michele	Zinoman, L Zobre, D		Bennett "D" Kim "C"	McCullough, J		Kathy "Ts"	arrar, K-
_	Michele	Zeppetelli, L		Michele	McCarthy, P.		Kathy "Ts" Karen	-arrar, D
	Kathy "Ts" Michele				Mateunas, M		Michele	G ,ansv
		Zalewski, J		Bennett "D"	M ason, M			S , snilovi
	"A" szil	Yavonditte, J		Marcia "E"	Mason M		Karen	J ,tsinn=
	Bennett "D"	Woodward, V		"A" sziJ			Michele	A dsilgn=
	"A" bziJ	Woodward, F	<del>-</del>	Kathy "Ts" Kim "C"	Magee, C Maiurano, K		Kathy "Ts"	
	Michele	Wolosen, T.		Kim "C" Kathy "Te"			Lauren "B"	Edwards, R Edwards, Sue
	Kathy "Ts"	Wolosen B			MacDonald, L MacNeal, D		Kathy "Ts" Lauren "B"	A gnod
	Kathy "Ts"	Wither, S		Lauren "B"				aton, Dan
	"A" seiJ	Whitfield, C		Lauren "B"	MacCabe M		"A" ssiJ	A ,nemtes
	Michele	Whitcher, R.		Kim "C"	Lukowski, E.		Valerie "A"	L ,19dyC
	"G" Italian	White, J		Bennett "D"	Long, Payson			L ,ninnuC
	"3" Marcia "E"	W ZheW		Bennett "D"	Livingston, D		Lauren "B"	.M ,msdnuC
	Bennett "D"	Welling, W		Kathy "Ts"			"G" Janana	
	Michele	☐ ,legieW		"A" EsiJ	Linder-Cantwell, C Lister, J		"A" eilelie Valerie "A"	Judek, Heidi
	"A" sziJ	Walter, A.		Michele			Lauren "B"	Jrumm, J.
	"aT" YnteX	Victor, J		Michele	Lewis Lisa		Kim "C"	. J. ejsloc
	"A" ssiJ	O ,nevebuseV		Kathy "Ts"	Lewandowski, K		Michele	Oiligent, K.
	Karen	Tromp, D		Kathy "Ts"	. D. 6966, C.		"A" əinələV	Dieter, G.
	Marcia "E"	L 'beiT		Lauren "B"	Lee, R.		"A" sziJ	.T ,ZsiC
	"at" Kathy	Tambe Jacob		Kathy "Ts"	Lebarron, T.		"O" miX	Syette, S.
	"∃" siɔısM	Sylvester, A		Bennett "D"	S ,nibsed		Lauren "B"	G. (Shees, S.
	"A" ssiJ	Swartout, J		Lauren "B"	Larson, T		Karen	Desnoyers, D.
	"A" ssiJ	Strang, J		"A" sziJ	Lampman, L		Kim "C"	OeNyse, K.
	Kim "C"	Spellman, J.		Kathy "Ts"	Куег, К		Michele	OeMarco, G.
	Michele	Spath, M		Bennett "D"	Komoroske, M		"A" ssiJ	OeCandia, R.
	Michele	T ,nisq2		Marcia "E"	Knizek, B		Lauren "B"	.a ,nosbivsC
7	Lauren "B"	T , rdim2		Michele	Kenney, K		Karen	.W ,elgisC
	Lauren "B"	Smith, P. D		Michele	Kennedy, L		"A" ssiJ	Curran, C.
	Karen	W, wed?		Lauren "B"	Keating, R		Marcia "E"	Cruden, M.
	"A" ssiJ	Seaman, M.		Michele	Karwiel, S		Kim "C"	D. (2001)
	Kim "C"	Schick, R		Kim "C"	Karwiel, A		Kim "C"	Crosby, D
	"A" ssiJ	Scharf, S		"A" sziJ	Jones, J.		Lauren "B"	R, yssoc
	Lauren "B"	Sarnowicz, K		Kathy "Ts"	M ,noanhot		Michele	Couser, T
	Michele	Sarnacki M		Marcia "E"	Jenks, M.		Michele	O , soluoqotso O
	"O" miX	Myan, M		Kathy "Ts"	Jarratt James		Kathy "Ts"	Corcoran, R
	Kathy "Ts"	Rutland, R		"A" seiJ	Jankauskas, B.		Kim "C"	Cook, Joshua
	Michele	☐ J ,ozziЯ		"A" sziJ	Hunter, L.		"∃" sioneM	Chiusano, D
	Bennett "D"	Rider, G	7	Michele	Нитрһгеу, Р.		Michele	A ,obeidO
	Kim "C"	Reinhart, K		Kim "C"	Hubicki M		Michele	Cerniglia L
	"sT" ydtsX	Reichinger S		Bennett "D"	Ноидh R		Kathy "Ts"	Carpenter, Ke
	Karen	A ,nniuD		Michele	L ,nsnoH		Kathy "Ts"	Carpenter, Ka
	Lauren "B"	Quinn, J		Michele	T ,nsmitoH		Kim "C"	Candiloro, J
	Michele	A ,nninD		Bennett "D"	O ,nsmitoH		Bennett "D"	Campbell, B.
	"A" ssiJ	Putnam, N.		Lauren "B"	Hesier, D		"sT" Kathy	Galifano, E
	Kathy "Ts"	Putnam, B		Kim "C"	Herman, D.		"A" saiJ	Burke, G
	Kim "C"	Priore, S		Kim "C"	Helmset, J	<del></del>	Michele	Burger, Ralph
	Karen	Ports, W		Bennett "D"	Heitzman, G	7	Kim "C"	Brown, B.
	Kathy "Ts"	Pokrzywka De		"sT" Kathy	Heigel, S		Kathy "Ts"	Brausieck, J.
	Lauren "B"	Perez Mal J		Marcia "E"	Hausamann, E		Bennett "D"	Brand, Martin
	"O" Itenned	Pelton, J.		"Aleiona"E"	D , simsH		Michele	Bolesky, Sue
	Lauren "B"	Беск, Ј		Kathy "Ts"	Harrington, J		"A" ssiJ	Ворегѕку, Сиу
	Kim "C"	W ,yswettO		Lauren "B"	U ,notgninsH		"A" sziJ	Bishop, H.
	Kim "C"	A ,adgonomO		Bennett "D"	Hampston, E		Michele	Bennett, Ted
	Kathy "Ts"	Obrecht, J		Kathy "Ts"	Hale, K		Kim "C"	Gennett, Bill
	Kathy "Ts"	Obrecht, E		Karen	Наддецу, Е		Bennett "D"	Belmore, Ed
	Michele	Norvik, D		"A" seiJ	Hackett, R.		Bennett "D"	Beilby lan
	Michele	A ,təəlhoM		Michele	Gupta, S		"O" miX	Becker, Kiera
	"A" ssiJ	√g, C *		"A" əinəlsV	Gupta K		Kathy "Ts"	Зауег, Wayne
	Bennett "D"	V ,ismnattaV		Lauren "B"	Greco, J.		Kathy "TS"	Sarrie Mary
	Lauren "B"	Mustico, R		Lauren "B"	Grathwol, J		Lauren "B"	Aversa, Jack
	"3" sioneM	Murry-Bonsteel, N.		Michele	V ,nozdiĐ		Kathy "TS"	Artino Cecelia
7	"3" sioneM	M szoM		Lauren "B"	Gibbons, T		Kathy "Ts"	T , zahatsen A
	Bennett "D"	Moras, J		Kathy "Ts"	Freedman, C.		"O" IJəunə8	Alden, Larry
	"A" seiJ	Moore, V.		"O" miX	Franklin B		Michele	Albert, Michele
	"a" EinseM	Momberger G	7	Michele	Follett, K.		Lauren "B"	Ahmed, S.
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