rapvf. *212112.hcod* ,/t?. **M*A***'^ediia.

LooBifTAicfiJ10 Com*pk fan** **4J**f^*d*^ **f«**

l?.d;no **ft***4s>v*

REMEDIAL CONSTRUCTION COMPLETION REPORT

APPENDICES A-H

FORMER RUNOFF BASIN AREA
KENTUCKY AVENUE WELLFIELDlSITE
OPERABLE UNIT NOi 3
HORSEHEADS, NEW YORK

I? £ #7?r

prepared/or:

Viacom In.c.
11 Stanwix Street ,
Pittsburgh, PA 15222-1384

preparatory:

IT Corporation
2790 Mosside Boulevard .?
Monroeville, Pennsy4vanial5146 **

December 8,v20D0

REMEDIAL CONSTRUCTION COMPLETION REPORT

APPENDICES AH

FORMER RUNOFF BASIN AREA
KENTUCKY AVENUE WELLFIELD SITE
OPERABLE UNIT NO. 3
HORSEHEADS, NEW YORK

prepared/or:

Viacom Inc.
11 Stanwix Street
Pittsburgh, PA 15222-1384

prepared by:

IT Corporation
2790 Mosside Boulevard
Monroeville, Pennsylvania 15146

December 8,2000

APPENDIX

A

APPENDIX A

BORING LOGS

FINAL DESIGN
EQUIPMENT SPECIFICATIONS
for the
AIR SPARGE/SOIL VAPOR EXTRACTION SYSTEM
at the
FORMER RUNOFF BASIN
KENTUCKY AVENUE WELLFIELD SITE
OPERABLE UNIT NO. 3
HORSEHEADS, NEW YORK

1.) SVE Wells (3 new wells) SVE-2, SVE-3, and SVE-4

Nominal Utilization:	86-172 scfm
Material:	solid PVC riser, 0.040" slotted PVC screen
Diameter	4"
Depth:	11' (subject to site conditions)
Sand Pack:	#2 sand
Well Seal:	bentonite
Installation Method:	hollow-stem auger drilling

2.) Air Sparge Wells (8 new wells) AS-2 through AS-9

Nominal Utilization:	2 scfm
Material:	galvanized steel riser, galvanized #60 gauze point
Diameter	1"
Depth:	2V (subject to site conditions)
Sand Pack:	#1 sand, #00 sand
Well Seal:	bentonite, hydraulic cement
Installation Method:	hollow-stem auger drilling

K)

ro*J

C9) 1*-CA-FVC
(4) 4'-VAP-FVC

S 1"-CA-f¥C
4"-VAP-P¥D

MW-11S

f4) 1"-Ck-t*C
(2) 4'-VAP-PVC

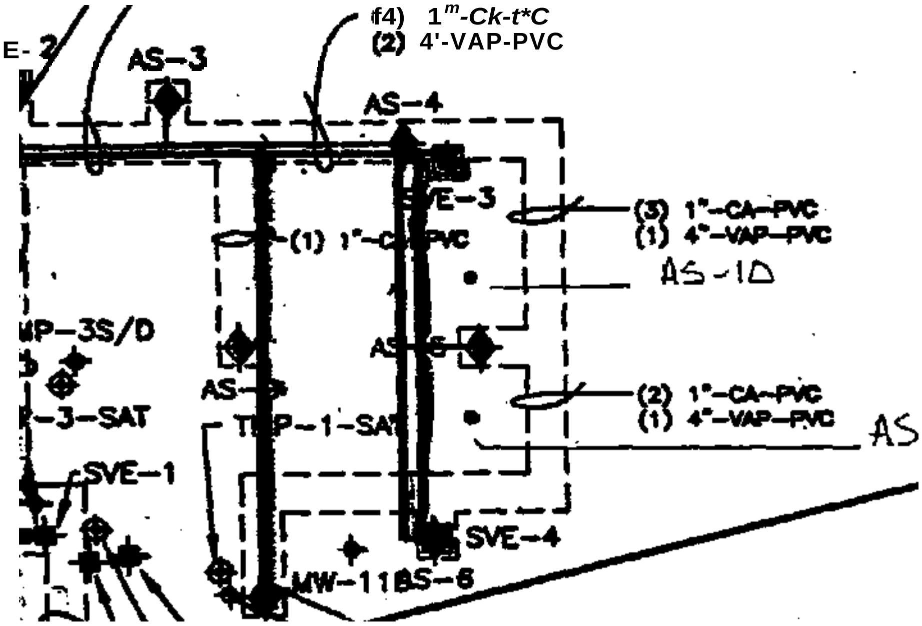
SVE-

AS-2

(2) 1*-CA-PVC
CI) 4"-VAP-PVC

TOP-5S/D

AS-t
AS-V



$ •

AS-

AS-7

VEW-S

TMP-1S/D

TMP-4-SAT

VEW-0

0) r-cA-pvc

MAIN PUNT
BUILDINGS

DETAIL NUMBER

SHEET ON WHICH
DETAA. CAN BE FOUN

SHEET ON WMCH
DETWLJS FWST
REFERENCED

Drilling Log

(T CORPORATION

Air Sparge Point **AS-2**

Page: 1 of 1

COMMENTS

Project *Kentucky Ave. Weltfjeki Site* Owner

Location *Horseheads, NY* Proj.No. *811S95*

Surface Etev. *J!** Total Hole Depth *21.0 ft.* North. ____ East ______

Top of Casing *NA* Water Level Initial *S 11.0 lt* Static *NA* Diameter *4^5 in.*

Screen: Dia . *NA* Length *JO** ______ Type/Size _**_

Casing: Dia *JM* Length *NA* Type *M*

Fill Material ______ Rig/Core

Drill Co. Maxim *Technologies, Inc.* Method Wo/tow Stem *Auger*

Driller ______ Log By Date *&2&00* Permit # *NA*

Checked By ______ License No.

F	Bi	O £ tc	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.	
- O -			Asphalt. Brown coarse GRAVEL subcase, dry. Brown grading to black, SILT and GRAVEL with cinders, dry to damp.	*J*
- *2* -				
- 4 -	40%	Q'		
6 -	20%			
- 8 -	0%		No recovery.	
- 10 -	85%		Brown GRAVEL and SILT, saturated.	
- 12 -	20%			
- 14 -	85%		Brown GRAVEL. SAND, and SILT, saturated.	
16 -	75%		Brown GRAVEL, SILT, and SAND, saturated.	
\- 18 -	80%		Brown GRAVEL, CLAY, SILT, and SAND, saturated.	
20 -			No recovery.	

03

rrcoRpotuffDM

Drilling Log

Air Sparge Point AS-3

Page: 1 of 1

COMMENTS

Project *Kentucky Ave. WelHield Site* Owner

Location *Horseheads, NY* Proj. No. *811S9S*

Surface Elev. *JM_* Total Hole Depth *21.0 ft.* North_____ _____East _______

Top of Casing *0*.* Water Level Initial S *12.0 ft.* Static _**_ Diameter *4-25 in.*

Screen; Ota *NA* Length *JM*______________ Type/Size JW_

Casing: Dta _^*______ Length _$M______________ Type ^

Fill Material ____________________ Rig/Core

Drin Co. *Maxim Technologies. Inc.* Method *Hollow Stem Auger*

Driller _:________________Log By Date *&23M0* Permit* *JO*.*

Checked By ____________________ License No.

E g	M <t		Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.	
- 0 -			K Asphalt GRAVEL subbase Brown, f-c GRAVEL and SILT, dry.	*J*
- 2			Brown, m-c GRAVEL and SILT with ashes, dry.	
- *A* -	0%		No recovery	
- 6 -	10%		Black, SILT and m-c GRAVEL, wet.	
- 8 -	10%		Brown, m-c GRAVEL and SILT, damp.	
- 10 -	50%		Brown, SILT and m-c GRAVEL, damp.	
l_12 2J	50%		Brown, SILT layer and m-c GRAVEL, wet.	
- 14 -	55%		Brown, SILT and SAND with gravel lenses, wet.	
- 16 -	55%		Brown SAND, little silt, saturated	
- 18 -	70%		Brown, m-c GRAVEL, SILT and SAND, saturated.	
I.		».		
- 20 -	60%			

Drilling Log

rrcoRraumoi

Air Sparge Point **AS-4**

Page: 1 of 1

COMMENTS

Project *Kentucky Ave. Wellfhld Site*

Owner

Location *Horseheads, NY*

Proj. No. *811595*

Surface Elev. NA

Total Hole Depth *21.0 ft.*

North ___ East _______

Top of Casing ^

Water Level Initial -^ ™* ft

Static J " .

Diameter *4.25 in.*

Screen: Dia 1-25 '"•

Length Jt£

Type/Size *Stainless Steel*

Casing: Dia 1 '"•

Length J!*.

Type *Galvanized Steel*

Fill Material _________

Rig/Core

Drill Co. *Maxim Technologies, Inc.* Method *Hollow Stem Auger*

Driller __________ Log By __________ Date *8/22/00*

Permit # J^

Checked By

License No.

2* v

fa II si

Description

(Color, Texture, Structure)

Geologic Descriptions are Based on the USCS.

0 -

K Asphalt.

Brown SILT with medium to coarse gravel.

- 2 -

- A -

- 6 -

- 8 -

- 10 c

c

- 12 -

Large Cobbles.

- 14 -

Brown SILT with medium to coarse gravel.

- 16 -

- 18 - c

c.

- 20 -

c

EE3
rr CORPORATK«

Drilling Log

Air Sparge Point **AS-8**

Page: 1 of 1

Project *Kentucky Ave. Weltfield Site* Owner COMMENTS
Location *Horseheads, NY* Proj.No. *811595*
Surface Elev. *JO.* Total Hole Depth *21.0 ft.* North. _____East _______
Top of Casing *NA* Water Level Initial *^ 11-oft-* Static *AW* Diameter *4-25 in.*
Screen: Dta . *1.25 in.* Length _**______________ Type/Size *Stainless Steel*
Casing: Dia *1 in* Length *NA* Type *Galvanized Steel*
Fill Material________:____________ **Rig/Core**
Drill Co. *Maxim Technologies, Inc.* Method Hoftw Stem Auger
Driller____________________Log By Date *B/24/00* Permit # *JM.*
Checked By ____________________ License No.

81	wl^	11 *P*	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
- 0			Drilled
	70%	B o	Brown SILT and GRAVEL, dry.
- 2 -	35%	"\	Brown, m-c GRAVEL and SILT, dry.
- 4 -	40%	A	Black, f-c GRAVEL. SILT, and ASHES, damp to wet.
6 -	15%	ˌ <	
		<3d> V	
8 -	20%	V <:	Brown, f-m GRAVEL and SILT, wet.
- 10 -	15%	r^tr V <-	Brown, GRAVEL, little silt, wet.
		•>b	
- 12 -	100%	s	Gray, SILT and CLAY, few vf sand lenses, damp.
14 -	85%	18	Brown, SAND and GRAVEL, wet grading to saturated.
		mm	
- 16 -	25%	ill	
- 18 -	70%		
- 2 0 -	50%		

EH

iTcoRpQuam

Drilling Log

Soil Boring **AS-10**

Page: 1 of 1

Project *Kentucky Ave. WeHTield Site*
Owner
COMMENTS
Location *Horseheads, NY*
Proj.No. g » » 5
Surface Elev. *JfA*
Total Hole Depth 2T ° *ft.*
North. ____East ________
Top of Casing *NA*
Water Level Initial ** 10.7 ft.*
Static *NA*
Diameter 42S"•
Screen: Dia . *NA*
Length J ^______________
Type/Size _ ^ 1
Casing: Dia *J£*
Length *NA*
Type *M.*____
Fill Material ____________________
Rig/Core
Drill Co. *Maxim Technologies. Inc.*
Method *Hollow Stem Auger*
Driller____________________Log By
Date 82400
Permit # _ ^ 1
Checked By ____________________
License No.

Description

(Color, Texture, Structure)

Geologic Descriptions are Based on tfw USCS.

H

wi#

- 0 -	70%	18" 26 7 4	<1Z\	KASPHALT **Brown GRAVEL and SILT, damp.**
2 -	50%	5 4 3 7	z	**Brown SILT and m-c GRAVEL, damp.**
- 4 -	40%	4 4 5 6		
- 6 -	35%	6' 7 6 3		
- 8 -	10%	4 4 8 11	▨	**COBBLE**
h 10 H 2	20%	16 24 38 17		**Brown, m-c GRAVEL, little silt, saturated.**
- 12 -	B5%	10' 14 13 11		**Gray SILT, wet.**
- 14 -	50%	24' 16 14 15		**Gray SILT with Clay and Gravel lenses, wet.**
- 16 -	70%	36' 20 18 14	&·	
- 18 -	50%	10 6 7 7	"\ O	**Brown, f-c GRAVEL, little silt, saturated.**
- 20 -	50%	io' 10	ox	

/

Drilling Log

Soil Boring **AS-11**

ircoRPOMm
*A Hi i\r*J)rlT6mr*

Page: 1 of 1

COMMENTS

Project *Kentucky Ave. WeimekSSite*

Owner

Location Horeerwads, *NY*

Proj. No. *811S9S*

Surface Etev. JW
Total Hole Depth *21.011*___
North. _____**East** _______

Top of Casing *NA*
Water Level Initial ^ *110ft*
Static *NA*
Diameter *4.25 in.*

Screen: Dia . *NA*
Length J^______________
Type/Size J**.

Casing: Dia ^
Length *NA*
Type _™____

Fill Material ____________________
Rig/Core

prill Co Maxim *Technologies, Inc.*
Method *Hollow Stem Augor*

Driller____________________**Log By**
Date &****>
Permit* JH_

Checked By____________________
License No.

-?

Oescripfim^v-: --
((^otor^Texture, Structure) "'
Geolosic Desortp&ons are Based cm the USCS.

- 0 -			\ Asphalt GRAVEL subbase Black GRAVEL, damp.	*J*
- 2 -			Black, m-c GRAVEL, SILT and ASH. damp,	
- 4 -	35%			
- 6 -	45%			
- 8 -	35%			
- 10 -	70%		Brown, *i-c* GRAVEL and SILT. wet.	
- 12 -	50%	B* -	Brown, SILT and CLAY with gravel lenses, wet-	
- 14 -	70%		Brown. m-c GRAVEL, SAND and SILT. wet.	
•				
	100%		Brown SAND, little silt, saturated	
- 16 -				
	50%		Brown, f-c GRAVEL, saturated.	
- 18 -				
	40%			
-20 -				

Drilling Log

ITCORPORAnOH

Air Sparge Point **AS-5**

Page: 1 of 1

Project *Kentucky Ave. Weltfield Site*
Owner
COMMENTS
Location *Horseheads, NY*
Proj.No. ***811595***

Surface Elev. _M
Total Hole Depth *21.0 ft.*
North. _____East ________
Top of Casing *NA*
Water Level Initial *JfA_*
Static *NA*
Diameter
Screen: Dia *NA*
Length _^4_________
Type/Size _^6_
Casing: Dia *J^L*
Length *NA*
Type *N**
Fill Material ______________________
Rig/Core
Drill Co. *Maxim Technologies, Inc.*
Method *Hollow Stem Auger*
Driller____________________Log By
Date *8/21/00*
Permit # _^1
Checked By____________________
License No.

fa **Bi** **r***

Description

(Color, Texture, Structure)

Geologic Descriptions are Based on the USCS.

- 0 -	-\ Asphalt GRAVEL subbase SILT and GRAVEL.	*J*
- 2 -	**i**	
- 4 -		
	COBBLES and GRAVEL.	
- 6		
- 8 -		
- 10 -	Brown SILT with GRAVEL.	
- 12		
- 14 -		
- 16 -		
- 18 -		
- 20 -		

EE3
IT CORPORATION
4 Ilmtrr .S TV rr<nf>

Drilling Log

Air Sparge Point **AS-6**

Page: 1 of 1

COMMENTS

Project *Kentucky Ave. WeHfteld Site*
Owner
Location *Horseheads, NY*
Proj. No. 5**595
Surface Elev. *NA*
Total Hole Depth *21.0 ft.*
North. ____ East ____
Top of Casing *NA*
Water Level Initial 2 £ *10.6 ft.*
Static *NA*
Diameter *4-25in-*
Screen: Dia *1-25* '"•
Length *NA*
Type/Size *Stainless Steel*
Casing: Dia *'"•
Length *NA*
Type *Galvanized Steel*
Fill Material ____
Rig/Core
Drill Co. *Maxim Technologies, Inc.*
Method *Hollow Stem Auger*
Driller ____ Log By
Date *8/21/00*
Permit* *NA*
Checked By ____
License No.

Q E *zr Q.*	Description (Color, Texture, Structure) Geologic Descriptions are Based on the USCS.
- 0 -	Brown medium to coarse GRAVEL and sitt.
- 2 -	
- *A* -	
- 6 -	
- 8 -	
	Heavy COBBLES.
1—10—1 **2**	Brown SILT with GRAVEL.
- 12 -	
- 14 -	
	Heavy COBBLES.
- 16 -	GRAVEL and water.
- 18	
- 20 -	

Drilling Log

IT CORPORATION
<Mi.lu •ftwrrc~T

Air Sparge Point **AS-7**
Page: 1 of 1

project *Kentucky Ave, Wellfield Site*
Owner
COMMENTS
Location *Horseheads, NY*
Proj. No. *B11595*
Surface Elev. JM
Total Hole Depth *210 ft-*
North. ____ East ____
Top of Casing *NA*
Water Level Initial *^ 107ft-*
Static *NA*
Diameter *4.25 in-*
Screen: Dia *. 1.25 in.*
Length *J***
Type/Size *Stainless Steel*
Casing: Dia *1 in-*
Length *NA*
Type *Galvanized Steel*
Fill Material ____
Rig/Core
Drill Co. *Maxim Technologies, Inc.*
Method *Hollow Stem Auger*
Driller ____ Log By
Date *8/22/00*
Permit # _M.
Checked By ____
License No.

s^e OE

Description

(Color, Texture, Structure)

Geologic Descriptions are Based on the USCS.

- 0 -

Hit Pier CONCRETE.

Gravel and cobbles.

- 2 -

- A -

SILT medium to fine gravel.

- 6

- 8 -

h 10 H
2

- 12 -

Brown SILT with GRAVEL.

- 14 -

Heavy COBBLES.

16 -

- 18 -

- 20 -

Q3
IT CORPORATION

Drilling Log

Air Sparge Point **AS-9**
Page: 1 of 1

COMMENTS

project *Kentucky Ave. Wellfield Site* Owner
Location *Hcrseheads, NY* Proj. No. *811595*
Surface Elev. _ M . Total Hole Depth *21.0 ft.* North. _____ East _______
Top of Casing *NA* Water Level Initial _*!*_ Static *NA* Diameter *4-2$in-*
Screen: Dia *1-25 in.* Length *NA* Type/Size *Stainless Steel*
Casing: Dia *'"• Length *NA* Type *Galvanized Steel*
Fill Material ____________________ Rig/Core
Drill Co. *Maxim Technologies, Inc.* Method *Hollow Stem Auger*
Driller ____________________ Log By Date *8/22/00* Permit # *NA*
Checked By ____________________ License No.

fi ***n***

Description

(Color, Texture, Structure)
Geologic Descriptions are Based on the USCS.

- o -

\ Asphalt
COBBLES and SILT.

- 2 -

- *A* -

SILT and medium to coarse gravel.

- 6

c

- 8 -

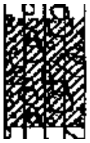
o

- **10** -

SILT and fine to medium gravel.

c

- 12 -



Brown SILT with GRAVEL.

- 14 -

- 16 -

c

- 18

c

- 20 -

c

APPENDIX
B

APPENDIX B

TRENCHING, FOUNDATION, AND SHED DETAILS (AS-BUILTS)

STATE OF NEW YORK
DEPARTMENT OP TRANSPORTATION
107 BROADWAY
HORNELX, N.Y. I4B43

PETEr? E. WHITE. P.E.
REGIOMAL DIRECTOR

JOttC^M H. BOMOMAM
COMNIUIONm

July 25, 2000

Rhinehait Sand & Gravel
201 East Comog Road
Coming. NY 14830

RE. Source # 6-4SG

Gentlemen :

Your source represented by Sample # 141007 has been tested for items 703-02 Coarse aggregate.

Test results are attached

If you have any questions, please feel free to contact me at 607-324-3375-

Sincerely

Kevin B. O'Buckiey, P.E.
Regional Construction Engineer, R-6

By ______________________
Walt Rutski
Regional Materials Engineer, R-6

war
attachment
ccrfile

.-"'. >iv

U -!- s^-^'-NEWlyORK STATE •-• .-•?>" i.riv-"
•" DEPARTMENT OT 'TRANSPORTATION ; 1
*' • .-MATERIALS BUREAU

SOURCE # 6- 4SG TEST. # 00AG 17C
RHINERART SAND & GRAVEL BR3a SERIAL ft 14100?
EAST CORNING, NY

On 07/17/QQ material represented by sample 141007 was ACCEPTED FOR ITEMS 703-02 (coarse aggregate).

REMARKS: EAST PIT

YSDOT SIZES	NO.2	NO.l	NO-1A
10 Cycle MgS04.	8.7	17.0	
25 Cycle freeze-thaw			
25 Cycle 3% freeze-thaw	•J-0		
% Non-carbonate	87		
* Insoluble residue	20.1		
L.A. Abrasion. Grading B			

Bulk Specific Gravity SSD	2-61	Gravity & absorption values represent
Bulk Specific Gravity	2.5ffi	this sample only, use average values
Apparent Specific Gravity	2.687	from Aggregate Source Book in all
Absorption	1.fi	calculations

OMPOSITION (size 2)	
LIMESTONE	10
DOLOMITE	3
CHERT	1
RED SANDSTONE	3
GUARTZITS	4
IGNEOUS	4
GRAyWACKE-SILTSTONE	75

```
PROGRAM: S4285100              PENNDOT CAMMS TESTING REPORT              1/20/1999
REPORT : CAMLR510                       AGGREGATE       ENGLISB            4:16:05
 I   NAT.   REPORT   Re£#   A111990    La*>#: 98031073   Paso/Fail•-     CAMSPROD

2ont #: 000000                          QA Rtng.-                   Cntrctr
3t F N? 09008509000 0300 614 9998       Smp Cl8;RS                  Suplier  RHINYCX4
?r O #:                                 Orgnztn;0300                Lctn Cd
*tl Cd:203 A8GL                         State R:                    JME #/V    /
4tl  De:AGGRGT,COARSE                   Section:    0000            L/C XRf
408Y/S;1994  703                        Station:                    Prt Tkt
Supl  #:                                Colcted:11/18/1998          Lot Nbr
Pic CI:COLD SPRING PIT                  Receivd:12/01/1998          # incrm
Sap BysSEKELLICK                        Releaftd: 1/20/1999         447 XRf

tR-447 Renarks: SUPERPAVE CONSENSUS. LESS THAN 30 MILL ESALS.
                LESS THAN 1OOMM DEPTH

5CRKSN  LIMITS    RL    -1-
3/4"                    100
1/2"   100 100     0    100
3/8"    85 100    15     99
1/4"                     43
ft*  10     30    20     14
1*8      0  10    10      1
#16      O   5     5      1

PERCENT ABSORPTION
   -1-
    1.64

SSD SPECIFIC GRAVITY
k  -1-
1   2.62

BULK SPECIFIC GRAVITY
   -1-
    2.574

CRUSH COUNT %
   •1-
   87-09

LIMITS:   85     »  100        R(L)i   15

SODIUM SULFATE - TOTAL % LOSS
   -1-
    2.00

LIMITS:    0         10        R(L):   10

PERCENT LOSS BY WASH
   -1-
    0.4S

LIMITS:    0                   R(t):
```

DEPARTMENT OF TRANSPORTATION
MATERIALS BUREAU

JOB MIX FORMULA

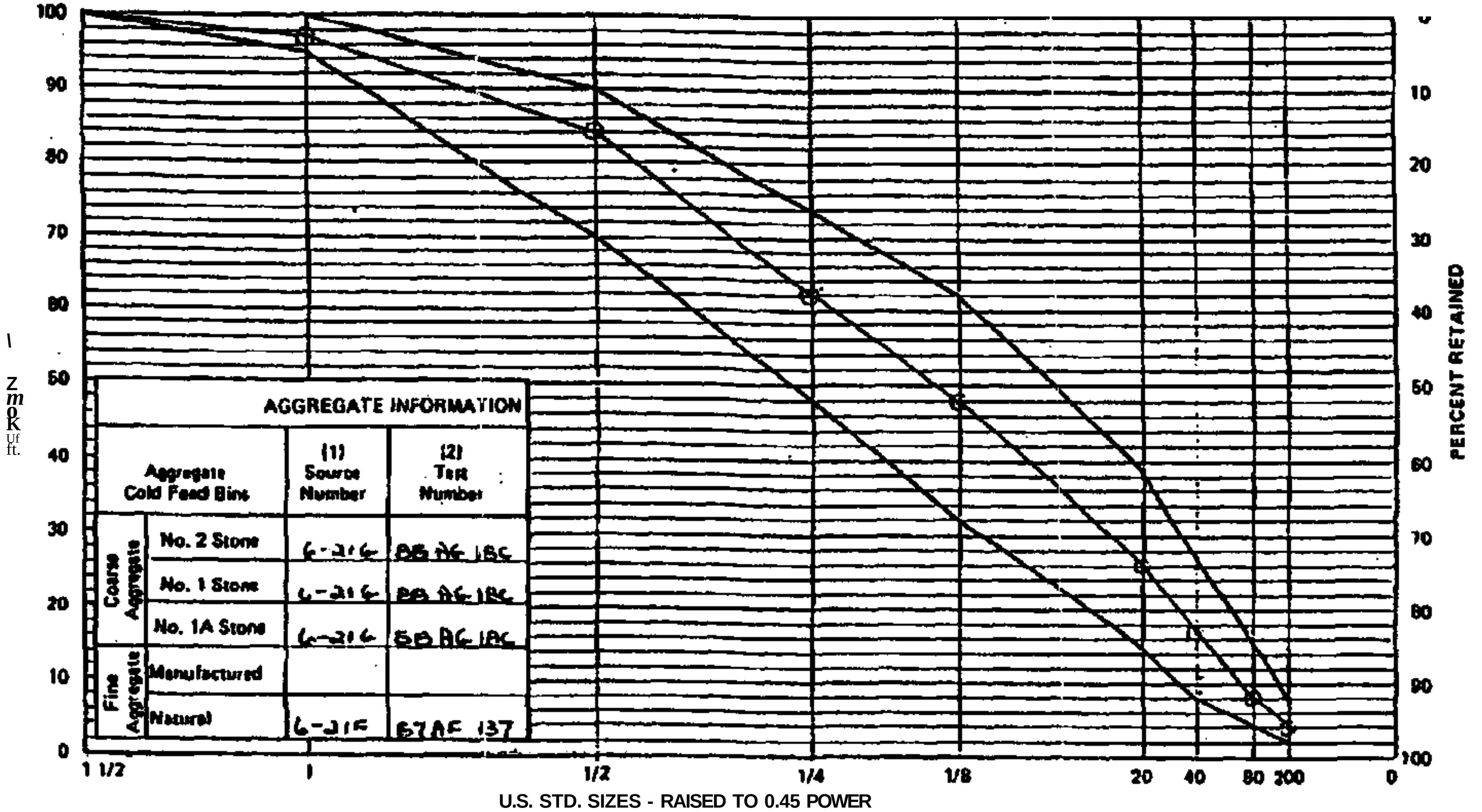
Typ» 3, Bindvr {D*ns«J

a«»r*.. Pu^-.tlW

Location______flA>igtWLi.6 A/.Y.

Submitted By____«?• &uft<fA________

(Submrsskw Instructions on back) Jf*JJp£ /% & a^dfc^-*



AGGREGATE INFORMATION			
Aggregate Cold Feed Bins		(1) Source Number	(2) Test Number
Course Aggregate	No. 2 Stone	6-216	86 AG 18C
	No. 1 Stone	6-216	86 AG 18C
	No. 1A Stone	6-216	6B AG 18C
Fine Aggregate	Manufactured		
	Natural	6-215	67AF 137

SitveSixt		2"	I VT*	V	1/7"	V4*	1/8"	No. 20	N».40	No. 80	No. 200	Asphalt Content (P tf cent)	Asph»n Grade
%P«sing	1. General Limits	▨	too	06-100	70-90	48-74	33-62	15-39	8-27	4-16	2-a	4.5-6.5	
	2 JMF Banoj	▨	JfiL	9S-tn	3£=l£-	»sy-tf			JO-	jLiUc.	Art.	f.f- Jf	AC«i£_
	3- Tweet Velwe	▨	JC£S.	Jill	l£	i x			_iX			i £ .	

' RtlMffct

r-^O

Approved

^ ' - ^D^eetonel Director

Ditt e?

MAXIM
TECHNOLOGIES INC*

Empire Soils Investigations, Inc., Division

2415 N. Triphammer Rd., Suite 3
Ithaca, New York 14850
Tdephore: (607) 26MH47
Fax: (607) 266-6409

LETTER OF TRANSMITTAL

Date: September 18, 2000

To: IT Corporation
10 Ward Rd.
N. Tonawanda, NY 14131

Attention: Frank McCune

Reference: Cuttler Hammer
Horseheads, NY

Job No.: 2002200 Client's Job No.:

We are sending you: _X___Herewith ____Under Separate Cover

______Letter _X___Report Subsurface Logs____________Invoice

______Drawings _____Samples Test Results_______________See Below

No. of Copies	**Title or Description of Enclosures**
1	Field In-Place Density Test Report

These Are: For Your information _X___Per Your Request

Per the Request of:

Remarks:__________

Sent By:
JLMail
___Express Service
___UPS
___Hand Delivered

Copies to: IT-Richard Kilmer (1)

Respectfully submitted,

EMPIRE SOILS INVESTIGATIONS, INC.

Nathan E. Cole
Technician Supervisor

"Providing Cost-Effective Solutions to Clients Nationwide"

MAXIM
TECHNOLOGIES INC

Empire Soib Investigations, Inc., Division

2415 H Triphammer Rd, Snite 3
Ithaca, New York 14850
Telephone: (607) 266-0147
Fix: (607) 266-6409

FIELD IN-PLACE DENSITY TEST REPORT

Project: Cutler-Hammer, Horseheads, NY
Report No. 2002200
Client: IT Corporation
Date: 08-30-00
Contractor Elk Environmental
Project No. 2002200
Weather Sunny-80

Test No.	Elevation	Location and Comments	**hvpteca** mobtura	Density			% compact
				WeUpef)	Dfy(pcf)	Maxim (pcO	
1	FG	CL Laterial for Evaporization Pipes-6' N of Bldg. Wall	8.2%	138.0	127.5	123.3	103.4%
2	FG	CL Laterial for Evaporization Pipes-20' N of Bldg. Wall	7.5%	130.5	121.4	123.3	98.5%
3	FG	CL Laterial for Evaporization Pipes-45' N of Bldg. Wall	7.8%	128.3	119.0	123.3	96.5%
4	FG	W Laterial Lines for Evaporization Pipes-12' N of Bldg. Cor.	7.2%	129.6	120.9	123.3	98.0%
5	FG	W Laterial Lines for Evaporization Pipes-20' N of Bldg. Cor.	7.9%	126.8	117.5	123.3	95.3%
6	FG	W Laterial Lines for Evaporization Pipes-35* N of Bldg. Cor.	10.0%	128.5	116.8	123.3	94.7%
7	FG	E Laterial Lines for Evaporization Pipes-10' N of Bldg. Wall	8.5%	136.2	125.5	123.3	101.8%
8	FG	E Laterial Lines for Evaporization Pipes-30^1 N of Bldg. Cor.	9.5%	128.9	117.7	123.3	95.5%

Mu D«rttity	Optimum Moteturf*	Material **Typa** and Source	Method
123.3	9.4	On-Site Fill	ASTM 01556

REMARKS:

Gauge Model: Troxler, 3411B
Serial Number 12455
Std. Counts: 2801/625
Technician: R. Truex

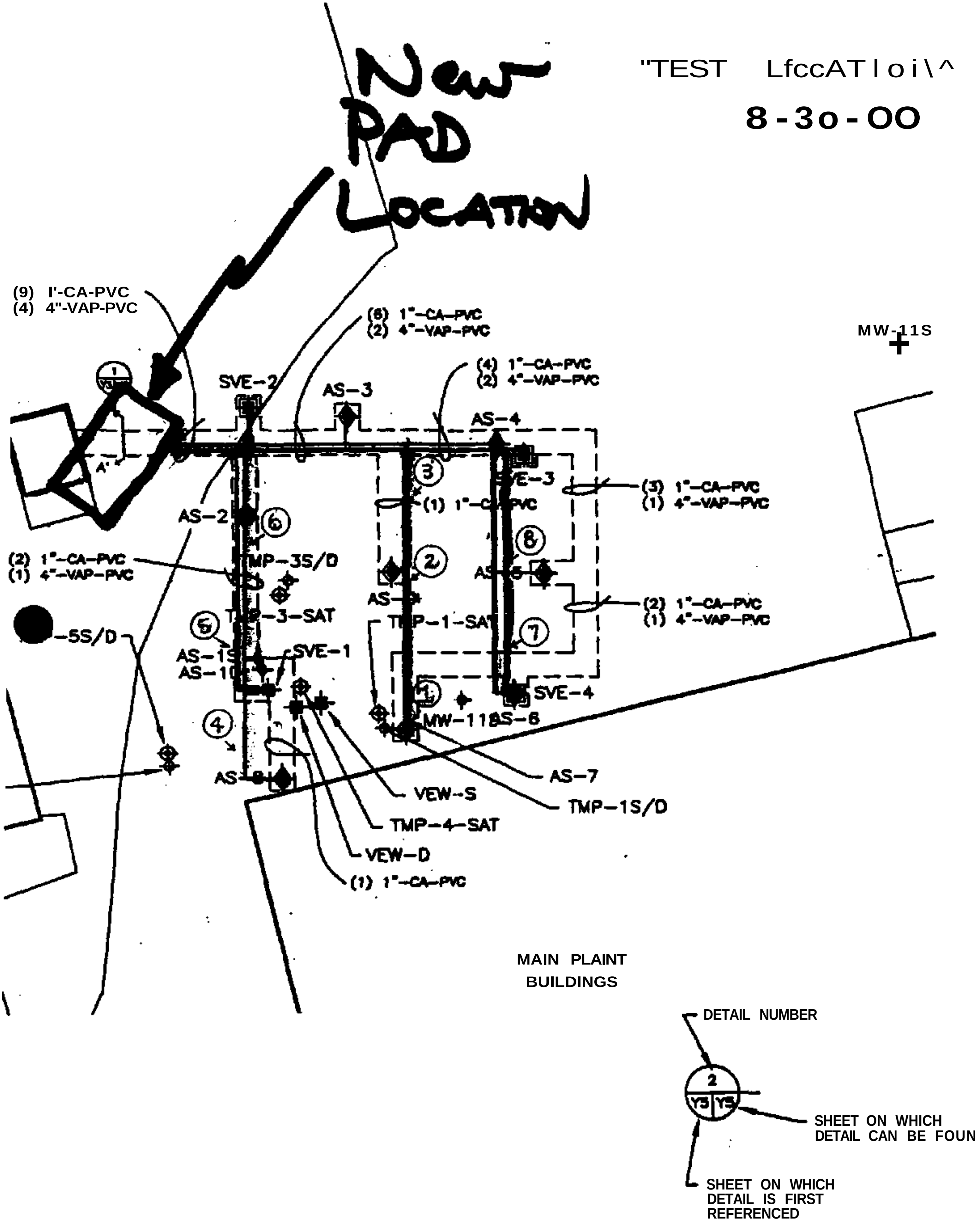
Respectfully submitted,
MAXIM TECHNOLOGIES OF NEW YORK. INC.

Nathan E. Cole
Technician Supervisor

"TEST LfccATIoi\^

8-3o-OO

New PAD Location



MAXIM
TECHNOLOGIES INC

Empire Soib Investigations, Inc., Division

2415 K Triphammer RA, Suite 3
Ithaca, New York 14850
Telephone: (607) 266-0147
Fax: (607) 266-6409

FIELD IN-PLACE DENSITY TEST REPORT

Project:	Cutler-Hammer, Horseheads, NY	Report No.	2002200
Client:	IT Corporation	Date:	09-05-00
Contractor	Elk Environmental	Project No.	2002200
Weather	Sunny-Cool		

Test No.	Elevation	Location and Comment*	tn-ptajce moisture	Density			% compact
				Wet{pcf)	Dry (pc()	Maxim (pcf)	
1	FG	Main Laterial Line-Intersection w/Middle Line	8.6%	127.0	117.1	123.3	95.0%
2	FG	Main Laterial Line-Intersection w/East Line	9.6%	123.3	112.5	123.3	91.2%

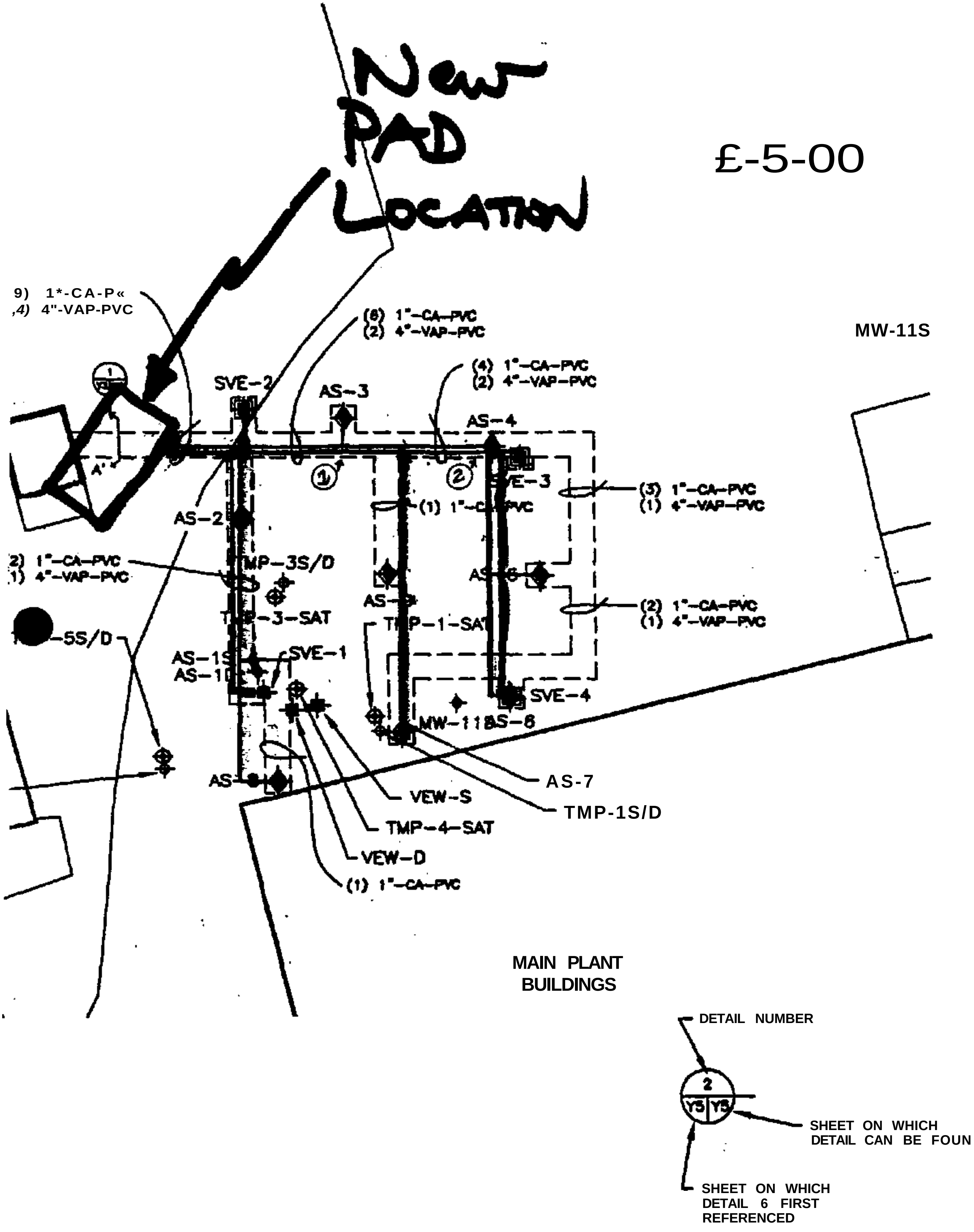
Hue Omity	Optimum Moisture	Material Type and Source	Method
123.3	9.4	On-Srte Fill	ASTM D1556

REMARKS:

Gauge Model: Troxler, 3411B
Serial Number 12455
Std. Counts: 2765/620
Technician: R. Truex

Respectfully submitted,
MAXIM TECHNOLOGIES OF NEW YORK, INC.

Nathan E. Cole
Technician Supervisor



New PAD LOCATION

£-5-00

MAXIM
TECHNOLOGIES INC

Empire Soib Investigations, Inc., Division

2415 N. Triphammer Rd., Suite 3
Ithaca, New York 14850
Telephone: (607) 266-0147
Fax: (607) 266-6409

FIELD IN-PLACE DENSITY TEST REPORT

Project:	Cutler-Hammer, Horseheads, NY	Report No.	2002200
Client:	IT Corporation	Date:	09-08-00
Contractor	Elk Environmental	Project No.	2002200
Weather	Sunny 70		

Tost No.	Elevation	Location and Comments	tn-plac. motstur*	Density			% compact
				Wot(pef)	Drylpcf)	Maxim (pcf)	
1	FG	Center of Shed Pad	7.2%	121.0	112.8	123.3	91.5%
2	FG	LaterialffWof Shed	7.7%	122.8	113.5	123.3	92.1%

Max Density	Optimum Mobtuni	Material Type and Source	Method
123.3	9.4	On-Sito Fill	ASTM 01556

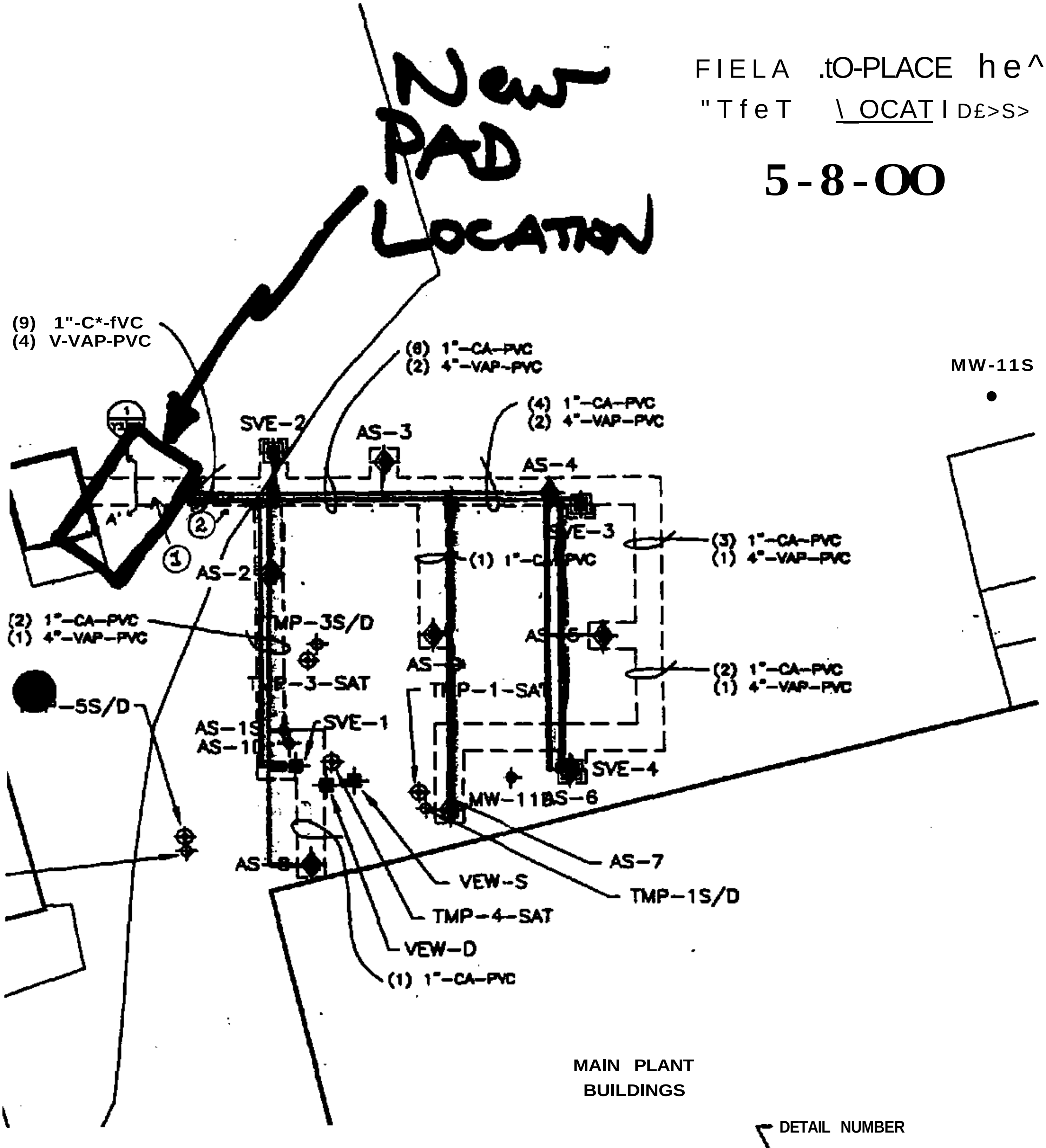
REMARKS:

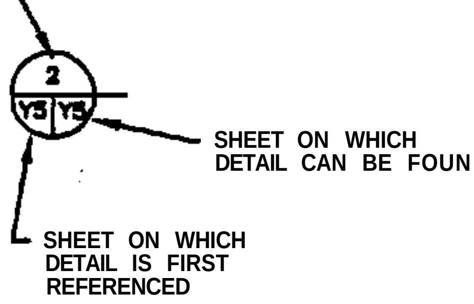
Gauge Model: Troxler, 34116
Serial Number: 12455
Std. Counts: 2798/632
Technician: R. Truex

Respectfully submitted,
MAXIM TECHNOLOGIES OF NEW YORK, INC.
Nathan ^ZL
Nathan E. Cole
Technician Supervisor

FIELA .tO-PLACE he^nN
"TfeT _OCATI D£>S>

5-8-OO





Attachment 2

Processed Gravel Base
Certificate of Compliance

Steel Pipe

SPECIFICATIONS

ASTM Number	Explanation
A-53	Covers seamless and welded black and galvanized steel pipe furnished m the following iypca and grades: Type P - Furnace Butt Welded (also known as continuous weld) 1/8 in. to 4 in. NPS "Typ> t - Bectric-Resisianoe Welded. Grades A and B 1/8 in. to 24 la NPS Type S - Seamless. Grades A and 6 1/B in. to 28 in. NPS Except for Type F, pipe ordered to this specification is suitable (or forming, Bending- and flanging. Grade B. the most oomrnon, has a minimum yield of 35.000 psi Marmun/Keystone stocks dual stenciled and dual certified materials to API SO. in bath Seamkns ana Welded where applicants.
A-106	Covers seamless only cartxm ileal pipe for high-temperature service. Furnished in one of three grades. *A, 8* or C. SuKaols for bending, flanging, and similar forming operations.
A-134	Covers electric-fusion (arc)-wetded straight seam or spiral seam plate pipe 16 in. and over in Diameter, with wall thicknesses up to 3/4 In. This pipe is ^tended for conveying liquid, gas, c vapor.
A-135	Covers two grades of eiec&te-resistance-Welded steel pipe (A and B) 30-in. diameter and under. Pipe is intended for conveying liquid, gas, or vapor; and only grade A is adapted for flanging end bendi"fl-
A-139	Covers five grades (A and 0 of eiectnc*fusion (are)-welded, straight-seam, or spiral-seam atee* pipe. 4 in. and over" in diameter wrifi nominal wall thicknesses up to 1 in. Has different mechanical properties man standard plate grades. Used for conveying liquid, gas. or vapor.
A-IGI	Covers seamless, hot finished and cold drawn, low carbon and carbon-morytxJenum steal still tubes, for us a in carrying fluids 31 elevated temperatures and pressures In various types of heaters. This specification includes tubes 2- to 9-in. O.D. Inclusive and *Q"f* 0.220 in. In minimum waO thickness,
A-178	Covers etectric-resistanee-wetded tubes made of carbon steel and intended for use as boiler tubes and superheater fluea. Includes tunes 1/2 in. to 5 in. O.D. end 0.035 to 0.320 In. *in* minimum wall thickness-
A-179	Covers seamless cold drawn low carbon steel tubes for tubular heat transfer apparatus. Includes sizes 1/B to 3 in. O.D. Inclusive.
A-102	This specification supersedes A-63 and covers seamless carbon steel boiler and superheater tubes (or high pressure service. Includes Sires 1/2 to 7 in. CD. and 0.0B5 to 1.000 In, minimum wall thickness.
A-18B	Covers several grades of chromium-molybdenum and ctvomium-molybderium-silicon seamless cold drawn intermediate alloy steel tubes for heat exchangers, condensers. and similar heal transfer apparatus. Includes sizes 1/8 to 3 in. inclusive in O.D.
A-200	Covers same graces as A-1B9 except use and size range varies. This specification cowers sizes 2 to 9 in. O.D. and wall thickness over 0.22 0 min.
A-200	Covers three grades of seamless carbon-mofybdenum alloy steel boiler and superheater tubes, tncfudee sizes 1/2 to 5 'n. in O.D. end 0.035 to 0-S00 in minimum wall thickness.
A-210	Covers seamkss medlurti carbon steel boner tubes and Doilar flues, including safe ends, arch and stay tubes, and superheater tubes. Includes sizes 1/2 10 5 in. In O.D. and 0.035 to 0.500 in, in minimum wall thickness,
A-211	Covera spiral welded steel or iron pipe 4 to 40 In. in diameter, and 1/1& to 11/16 in. in wall thickness. Intended for conveying liquid. gas, or vapor.
V252	Covers welded and seamless steel pipe for piling application or permanent load carrying member. Available In Grades 1, 2. and 3 to meet physical propertJeB as required.
A-311	Covers stress-relieved cold drawn carbon steel bars produced to mechanical property requirements- One claas, 6), is cord drawn with higher than normal {heavy} drafts to provide higher strength le*ets.
A-333	Covers nominal wall aaamiew and welded carbon and alloy steel pipe intended for jow temperatwni service. (-50 to -3Z0"F), Several grades are covered. Including Grades 1. 3. 4, 0, 7. 8, *ana 9*.
A-334	Covers six grades of seamless or welded carbon ana alloy steel tubas intended for use at low temperatures (-50 to ~320TF).
A-335	Covers nominal wail seamless aUoy steal pipe intended tor *fugh* temperature service. Pipe ordered to thts specification shall De suitable for benoing, flanging, and similar forming operations, and for fusion welding. Scectiun will depend upon design, service conditions, mechanical properties, and high temperature characteristics- This specfflcafJOn covers twelve orades, most oommen of which are Grades 1.5,7,9,11, and 22.
A-405	Covers one grads (P-2*) of seamless ferrltic altoy-ateel pipe specialty treated for high temperature service.
A-SOo	Covers cold formed welded and seamless carbon square, rectangular. or special shape structural tubing for general structural purposes. Covers three grades: Grade A - 39,000 psi Min. *Ytetd* Grade H -, 46.000 psl Min. Yield Grada C - 50,000 psi Min. V«ld
A-501	Covers hot-formed welded and seamless carbon steel, rectangular. square. or special shape tubing for general structural purposes.
A-512	This specification covers cold drawn putt weld carbon steel lubes for use as mechanical tubing, ft covers round, square, rectangular. and special shapes- Common grades «i warehouse stocks »n» 1010. 1015. and 1020. (Mole: Sea tolerance section on page 68 for additional information on this specification.)
A-513	Thai specification covers etectric-resistancg wetted carbon and alloy steel tubing for use as mechanical tuping. It covers round. square, rectannuiar, and special shapes made from hot or cold rolled steel- It covers "as welded." 'sink drawn," "mandrel drawn.' and 'special emootn inside diameter.* Common grades In warehouse stocks are 1010. 1015, 1020 and 1026. (Note: See tolerance section on page 66 for additional siformation on this specification-)
A-519	This specification covers a murrtude of grades of carbon and alloy steel seamless mechanical tubing, ft covers both hot finished and cold drawn tubing up to and Including 12-3/4 in. outside diameter with wall thickness as required. Common grades in warehouse Stocks are 1018. 1020. 1025, 1026. 4130, 4140. and 4142- (Note; See tolerance section on pages B4 and 65 for additional Information on tris specification.)
A-524	Covers Baamiess carbon steel pipe for process piping applications. Suitable for welding, bending, flanging, and similar forming operations- IWc grades are covered: Grade I (.375 m. wall thickness end under) and Grade II (greater than .375 m. wall trdcknessj
A-618	Covera three grades o' hot formed welded and seamless high-strength lowaUoy square, rectangular, round or special shape tubing for use in bridge or building construcuon and general structural purposes.
A-S71	Covers electrlc-fusiDA-weided steel pipe with filler metal added, fabricated from pressure vessel quality ptate of several anaJy&ea and tUrength levels and suitable for service at atmospheric and lower temperatures.
A-672	Covers alacWc-fusion-welded steal pipe with filler metal added, fabricated from pressure vessel quality ptate of several anatysee and strength ktveta and suitable for high-pressure service at moderate temperatures.
A-691	Covers electric-fustOn wofctad carbon and alloy steel pipe with finer mat&J added, fabricated from pressure vessel ouafiry ptate of severs! anaf/sea and strength levels and suitable for high-pressure service at high temperatures.

U.S. 1-800 521-1283

FLEXIBLE COUPLINGS

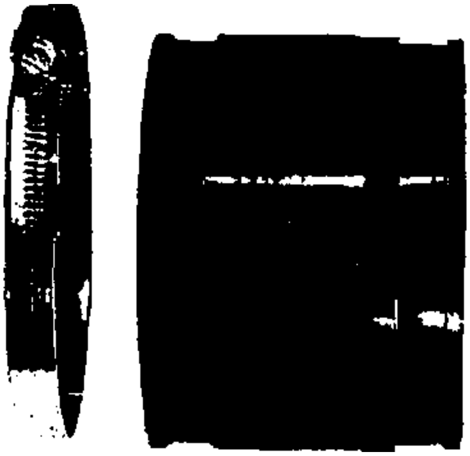
for sewer, drain, waste & vent piping.

Because of their quality and ease of ! installation. Femco Flexible Coupings have found wide acceptance among sewer aid plumbing contractors and municipalities! Femco couplings are used for all :ypes)f in-house and sewer connections: drsin va^te. vent piping, house-to-main. repairs, cit-jna. conductor and roof drains and increassfis-reducers. ;

Made of tough elastomeric poryvnyl chloride CFVC). they are strong, resilient and unaffected by soil conditions. The/ are also resistant to chemicals, ultravolet rays. fungus growth, and norma) aewer gasud due to the inert nature and physical praperties of the material. And they're leakprocf. rootproof and seal against infiltrat on end exfiltration, \

Femco makes the most complete line in) the industry, from sizes of 1-1/4' to 27* Cl2mm to 381 mm) with couplings available to i connect any two pipes. For larger size • connections, see Large Diameter Couaungs on page 12. The dimensional fiexbilit> of Femco couplings ensures leakproof strals on virtually any pipe material: plasjc. cast iron, asbestos cement, clay, concrete, steel, fibre and ductile iron.

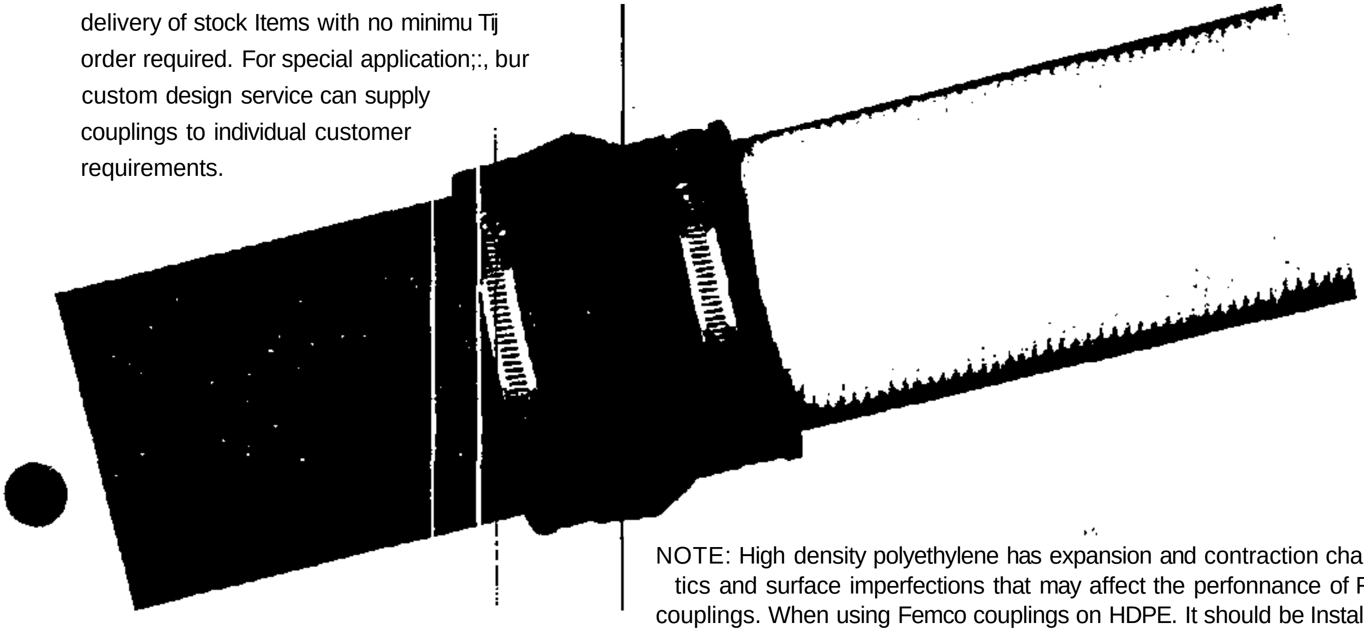
Ail couplings are clearly marked with parft number, size, and pipe materials that thej coupling will connect. Femco makss fast delivery of stock Items with no minimu Tij order required. For special application;:, bur custom design service can supply couplings to individual customer requirements.



Takes only minutes for average connection.
Place coupling over spigot and tighten bands.
Saves money by saving installation time.

Fernco Flexible Couplings

For further information on Code approvals, contact Femco Customer Service Department.



NOTE: High density polyethylene has expansion and contraction characteristics and surface imperfections that may affect the perfonnance of Femco couplings. When using Femco couplings on HDPE. It should be Installed on a smooth, gouge free surface with the pipe at operating temperature.

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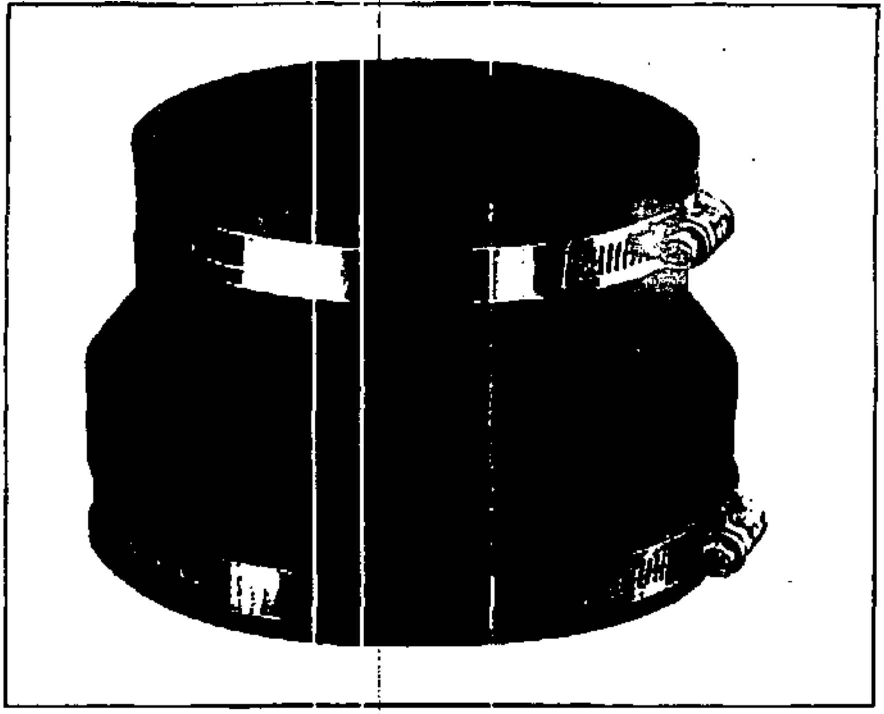
FLEXIBLE COUPLINGS

for sewer, drain, waste & vent piping.



Tested Design

helps you make the right connection.

Specially formulated PVC compound positively seals any sewer and drain connection.

Positive seal against infiltration and exfiltration

Leakproof rootproof.

Conforms to applicable part:? of ASTM#C443. C42S, CSIi4. D1869. CI 172. D5926

Connects pipes of same or different sizes and materials quickly and easily.

Stainless steel clamps are corrosion-resistant and rustproof.

The industry"s most complete line of couplings allows any two pipes—regardless of size or material—to be connected quickly and easily.

All Famco clamps, including the band screw and housing, are made from Series 300 Stainless Steel. They are corrosion-resistant and rustproof. Additional band slots have been added for greater flexibility and the bands are specially designed for greater sealing efficiency.

Femco couplings flex with earth movement, maintaining integrity of seal.

No special tools needed. Installs easily with screwdriver or 5/16" C7.93miT0 nut driver or socket (to 60' lbs. torque.)

Femco Flexible Couplings are air, water a ^ ^ ^ smoke tested from Alaska to Puerto Rico ^ ^ and they've proven themselves in even the most demanding of applications and conditions. Because Femco Couplings earned a reputation for consistent, superior performance, you can have full confidence in their quality and reliability.

Femco makes fast delivery of stock items with no minimum order required. For special applications, our custom design service can supply couplings to individual customer requirements.

Femco Flexible Couplings and Donuts are widely recognized throughout the industry for high quality—backed by over three decades of proven performance-

Series 316 Stainless Steel Clamps are available upon request. Please contact Femco Customer Service Department.

[illegible]rnsCascade
BURNS BROS AFFILIATE
f£5T PHIIO BQAO. h&ft STEADS. *Y 1*3*5
It (G07j T»-p751 FAX ICO/'] 73S- 1330

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                            Print Key Output                                      Page   l
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  Display  Device                 i  HHD5PO<t
  User    « . . .                 :  HUGHES

 41205                     SUMMARY  AVAILABILITY               Branch/PIant .
                                                               S/D. . . . . .D
Item  Number.        1GVPE                                     U/M. . . . . .FT
                     1 STD GALV PIPE PE AS3CW
                     1.68 LB PER FT.
  P
O S        Location                On Hand     Committed      Available    On Receipt
  P                                £52.OO                       252.00

     Tota151                       252.OO                       252.OO




     Optr  l=Detai1 Availabi1ity  S=Biranch/Plant Information     F24—More Keys
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PVC Pipe

PVC Schedule 40 Pipe and Pressure Fittings

<atfs>

Schedule 40 PVC Pipe — Conforms to ASTM D-1785, Type I (normal impact), Grade 1 (high chemical resistance). This pipe also conforms to U.S. Product Standard PS 21-70 (supersedes U.S. Commercial Standard *CS* 207-60) as having the same O.D. dimension as Iron pipe. The National Sanitation Foundation (NSF) has approved pipe sizes 1/4" thru 12* for use in potable water service. Schedule 40 pipe should not be threaded.

PVC Schedule 40 Pipe

Kp« Ste	O.D.	Avg. . . IlJ-	Mtn. WoB	*tioatiaal* Wt/R.	Uny WJ>. PS
1/2-	.840	.608	109	.161	600
3/4*	1.050	.SID	113	.214	460
1-	1.315	1.033	133	.315	450
1-1/4"	1.660	1.364	140	.426	370
i-i/r	1.900	1.592	1*5	.509	330
T	2.375	2.049	154	.682	280
2-1/2-	2.875	2.445	203	1.076	300
3"	3-500	3.042	216	1.409	260
4"	4.500	3998	237	2.006	220
5"	5.563	5.017	258	2.726	190
6"	6,625	6.031	28C	3.535	180
8-	8.625	7.943	322	5.305	160
10'	10.750	0.976	365	7.532	140
12"	12.750	11-890	406	9.949	130
14"	14.0OU	13 072	438	1181	130
16"	16.000	14.940	500	IS.41fi	130
18"	16.000	16.809	562	20 112	13D
20*	20.000	18.743	593	23.624	120
24"	24.000	22.544	687	32.873	120

PVC Schedule 40 White Pipe

Port No.	• PIOC Sise	Prt=e
400005	1/3-	SO,U
400007	3/4-	JO. 15
400010	r	$0.21
400012	1-1/4"	10 29
400015	1-1/2*	SO 30
400020	2*	$0.33
40002S	2-1/2'	SO. 78
400030	3"	S0.82
400040	4'	Si.15
400050	5'	$2.29
400060	6"	S2.12
400080	fl-	S3.26
400100	10"	S4.94
400120	12"	S6.S9
400140	14-	$10.64
400160	16"	$13.67
400180	IB"	$20.75
400200	20'	$24.36
400240	24"	$33.92

PVC Schedule 40 Harvel Grey Pipe

part Ho.	PJj» Btn»	Pzlae
4000Q5G	1/2-	S0.27
4O0O07G	3/4-	$0.36
4OO01DG	r	$0.53
4O0012G	1-1/4'	$0.71
4O0015C	1-1/2"	S0.43
40O020G	2*	SI-13
400025G	2-1/2-	SI. 83
40O030G	3"	$2.33
400O40G	4-	$3.31
400050G	5-	S4.64
40D060G	6'	S5.84
400080G	fl'	$8.75
400100G	io-	S 12.65
4O012OG	12"	Si 6.72
400140G	14"	$15.14
40016OS	16"	$19.75
40G180G	18*	S20.75
4OQ200G	20"	$24.38
400240G	24-	$33.92

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Tee
SLIP X SUP X SUP

Part Ho..	- HIB '	Dim . C	Otto *t*	Dim G	Pace
401O05	1/2	V2	1/2	1/2	$0.27
401007	3/4	9/16	9/16	0/16	$0.25
401010	1	11/16	11/16	11/16	$0.47
401012	1-1/4	7/8	7/8	7/8	$0.74
40101S	1-1/2	1	1	1	$0-89
401020	2	1-1/4	1-1/4	1-1/4	SI.30
40102S	2-1/2	1-9/16	1-9/16	1^9/16	$4.28
401030	3	1-7/8	1-7/B	1-7/8	$5.62
401040	4	2-5/16	2-5/^6	2-5/16	$10.17
401050	5		—	—	$24.57
4Q1060	6	3-1/3	3-1/2	3-1/2	$34,25
40108O	8	4-9/16	4-9/16	4-9/16	$79.44

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Vs.. •

90° ELL
SUP X SUP

> a-

Port No.	Slxe	XHm . A	Dtm fi	Pries
406005	1/2	1/2	1/2	$0.16
406007	3/4	9/16	9/16	S0.20
406010	1	3/4	3/4	$0.36
406012	1-1/4	7/9	7/8	$0.63
406015	1-1/2	1	1	SO 66
406020	2	1-1/4	1-1/4	SI.06
406025	2-1/2	1-9/16	1-9/16	$3.20
406030	3	2-27/32	2-27/32	S3.83
406O40	4	2-11/32	2-11/32	$6.86
406050	6	—	—	117.72
406060	6	3-1/2	3-1/2	$21.80
4060B0	8	4-9/16	4-9/16	S56.14

PVC Schedule 80
Pipe and Pressure Fittings

<a©>

Schedule 80 PVC Pipe — Conforms to ASTM D-1785, Type 1 (normal impact). Grade 1 (high chemical resistance). This pipe also conforms to U.S. Product Standard PS 21-70 (supersedes U-S- Commercial Standard CS 207-60) as having the same O.D. dimension as iron pipe. The National Sanitation Foundation (N5F) has approved pipe sixes 1/2" thru 12" for use in potable water service. Schedule 80 pipe may be threaded.

PVC Schedule 80 Pipe

Plpo Sbc	CJ>.	Aw* LD.	fella. YKfll	Nominal WL/PL	I f n W.P. FS1
1/8'	450	.203	.095	058	1230
1/4-	.540	.286	• 119	.100	1130
3/8*	.675	.407	•136	.138	920
1/2-	.840	.528	.147	.202	850
3/4"	1.050	-724	.154	.273	690
r	1.316	.935	.179	.402	630
1-1/4"	1.660	1.256	.191	554	£20
1-1/2*	1.900	1.476	.200	.673	470
2-	2.375	1.913	.218	.932	400
2-1/2-	2.B75	2-2BQ	.276	1.419	420
3'	3500	2.864	.300	1.903	370
4*	4.500	3.786	337	2.782	320
5*	5,563	4.767	.375	3.867	290
6'	6.625	5.709	.432	5.313	260
6'	6.625	7,565	.500	8.058	250
10-	10.750	9492	.593	11.956	230
12'	12750	11.294	.687	16.437	230
14"	14.000	12.410	.750	19.790	220
16-	16.000	14.214	.643	25430	220
ia-	18.000	16.014	.937	31630	220
20*	20.000	17.814	1.031	40.091	220
24'	24.000	21.410	1216	56.862	210

PVC Schadule 80 Gray Pipe

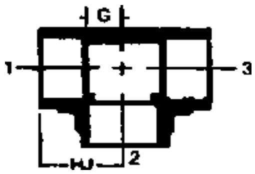
Port No.	PIP* Stta	Mee
800001	1/6-	S0.25
800002	l/«-	$0.30
8O00O3	3/a-	S0.34
000005	1/2"	SO. 14
800007	3/4*	SO. 19
eoooio	1*	£0.29
800012	1-1/4-	10-39
800015	10/2"	$0.46
800020	2'	S0.66
800025	2-1/2-	11.07
600030	3'	SI.34
800040	4*	$1.92
B00050	5-	53.22
800060	6"	13.78
600080	fl-	15.66
8001DO	io-	16.54
800120	12*	J11.79
800140	14-	117.25
800160	1 fi-	S30-23
600160	le*	S32.B5
600200	20-	141.37
800240	24"	S58.69

PVC Schedule 80 Harvel Grey Pipe

Part . No.	Ptf» &**	VHOB
BOOOOIH	1/8-	$0.40
800002H	1/4*	S0.56
800003H	3/8-	$0.76
800005H	\nr	$0.22
800007H	3/4-	$0.46
eoooioH	r	$0.45
600012H	1-1/4*	$0.62
6000I5H	1-1/r	$0.74
80OO2OH	2'	$1.54
00002SH	2-1/2*	11.23
6O003OH	3'	$3.14
B00040H	4'	$4£9
8O005OH	£•	$3.34
B00060H	6'	SB.77
800080H	8'	$6.86
B0O100H	10*	$9.64
800120M	12*	$13.25
800140H	14*	$17.24
B00160H	16'	$26-24
800180H	18"	$32.85
8O020OH	2a	$41.37
8O024OH	24'	$58.69

P/L 08 Material: PVC Type I Gray (cell classification 12454-8J
Meets ASTM D 2467 (Socket] and ASTM D 2464 (Threaded]

Tee (S x S x SI



Post No.	men cbo	HJ .	G	PBcm
801002	1/4	61/64	21/64	$1.77
801003	3/8	1-9/64	13/32	$1.77
801005	1/2	1-25/64	17/32	$1.77
801007	3/*	1-37/64	19/32	S1.B6
801010	1	1-27/32	23/32	$2.32
601012	1-1/4	2-5/32	29/32	$6 38
601015	1-1/2	2-13/32	1-1/32	S6.38
801020	2	2-25/32	1-9/32	$7 96
801025	2-1/2	3-0/32	1-17/32	$6.68
601030	3	3-23/32	1-55/&4	$10.85
SO1040	4	4-19/32	2-23/64	$12.53
801060	6	fr^/16	3-9/16	$42.93
801080	6	8-9/16	4-9/16	$99.53

CONSTRUCTIO•N SHEETING

Fuly* America's conaxruclioA sheeting is made I fn>n polyethylene which provides for optimum in economy and performance. Because; of Ha good wcothernbiliry, chemical inertness and toughness, Poly-Amtnca'i polyethyi ate iheeting has tacceastUUy been used for over 20 yean in a wide variety of applicatioB. Thickness rang** from as little as .3 mil for paint drop doth* to 100 mil for UAC u landfill lpen. Widths range up to 40 ft. If you have a special application or need more information on our products, contact your area sales representative.

Poly-America's standard sheeting wfll meet of I tbc following standard technical •pacifications: *

Construction Sheeting

ASTM D4397 (»ee Tables 1 tor Impact Rcsu and W\TR requirement)

ASTMD4635

Federal SpedficBtion LP-378

Federal SnccHfcattoti LP.390

Federa^ Sotctflcatkm LM12

ClailL
Grade lor 2

Coaitruction Sheeting Cant.

ASTM D124S
Typo I (density .910 to .925)
Category 3 (meh index L lo 10)
CUsa A or C (A- oeturel or clear)
<C-black)
Orach Ol or 03 (physical property requirownu)

ASTMD2103 Standard Classification **12230 (dear)**
12231 (black)

Note: If requested custom sheeting can be made to meet the following oUuificaTtoca.

12130 13130 13230 12330 13330

nniBbpadcoftBcAsAOCtstfUm B1I
TyptI
Surface II
CUstl
Finish 1

TABLE 1

TUdOMsa ASTMD374 mils	Part Impact ASTMD1709 _ jss	WVTR ASTME°6 am 100 sajn-day	WVTR ASTME96 perms	VWTR ASTME96 metric perms
1	40	1.40	.76	50
	85	.70	38	25
	125	.47	.25	.17
	163	33	19	.12
~±L	203	.28	13	.10
	260	.23	13	.084
	315	•20	11	070
	370	18	.096	.063
	420	.16	.082	.054
10	473	.14	076	.030

NOTE: The above la for our standard sheeting prodmn*. Poly-America will produce cimem sheeting prcxhicts to moel other chv*u^ Contact Poly-America to Me how they con help you with your needs.

MATERIAL SAFETY DATA SHUT

POLY-AVflBWCA, KC.
WN WBST UAUKAIX DIM
OftAKP NUDUE.TSUA 7J051
1H4IT-4S74

PRODUCT Putyrtayw— SheetfaojBeeji

IMPORTANT:
Poly-Ammo*. Inc. urt>* •a^ouitoror or recipient of (hi* Mii»i*JSt£ty to become eWOT of aid uaotmindthe hwrflj mohrfnri vnh die product. Tb*md«r«bould insider consulting refemot wodo or mdi*vfc*i« who ere expert in reatllsticev toxcotagy or fire prevention, *s memory or eppropnite to use end undenund the dam contursd in thia MSD3.

NOTICE:
This product is not FDA, CPSC or NSF compliant, b is uwsuble fox uum applications 1116*101 direct *a* indirect food contest. toyi, mediad cevtot or pterffltecuuctl application! of for potable water application.

SECTION i IDENTIFICATION

OwwlcalN	Polycthytaea Keain*
CASNasber	9002-SM
Synovjau:	Higfrdoniiiy Polyethylene (HOPE) LimcrLow-dwitay Polyedyepie (LLDPE)

SECTION fl COMPOSITION

	CAS No.	AOGU1 TLV	AGGTfl 91£L	OSHA PEL	OSHA OTKL	WL%	Cerchuftflk LUfl>C *
Potimhyiene. hoaopolyaer	V0C2-*t-4	NO,	N/L	N/L	NO.	91-100	N/L
1-Octane polymer with ethane	3633U7].t	N/L	N*.	N/L	N/L	91-100	N/L
1-Butene potynerwithetheM	25087.34-7	N/L	N/L	NO.	N/L	M.I0O	N/L

* 1-OSHA I"UftC J*NTF 4-Often :«/L« Net neCed

SECTION m- ncvsiCAL PKoramss

<u>faeieievOwww</u> Thli antirlal te NOT HAZARDOUS by OSHA HaierdCoeniiutiketloti

Boi*M Point:	Not applicable
Vapor Pneeurw	Net applicable I
SofcibahY to Water	NU
DfOtfty:	.900- 9fiQ pn/it
	Thin solid film or sheet
Odor	Hoc*
Vohrtileei	

J nt« lot)

SEcnorr iv FUttAWD EXPLOSION UAMKO DATA

AutolfWttaa Teattennere:	50O.tf5OdepM»F.
FMPalM:	C0O-ft»ifawiF
FfeamMaLtaate:	Not applicable
Fin Filling:	UuwtMUemlrapilihdie ftaindcool W<ICM. Oihertypeaof Fxravashen ouy«isobemod. UwNlOSHeppToredeelf-Cantaimd hieatliing append* whea fightsna fiw in enckwdd m» SUtiediuhBBMewibegFnenited EKEOWVC airborne du* may cause ocpianxL
DetanipaaiHon Product*:	C02; HZ. Rd wdtf leen O ^ B * » ee«JiBom. CO

SECTION V WAcnvrry

StaMlty:	Stablt
Ceeitf Mm <o Awed:	TempenUws over 100 degraM C. con cauu defadattati
leewmv Fwyne^BHtsn!	Does not occur Now

BEcnort vi HEALTH

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SkJaO	NeaHpWe	
InhibUMi:	Negligible	I ai SntnonctMBpeiBtUN.
Ingndeff:	Minimal toxical	
CwaureLtaiHi:	No limit	fox polyethylene
Fir* At*	If ingested, i tretttdieitft tttdttftklfii	. health effect, 3kia contact with tmhenplarxcihould be (water heffore plauic it iroiovoi ibtn wrap in clean puce [aaentiaa,

SECTION VJL EMPtOYTK'

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SECTION Via HAMMJNC AWP aTOKAO*

ThbpnduliinormeUyihippedmeoniiaitedpeptrbOMi. Stare end tack as recommended by the tntnufacurer TW'ooMeejidpli^c wiQbvmiilTheprejanwofqjenllawe Do not weld or UM f*»" flaw wh*™ product* itore4 without proper fire ti jhto^ pmverttion pmctum

SECTION PC EWVOCQNMSNTALFROTTCTKXN

Polyethylene thccU or bap are owwiderad ncn-hazatdna, ho»cv<r Uuy d*gf*d# very eloerty and nty Become i ruuance. Recycle oldorunmad pJanie^hcnpowiWe. C*b«r*iw. dltpou in landfilte or Incinerator* in accordance with local, «uct, end federal regulations.

PtftsSofj

fer

LSBCTIOW X TRAMETOfcT INFORMATION

SECTION xi APPITON At INFORMATION

POT: **Not** Applicable

HHB: HMMI: U
Stocttvtty. 0
riWMbllty? 0

PREPARED BY........................W«Qr / Bnwronmwmd Cuunlifia
PKEPKRATIQN'DATE............Sdplftnfa«r 1.1991

CMUCCNCV M O M NUMtEI. 1-WO-ftf 1H3

•fflB NUMS0K 9 A V MI A I I * DAYS. MOJO* WSSKEhDft AND H0UDA.T3

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O

JOB STAMP

Portland Cement Concrete

n Asphalt Concrete

HIPPED FRO
Plant !5^yz
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C^RM-S

Plant No. 3o / <*
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Qau/MJx TVpa* *QuMatity*

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Project No. ^SAJ£/».lj
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Oate 9/ / 3 / ^ '

^J^ff^s^r;

Attachment 4

Cast-In-Place Concrete Slump and Air Entrainment Test Results with Concrete Strength Test Results

DALRYMPLE GRAVEL * CONTRACTING CO.. INC.

•CONCRETE TEST REPORT

CLUWTi \Ajft^g<.| pATE MOLDED. 9" *3**<>

OWmUCTCg: UJftiflTe-1 JOB WO, ?U<*Cs

conquers mrruau ^<>C JOX: t*J#Ltto$_1$^4l J*k lt«ttl

OCTAL Kjuamft uxanum Sr&^t *ft^ t^jr^JA^

SRCXPZCAXZOI UQDXUMBRr AT 2* BAM MOOO WI t IB PAIS

JL&

1 toO tt*Q- Jfcf

WEE ACCKBCAIEl /3 7T "3Sg|rf rooms

COAIH AflCEESAlEt /7£J" ~Z*i

HATO BAKU rUET /^g.OCAlB. ADDPt JZSL QAU. -TOTAL/*P-6 CALS.

V ^ <tt7 ^ »ul^ I*W UMC<JL

ELatrr 3YE" Am pmuiotOTi 6-*%

COECtm TCHP.i (iVC Alt TBWT.t AJ/»

cnmi *mason* _ SP^A^ UXMUK

TEDCK WO.: ***"* TICKET 110,1 yy*fe6 coiic TAOSI B 0

* •ilCWP: »'•>*- 5IAKT DISCHARGE* &:Hg DiTTYl <V*0

rnuppjigctVE STRENGTH

.D. NO. ABE DAYS "6STS——COTTO35TVE— TESTED STRENGTH (PSD TECHNICIAN:

DATE RECEIVED:

\O-VV-0D

t$_D$_v\-e»o in,»wJa.xf»mfcwt 7lrf^{r}tAfl)———

sir

STRENGTH REQUIREAlfiNT AT 21 DAYS MOQO

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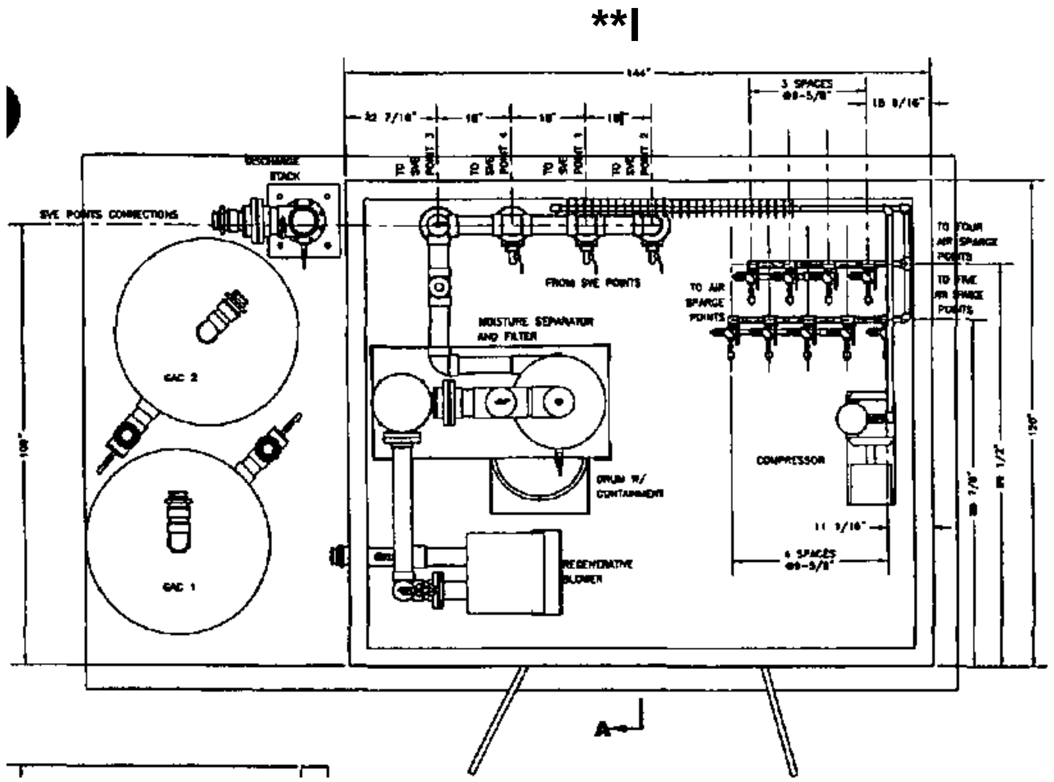
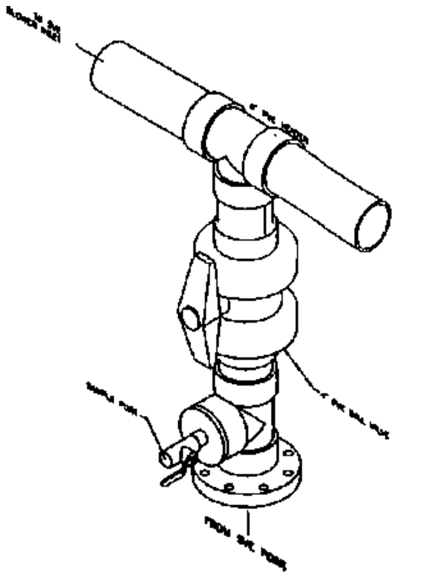
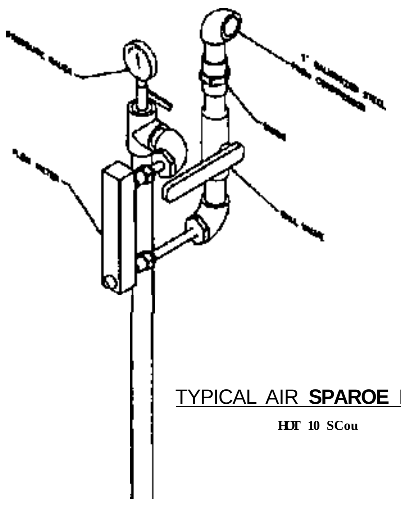
APPENDIX C

EQUIPMENT LAYOUT AND CUT SHEETS





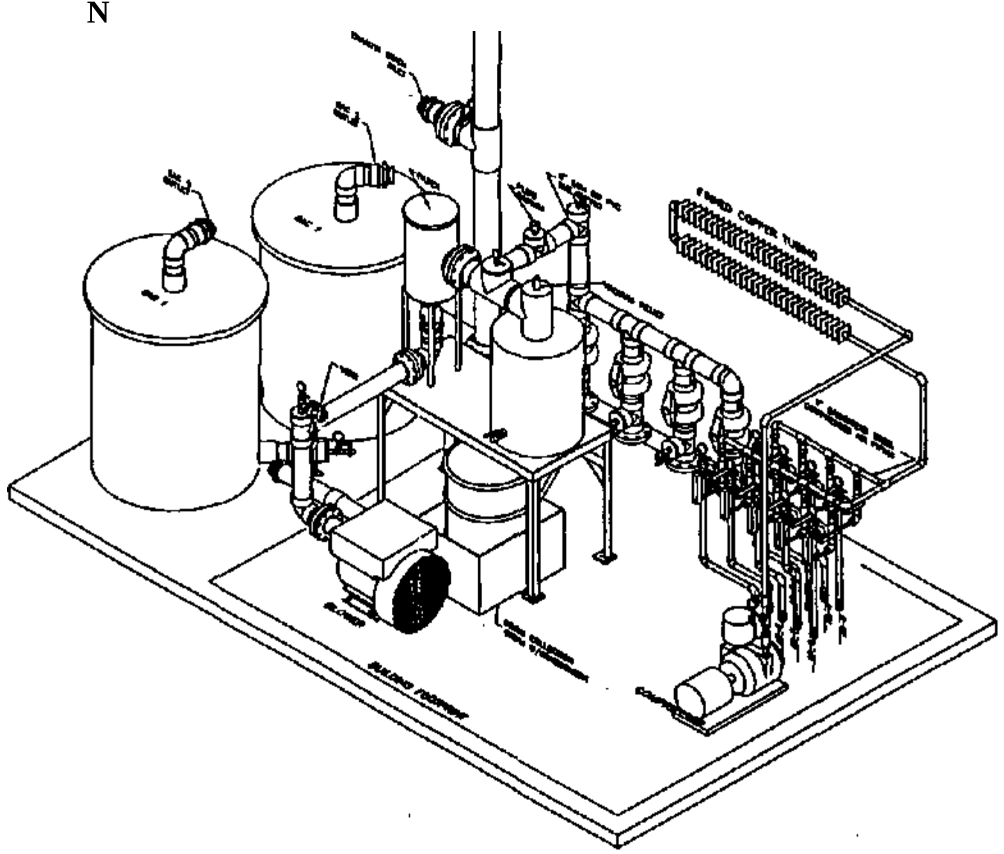
TYPICAL 8VG POINT CONNECTION

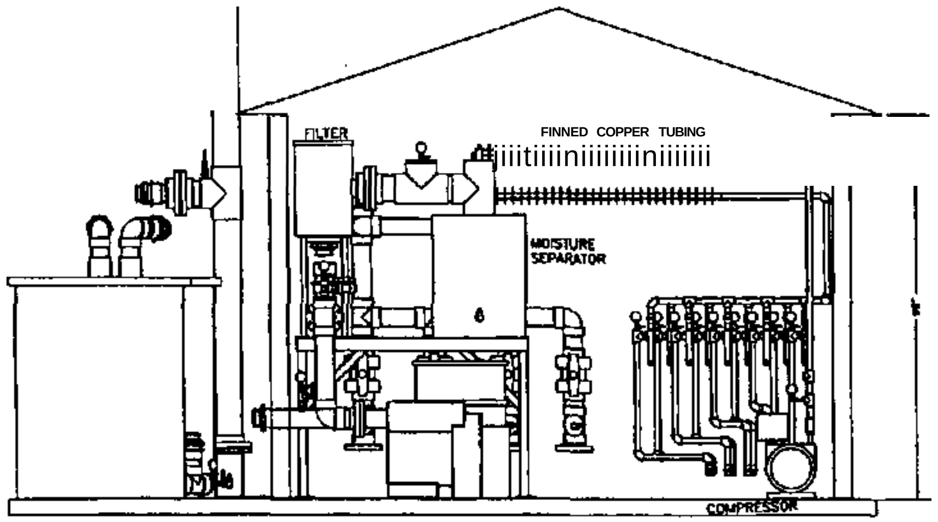


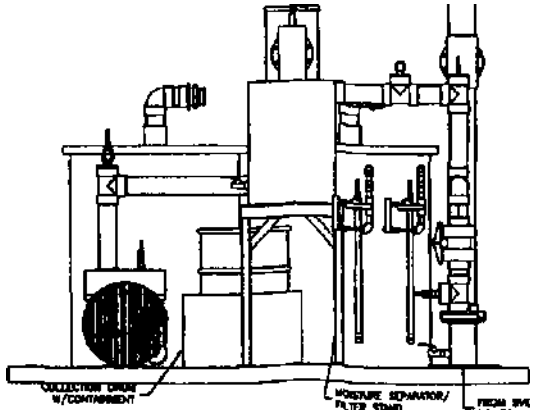
TYPICAL AIR SPAROE POINT

HDI' 10 SCou

^ N







BUILDING NOT SHOWN

SECTION A-A

		11/1/00
02	CHANCE FILTER OUTLET	10/23/00
01	ADD CONNECTION DIMENSIONS	8/25/00

DRAWN CBH

DATE 11/1/00

CHECKED

CUSTOMER rr CORP

JOB HORSEHEADS

CUSTOMER PC

SCALE i/4-= r

FUE NAME

└ H MI MAMS* UCIWHUIUH 10 IHf M»5un OP fNDOTIW. *t

RD^SIQN, ZEE CERP sea

BBBBDBBB

fit. 519. EfcMy Four Pa.

724-222-3334 F* 724-222-4090

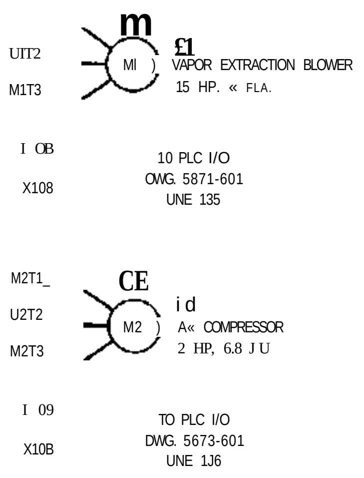
SVE SYSTEM

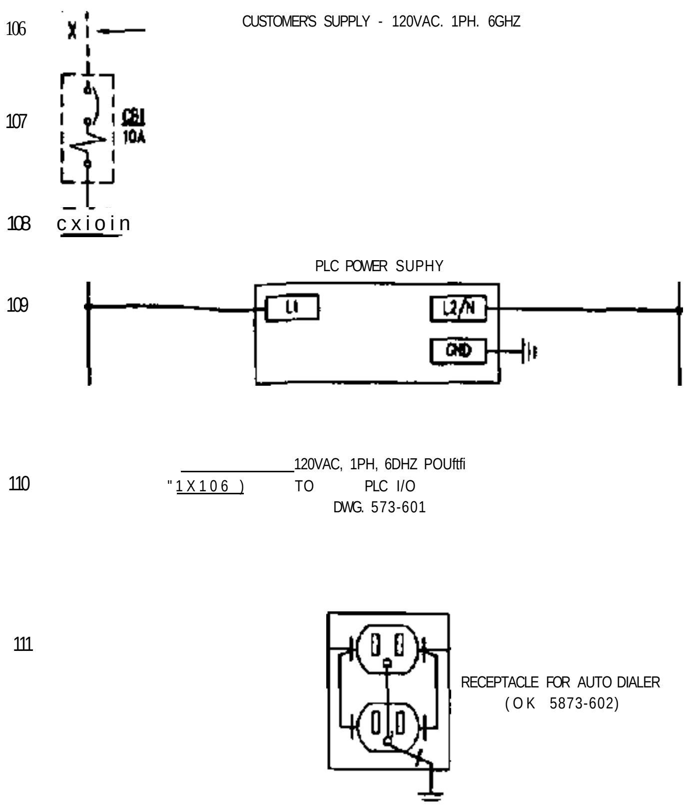
GENERAL ARRANGEMENT

DRAWING NO. 5873-120

SHEET 1 OF 1

REV. 03





SYMBOLS

CB - ORCUIT BREAKER
CU - CONTACTOR
CPU - MANUAL STARTER / PROTECTOR
CR - CONTROL RELAY
FS - aOW SH1TCH
LS - LEVEL SWITCH
PB - PUSH BUTTON
SS - SELECTOR SWITCH

1££EHDL

fCPl CONTROL PANEL
m °ELD MOUNTED
® - 230VAC TERMINAL fl CP PANR
D - LOW VOLTAGE TERMINAL 0 CP PANEL
rm - FUSE
CtQP - FUSE TYPE URMWI BLOCK
[ml - CROSS REFERENCE JN£ WU8ER

1. ALL DEVICES ARE LOCATED IN G?]
CONTROL PANEL
UNLESS NOTEO OTHERMSE.

2- ALL DEVICES / ASSEMBLIES TO
CONFORM TO NEC/NFPA 79 SPEOFICATIONS.

i ALL 24VTJC MHNC TO BE flB AWC

DRAWN **DATE**
VAL **B-22-00**
CHECKED
RON **0-23-00**
SCA1X
NONE

CUSTOMER
CBS CORP.
joe
HORSEHEAD. NY
CUSTOMER PO
fUE NAME

w« oraoi cwar'
IM tm MH'—

mCMCTMY ID tKSTICK •£.
•"ricni cr O^BIW- «t

SHBBDBBCI
Rt. 519, Eighty Four Pa.
724-222-3334 *Fx 724-222-4090*

TREATMENT SYSTEM
MOTOR CONTROL / POWER
SCHEMATIC

DRAWING NO
5873-600
SHEET
1 or 4
HEV.
00

(XI08) 120VAC, IPH, 60HZ CONRMJEO FROM M73-6O0, UKE 110

WRITS m

125 **A-6** CAT. /1761-L32AWA)

126 HOT USD
MOT USD
AC **CO***

HANOv • AUTO

127 n I n (OX) 100 IN 0 AUTOHOOC SELECTED
EB=1
START

128 VAPOR EXTRACTWC BLOWER START

PB-2
STOP

129 IN 2 VAPOR EXTRACTWC BLOWER STOP

eta
START

130 Lfli. IN 3 AIR COMPRESSOR START

ACCOM

STOP
131 -o_I_o— 104 IN 4 AIR COMPRESSOR STOP
PB-5
LAMP 1EST

132 105 IN 5 LAMP TEST

F5L-100 m

133 -Q- 106 IN 6 AIR aow TO MOISTURE SEPARATOR NOT LOW

LSH-101 CO

134 K^T— -0- 107 MOISTURE SEPARATOR NOT HIGH LEWL

CPU cm
135 1350 ioa IN 8 VAPOR EXTRACTION BLOKR RUNNING
102]
L_ = = = = _ _ = _ _
r<yU2 **CM2** I

136 **CM)** Hht- 109 IN 9 AIR COMPRESSOR ROWING

[IR150 [

137 IN 10 AIR COMPRESSOR ON TIME

TRIS2

138 111 IN 11 AW COMPRESSOR OfT 111IE
L"_BLJ

139 [12 IN 12

140 113 IN 13

141 IN14

142 115 w15

HE IN16

144 117 IN 17

145 IN18

146 119 IN 19

147 120VAC, IPN. 60HZ POWER CONTIMJED TO DWG 5873-602. UNE 148

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C HOB)

120VAC, IPH, 60H2 CONTINUED FROM 5873-601, HUE 147

• C D

148

149 (A-B CAT. /I761-L32AWA) iBzia

X108
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AIR COMPRESSOR
ON TIME

150 VAC
ADC
J5JSL

TIMER
TIMED OUT
TO PIC INPUT

151 OUT 0 000 J —J (137)

18=152

J12L

<2> <2>
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AIR COMPRESSOR
OFF TIME

152 VAC
/VDC
JSZfl.

HUER
I,MDOUT
TO PLC INPUT
(138]

153 OUT 1 0 01 O

VAC
/VDC

&zi

155 OUT 2 0 02

MOISTURE SEPARATOR
"LOW AIR ROW"

a=i
£H

156 OUT 3 003

MOISTURE SEPARATOR
"HIGH LEVEL"

157 VAC
/VDC

OUT 4 004

81
VAPOR EXTRACTING
BL0KR CONTACTOR
101, 101, 101, 102

€H

159 OUT 5 0 05

AG
AIR COMPRESSOR
CONTACTOR
103, 103, I0J. HM

ELzl

160 OUT 6 006

VAPOR EXTRACTING
BLOWER
"RUNNING"

ELz2
V—*\

OUT 7 0 07

AIR COMPRESSOR
"RUNNWC"

162 VAC
/VDC
1670

PHONFTICS ffWSAPHOtf DPRBS I
(AUTO DIALER)

XFMR.PLUC
TO I20VAC
RECEPT. (INPHLIj
CKT. X108, WOfII
DK. 5783-600

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163 OUT 8 008

164 OUT 9 009

win SLOT i
JUMPER
POSITION

165 OUT 10 0 10 "0

VAPOR EXTRACTION
6L0HER FAULT

166 OUT 11 0 11 m

AIR COMPRESSOR
FAULT

PS1 000-254
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167

LOW AR FLOW
TO MOISTURE SEPARATOR

168 -a
m

UGH LEVEL H
MOtSIUfiE SEPARATOR

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169 a

170 m

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171 m,
m'

172 MMSEB 0
(MOUNT ON EXTERIOR OF PANEL)

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AMBIENT
TEMPERATURE
(DEGT)

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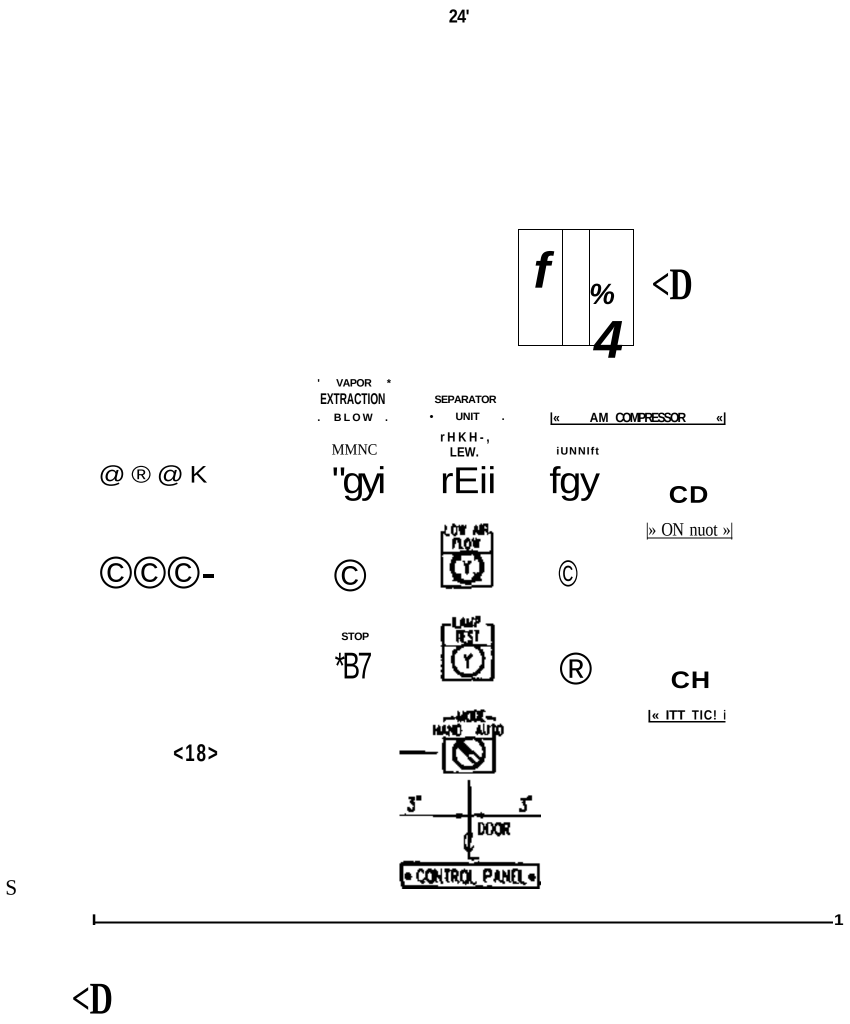
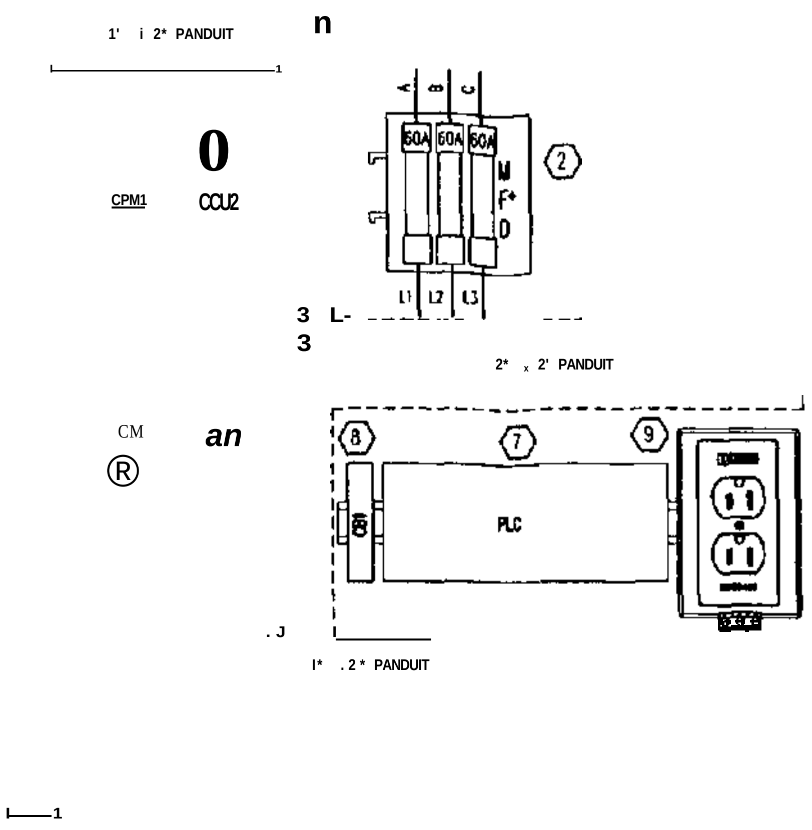


pn-i **CONTROL PANEL**
- ~ (FRONT VIEW)



SUBPANEL ARRANGEMENT
[SIZE: 22.2"H « 222"W]

®

BILL OF MATERIAL

	ITEM	QTT	TAG	DESCRIPTION	REMARKS
	<D		CP	ENCLOSURE - NEMA 12. WAIL MOUNT, SIZE: 24"H i 24'W » I6'0P W/ SUBPANEL SIZE: 22.2"H X 222"W KC4TUAN CAT. JC-S0242416 & C-P2424	
	<D		UFD	FUSED DISCONNECT SWTCH MT - 60 AUP, 600V. J FUSING W/ (3) 60 AMP TWE DELAY FUSES, HANOLE. SHAFT SQUARE '0' CAT. p421-N03/NW2^S36	
	<D		CPU)	MANUAL STARTER / PROTECTOR - 40 - 63 AMP SETTING W/ AUX. CONTACT BLOCK TELEMECANIOUE CAT. |GV3M63 & CV1A01	
	®		CUT	CONTACTOR - 3 POLE. 50 AMP. 120VAC COL TELEMECANIOUE CAT. (LCI05O1IG6	
	<D		CPU2	MANUAL STARTER / PROTECTOR - 6 - 10 AMP SETTING W/ AUX. CONTACT BLOCK TELEMECANIOUE CAT. fGV2MI4 & GV2AE1	
	©		CM2	CONTACTOR - 3 POLE, 9 AMP. 120VAC COL TELEMECANIOUE CAT. JLC1D0910G6	
	<D		PLC	PROCESSOR - MICROLOGIX 1000 ALLEN-BRADLEY CAT. |1761-L32AWA	
	<D		cai	ORCU1T BREAKER - 10 AMP, 1 POLE, 240VAC SQUARE D' CAT. JMC24432	
	<D			DUPLEX RECEPTACLE PHOENIX CAT. |5600461	
	#	1 LOT		TERMINALS & ACCESSORIES: (12) PHOENIX CAT. fUKSN (2) ENO ANCHORS - PHOENIX CAT. fE/UK 4 OCN RAI. AS REQ'O.	
	®	1		AUTODIALER - PHONETICS, 5ENSAPH0NE EXPRESS 0 TEMPERATURE SENSOR PART JFDC-0100	
	©	2	TR150 TR152	TIMER - DIGITAL. 120VAC POKR W/ SOCKET 4 PANEL MOUNTING ADAPTER OMRON CAT. JH5CN-YDN-AC1O0-24O W/ P2CF-08 *k* Y92F-30	
	©	2	PIT PL2	PILOT UGHT - RED LENS, 120VAC TELEMECANIOUE CAT. JZB48V04 *k* ZB46V3	
	©	2	PL3 PL4	PILOT UGHT - YELLOW LENS, 120VAC TELEMECANIOUE CAT. (ZB4BVQ5 *k* Z84BV3	
	©	2	P31 PB3	PUSH BUTTON - MOMENTARY. N.O. CONTACT. WEEN FLUSH HEAD TELEMECANIOUE CAT. fZ64BA333 *k* ZB4BZT01	
	<H>	2	P82 P84	PUSH BUTTON - MOMENTARY, N.C. CONTACT, RED EXTENDED HEAD TB.EMECANIQUE CAT. |ZB46L434 *k* Z646Z102	
	<5>	1	FB5	PUSH BUTTON - MOMENTARY, N.O. CONTACT, YELLOW MJSH HEAD TELEMECANIOUE CAT. fZB4SA5 *k* ZB4BZ101	
	©	1	SS1	SELECTOR SWTCH - 2 POSITION. BLACK KNOB TELEMECANIOUE CAT. fZB4BD2 *k* ZB40Z1OT	

* S

NOTES:

1. EXTERIOR TO BE PAINTED TEXTURED ANSI 61 WAY
2. NAUEPLATES ARE TO BE WHITE PHENOLIC W/ BLACK ENGRAVING WTH EXTERIOR NAMEPLATES ATTACHED W/ SCREWS
3. ALL WRING TO CONFORM WITH NFPA 79 4 NEC WRING STANDARDS
4. ALL 24VDC WIRING TO BE J18AWG MIN.
5. PANEL SHOP TO SUPPLY A SPARE SET OF WIRE TAGS.

OR AW*	DATE	CUSTOMER
VAL	8-22-00	CBS CORP.
CHECKED		JOB
RON		HORSEHEAO. NY
		CUSTOMER FO
SCALE		OLE NAME
3/8"		

M H W O M ") IWWMWln. oiiiXiwoi « 2 » H i * It IWOHIl. HC.

HdBQaSBD
Rt. 519 Eightv Four Pa.
724-iSS.*3334 Fx 724-Z2Z-4090*

TREATMENT SYSTEM
CONTROL PANEL ARRANGEMENT
& BILL OF MATERIAL

OR AWN C NO. 5873-603
SHEET 4 or 4
REV. 00

L

Poat-tt* Fax Note **7671** **Date** q/gfaftl*fc» j°[

• Iv[^\X^f^ **^nrOftan^r,.^r ^**

CoJDtfiL

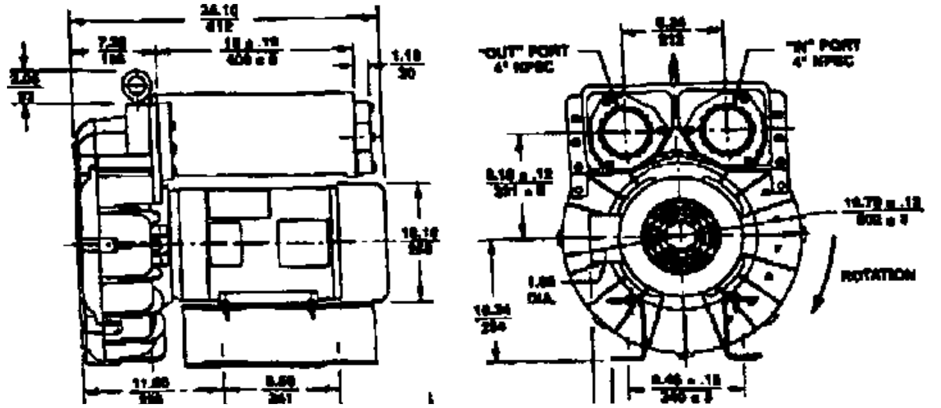
PhOfM* **Phon»#**

Fax* *te3Bb-fBc^

\METEK **RotronTMD**

DR909&CP909
Regenerative Blower

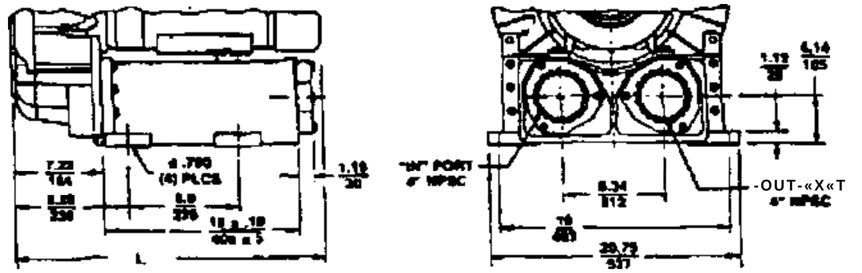
Scat* CAD d m * * ,,,ll*lnjport»qu««. |



MB- *rtw* *a*™

RAIL MOUNTED UNIT

BASE MOUNTED OPTION



Mooei	l(W/«IM)
UMMMBSTMF	14.10 reu
DRttMEHWin	3«.io/an
OfMOBBSnW	11.2/tt*
omoNBiex	iu/6»
DRBDUE72X	24.1 '•«
DftMUENH	M.i *n
DRM98BT2X	23.2/Ht
HICMWETM	u.i/eu

DIMENSIONS: jjjjj
TOLCflANCSS; Jtt « £j
luNtess oTHeRwroe MOTCO)

SPECIHCATIONS ^

MODEL [RAIL MOUNT^	DR909BE72W	DR909BE86W	0R909BB72W i	DR909BB66W	CP909FJ72WLR	HiE909BE72W
Part No. (Rail Mount)	036620	038625	036621	080300	038632	038633
Motor Enclosure - Shaft Material	TEFC - CS	TEFC - CS	TEFC - CS	TEFC - CS	ChemTEFC-SS	TEFC - CS
Horsepower	15	15	to	10	Same as DR909BE72W-038620 except add Chemical Processing (CP) features from catalog inside front cover	Same as DR909BE72W - 038620 except add High Efficiency motor
Voitaoe'	208-2307460	575	230/460	575		
Phase - Frequency'	Three - 60 Hz	Three - 60 Hz	Three - 60 Hz	Three - 60 Hz		
Insulation Class ?	F	F	F	F		
NEMA Rated Motor Amps	41.5-37.6/18.8	14.6	26/13	10.5		
Service Factor	1.15	1.15	1.15	1.15		
Locked Rotor Amps	290/145	93	162/81	65		
Max. Blower Amps '	48.6-44/22	15.8	32.4/162	13-0		
RecommendBd NEMA Starter Size	2/2	2	2/1	1		
Shippinq Weiqht	400 lb (162 kQ)	400 lb (182 krj)	400 lb (182 kQ)	400 lb (182 kq)		
Model No. (Base Mount)	DR909BE72X	DR9098E86X	DR909BB72X	0R909BB86X		
Part No. (Base Mount)	036622	038626	038623	080183		

[1] Rotron motors are designee* to handle a broad range of world voltages and power supply variations. Our dual voltage 3 phase moto'9 ana factory tesled and certified to operate on both: 208-230/415-460 VAC-3 ph-60 Hz and 190-206/380-415 VAC-3 ph-50 Hx Our dual voltage i phase motors are factory tested and certrtied to operate on botn: 104-115/206-230 VAC*1 ph-60 Hz and 100-110/200-220 VAC-1 ph-50 Hz. All voltages above can handle a ±10% voltage fluctuation. Special wound motors can be ordered lor vottaoes outside our certified range.

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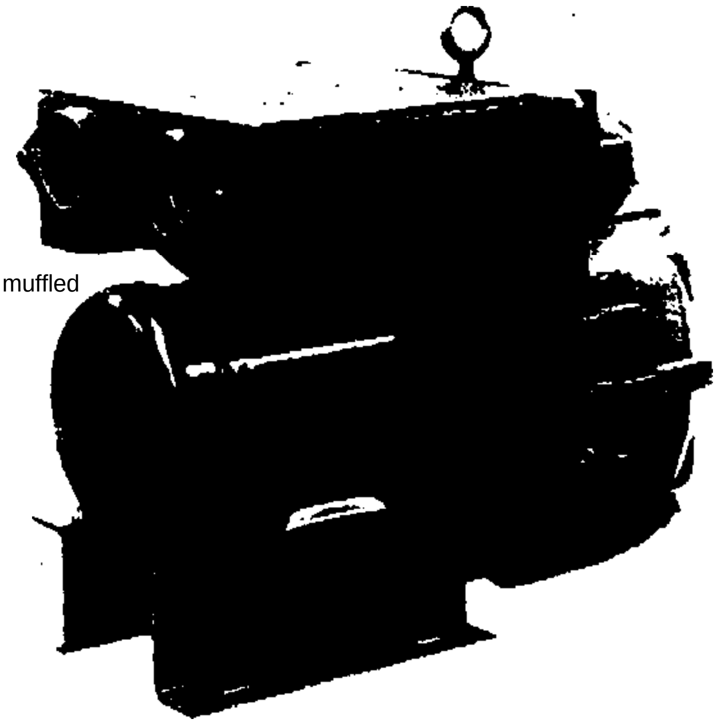
* Majcimum operating temperature: Motor winding temperature (winding nse plus ambient) should not exceed 140'C for Class F rated motors or 120°C tor Class 6 rated motors. Blower outlet air temperature should not exceed 140°C (air temperature rise plus inlet temperature). Performance curve maximum pressure and suction points are based on a 40*C Inlet and ambient temperature. Consult factory for inlet or ambient temperatures above 4Q"C

3 Maximum blower amps corrasponds to the performance point at which the motor or blower temperature rise with a 40"C inlet and/or ambient temperature reaches the maximum operating temperature.

SpecfflCattont tutyect to ehange without notice. P I M M consult your Local Raid Salta Engineer for specification update*.

AMETEK RotronTMD

DR909&CP909
Regenerative Blower



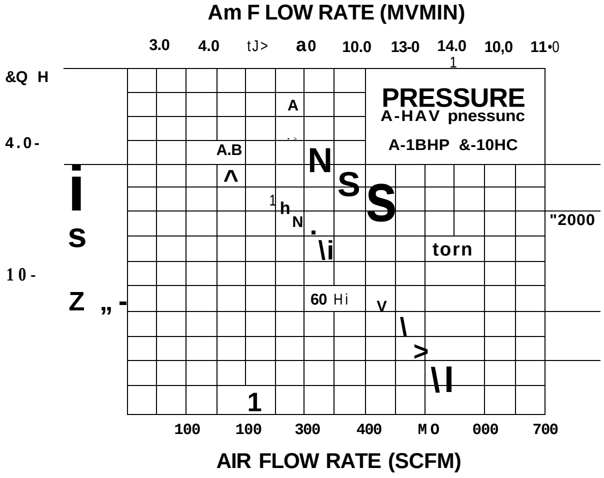
FEATURES
- Manufactured in the USA - ISO 9001 compliant
- CE compliant - Declaration of Conformity on tile
- Maximum flow: 600 SCFM
- Maximum pressure: 125 IWG
- Maximum vacuum: 7.5" Hg (102 IWG)
- Standard motor: 15 HP, TEFC
- Cast aluminum blower housing, impeller & cover; cast iron flanges (threaded)
- UL & CSA approved motor with permanently sealed ball bearings
- Inlet & outlet internal muffling
- Quiet operation wiihin OSHA standards when properly piped or muffled

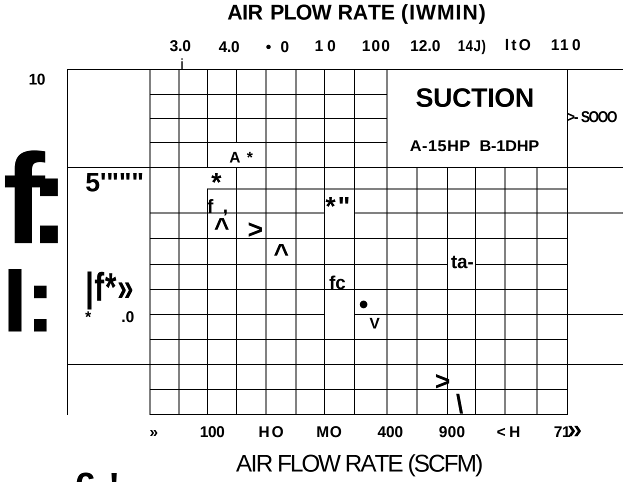
MOTOR OPTIONS
- International voltage & frequency (Hz)
- Chemical duty, high efficiency, inverter duty or industry-specific designs
- Various horsepowers for application-specific needs

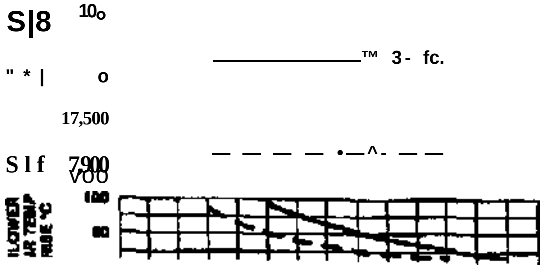
BLOWER OPTIONS
- Corrosion resistant surface treatments & sealing options
- Remote drive (motorless) models
- Slip-on or face flanges for application-specific needs

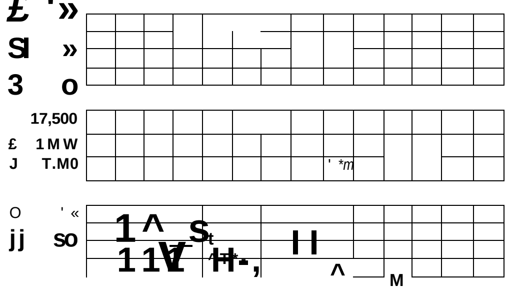
ACCESSORIES (See Catalog Accessory Section)
- Flowmeters reading in SCFM
- Fitters & moisture separators
- Pressure gauges, vacuum gauges & relief valves
- Switches - air flow, pressure, vacuum or temperature
- External mufflers for additional silencing
- Air knives (used on blow-off applications)
- Variable frequency drive package

BLOWER PERFORMANCE AT STANDARD CONDITIONS









ROTRON MOISTHR.E SEPARATOR

AMETEK RotronTMD

itration Accessories

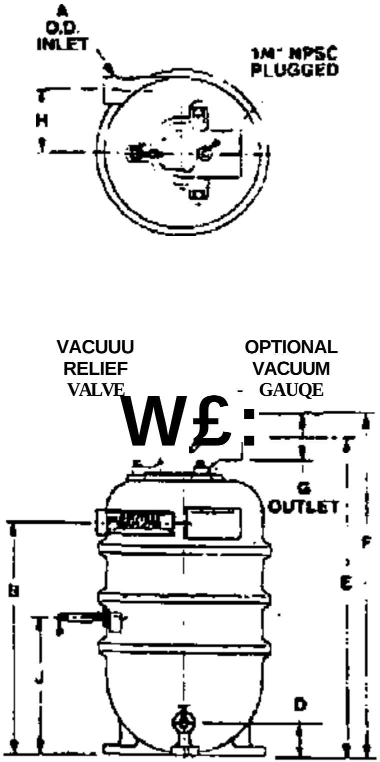
Blower Connection Key
NPT - American National Standard Taper^Pipe Thread (Male)_
NPSC - American National Standard Straignt Pipe Thread tor Coupling (Pemale)
SO - Slip On (Smooth-No Threads)

Moisture Separator™

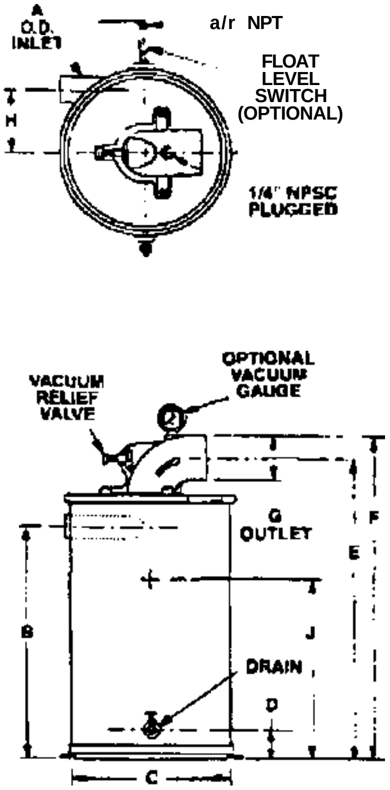
By separating and containing entrained liquids. Rotron's moisture separator helps protect our regenerative blowers and the end treatment system from corrosion and mineralization damage. Recommended for all soil vacuum extraction applications.

SPECIFICATIONS:

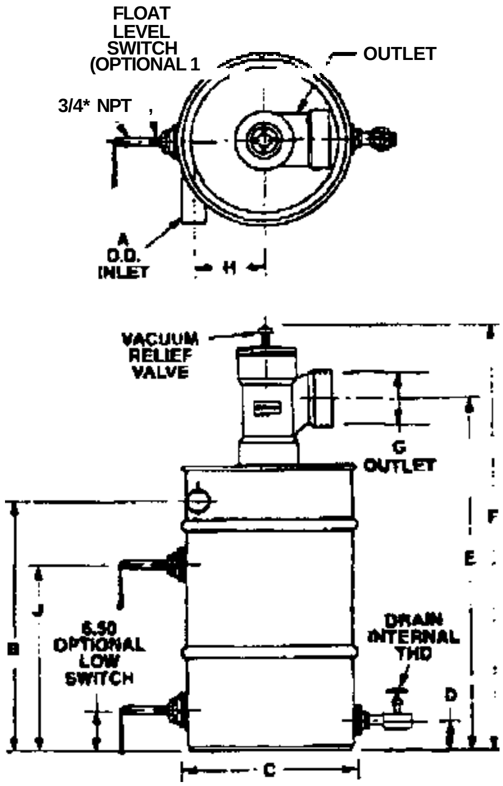
SEPARATION METHOD - n^u Efficiency Cyclonic
RELIEF VALVE MATERIAL - Brass & Stainless Steel
FLUAT ivirtl EhiAL - Copper
FLOAT SWITCH - SPDT, Explosion-proof
NEMA 7&9, 5 Amp max.



PLASTIC "P" DESIGN



METAL "D" DESIGN



METAL "B" DESIGN

Model	Pari No.	CFM Max.	ADIa.	a	CDia.	D	E	F	QDIfl.	H	J Switch	Drain Internal THD	Shipping Weight
MS200PS	038519	200	2 38	2246	16.42	3.25	31.05	33.30	4.50 OP	6.00	13.25	3/4" NPT	421b.
MS300PS	038520	300	2 86										
^IS200DS	060086	200	2.00	24.50	14.00	3.00	39.00	30.33		6-01	15.00		
WJ300DS	080087	300	2.50							576			
™S35QBS	038357	350	3.25	28.39	23-00	500	30.75	41.25		9.75	16.87	I'NPT	821b.
MSSOQBS	038354	500					37.37	54.50	6.83 ID				951b.
MSeooBS	038353	800	4.00	27.87						9.25			981b.
MS1000BS	038914	1000	8.00	31-00	27.00		4800	59.00	9.25 OD	10.50	24.00		1501b.

Models wtthout float switch available. Metal MS200/300DS models are not the standard stocked, but are available.

LL1 ia,

Filtration^ Accessories

Btowrar Modal Refaranoa Kay
A -. SPIRAL ____________
B « DR/EN/CP 068, 063,101,202
C = DR/EN/CP 303. 312. 313. 353
ft - DR/CNTCP 404. 454. 513. 505. 555, 523
E • QfVEN/CP 606. 8543. 6. 623. 37, $75
F « DR/EWCP 707, BOS, 385, B5B. S9, P9 flntat Only)
G =0R/EN/CP 623. S13.P13 (Inlet Only)
"H s DR/EN/CP 909.1223.14. S15. P15 (Inlat Only)

2.0 Moisture Separator™ Specifications

2.1 DUTY

The moisture separator shall be designed tor use In a soil vapor extraction system capable of continuous operation with a pressure drop of less than six inches of water at the rated flow of ___ SCFM. The separator shall be capable of operation under various Inlet conditions ranging from a fine mist to slugs of water with high efficiency.

2.2 PRINCIPLE OF OPERATION

The moisture separator shall incorporate cyclonic separation to remove entrained water. The separator must protect against an overflow by fail safe mechanical means- An electrical switch or contact(s) alone is not an acceptable means of protection against overflow, but is a good backup.

2.3 CONSTRUCTION

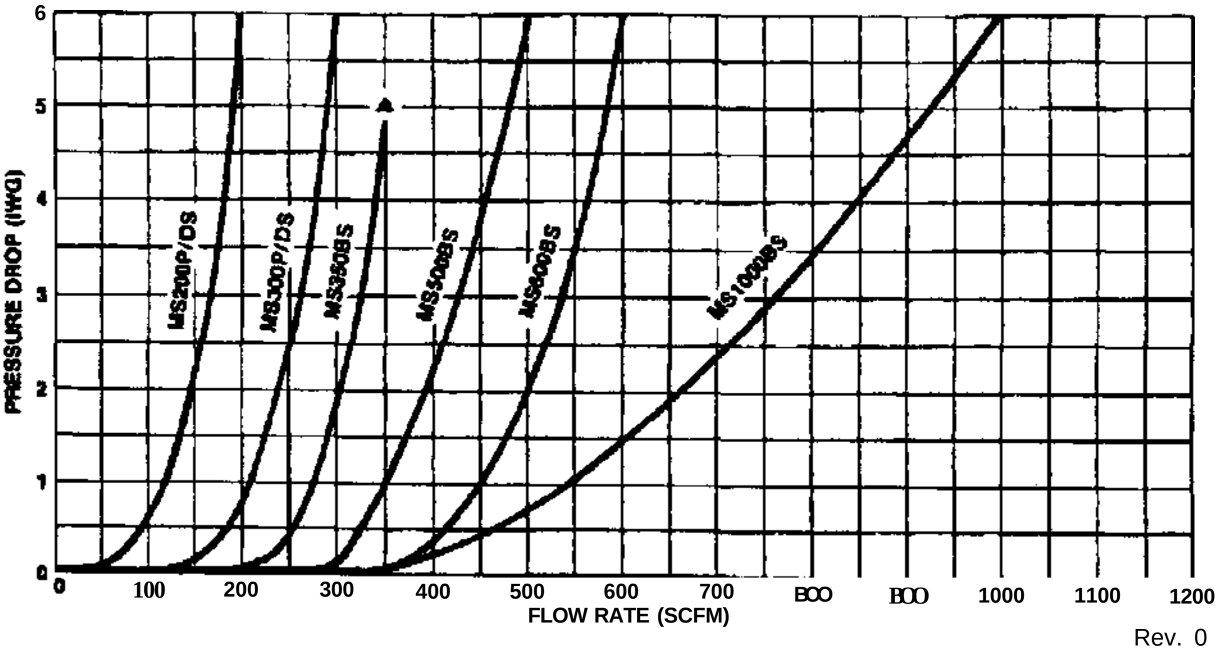
The body of the moisture separator shall be constructed of heavy wall plastic or heavy gauge cold rolled steel. The steel interior and exterior shall be epoxy (powder) coated to resist abrasion, corrosion, and chipping that might expose the surface. The inlet shall be tangentially located and welded to the body. The outlet port shall be constructed of PVC or cast aluminum alloy, flanged and sealed to the center of the top of the separator. The separator shall incorporate a non-sparking copper float ball and an adjustable relief valve to protect against overflow and overheating the blower.

2.4 CAPACITY AND DIMENSIONS

The moisture separator must have a liquid capacity of_______gallons. The inlet shall be_______inch OD slip-on type. The outlet shall be inchOD slip-on type.

For DR/EN/CP Blower Modal	Selector Moisture Separator Modal	HH!	Inlet (OD)	Outlet	ilit
404 454 505 513 523 555 623 823	MS200PS	7	2 38	4.5" OD	12
	MS200DS	10	2 0		U
606 6 707	MS300PS	7	2.88		12
	MS300DS	10	2.5		22
80S	MS3506S	40	3.25		
858 1223	MSSOOBS			6.63" ID	
909	1 MS600BS		4.0"		
14	MS1000BS	65	6-0"	9.25* OD	

2.5 PRESSURE DROP



ROTRON INLINE FILTER

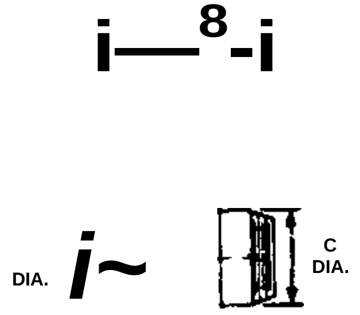
5164 65"

AMETEK Rotron TMD

Filtration Accessories

Blower Connection Key
NPT – American National Standard Taper Pipe Thread (Male)
NPSC – American National Standard Straight Pipe Thread for Coupling (Female)
SO – Slip On (Smooth – No Threads)

Inlet Filter (Single Connection)

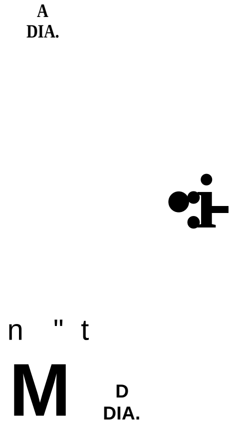


Inlet Filters protect the blower and the air distribution system from dust, and other airborne particles and contaminants. Normally used in pressure systems.

SPECIFICATIONS:
HOUSING - Steel
MEDIA - Polyester
EFFICIENCY - 97-98% (8 to 10 micron particle size)
FILTER ELEMENT - Replaceable (see filter elements)
NOTE: "Z" MEDIA (1 to 3 micron particle size) available

Standard Media Part Number	Z Medi* Fitter PartNumbtr	Reference Blower Modal	Connection	Dlmenaiomj (Inches)			Filter Element
			bitot	A	B	C	
477411		A	2.00 SO	4.56	7,00	2.00	271078
516466	517865	B	1.00 NPT	600	650	1-00	515132
515122	SI7666	CD	1.50 NPT	GOO	6.50	1.50	515132
J ^ B 515123	517667	E	2.00 NPT	7.75	7.25	200	515133
^ • • W 515124	517666	E	2 00 NPT	10.00	1225	2.00	515134
515125	SI7660	F	2.50 NPT	1000	12.50	2.50	515134
515145	517B70	G	3.00 NPT	10.00	1300	| 3.00	51S134
515151	517871	ri	4.00 NPT	10.00	1400	4.00	515135
518511	517672	H	6.00 NPT	16.00	15.00	600	510515

Inline Filter (Dual Connection)



Inline Filters protect the blower from harmful dust and other particles that may be drawn into the blower through the air distribution system. Normally used in vacuum systems.

SPECIFICATIONS:
HOUSING - Steel
MEDIA - Polyester
EFFICIENCY - 97-98% (8 to 10 micron particle size)
FILTER ELEMENT - Replaceable {see filter elements)
NOTE: *T* MEDIA (1 to 3 micron particle size) available

Stendert Media Pert Number	Z MMU Fitter Perl Number	Rflfvjronct) Blower Moot)	Connection		Dlmenalona (inches)				Filter Element
			Inlet	Outlet	A	B	' C	D	
271200		A	176 SO	• 2.00 SO	5-2S	8.31	2.00	1.75	271078
516461	517866	B	1.00NPSC-F	1.00NP9C-F	7.25	6.50	1.00	1.00	616434
flk<Ub4	517867	CO	1.S0 NPSC*F	1.S0NPSC-F	7.00	6-50	1.50	130	516434
••VlbO*	517886	E	2.00 NPSC-P	2.00 NP6C-F	6.00	1026	2.00	2.00	516435
515256	517868	F	2-60 NPSC-F	2.S0NPSC	8.00	10.25	250	2.50	516435
516463*	617690	Q	3.00 NPT-M	3 00 NTP-U	14.00	26 50	3.00	3.00	616136
516465*	517691	H	4.00 MPT-M	4 oo ropT-M	14.00	27.00	4.00	4.00	515135
617611"	517BS2	H	6.00 NPT-M	6.00 NPT-M	16.00	2600	6.00	6.00	516515

• Feature 1/4" threaded tap far *gauge* connection on inlet and outlet

C^ASX COMPRESSOR.
MOt>6L *QD20-m*-T3.3>J-*

SMRGIN - COMPRESSORS

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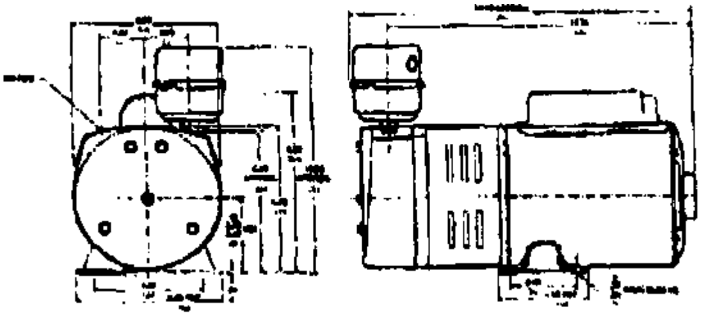
(mm) **(mehw)**

Model 0U3



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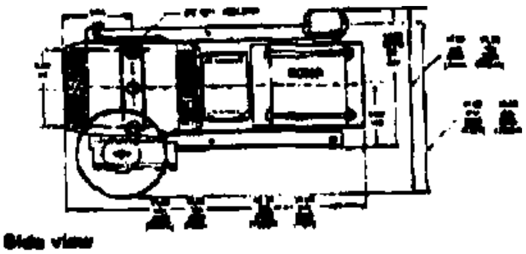
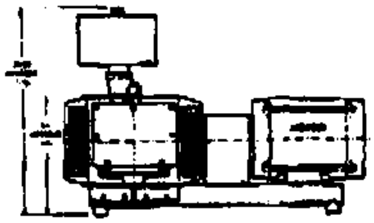
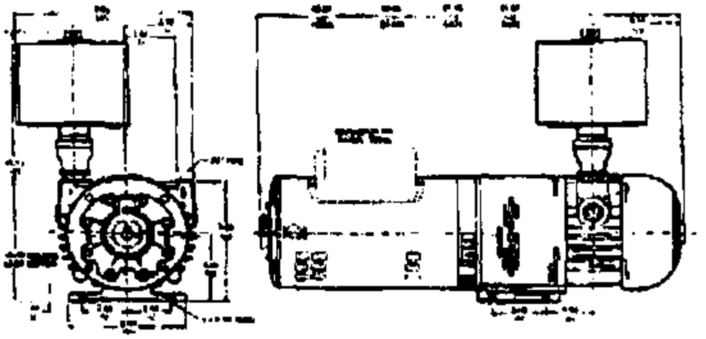
TapfMw



Side view



Models 2067, 2567



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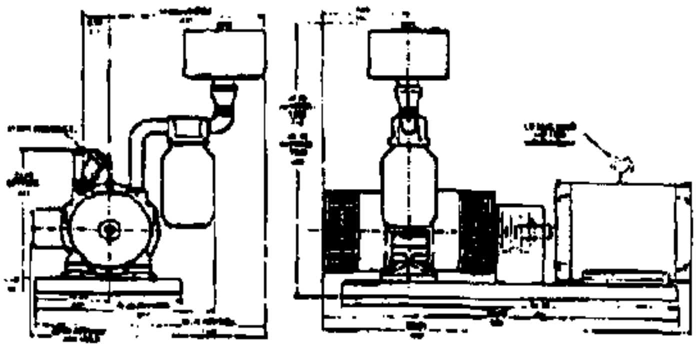
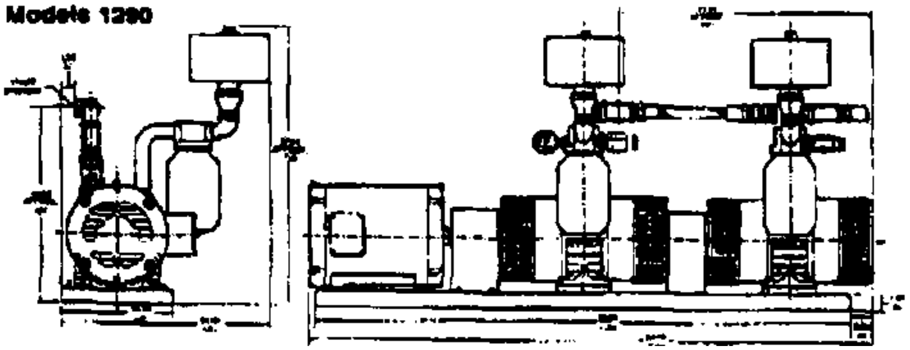
Models 5065



Models 1280

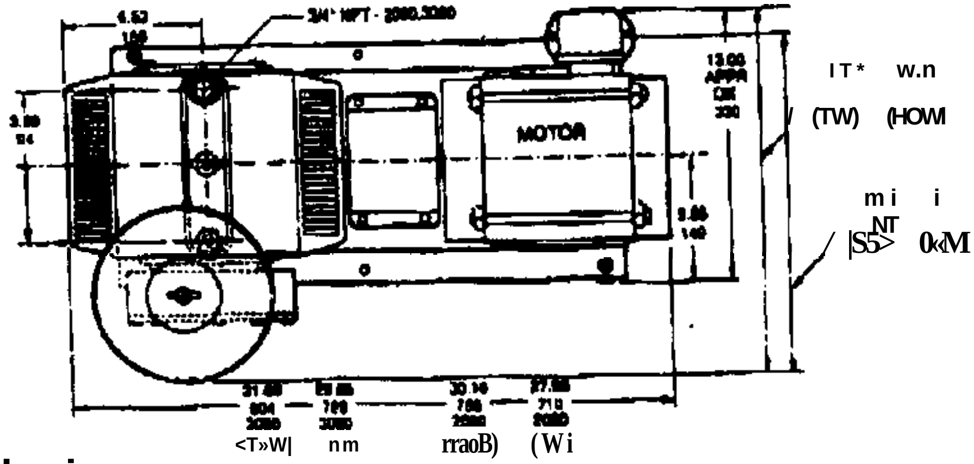


NOTICE: Overall length dimensions are reference only, due to optional motor sizes available.

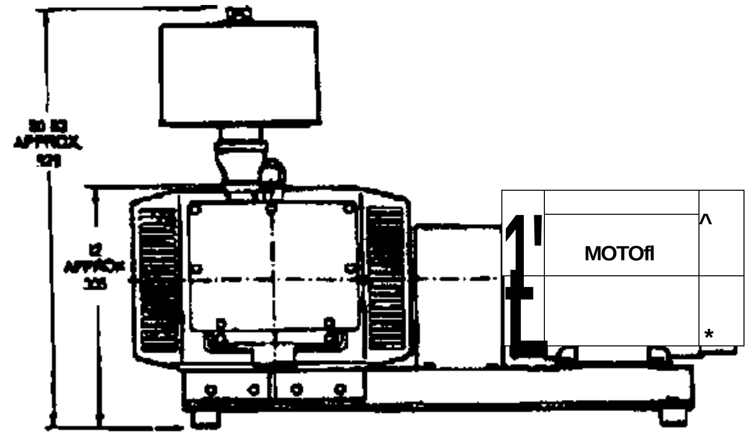
'NO - COMPRESSORS

Models 2080,3080

Top view



Side view



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COMPRESSORS - ROTARY VANE

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Product SpocWoittoM

		Motor	BpOQlftaatlOfto		Mu.Prnsur*		ttu.Ftow			
				HP	• 6QHa		• BOHl		1M	Ji.
Nuimar Oias-Piawjootx'		Ms	* * * —				ofnn	iftfi		
		SO	1O0-1 ttyggo-24cT	- 075	10(1flfcM)	0,7(1.0)		14	50	23
		60	"ioO'TT57aoY>g3p							
	Tbf»«		230/460	2 0	IS	1,0	25	42	136	61
IBS pla4.T»otr	;pE	60	TtSWO	3.0		1,0	26 I	42	136	61
		60	206-330/460	3.0	16	1,0	36	59	160	72
	Ttyw Who»	"60"		5.0	15	\,0	"3"	M	160	72
a0tT+1l>O4T0X^r	SifttfO	n	116/230	1.8	80	1.4	17	30	64	38
			220/360-416	IX						
W67.P116-0471**	TtoM	_BJ2.	aoa^g6/*6o	"13	20	1.4	17	28	84 I	36
	~Thr«e	60	230/460	2.0	20	W	21	"3T	as	
M67-P1	Singto	60	116/230	20	20	1,4	21	36	65	36
6066-P1	7hf66	60	306-230/460	SO	15	tf	66	83		92
6666-P1		60	20S-23V460	5.0	20	1,4		63	US	as
6060•p1 »liaa».1W		60		7.6	20	1.4		83		
i«WHio-Tio4=*r	"ffl;	60	'460	10	15	1.0	112	180	' 430	
1t80»P110A-T610'	ThrM T	60	208-230/460	15	20	1.4	112 I	190	' 440	186

'-&M

' • • M I i <M * w v • » « * «M »• kw MU M *au e*r * **» "W nmam, C*«* tMto^ » I

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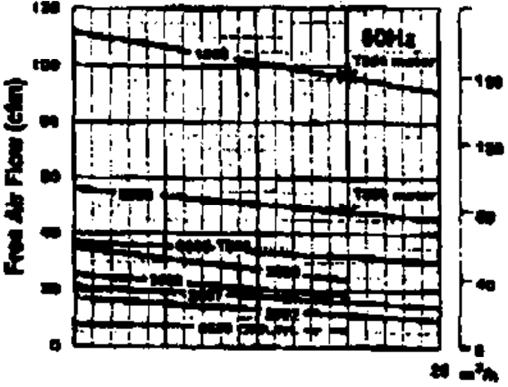

PRESSURE (palg)

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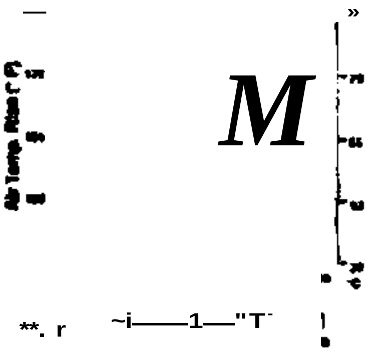

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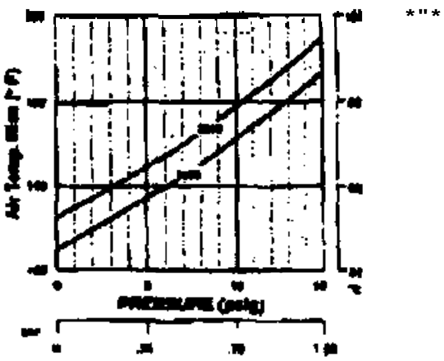

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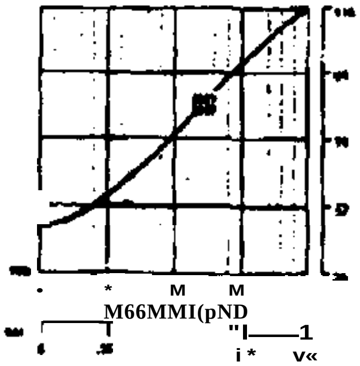

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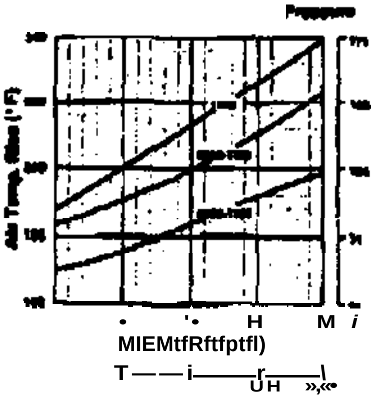

FAX TRANSMITTAL
TO: Charles Hacker
CO: Sactech
DEPT.
FAX # 724 222-4090 FAX # (412) 367-7837
COMMENTS

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COMPRESSOR. INL-ETFILTeR

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Liquid Separator

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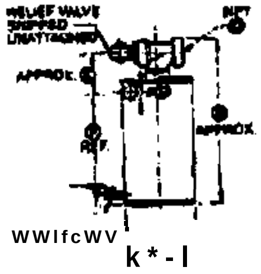

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mbifo	10	ᵁJ1	37.6ᴴ	r	7.5"	26.8"
wwtoo		19.7"		T"r	7.5"	26.8"
	19	19.7"			7.5"	26.8"
RK8400	40			3"	9.7"	29"

Pf1 NO-	FVOjUCtTVpa	Dtcrtptmn	UaadOn
BM9190	Uqutd oapartlor	10 paaon *g^eftffy*?fleapacrtv ..	H3,B4, R4P, H5 Bloww*
mnzoo	liquid—ptrtPr	19jaflon llqt^wrytng capacity _	FU-jMP. Rft, HA BlOWfW
	Uqirteaptfttar	19 Baton tk^carryhg .capacfty	
RMfMOO	UquUMparaVx	40 cj^Jkaiid wrrying capacity	ft&P.H7&OWB«
AJ21S	Ftoetewiton	yOTawWch, 6 amp 129/250 VAC. V NPT mpuritng	RMS SariaVi3cp^ratoii„

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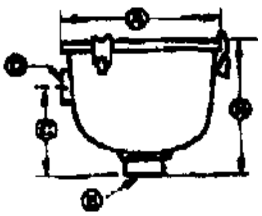

Part Mo.	DM.A	Oafl.i	Wm.C	Dlm.D	Dlm.E
AJiaic	7.38"	Ml".-	4.6J"	1-1/4" FPT	1-1/4" FPT
AJIB1D	7M"	MI*	4«"	1-fflf'FPT	1-1/2" FPT
Ajlftlt	8.79"		voovᵛ	2'FPf"	2" FPT
AJ151G	e.oo*	IMS'	*»J0ʳ	a-i/r FPT	2-1/2" FPT
AJ181H	H.00*	easo-	19.13"	r'MFT	3" MPT
AJ151L	14.00*	w.ir"	'19.90*'	"VfcffT	4" MPT

ilMRM««Vll)^IM«U«l<lpn«M«N,

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For Vacuum Service

AJ161C	In*wi«af.	10 mioron attar (replacement element AJ1356)	naakMior
AJISID	kvanotttr	iprnteiontitter*QgMVtrmt*.etamontM135E) '	R4jR4p
AJ181E	In** mar	10 mtorop After (roplagai»Welement AJ133F)	R5, R4H Stowart
AJ1B1Q	Irvine filter	10mtefonViW(raplao^mar<atoffyt'M13SQ) ^	R6. R8RR4W Beware
AJ1I1H		lOjriicron torJreplecefTOm etarnant AJi3dC)	fR7 Bower "

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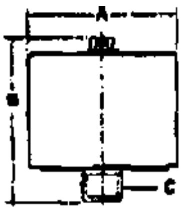

Part NO.	(Mm. A	Dim. a	Dim. C
AJ188C	QXXT	7.1Z'	1-1/4* MPT
~>AJ12BD	7.70"	755"	1-1/8" MPT
AJ129F	loir	4.91"	2* FPT"
AJ199Q	10.00*	13.12"	2-1/2" MPT
AJIML	10.00*	1482"	4'MPT

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CASHCROFT

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Type 1490 Low Pressure Diaphragm Gauge

The Ashcroft* Type 1480 tow pressure diaphragm gauge is designed to measure pressure from 10 in. H_zO to 15 psi, both positive and negative pressures. This gauge uses a very sensitive diaphragm capsule to measure tow pressure and vacuum. The gauge is specifically designed for use whenever the pressure medium is a gas that Is not corrosive to beryllium copper, brass, porvsuttone and RTV silicone. Typical applications are, but not limited to. vacuum pumps, gas leak detectors, air com' pressors, air filters, gas burners, gas measurement, vacuum ovens, suction regulators and respirators.

Type 1495 Low Pressure Receiver Gauge

The Ashcroft Type 1495 receiver gauge uses a diaphragm capsule as its sensing element rather than a bourdon tube. The sensitivity of the diaphragm promotes smooth pointer motion that makes minor pressure changes easy to read.

The Type 1495 receiver gauge is the ideal product where the standard Grade A accuracy [2-1-2%) or the optional Grade 1A(1%) accuracy and smaller dial sizes are specified. The long pointer, smooth-operating sensing element, easily removable window and re-zero adjustment screw make specification and installation of This receiver gauge quick and easy.

1490 and 1495 Standard Specifications

Typo:	1490-tow pressure diaphragm gauge 1495-diaphragm receiver gauge 3to15psi
Dial Size:	2%"and3%"
Case Material:	Glass-filled por/sulTone
Window:	Polycarbonate Quarter-turn bayonet style mounting
Pointer:	Black aluminum
Dial:	White aluminum with black markings
Movement:	Brass
Sensing Element:	Beryllium copper diaphragm
Wetted Materials:	Beryllium copper. brass, polysultone and RTV silicone
Sockets:	Brass
Connection:	1/8 and 1/4 NPT lower and back- Hose barb '/•", ¥t%" or '/«" lower and back connect
Ranges:	10 in. HaO through 15 psi including vacuum and compound. See *chart for 1490 and 1495 Ranges,*

Accuracy:	ASME Grade A 2-1-2%
Zero Adjust:	Recalibration screw on dial
Proof Pressure:	150% of range
Burst Pressure:	Up to 5 psi range - 50 psi, 5 psi to 5 psi range-100 psi
Operating Temperature:	-20 to 180°F
Storage Temperature:	-45 to 185°F

Table A
1490/1495 Options

Code	Description
XAK	Autoclavable at 275° F for 30 minutes. The unit can be autociaved five times. Poiysulfone window will be supplied.
XAN	1% optional accuracy
XDA	Dial marking
XNH	Stainless steel tag
XNN	Paper tag
XTU	Throttle plug
XUC"^{1}	U-ciamp

Warning: All gauge components should be selected considering the medium and ambient operating conditions to prevent misapplication. Improper application can be detrimental to the gauge, and can cause failure and possible personal injury or property damage.

How To Order

0	81 Size	Type		Wetted Material		Connection Size & typo		Connection Location	
Code	Description	Code	Description	Code	Description	Code	Description	Coda	Description
t 25	*tvr*	149Q	loft Pressure Diaphragm Gauge	# A	Beryllium Capper	01	1/8 NPT		Lower
					Brats Socket		1/4 HPT	B	Center Back
35	3H"	1495	Diaphragm Roeolver Gauge		Polyittlfone	HD	V Hose Barb*	T	Top
					RTV Silicons	HE	KT Hose Barb"	0	3 0'Clock
						HF	fc~ Hue Barb™	E	QOXIaca

EXAMPLES: 26 1460A 021. 10 IW XNH

[2] U-clamp furnished when hose hart specified.

1490 Low Pressure Diaphragm Gauge

Standard Ranges

Pmiura	Figurt interval!	Minor Graflualion
0/10 in. HjO		0.1
0/15 in. HjO		0.2
0/30 in. HaO		0.5
0/60 in. HaO	10	
0/1QQ in. H_TQ	10	
0/160 in. HfO	20	
0/200 in. HTO	20	
Q/300 in. HaO	50	
0/10 02./in.		0.1
0/15oz-/in.'		0.2
0/30 w-/in.'		0.5
0/80 oz/in.	10	
0/100 oz7in.	10	
0/160 or/in.'	20	
0/250 02/in.'	50	
0/3 psi	D.5	005
0/5 psi		01
0/10 psi		0.1
0/15 psi		02
Vacuum		
15/0 in. H_aO		0.2
30/0 in. HiO		0.5
6070 in. HtO	10	
100/0 in H^J	10	
200/0 in. HjO	20	
15A>02./in.*		0.2
3O/0 oz71n.*	5"	0.5
60/0 (w./in.*	10	
100/D ozJin.*	10	

Compound		
^30730 in. HaO	10	
•30/30 in. oz/in.[1]	10	1
-10/10 in. H*0		0.2

Standard Metric Ranges

Preaaura	Figure Jntatvala	Minor Graduation^
a/60 cm. HjO	10	
0/2.5 kPa	0.5	0.05
0/4.0 kPa		0.1
0/10 kPa		0.1
a'16 kPa		0.2
0/25 kPa		0.5
0/40 kPa	10	
07100 kPa	10	
Vacuum		
2.5/0 kPa	0.5	005
4.O/0 kPa		0.1
10/OkPa		0.1
16/0 kPa		0.2
25/0 kPa		0.5
40/0 kPa	10	
100/0 kPa	10	
Compound		
-10/60 cm HaO	10	
-10/50 cm HaO	10	
-20/40 cm HjO	10	
-10/100 cm HaO	10	
•10/120 cm HaO	20	

Dual Scale

Rang*		Graduation*			
		Inner fieala		Outer Bcala	
Inner Seato	Outer Seal*	Flgura	Ubwr	Flgura	Minor
0/9 02/in.'	0/15 in. HaO	1	0.2		0.2
0/20 ox/in.*	0/35 fav HjO		0.5		0.5
0/35 02/in.	0760 in. H_aO		0.5	10	
0/60 oz/In.*	0/100 tn. HaO	10		10	

Other imnpm WWBME on noma. Ct»^a hemt

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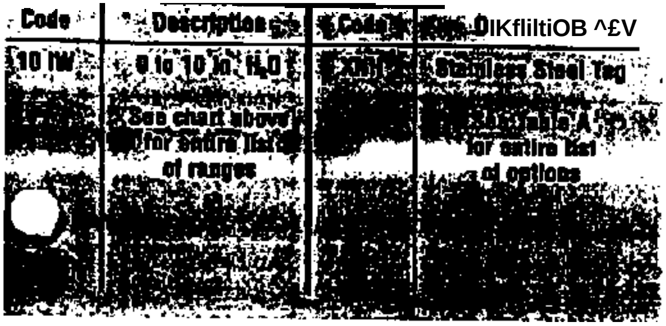


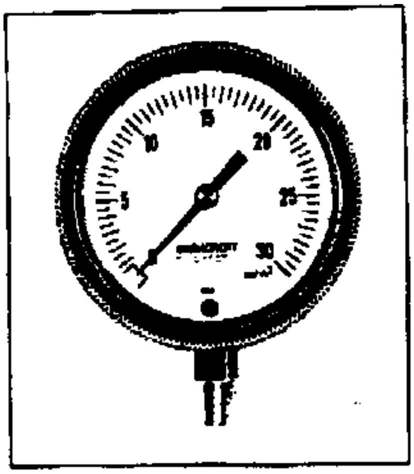
Code	Description	Code	DIKfliltiOB ^£V
10 IW	0 to 10 in. H_2O	XNN	Stainless Steel Tag
[illegible]	See chart above for entire list of ranges	[illegible]	See Table A for entire list of options

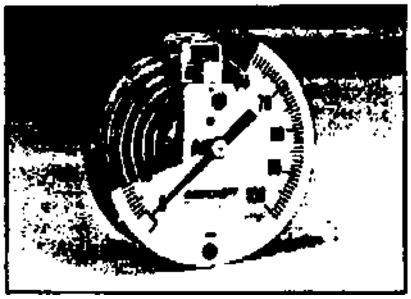
1495 Diaphragm Receiver Gauge

Standard Ranges

PreWire	Flgur* Intervals	Minor Graduation.
0-100%	10	
0-10 square root	1	01
0-10 sq rVO-100 Linear'		

1. Tnis dial 15 standard end wHI be supplied unltM omerwtae orfterad. Figure/minor intervais tame as single scata.





APPENDIX
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APPENDIX D

BACKGROUND AMBIENT AIR MONITORING DATA

Background Ambient Air Monitoring

Per the Initial Testing Program Plan (ITPP), ambient air monitoring was conducted in the main Site building local to the SVE/AS System in accordance with Section 7.3.1 of the Health and Safety Contingency Plan (HAS/CP) (Attachment 1).

An IT Corporation (IT) representative was on-Site on 9-28-00 and 10-12-00 to collect SUMMA canister samples to be analyzed for volatile organic compounds (VOCs) via method TO-14. The VOCs reported by the laboratory are listed in Attachment 2. Only VOCs that were detected in the samples are reported in the summary tables.

A representative from Fagan Engineers, Incorporated (Fagan) was on-Site daily from 9-27-00 through 10-13-00 to calibrate the two MiniRAE 2000 units (PID) that were used to collect real-time air quality data. Specifications for the PID units are included (Attachment 3). The locations of the PID units are illustrated on the enclosed map (Attachment 4). Data was downloaded throughout the 2-week duration of air monitoring and on 10-18-00. Field notes collected by the Fagan representative are included as Attachment 5. These data will be used to generate baseline conditions for evaluation of air monitoring data during system testing and operation. Analytical results and downloaded PID data are presented in Attachments 6 through 10.

Due to calibration and programming adjustments made to the two automatic PID units (on 9-28-00 following their initial start-up on 9-27-00), the SUMMA canister air samples collected on 9-28-00 were collected just prior to re-initiation of PID data collection. Based on the similarity of the two SUMMA canister data sets (9-28-00 and 10-12-00) and the narrow range of PID concentration readings, this protocol variance does not impact the substance of the background air monitoring data. Real-time air monitoring data that correlate to SUMMA canister samples collected on 10-12-00 are highlighted on the tables in Attachments 7 and 9.

LIST OF ATTACHMENTS

1. Section 7.3.1 of the Health and Safety Contingency Plan (HAS/CP)
2. Volatile Organic Compounds Via Method TO-14
3. MiniRAE 2000 (PID) Specifications
4. SUMMA Canister Locations - Drawing
5. Fagan Field Notes
6. SUMMA Canister Analytical Results
7. Unit#10-PID Data
8. Unit #10 - Calibration Data
9. Unit#11 -PID Data
10. Unit #11 - Calibration Data

Attachment 1

Section 7.3.1 of the Health and Safety Contingency Plan (HAS/CP)

7.14 VOC Monitoring within Main Plant Building - Former Runoff Basin Area

Approximately two weeks before initiating testing and start-up of the SVE/AS remedial system at the Former Runoff Basin Area, baseline (background) real-time ambient air quality monitoring will be conducted inside that portion of the Main Plant Building and any other occupied structures in close proximity to the Former Runoff Basin Area for organic vapors using PIDs. A minimum of two PIDs will be placed at separate locations inside the Main Plant Building. Each PID will be set up with a data logger and operated continuously to monitor ambient air quality in the worker's breathing zone. Continuous monitoring will be averaged in 15-minute integrations. Each PID will have a 10.2 eV ultraviolet (UV) lamp. The PID locations will be placed in proximity to any floor sumps, drains, or other floor openings. All continuous PID readings will be logged and recorded in accordance with the procedures described in Section *IX*, Data Logging, below. Prior to the start of the indoor ambient air quality monitoring, a walk-through will be performed in those buildings by the Project Engineer, Project Manager, the CBS representative, and the USEPA and/or the NYSDEC field representative^), if present, to identify the air monitoring locations. The walk-through will be coordinated with the Cutler-Hammer plant management and security personnel.

Additionally, as part of the baseline ambient air quality monitoring, two-hour indoor air samples will be collected, one at each of the locations selected for PID monitoring, to monitor specifically for TGE in ambient air. An additional two-hour air sample will be collected outside, and preferably upwind, of that portion of the Former Runoff Basin. The air samples will be collected on two consecutive days before initiating testing and start-up of the SVE/AS remedial system. The air samples will be collected in SUMMA passivated stainless-steel canisters or other specially prepared canisters, as appropriate, and sent to a laboratory to be analyzed for TCE in accordance with USEPA Method TO-14A. The laboratory shall be certified by the State of New York to perform air analysis.

Following start-up of the SVE/AS remedial system, Hie real-time ambient air quality monitoring being performed inside the Main Plant Building will be continued for a Tninitwnm of two weeks. If VOC concentrations exceed background levels by 2.0 ppm or greater and are sustained for at least one hour in any day, the Project Manager, the CBS representative, and the USEPA and NYSDEC representatives will be promptly notified. If such concentrations are determined by CBS andVor the USEPA and the NYSDEC to be unrelated to plant operations, two-hour indoor air samples will be collected at the PED monitoring locations and analyzed in accordance with USEFA Method TO-14A for TCE. Additionally, if the VOC concentrations exceed background levels by 25 ppm or greater, the operation of the SVE/AS remedial system will be immediately suspended, Cutler-Hammer plant management personnel will be notified, and corrective actions will be implemented to reduce the vapor levels within the building.

If TCE is detected is any air sample at concentration* of 2.0 ppm or greater above background TCE levels, the USEPA and NYSDEC will be promptly notified and an assessment will be made to determine whether its presence is attributable to the operation ofthe SVE/AS remedial system and what cmectrve actions, ifeny, are paired. Tne results ofthe assessment and any proposed corrective actions will be provided to the USEPA and NYSDEC for review and approval within one week of receiving the air sample analytical results. Corrective actions may include, but not be limited to, adjustments to the soil vapor extraction rates and the air sparge injection rates or other modifications ofthe SVE/AS remedial system, as appropriate, and/or ventilation ofthe Main Plant Building during operation ofthe SVE/AS system.

If TCE is detected in any air sample at concentrations exceeding the NIOSH recommended exposure limit far TCE of 25 ppm, the operation ofthe SVE/AS remedial system will be immediately suspended until the corrective actions discussed above are implemented to reduce the levels of TCE in the ambient air within the building.

Following completion of any modifications to the SVE/AS remedial system or other corrective actions, the monitoring for total VOCs and TCE in ambient air will be resumed m the Main PlsmBuildiiigrOTtinTcwnseciitive days. The two-hour air samples will be collected at all indoor monitoring locations. If the concentration of total VOCs or TCE is still greater than or equal to the action levels or do not decrease to below such levels over the three-day monitoring period, the operation ofthe SVE/AS remedial system will be suspended and the Project Manager, the CBS representative, and the USEPA and

NYSDEC representatives will be promptly notified of the shut down. An evaluation will be performed of the SVE/AS remedial system to detennine what additional corrective actions, if any, are necessary to pie vent TCE or any other VOC from entering the building as a result of the SVE/AS system operation. The results of the system evaluation and recommended corrective actions will be provided to the USEPA and the NYSDEC for approval within two weeks of shut down of the SVE/AS system operation. CBS will proceed to implement any corrective actions approved by the USEPA and the NYSDEC prior to resumption of the SVE/AS remedial system operation. Upon resumption of SVE/AS operation, the ambient air monitoring program for the Main Plant Building near the Former Runoff Basin area will be resumed for total VOCs and TCE.

If the concentration of total VOCs or TCE levels are below the action levels during the first two weeks of operation of the SVE/AS remedial system or if they decrease to such levels after corrective actions are implemented, indoor ambient air quality monitoring using FIDs will be continued on a biweekly basis for the next two months of operation, men on a monthly basis for the duration of the remedial action (i&, until the USEPA certifies to CBS mat the remedial action at the Former RunorTBasin area is complete and the SVE/AS remedial system deration is discontinued). ForthobiweeUyandmcirtmymomtoring,the PIDs will be set up with data Loggers for continuous monitoring of total VOCs in ambient air over a 48-hour period and vapors will be measured in 15-minute integrations.

During biweekly and monthly air monitoring, if sustained VOC concentrations are greater man or equal to the action levels, the air sampling and analysis for TCE will be reinitiated as described above and the Project Manager, the CBS representative and the USEPA and the NYSDEC iBUicaeulaUves will be promptly notified. If TCE is detected in any sample at a concentration greater than or equal to the action level, an Bmcwmient will be made to determine if its presence is attributable to the operation of the SVE/AS remedial system and what additional response actions, if any, will be required. IfTCE is not detected at such a level or is not attributable to the SVE/AS system, indoor ambient air quality monitoring using the PIDs will be resumed on a biweekly or monthly basis, as appropriate.

A copy of all PID readings will be provided to the USEPA and NYSDEC within 48 hours of completing each day of continuous logging and recording. A copy of all analytical results from the two-hour air samples will be provided to the USEPA and NYSDEC within 48 hours of receipt from the laboratory.

<u>Attachment 2</u>

Volatile Organic Compounds
Via Method TO-14

Volatile Organics List

1	Propene	40	Ethyl Acrylate
2	Dichlorodifluoromethane	41	1,2-Dichloropropane
3	Chlorotiifiuoromethane	42	Methyl Methacrylate
4	Freon 114	43	Di bromomethane
5	Chloromethane	44	1,4-Dioxane
6	Vinyl Chloride	45	Bromodichloromethane
7	1,3-Butadiene	46	cis-1,3-Dichloropropene
e	Bromomethane	47	4-Methyl 2-Pentanone
9	Chloroethane	48	Toluene
10	Dichlorofluoromethane	49	Octane
11	Trichlorofluoromethane	50	trans-1,3-Dichloropropene
12	Pentane	51	Ethyl Methacrylate
13	Acrolein	52	1,1,2-Trichloroethane
14	1,1-Dichloroethene	53	Tetrachloroethane
15	Freon 113	54	2-Hexanone
16	Acetone	55	Dibromochloromethane
17	Methyl Iodide	56	1,2-Dibromoethane
18	Carbon Disulfide	57	Chlorobenzene
19	Acetonitrile	58	1,1,1,2-Tetrachloroethane
20	3-Chloropropene	59	Ethylbenzene
21	Methylene Chloride	60	m/p-Xylene
22	Acrylonitrile	61	o-Xylene
23	trans-1,2-Dichloroethene	62	Styrene
24	Methyl t-Butyl Ether	63	Bromoform
25	Hexane	64	Cumene
26	1,1-Dichloroethane	65	1,1,2,2-Tetrachioroethane
27	Vinyl Acetate	66	1,2,3-Trichloropropane
28	cis-1,2-Dichloroethene	67	Bromobenzene
29	2-Butanone	68	4-Ethyltoluene
30	Ethyl Acetate	69	1,3,5-Trimethylbenzene
31	Methyl Acrylate	70	Alpha Methyl Styrene
32	Chloroform	71	1,2,4-Tri methyl benzene
33	1,1,1 -Trichloroethane	72	1,3-Dichlorobenzene
34	Carbon Tetrachloride	73	1,4-Dichloro benzene
35	1,2-Dichloroethane	74	Benzyl Chloride
36	Benzene	75	1,2-Dichlorobenzene
37	Isooctane	76	Hexachloroethane
38	Heptane	77	1,2,4-Trichlorobenzene
39	Trichloroethene	78	Hexachlorobutadiene

Attachment 3

MiniRAE 2000 (PID) Specifications

FIELD ENVIRONMENTAL INSTRUMENTS

EQUIPMENT RENTAL & FIELD SUPPLIES

99 Miller Avenue
Braddock PA 15104
Phone:800-393-4009

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: •

MINIRAE 2000

PORTABLE VOC-PID MONITOR

0 Smallest handheld VOC monitor on the market
- 0-10,000ppm range
- linear PID sensor
- Very Responsive
  Resistant to moisture and dirt

0 Quick access lamp and sensor
0 Strong, built-in sample draw pump with pump stall feature
0 Field replaceable NMH rechargeable battery
0 High visibility rugged rubber boot
0 102 built-in correction factors from a RAE list of 250+ chemicals
0 User selectable hygiene and survey modes
0 ppm or mg/m* readout
0 ProRAE suite datalogging software for Windows™

APPLICATIONS

0 Confined space entry
0 Hazamat
0 Air Pollution
0 Leak detection
0 Soil, well and water head space analysis

SPECIFICATIONS

SIZE:	8.2" (21-Ban) L x 3" (7.62cm) W x 2"(5.8cm) H
WEIGHT:	19.5oz (553gm) with battery pack
DETECTOR:	Photo-ionization sensor with standard 10.6 eV or optional 9.8 or 11.7 eV UV lamp
BATTERY:	Rechargeable, external, field replaceable Nickel Metal Hydride battery pack
OPERATING TIME:	10 hours continuous
BATTERY CHARCiNG:	up to 10 hrs charge through built-in smart charger
DISPLAY;	Large LCD, manual, darkness and alarm activated
RANGE, RESOLUTION & RESPONSE	(Isobutylene Calibration gas)
TTME(T90)	0-999ppm...........O.lppm.............<3sec
TIME(T90)	100-10,000ppm......lppm.............<3sec
ACCURACY:	(Isobutylene) ±2ppm or 10% of reading <2Q00ppm (Isobutylene) ±20% of reading > 2000ppm
** MJB RATION:	Two points Held calibration of zero and standard gas
-ECT READOUT:	Instantaneous, average, STEL, & peak value
iCMPERATURE:	0° to 40^(32° to 113T)
HUMIDITY:	0% to 95% relative humidity (non-condensing)

I PRICES

• BASIC UNIT:	$3215.00	<
J LAMPS (choose one)		
• 10.6e V lamp *W*, interchangeable	$0.00-1/	:
• 11.7eV lamp *W*, interchangeable	$100.00	:
• 9-BeV lamp *W*, interchangeable	$50.00	;
\ CHARGER (choose one)		
I Battery charger 110 VAC or 12 VDC	$30.00*/	:
; Battery charger 230 VAC or 12 VDC	$30.00	:
• No charger	$0.00	:
• DATALOGGING (choose one)		
• Non-datalogging	$0.00	•
I Datalogging-includes software £c cable	$250.^/	
* MONITOR & KITS (choose one)		
• Monitor Only	$0.00	:
; Kit w / lOOppm Isobutylene & regulator	$500.00'./	;
• Kit w/ regulator, no gas	$445.00	;
• Kit without gas or regulator	$313.00	

DREl>ffORMATl6NPLEASE " J f c x

CALt 8OM93-40D943595 - T ^)

RAE 2000

- Still llw smallest handheld VOC monitor on the market
- New RAE Photo-lonization Detector (PIDJ 3-D sensor
  - Easily accessible lamp and sensor
  - Reduced humidity interference
  - Improved linearity
  - Increased sensitivity
  - Extended range 0-10.000 ppm
- Strong, built-in sample draw pump with pump stall feature
  - Sample up to 100' (30m) horizontally or vertically
  - Prevents liquid flow into the monitor
  - Warns-if sample tubing is blocked or crimped
- External, field replaceable NMH rechargeable battery
  - 10 hours of continuous monitoring
  - Smart battery charging
  - Alkaline battery holder supplied
  - Automotive charger available
- Robust inlet probe
- Large keys operable with 3 layers of gloves
- Large easy to read back light display
  - Alarm activated
  - Darkness or manually activated
- Preset alarm thresholds for STEL, TWA. low and high level peak values. Audio buuer and flashing LED display will be activated when the limits are exceeded
- 15,000 point data logging storage capacity tor data download to PC
- Rubber protective boot
- 102 built-in correction factors from a RAE list ol 250* chemicals
- User selectable hygiene and survey modes
- Protected from portable radios
- **ppm or mg/m readout**

Environmental Applications

- Air pollution — trace, toxic gaso*.
- Leaking underground storage ranks
- Monitoring drums, perimeter fence line
- Leak detection — fugitive emissions (EPA Method 21)
- Soil, well and water head space analysis
- Vapor recovery breakthrough

Industrial Hygiene, Health, Safety and Plant Applications

- Confined space entry — braad ran?:. real time monitoiing of low-level :c». c gases
- Emergency "espouse to hazardous spills
- Indoor air quality in rew. sick ano n'lxeo usage buildings
- Personnel monitoring — determine levels for persona! proiect-ve equctr-ert (PPE!
- Survey instrument — prioritization c sample collection
- Work place monitoring — oca*, STEu. **and TWA**

*TV.

Specifications

	62^{m} (21.8 cm) L» 3 " (7 62 cm) W k 2." (5.08 cm) H
	19.5 02 (553 gm) with battery pack
	Photo-tonoatton sensor with standard 10-6 «V or optional 9.8 or 11.7 tV uV tamp
"DS-VV'	Rechargeable, external, field replaceable Nickel Metal Hydride battery pack. . Alkalint battery holdar (for 4 AA] supplied
	10 hours continuou)
/;iihv:."i:—.^i":ii",.-:	Up to 10 hours charge through butrt-m smart charger
5l#'iv	Large LCD. manual, darkness and alarm activated
;i;!-p.ii'*»!(i|,v.'T,i-V i;r,r»].-.v-tv^	IsobutyUne (calibration gat] 0-999 ppm 0.1 pprn O sec 100-10.000 ppm 1 ppm < 3 sec
	s 2 ppm or 10% of reading <2000 ppm *t* 20% of reading > 2000 ppm Calibrated to 100 ppm isobutylene
	Easy access to lamp and sensor for cleaning and replacement
	102 built-in VOC gases
	Two points field calibration of zero and standard reference gas. Calibration memory of B calibration gases, alarm limits, span values and calibration date
V^^^KJi;l^;'.•; K&V*;	Flexible 5" (13 cm) tubing
	I operation and 2 program keys
	Instantaneous, average, STEL and peak value, battery voltage and elapsed time
	UL & cUL Class 1. Division I. Group A.B.C.D (US & Canada). EEx ia IIC T4 (Europe)
	Separate preset alarm limit for high, low, STEI and TWA alarm
	Survey or Hygiene, user selectable
	•Odbbuuer
	Plashing red LED
-^gga -Si ssm	Optional plug in pen site vibration alarm
	Latching or automatic reset
	15.000 points with time/date. Header information includes monitor serial number, user tD, site ID, date and time
-?. ,'iS IT.'-';;-	Download data and up load instrument setup from PC through RS-232 link to serial port.
	Software compatible with Windows' 95. 98 and NT
Jg^iAv'i&iJ^f	Power On/Off and data logging through RS-232 port
^fe®fe5V	Calibrated output, user selectable full-scale range
	Internal integrated flow rate 400 cc/minute Sample from 100/ (30m) horuontally or vertically
	Auto shut off pump at low flow condition
	14-F to IW'F (-10"C to 40*C)
	0 % to 95 % relative humidity (non -condensing)

Ordering Information

Model PGM-7600 Monitor

- Mini RAH 2000 unit with 10.6 eV PID deteaor
- Nickel metal hydride batteries
- Alkaline battery holder
- Rubber boot
- Inlet probe and water trap filter
- Operation and maintenance manual
- Soft carry case
- Pro-RAE Suite software (data logging version)

Model PGM-7600 Kit

Items included with Monitor Plus

- Calibration Gas
- Calibration Regulator with flow controller
- Porous metal fitter and O-ring kit
- Gas outlet port and tubing
- Tool kit
- Hard transport case

Accessories

- 9.B&11.7 eV lamps
- Lamp cleaning kit
- Automatic charger
- Remote access probe
- External vibration alarm
- Automotive charger adapter

© c® <£>C€ 150 90011 CERTIFIED

DISTRIBUTED BY:

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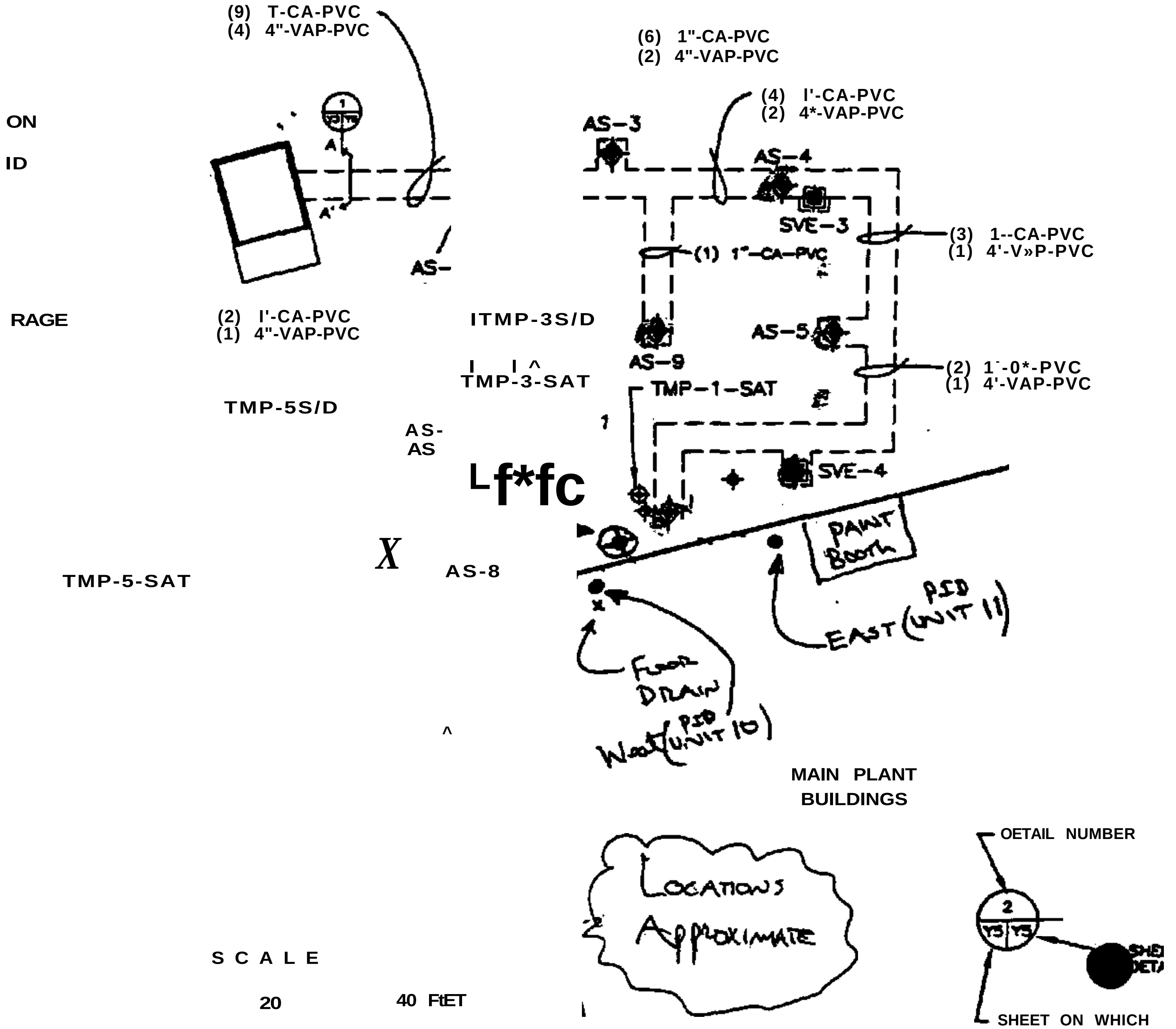
Attachment 4

SUMMA Canister Locations Drawing

^LMM!\ CjMlSrfEPs /o KJ

Locfcrr i o NIS



DRAWING NUMBER: 96254830

30* PREPARED 8V. CUUMINCS MTTSt CONSULTANTS. INC

Attachment 5
Fagan Field Notes

VIACOM OU-3
Initial Testing Program Plan
SVE / Air Sparge System

Daily Log
Ambient Air Monitoring for SVE System

9/27/2000 - On location 10:30 electrical boxes set but power not run to boxes. Spoke with L Martin, IT discussed monitoring and calibrating air monitoring equipment at site. Met with Rich Kilmer, IT discussed shipping Suma canisters and decided to meet at 2 PM to set up monitoring units and collect ambient air samples.

9/27/2000 - On location 14:05 read operating instructions and spoke with Abby in customer services about operating the air monitoring units. Measured total depths of one injection and one extraction well. 15:15 calibrated unit to fresh air then to isobutylene calibration gas. Unit 00010 setup in box located on north wall of building toward the west end of the wall. Unit 00011 setup on north wall near east end of wall. Monitoring air intakes of each unit approximately 5.5 feet above floor. Setup Suma Canisters and started collecting ambient air samples at approximately 15:20. One canister each collected ambient air from a location inside the building approximately 3 feet south of the air monitors and one outside the building approximately twenty feet north of the building near the center of the air sparge wells. Left location 16:05. Rich Kilmer to wait till canisters completed sampling and then to fed-ex samples to Lancaster Lab Via Fed-ex overnight for TO-14 analyses. Calibration Gas - RAE Gas Composition Part # 600-0002-000, isobutylene, 100 ppm container TC 39M NRC 34/43, M1003.

9/28/2000 - On location 10:30 calibrated unit 00010 and tried to download data from monitoring unit. None of the data had been stored in the units. I was told both units were to be preprogrammed for this project. Went into program setup and changed program to automatically store data in 900 second intervals (15 minutes). Calibrated unit 00011 and reprogrammed to automatic data storage and 900 second intervals.

9/28/2000 - On location 15:45 downloaded collected data to verify the units were collecting data as programmed and calibrated units. Stan Criss to be out of town over weekend, trained Tom Johnson, Fagan Engineers (FE), in calibration protocols.

9/29/2000 - On location 7:45 calibrated units.

9/29/2000 - On location 17:50 calibrated units. Oversaw TJ calibrate units. Tom Johnson to calibrate units twice daily over weekend. Stan Criss to calibrate units 10/2/2000.

9/30/2000 - TJ on location at 7:25 calibrated units.

9/30/2000 - TJ on location at 16:00 calibrated units.

10/1/2000 - TJ on location at 7:05 calibrated units.

10/1/2000 - TJ on location at 16:20 calibrated units jlO/2/2000 - Stan Criss on location 8:20 downloaded data and calibrated units. Converted file to Excel and Emailed daily log, data files (Excel) and MiniRAE to Larry Martin, IT. Took approx three calibration runs each gas to calibrate meters to 0.0 ppm (fresh-air) and 100 ppm isobutylene

10/2/2000 - On location 17:20 used a new cylinder of isobutylene calibration gas. Again, taking three to four calibration runs to zero the meters and get them set on 100 ppm for the span gas (isobutylene).
Field Environmental Instruments Inc. Braddock, PA Gas composition isobutylene 100 ppm, LOT # 10-1651, fill date 9/18/00,PSI on cylinder approx. 250 PSI.

10/3/2000 - On location 8:00 calibrated monitoring units. Took several times to zero the units to fresh air and 100 ppm for isobutylene.

Located monitors: West monitor located on inside of north wall of main plant buildings (see drwg. Sheet reference # Y2, Appendix A of Initial Testing Program Plan, August 8, 2000) 17 feet east of northwest corner of building. A two inch floor drain exists in floor approximately five feet south of the West monitor location, no other floor drains appear in the building. East monitor is located on inside of north wall approximately 42 feet east of the northwest comer of building.

NOTE: Three feet east of the East monitor is a booth that intersects the north wall. The booth appears to have been a paint booth. The booth is fully contained in the building area and has a door, vents and holes in tis roof to the main area. I went inside the booth looking for other floor drains and noted the smell of organic fumes.

would suggest we use the PID to measure the VOCs in the booth.

10/3/2000 - 16:20 on location, met CDM personnel and answered questions regarding ambient air monitoring. Calibrated units at about 17:00.

10/4/2000 - On location 7:15 , spent time at Disposal Area F, changed out locks on PID boxes and calibrated Units approximately 9:00. Both units zeroed on the first calibration run. Humidity may have caused the previous calibration problems.

10/4/2000 - On location 16:20, calibrated monitoring units at approx. 17:00.

10/5/2000 - On location 11:00, calibrated units at 13:15

10/6/2000 - On location 11:45, calibrated units at 12:00, Unit 11 (East most monitoring point required several fresh air calibration runs before unit zeroed.

Units calibrated daily by Tom Keefer of Fagan Engineers, 10/7 through 10/13/00

10/7 - 15:00
10/8 - 11:45
10/9 - 13:00
10/10 - 12:00

10/11 - 12:45
10/12 - 9:30 Data downloaded and e-mailed to Larry Martin, IT and Leo Braush, Viacom
10/13 - 17:00
10/18 - 10:40 Data downloaded and units calibrated by Stan Criss

Attachment 6

SUMMA Canister Analytical Results

X o -1 i 1 V) 7. fl) £ < o

1 =1 CD CL CD

(D "J O (D -J c CD

z o CD 0)

a -t c > © Q (A =: o I 5 1 Q W < O 01 o c 3 a.

(S (0 ii 3. =1 Q. Q) 5' Q. ^ T> Q. 3.

11?

ill If II

I CD X 0) O ZT o 3 o- c ST Q. CD' CD	-1 o' zr o o cr CD N CD Zt CD	o CD Zt CD	1 x 1	m zf cr CD ZJ N CD ZI CD	o o ST CD	H o c CD CD	H o' zr o o CD zr CD ZI CD	CD CD ZJ N CD CD	M CD c ST o Zt CD	X CD X 01 ZJ CD	CD zr *<_ CD c •^ m zr CD	CD a. CD c > n o zr o	J? CD £T ZI CD	CD 3 5T Z) CD	O zr o -i o Q. =9 C o —1 o 3 CD zr (U n CD	o •a CD CD	> z > r m SAMPLE DESIGNATION (AND LOCATION)	> m
cz	C	c	c	C	c	CO	c	c	c	c	c	c	CO	c	C	c	OUTSIDE BUILDING 0016	CO ro o o
c	c		ro	c	-J. c	en	•U	c	s	c	c	C	s	M	CD	c	INSIDE BUILDING UNIT #11 0035 (EAST)	
c	c	c	c	c	c	-C*	.&	c		c	c	c	o	ro	^i	c	INSIDE BUILDING UNIT #10 0143 (DRAIN-WEST)	
c	c	c	c	c	c	c	c	c	c	c	c	CO	fO	c	C=	c	OUTSIDE BUILDING 0115	CO ro CO o o
c	c	c	c	c	c	c>	CD	c	00	c	cr	c	-c*		c	c	INSIDE BUILDING UNIT #11 0195 (EAST)	
c	c			c	c	00	CO	c	^J		c	CO	*•	ro	c	c	INSIDE BUILDING UNIT #10 0121 (DRAIN-WEST)	
c	c	JO o	£	CO	CJ1	-fc>		c	c	c	ro		ro C	c	c	c	FIELD BLANK	
CO	N>	c	CO	C	c	CO	c		c	c	C	c	CO	ro	c	ro	OUTSIDE BUILDING 0094	o ro o o
c	c	c	-U	c	c	CO	to	fO	o		c	c	CO	CO	•Cv	CO	INSIDE BUILDING UNIT #11 0153 (EAST)	
c	CZ	c	CO	c	c	CO	ro		CO	c	c	c	_fc	CO	en	ro	INSIDE BUILDING UNIT #10 0116 (DRAIN-WEST)	

SUMMA CANISTER PRELIMINARY ANALYTICAL DATA

DATE	9/2 3/00				10/12/00		
SAMPLE DESIGNATION (AND LOCATION) ANALYTE	OUTSIDE BUILDING 0115	INSIDE BUILDING UNIT #11 0195 (EAST)	INSIDE BUILDING UNIT#10 0121 (DRAIN-WEST)	Z CD Q _J LU U_	OUTSIDE BUILDING 0094	INSIDE BUILDING UNIT #11 0153 (EAST)	INSIDE BUILDING UNIT #10 0116 (DRAIN-WEST)
Propene	1U	1U	1U	1U	2	3	2
Ch lo rod ifl uorometha ne	1U	1U	1U	1U	1U	4	5
Pentane	1U	1	2	1U	2	9	9
Acetone	2	4	4	2U	3	13	11
tert-Butyl Alcohol	3	1U	6	17	1U	1U	1U
Methyl t-Butyl Ether	1U	1U	1U	12	1U	1U	1U
Hexane	1U	1U	1U	1U	1U	1	1U
2-Butanone	1U	8	7	1U	1U	10	9
Benzene	1U	1U	1U	1U	1	2	1
Trichloroethene	1U	6	3	1U	1U	3	2
Toluene	1U	9	8	4	3	9	9
Octane	1U	1U	1U	5	1U	1U	1U
Ethylbenzene	1U	1U	1U	13	1U	1U	1U
m/p Xylene	1U	1U	1	29	3	4	3
o-Xylene	1U	1U	1U	20	1U	1U	1U
1,2,4-Trichlorobenzene	1U	1U	1U	1U	2	1U	1U
Hexachlorobutadiene	1U	1U	1U	1U	3	1U	1U

Notes: 1. All concentrations are reported in parts per billion (ppb) by volume.
2. U - Compound was undetected at the specified limit of quantitation.
3. The list of volatiles has been modified to include only those that were detected in the samples.

Attachment 7

Unit#10-PID Data

	DATA COLLECTION POINT	DATE	TIME	AVERAGE CONCENTRATION	MAXIMUM CONCENTRATION
The first Summa canister sample corresponding to Unit #10 was collected on 9-28-00 from 0725 through 0925. The canister was collected prior to the initiation of real-time air monitroing.					
1	1	09/28/00	11:11	0.2	0.4
	2	09/28/00	11:26	0.2	0.4
	3	09/28/00	11:41	0.2	0.4
	4	09/28/00	11:56	0.2	0.4
	5	09/28/00	12:11	0.2	0.5
	6	09/28/00	12:26	0.2	0.5
	7	09/28/00	12:41	0.2	0.4
	8	09/28/00	12:56	0.2	0.4
	9	09/28/00	13:11	0.2	0.4
	10	09/28/00	13:26	0.2	0.4
	11	09/28/00	13:41	0.2	0.4
	12	09/28/00	13:56	0.2	0.4
	13	09/28/00	14:11	0.2	0.5
	14	09/28/00	14:26	0.2	0.4
	15	09/28/00	14:41	0.2	0.4
	16	09/28/00	14:56	0.2	0.3
	17	09/28/00	15:11	0.2	0.3
	18	09/28/00	15:26	0.1	0.3
	19	09/28/00	15:41	0.1	0.6
2	1	09/28/00	16:36	0.0	0.2
	2	09/28/00	16:51	0.0	0.2
	3	09/28/00	17:06	0.0	0.4
	4	09/28/00	17:21	0.0	0.2
	5	09/28/00	17:36	0.0	0.3
	6	09/28/00	17:51	0.0	0.3
	7	09/28/00	18:06	0.0	0.2
	8	09/28/00	18:21	0.0	0.2
	9	09/28/00	18:36	0.0	0.3
	10	09/28/00	18:51	0.0	0.5
	11	09/28/00	19:06	0.0	0.2
	12	09/28/00	19:21	0.0	0.3
	13	09/28/00	19:36	0.1	0.3
	14	09/28/00	19:51	0.1	0.3
	15	09/28/00	20:06	0.1	0.5
	16	09/28/00	20:21	0.1	0.6
	17	09/28/00	20:36	0.1	0.3
	18	09/28/00	20:51	0.1	0.3
	19	09/28/00	21:06	0.1	0.3
	20	09/28/00	21:21	0.1	0.3
	21	09/28/00	21:36	0.1	0.4
	22	09/28/00	21:51	0.1	0.5
	23	09/28/00	22:06	0.0	0.2
	24	09/28/00	22:21	0.0	0.3

	DATA COLLECTION POINT	DATE	TIME	AVERAGE CONCENTRATION	MAXIMUM CONCENTRATION
	25	09/28/00	22:36	0.0	0.2
	26	09/28/00	22:51	0.0	0.2
	27	09/28/00	23:06	0.0	0.2
	28	09/28/00	23:21	0.0	0.2
	29	09/28/00	23:36	0.0	0.2
	30	09/28/00	23:51	0.0	0.3
	31	09/29/00	0:06	0.0	0.4
	32	09/29/00	0:21	0.0	0.2
	33	09/29/00	0:36	0.0	0.3
	34	09/29/00	0:51	0.0	0.3
	35	09/29/00	1:06	0.0	0.3
	36	09/29/00	1:21	0.1	0.3
	37	09/29/00	1:36	0.1	0.3
	38	09/29/00	1:51	0.0	0.3
	39	09/29/00	2:06	0.1	0.3
	40	09/29/00	2:21	0.1	0.3
	41	09/29/00	2:36	0.0	0.3
	42	09/29/00	2:51	0.1	0.2
	43	09/29/00	3:06	0.1	0.2
	44	09/29/00	3:21	0.1	0.2
	45	09/29/00	3:36	0.1	0.2
	46	09/29/00	3:51	0.1	0.2
	47	09/29/00	4:06	0.1	0.2
	48	09/29/00	4:21	0.1	0.2
	49	09/29/00	4:36	0.1	0.3
	50	09/29/00	4:51	0.1	0.2
	51	09/29/00	5:06	0.1	0.2
	52	09/29/00	5:21	0.1	0.2
	53	09/29/00	5:36	0.1	0.3
	54	09/29/00	5:51	0.0	0.5
	55	09/29/00	6:06	0.0	0.2
	56	09/29/00	6:21	0.0	0.2
	57	09/29/00	6:36	0.0	0.2
	58	09/29/00	6:51	0.0	0.2
	59	09/29/00	7:06	0.0	0.4
	60	09/29/00	7:21	0.0	0.3
	61	09/29/00	7:36	0.0	0.3
	62	09/29/00	7:51	0.0	0.2
	63	09/29/00	8:06	0.0	0.2
	64	09/29/00	8:21	0.0	0.2
	65	09/29/00	8:36	0.0	0.1
3	1	09/29/00	9:11	0.0	0.2
	2	09/29/00	9:26	0.0	0.2
	3	09/29/00	9:41	0.0	0.2
	4	09/29/00	9:56	0.0	0.1
	5	09/29/00	10:11	0.0	0.1
	6	09/29/00	10:26	0.0	0.1

	DATA COLLECTION POINT	DATE	TIME	AVERAGE CONCENTRATION	MAXIMUM CONCENTRATION
	7	09/29/00	10:41	0.0	0.1
	8	09/29/00	10:56	0.0	0.2
	9	09/29/00	11:11	0.0	0.2
	10	09/29/00	11:26	0.0	0.3
	11	09/29/00	11:41	0.0	0.2
	12	09/29/00	11:56	0.0	0.2
	13	09/29/00	12:11	0.0	0.2
	14	09/29/00	12:26	0.0	0.2
	15	09/29/00	12:41	0.0	0.1
	16	09/29/00	12:56	0.0	0.1
	17	09/29/00	13:11	0.0	0.1
	18	09/29/00	13:26	0.0	0.2
	19	09/29/00	13:41	0.0	0.1
	20	09/29/00	13:56	0.0	0.1
	21	09/29/00	14:11	0.0	0.3
	22	09/29/00	14:26	0.0	0.2
	23	09/29/00	14:41	0.0	0.2
	24	09/29/00	14:56	0.0	0.3
	25	09/29/00	15:11	0.0	0.1
	26	09/29/00	15:26	0.0	0.1
	27	09/29/00	15:41	0.0	0.1
	28	09/29/00	15:56	0.0	0.3
	29	09/29/00	16:11	0.0	0.1
	30	09/29/00	16:26	0.0	0.1
	31	09/29/00	16:41	0.0	0.1
	32	09/29/00	16:56	0.0	0.1
	33	09/29/00	17:11	0.0	0.1
4	1	09/29/00	18:02	0.0	0.1
	2	09/29/00	18:17	0.0	0.1
	3	09/29/00	18:32	0.0	0.1
	4	09/29/00	18:47	0.0	0.1
	5	09/29/00	19:02	0.0	0.0
	6	09/29/00	19:17	0.0	0.0
	7	09/29/00	19:32	0.0	0.0
	8	09/29/00	19:47	0.0	0.0
	9	09/29/00	20:02	0.0	0.0
	10	09/29/00	20:17	0.0	0.0
	11	09/29/00	20:32	0.0	0.0
	12	09/29/00	20:47	0.0	0.0
	13	09/29/00	21:02	0.0	0.0
	14	09/29/00	21:17	0.0	0.0
	15	09/29/00	21:32	0.0	0.0
	16	09/29/00	21:47	0.0	0.2
	17	09/29/00	22:02	0.0	0.1
	18	09/29/00	22:17	0.0	0.0
	19	09/29/00	22:32	0.0	0.0
	20	09/29/00	22:47	0.0	0.0

	DATA COLLECTION POINT	DATE	TIME	AVERAGE CONCENTRATION	MAXIMUM CONCENTRATION
	21	09/29/00	23:02	0.0	0.0
	22	09/29/00	23:17	0.0	0.0
	23	09/29/00	23:32	0.0	0.2
	24	09/29/00	23:47	0.0	0.2
	25	09/30/00	0:02	0.0	0.0
	26	09/30/00	0:17	0.0	0.0
	27	09/30/00	0:32	0.0	0.0
	28	09/30/00	0:47	0.0	0.0
	29	09/30/00	1:02	0.0	0.0
	30	09/30/00	1:17	0.0	0.0
	31	09/30/00	1:32	0.0	0.0
	32	09/30/00	1:47	0.0	0.1
	33	09/30/00	2:02	0.0	0.2
	34	09/30/00	2:17	0.0	0.2
	35	09/30/00	2:32	0.0	0.3
	36	09/30/00	2:47	0.0	0.0
	37	09/30/00	3:02	0.0	0.0
	38	09/30/00	3:17	0.0	0.0
	39	09/30/00	3:32	0.0	0.0
	40	09/30/00	3:47	0.0	0.0
	41	09/30/00	4:02	0.0	0.0
	42	09/30/00	4:17	0.0	0.0
	43	09/30/00	4:32	0.0	0.0
	44	09/30/00	4:47	0.0	0.0
	45	09/30/00	5:02	0.0	0.0
	46	09/30/00	5:17	0.0	0.0
	47	09/30/00	5:32	0.0	0.0
	48	09/30/00	5:47	0.0	0.0
	49	09/30/00	6:02	0.0	0.0
	50	09/30/00	6:17	0.0 ,	0.0
	51	09/30/00	6:32	0.0	0.0
	52	09/30/00	6:47	0.0	0.0
	53	09/30/00	7:02	0.0	0.0
5	1	09/30/00	8:08	0.1	0.3
	2	09/30/00	8:23	0.1	0.3
	3	09/30/00	8:38	0.1	0.3
	4	09/30/00	8:53	0.1	0.4
	5	09/30/00	9:08	0.0	0.3
	6	09/30/00	9:23	0.0	0.3
	7	09/30/00	9:38	0.1	0.3
	8	09/30/00	9:53	0.1	0.4
	9	09/30/00	10:08	0.1	0.3
	10	09/30/00	10:23	0.1	0.3
	11	09/30/00	10:38	0.1	0.3
	12	09/30/00	10:53	0.0	0.3
	13	09/30/00	11:08	0.0	0.6
	14	09/30/00	11:23	0.0	0.3

	DATA COLLECTION POINT	DATE	TIME	AVERAGE CONCENTRATION	MAXIMUM CONCENTRATION
	15	09/30/00	11:38	0.0	0.2
	16	09/30/00	11:53	0.0	0.2
	17	09/30/00	12:08	0.0	0.3
	18	09/30/00	12:23	0.1	0.5
	19	09/30/00	12:38	0.1	0.4
	20	09/30/00	12:53	0.1	0.3
	21	09/30/00	13:08	0.1	0.3
	22	09/30/00	13:23	0.1	0.3
	23	09/30/00	13:38	0.1	0.3
	24	09/30/00	13:53	0.1	0.3
	25	09/30/00	14:08	0.1	0.3
	26	09/30/00	14:23	0.1	0.3
	27	09/30/00	14:38	0.1	0.5
	28	09/30/00	14:53	0.1	0.4
	29	09/30/00	15:08	0.2	0.4
	30	09/30/00	15:23	0.2	0.4
	31	09/30/00	15:38	0.2	0.4
	32	09/30/00	15:53	0.2	2.0
6	1	09/30/00	16:29	0.1	0.3
	2	09/30/00	16:44	0.1	0.4
	3	09/30/00	16:59	0.1	0.4
	4	09/30/00	17:14	0.1	0.3
	5	09/30/00	17:29	0.1	0.4
	6	09/30/00	17:44	- 0.1	0.4
	7	09/30/00	17:59	0.1	0.4
	8	09/30/00	18:14	0.1	0.3
	9	09/30/00	18:29	0.1	0.4
	10	09/30/00	18:44	0.1	0.4
	11	09/30/00	18:59	0.1	0.3
	12	09/30/00	19:14	0.1	0.4
	13	09/30/00	19:29	0.1	0.4
	14	09/30/00	19:44	0.1	0.4
	15	09/30/00	19:59	0.1	0.3
	16	09/30/00	20:14	0.1	0.3
	17	09/30/00	20:29	0.1	0.3
	18	09/30/00	20:44	0.1	0.3
	19	09/30/00	20:59	0.1	0.3
	20	**09/30/00**	**21:14**	**0.1**	**0.3**
	21	09/30/00	21:29	**0.1**	0.3
	22	09/30/00	21:44	**0.1**	0.4
	23	09/30/00	21:59	**0.0**	0.3
	24	09/30/00	22:14	**0.0**	0.3
	25	09/30/00	22:29	0.0	0.2
	26	09/30/00	22:44	0.0	0.2
	27	09/30/00	22:59	0.0	0.3
	28	09/30/00	23:14	0.0	0.2
	29	09/30/00	23:29	0.0	0.3

	DATA COLLECTION POINT	DATE	TIME	AVERAGE CONCENTRATION	MAXIMUM CONCENTRATION
	30	09/30/00	23:44	0.0	0.3
	31	09/30/00	23:59	0.1	0.3
	32	10/01/00	0:14	0.2	0.4
	33	10/01/00	0:29	0.2	0.4
	34	10/01/00	0:44	0.2	0.4
	35	10/01/00	0:59	0.1	0.4
	36	10/01/00	1:14	0.1	0.3
	37	10/01/00	1:29	0.1	0.3
	38	10/01/00	1:44	0.1	0.3
	39	10/01/00	1:59	0.1	0.3
	40	10/01/00	2:14	0.1	0.2
	41	10/01/00	2:29	0.0	0.3
	42	10/01/00	2:44	0.0	0.2
	43	10/01/00	2:59	0.0	0.2
	44	10/01/00	3:14	0.0	0.3
	45	10/01/00	3:29	0.1	0.4
	46	10/01/00	3:44	0.2	0.7
	47	10/01/00	3:59	0.3	0.7
	48	10/01/00	4:14	0.2	0.4
	49	10/01/00	4:29	0.2	0.4
	50	10/01/00	4:44	0.1	0.3
	51	10/01/00	4:59	0.1	0.2
	52	10/01/00	5:14	0.0	0.2
	53	10/01/00	5:29	0.0	0.3
	54	10/01/00	5:44	0.0	0.2
	55	10/01/00	5:59	0.0	0.2
	56	10/01/00	6:14	0.0	0.2
	57	10/01/00	6:29	0.0	0.2
	58	10/01/00	6:44	0.0	0.2
	59	10/01/00	6:59	0.0	0.2
7	1	10/01/00	7:41	0.0	0.2
	2	10/01/00	7:56	0.0	0.2
	3	10/01/00	8:11	0.0	0.3
	4	10/01/00	8:26	0.0	0.2
	5	10/01/00	8:41	0.0	0.2
	6	10/01/00	8:56	0.0	0.2
	7	10/01/00	9:11	0.0	0.2
	8	10/01/00	9:26	0.0	0.2
	9	10/01/00	9:41	0.0	0.2
	10	10/01/00	9:56	0.0	0.2
	11	10/01/00	10:11	0.0	0.2
	12	10/01/00	10:26	0.0	0.2
	13	10/01/00	10:41	0.0	0.5
	14	10/01/00	10:56	0.0	0.2
	15	10/01/00	11:11	0.0	0.2
	16	10/01/00	11:26	0.0	0.2
	17	10/01/00	11:41	0.0	0.4

	DATA COLLECTION POINT	DATE	**TIME**	**AVERAGE CONCENTRATION**	**MAXIMUM CONCENTRATION**
	18	10/01/00	11:56	0.0	**0.4**
	19	10/01/00	12:11	0.0	**0.2**
	20	10/01/00	12:26	0.0	**0.3**
	21	10/01/00	12:41	0.1	**0.3**
	22	10/01/00	12:56	0.1	**0.3**
	23	10/01/00	13:11	0.1	**0.3**
	24	10/01/00	13:26	0.1	**0.3**
	25	10/01/00	13:41	0.1	**0.3**
	26	10/01/00	13:56	0.1	**0.4**
	27	10/01/00	14:11	0.1	**0.3**
	28	10/01/00	14:26	**0.2**	**0.4**
	29	10/01/00	14:41	**0.2**	**0.4**
	30	10/01/00	14:56	0.2	**0.5**
	31	10/01/00	15:11	0.2	**0.4**
	32	10/01/00	15:26	**0.2**	**0.5**
	33	10/01/00	15:41	**0.2**	**0.5**
	34	10/01/00	15:56	**0.2**	**0.4**
	35	10/01/00	16:11	0.2	**0.5**
8	1	10/01/00	16:47	**0.4**	**0.7**
	2	10/01/00	17:02	**0.4**	**0.7**
	3	10/01/00	17:17	**0.4**	**0.6**
	4	10/01/00	17:32	0.4	**0.6**
	5	10/01/00	17:47	0.4	**0.7**
	6	10/01/00	18:02	0.4	**0.6**
	7	10/01/00	18:17	0.4	**0.6**
	8	10/01/00	18:32	**0.3**	**0.7**
	9	10/01/00	18:47	**0.3**	**0.6**
	10	10/01/00	19:02	**0.3**	**0.6**
	11	10/01/00	19:17	**0.3**	**0.6**
	12	10/01/00	19:32	**0.3**	**0.6**
	13	10/01/00	19:47	**0.3**	**0.6**
	14	10/01/00	20:02	0.3	**0.6**
	15	10/01/00	20:17	**0.3**	**0.6**
	16	10/01/00	20:32	**0.3**	**0.5**
	17	10/01/00	20:47	**0.3**	**0.6**
	18	10/01/00	21:02	0.3	**0.6**
	19	10/01/00	21:17	**0.3**	**0.5**
	20	10/01/00	21:32	0.3	0.5
	21	10/01/00	21:47	0.2	0.5
	22	10/01/00	22:02	0.2	**0.5**
	23	10/01/00	22:17	0.2	**0.6**
	24	10/01/00	22:32	0.2	**0.6**
	25	10/01/00	22:47	0.2	**0.5**
	26	10/01/00	23:02	0.2	**0.5**
	27	10/01/00	23:17	0.2	**0.4**
	28	10/01/00	23:32	**0.2**	**0.5**
	29	10/01/00	23:47	0.2	**0.5**

	DATA COLLECTION POINT	DATE	TIME	AVERAGE CONCENTRATION	MAXIMUM CONCENTRATION
	30	10/02/00	0:02	0.2	0.5
	31	10/02/00	0:17	0.2	0.4
	32	10/02/00	0:32	0.2	0.4
	33	10/02/00	0:47	0.2	0.4
	34	10/02/00	1:02	0.2	0.4
	35	10/02/00	1:17	0.2	0.4
	36	10/02/00	1:32	0.2	0.4
	37	10/02/00	1:47	0.2	0.4
	38	10/02/00	2:02	0.2	0.4
	39	10/02/00	2:17	0.2	0.4
	40	10/02/00	2:32	0.2	0.4
	41	10/02/00	2:47	0.2	0.4
	42	10/02/00	3:02	0.2	0.4
	43	10/02/00	3:17	0.2	0.4
	44	10/02/00	3:32	0.2	0.5
	45	10/02/00	3:47	0.2	0.4
	46	10/02/00	4:02	0.2	0.4
	47	10/02/00	4:17	0.2	0.4
	48	10/02/00	4:32	0.2	0.3
	49	10/02/00	4:47	0.1	0.3
	50	10/02/00	5:02	0.1	0.3
	51	10/02/00	5:17	0.1	0.3
	52	10/02/00	5:32	0.1	0.3
	53	10/02/00	5:47	0.1	0.3
	54	10/02/00	6:02	0.1	0.3
	55	10/02/00	6:17	0.1	0.3
	56	10/02/00	6:32	0.1	0.3
	57	10/02/00	6:47	0.1	0.3
	58	10/02/00	7:02	0.1	0.3
	59	10/02/00	7:17	0.2	0.4
	60	10/02/00	7:32	0.2	0.6
	61	10/02/00	7:47	0.2	0.6
	62	10/02/00	8:02	0.2	0.3
9	1	10/02/00	8:42	0.1	0.4
	2	10/02/00	8:57	0.2	0.4
	3	10/02/00	9:12	0.2	0.4
	4	10/02/00	9:27	0.2	0.4
	5	10/02/00	9:42	0.2	0.5
	6	10/02/00	9:57	0.2	0.5
	7	10/02/00	10:12	0.2	0.5
	8	10/02/00	10:27	0.2	0.5
	9	10/02/00	10:42	0.2	0.6
	10	10/02/00	10:57	0.2	0.5
	11	10/02/00	11:12	0.2	0.6
	12	10/02/00	11:27	0.2	0.6
	13	10/02/00	11:42	0.2	0.5
	14	10/02/00	11:57	0.2	0.5

	DATA COLLECTION POINT	DATE	TIME	AVERAGE CONCENTRATION	MAXIMUM CONCENTRATION
	15	10/02/00	12:12	0.2	0.5
	16	10/02/00	12:27	0.2	0.5
	17	10/02/00	12:42	0.2	0.5
	18	10/02/00	12:57	0.2	0.7
	19	10/02/00	13:12	0.2	0.6
	20	10/02/00	13:27	0.2	0.5
	21	10/02/00	13:42	0.2	0.5
	22	10/02/00	13:57	0.2	0.6
	23	10/02/00	14:12	0.2	0.6
	24	10/02/00	14:27	0.2	0.5
	25	10/02/00	14:42	0.2	0.5
	26	10/02/00	14:57	0.2	0.6
	27	10/02/00	15:12	0.2	0.5
	28	10/02/00	15:27	0.3	0.6
	29	10/02/00	15:42	0.3	0.6
	30	10/02/00	15:57	0.3	0.6
	31	10/02/00	16:12	0.3	0.6
	32	10/02/00	16:27	0.3	0.6
	33	10/02/00	16:42	0.3	0.6
	34	10/02/00	16:57	0.3	0.6
	35	10/02/00	17:12	0.3	0.6
10	1	10/02/00	18:10	0.2	0.4
	2	10/02/00	18:25	0.2	0.5
	3	10/02/00	18:40	0.3	0.5
	4	10/02/00	18:55	0.3	0.6
	5	10/02/00	19:10	0.3	0.6
	6	10/02/00	19:25	0.4	0.6
	7	10/02/00	19:40	0.4	0.7
	8	10/02/00	19:55	0.4	0.7
	9	10/02/00	20:10	0.4	0.7
	10	10/02/00	20:25	0.4	0.7
	11	10/02/00	20:40	0.4	0.7
	12	10/02/00	20:55	0.4	0.7
	13	10/02/00	21:10	0.4	t— 0.7
	14	10/02/00	21:25	0.4	0.6
	15	10/02/00	21:40	0.4	0.6
	16	10/02/00	21:55	0.4	0.6
	17	10/02/00	22:10	0.4	0.7
	18	10/02/00	22:25	0.4	0.7
	19	10/02/00	22:40	0.4	0.7
	20	10/02/00	22:55	0.4	0.7
	21	10/02/00	23:10	0.4-	0.7
	22	10/02/00	23:25	0.4	0.7
	23	10/02/00	23:40	0.5	0.7
	24	10/02/00	23:55	0.5	0.7
	25	10/03/00	0:10	0.4	0.6
	26	10/03/00	0:25	0.4	0.6

	DATA COLLECTION POINT	DATE	TIME	AVERAGE CONCENTRATION	MAXIMUM CONCENTRATION
	27	10/03/00	0:40	0.3	0.6
	28	10/03/00	0:55	0.3	0.6
	29	10/03/00	1:10	0.3	0.5
	30	10/03/00	1:25	0.2	0.5
	31	10/03/00	1:40	0.2	0.5
	32	10/03/00	1:55	0.2	0.4
	33	10/03/00	2:10	0.2	0.5
	34	10/03/00	2:25	0.2	0.5
	35	10/03/00	2:40	0.2	0.5
	36	10/03/00	2:55	0.2	0.6
	37	10/03/00	3:10	0.2	0.5
	38	10/03/00	3:25	0.2	0.6
	39	10/03/00	3:40	0.2	0.6
	40	10/03/00	3:55	0.2	0.5
	41	10/03/00	4:10	0.2	0.6
	42	10/03/00	4:25	0.2	0.5
	43	10/03/00	4:40	0.2	0.4
	44	10/03/00	4:55	0.2	0.5
	45	10/03/00	5:10	0.2	0.5
	46	10/03/00	5:25	0.2	0.6
	47	10/03/00	5:40	0.3	0.5
	48	10/03/00	5:55	0.2	0.5
	49	10/03/00	6:10	0.2	0.5
	50	10/03/00	6:25	0.2	0.5
	51	10/03/00	6:40	0.2	0.5
	52	10/03/00	6:55	0.2	0.5
	53	10/03/00	7:10	0.2	0.4
	54	10/03/00	7:25	0.2	0.4
	55	10/03/00	7:40	0.2	0.4
11	1	10/03/00	8:30	0.1	0.4
	2	10/03/00	8:45	0.2	0.5
	3	10/03/00	9:00	0.1	0.4
	4	10/03/00	9:15	0.1	0.4
	5	10/03/00	9:30	0.1	0.4
	6	10/03/00	9:45	0.0	0.4
	7	10/03/00	10:00	0.0	0.3
	8	10/03/00	10:15	0.0	0.3
	9	10/03/00	10:30	0.0	0.4
	10	10/03/00	10:45	0.0	0.3
	11	10/03/00	11:00	0.0	0.3
	12	10/03/00	11:15	0.0	0.2
	13	10/03/00	11:30	0.0	0.2
	14	10/03/00	11:45	0.0	0.2
	15	10/03/00	12:00	0.0	0.2
	16	10/03/00	12:15	0.0	0.2
	17	10/03/00	12:30	0.0	0.2
	18	10/03/00	12:45	0.0	0.2

	DATA COLLECTION POINT	DATE	TIME	AVERAGE CONCENTRATION	MAXIMUM CONCENTRATION
	19	10/03/00	13:00	0.0	0.2
	20	10/03/00	13:15	0.0	0.3
	21	10/03/00	13:30	0.0	0.2
	22	10/03/00	13:45	0.0	0.3
	23	10/03/00	14:00	0.0	0.2
	24	10/03/00	14:15	0.0	0.2
	25	10/03/00	14:30	0.0	0.3
	26	10/03/00	14:45	0.0	0.2
	27	10/03/00	15:00	0.0	0.2
	28	10/03/00	15:15	0.0	0.2
	29	10/03/00	15:30	0.0	0.2
	30	10/03/00	15:45	0.0	0.2
	31	10/03/00	16:00	0.0	0.1
	32	10/03/00	16:15	0.0	0.2
	33	10/03/00	16:30	0.0	0.2
	34	10/03/00	16:45	0.0	0.2
12	1	10/03/00	17:37	0.2	0.5
	2	10/03/00	17:52	0.2	0.5
	3	10/03/00	18:07	0.2	0.6
	4	10/03/00	18:22	0.2	0.5
	5	10/03/00	18:37	0.2	0.5
	6	10/03/00	18:52	0.2	0.5
	7	10/03/00	19:07	0.3	0.6
	8	10/03/00	19:22	0.3	0.6
	9	10/03/00	19:37	0.3	0.5
	10	10/03/00	19:52	0.3	0.6
	11	10/03/00	20:07	0.3	0.6
	12	10/03/00	20:22	0.2	0.5
	13	10/03/00	20:37	0.2	0.5
	14	10/03/00	20:52	0.2	0.5
	15	10/03/00	21:07	0.2	0.6
	16	10/03/00	21:22	0.2	0.4
	17	10/03/00	21:37	0.2	0.4
	18	10/03/00	21:52	0.1	0.4
	19	10/03/00	22:07	0.1	0.4
	20	10/03/00	22:22	0.1	0.3
	21	10/03/00	22:37	0.1	0.3
	22	10/03/00	22:52	0.1	0.3
	23	10/03/00	23:07	0.1	0.3
	24	10/03/00	23:22	0.1	0.3
	25	10/03/00	23:37	0.1	0.3
	26	10/03/00	23:52	0.0	0.2
	27	10/04/00	0:07	0.0	0.3
	28	10/04/00	0:22	0.0	0.2
	29	10/04/00	0:37	0.0	0.2
	30	10/04/00	0:52	0.0	0.3
	31	10/04/00	1:07	0.1	0.4

	DATA COLLECTION POINT	DATE	TIME	AVERAGE CONCENTRATION	MAXIMUM CONCENTRATION
	32	10/04/00	1:22	0.1	0.2
	33	10/04/00	1:37	0.1	0.2
	34	10/04/00	1:52	0.0	0.2
	35	10/04/00	2:07	0.0	0.2
	36	10/04/00	2:22	0.0	0.2
	37	10/04/00	2:37	0.0	0.2
	38	10/04/00	2:52	0.0	0.2
	39	10/04/00	3:07	0.0	0.2
	40	10/04/00	3:22	0.0	0.2
	41	10/04/00	3:37	0.0	0.2
	42	10/04/00	3:52	0.0	0.2
	43	10/04/00	4:07	0.0	0.2
	44	10/04/00	4:22	0.0	0.2
	45	10/04/00	4:37	0.0	0.4
	46	10/04/00	4:52	0.0	0.4
	47	10/04/00	5:07	0.0	0.4
	48	10/04/00	5:22	0.0	0.3
	49	10/04/00	5:37	0.0	0.2
	50	10/04/00	5:52	0.0	0.2
	51	10/04/00	6:07	0.0	0.2
	52	10/04/00	6:22	0.0	0.2
	53	10/04/00	6:37	0.0	0.2
	54	10/04/00	6:52	0.0	0.2
	55	10/04/00	7:07	0.0	0.2
	56	10/04/00	7:22	0.0	0.3
	57	10/04/00	7:37	0.1	0.4
	58	10/04/00	7:52	0.1	0.4
	59	10/04/00	8:07	0.1	0.5
	60	10/04/00	8:22	0.1	0.4
13	1	10/04/00	9:04	0.0	0.1
	2	10/04/00	9:19	0.0	0.2
	3	10/04/00	9:34	0.0	0.2
	4	10/04/00	9:49	0.0	0.4
	5	10/04/00	10:04	0.1	0.4
	6	10/04/00	10:19	0.1	0.4
	7	10/04/00	10:34	0.1	0.3
	8	10/04/00	10:49	0.1	0.3
	9	10/04/00	11:04	0.1	0.4
	10	10/04/00	11:19	0.1	0.4
	11	10/04/00	11:34	0.1	0.4
	12	10/04/00	11:49	0.1	0.3
	13	10/04/00	12:04	0.1	0.3
	14	10/04/00	12:19	0.1	0.3
	15	10/04/00	12:34	0.0	0.2
	16	10/04/00	12:49	0.0	0.4
	17	10/04/00	13:04	0.0	0.3
	18	10/04/00	13:19	0.0	0.2

	DATA COLLECTION POINT	DATE	TIME	AVERAGE CONCENTRATION	MAXIMUM CONCENTRATION
	19	10/04/00	13:34	0.0	0.3
	20	10/04/00	13:49	0.0	0.3
	21	10/04/00	14:04	0.0	0.3
	22	10/04/00	14:19	0.0	0.3
	23	10/04/00	14:34	0.0	0.3
	24	10/04/00	14:49	0.0	0.3
	25	10/04/00	15:04	0.1	0.4
	26	10/04/00	15:19	0.1	0.4
	27	10/04/00	15:34	0.1	0.3
	28	10/04/00	15:49	0.0	0.3
	29	10/04/00	16:04	0.0	0.3
14	1	10/04/00	16:55	0.2	0.5
	2	10/04/00	17:10	0.2	0.5
	3	10/04/00	17:25	0.2	0.5
	4	10/04/00	17:40	0.2	0.5
	5	10/04/00	17:55	0.2	0.4
	6	10/04/00	18:10	0.2	0.4
	7	10/04/00	18:25	0.1	0.5
	8	10/04/00	18:40	0.1	0.4
	9	10/04/00	18:55	0.1	0.5
	10	10/04/00	19:10	0.1	0.5
	11	10/04/00	19:25	0.1	0.4
	12	10/04/00	19:40	0.1	0.4
	13	10/04/00	19:55	0.0	0.3
	14	10/04/00	20:10	0.0	0.3
	15	10/04/00	20:25	0.0	0.2
	16	10/04/00	20:40	0.0	0.2
	17	10/04/00	20:55	0.0	0.3
	18	10/04/00	21:10	0.0	0.2
	19	10/04/00	21:25	0.0	0.2
	20	10/04/00	21:40	0.0	0.2
	21	10/04/00	21:55	0.0	0.1
	22	10/04/00	22:10	0.0	0.1
	23	10/04/00	22:25	0.0	0.1
	24	10/04/00	22:40	0.0	0.1
	25	10/04/00	22:55	0.0	0.1
	26	10/04/00	23:10	0.0	0.1
	27	10/04/00	23:25	0.0	0.1
	28	10/04/00	23:40	0.0	0.1
	29	10/04/00	23:55	0.0	0.1
	30	10/05/00	0:10	0.0	0.1
	31	10/05/00	0:25	0.0	0.1
	32	10/05/00	0:40	0.0	0.1
	33	10/05/00	0:55	0.0	0.1
	34	10/05/00	1:10	0.0	0.1
	35	10/05/00	1:25	0.0	0.1
	36	10/05/00	1:40	0.0	0.1

	DATA COLLECTION POINT	DATE	TIME	AVERAGE CONCENTRATION	MAXIMUM CONCENTRATION
	37	10/05/00	1:55	0.0	0.1
	38	10/05/00	2:10	0.0	0.2
	39	10/05/00	2:25	0.0	0.2
	40	10/05/00	2:40	0.0	0.1
	41	10/05/00	2:55	0.0	0.1
	42	10/05/00	3:10	0.0	0.1
	43	10/05/00	3:25	0.0	0.1
	44	10/05/00	3:40	0.0	0.1
	45	10/05/00	3:55	0.0	0.1
	46	10/05/00	4:10	0.0	0.1
	47	10/05/00	4:25	0.0	0.2
	48	10/05/00	4:40	0.0	0.2
	49	10/05/00	4:55	0.0	0.1
	50	10/05/00	5:10	0.0	0.1
	51	10/05/00	5:25	0.0	0.2
	52	10/05/00	5:40	0.0	0.3
	53	10/05/00	5:55	0.0	0.2
	54	10/05/00	6:10	0.0	0.1
	55	10/05/00	6:25	0.0	0.1
	56	10/05/00	6:40	0.0	0.1
	57	10/05/00	6:55	0.0	0.1
	58	10/05/00	7:10	0.0	0.1
	59	10/05/00	7:25	0.0	0.1
	60	10/05/00	7:40	0.0	0.1
	61	10/05/00	7:55	0.0	0.2
	62	10/05/00	8:10	0.0	0.0
	63	10/05/00	8:25	0.0	0.0
	64	10/05/00	8:40	0.0	0.1
	65	10/05/00	8:55	0.0	0.1
	66	10/05/00	9:10	0.0	0.1
	67	10/05/00	9:25	0.0	0.1
	68	10/05/00	9:40	0.0	0.1
	69	10/05/00	9:55	0.0	0.1
	70	10/05/00	10:10	0.0	0.1
	71	10/05/00	10:25	0.0	0.3
	72	10/05/00	10:40	0.0	0.3
	73	10/05/00	10:55	0.0	0.1
	74	10/05/00	11:10	0.0	0.1
	75	10/05/00	11:25	0.0	0.1
	76	10/05/00	11:40	0.0	0.1
	77	10/05/00	11:55	0.0	0.1
	78	10/05/00	12:10	0.0	0.1
	79	10/05/00	12:25	0.0	0.1
	80	10/05/00	12:40	0.0	0.1
	81	10/05/00	12:55	0.0	0.1
	82	10/05/00	13:10	0.0	0.1
	83	10/05/00	13:25	0.0	0.1

	DATA COLLECTION POINT	DATE	TIME	AVERAGE CONCENTRATION	MAXIMUM CONCENTRATION
15	1	10/05/00	14:06	0.0	0.2
	2	10/05/00	14:21	0.0	0.2
	3	10/05/00	14:36	0.0	0.2
	4	10/05/00	14:51	0.0	0.2
	5	10/05/00	15:06	0.0	0.3
	6	10/05/00	15:21	0.0	0.2
	7	10/05/00	15:36	0.0	0.2
	8	10/05/00	15:51	0.0	0.3
	9	10/05/00	16:06	0.0	0.2
	10	10/05/00	16:21	0.0	0.2
	11	10/05/00	16:36	0.0	0.3
	12	10/05/00	16:51	0.0	0.3
	13	10/05/00	17:06	0.0	0.3
	14	10/05/00	17:21	0.0	0.2
	15	10/05/00	17:36	0.0	0.2
	16	10/05/00	17:51	0.0	0.2
	17	10/05/00	18:06	0.0	0.3
	18	10/05/00	18:21	0.0	0.3
	19	10/05/00	18:36	0.0	0.3
	20	10/05/00	18:51	0.0	0.2
	21	10/05/00	19:06	0.0	0.3
	22	10/05/00	19:21	0.0	0.2
	23	10/05/00	19:36	0.0	0.2
	24	10/05/00	19:51	0.0	0.3
	25	10/05/00	20:06	0.0	0.3
	26	10/05/00	20:21	0.0	0.2
	27	10/05/00	20:36	0.0	0.3
	28	10/05/00	20:51	0.0	0.2
	29	10/05/00	21:06	0.0	0.3
	30	10/05/00	21:21	0.0	0.2
	31	10/05/00	21:36	0.0	0.2
	32	10/05/00	21:51	0.0	0.3
	33	10/05/00	22:06	0.0	0.2
	34	10/05/00	22:21	0.0	0.2
	35	10/05/00	22:36	0.0	0.2
	36	10/05/00	22:51	0.0	0.1
	37	10/05/00	23:06	0.0	0.1
	38	10/05/00	23:21	0.0	0.2
	39	10/05/00	23:36	0.0	0.1
	40	10/05/00	23:51	0.0	0.1
	41	10/06/00	0:06	0.0	0.1
	42	10/06/00	0:21	0.0	0.1
	43	10/06/00	0:36 -	0.0	0.2
	44	10/06/00	0:51	0.0	0.1
	45	10/06/00	1:06	0.0	0.2
	46	10/06/00	1:21	0.0	0.1
	47	10/06/00	1:36	0.0	0.2

	DATA COLLECTION POINT	DATE	TIME	AVERAGE CONCENTRATION	MAXIMUM CONCENTRATION
	48	10/06/00	1:51	0.0	0.1
	49	10/06/00	2:06	0.0	0.2
	50	10/06/00	2:21	0.0	0.1
	51	10/06/00	2:36	0.0	0.2
	52	10/06/00	2:51	0.0	0.1
	53	10/06/00	3:06	0.0	0.1
	54	10/06/00	3:21	0.0	0.2
	55	10/06/00	3:36	0.0	0.2
	56	10/06/00	3:51	0.0	0.1
	57	10/06/00	4:06	0.0	0.1
	58	10/06/00	4:21	0.0	0.1
	59	10/06/00	4:36	0.0	0.1
	60	10/06/00	4:51	0.0	0.1
	61	10/06/00	5:06	0.0	0.2
	62	10/06/00	5:21	0.0	0.1
	63	10/06/00	5:36	0.0	0.1
	64	10/06/00	5:51	0.0	0.1
	65	10/06/00	6:06	0.0	0.1
	66	10/06/00	6:21	0.0	0.1
	67	10/06/00	6:36	0.0	0.1
	68	10/06/00	6:51	0.0	0.2
	69	10/06/00	7:06	0.0	0.1
	70	10/06/00	7:21	0.0	0.1
	71	10/06/00	7:36	0.0	0.1
	72	10/06/00	7:51	0.0	0.1
	73	10/06/00	8:06	0.0	0.1
	74	10/06/00	8:21	0.0	0.2
	75	10/06/00	8:36	0.0	0.1
	76	10/06/00	8:51	0.0	0.2
	77	10/06/00	9:06	0.0	0.2
	78	10/06/00	9:21	0.0	0.2
	79	10/06/00	9:36	0.0	0.1
	80	10/06/00	9:51	0.0	0.2
	81	10/06/00	10:06	0.0	0.2
	82	10/06/00	10:21	0.0	0.1
	83	10/06/00	10:36	0.0	0.1
	84	10/06/00	10:51	0.0	**0.2**
	85	10/06/00	11:06	0.0	0.2
	86	10/06/00	11:21	0.0	0.2
	87	10/06/00	11:36	0.0	0.2
	88	10/06/00	11:51	0.0	0.1
16	1	10/06/00	12:34	0.0	0.0
	2	10/06/00	12:49	0.0	0.0
	3	10/06/00	13:04	0.0	0.0
	4	10/06/00	13:19	0.0	0.1
	5	10/06/00	13:34	0.0	0.1
	6	10/06/00	13:49	0.0	0.0

	DATA COLLECTION POINT	DATE	TIME	AVERAGE CONCENTRATION	MAXIMUM CONCENTRATION
	7	10/06/00	14:04	0.0	0.0
	8	10/06/00	14:19	0.0	0.0
	9	10/06/00	14:34	0.0	0.1
	10	10/06/00	14:49	0.0	0.1
	11	10/06/00	15:04	0.0	0.0
	12	10/06/00	15:19	0.0	0.0
	13	10/06/00	15:34	0.0	0.1
	14	10/06/00	15:49	0.0	0.0
	15	10/06/00	16:04	0.0	0.1
	16	10/06/00	16:19	0.0	0.1
	17	10/06/00	16:34	0.0	0.2
	18	10/06/00	16:49	0.0	0.2
	19	10/06/00	17:04	0.0	0.2
	20	10/06/00	17:19	0.0	0.4
	21	10/06/00	17:34	0.0	0.2
	22	10/06/00	17:49	0.0	0.2
	23	10/06/00	18:04	0.0	0.2
	24	10/06/00	18:19	0.0	0.1
	25	10/06/00	18:34	0.0	0.2
	26	10/06/00	18:49	0.0	0.1
	27	10/06/00	19:04	0.0	0.1
	28	10/06/00	19:19	0.0	0.2
	29	10/06/00	19:34	0.0	0.2
	30	10/06/00	19:49	0.0	0.1
	31	10/06/00	20:04	0.0	0.2
	32	10/06/00	20:19	0.0	0.1
	33	10/06/00	20:34	0.0	0.1
	34	10/06/00	20:49	0.0	0.1
	35	10/06/00	21:04	0.0	0.1
	36	10/06/00	21:19	0.0	0.0
	37	10/06/00	21:34	0.0	0.0
	38	10/06/00	21:49	0.0	0.0
	39	10/06/00	22:04	0.0	0.1
	40	10/06/00	22:19	0.0	0.0
	41	10/06/00	22:34	0.0	0.0
	42	10/06/00	22:49	0.0	0.0
	43	10/06/00	23:04	0.0	0.0
	44	10/06/00	23:19	0.0	0.0
	45	10/06/00	23:34	0.0	0.0
	46	10/06/00	23:49	0.0	0.0
	47	10/07/00	0:04	0.0	0.1
	48	10/07/00	0:19	0.0	0.0
	49	10/07/00	0:34	0.0	0.0
	50	10/07/00	0:49	0.0	0.0
	51	10/07/00	1:04	0.0	0.0
	52	10/07/00	1:19	0.0	0.0
	53	10/07/00	1:34	0.0	0.0

	DATA COLLECTION POINT	DATE	TIME	AVERAGE CONCENTRATION	MAXIMUM CONCENTRATION
	54	10/07/00	1:49	0.0	0.0
	55	10/07/00	2:04	0.0	0.0
	56	10/07/00	2:19	0.0	0.0
	57	10/07/00	2:34	0.0	0.0
	58	10/07/00	2:49	0.0	0.0
	59	10/07/00	3:04	0.0	0.0
	60	10/07/00	3:19	0.0	0.0
	61	10/07/00	3:34	0.0	0.0
	62	10/07/00	3:49	0.0	0.0
	63	10/07/00	4:04	0.0	0.0
	64	10/07/00	4:19	0.0	0.0
	65	10/07/00	4:34	0.0	0.0
	66	10/07/00	4:49	0.0	0.0
	67	10/07/00	5:04	0.0	0.0
	68	10/07/00	5:19	0.0	0.0
	69	10/07/00	5:34	0.0	0.0
	70	10/07/00	5:49	0.0	0.0
	71	10/07/00	6:04	0.0	0.0
	72	10/07/00	6:19	0.0	0.0
	73	10/07/00	6:34	0.0	0.0
	74	10/07/00	6:49	0.0	0.0
	75	10/07/00	7:04	0.0	0.0
	76	10/07/00	7:19	0.0	0.0
	77	10/07/00	7:34	0.0	0.0
	78	10/07/00	7:49	0.0	0.0
	79	10/07/00	8:04	0.0	0.0
	80	10/07/00	8:19	0.0	0.0
	81	10/07/00	8:34	0.0	0.0
	82	10/07/00	8:49	0.0	0.0
	83	10/07/00	9:04	0.0	0.0
	84	10/07/00	9:19	0.0	0.0
	85	10/07/00	9:34	0.0	0.0
	86	10/07/00	9:49	0.0	0.0
	87	10/07/00	10:04	0.0	0.0
	88	10/07/00	10:19	0.0	0.0
	89	10/07/00	10:34	0.0	0.0
	90	10/07/00	10:49	0.0	0.0
	91	10/07/00	11:04	0.0	0.0
	92	10/07/00	11:19	0.0	0.0
	93	10/07/00	11:34	0.0	0.0
	94	10/07/00	11:49	0.0	0.0
	95	10/07/00	12:04	0.0	0.0
	96	10/07/00	12:19	0.0	0.0
	97	10/07/00	12:34	0.0	0.0
	98	10/07/00	12:49	0.0	0.0
	99	10/07/00	13:04	0.0	0.0
	100	10/07/00	13:19	0.0	0.0

	DATA COLLECTION POINT	**DATE**	**TIME**	**AVERAGE CONCENTRATION**	**MAXIMUM CONCENTRATION**
	101	10/07/00	13:34	0.0	0.0
	102	10/07/00	13:49	0.0	0.0
	103	10/07/00	14:04	0.0	0.0
	104	10/07/00	14:19	0.0	0.0
	105	10/07/00	14:34	0.0	0.0
	106	10/07/00	14:49	0.0	0.0
17	1	10/07/00	15:29	0.0	0.0
	2	10/07/00	15:44	0.0	0.3
	3	10/07/00	15:59	0.0	0.2
	4	10/07/00	16:14	0.0	0.1
	5	10/07/00	16:29	0.0	0.1
	6	10/07/00	16:44	0.0	0.1
	7	10/07/00	16:59	0.0	0.2
	8	10/07/00	17:14	0.0	0.1
	9	10/07/00	17:29	0.0	0.0
	10	10/07/00	17:44	0.0	0.0
	11	10/07/00	17:59	0.0	0.1
	12	10/07/00	18:14	0.0	0.1
	13	10/07/00	18:29	0.0	0.1
	14	10/07/00	18:44	0.0	0.1
	15	10/07/00	18:59	0.0	0.1
	16	10/07/00	19:14	0.0	0.1
	17	10/07/00	19:29	0.0	0.1
	18	10/07/00	19:44	0.0	0.0
	19	10/07/00	19:59	0.0	0.1
	20	10/07/00	20:14	0.0	0.0
	21	10/07/00	20:29	0.0	0.0
	22	10/07/00	20:44	0.0	0.1
	23	10/07/00	20:59	0.0	0.0
	24	10/07/00	21:14	0.0	0.0
	25	10/07/00	21:29	0.0	0.0
	26	10/07/00	21:44	0.0	0.0
	27	10/07/00	21:59	0.0	0.0
	28	10/07/00	22:14	0.0	0.0
	29	10/07/00	22:29	0.0	0.0
	30	10/07/00	22:44	0.0	0.0
	31	10/07/00	22:59	0.0	0.0
	32	10/07/00	23:14	0.0	0.0
	33	10/07/00	23:29	0.0	0.0
	34	10/07/00	23:44	0.0	0.0
	35	10/07/00	23:59	0.0	0.0
	36	10/08/00	0:14	0.0	0.0
	37	10/08/00	0:29	0.0	0.0
	38	10/08/00	0:44	0.0	0.0
	39	10/08/00	0:59	0.0	0.0
	40	10/08/00	1:14	0.0	0.0
	41	10/08/00	41:29	0.0	0.0

	DATA COLLECTION POINT	DATE	TIME	AVERAGE CONCENTRATION	MAXIMUM CONCENTRATION
	42	10/08/00	1:44	0.0	0.0
	43	10/08/00	1:59	0.0	0.0
	44	10/08/00	2:14	0.0	0.0
	45	10/08/00	2:29	0.0	0.0
	46	10/08/00	2:44	0.0	0.0
	47	10/08/00	2:59	0.0	0.0
	48	10/08/00	**3:14**	0.0	0.0
	49	10/08/00	3:29	0.0	0.0
	50	10/08/00	3:44	0.0	0.0
	51	10/08/00	3:59	0.0	0.0
	52	10/08/00	4:14	0.0	0.0
	53	10/08/00	4:29	0.0	0.0
	54	10/08/00	4:44	0.0	0.0
	55	10/08/00	4:59	0.0	0.0
	56	10/08/00	5:14	0.0	0.0
	57	10/08/00	5:29	0.0	0.0
	58	10/08/00	5:44	0.0	0.1
	59	10/08/00	5:59	0.0	0.0
	60	10/08/00	6:14	0.0	0.0
	61	10/08/00	6:29	0.0	0.0
	62	10/08/00	6:44	0.0	0.0
	63	10/08/00	6:59	0.0	0.0
	64	10/08/00	7:14	0.0	0.0
	65	10/08/00	7:29	0.0	0.0
	66	10/08/00	7:44	0.0	0.0
	67	10/08/00	7:59	0.0	0.0
	68	10/08/00	8:14	0.0	0.0
	69	10/08/00	8:29	0.0	0.0
	70	10/08/00	8:44	0.0	0.0
	71	10/08/00	8:59	0.0	0.0
	72	10/08/00	9:14	0.0	0.0
	73	10/08/00	9:29	0.0	0.0
	74	10/08/00	**9:44**	0.0	0.0
	75	10/08/00	9:59	0.0	0.0
	76	10/08/00	10:14	0.0	0.0
	77	10/08/00	10:29	0.0	0.1
	78	10/08/00	10:44	0.0	0.0
	79	10/08/00	10:59	0.0	0.0
	80	10/08/00	11:14	0.0	0.0
	81	10/08/00	11:29	0.0	0.0
18	1	10/08/00	12:12	0.0	0.2
	2	10/08/00	12:27	0.0	0.1
	3	10/08/00	12:42	0.0	0.0
	4	10/08/00	12:57	0.0	0.2
	5	10/08/00	13:12	0.0	0.2
	6	10/08/00	13:27	0.0	0,1
	7	10/08/00	13:42	0.0	0.1

	DATA COLLECTION POINT	DATE	TIME	AVERAGE CONCENTRATION	MAXIMUM CONCENTRATION
	8	10/08/00	13:57	0.0	0.0
	9	10/08/00	14:12	0.0	0.0
	10	10/08/00	14:27	0.0	0.0
	11	10/08/00	14:42	0.0	0.0
	12	10/08/00	14:57	0.0	0.0
	13	10/08/00	15:12	0.0	0.0
	14	10/08/00	15:27	0.0	0.0
	15	10/08/00	15:42	0.0	0.0
	16	10/08/00	15:57	0.0	0.0
	17	10/08/00	16:12	0.0	0.0
	18	10/08/00	16:27	0.0	0.0
	19	10/08/00	16:42	0.0	0.0
	20	10/08/00	16:57	0.0	0.1
	21	10/08/00	17:12	0.0	0.1
	22	10/08/00	17:27	0.0	0.0
	23	10/08/00	17:42	0.0	0.0
	24	10/08/00	17:57	0.0	0.0
	25	10/08/00	18:12	0.0	0.0
	26	10/08/00	18:27	0.0	0.0
	27	10/08/00	18:42	0.0	0.0
	28	10/08/00	18:57	0.0	0.0
	29	10/08/00	19:12	0.0	0.1
	30	10/08/00	19:27	0.0	0.0
	31	10/08/00	19:42	0.0	0.1
	32	10/08/00	19:57	0.0	0.1
	33	10/08/00	20:12	0.0	0.0
	34	10/08/00	20:27	0.0	0.0
	35	10/08/00	20:42	0.0	0.1
	36	10/08/00	20:57	0.0	0.1
	37	10/08/00	21:12	0.0	0.1
	38	10/08/00	21:27	0.0	0.0
	39	10/08/00	21:42	0.0	0.1
	40	10/08/00	21:57	0.0	0.0
	41	10/08/00	22:12	0.0	0.0
	42	10/08/00	22:27	0.0	0.0
	43	10/08/00	22:42	0.0	0.1
	44	10/08/00	22:57	0.0	0.1
	45	10/08/00	23:12	0.0	0.0
	46	10/08/00	23:27	0.0	0.1
	47	10/08/00	23:42	0.0	0.1
	48	10/08/00	23:57	0.0	0.0
	49	10/09/00	0:12	0.0	0.0
	50	10/09/00	0:27	0.0	0.0
	51	10/09/00	0:42	0.0	0.1
	52	10/09/00	0:57	0.0	0.0
	53	10/09/00	1:12	0.0	0.1
	54	10/09/00	1:27	0.0	0.0

	DATA COLLECTION POINT	DATE	TIME	AVERAGE CONCENTRATION	MAXIMUM CONCENTRATION
	55	10/09/00	1:42	0.0	0.1
	56	10/09/00	1:57	0.0	0.1
	57	10/09/00	2:12	0.0	0.1
	58	10/09/00	2:27	0.0	0.0
	59	10/09/00	2:42	0.0	0.1
	60	10/09/00	2:57	0.0	0.2
	61	10/09/00	3:12	0.0	0.1
	62	10/09/00	3:27	0.0	0.2
	63	10/09/00	3:42	0.0	0.2
	64	10/09/00	3:57	0.0	0.1
	65	10/09/00	4:12	0.0	0.1
	66	10/09/00	4:27	0.0	0.2
	67	10/09/00	4:42	0.0	0.1
	68	10/09/00	4:57	0.0	0.1
	69	10/09/00	5:12	0.0	0.1
	70	10/09/00	5:27	0.0	0.1
	71	10/09/00	5:42	0.0	0.1
	72	10/09/00	5:57	0.0	0.2
	73	10/09/00	6:12	0.0	0.2
	74	10/09/00	6:27	0.0	0.3
	75	10/09/00	6:42	0.0	0.2
	76	10/09/00	6:57	0.0	0.2
	77	10/09/00	7:12	0.0	0.3
	78	10/09/00	7:27	0.0	0.3
	79	10/09/00	7:42	0.0	0.3
	80	10/09/00	7:57	0.0	0.4
	81	10/09/00	8:12	0.1	0.5
	82	10/09/00	8:27	0.1	0.4
	83	10/09/00	8:42	0.1	0.3
	84	10/09/00	8:57	0.0	0.3
	85	10/09/00	9:12	0.0	0.3
	86	10/09/00	9:27	0.0	0.3
	87	10/09/00	9:42	0.0	0.3
	88	10/09/00	9:57	0.0	0.3
	89	10/09/00	10:12	0.0	0.3
	90	10/09/00	10:27	0.0	0.2
	91	10/09/00	10:42	0.0	0.2
	92	10/09/00	10:57	0.0	0.2
	93	10/09/00	11:12	0.0	0.1
	94	10/09/00	11:27	0.0	0.2
	95	10/09/00	11:42	0.0	0.2
	96	10/09/00	11:57	0.0	0.2
	97	10/09/00	12:12	0.0	0.3
	98	10/09/00	12:27	0.0	0.3
	99	10/09/00	12:42	0.0	0.2
19	1	10/09/00	13:20	0.0	0.2
	2	10/09/00	13:35	0.0	0.4

	DATA COLLECTION POINT	DATE	TIME	AVERAGE CONCENTRATION	MAXIMUM CONCENTRATION
	3	10/09/00	13:50	0.0	0.2
	4	10/09/00	14:05	0.0	0.2
	5	10/09/00	14:20	0.0	0.2
	6	10/09/00	14:35	0.0	0.2
	7	10/09/00	14:50	0.0	0.2
	8	10/09/00	15:05	0.0	0.2
	9	10/09/00	15:20	0.0	0.2
	10	10/09/00	15:35	0.0	0.2
	11	10/09/00	15:50	0.0	0.2
	12	10/09/00	16:05	0.0	0.2
	13	10/09/00	16:20	0.0	0.2
	14	10/09/00	16:35	0.0	0.2
	15	10/09/00	16:50	0.0	0.1
	16	10/09/00	17:05	0.0	0.2
	17	10/09/00	17:20	0.0	0.2
	18	10/09/00	17:35	0.0	0.1
	19	10/09/00	17:50	0.0	0.2
	20	10/09/00	18:05	0.0	0.2
	21	10/09/00	18:20	0.0	0.2
	22	10/09/00	18:35	0.0	0.1
	23	10/09/00	18:50	0.0	0.1
	24	10/09/00	19:05	0.0	0.1
	25	10/09/00	19:20	0.0	0.1
	26	10/09/00	19:35	0.0	0.1
	27	10/09/00	19:50	0.0	0.1
	28	10/09/00	20:05	0.0	0.2
	29	10/09/00	20:20	0.0	0.1
	30	10/09/00	20:35	0.0	0.1
	31	10/09/00	20:50	0.0	0.1
	32	10/09/00	21:05	0.0	0.1
	33	10/09/00	21:20	0.0	0.1
	34	10/09/00	21:35	0.0	0.1
	35	10/09/00	21:50	0.0	0.1
	36	10/09/00	22:05	0.0	0.2
	37	10/09/00	22:20	0.0	0.1
	38	10/09/00	22:35	0.0	0.1
	39	10/09/00	22:50	0.0	0.0
	40	10/09/00	23:05	0.0	0.1
	41	10/09/00	23:20	0.0	0.1
	42	10/09/00	23:35	0.0	0.1
	43	10/09/00	23:50	0.0	0.3
	44	10/10/00	0:05	0.0	0.2
	45	10/10/00	0:20	0.0	0.2
	46	10/10/00	0:35	0.0	0.2
	47	10/10/00	^0:50	0.0	0.2
	48	10/10/00	1:05	0.0	0.1
	49	10/10/00	1:20	0.0	0.2

	DATA COLLECTION POINT	DATE	TIME	AVERAGE CONCENTRATION	MAXIMUM CONCENTRATION
	50	10/10/00	1:35	0.0	0.1
	51	10/10/00	1:50	0.0	0.1
	52	10/10/00	2:05	0.0	0.1
	53	10/10/00	2:20	0.0	0.2
	54	10/10/00	2:35	0.0	0.1
	55	10/10/00	2:50	0.0	0.2
	56	10/10/00	3:05	0.0	0.1
	57	10/10/00	3:20	0.0	0.1
	58	10/10/00	3:35	0.0	0.1
	59	10/10/00	3:50	0.0	0.1
	60	10/10/00	4:05	0.0	0.1
	61	10/10/00	4:20	0.0	0.1
	62	10/10/00	4:35	0.0	0.1
	63	10/10/00	4:50	0.0	0.1
	64	10/10/00	5:05	0.0	0.1
	65	10/10/00	5:20	0.0	0.1
	66	10/10/00	5:35	0.0	0.1
	67	10/10/00	5:50	0.0	0.1
	68	10/10/00	6:05	0.0	0.1
	69	10/10/00	6:20	0.0	0.1
	70	10/10/00	6:35	0.0	0.1
	71	10/10/00	6:50	0.0	0.1
	72	10/10/00	7:05	0.0	0.1
	73	10/10/00	7:20	0.0	0.1
	74	10/10/00	7:35	0.0	0.1
	75	10/10/00	7:50	0.0	0.1
	76	10/10/00	8:05	0.0	0.2
	77	10/10/00	8:20	0.0	0.1
	78	10/10/00	8:35	0.0	0.1
	79	10/10/00	8:50	0.0	0.1
	80	10/10/00	9:05	0.0	0.2
	81	10/10/00	9:20	0.0	0.1
	82	10/10/00	9:35	0.0	0.1
	83	10/10/00	9:50	0.0	0.1
	84	10/10/00	10:05	0.0	0.2
	85	10/10/00	10:20	0.0	0.1
	86	10/10/00	10:35	0.0	0.2
	87	10/10/00	10:50	0.0	0.1
	88	10/10/00	11:05	0.0	0.1
	89	10/10/00	11:20	0.0	0.1
	90	10/10/00	11:35	0.0	0.1
	91	10/10/00	11:50	0.0	0.1
20	1	10/10/00	12:28	0.0	0.0
	2	10/10/00	12:43	0.0	0.0
	3	10/10/00	12:58	0.0	0.0
	4	10/10/00	13:13	0.0	0.0
	5	10/10/00	13:28	0.0	0.0

	DATA COLLECTION POINT	DATE	TIME	AVERAGE CONCENTRATION	MAXIMUM CONCENTRATION
	6	10/10/00	13:43	0.0	0.0
	7	10/10/00	13:58	0.0	0.0
	8	10/10/00	14:13	0.0	0.0
	9	10/10/00	14:28	0.0	0.0
	10	10/10/00	14:43	0.0	0.0
	11	10/10/00	14:58	0.0	0.0
	12	10/10/00	15:13	0.0	0.0
	13	10/10/00	15:28	0.0	0.0
	14	10/10/00	15:43	0.0	0.0
	15	10/10/00	15:58	0.0	0.0
	16	10/10/00	16:13	0.0	0.0
	17	10/10/00	16:28	0.0	0.0
	18	10/10/00	16:43	0.0	0.0
	19	10/10/00	16:58	0.0	0.0
	20	10/10/00	17:13	0.0	0.0
	21	10/10/00	17:28	0.0	0.0
	22	10/10/00	17:43	0.0	0.0
	23	10/10/00	17:58	0.0	0.0
	24	10/10/00	18:13	0.0	0.0
	25	10/10/00	18:28	0.0	0.0
	26	10/10/00	18:43	0.0	0.0
	27	10/10/00	18:58	0.0	0.0
	28	10/10/00	19:13	0.0	0.0
	29	10/10/00	19:28	0.0	0.0
	30	10/10/00	19:43	0.0	0.0
	31	10/10/00	19:58	0.0	0.0
	32	10/10/00	20:13	0.0	0.0
	33	10/10/00	20:28	0.0	0.0
	34	10/10/00	20:43	0.0	0.0
	35	10/10/00	20:58	0.0	0.0
	36	10/10/00	21:13	0.0	0.0
	37	10/10/00	21:28	0.0	0.0
	38	10/10/00	21:43	0.0	0.0
	39	10/10/00	21:58	0.0	0.0
	40	10/10/00	22:13	0.0	0.0
	41	10/10/00	22:28	0.0	0.0
	42	10/10/00	22:43	0.0	0.0
	43	10/10/00	22:58	0.0	0.0
	44	10/10/00	23:13	0.0	0.0
	45	10/10/00	23:28	0.0	0.0
	46	10/10/00	23:43	0.0	0.0
	47	10/10/00	23:58	0.0	0.0
	48	10/11/00	0:13	0.0	0.0
	49	10/11/00	0:28	0.0	0.0
	50	10/11/00	0:43	0.0	0.0
	51	10/11/00	0:58	0.0	0.0
	52	10/11/00	* 1:13	0.0	0.0

	DATA COLLECTION POINT	DATE	TIME	AVERAGE CONCENTRATION	MAXIMUM CONCENTRATION
	53	10/11/00	1:28	0.0	0.0
	54	10/11/00	1:43	0.0	0.0
	55	10/11/00	1:58	0.0	0.0
	56	10/11/00	2:13	0.0	0.0
	57	10/11/00	2:28	0.0	0.0
	58	10/11/00	2:43	0.0	0.0
	59	10/11/00	2:58	0.0	0.0
	60	10/11/00	3:13	0.0	0.0
	61	10/11/00	3:28	0.0	0.0
	62	10/11/00	3:43	0.0	0.0
	63	10/11/00	3:58	0.0	0.0
	64	10/11/00	4:13	0.0	0.0
	65	10/11/00	4:28	0.0	0.0
	66	10/11/00	4:43	0.0	0.0
	67	10/11/00	4:58	0.0	0.0
	68	10/11/00	5:13	0.0	0.0
	69	10/11/00	5:28	0.0	0.0
	70	10/11/00	5:43	0.0	0.0
	71	10/11/00	5:58	0.0	0.0
	72	10/11/00	6:13	0.0	0.0
	73	10/11/00	6:28	0.0	0.0
	74	10/11/00	6:43	0.0	0.0
	75	10/11/00	6:58	0.0	0.0
	76	10/11/00	7:13	0.0	0.0
	77	10/11/00	7:28	0.0	0.0
	78	10/11/00	7:43	0.0	0.0
	79	10/11/00	7:58	0.0	0.0
	80	10/11/00	8:13	0.0	0.0
	81	10/11/00	8:28	0.0	0.0
	82	10/11/00	8:43	0.0	0.0
	83	10/11/00	8:58	0.0	0.0
	84	10/11/00	9:13	0.0	0.0
	85	10/11/00	9:28	0.0	0.0
	86	10/11/00	9:43	0.0	0.0
	87	10/11/00	9:58	0.0	0.0
	88	10/11/00	10:13	0.0	0.0
	89	10/11/00	10:28	0.0	0.0
	90	10/11/00	10:43	0.0	0.0
	91	10/11/00	10:58	0.0	0.0
	92	10/11/00	11:13	0.0	0.0
	93	10/11/00	11:28	0.0	0.0
	94	10/11/00	11:43	0.0	0.0
	95	10/11/00	11:58	0.0	0.0
	96	10/11/00	12:13	0.0	0.0
	97	10/11/00	12:28	0.0	0.0
21	1	10/11/00	13:08	0.1	0.3
	2	10/11/00	13:23	0.1	0.4

	DATA COLLECTION POINT	DATE	TIME	AVERAGE CONCENTRATION	MAXIMUM CONCENTRATION
	3	10/11/00	13:38	0.1	0.3
	4	10/11/00	13:53	0.1	0.3
	5	10/11/00	14:08	0.1	0.3
	6	10/11/00	14:23	0.1	0.3
	7	10/11/00	14:38	0.1	0.4
	8	10/11/00	14:53	0.1	0.4
	9	10/11/00	15:08	0.1	0.4
	10	10/11/00	15:23	0.2	0.4
	11	10/11/00	15:38	0.2	0.4
	12	10/11/00	15:53	0.2	0.5
	13	10/11/00	16:08	0.3	0.6
	14	10/11/00	16:23	0.3	0.6
	15	10/11/00	16:38	0.3	0.6
	16	10/11/00	16:53	0.3	0.7
	17	10/11/00	17:08	0.4	0.7
	18	10/11/00	17:23	0.4	0.7
	19	10/11/00	17:38	0.4	0.7
	20	10/11/00	17:53	0.4	0.7
	21	10/11/00	18:08	0.4	0.7
	22	10/11/00	18:23	0.3	0.7
	23	10/11/00	18:38	0.3	0.6
	24	10/11/00	18:53	0.3	0.5
	25	10/11/00	19:08	0.2	0.6
	26	10/11/00	19:23	0.2	0.6
	27	10/11/00	19:38	0.2	0.4
	28	10/11/00	19:53	0.1	0.5
	29	10/11/00	20:08	0.1	0.5
	30	10/11/00	20:23	0.1	0.4
	31	10/11/00	20:38	0.1	0.4
	32	10/11/00	20:53	0.1	0.4
	33	10/11/00	21:08	0.1	0.3
	34	10/11/00	21:23	0.1	0.3
	35	10/11/00	21:38	0.1	0.3
	36	10/11/00	21:53	0.1	0.3
	37	10/11/00	22:08	0.1	0.3
	38	10/11/00	22:23	0.0	0.3
	39	10/11/00	22:38	0.0	0.3
	40	10/11/00	22:53	0.0	0.3
	41	10/11/00	23:08	0.0	0.3
	42	10/11/00	23:23	0.0	0.3
	43	10/11/00	23:38	0.0	0.3
	44	10/11/00	23:53	0.0	0.3
	45	10/12/00	0:08	0.0	0.2
	46	10/12/00	0:23	0.0	0.3
	47	10/12/00	0:38	0.0	0.2
	48	10/12/00	0:53	0.0	0.3
	49	10/12/00	1:08	0.0	0.3

	DATA COLLECTION POINT	DATE	TIME	AVERAGE CONCENTRATION	MAXIMUM CONCENTRATION
	50	10/12/00	1:23	0.0	0.2
	51	10/12/00	1:38	0.0	0.3
	52	10/12/00	1:53	0.0	0.3
	53	10/12/00	2:08	0.0	0.3
	54	10/12/00	2:23	0.0	0.2
	55	10/12/00	2:38	0.0	0.3
	56	10/12/00	2:53	0.0	0.3
	57	10/12/00	3:08	0.0	0.3
	58	10/12/00	3:23	0.0	0.2
	59	10/12/00	3:38	0.0	0.3
	60	10/12/00	3:53	0.0	0.4
	61	10/12/00	4:08	0.0	0.2
	62	10/12/00	4:23	0.0	0.3
	63	10/12/00	4:38	0.0	0.2
	64	10/12/00	4:53	0.0	0.3
	65	10/12/00	5:08	0.0	0.2
	66	10/12/00	5:23	0.0	0.3
	67	10/12/00	5:38	0.0	0.2
	68	10/12/00	5:53	0.0	0.2
	69	10/12/00	6:08	0.0	0.2
	70	10/12/00	6:23	0.0	0.2
	71	10/12/00	6:38	0.0	0.3
	72	10/12/00	6:53	0.0	0.2
	73	10/12/00	7:08	0.0	0.3
	74	10/12/00	7:23	0.0	0.3
	75	10/12/00	7:38	0.0	0.2
	76	10/12/00	7:53	0.0	0.2
	77	10/12/00	8:08	0.0	0.2
	78	10/12/00	8:23	0.0	0.3
	79	10/12/00	8:38	0.1	0.6
	80	10/12/00	8:53	0.1	0.6
	81	10/12/00	9:08	0.0	0.5

AVERAGE =	0.1	0.2
STANDARD DEVIATION =	0.1	0.2

Attachment 8

Unit #10 Calibration Data

```
Calibration Log for Unit #10

      Instrument: MiniRAE 2000 (PGM7600)              Serial Number: 002844
      User ID: 00000001        Site ID: 00000013
      Gas Name:  isobutylene

    1 Data Points: 19          Sample Period: 900 sec
      Last Calibration Time: 09/28/2000 10:54

    2 Data Points: 65          Sample Period: 900 sec
      Last Calibration Time: 09/28/2000 16:13

    3 Data Points: 33          Sample Period: 900 sec
      Last Calibration Time: 09/29/2000 08:55

    4 Data Points: 53          Sample Period: 900 sec
      Last Calibration Time: 09/29/2000 17:46

    5 Data Points: 32          Sample Period: 900 sec
      Last Calibration Time: 09/30/2000 07:35

    6 Data Points: 59          Sample Period: 900 sec
      Last Calibration Time: 09/30/2000 16:13

    7 Data Points: 35          Sample Period: 900 sec
      Last Calibration Time: 10/01/2000 07:25

    8 Data Points: 62          Sample Period: 900 sec
      Last Calibration Time: 10/01/2000 16:31

    9 Data Points: 35          Sample Period: 900 sec
      Last Calibration Time: 10/01/2000 16:31

   10 Data Points: 55          Sample Period: 900 sec
      Last Calibration Time: 10/02/2000 17:54

   11 Data Points: 34          Sample Period: 900 sec
      Last Calibration Time: 10/03/2000 08:14

   12 Data Points: 60          Sample Period: 900 sec
      Last Calibration Time: 10/03/2000 17:21

   13 Data Points: 29          Sample Period: 900 sec
      Last Calibration Time: 10/04/2000 08:48

   14 Data Points: 83          Sample Period: 900 sec
      Last Calibration Time: 10/04/2000 16:39

   15 Data Points: 88          Sample Period: 900 sec
```

```
     Last Calibration Time: 10/05/2000 13:50

16 Data Points: 106        Sample Period: 900 sec
     Last Calibration Time: 10/06/2000 12:17

17 Data Points: 81         Sample Period: 900 sec
     Last Calibration Time: 10/07/2000 15:13

18 Data Points: 99         Sample Period: 900 sec
     Last Calibration Time: 10/08/2000 11:56

19 Data Points: 91         Sample Period: 900 sec
     Last Calibration Time: 10/09/2000 13:04

20 Data Points: 97         Sample Period: 900 sec
     Last Calibration Time: 10/10/2000 12:12

21 Data Points: 81              Sample Period: 900 sec
     Last Calibration Time: 10/11/2000 12:52
```

Attachment 9

Unit#11-PIDData

	DATA COLLECTION POINT	DATE	TIME	AVERAGE CONCENTRATION	MAXIMUM CONCENTRATION
The first Summa canister sample corresponding to Unit #11 was collected on 9-28-00 from 0730 through 0930. The canister was collected prior to the initiation of real-time air monitroing.					
1	1	9/28/00	11:30	0.0	0.2
	2	9/28/00	11:45	0.0	0.2
	3	9/28/00	12:00	0.0	0.3
	4	9/28/00	12:15	0.0	0.3
	5	9/28/00	12:30	0.0	0.3
	6	9/28/00	12:45	0.0	0.4
	7	9/28/00	13:00	0.0	0.3
	8	9/28/00	13:15	0.0	0.3
	9	9/28/00	13:30	0.0	0.3
	10	9/28/00	13:45	0.0	0.3
	11	9/28/00	14:00	0.0	0.3
	12	9/28/00	14:15	0.0	0.3
	13	9/28/00	14:30	0.0	0.3
	14	9/28/00	14:45	0.1	0.3
	15	9/28/00	15:00	0.0	0.3
	16	9/28/00	15:15	0.1	0.3
	17	9/28/00	15:30	0.0	0.3
	18	9/28/00	15:45	0.0	0.3
	19	9/28/00	16:00	0.0	0.3
2	1	9/28/00	16:45	0.2	0.5
	2	9/28/00	17:00	0.2	0.5
	3	9/28/00	17:15	0.2	0.5
	4	9/28/00	17:30	0.2	0.6
	5	9/28/00	17:45	0.2	0.5
	6	9/28/00	18:00	0.2	0.5
	7	9/28/00	18:15	0.2	0.5
	8	9/28/00	18:30	0.2	0.6
	9	9/28/00	18:45	0.2	0.5
	10	9/28/00	19:00	0.2	0.5
	11	9/28/00	19:15	0.2	0.5
	12	9/28/00	19:30	0.2	0.6
	13	9/28/00	19:45	0.2	0.6
	14	9/28/00	20:00	0.3	0.6
	15	9/28/00	20:15	0.3	0.6
	16	9/28/00	20:30	0.3	0.6
	17	9/28/00	20:45	0.2	0.5
	18	9/28/00	21:00	0.3	0.6
	19	9/28/00	21:15	0.3	0.6
	20	9/28/00	21:30	0.3	0.6
	21	9/28/00	21:45	0.3	0.6
	22	9/28/00	22:00	0.3	0.6
	23	9/28/00	22:15	0.2	0.6
	24	9/28/00	22:30	0.2	0.5

	DATA COLLECTION POINT	DATE	TIME	AVERAGE CONCENTRATION	MAXIMUM CONCENTRATION
	25	9/28/00	22.45	0.2	0.6
	26	9/28/00	23:00	0.2	0.5
	27	9/28/00	23:15	0.2	0.6
	28	9/28/00	23:30	0.2	0.6
	29	9/28/00	23:45	0.2	0.6
	30	9/29/00	0:00	0.2	0.6
	31	9/29/00	0:15	0.2	0.6
	32	9/29/00	0:30	0.2	0.5
	33	9/29/00	0:45	0.2	0.5
	34	9/29/00	1:00	0.2	0.6
	35	9/29/00	1:15	0.2	0.5
	36	9/29/00	1:30	0.2	0.5
	37	9/29/00	1:45	0.2	0.5
	38	9/29/00	2:00	0.2	0.5
	39	9/29/00	2:15	0.2	0.5
	40	9/29/00	2:30	0.2	0.5
	41	9/29/00	2:45	0.2	0.5
	42	9/29/00	3:00	0.2	0.5
	43	9/29/00	3:15	0.2	0.5
	44	9/29/00	3:30	0.2	0.6
	45	9/29/00	3:45	0.2	0.5
	46	9/29/00	4:00	0.2	0.5
	47	9/29/00	4:15	0.3	0.6
	48	9/29/00	4:30	0.3	0.5
	49	9/29/00	4:45	0.2	0.5
	50	9/29/00	5:00	0.3	0.6
	51	9/29/00	5:15	0.3	0.6
	52	9/29/00	5:30	0.2	0.6
	53	9/29/00	5:45	0.3	0.5
	54	9/29/00	6:00	0.3	0.6
	55	9/29/00	6:15	0.2	0.6
	56	9/29/00	6:30	0.2	0.5
	57	9/29/00	6:45	0.2	0.5
	58	9/29/00	7:00	0.2	0.5
	59	9/29/00	7:15	0.2	0.5
	60	9/29/00	7:30	0.2	0.5
	61	9/29/00	7:45	0.3	0.5
	62	9/29/00	8:00	0.2	0.6
	63	9/29/00	8:15	0.2	0.6
	64	9/29/00	8:30	0.2	0.6
3	1	9/29/00	9:07	0.0	0.2
	2	9/29/00	9:22	0.0	0.2
	3	9/29/00	9:37	0.0	0.2
	4	9/29/00	9:52	0.0	0.2
	5	9/29/00	10:07	0.0	0.2
	6	9/29/00	10:22	0.0	0.2
	7	9/29/00	10:37	0.0	0.3

	DATA COLLECTION POINT	DATE	TIME	AVERAGE CONCENTRATION	MAXIMUM CONCENTRATION
	8	9/29/00	10:52	0.0	0.2
	9	9/29/00	11:07	0.0	0.3
	10	9/29/00	11:22	0.0	0.3
	11	9/29/00	11:37	0.1	0.3
	12	9/29/00	11:52	0.0	0.3
	13	9/29/00	12:07	0.0	0.3
	14	9/29/00	12:22	0.0	0.3
	15	9/29/00	12:37	0.0	0.3
	16	9/29/00	12:52	0.0	0.3
	17	9/29/00	13:07	0.0	0.3
	18	9/29/00	13:22	0.0	0.2
	19	9/29/00	13:37	0.0	0.3
	20	9/29/00	13:52	0.0	0.3
	21	9/29/00	14:07	0.1	0.4
	22	9/29/00	14:22	0.1	0.5
	23	9/29/00	14:37	0.1	0.3
	24	9/29/00	14:52	0.0	0.3
	25	9/29/00	15:07	0.0	0.3
	26	9/29/00	15:22	0.0	0.3
	27	9/29/00	15:37	0.0	0.3
	28	9/29/00	15:52	0.0	0.3
	29	9/29/00	16:07	0.0	0.3
	30	9/29/00	16:22	0.0	0.3
	31	9/29/00	16:37	0.0	0.3
	32	9/29/00	16:52	0.0	0.3
	33	9/29/00	17:07	0.0	0.3
	34	9/29/00	17:22	0.0	0.3
4	1	9/29/00	18:10	0.3	0.6
	2	9/29/00	18:25	0.3	0.6
	3	9/29/00	18:40	0.3	0.7
	4	9/29/00	18:55	0.3	0.6
	5	9/29/00	19:10	0.3	0.6
	6	9/29/00	19:25	0.2	0.5
	7	9/29/00	19:40	0.2	0.5
	8	9/29/00	19:55	0.2	0.6
	9	9/29/00	20:10	0.2	0.5
	10	9/29/00	20:25	0.2	0.5
	11	9/29/00	20:40	0.2	0.6
	12	9/29/00	20:55	0.2	0.5
	13	9/29/00	21:10	0.2	0.5
	14	9/29/00	21:25	0.2	0.5
	15	9/29/00	21:40	0.2	0.5
	16	9/29/00	21:55	0.2	0.5
	17	9/29/00	22:10	0.2	0.5
	18	9/29/00	22:25	0.2	0.5
	19	9/29/00	22:40	0.2	0.5
	20	9/29/00	22:55	0.1	0.5

	DATA COLLECTION POINT	DATE	TIME	AVERAGE CONCENTRATION	MAXIMUM CONCENTRATION
	21	9/29/00	23:10	0.2	0.4
	22	9/29/00	23:25	0.2	0.5
	23	9/29/00	23:40	0.2	0.5
	24	9/29/00	23:55	0.2	0.5
	25	9/30/00	0:10	0.2	0.5
	26	9/30/00	0:25	0.2	0.5
	27	9/30/00	0:40	0.2	0.5
	28	9/30/00	0:55	0.1	0.5
	29	9/30/00	1:10	0.1	0.5
	30	9/30/00	1:25	0.2	0.5
	31	9/30/00	1:40	0.2	0.5
	32	9/30/00	1:55	0.2	0.5
	33	9/30/00	2:10	0.2	0.5
	34	9/30/00	2:25	0.2	0.5
	35	9/30/00	2:40	0.2	0.5
	36	9/30/00	2:55	0.2	0.5
	37	9/30/00	3:10	0.2	0.5
	38	9/30/00	3:25	0.1	0.5
	39	9/30/00	3:40	0.2	0.5
	40	9/30/00	3:55	0.2	0.5
	41	9/30/00	4:10	0.2	0.5
	42	9/30/00	4:25	0.2	0.5
	43	9/30/00	4:40	0.2	0.5
	44	9/30/00	4:55	0.1	0.5
	45	9/30/00	5:10	0.2	0.5
	46	9/30/00	5:25	0.2	0.5
	47	9/30/00	5:40	0.2	0.5
	48	9/30/00	5:55	0.2	0.5
	49	9/30/00	6:10	0.2	0.5
	50	9/30/00	6:25	0.2	0.5
	51	9/30/00	6:40	0.2	0.6
	52	9/30/00	6:55	0.2	0.5
	53	9/30/00	7:10	0.2	0.6
5	**1**	9/30/00	8:09	0.2	0.5
	2	9/30/00	8:24	0.2	0.5
	3	9/30/00	8:39	0.2	0.5
	4	9/30/00	8:54	0.2	0.4
	5	9/30/00	9:09	**0.1**	0.5
	6	9/30/00	9:24	0.1	0.4
	7	9/30/00	9:39	0.2	0.5
	8	9/30/00	9:54	0.2	0.5
	9	9/30/00	10:09	0.2	0.5
	10	9/30/00	10:24	0.2	0.5
	11	9/30/00	10:39	0.2	0.5
	12	9/30/00	10:54	0.2	0.5
	13	9/30/00	11:09	0.2	0.5
	14	9/30/00	11:24	0.2	0.5

	DATA COLLECTION POINT	DATE	TIME	AVERAGE CONCENTRATION	MAXIMUM CONCENTRATION
	15	9/30/00	11:39	0.2	0.5
	16	9/30/00	11:54	0.2	0.5
	17	9/30/00	12:09	0.2	0.5
	18	9/30/00	12:24	0.2	0.5
	19	9/30/00	12:39	0.2	0.5
	20	9/30/00	12:54	0.2	0.6
	21	9/30/00	13:09	0.2	0.6
	22	9/30/00	13:24	0.2	0.6
	23	9/30/00	13:39	0.2	0.7
	24	9/30/00	13:54	0.2	0.6
	25	9/30/00	14:09	0.2	0.6
	26	9/30/00	14:24	0.3	0.6
	27	9/30/00	14:39	0.3	0.6
	28	9/30/00	14:54	0.3	0.6
	29	9/30/00	15:09	0.3	0.6
	30	9/30/00	15:24	0.3	0.7
	31	9/30/00	15:39	0.3	0.6
6	1	9/30/00	16:24	0.1	0.4
	2	9/30/00	16:39	0.1	0.4
	3	9/30/00	16:54	0.1	0.4
	4	9/30/00	17:09	0.1	0.4
	5	9/30/00	17:24	0.1	0.5
	6	9/30/00	17:39	0.1	0.4
	7	9/30/00	17:54	0.1	0.5
	8	9/30/00	18:09	0.1	0.5
	9	9/30/00	18:24	0.1	0.4
	10	9/30/00	18:39	0.1	0.5
	11	9/30/00	18:54	0.1	0.5
	12	9/30/00	19:09	0.1	0.5
	13	9/30/00	19:24	0.1	0.4
	14	9/30/00	19:39	0.1	0.4
	15	9/30/00	19:54	0.1	0.4
	16	9/30/00	20:09	0.1	0.4
	17	9/30/00	20:24	0.1	0.4
	18	9/30/00	20:39	0.1	0.4
	19	9/30/00	20:54	0.1	0.4
	20	9/30/00	21:09	0.1	0.4
	21	9/30/00	21:24	0.1	0.4
	22	9/30/00	21:39	0.1	0.4
	23	9/30/00	21:54	0.1	0.4
	24	9/30/00	22:09	0.1	0.4
	25	9/30/00	22:24	0.1	0.4
	26	9/30/00	22:39	0.1	0.4
	27	9/30/00	22:54	0.0	0.4
	28	9/30/00	23:09	0.0	0.4
	29	9/30/00	23:24	0.0	0.3
	30	9/30/00	23:39	0.0	0.3

	DATA COLLECTION POINT	DATE	TIME	AVERAGE CONCENTRATION	MAXIMUM CONCENTRATION
	31	9/30/00	23:54	0.1	0.4
	32	10/1/00	0:09	0.2	0.4
	33	10/1/00	0:24	0.2	0.5
	34	10/1/00	0:39	0.2	0.5
	35	10/1/00	0:54	0.2	0.5
	36	10/1/00	1:09	0.2	0.4
	37	10/1/00	1:24	0.1	0.4
	38	10/1/00	1:39	0.1	0.4
	39	10/1/00	1:54	0.1	0.5
	40	10/1/00	2:09	0.1	0.4
	41	10/1/00	2:24	0.1	0.4
	42	10/1/00	2:39	0.1	0.4
	43	10/1/00	2:54	0.1	0.4
	44	10/1/00	3:09	0.0	0.3
	45	10/1/00	3:24	0.0	0.4
	46	10/1/00	3:39	0.2	0.4
	47	10/1/00	3:54	0.3	0.7
	48	10/1/00	4:09	0.3	0.5
	49	10/1/00	4:24	0.2	0.5
	50	10/1/00	4:39	0.1	0.4
	51	10/1/00	4:54	0.1	0.4
	52	10/1/00	5:09	0.1	0.4
	53	10/1/00	5:24	0.1	0.3
	54	10/1/00	5:39	0.0	0.4
	55	10/1/00	5:54	0.0	0.4
	56	10/1/00	6:09	0.0	0.4
	57	10/1/00	6:24	0.0	0.3
	58	10/1/00	6:39	0.0	0.3
	59	10/1/00	6:54	0.0	0.3
7	1	10/1/00	7:37	0.3	0.6
	2	10/1/00	7:52	0.3	0.6
	3	10/1/00	8:07	0.3	0.6
	4	10/1/00	8:22	0.3	0.6
	5	10/1/00	8:37	0.3	0.6
	6	10/1/00	8:52	0.3	0.6
	7	10/1/00	9:07	0.3	0.6
	8	10/1/00	9:22	0.3	0.6
	9	10/1/00	9:37	0.3	0.6
	10	10/1/00	9:52	0.3	0.6
	11	10/1/00	10:07	0.3	0.6
	12	10/1/00	10:22	0.3	0.6
	13	10/1/00	10:37	0.3	0.6
	14	10/1/00	10:52	0.3	0.6
	15	10/1/00	11:07	0.3	0.6
	16	10/1/00	11:22	0.3	0.6
	17	10/1/00	11:37	0.3	0.7
	18	10/1/00	11:52	0.3	0.7

	DATA COLLECTION POINT	DATE	TIME	AVERAGE CONCENTRATION	MAXIMUM CONCENTRATION
	19	10/1/00	12:07	0.3	0.6
	20	10/1/00	12:22	0.4	0.7
	21	10/1/00	12:37	0.4	0.7
	22	10/1/00	12:52	0.4	0.8
	23	10/1/00	13:07	0.4	0.8
	24	10/1/00	13:22	0.4	0.7
	25	10/1/00	13:37	0.4	0.7
	26	10/1/00	13:52	0.4	0.8
	27	10/1/00	14:07	0.5	0.9
	28	10/1/00	14:22	0.5	0.8
	29	10/1/00	14:37	0.5	0.8
	30	10/1/00	14:52	0.5	0.8
	31	10/1/00	15:07	0.5	0.8
	32	10/1/00	15:22	0.5	0.9
	33	10/1/00	15:37	0.5	0.8
	34	10/1/00	15:52	0.5	0.8
	35	10/1/00	16:07	0.5	0.9
8	1	10/1/00	16:43	0.2	0.6
	2	10/1/00	16:58	0.2	0.6
	3	10/1/00	17:13	0.2	0.5
	4	10/1/00	17:28	0.2	0.6
	5	10/1/00	17:43	0.2	0.6
	6	10/1/00	17:58	0.2	0.5
	7	10/1/00	18:13	0.2	0.5
	8	10/1/00	18:28	0.2	0.5
	9	10/1/00	18:43	0.2	0.5
	10	10/1/00	18:58	0.2	0.5
	11	10/1/00	19:13	0.2	0.5
	12	10/1/00	19:28	0.2	0.6
	13	10/1/00	19:43	0.2	0.5
	14	10/1/00	19:58	0.2	0.6
	15	10/1/00	20:13	0.2	0.5
	16	10/1/00	20:28	0.2	0.5
	17	10/1/00	20:43	0.2	0.5
	18	10/1/00	20:58	0.2	0.5
	19	10/1/00	21:13	0.2	0.5
	20	10/1/00	21:28	0.2	0.5
	21	10/1/00	21:43	0.2	0.5
	22	10/1/00	21:58	0.2	0.5
	23	10/1/00	22:13	0.1	0.4
	24	10/1/00	22:28	0.1	0.4
	25	10/1/00	22:43	0.1	0.5
	26	10/1/00	22:58	0.1	0.4
	27	10/1/00	23:13	0.1	0.4
	28	10/1/00	23:28	0.1	0.4
	29	10/1/00	23:43	0.1	0.4
	30	10/1/00	23:58	0.1	0.4

	DATA COLLECTION POINT	DATE	TIME	AVERAGE CONCENTRATION	MAXIMUM CONCENTRATION
	31	10/2/00	0:13	0.1	0.4
	32	10/2/00	0:28	0.1	0.4
	33	10/2/00	0:43	0.1	0.4
	34	10/2/00	0:58	0.1	0.4
	35	10/2/00	1:13	0.1	0.4
	36	10/2/00	1:28	0.1	0.4
	37	10/2/00	1:43	0.1	0.4
	38	10/2/00	1:58	0.1	0.4
	39	10/2/00	2:13	0.1	0.4
	40	10/2/00	2:28	0.1	0.4
	41	10/2/00	2:43	0.1	0.4
	42	10/2/00	2:58	0.1	0.4
	43	10/2/00	3:13	0.1	0.4
	44	10/2/00	3:28	0.1	0.4
	45	10/2/00	3:43	0.1	0.4
	46	10/2/00	3:58	0.1	0.4
	47	10/2/00	4:13	0.1	0.4
	48	10/2/00	4:28	0.0	0.4
	49	10/2/00	4:43	0.0	0.4
	50	10/2/00	4:58	0.0	0.4
	51	10/2/00	5:13	0.0	0.3
	52	10/2/00	5:28	0.0	0.4
	53	10/2/00	5:43	0.0	0.4
	54	10/2/00	5:58	0.0	0.4
	55	10/2/00	6:13	0.0	0.3
	56	10/2/00	6:28	0.0	0.3
	57	10/2/00	6:43	0.0	0.3
	58	'10/2/00	6:58	0.0	0.3
	59	10/2/00	7:13	0.0	0.3
	60	10/2/00	7:28	0.0	0.3
	61	10/2/00	7:43	0.0	0.4
	62	10/2/00	7:58	0.0	0.3
	63	10/2/00	8:13	0.0	1.1
9	1	10/2/00	8:58	0.4	0.7
	2	10/2/00	9:13	0.4	0.7
	3	10/2/00	9:28	0.4	0.7
	4	10/2/00	9:43	0.4	0.7
	5	10/2/00	9:58	0.4	0.8
	6	10/2/00	10:13	0.4	0.7
	7	10/2/00	10:28	0.4	0.8
	8	10/2/00	10:43	0.4	0.8
	9	10/2/00	10:58	0.4	0.8
	10	10/2/00	11:13	0.4	0.8
	11	10/2/00	11:28	0.4	0.8
	12	10/2/00	11:43	0.4	0.7
	13	10/2/00	11:58	0.4	0.7
	14	10/2/00	12:13	0.4	0.8

	DATA COLLECTION POINT	DATE	TIME	AVERAGE CONCENTRATION	MAXIMUM CONCENTRATION
	15	10/2/00	12:28	0.4	0.7
	16	10/2/00	12:43	0.4	0.7
	17	10/2/00	12:58	0.5	0.8
	18	10/2/00	13:13	0.5	0.8
	19	10/2/00	13:28	0.5	0.8
	20	10/2/00	13:43	0.4	0.8
	21	10/2/00	13:58	0.5	0.7
	22	10/2/00	14:13	0.5	0.8
	23	10/2/00	14:28	0.4	0.8
	24	10/2/00	14:43	0.5	0.8
	25	10/2/00	14:58	0.5	0.8
	26	10/2/00	15:13	0.6	0.9
	27	10/2/00	15:28	0.6	1.0
	28	10/2/00	15:43	0.6	1.0
	29	10/2/00	15:58	0.7	1.0
	30	10/2/00	16:13	0.7	1.0
	31	10/2/00	16:28	0.7	1.1
	32	10/2/00	16:43	0.7	1.0
	33	10/2/00	16:58	0.7	1.0
	34	10/2/00	17:13	0.7	1.0
10	1	10/2/00	18:03	0.1	0.5
	2	10/2/00	18:18	0.1	0.5
	3	10/2/00	18:33	0.1	0.6
	4	10/2/00	18:48	0.2	0.5
	5	10/2/00	19:03	0.2	0.6
	6	10/2/00	19:18	0.3	0.6
	7	10/2/00	19:33	0.3	0.7
	8	10/2/00	19:48	0.3	0.7
	9	10/2/00	20:03	0.3	0.7
	10	10/2/00	20:18	0.3	0.7
	11	10/2/00	20:33	0.3	0.7
	12	10/2/00	20:48	0.3	0.7
	13	10/2/00	21:03	0.3	0.8
	14	10/2/00	21:18	0.3	0.7
	15	10/2/00	21:33	0.3	0.7
	16	10/2/00	21:48	0.3	0.7
	17	10/2/00	22:03	0.3	0.7
	18	10/2/00	22:18	0.3	**0.7**
	19	10/2/00	22:33	0.3	0.7
	20	10/2/00	22:48	0.3	0.7
	21	10/2/00	23:03	0.3	0.6
	22	10/2/00	23:18	0.3	0.7
	23	10/2/00	23:33	0.3	0.7
	24	10/2/00	23:48	0.4	0.8
	25	10/3/00	0:03	0.3	0.7
	26	10/3/00	0:18	0.3	0.6
	27	10/3/00	0:33	0.3	0.6

	DATA COLLECTION POINT	DATE	TIME	AVERAGE CONCENTRATION	MAXIMUM CONCENTRATION
	28	10/3/00	0:48	0.2	0.6
	29	10/3/00	1:03	0.2	0.5
	30	10/3/00	1:18	0.1	0.5
	31	10/3/00	1:33	0.1	0.5
	32	10/3/00	1:48	0.1	0.5
	33	10/3/00	2:03	0.1	0.5
	34	10/3/00	2:18	0.1	0.4
	35	10/3/00	2:33	0.1	0.4
	36	10/3/00	2:48	0.1	0.5
	37	10/3/00	3:03	0.1	0.5
	38	10/3/00	3:18	0.1	0.5
	39	10/3/00	3:33	0.1	0.5
	40	10/3/00	3:48	0.1	0.4
	41	10/3/00	4:03	0.1	0.4
	42	10/3/00	4:18	0.1	0.4
	43	10/3/00	4:33	0.1	0.5
	44	10/3/00	4:48	0.1	0.4
	45	10/3/00	5:03	0.1	0.4
	46	10/3/00	5:18	0.1	0.5
	47	10/3/00	5:33	0.1	0.5
	48	10/3/00	5:48	0.1	0.5
	49	10/3/00	6:03	0.1	0.5
	50	10/3/00	6:18	0.1	0.5
	51	10/3/00	6:33	0.1	0.5
	52	10/3/00	6:48	0.1	0.5
	53	10/3/00	7:03	0.1	0.4
	54	10/3/00	7:18	0.0	0.5
	55	10/3/00	7:33	0.0	0.4
	56	10/3/00	7:48	0.0	0.4
	57	10/3/00	8:03	0.0	0.4
11	1	10/3/00	8:45	0.1	0.5
	2	10/3/00	9:00	0.1	0.5
	3	10/3/00	9:15	0.1	0.5
	4	10/3/00	9:30	0.1	0.4
	5	10/3/00	9:45	0.1	0.5
	6	10/3/00	10:00	0.0	0.4
	7	10/3/00	10:15	0.0	0.4
	8	10/3/00	10:30	0.0	0.4
	9	10/3/00	10:45	0.0	0.4
	10	10/3/00	11:00	0.0	0.4
	11	10/3/00	11:15	0.0	0.4
	12	10/3/00	11:30	0.0	0.5
	13	10/3/00	11:45	0.0	0.4
	14	10/3/00	12:00	0.0	0.5
	15	10/3/00	12:15	0.0	0.4
	16	10/3/00	12:30	0.0	0.4
	17	10/3/00	12:45	0.0	0.4

	DATA COLLECTION POINT	DATE	TIME	AVERAGE CONCENTRATION	MAXIMUM CONCENTRATION
	18	10/3/00	13:00	0.0	0.4
	19	10/3/00	13:15	0.0	0.4
	20	10/3/00	13:30	0.1	0.5
	21	10/3/00	13:45	0.1	0.4
	22	10/3/00	14:00	0.1	0.4
	23	10/3/00	14:15	0.1	0.4
	24	10/3/00	14:30	0.1	0.5
	25	10/3/00	14:45	0.1	0.4
	26	10/3/00	15:00	0.1	0.5
	27	10/3/00	15:15	0.1	0.4
	28	10/3/00	15:30	0.1	0.5
	29	10/3/00	15:45	0.1	0.4
	30	10/3/00	16:00	0.1	0.5
	31	10/3/00	16:15	0.1	0.5
	32	10/3/00	16:30	0.1	0.4
	33	10/3/00	16:45	0.1	0.5
	34	10/3/00	17:00	0.1	0.5
12	1	10/3/00	17:47	0.1	0.5
	2	10/3/00	18:02	0.1	0.5
	3	10/3/00	18:17	0.1	0.5
	4	10/3/00	18:32	0.1	0.5
	5	10/3/00	18:47	0.1	0.5
	6	10/3/00	19:02	0.1	0.5
	7	10/3/00	19:17	0.2	0.6
	8	10/3/00	19:32	0.2	0.6
	9	10/3/00	19:47	0.2	0.6
	10	10/3/00	20:02	0.2	0.6
	11	10/3/00	20:17	0.2	0.6
	12	10/3/00	20:32	0.1	0.6
	13	10/3/00	20:47	0.1	0.6
	14	10/3/00	21:02	0.1	0.5
	15	10/3/00	21:17	0.1	0.5
	16	10/3/00	21:32	0.1	0.4
	17	10/3/00	21:47	0.0	0.4
	18	10/3/00	22:02	0.0	0.4
	19	10/3/00	22:17	0.0	0.4
	20	10/3/00	22:32	0.0	0.4
	21	10/3/00	22:47	0.0	0.3
	22	10/3/00	23:02	0.0	0.3
	23	10/3/00	23:17	0.0	0.3
	24	10/3/00	23:32	0.0	0.2
	25	10/3/00	23:47	0.0	0.3
	26	10/4/00	0:02	0.0	0.3
	27	10/4/00	0:17	0.0	0.2
	28	10/4/00	0:32	0.0	0.3
	29	10/4/00	0:47	0.0	0.3
	30	10/4/00	1:02	0.0	0.3

	DATA COLLECTION POINT	DATE	TIME	AVERAGE CONCENTRATION	MAXIMUM CONCENTRATION
	31	10/4/00	1:17	0.0	0.3
	32	10/4/00	1:32	0.0	0.2
	33	10/4/00	1:47	0.0	0.3
	34	10/4/00	2:02	0.0	0.2
	35	10/4/00	2:17	0.0	0.2
	36	10/4/00	2:32	0.0	0.2
	37	10/4/00	2:47	0.0	0.2
	38	10/4/00	3:02	0.0	0.2
	39	10/4/00	3:17	0.0	0.2
	40	10/4/00	3:32	0.0	0.2
	41	10/4/00	3:47	0.0	0.2
	42	10/4/00	4:02	0.0	0.1
	43	10/4/00	4:17	0.0	0.2
	44	10/4/00	4:32	0.0	0.2
	45	10/4/00	4:47	0.0	0.2
	46	10/4/00	5:02	0.0	0.2
	47	10/4/00	5:17	0.0	0.3
	48	10/4/00	5:32	0.0	0.2
	49	10/4/00	5:47	0.0	0.2
	50	10/4/00	6:02	0.0	0.2
	51	10/4/00	6:17	0.0	0.2
	52	10/4/00	6:32	0.0	0.2
	53	10/4/00	6:47	0.0	0.1
	54	10/4/00	7:02	0.0	0.1
	55	10/4/00	7:17	0.0	0.2
	56	10/4/00	7:32	0.0	0.1
	57	10/4/00	7:47	0.0	0.1
	58	10/4/00	8:02	0.0	0.1
	59	10/4/00	8:17	0.0	0.1
	60	10/4/00	8:32	0.0	0.1
13	1	10/4/00	9:18	0.0	0.3
	2	10/4/00	9:33	0.0	0.4
	3	10/4/00	9:48	0.0	0.4
	4	10/4/00	10:03	0.0	0.4
	5	10/4/00	10:18	0.1	0.5
	6	10/4/00	10:33	0.1	0.4
	7	10/4/00	10:48	0.1	0.4
	8	10/4/00	11:03	0.1	0.5
	9	10/4/00	11:18	0.1	0.5
	10	10/4/00	11:33	0.1	0.5
	11	10/4/00	11:48	0.1	0.5
	12	10/4/00	12:03	0.1	0.5
	13	10/4/00	12:18	0.1	0.5
	14	10/4/00	12:33	0.1	0.5
	15	10/4/00	12:48	0.1	0.4
	16	10/4/00	13:03	0.1	0.5
	17	10/4/00	13:18	0.1	0.5

	DATA COLLECTION POINT	**DATE**	**TIME**	**AVERAGE CONCENTRATION**	**MAXIMUM CONCENTRATION**
	18	10/4/00	13:33	0.1	0.5
	19	10/4/00	13:48	0.1	0.5
	20	10/4/00	14:03	0.1	0.5
	21	10/4/00	14:18	0.1	0.5
	22	10/4/00	14:33	0.1	0.5
	23	10/4/00	14:48	0.1	0.5
	24	10/4/00	15:03	0.1	0.5
	25	10/4/00	15:18	0.2	0.5
	26	10/4/00	15:33	0.1	0.5
	27	10/4/00	15:48	0.1	0.5
	28	10/4/00	16:03	0.1	0.6
	29	10/4/00	16:18	0.1	0.6
14	1	10/4/00	17:14	0.0	0.4
	2	10/4/00	17:29	0.0	0.4
	3	10/4/00	17:44	0.0	0.4
	4	10/4/00	17:59 •	0.0	0.3
	5	10/4/00	18:14	0.0	0.4
	6	10/4/00	18:29	0.0	0.4
	7	10/4/00	18:44	0.0	0.3
	8	10/4/00	18:59	0.0	0.3
	9	10/4/00	19:14	0.0	0.2
	10	10/4/00	19:29	0.0	0.3
	11	10/4/00	19:44	0.0	0.3
	12	10/4/00	19:59	0.0	0.2
	13	10/4/00	20:14	0.0	0.2
	14	10/4/00	20:29	0.0	0.2
	15	10/4/00	20:44	0.0	0.2
	16	10/4/00	20:59	0.0	0.2
	17	10/4/00	21:14	0.0	0.2
	18	10/4/00	21:29	0.0	0.2
	19	10/4/00	21:44	0.0	0.2
	20	10/4/00	21:59	0.0	0.1
	21	10/4/00	22:14	0.0	0.1
	22	10/4/00	22:29	0.0	0.1
	23	10/4/00	22:44	0.0	0.2
	24	10/4/00	22:59	0.0	0.1
	25	10/4/00	23:14	0.0	0.1
	26	10/4/00	23:29	0.0	0.1
	27	10/4/00	23:44	0.0	0.2
	28	10/4/00	23:59	0.0	0.1
	29	10/5/00	0:14	0.0	0.1
	30	10/5/00	0:29	0.0	0.1
	31	10/5/00	0:44	0.0	0.1
	32	10/5/00	0:59	0.0	0.2
	33	10/5/00	1:14	0.0	0.1
	34	10/5/00	1:29	0.0	0.2
	35	10/5/00	1:44	0.0	0.1

	DATA COLLECTION POINT	DATE	TIME	AVERAGE CONCENTRATION	MAXIMUM CONCENTRATION
	36	10/5/00	1:59	0.0	0.1
	37	10/5/00	2:14	0.0	0.2
	38	10/5/00	2:29	0.0	0.1
	39	10/5/00	2:44	0.0	0.2
	40	10/5/00	2:59	0.0	0.2
	41	10/5/00	3:14	0.0	0.2
	42	10/5/00	3:29	0.0	0.1
	43	10/5/00	3:44	0.0	0.1
	44	10/5/00	3:59	0.0	0.1
	45	10/5/00	4:14	0.0	0.1
	46	10/5/00	4:29	0.0	0.2
	47	10/5/00	4:44	0.0	0.3
	48	10/5/00	4:59	0.0	0.2
	49	10/5/00	5:14	0.0	0.2
	50	10/5/00	5:29	0.0	0.3
	51	10/5/00	5:44	0.0	0.3
	52	10/5/00	5:59	0.0	0.3
	53	10/5/00	6:14	0.0	0.2
	54	10/5/00	6:29	0.0	0.2
	55	10/5/00	6:44	0.0	0.1
	56	10/5/00	6:59	0.0	0.1
	57	10/5/00	7:14	0.0	0.0
	58	10/5/00	7:29	0.0	0.0
	59	10/5/00	7:44	0.0	0.0
	60	10/5/00	7:59	0.0	0.0
	61	10/5/00	8:14	0.0	0.0
	62	10/5/00	8:29	0.0	0.0
	63	10/5/00	8:44	0.0	0.1
	64	10/5/00	8:59	0.0	0.1
	65	10/5/00	9:14	0.0	0.0
	66	10/5/00	9:29	0.0	0.1
	67	10/5/00	9:44	0.0	0.1
	68	10/5/00	9:59	0.0	0.1
	69	10/5/00	10:14	0.0	0.0
	70	10/5/00	10:29	0.0	0.1
	71	10/5/00	10:44	0.0	0.0
	72	10/5/00	10:59	0.0	0.0
	73	10/5/00	11:14	0.0	0.1
	74	10/5/00	11:29	0.0	0.0
	75	10/5/00	11:44	0.0	0.1
	76	10/5/00	11:59	0.0	0.1
	77	10/5/00	12:14	0.0	0.1
	78	10/5/00	12:29	0.0	0.1
	79	10/5/00	12:44	0.0	0.1
	80	10/5/00	12:59	0.0	0.1
	81	10/5/00	13:14	0.0	0.0
15	1	10/5/00	14:02	0.0	0.2

	DATA COLLECTION POINT	DATE	TIME	AVERAGE CONCENTRATION	MAXIMUM CONCENTRATION
	2	10/5/00	14:17	0.0	0.2
	3	10/5/00	14:32	0.0	0.2
	4	10/5/00	14:47	0.0	0.2
	5	10/5/00	15:02	0.0	0.2
	6	10/5/00	15:17	0.0	0.2
	7	10/5/00	15:32	0.0	0.2
	8	10/5/00	15:47	0.0	0.2
	9	10/5/00	16:02	0.0	0.2
	10	10/5/00	16:17	0.0	0.2
	11	10/5/00	16:32	0.0	0.2
	12	10/5/00	16:47	0.0	0.2
	13	10/5/00	17:02	0.0	0.2
	14	10/5/00	17:17	0.0	0.2
	15	10/5/00	17:32	0.0	0.2
	16	10/5/00	17:47	0.0	0.3
	17	10/5/00	18:02	0.0	0.2
	18	10/5/00	18:17	0.0	0.3
	19	10/5/00	18:32	0.0	0.2
	20	10/5/00	18:47	0.0	0.3
	21	10/5/00	19:02	0.0	0.2
	22	10/5/00	19:17	0.0	0.3
	23	10/5/00	19:32	0.0	0.3
	24	10/5/00	19:47	0.0	0.3
	25	10/5/00	20:02	0.0	0.3
	26	10/5/00	20:17	0.0	0.3
	27	10/5/00	20:32	0.0	0.2
	28	10/5/00	20:47	0.0	0.3
	29	10/5/00	21:02	0.0	0.2
	30	10/5/00	21:17	0.0	0.2
	31	10/5/00	21:32	0.0	0.3
	32	10/5/00	21:47	0.0	0.2
	33	10/5/00	22:02	0.0	0.2
	34	10/5/00	22:17	0.0	0.2
	35	10/5/00	22:32	0.0	0.1
	36	10/5/00	22:47	0.0	0.2
	37	10/5/00	23:02	0.0	0.2
	38	10/5/00	23:17	0.0	0.2
	39	10/5/00	23:32	0.0	0.2
	40	10/5/00	23:47	0.0	0.2
	41	10/6/00	0:02	0.0	0.2
	42	10/6/00	0:17	0.0	0.2
	43	10/6/00	0:32	0.0	0.2
	44	10/6/00	0:47	0.0	0.2
	45	10/6/00	1:02	0.0	0.1
	46	10/6/00	1:17	0.0	0.2
	47	10/6/00	1:32	0.0	0.3
	48	10/6/00	- 1:47	0.0	0.2

	DATA COLLECTION POINT	DATE	TIME	AVERAGE CONCENTRATION	MAXIMUM CONCENTRATION
	49	10/6/00	2:02	0.0	0.2
	50	10/6/00	2:17	0.0	0.2
	51	10/6/00	2:32	0.0	0.2
	52	10/6/00	2:47	0.0	0.2
	53	10/6/00	3:02	0.0	0.2
	54	10/6/00	3:17	0.0	0.1
	55	10/6/00	3:32	0.0	0.2
	56	10/6/00	3:47	0.0	0.1
	57	10/6/00	4:02	0.0	0.2
	58	10/6/00	4:17	0.0	0.2
	59	10/6/00	4:32	0.0	0.1
	60	10/6/00	4:47	0.0	0.2
	61	10/6/00	5:02	0.0	0.2
	62	10/6/00	5:17	0.0	0.3
	63	10/6/00	5:32	0.0	0.2
	64	10/6/00	5:47	0.0	0.2
	65	10/6/00	6:02	0.0	0.3
	66	10/6/00	6:17	0.0	0.1
	67	10/6/00	6:32	0.0	0.3
	68	10/6/00	6:47	0.0	0.2
	69	10/6/00	7:02	0.0	0.2
	70	10/6/00	7:17	0.0	0.1
	71	10/6/00	7:32	0.0	0.1
	72	10/6/00	7:47	0.0	0.1
	73	10/6/00	8:02	0.0	0.2
	74	10/6/00	8:17	0.0	0.1
	75	10/6/00	8:32	0.0	0.1
	76	10/6/00	8:47	0.0	0.1
	77	10/6/00	9:02	0.0	0.2
	78	10/6/00	9:17	0.0	0.1
	79	10/6/00	9:32	0.0	0.2
	80	10/6/00	9:47	0.0	0.1
	81	10/6/00	10:02	0.0	0.1
	82	10/6/00	10:17	0.0	0.2
	83	10/6/00	10:32	0.0	0.3
	84	10/6/00	10:47	0.0	0.2
	85	10/6/00	11:02	0.0	0.3
	86	10/6/00	11:17	0.0	0.2
	87	10/6/00	11:32	0.0	0.2
16	1	10/6/00	12:23	0.1	0.5
	2	10/6/00	12:38	0.1	0.5
	3	10/6/00	12:53	0.1	0.5
	4	10/6/00	13:08	0.1	0.5
	5	10/6/00	13:23	0.1	0.6
	6	10/6/00	13:38	0.1	0.5
	7	10/6/00	13:53	0.1	0.5
	8	10/6/00	14:08	0.1	0.5

	DATA COLLECTION POINT	DATE	TIME	AVERAGE CONCENTRATION	MAXIMUM CONCENTRATION
	9	10/6/00	14:23	0.1	0.5
	10	10/6/00	14:38	0.1	0.5
	11	10/6/00	14:53	0.1	0.4
	12	10/6/00	15:08	0.1	0.5
	13	10/6/00	15:23	0.1	0.5
	14	10/6/00	15:38	0.1	0.5
	15	10/6/00	15:53	0.1	0.6
	16	10/6/00	16:08	0.2	0.6
	17	10/6/00	16:23	0.2	0.6
	18	10/6/00	16:38	0.2	0.6
	19	10/6/00	16:53	0.2	0.6
	20	10/6/00	17:08	0.2	0.6
	21	10/6/00	17:23	0.2	0.6
	22	10/6/00	17:38	0.2	0.6
	23	10/6/00	17:53	0.2	0.6
	24	10/6/00	18:08	0.2	0.6
	25	10/6/00	18:23	0.2	0.6
	26	10/6/00	18:38	0.2	0.7
	27	10/6/00	18:53	0.2	0.6
	28	10/6/00	19:08	0.2	0.6
	29	10/6/00	19:23	0.2	0.6
	30	10/6/00	19:38	0.2	0.6
	31	10/6/00	19:53	0.2	0.6
	32	10/6/00	20:08	0.2	0.7
	33	10/6/00	20:23	0.2	0.6
	34	10/6/00	20:38	0.2	0.6
	35	10/6/00	20:53	0.2	0.6
	36	10/6/00	21:08	0.2	0.5
	37	10/6/00	21:23	0.2	0.6
	38	10/6/00	21:38	0.2	0.6
	39	10/6/00	21:53	0.2	0.6
	40	10/6/00	22:08	0.2	0.6
	41	10/6/00	22:23	0.2	0.5
	42	10/6/00	22:38	0.1	0.6
	43	10/6/00	22:53	0.1	0.5
	44	10/6/00	23:08	0.1	0.6
	45	10/6/00	23:23	0.1	0.5
	46	10/6/00	23:38	0.1	0.5
	47	10/6/00	23:53	0.1	0.5
	48	10/7/00	0:08	0.1	0.5
	49	10/7/00	0:23	0.1	0.5
	50	10/7/00	0:38	0.1	0.5
	51	10/7/00	0:53	0.1	0.5
	52	10/7/00	1:08	0.1	0.4
	53	10/7/00	1:23	0.1	0.5
	54	10/7/00	1:38	0.1	0.5
	55	10/7/00	1:53	0.1	0.5

	DATA COLLECTION POINT	DATE	TIME	AVERAGE CONCENTRATION	MAXIMUM CONCENTRATION
	56	10/7/00	2:08	0.1	0.5
	57	10/7/00	2:23	0.1	0.5
	58	10/7/00	2:38	0.1	0.5
	59	10/7/00	2:53	0.1	0.5
	60	10/7/00	3:0B	0.1	0.5
	61	10/7/00	3:23	0.1	0.5
	62	10/7/00	3:38	0.1	0.4
	63	10/7/00	3:53	0.1	0.4
	64	10/7/00	4:08	0.1	0.4
	65	10/7/00	4:23	0.1	0.5
	66	10/7/00	4:38	0.1	0.5
	67	10/7/00	4:53	0.1	0.4
	68	10/7/00	5:08	0.1	0.4
	69	10/7/00	5:23	0.1	0.4
	70	10/7/00	5:38	0.1	0.4
	71	10/7/00	5:53	0.1	0.4
	72	10/7/00	6:08	0.1	0.5
	73	10/7/00	6:23	0.1	0.5
	74	10/7/00	6:38	0.1	0.5
	75	10/7/00	6:53	0.1	0.4
	76	10/7/00	7:08	0.1	0.5
	77	10/7/00	7:23	0.1	0.4
	78	10/7/00	7:38	0.1	0.4
	79	10/7/00	7:53	0.1	0.4
	80	10/7/00	8:08	0.1	0.5
	81	10/7/00	8:23	0.1	0.4
	82	10/7/00	8:38	0.1	0.4
	83	10/7/00	8:53	0.1	0.4
	84	10/7/00	9:08	0.1	0.5
	85	10/7/00	9:23	0.1	0.4
	86	10/7/00	9:38	0.1	0.4
	87	10/7/00	9:53	0.1	0.4
	88	10/7/00	10:08	0.1	0.4
	89	10/7/00	10:23	0.1	0.4
	90	10/7/00	10:38	0.1	0.4
	91	10/7/00	10:53	0.1	0.4
	92	10/7/00	11:08	0.1	0.5
	93	10/7/00	11:23	0.1	0.4
	94	10/7/00	11:38	0.1	0.5
	95	10/7/00	11:53	0.1	0.5
	96	10/7/00	12:08	0.1	0.4
	97	10/7/00	12:23	0.1	0.4
	98	10/7/00	12:38	0.1	0.5
	99	10/7/00	12:53	0.1	0.5
	100	10/7/00	13:08	0.1	0.4
	101	10/7/00	13:23	0.1	0.4
	102	10/7/00	13:38	0.1	0.5

	DATA COLLECTION POINT	DATE	TIME	AVERAGE CONCENTRATION	MAXIMUM CONCENTRATION
	103	10/7/00	13:53	0.1	0.4
	104	10/7/00	14:08	0.1	0.5
	105	10/7/00	14:23	0.1	0.4
	106	10/7/00	14:38	0.1	0.4
17	1	10/7/00	15:20	0.0	0.4
	2	10/7/00	15:35	0.0	0.4
	3	10/7/00	15:50	0.0	0.4
	4	10/7/00	16:05	0.0	0.4
	5	10/7/00	16:20	0.0	0.4
	6	10/7/00	16:35	0.0	0.4
	7	10/7/00	16:50	0.0	0.3
	8	10/7/00	17:05	0.0	0.3
	9	10/7/00	17:20	0.0	0.3
	10	10/7/00	17:35	0.0	0.4
	11	10/7/00	17:50	0.0	0.4
	12	10/7/00	18:05	0.0	0.4
	13	10/7/00	18:20	0.0	0.4
	14	10/7/00	18:35	0.0	0.4
	15	10/7/00	18:50	0.0	0.3
	16	10/7/00	19:05	0.0	0.4
	17	10/7/00	19:20	0.0	0.4
	18	10/7/00	19:35	0.0	0.3
	19	10/7/00	19:50	0.0	0.4
	20	10/7/00	20:05	0.0	0.4
	21	10/7/00	20:20	0.0	0.4
	22	10/7/00	20:35	0.0	0.4
	23	10/7/00	20:50	0.0	0.3
	24	10/7/00	21:05	0.0	0.3
	25	10/7/00	21:20	0.0	0.3
	26	10/7/00	21:35	0.0	0.3
	27	10/7/00	21:50	0.0	0.3
	28	10/7/00	22:05	0.0	0.3
	29	10/7/00	22:20	0.0	0.3
	30	10/7/00	22:35	0.0	0.2
	31	10/7/00	22:50	0.0	0.3
	32	10/7/00	23:05	0.0	0.2
	33	10/7/00	23:20	0.0	0.3
	34	10/7/00	23:35	0.0	0.4
	35	10/7/00	23:50	0.0	0.3
	36	10/8/00	0:05	0.0	0.3
	37	10/8/00	0:20	0.0	0.2
	38	10/8/00	0:35	0.0	0.2
	39	10/8/00	0:50	0.0	0.3
	40	10/8/00	1:05	0.0	0.3
	41	10/8/00	1:20	0.0	0.4
	42	10/8/00	1:35	0.0	0.2
	43	10/8/00	1:50	0.0	0.3

	DATA COLLECTION POINT	DATE	TIME	AVERAGE CONCENTRATION	MAXIMUM CONCENTRATION
	44	10/8/00	2:05	0.0	0.2
	45	10/8/00	2:20	0.0	0.2
	46	10/8/00	2:35	0.0	0.3
	47	10/8/00	2:50	0.0	0.3
	48	10/8/00	3:05	0.0	0.2
	49	10/8/00	3:20	0.0	0.3
	50	10/8/00	3:35	0.0	0.3
	51	10/8/00	3:50	0.0	0.2
	52	10/8/00	4:05	0.0	0.2
	53	10/8/00	4:20	0.0	0.2
	54	10/8/00	4:35	0.0	0.2
	55	10/8/00	4:50	0.0	0.2
	56	10/8/00	5:05	0.0	0.2
	57	10/8/00	5:20	0.0	0.3
	58	10/8/00	5:35	0.0	0.2
	59	10/8/00	5:50	0.0	0.3
	60	10/8/00	6:05	0.0	0.3
	61	10/8/00	6:20	0.0	0.2
	62	10/8/00	6:35	0.0	0.2
	63	10/8/00	6:50	0.0	0.2
	64	10/8/00	7:05	0.0	0.3
	65	10/8/00	7:20	0.0	0.3
	66	10/8/00	7:35	0.0	0.3
	67	10/8/00	7:50	0.0	0.2
	68	10/8/00	8:05	0.0	0.2
	69	10/8/00	8:20	0.0	0.3
	70	10/8/00	8:35	0.0	0.2
	71	10/8/00	8:50	0.0	0.3
	72	10/8/00	9:05	0.0	0.3
	73	10/8/00	9:20	0.0	0.2
	74	10/8/00	9:35	0.0	0.2
	75	10/8/00	9:50	0.0	0.2
	76	10/8/00	10:05	0.0	0.2
	77	10/8/00	10:20	0.0	0.2
	78	10/8/00	10:35	0.0	0.2
	79	10/8/00	10:50	0.0	0.2
	80	10/8/00	11:05	0.0	0.3
	81	10/8/00	11:20	0.0	0.2
18	1	10/8/00	12:04	0.0	0.3
	2	10/8/00	12:19	0.0	0.3
	3	10/8/00	12:34	0.0	0.3
	4	10/8/00	12:49	0.0	0.3
	5	10/8/00	13:04	0.0	0.3
	6	10/8/00	13:19	0.0	0.3
	7	10/8/00	13:34	0.0	0.4
	8	10/8/00	13:49	0.0	0.3
	9	10/8/00	14:04	0.0	0.3

	DATA COLLECTION POINT	DATE	TIME	AVERAGE CONCENTRATION	MAXIMUM CONCENTRATION
	10	10/8/00	14:19	0.0	0.3
	11	10/8/00	14:34	0.0	0.3
	12	10/8/00	14:49	0.0	0.3
	13	10/8/00	15:04	0.0	0.3
	14	10/8/00	15:19	0.0	0.3
	15	10/8/00	15:34	0.0	0.4
	16	10/8/00	15:49	0.0	0.3
	17	10/8/00	16:04	0.0	0.4
	18	10/8/00	16:19	0.0	0.4
	19	10/8/00	16:34	0.0	0.3
	20	10/8/00	16:49	0.0	0.3
	21	10/8/00	17:04	0.0	0.3
	22	10/8/00	17:19	0.0	0.3
	23	10/8/00	17:34	0.0	0.4
	24	10/8/00	17:49	0.0	0.5
	25	10/8/00	18:04	0.0	0.3
	26	10/8/00	18:19	0.0	0.3
	27	10/8/00	18:34	0.0	0.3
	28	10/8/00	18:49	0.0	0.3
	29	10/8/00	19:04	0.0	0.3
	30	10/8/00	19:19	0.0	0.3
	31	10/8/00	19:34	0.0	0.3
	32	10/8/00	19:49	0.0	0.3
	33	10/8/00	20:04	0.0	0.3
	34	10/8/00	20:19	0.0	0.3
	35	10/8/00	20:34	0.0	0.4
	36	10/8/00	20:49	0.0	0.2
	37	10/8/00	21:04	0.0	0.3
	38	10/8/00	21:19	0.0	0.3
	39	10/8/00	21:34	0.0	0.3
	40	10/8/00	21:49	0.0	0.3
	41	10/8/00	22:04	0.0	0.3
	42	10/8/00	22:19	0.0	0.3
	43	10/8/00	22:34	0.0	0.3
	44	10/8/00	22:49	0.0	0.3
	45	10/8/00	23:04	0.0	0.3
	46	10/8/00	23:19	0.0	0.3
	47	10/8/00	23:34	0.0	0.3
	48	10/8/00	23:49	0.0	0.2
	49	10/9/00	0:04	0.0	0.3
	50	10/9/00	0:19	0.0	0.3
	51	10/9/00	0:34	0.0	0.3
	52	10/9/00	0:49	0.0	0.2
	53	10/9/00	1:04	0.0	0.3
	54	10/9/00	1:19	0.0	0.3
	55	10/9/00	1:34	0.0	0.2
	56	10/9/00	"1:49	0.0	0.2

	DATA COLLECTION POINT	DATE	TIME	AVERAGE CONCENTRATION	MAXIMUM CONCENTRATION
	57	10/9/00	2:04	0.0	0.3
	58	10/9/00	2:19	0.0	0.2
	59	10/9/00	2:34	0.0	0.4
	60	10/9/00	2:49	0.0	0.3
	61	10/9/00	3:04	0.0	0.3
	62	10/9/00	3:19	0.0	0.4
	63	10/9/00	3:34	0.0	0.3
	64	10/9/00	3:49	0.0	0.5
	65	10/9/00	4:04	0.0	0.3
	66	10/9/00	4:19	0.0	0.3
	67	10/9/00	4:34	0.0	0.3
	68	10/9/00	4:49	0.0	0.3
	69	10/9/00	5:04	0.0	0.3
	70	10/9/00	5:19	0.0	0.3
	71	10/9/00	5:34	0.0	0.3
	72	10/9/00	5:49	0.0	0.3
	73	10/9/00	6:04	0.0	0.3
	74	10/9/00	6:19	0.0	0.3
	75	10/9/00	6:34	0.0	0.3
	76	10/9/00	6:49	0.1	0.4
	77	10/9/00	7:04	0.1	0.4
	78	10/9/00	7:19	0.0	0.4
	79	10/9/00	7:34	0.0	0.4
	80	10/9/00	7:49	0.1	0.4
	81	10/9/00	8:04	0.2	0.5
	82	10/9/00	8:19	0.2	0.6
	83	10/9/00	8:34	0.2	0.6
	84	10/9/00	8:49	0.2	0.5
	85	10/9/00	9:04	0.1	0.4
	86	10/9/00	9:19	0.1	0.4
	87	10/9/00	9:34	0.1	0.4
	88	10/9/00	9:49	0.1	0.4
	89	10/9/00	10:04	0.1	0.4
	90	10/9/00	10:19	0.1	0.4
	91	10/9/00	10:34	0.1	0.4
	92	10/9/00	10:49	0.1	0.4
	93	10/9/00	11:04	0.1	0.3
	94	10/9/00	11:19	0.0	0.4
	95	10/9/00	11:34	0.0	0.4
	96	10/9/00	11:49	0.0	0.3
	97	10/9/00	12:04	0.0	0.3
	98	10/9/00	12:19	0.0	0.3
19	1	10/9/00	13:14	0.0	0.3
	2	10/9/00	13:29	0.0	0.3
	3	10/9/00	13:44	0.0	0.3
	4	10/9/00	13:59	0.0	0.4
	5	10/9/00	14:14	0.0	0.3

	DATA COLLECTION POINT	DATE	TIME	AVERAGE CONCENTRATION	MAXIMUM CONCENTRATION
	6	10/9/00	14:29	0.0	0.4
	7	10/9/00	14:44	0.0	0.4
	8	10/9/00	14:59	0.1	0.4
	9	10/9/00	15:14	0.1	0.5
	10	10/9/00	15:29	0.1	0.4
	11	10/9/00	15:44	0.1	0.4
	12	10/9/00	15:59	0.0	0.4
	13	10/9/00	16:14	0.1	0.4
	14	10/9/00	16:29	0.1	0.4
	15	10/9/00	16:44	0.1	0.4
	16	10/9/00	16:59	0.1	0.4
	17	10/9/00	17:14	0.1	0.5
	18	10/9/00	17:29	0.1	0.4
	19	10/9/00	17:44	0.1	0.4
	20	10/9/00	17:59	0.1	0.4
	21	10/9/00	18:14	0.1	0.4
	22	10/9/00	18:29	0.1	0.4
	23	10/9/00	18:44	0.0	0.3
	24	10/9/00	18:59	0.0	0.4
	25	10/9/00	19:14	0.0	0.4
	26	10/9/00	19:29	0.0	0.3
	27	10/9/00	19:44	0.0	0.3
	28	10/9/00	19:59	0.0	0.4
	29	10/9/00	20:14	0.0	0.3
	30	10/9/00	20:29	0.0	0.3
	31	10/9/00	20:44	0.0	0.3
	32	10/9/00	20:59	0.0	0.3
	33	10/9/00	21:14	0.0	0.3
	34	10/9/00	21:29	0.0	0.3
	35	10/9/00	21:44	0.0	0.3
	36	10/9/00	21:59	0.0	0.3
	37	10/9/00	22:14	0.0	0.3
	38	10/9/00	22:29	0.0	0.3
	39	10/9/00	22:44	0.0	0.3
	40	10/9/00	22:59	0.0	0.4
	41	10/9/00	23:14	0.0	0.3
	42	10/9/00	23:29	0.0	0.3
	43	10/9/00	23:44	0.0	0.3
	44	10/9/00	23:59	0.1	0.4
	45	10/10/00	0:14	0.1	0.4
	46	10/10/00	0:29	0.1	0.4
	47	10/10/00	0:44	0.1	0.4
	48	10/10/00	0:59	0.1	0.4
	49	10/10/00	1:14	0.0	0.3
	50	10/10/00	1:29	0.0	0.3
	51	10/10/00	1:44	0.0	0.4
	52	10/10/00	1:59	0.0	0.3

	DATA COLLECTION POINT	DATE	TIME	AVERAGE CONCENTRATION	MAXIMUM CONCENTRATION
	53	10/10/00	2:14	0.0	0.4
	54	10/10/00	2:29	0.0	0.3
	55	10/10/00	2:44	0.0	0.4
	56	10/10/00	2:59	0.0	0.3
	57	10/10/00	3:14	0.0	0.3
	58	10/10/00	3:29	0.0	0.3
	59	10/10/00	3:44	0.0	0.3
	60	10/10/00	3:59	0.0	0.3
	61	10/10/00	4:14	0.0	0.3
	62	10/10/00	4:29	0.0	0.3
	63	10/10/00	4:44	0.0	0.3
	64	10/10/00	4:59	0.0	0.4
	65	10/10/00	5:14	0.0	0.3
	66	10/10/00	5:29	0.0	0.3
	67	10/10/00	5:44	0.0	0.3
	68	10/10/00	5:59	0.0	0.3
	69	10/10/00	6:14	0.0	0.3
	70	10/10/00	6:29	0.0	0.3
	71	10/10/00	6:44	0.0	0.3
	72	10/10/00	6:59	0.0	0.3
	73	10/10/00	7:14	0.0	0.3
	74	10/10/00	7:29	0.0	0.3
	75	10/10/00	7:44	0.0	0.3
	76	10/10/00	7:59	0.0	0.3
	77	10/10/00	8:14	0.0	0.3
	78	10/10/00	8:29	0.0	0.3
	79	10/10/00	8:44	0.0	0.3
	80	10/10/00	8:59	0.0	0.3
	81	10/10/00	9:14	0.0	0.3
	82	10/10/00	9:29	0.0	0.3
	83	10/10/00	9:44	0.0	0.3
	84	10/10/00	9:59	0.0	0.3
	85	10/10/00	10:14	0.0	0.3
	86	10/10/00	10:29	0.0	0.3
	87	10/10/00	10:44	0.0	0.3
	88	10/10/00	10:59	0.0	0.3
	89	10/10/00	11:14	0.0	0.3
	90	10/10/00	11:29	0.0	0.3
20	1	10/10/00	12:21	0.0	0.3
	2	10/10/00	12:36	0.0	0.3
	3	10/10/00	12:51	0.0	0.3
	4	10/10/00	13:06	0.0	0.3
	5	10/10/00	13:21	0.0	0.3
	6	10/10/00	13:36	0.0	0.3
	7	10/10/00	13:51	0.0	0.3
	8	10/10/00	14:06	0.0	0.4
	9	10/10/00	14:21	0.0	0.3

	DATA COLLECTION POINT	DATE	TIME	AVERAGE CONCENTRATION	MAXIMUM CONCENTRATION
	10	10/10/00	14:36	0.0	0.3
	11	10/10/00	14:51	0.0	0.3
	12	10/10/00	15:06	0.0	0.3
	13	10/10/00	15:21	0.0	0.3
	14	10/10/00	15:36	0.0	0.3
	15	10/10/00	15:51	0.0	0.3
	16	10/10/00	16:06	0.0	0.4
	17	10/10/00	16:21	0.0	0.3
	18	10/10/00	16:36	0.0	0.4
	19	10/10/00	16:51	0.0	0.4
	20	10/10/00	17:06	0.0	0.4
	21	10/10/00	17:21	0.0	0.4
	22	10/10/00	17:36	0.0	0.3
	23	10/10/00	17:51	0.0	0.4
	24	10/10/00	18:06	0.0	0.3
	25	10/10/00	18:21	0.0	0.3
	26	10/10/00	18:36	0.0	0.3
	27	10/10/00	18:51	0.0	0.4
	28	10/10/00	19:06	0.0	0.4
	29	10/10/00	19:21	0.0	0.3
	30	10/10/00	19:36	0.0	0.3
	31	10/10/00	19:51	0.0	0.4
	32	10/10/00	20:06	0.0	0.4
	33	10/10/00	20:21	0.0	0.4
	34	10/10/00	20:36	0.0	0.3
	35	10/10/00	20:51	0.0	0.4
	36	10/10/00	21:06	0.0	0.3
	37	10/10/00	21:21	0.0	0.3
	38	10/10/00	21:36	0.0	0.3
	39	10/10/00	21:51	0.0	0.4
	40	10/10/00	22:06	0.0	0.5
	41	10/10/00	22:21	0.0	0.5
	42	10/10/00	22:36	0.0	0.4
	43	10/10/00	22:51	0.0	0.3
	44	10/10/00	23:06	0.0	0.3
	45	10/10/00	23:21	0.0	0.3
	46	10/10/00	23:36	0.0	0.3
	47	10/10/00	23:51	0.0	0.4
	48	10/11/00	0:06	0.0	0.3
	49	10/11/00	0:21	0.0	0.4
	50	10/11/00	0:36	0.0	0.3
	51	10/11/00	0:51	0.0	0.3
	52	10/11/00	1:06	0.0	0.3
	53	10/11/00	1:21	0.0	0.3
	54	10/11/00	1:36	0.0	0.2
	55	10/11/00	1:51	0.0	0.3
	56	10/11/00	2:06	0.0	0.2

	DATA COLLECTION POINT	DATE	TIME	AVERAGE CONCENTRATION	MAXIMUM CONCENTRATION
	57	1 on 1/00	2:21	0.0	0.4
	58	10/11/00	2:36	0.0	0.3
	59	10/11/00	2:51	0.0	0.3
	60	10/11/00	3:06	0.0	0.3
	61	10/11/00	3:21	0.0	0.3
	62	10/11/00	3:36	0.0	0.4
	63	10/11/00	3:51	0.0	0.4
	64	10/11/00	4:06	0.0	0.3
	65	10/11/00	4:21	0.0	0.3
	66	10/11/00	4:36	0.0	0.4
	67	10/11/00	4:51	0.0	0.3
	68	10/11/00	5:06	0.0	0.5
	69	10/11/00	5:21	0.0	0.4
	70	10/11/00	5:36	0.0	0.3
	71	10/11/00	5:51	0.0	0.4
	72	10/11/00	6:06	0.1	0.5
	73	10/11/00	6:21	0.0	0.4
	74	10/11/00	6:36	0.1	0.4
	75	10/11/00	6:51	0.1	0.4
	76	10/11/00	7:06	0.1	0.4
	77	10/11/00	7:21	0.1	0.4
	78	10/11/00	7:36	0.1	0.4
	79	10/11/00	7:51	0.1	0.4
	80	10/11/00	8:06	0.1	0.4
	81	10/11/00	8:21	0.1	0.4
	82	10/11/00	8:36	0.0	0.3
	83	10/11/00	8:51	0.0	0.4
	84	10/11/00	9:06	0.1	0.4
	85	10/11/00	9:21	0.1	0.5
	86	10/11/00	9:36	0.0	0.4
	87	10/11/00	9:51	0.0	0.4
	88	10/11/00	10:06	0.0	0.3
	89	10/11/00	10:21	0.0	0.4
	90	10/11/00	10:36	0.0	0.3
	91	10/11/00	10:51	0.0	0.3
	92	10/11/00	11:06	0.0	0.3
	93	10/11/00	11:21	0.0	0.3
	94	10/11/00	11:36	0.0	0.3
	95	10/11/00	11:51	0.0	0.3
	96	10/11/00	12:06	0.0	0.3
	97	10/11/00	12:21	0.0	0.3
21	1	10/11/00	13:03	0.0	0.3
	2	10/11/00	13:18	0.0	0.2
	3	10/11/00	13:33	0.0	0.3
	4	10/11/00	13:48	0.0	0.3
	5	10/11/00	14:03	0.0	0.3
	6	10/11/00	14:18	0.0	0.3

	DATA COLLECTION POINT	DATE	TIME	AVERAGE CONCENTRATION	MAXIMUM CONCENTRATION
	7	10/11/00	14:33	0.0	0.3
	8	10/11/00	14:48	0.0	0.3
	9	10/11/00	15:03	**OO**	0.4
	10	10/11/00	15:18	**OO**	0.4
	11	10/11/00	15:33	0.1	0.4
	12	10/11/00	15:48	0.1	0.4
	13	10/11/00	16:03	0.1	0.5
	14	10/11/00	16:18	0.2	0.5
	15	10/11/00	16:33	0.2	0 7
	16	10/11/00	16:48	0.2	0.6
	17	10/11/00	17:03	0.2	0.5
	18	10/11/00	17:18	0.2	0.8
	19	10/11/00	17:33	0.2	0 7
	20	10/11/00	17:48	0.2	0.5
	21	10/11/00	18:03	0.2	0.6
	22	10/11/00	18:18	0.2	0 6
	23	10/11/00	18:33	0.1	0.5
	24	10/11/00	18:48	0.1	0.5
	25	10/11/00	19:03	0.1	0.4
	26	10/11/00	19:18	0.1	0.4
	27	10/11/00	19:33	0.0	0.4
	28	10/11/00	19:48	**OO**	0.4
	29	10/11/00	20:03	**0.0**	0.4
	30	10/11/00	20:18	**0.0**	0.3
	31	10/11/00	20:33	**0.0**	0.3
	32	10/11/00	20:48	**0.0**	0.2
	33	10/11/00	21:03	**0.0**	0.3
	34	10/11/00	21:18	**OO**	0 3
	35	10/11/00	21:33	0.0	0.3
	36	10/11/00	21:48	**OO**	0.3
	37	10/11/00	22:03	0.0	0 3
	38	10/11/00	22:18	0.0	0.3
	39	10/11/00	22:33	0.0	0.2
	40	10/11/00	22:48	0.0	0.3
	41	10/11/00	23:03	**OO**	0.2
	42	10/11/00	23:18	**OO**	0.2
	43	10/11/00	23:33	0.0	0 2
	44	10/11/00	23:48	**OO**	0 2
	45	10/12/00	**0:03**	**OO**	0.2
	46	10/12/00	0:18	**OO**	0.2
	47	10/12/00	0:33	0.0	0 2
	48	10/12/00	0:48	0.0	0 2
	49	10/12/00	*1:03	0.0	0 2
	50	10/12/00	1:18	**OO**	0.2
	51	10/12/00	1:33	**OO**	0.2
	52	10/12/00	, 1:48	.0.0	0 2
	53	10/12/00	2:03	0.0	0 2

	DATA COLLECTION POINT	DATE	TIME	AVERAGE CONCENTRATION	MAXIMUM CONCENTRATION
	54	10/12/00	2:18	0.0	0.2
	55	10/12/00	2:33	0.0	0.1
	56	10/12/00	2:48	0.0	0.2
	57	10/12/00	3:03	0.0	0.2
	58	10/12/00	3:18	0.0	0.2
	59	10/12/00	3:33	0.0	0.2
	60	10/12/00	3:48	0.0	0.2
	61	10/12/00	4:03	0.0	0.2
	62	10/12/00	4:18	0.0	0.2
	63	10/12/00	4:33	0.0	0.2
	64	10/12/00	4:48	0.0	0.2
	65	10/12/00	5:03	0.0	0.2
	66	10/12/00	5:18	0.0	0.2
	67	10/12/00	5:33	0.0	0.2
	68	10/12/00	5:48	0.0	0.2
	69	10/12/00	6:03	0.0	0.3
	70	10/12/00	6:18	0.0	0.2
	71	10/12/00	6:33	0.0	0.1
	72	10/12/00	6:48	0.0	0.1
	73	10/12/00	7:03	0.0	0.2
	74	10/12/00	7:18	0.0	0.2
	75	10/12/00	7:33	0.0	0.1
	76	10/12/00	7:48	0.0	0.2
	77	10/12/00	8:03	0.0	0.2
	78	10/12/00	8:18	0.0	0.1
	79	10/12/00	8:33	0.0	0.2
	80	10/12/00	8:48	0.0	0.2

AVERAGE»	**0.1**	**0.4**
STANDARD DEVIATION •=	**0.1**	**0.4**

Attachment 10

Unit #11 Calibration Data

```
Calibration Log for Unit #11

      Instrument: MiniRAE 2000 (PGM7600)              Serial Number: 002843
      User ID: 00000001       Site ID: 00000012
      Gas Name: Isobutylene

    1 Data Points: 19         Sample Period: 900 sec
      Last Calibration Time: 09/28/2000 11:05

    2 Data Points: 64         Sample Period: 900 sec
      Last Calibration Time: 09/28/2000 16:25

    3 Data Points: 34         Sample Period: 900 sec
      Last Calibration Time: 09/29/2000 08:51

    4 Data Points: 53         Sample Period: 900 sec
      Last Calibration Time: 09/29/2000 17:54

    5 Data Points: 31         Sample Period: 900 sec
      Last Calibration Time: 09/30/2000 07:49

    6 Data Points: 59         Sample Period: 900 sec
      Last Calibration Time: 09/30/2000 16:07

    7 Data Points: 35         Sample Period: 900 sec
      Last Calibration Time: 10/01/2000 07:21

    8 Data Points: 63         Sample Period: 900 sec
      Last Calibration Time: 10/01/2000 16:27

    9 Data Points: 34         Sample Period: 900 sec
      Last Calibration Time: 10/01/2000 16:27

   10 Data Points: 57         Sample Period: 900 sec
      Last Calibration Time: 10/02/2000 17:47

   11 Data Points: 34         Sample Period: 900 sec
      Last Calibration Time: 10/03/2000 08:29

   12 Data Points: 60         Sample Period: 900 sec
      Last Calibration Time: 10/03/2000 17:31

   13 Data Points: 29         Sample Period: 900 sec
      Last Calibration Time: 10/04/2000 09:02

   14 Data Points: 81         Sample Period: 900 sec
      Last Calibration Time: 10/04/2000 16:50

   15 Data Points: 87         Sample Period: 900 sec
```

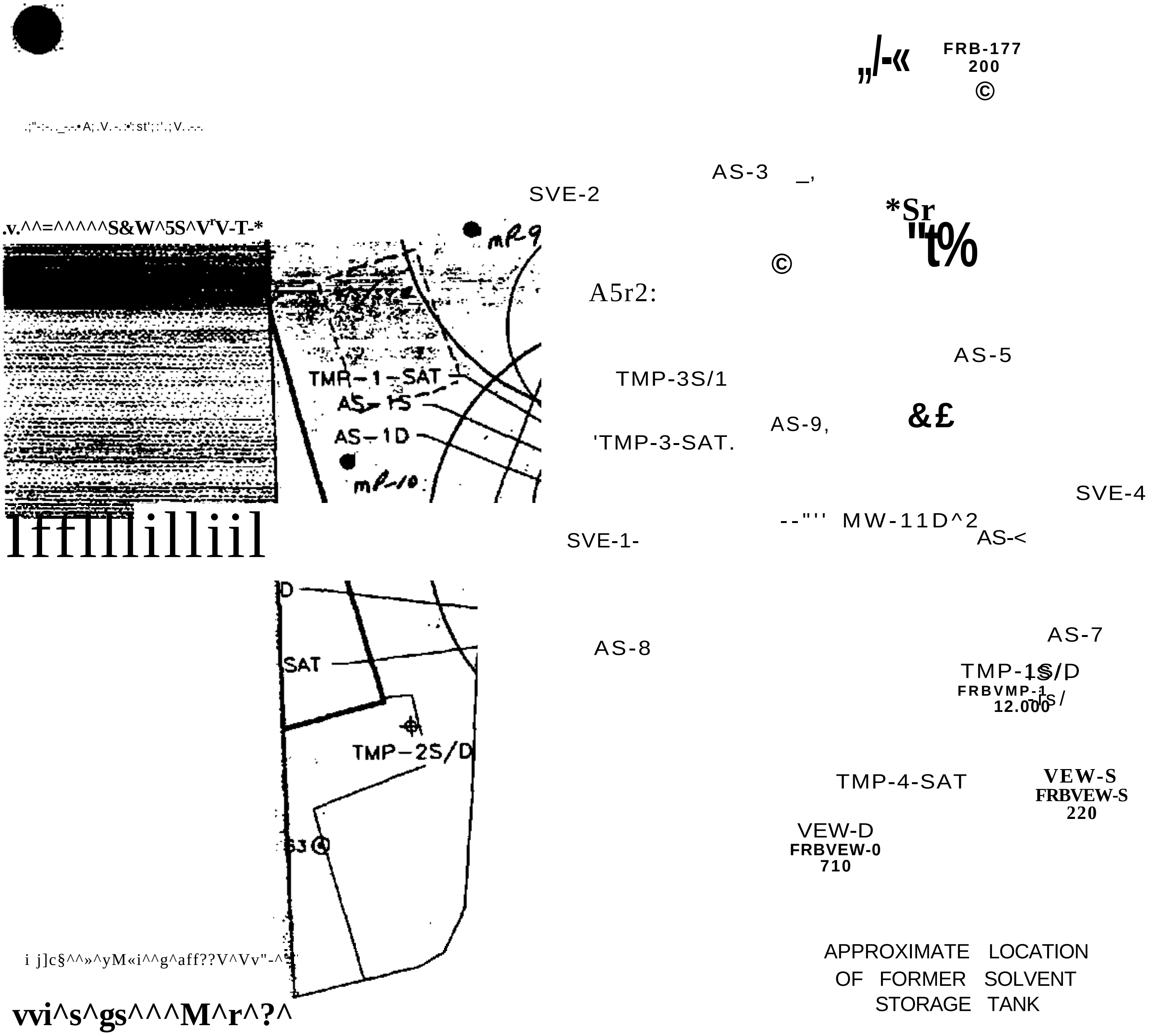
```
     Last Calibration Time: 10/05/2000 13:46

16 Data Points: 106      Sample Period: 900 sec
     Last Calibration Time: 10/06/2000 12:05

17 Data Points: 81       Sample Period: 900 sec
     Last Calibration Time: 10/07/2000 15:03

18 Data Points: 98       Sample Period: 900 sec
     Last Calibration Time: 10/08/2000 11:48

19 Data Points: 90       Sample Period: 900 sec
     Last Calibration Time: 10/09/2000 12:58

20 Data Points: 97       Sample Period: 900 sec
     Last Calibration Time: 10/10/2000 12:05

21 Data Points: 80       Sample Period: 900 sec
     Last Calibration Time: 10/11/2000 12:47
```

APPENDIX E

APPENDIX E

FIELD NOTES AND DATA COLLECTION LOGS

VADOSE ZONE SOILS WI'm
TCE CONCENTRATIONS
ABOVE 800 ug/kg.



dBER: 98254B30

RED BY: CUMMtNCS RITTER CONSULTANTS. INC.

IT CORPORATION

A **Member of 7k iT Group**

By Dkl DatP SV/YBSaL Suhjftrt t^/^ c?»~ — &*y£~c£r y^rg. S~s4e, Sheet No ^ nf ^

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Ry)(?^ Date /^W^-gx) Suhjflrt t^*****.- ££^^L<a&, five.. %'•& Sheet Nat ^ nf ^

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IT CORPORATION

AManbtTofTherTGroup

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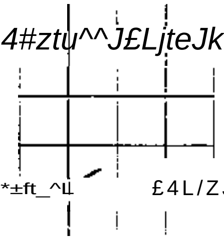

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Table
Sheet 3 of
Viacom, Inc/Former Horseheads, NY Facility
Extraction Wellhead Data - AS/SVE System Initial Testing Program

^ ^ r
/ ^

Date	Time	Vacuum at Extraction Well SVE- /	Vacuum at blower Inlet	Air Temperature		Extraction Air Flow Rate (4" Pipe)		Excracted Soil Gas VOC Concentration			Effluent Pressure (before GAC)	Effluent Flow Rat
				at Blower Inlet	at Blower Outlet	Velocity at Extraction Well SVE-	Volumetric Flow Rate	Influent	Midfluent	Effluent		
		inW.C.	in W.C.	(°F)	<°F)	fpm	scfm	ppmv	ppmv	ppmv	in W.C.	fpm
/O-A£-*O	V?*v£~,	O	3*9**			0	o	—	—	—	—	—
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'1	L'.S*	7	J1*Z	7 3 . /	/6J./	-KO		S-J-			/3	

Legend: "-" indicates no measurement taken
in W.C. = inches of water column
°F = degrees Farenheit
fpm = feet per minute
scfm = standard cubic feet per minute

& C-.^o^^ £tj£€^ff

to.si'

Notes:

	%jy*t	@ 5:45 pm
SVE-1	0.0	2.85"
-2	0.03" H2O	0.06"
-3	0.0	0.0"
-4	0.0	0.0"
		@ 6 pm
MP-1		0.0"
-2		0.0"
-3		0.0"
-5		o.O"

p.*/*

EH

rr CORPORATION
A Member of Tie TT Group

By *DRZ* Date */#-X7-00* Subject *K/GJCI>~*.- kf^-ftA^^ /&£.. $*'£&* Sheet No. */* of *3*

Chkd. By ____ Date ____ *#S/fts£ $•£**£-fif** Proj. No. *f/S&S*

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>^^-7£> *13, W'*

»"S-?j *(3,01'*

@ 3:30pm

3.5 ppm

3.7 ppm

3.8 ppm

*T*P-/S>* *3.€^^* *3.3/y**

IT

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IT CORPORATION
A Member of The FT Group

Ry *jy£^* RatP */O-J7-0O* Suhjent */ ^ c ^ - ^ ^ 4 ^ . Sr'£&* ShPPt Mn ^ of 3

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i V^' **r'&£*T* - **r>o**f+*~ . $**&. ..-.tyf-fr** •..* .. . . . .L...... --i

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Table
Sheet 3 of_JL
Viacom, Inc/Former Horseheads, NY Facility
Extraction Wellhead Data - AS/SVE System Initial Testing Program

& •-tvyo. = **rfj*/C**

Date	Time	Vacuum at Extraction Well SVE-,3	Vacuum at blower Inlet	Air Temperature*		Extraction Air Flow Rate (4" Pipe)		Excracted Soil Gas VOC Concentration			Effluent Pressure (before GAC)	Effluent Flow Rat
				at Blower Inlet	at Blower Outlet	Velocity at Extraction Well SVE- a.	Volumetric Flow Rate	Influent	Mldfluent	Effluent		
		in W.C.	In W.C.	(°F)	(°F)	fpm	scfm	ppmv	ppmv	ppmv	in W.C.	fpm
so- J 7-&o	/f:*o «™	O	30~	&?.*>	/>£*.</	XSee		7 7	"7.3	l,Z	f-3	
i	3:*>-°/*~\	O	3oS	to. 4	rtf.o	-^ */&£>		6.6	-3,f.	•*>,-*	/J	
ts	</:*/&+*<	o	3,£>±-	Tf.3	rn.t	^ySo°		;?.-7	•3./	*.3	/a	

Legend: **"-" indicates no measurement taken**
in W.C. = inches of water column
°F = degrees Farenheit
fpm = feet per minute
scfm = standard cubic feet per minute

_?^«r^etr-fy'(/*c.Kw^ f/^t ^^

mf-n

mf-f'	&.o3	0,014
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Table
Sheet J of 3
Viacom, Inc/Former Horseheads, NY Facility
Extraction Wellhead Data - AS/SVE System Initial Testing Program

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Date	Time	Vacuum at Extraction Well SVE-J_	Vacuum at blower Inlet	Air Temperature		Extraction Air Flow Rate {4" Pipe)		Excracted Soil Gas VOC Concentration			Effluent Pressure (before GAC)	Effluent Flow Rat
				at Blower Inlet	at Blower Outlet	Velocity at Extraction Well SVE-3	Volumetric Flow Rate	Influent	Midfluent	Effluent		
		in W.C.	in W.C.	<°F)	<°F)	fpm	scfm	ppmv	ppmv	ppmv	in W.C.	fpm
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Legend: •'-" indicates no measurement taken
in W.C. = inches of water column
°F = degrees Farenheit
fpm = feet per minute
scfm = standard cubic feet per minute

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Table

Sheet 3 of *3*

Viacom, Inc/Former Horseheads, NY Facility

Extraction Wellhead Data - AS/SVE System Initial Testing Program

Date	Time	Vacuum at Extraction Well SVE-^	Vacuum at blower Inlet	Air Temperature		Extraction Air Flow Rate (4" Pipe)		Excracted Soil Gas VOC Concentration			EfRuent Pressure (before GAC)	Effluent Flow Rat
				at Blower Inlet	at Blower Outlet	Velocity at Extraction Well SVE--/	Volumetric Flow Rate	Influent	Midfluent	Effluent		
		inW.C.	InW.C.	f°F)	*m*	fpm	scfm	ppmv	ppmv	ppmv	In W.C.	fpm
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Legend: "-" indicates no measurement taken
in W.C. = inches of water column
°F = degrees Farenheit
fpm = feet per minute
scfm = standard cubic feet per minute

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Sheet / of <f

Viacom, Inc./Former Horseheads, NY Facility

Extraction Wellhead Data - AS/SVE System Initial Testing Program

	Date ft-l-oo	Time	Vacuum at Extraction Well SVE- /	Vacuum at blower Inlet	Air Temperature		Extraction Air Flow Rate (4" Pipe)		Excracted Soil Gas VOC ' Concentration			Effluent Pressure (before 6AC)	Effluent Flow Rat	
					at Blower Inlet	at Blower Outlet	Velocity at Extraction Well SVE- /	Volumetric Flow Rate	Influent	Midfluent	Effluent			
			inW.C.	inW.C.	<°F)	(°F>	fpm	scfm	ppmv	ppmv	ppmv	in W.C.	fpm	(M.^O)
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Legend: "-" indicates no measurement taken
in W.C. = inches of water column
°F = degrees Farenheit
fpm = feet per minute
scfm = standard cubic feet per minute

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Table. /
Sheet *JL* of ¥
Viacom, Ihc/Former Horseheads, NY Facility
Extraction Wellhead Data - AS/SVE System Initial Testing Program

Date	Time	Vacuum at Extraction Well SVE- *&*	Vacuum at blower Inlet	Air Temperature		Extraction Air Flow Rate (4^N Pipe)		Excracted Soil Gas VOC Concentration			Effluent Pressure (before GAC)	Effluent Flow Rat	
				at Blower Inlet	at Blower Outlet	Velocity at Extraction Well S V E - *	Volumetric Flow Rate	Influent	Midfluent	Effluent			*(& ftt>t)*
		inW.C.	inW.C.	(°F)	<°F)	fpm	scfm	ppmv	ppmv	ppmv	inW.C.	fpm	*(£**#*&,*
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Legend: "-" indicates no measurement taken ***'fij^,*** ***A*4tsv6 <^P-***

in W.C. = inches of water column ***/a'&/*** ***&o'£***

°F = degrees Farenheit

fpm = feet per minute ^{7} **'• ^{J} ^{a}/** £ ' V^{S}"**

scfm = standard cubic feet per minute

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Table

Sheet *J* of *y*

Viacom, Inc/Former Horseheads, NY Facility

Extraction Wellhead Data - AS/SVE System Initial Testing Program

Date	Time	Vacuum at Extraction Well SVE- 3	Vacuum at blower Inlet	Air Temperature		Extraction Air Flow Rate (4" Pipe)		Excracted Soil Gas VOC Concentration			Effluent Pressure (before GAC)	Effluent Flow Rat	
				at Blower Inlet	at Blower Outlet	Velocity at Extraction Well SVE-3	Volumetric Flow Rate	Influent	Midfluent	Effluent			
		inW.C.	in W.C.	(°F)	<°F)	fpm	scfm	ppmv	ppmv	ppmv	in W.C.	fpm	*&^*!*J>1*
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Legend: "-" indicates no measurement taken
in W.C. = inches of water column
°F = degrees Farenheit
fpm = feet per minute
scfm = standard cubic feet per minute

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Table _£_

Sheet 9? of <f

Viacom, Inc/Former Horseheads, NY Facility

Extraction Wellhead Data - AS/SVE System Initial Testing Program

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Date	Time	Vacuum at Extraction Well SVE-j/	Vacuum at blower Inlet	Air Temperature		Extraction Air Flow Rate (4" Pipe)		Excracted Soil Gas VOC Concentration			Effluent Pressure (before GAC)	Effluent Flow Rat	
				at Blower Intet	at Blower Outlet	Velocity at Extraction Well SVE-^	Volumetric Flow Rate	Influent	Midfluent	Effluent			
		inW.C.	inW.C.	<°F)	<°F)	fpm	scfm	ppmv	ppmv	ppmv	inW.C.	fpm	MAC**** CM. #*O)
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Legend: "-" indicates no measurement taken
in W.C. = inches of water column
°F = degrees Farenheit
fpm = feet per minute
scfm - standard cubic feet per minute

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AS/SVE System Initial Testing Program
Monitoring Point Data
Viacom, **Inc./Former Horseheads, NY Facility**

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Distance to SVE Well (ft)
Distance to AS Well (R)

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TABLE 1
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AS/SVE System Initial Testing Program
Monitoring Point Data
Viacom, Inc./Former Horseheads, NY Facility

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Distance to SVE Well (1)
Distance to AS Well (ft)

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Chkd. By____Date ***sH/si/Z- $^*-c4>*** **Proj Nn *<%SS£9£***

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J?-'/^o^— *$-te.*~? j^o^^*. $y<t?e~^ <£*:£ if* & s> •? cc/,'* 4 <? ,-*f- ^J> /* &£>* f t / ^ ^ i) ^ *Jedy* •&*>•$.*

IT CORPORATION
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Ry *<&&?* **Date** *//-* '<?^ Siihjprf *(/y**ee*^- &*ftA^£^ stfse,$set* fihpgf No, <3 of____*£

Chkd. By_____**Date.** *rf</kiSg S&i-t-efa* **Proj. No.** *1/SZ96*

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By DRL Date 11-9-00 Subject Viacom-Kentucky Ave. Sheet No. 3 of 6

Chkd. By____ Date____ AS/SVE Start-Up Proj. No. 811595

.25 in. X .25 in.

SVE-1		SVE-2		SVE-3		SVE-4		Total	Temp (°F)	
Velocity (fpm)	Vacuum (in. H2O)	Velocity (fpm)	Vacuum (in. H2O)	Velocity (fpm)	Vacuum (in. H2O)	Velocity (fpm)	Vacuum (in. H2O)	Vac. (in. H2O)	Inlet	Outlet
Start										
1000	2.7	1000	3.3	1000	2.3	320(1)	17.0	18.0	59.6	113.6
— Throttle back bleed air to reduce back pressure on GAC										
1000	3.2	1000	3.4	1000	2.5	330	20.0	20.0	61.4	117.0
— Start sparge well AS-D1 @ 50% design flow (60 scfh) of 1 scfm										
— Shut system down; vac. relief valve on top of moisture cannister fell apart into the cannister										
— Start system back up										
1000	3.3	1000	3.6	1000	2.5	350	19.0	22.0	60.5	116.3
— Start sparge system back up and adjust AS-D1 to 50% design flow (60 scfh)										
— Increase sparge flow in AS-D1 to 75 scfh (15 scfh increase)										
1000	3.4	1000	3.4	1000	2.5	370	18.0	22.0	62.7	122.0
— Increase sparge flow in AS-D1 to 90 scfh (15 scfh increase)										
1000	3.3	1000	3.6	1000	2.4	400	17.5	23.0	63.5	123.3
— Increase sparge flow in AS-D1 to 105 scfh (15 scfh increase)										
1000	3.4	1000	3.6	1000	2.4	400	22.5	23.0	63.5	123.3
— Increase sparge flow in AS-D1 to 120 scfh (design flow)										
1000	3.4	1000	3.4	1000	2.4	370	23.0	24.0	63.0	123.1
	3.5		3.4		2.5		23.0	24.0	63.7	123.5
— Shut AS/SVE system down.										

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IT CORPORATION
A Member of The *TT Group*

By Js&X' DatP / / - 9-0Q Subject ^ c ^ - fet »•£«€.£» /%se.. S'.te. sheet No. 5" of _&_

Chkd. By______Date. **ds/$</£ 5^*n£-<S/>** Proj. Nn <g/T5"9S^

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TABLE
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AS/SVE System Initial Testing Program
Monitoring Point Data
Viacom, Inc./Former Horseheads, NY Facility

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Distance to SVEWBII (ft)
Distance to AS WMI (ft)

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IT CORPORATION
A Member of Thr *FT Group*

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Chkd. By____Date *________/3fA\s£ 4-&^-&fa________* proj. *Ho._f^Z£l£.________*

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IT CORPORATION

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By. Jj/?it Date /f-so-oo Subject ^a.fg^" 4%**-£*<.c(v, tfsc £.€* Sheet Nn. J2 nf £_

Chkd. By_ **Date.** <*?$/4\s£ £•&*-€- CS/> Proj. Nn ZfrS9$

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Temp. Outlet (°F)

Inlet (°F)

Total Vac. (in. H2O)

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IT CORPORATION
A Member of Tfcr *TT Gnnip*

Ry $tfzf Date ff-/O-0Q Suhjert (As-cg^ - 4f~-tO^/x A/E.. 5^-^e Sheet No. -2_of_£L

Chkd. By____Date tfs/$^/£ S-f^-C-tf/* Proj. No._^2^i£

.25in. X.25in.

Time	Extracted Soil Gas VOC Concentration (ppmv)			Extracted Soil Gas	Air Sparge Injection		)	
	Influent	Midfluent	Effluent	Helium Conc. (%)	Flow Rate @ AS-4 (scfh)	Pressure @ AS-4 (psig)		
10:05 am	Start SVE system							
10:20am								23.5
10:45am	4.8	1.1	0.6					
11:15 am	Start AS System: AS-4 @ 50% design flow				60	3.50	NU	
11:25 am								25.0
11:55 am	Increase Sparge Flow to AS-4				75	3.50	NU	
12:00pm								25.0
12:39pm	Increase Sparge Flow to AS-4				90	3.55	NU	
12:45pm								25.0
1:18pm	Increase Sparge Flow to AS-4				105	3.58	NU	
								24.5
	Increase Sparge Flow to AS-4				120	3.60	NU	
								25.0
	2.3	1.2	0.9					
	Take VOC, GW, and DO rdgs.							
					120	3.50	NU	25.0
	2.2	1.2	1.0					
	Shut system down							

IT CORPORATION

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By JytfsC **Date** /£-/£> - £>o **Subject** ^ f t f * ^ ~ £6~>-£i**-£rrf^- X-^g, **Sheet No.** 7 **of** £"

Chkd. By_____ **Date.**____________ ^^/s^e 5<«^-t{* ____________ **Proj. No** Urs-ff

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TABLE
Sheet 5^ of £

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AS/SVE System Initial Testing Program
Monitoring Point Data
Viacom, Inc./Former Horseheads. NY Facility

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Distance to SVE Wan (11)											
Distance to AS Wen (1)											
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t«r-€	' o./fa	%VK0	OAWh	**0./T3**	O./90	s	" *•.*				
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mf-9)	' o.a.oo	o.flS	n.V<Aft	o. rfo	0./T0	.	' &.£>				
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Chkd. By____Date________________^JV^Vg" *&*<-€-&&>*_____________Proj. *Ho._£/^£2^1*_______

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IT CORPORATION
A Mentha at The TT Group

By DRZ Date /A/3-OO Subject)f/ck.c***y - / ^ ^ ^ . ^ ^ W . .g,-Ig. Sheet No.. .of_SI

Chkd. By____ Date^ &5/fS(£ $•{*,-€-tf*> Proj. Nn %//r5g

.25 in. X .25 in.

Time	SVE-1		SVE-2		SVE-3		SVE-4		Total	Blower Temp.	
	Velocity (fpm)	Vacuum (in. H₂O)	Velocity (fpm)	Vacuum (in. H₂O)	Velocity (fpm)	Vacuum (in. H₂O)	Velocity (fpm)	Vacuum (in. H₂O)	Vac. (in. H₂O)	Inlet (°F)	Outlet (°F)
2:25 pm	Start SVE system: 3/4" bleed valve closed 100%; 1 1/2" bleed valve open 70%										
2:35 pm	1000	3.6	1000	4.0	1000	2.9	320	23.0	23.0	50.6	104.2
3:00 pm											
3:30 pm	Start AS system: Adjust sparge air to 60 scfh (50% design flow) to AS-2										
3:45 pm	1000	3.5	1000	4.2	1000	2.9	320	22.0	22.5	53.5	111.1
4:15 pm	Increase flow to AS-2 by 15 scfh to 75 scfh										
4:25 pm	1000	3.5	1000	4.2	1000	2.8	340	21.5	22.5	55.8	113.9
4:55 pm	Increase flow to AS-2 by 15 scfh to 90 scfh										
5:05 pm	1000	3.6	1000	4.0	1000	2.9	350	21.5	22.5	57.1	115.2
5:35 pm	Increase flow to AS-2 by 15 scfh to 105 scfh										
5:45 pm	1000	3.6	1000	4.0	1000	2.8	350	21.5	22.0	58.5	115.7
6:15 pm	Increase flow to AS-2 by 15 scfh to 120 scfh (design flow)										
6:25 pm	1000	3.6	1000	4.0	1000	2.8	360	21.5	22.5	58.7	119.0
6:50 pm											
8:00 pm	Collect VOC, DO, and GW level rdgs.										
9:00 pm	Shut system down										
11-14-00											
10:00 am	Start SVE system										
10:15 am	1000	3.6	1000	4.2	1000	2.8	330	22.0	23.0	53.8	109.2
10:30 am	Start AS system: Set AS-2 to 120 scfh										
10:50 am	Start adding Helium to system @ 60 scfh										
11:00 am	Take Helium Rdgs. @ Hand Drivenpoints, monitoring wells, and Blower Effluent										
12:05 pm	Take Helium Rdgs.										
12:20 pm	Went through 1 whole tank of helium and shut AS system down. Set up for testing AS-8.										

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By Date /S-/3-aO Subject [//ctcem — &t*m£*c£yrfxs*-. JVt^ Sheet No.. of iT

Chkd. By Date rfS/2\s£ 5-£*r-e~cfa Proj. No. I/S&f

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Chkd. By_____ Date ________________ ^?S/^^Lt $£*^-6-CSA__________ Proj. No ^V/^5^

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TABLE________

Sheet £~ of £

AS/SVE System Initial Testing Program

Monitoring Point Data

Viacom, Inc./Former Horseheads, NY Facitity

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Distance to SVE Wall (ft)

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FT CORPORATION
A Member of The TT Group

By *ZJ&Z* HatP *H'/f^&c* Suhjact t/%ag^v-?- ^n -*f<** <y£L- &"*• • *S/€&.* flhppt No. -^ nf £1

Chkd. By Date *rfs/$\s£* *$€*r-6-tf*$_A$ Proj, Nn *<Z/f?9£*

.25 in. X .25 in.

ju^oy, *f>-*>-£<4> tS^ety^ ^c-^y*- ~5? r* ^^;yrt,/-$_t$ •=- *3.f.'7S'/n. t/j.* & *S2S */*5f>r^*

9''30*a***\ - *f e z* <*&& **•Y*** /*it,*•tV'-*ifr• Mtr-*> /£>r<?^C$*

*S ^ * r f* *<?5* *syrfc*.* **~~?* *£Zy~* *fefrt.yy* **?S-tf.*

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Isviv" */--ninths* 4 j-c/Vej^1 *^t»c/£.* *c>*~\—* *i'^e* *^,,-t*4C* -c X< /^^^. ^^i^'-o^t «–T℃ ^o<r *£!r>*0 £>o*

*7:30,0** -

SVE-1		SVE-2		SVE-3		SVE-4		Total	Blower Temp.	
Velocity (fpm)	Vacuum (in. H2O)	Velocity (fpm)	Vacuum (in. H2O)	Velocity (fpm)	Vacuum (in. H2O)	Velocity (fpm)	Vacuum (in. H2O)	Vac. (in. H2O)	Inlet (°F)	Outlet (°F)
Start SVE System										
1000	3.6	1000	4.2	1000	2.9	330	22.0	23.0	53.8	108.2
Start AS System: Set AS-2 to 120 scfh										
Start adding Helium to sparge system										
Take Helium Conc. rdgs.										
Take Helium Conc. rdgs.										
Shut down AS system, went through 1 tank of helium in approx. 1 hr. Continue SVE										
1000	3.6	1000	4.0	1000	2.8	370	21.5	22.5	57.2	118.3
Start AS System: Adjust sparge air to 60 scfh (50% design flow) @ AS-8										
Increase flow to AS-8 by 15 scfh to 75 scfh										
1000	3.6	1000	4.0	1000	2.9	380	21.5	22.5	58.0	117.2
Increase flow to AS-8 by 15 scfh to 90 scfh										
1000	3.6	1000	4.0	1000	2.8	380	21.5	23.0	59.1	118.6
Increase flow to AS-8 by 15 scfh to 105 scfh										
1000	3.7	1000	4.0	1000	2.9	380	21.5	23.0	57.1	118.6
Increase flow to AS-8 by 15 scfh to 120 scfh										
1000	3.6	1000	4.0	1000	2.9	380	21.5	22.5	57.4	117.4
Take VOC, DO, and GW level rdgs. Go to Empire Gas to get more Helium.										
Shut AS/SVE system down.										
Start SVE System										
1000	3.6	1000	4.0	1000	2.9	340	22.0	23.0	48.6	104.8
system: Set AS-[illegible] to 120 scfh (design flow)										
helium to sparge line @ 60 scfh										
sure = 13psi Helium Pressure = 22psi										
1 tank of He.										

IT CORPORATION
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By *fit&f* . Date_^ . Subject f/'^^>^ - i ^ ^ T ^ ^ ^ . *Ss'lfe.* Sheet No. 3 of 5^

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IT CORPORATION
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Ry *JJtfzZ* Hate *//~/^aO* Subject *V/ajeom- ^c^'f^ccAy /4^-g.. Si'&&•* Sheet No.. of *f*

Chkd. By______Date. Proj. Nn f ^ / 5 ^

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TABLE_______
Sheet £ of £

AS/SVE System Initial Testing Program
Monitoring Point Data
Viacom, Inc.**/Former Horseheads, NY Facility**

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W&ll DaSlanatfon											cSSS&Sili	
Distance to SVE WBO (ft)												
Distance to AS Wed (ft)												
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IT CORPORATION
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By DRL Date //-/&~<S>t> ftnhjert l/fan^r-j ^ ^ / /^V^. 5/-' <?c Sheet Nn -£ nf.

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•^ra^j/f jy^-d,** < V / J < » M « *SeA^'sif /^A» ^UfTM'yc €'/.r-0>*f^ r-ejtrc^ \S*Are~. (f* ve. _ett.4$<Z-&f*

rtf-7; tidy's &S.*

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By JJ^^f_____ Date / / V ^ - ^ Subject K W * ^ i - ^ . ^ g ^ / 4 / g , c,t£, **Rh»»t NO.**____=2 **of** **€**

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Chkd. By______Date rfS/£is£ l^ar-e-cfa proj. No. l / f f ' r f

.25 in. X .25 in.

Start AS system: Set AS-1 to @
Add helium to sparge system
Take the rdgs.
Take the rdgs. (1/2 tank left)
Take the rdgs. (very little left)
[illegible] ran out of helium, stop testing

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Ry Btfz£ Date SA/S'-OO Snhjprt {//c^cor^x- j f ^ {LCC£^ ds^. &^e- Shtw»t No. y nf 5 "

Chkd. By____Date________S?f/f</£ f£*ri?-tfr________proj. Nn f / / ^ 9 ^

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TABLE
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AS/SVE System Initial Testing Program
Monitoring Point Data
Viacom, Inc/Former Horeeheads, NY Facility

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Distance to SVE Well (ft)

Distance to AS Well (ft)

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IT CORPORATION

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Ry _j0/?°? Date //-'6-6Q Subject C^ar^i - Ke*x4t*tKy dise.. $/€e. Sheet Nn -^ of 5^

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IT CORPORATION

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Chkd. By Date *?f/<v/? 5-£«r-6-c/# **Proj. Nn** %//&£

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Time	Extracted Soil/Gas VOC Concentration (ppmv)			Extracted Soil Gas	Air Sparge Injection		Helium Inj.	Effluent
	Influent	Midfluent	Effluent	Helium Conc. (%)	Flow Rate @ AS-6 (scfh)	Pressure @ AS-6 (psig)	Flow Rate @ AS-6 (scfm)	Pressure Before GAC (in. H_2O)
9:35am	Start SVE system							
9:50am								24.5
10:05am	Start AS system: Set AS-7 to 120scfh				12.0	5.6		
10:20 am	Add helium to sparge system @ 60scfh						1 (60scfh)	
10:30am	Take helium conc. rdgs (1/2 tank left)			0.02	140 (air+He)	5.0	1	
11:00 am	Take helium conc. rdgs.			0.05	140 (air+He)	5.0	1	
11:30 am	Take helium conc. rdgs			0.05	135 (air+He)	4.9	1	
11:45am	Tank ran out of helium - STOP testing AS-7.							
11:55am	Shut down AS-7 and open sparge air to AS-6 to 50% design flow (60 scfh)							
12:15pm					60	3.5		25.5
12:53pm	Increase sparge flow to AS-6 by 15scfh							
1:00pm					75	3.5		25.0
1:24pm	Increase sparge flow to AS-6 by 15scfh							
1:29pm					90	3.55		25.0
1:56pm	Increase sparge flow to AS-6 by 15 scfh							
2:00pm					105	3.55		24.5
2:26pm	Increase sparge flow to AS-6 by 15 scfh							
2:30pm					120	3.55		24.0
3:05pm	Start taking DO and GW level rdgs. @ monitoring wells							
3:15pm	4.1	2.1	1.3					
4:40pm					120	3.55		25.0
5:05pm	Add helium to sparge system							
5:15pm	Take helium conc. rdgs			0.06	120	3.50	1 (60scfh)	
5:45pm	Take helium conc. rdgs. (1/2 tank)			0.06	120	3.50	1	
6:15pm	Take helium conc. rdgs. (nearly mt)			0.08	120	3.50	1	
6:35pm	Shut down AS/SVE system							

AS-7 Test

EH

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Ry *jtl#Z?* Date *4S-/&-0Q* Siihjer.t *\Z/&-Car^~ ^^ /u. C&ss /9s^. Si* jfrs- Sheet No———^_———Of 3

Chkd. By_____Date________*rfS/S</£* *S^^f-Cf^* Prnj Mn f ^ 3 ^ 5 *

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TABLE________

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AS/SVE System Initial Testing Program
Monitoring Point Data
Viacom, Inc./Former Horseheads, NY Facility

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Distance to AS Well (fl)

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(T CORPORATION
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By *D&Z* Date *f-/7-0a* Subject *I/SCLC****- ^*> €<u*A.y rfsv. £*••€&.* Sheet No. ^- of ->

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^.'/iSV^-v — /C-1/j^t^ *&GJ /*ss<S ^ZPO rvtjs,* ai-/ S^^" t-ttf Asvwf ^/r«-wy\ *** *&'i'<Ay9 /'H>jr^^£.* ......**

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r~ m. ~-^0 Si.a 6*p -£,0 stefsyt JyA + ff**

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SVE-1		SVE-2		SVE-3		SVE-4		Total	Blower Temp.	
Velocity (fpm)	Vacuum (in. H2O)	Velocity (fpm)	Vacuum (in. H2O)	Velocity (fpm)	Vacuum (in. H2O)	Velocity (fpm)	Vacuum (in. H2O)	Vac. (in. H2O)	Inlet (°F)	Outlet (°F)
Start SVE system										
1000	3.8	1000	4.4	1000	3.2	350	18.5	20.0	50.0	104.2
Start AS system: Open sparge air to AS-5 and adjust flow to 50% design (60 scfh)										
1000	3.7	1000	4.7	1000	3.2	350	18.0	19.0	53.1	108.9
Increase sparge flow to AS-5 by 15 scfh to 75 scfh										
1000	3.7	1000	4.6	1000	3.2	390	18.0	19.0	56.0	110.9
Increase sparge flow to AS-5 by 15 scfh to 90 scfh										
1000	3.7	1000	4.6	1000	3.3	400	18.0	19.0	56.5	112.5
Increase sparge flow to AS-5 by 15 scfh to 105 scfh										
1000	3.7	1000	4.6	1000	3.3	400	18.0	19.0	58.3	116.1
Increase sparge flow to AS-5 by 15 scfh to 120 scfh										
1000	3.7	1000	4.6	1000	3.3	400	18.0	19.0	55.1	113.2
Start taking GW level and DO rdgs @ monitoring wells										
Start taking VOC rdgs. @ carbons, monitoring wells, and handdriven points										
1000	3.8	1000	4.6	1000	3.3	400	18.0	19.0	55.8	112.9
Add helium to sparge system @ 60 scfh (1 scfm)										
Take helium conc. rdgs.										
Take helium conc. rdgs. (½ tank left)										
Take helium conc. rdgs. (nearly empty)										
Shut down AS/SVE system										

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By &zf Date //-/7-gQ Subject [/'afP/vi--^^T^^^. X/^ Sheet No 3 nf €

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AS/SVE System Initial Testing Program
Monitoring Point Data
Viacom, Inc./Former Horseheads, NY FactHty

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Distance to SVE Well (ft)

Distance to AS Wad (II)

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mmm wmmmmm ^^^^^^^^^^^^^^^^M^^^^^^^^^^^^^^^^^^^M^^^^^^

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By *ORL* Date *//- & 0- 00* Subject **'<=* c&M ~ k&r\-ru.c£jy /"X~~-e-~~. 5, ta.* Sheet No. *-^* of *p*

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Air Sparge Injection

Pressure @ AS-2 (psig)

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Flow Rate @ AS-2 (scfh)

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Extracted Soil/Gas VOC Concentration (ppmv)

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AS/SVE System Initial Testing Program
Monitoring Point Data
Viacom, Inc./Former Horseheads, NY Facility

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Time	Extracted Soil/Gas VOC Concentration (ppmv)			Extracted Soil Gas Helium Conc. (%)	Air Sparge Injection		Helium Inj. Flow Rate @ AS-3 (scfm)	Effluent Pressure Before GAC (in. H_2O)
	Influent	Midfluent	Effluent		Flow Rate @ AS-3 (scfh)	Pressure @ AS-3 (psig)		
9:10am	Start SVE system							
9:45am	0.5	0.0	0.0					25.5
10:17am	Start AS system; Set AS-3 to 50% design				60	1.25		
10:46am	Increase spargeair 15scfh to AS-3							
11:10am					75	1.80		25.5
11:38am	Increase sparge air 15scfh to AS-3							
11:50am					90	3.0		25.2
12:15pm	Increase sparge air 15 scfh to AS-3							
12:30pm					105	4.3		25.3
1:05pm	Increase spargeair 15scfh to AS-3							
1:10pm					120	3.8		25.3
1:45pm	Start taking GW level and DO rdgs.							
1:55pm	0.9	0.0	0.0					
3:08 pm	Add helium to sparge system @ 1 scfm							
3:16 pm	Take helium conc. rdgs.			0.32	120	3.6	1 (60scfh)	
3:45 pm	Take helium conc. rdgs. (½ tank left)			0.70	120	3.6	1	
4:15pm	Take helium conc. rdgs. (nearly empty)			0.75				
4:30pm	Shut down AS-3 and open AS-4 to design flow (120scfh)							
4:35pm					120	3.4		24.9
4:42pm	Add helium to sparge air @ 1scfm				120	3.4	1 (60scfh)	
4:50pm	Take helium conc. rdgs. (full tank)			0.17	120	3.4	1	
5:20pm	Take helium conc. rdgs. (½ tank)			0.16	120	3.4	1	
5:50 pm	Take helium conc. rdgs. (nearly MT)			0.26	120	3.4	1	
6:05pm	Shut AS/SVE system down							

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TABLE

Sheet £ of__£_

AS/SVE System Initial Testing Program
Monitoring Point Data

Viacom, Inc/Former Horaeheads, NY Facility

T±j6*«4 rff-3

Well Designation											Comments	
Distance to SVE Well (ft)												
Distance to AS Well (ft)												
		PARAMETER										
Location		Induced Vacuum (in. H2O)					VOC's (ppmv)		Helium Conc. (%)			
SVE-1	3.1	3.1	3.0	3.0	3.1							
SVE-2	3.9	3.9	3.9	3.9	3.9							
SVE-3	2.3	2.3	2.1	2.1	2.3							
SVE-4	18.5	19.0	19.0	18.5	19.0							
TMP-1D							0.0		0.00	0.02	0.00	
TMP-1SAT							0.0		0.26	0.25	0.25	
TMP-2D							0.0		0.00	0.00	0.00	
TMP-11S							0.0		0.00	0.00	0,00	
TMP-11D							0.0		0.00	0,00	0.00	
mP-5	0.145	0.145	0.145	0.150	0.150		4.1		0.01	0.00	0.00	
mP-7	0.130	0.130	0.140	0.140	0.135		0.0		0.00	0,01	0.00	
mP-8	0.160	0.170	0.170	0.160	0.160		0.0		0.00	0.00	0.00	
mP-9	0.100	0.110	0.105	0.110	0.105		0,0		0.00	0.00	0.00	
Time	10:30 am	11:25 am	12:00 pm	12:42 pm	1:25 pm		2:20pm		3:16pm	3:45pm	4:15 pm	
Notes:	@60scfh	@75scfh	@90scfh	@105scfh	@120scfh							

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Sheet & of &

AS/SVE System Initial Testing Program
Monitoring Point Data
Viacom, Inc./Former Horseheads, NY Facility

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Distance to AS WeB (ft)

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*A **Member** of The* /T Group

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A Mentor of The FT Group

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TABLE
Sheet / of </

AS/SVE System Initial Testing Program
Monitoring Point Data
Viacom, Inc./Former Horseheads, NY Facility

Te^&ij ^ - I P C?*S*f tf'e.rt'S* "*f>)*

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Distance to SVE Well (t>
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IT CORPORATION
A Mtabtrcd The TT Group

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Air Sparge Injection Pressure @ AS-1D (psig)	ft 0	V	V 0	v5
Air Sparge Injection Flow Rate @ AS-1D (scfh)	fc§	5	5	b N

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Extracted Soil/Gas VOC Concentration (ppmv)	Effluent	T	v	f	« ^ ^ *
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IT CORPORATION
A Member of The TT Group

By & # ^ Date /f-l'T-ol* Subject lf/ctC0~i ' ^ ^ ^ C ytfxse..$,*£& sheet No. ¥ .of 6

Chkd. By ____ Date ____ &5/?</€. / €* r- £- QC^ Proj. Nn g / y ^ g "

.25 in. X .25 in.

Air Sparge Injection

Time	AS-2		AS-3		AS-4		AS-5		AS-6		AS-7		AS-8		AS-9	
	Flow Rate (scfh)	Press. (psig)	Flow Rate (scfh)	Press. (psig)	Flow Rate (scfh)	Press. (psig)	Flow Rate (scfh)	Press. (psig)	Flow Rate (scfh)	Press. (psig)	Flow Rate (scfh)	Press. (psig)	Flow Rate (scfh)	Press. (psig)	Flow Rate (scfh)	Press. (psig)
12:10pm	Start SVE system															
12:50pm																
1:35pm	Start AS System: Test all 9 wells simultaneously, starting @ 50% design flow															
1:50pm	60	3.7	60	1.1	60	3.35	60	0.1	60	3.45	60	3.3	60	0.2	60	3.55
2:20pm	Increase sparge air to all AS wells 15scfh															
2:25pm	75	3.7	75	1.65	75	3.35	75	0.2	75	3.4	75	3.25	75	0.2	75	3.55
3:00pm	Increase sparge air to all AS wells 15 scfh															
3:10pm	90	3.7	90	2.7	90	3.30	90	0.3	90	3.4	90	3.3	90	0.4	90	3.55
3:45pm	Increase sparge air to all AS wells 15scfh															
3: am	105	3.7	105	3.3	105	3.3	105	0.5	105	3.4	105	3.3	105	0.6	105	3.55
4: am	Increase sparge air to all AS wells 15scfh															
m	120	3.7	120	3.8	120	3.35	120	0.7	120	3.45	120	3.3	120	0.8	120	3.60
	Begin taking GW level and DO rdgs. at monitoring wells															
	Begin taking VOC rdgs. at carbons, monitoring wells, and hand-driven points															
	down AS/SVE system															

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IT CORPORATION
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TABLE_______

Sheet___& of &

AS/SVE System Initial Teating Program

Monitoring Point Data

Viacom, Inc./Former Horeeheads, NY Facility

*Te>?&*f glC-fa*'?** U&f/i

Well Designation											**Comments:**
Distance to SVE Well (ft)											
Distance to AS Well (ft)											
		PARAMETER:									
Location		Induced Vacuum (in. H2O)					VOCs (ppmv)				
SVE-1	3.0	2.9	2.8	2.9	2.7						
SVE-2	3.5	3.5	3.5	3.7	3.5						
SVE-3	2.2	2.1	2.0	2.0	2.0						

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IT CORPORATION
A Member of The IT Group

By ØR1 Date /f-^tf-ao Subject {//* e-e-** - &* -fC^fc^ sftsc. S/& Sheet No. / of G>

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Chkd. By. Date. ***#S/$^£ $f*r€-e//>*** Proj. No. *4//!T<fg*

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Blower Temp. Outlet (°F) Inlet (°F)

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SVE-4 Vacuum (in. H2O)

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Air Sparge Injection	
Pressure @ AS-1D (psig)	Flow Rate @ AS-1D (scfh)

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.25 in. X .25 in.

Air Sparge Injection

Time	AS-2		AS-3		AS-4		AS-5		AS-6		AS-7		AS-8		AS-9	
	Flow Rate (scfh)	Press. (psig)	Flow Rate (scfh)	Press. (psig)	Flow Rate (scfh)	Press. (psig)	Flow Rate (scfh)	Press. (psig)	Flow Rate (scfh)	Press. (psig)	Flow Rate (scfh)	Press. (psig)	Flow Rate (scfh)	Press. (psig)	Flow Rate (scfh)	Press. (psig)
8:00am	— start SVE system															
8:50am																
:55am	Start AS system; All sparge wells are open to design flow (120 scfh)															
9:20am	120	3.75	120	3.75	120	3.40	120	0.70	120	3.50	120	3.60	120	0.75	120	3.60
9:35am																
9:52am	Add helium to AS system @ 1 scfm															
0:17am	120	3.75	120	3.60	120	3.35	120	0.70	120	3.45	120	3.40	120	0.80	120	3.55
10:02am	Take helium conc. rdgs. (nearly full tank)															
10:36am	Take helium conc. rdgs. (½ full tank)															
0:50am	120	3.70	120	3.55	120	3.35	120	0.70	120	3.45	120	3.35	120	0.80	120	3.55
11:08am	Take helium conc. rdgs. (nearly empty)															
11:20am	Ran out of helium on 1st tank															
11:23am	Put 2nd helium tank on line, adding helium to sparge air @ 1 scfm															
1:30am	Take helium conc. rdgs. (nearly full tank, 2nd)															
11:43am	120	3.70	120	3.40	120	3.35	120	0.70	120	3.45	120	3.30	120	0.80	120	3.55
12:04pm	Take helium conc. rdgs. (½ full tank, 2nd)															
12:15pm	120	3.70	120	3.35	120	3.35	120	0.70	120	3.45	120	3.30	120	0.80	120	3.55
12:36pm	Take helium conc. rdgs. (nearly empty, 2nd)															
2:00pm																
3:10pm	Collect air samples at carbons for lab analysis.															
5:00pm	Shut AS/SVE system down.															

TABLE
Sheet € of t£

AS/SVE System Initial Testing Program
Monitoring Point Data

Viacom, Inc./Former Horseheads, NY Facility

7e$€s*p rtrf fyadfrfi Uft/Ys

Well Designation										**Comments**
Distance to SVE Well (ft)										
Distance to AS Well (ft)										
Date	**Time**		**PARAMETER:**							
Location	X	Helium	Concentration (%)							

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Notes:

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Quote #
Log #
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Sample #

Date //-3$-oO Contact @ Lancaster Labs.

Please complete the following:

# of Samples 5 u > i 5ej>*m & js£f*J

Account #

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Phone #

Fax #

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Billing information:

Company JZ-f C04*<Pr

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Please provide sample information:

Analyses Desired

Sample Designation (include location, employee. Job function, date collectrd):	See attached log sheet	Sampling time (minutes)	Flowrate (liters per minute)	Total volume (I)	Temp. (°C1	Almos. Press. (mm H?)	TO-14
X»fi&«»£- Ca^Y*- —		GroJ>	N tOk	ear	£a.<		X_
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j Desired Turnaround Time

I g^J Normal (10 working days)

j Special (added cost and prior approval required)

Special Instructions:

Submitted by ^ Date

Received @ Lab by ^ Date/Time

2425 New Holland Pike. Lancaster. PA 17601-5994 (717) 656-2301 Copies: White and yellow copies should accompany samples to Lancaster Laboratories. The pink copy should be retained by the client. 4/1/92 #2I8fi

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FT CORPORATION
A Member of The fT Group

By ** t t # ^* Date *ff-39-oO* Subject *(A'CKC**- - t ^ r ^ c ^ y 4ls±ᵣ $;*e* Sheet Nn / nf *</*

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IT CORPORATION

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IT CORPORATION
A Member of The IT Group

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IT CORPORATION
A Member of The fTGntp

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By *&^st* **Date** */Jt./&ao* Subject *tAgc*^-£**•£**£*, d^*. Srtc* **sheet No.** 3 **of** *(f_*

Chkd. By **Date** *<9f/<£*£* ***S£*r-£-*fa*** **Proj. Mo.** *%/SS9<*

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Purge Start Time: 1414

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._.. *"&££?'**'*">*"•*: ^K9*t.\&klfei .CJ?£/<*<") - .. y°° r^f/L/r? *

Purged/Sampled By: Jeri Kilburz

Comments: MS/MSD taken on this sample.

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IT CORPORATION
A Member of forr Group

By ~~ ~~ *DRZ* natfi S^/Zf/0Q Subject t//mc*m - /6r*6**£y #*€-. Sr^t- Sheet No ^ of "

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£ JAJ- ftf.0 vJ 5/?sn f>£ f/U6 /r*€'T/S0j>

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flpfs-jr^'na tfc r^-r^c & -fc, (^ /T/Wv..) ; /3Q ^//£/#».

fcj^tS/^$*j*/Jk^,$y :. . ;7#-//<^^CE*-»

I^To-Ht *tvi* £*><<€.£

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IT CORPORATION
A Member of The IT Croup

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Chkd. By- Date. *StS/'s •&" 54a*~t - tf/>* Proj. Nn *trSS-ff*

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PCK ft: */J/Zs/oo* *fee*? o -/**S* f&r» /o Cine- '.*

	(& rose)					*'fur £•£,-£y,* *f*STu)*	
. Z2-33 . **lZ.37** . *fZ'/i......* *tZHS.*	*it* ***It*** "j	7><eO ***7fr** .. 7.">1)	• 'Coo ; /tr.33¹	n.C7	***15-3Z*** **'5-2S** ***^3*** **...**	*.31*3. £* *....)&]&* . **|** ^ . **|**	*ZZhH* „^5 7v?j 2 S 8 ; ^
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IT CORPORATION

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•£}W^*S*«A **tf&** ***f**:^ &* ^ £'*>S/^<'?) l ** '°?r.(:/*f^>y^r,***

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i&. *S<* ^y&'c. *&-^ *.~\a s^L- ??*X.* **?**

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IT CORPORATION
A Member of The IT Group

Chkd. By„______Date________ Proj. Nn *tf/fS-^*
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E/^ef /'J-H«. *(' **\si)*	*Pcf>t?4. •£>* *I^JaSe.^* *(A r0tZ)*	*f''* *Cs.it)*	*Sr>ec.s/r'c* *Ce^f/vicSanCe.* *C KS /C-M)*	*7e*ijae / - & -* *^Ur e.* *C c)*	*&•$$*&•< J* *0>t*ytlC*->* *<&$*	*'Fu **&'£,-(y* *f' *JTu)*	*tfcSoyr* Av/)
//;36 #**, /I-2H *iy*z8* IV- 3z ."-3U.. 1[>46 /\ –M4	- — .——-. ."—' i	7-3S 7."' */^Z* *7M* *.1..-.<*Z* *!*<&* *-y~m*	iVW iq.oC 1?.7Q 17-13 .I7-.&4/ .. ..^-^: ;/8"-<M_I_	i2. O *n i I* 11.20 „.»*-I3 "-^-3 "•51 : |I-Hb	*li-72* //-T» *\t'.B* . *n^A* IM.IH *N./I* H- >o ;	*\Ib0-8* /3C*»- 1 ^35.0 .....^22,7 ......_.?26-6 . .^??r.T.. . k^i.i!	;?2-V /?3-t ^S.3 mo. .wy.s' a/^.o 2'|t S" •
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By *^ft*?* Date *'2/&aO* Subject *C^« <r*/vt - &» ^ f y /?**. J, &L* Sheet No. **&* of */r*

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COC for Groundwater Samples

Chain of Custody Record

SEVERN
TRENT
SERVICES

Severn Trent Laboratories, Inc.

STL-4124 (0700)

Client 'C(, •u //•? /yo

Project Manager

Oafs

Chain of Custody Number 001017

4ddress

Telephone'Number (Area Code)/Fax Number (Vr^ ?v;; - 770/

La6 Number

Pag* | nf t

City

Sfafe ?A

Zip Code

Sife Contact

Lab Contact

Analysis (Attach list if more space is needed)

J o .›. J

Protect Name and Location fState)

Carrier/Waybill Number ᵛ

Co/ifrac(/Purcrtase Order/Quote No.

Ma/rix

Containers & Preservatives

Special Instructions/ Conditions of Receipt

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Dale	Time	4	*	41	3 co		▌	S to (Si	o 1	u 1	1	IS		Special Instructions/ Conditions of Receipt
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IMP - ID	io/il/c-h	ii'00		K							y1				
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•"; i\f • 7.0 AU/Z-U £>	ic/P /«.	ii-,^		ti							*'				

Possible Hazard Identification

CI Non-Hazard D Flammable Q Shin (m'tanf D Poison B Q Unknown

Sample Disposal

PI Return Tn C.lmnt tyQ Dinpn^t Ry I ah ("] Arrhi'i/n Fnr Mnnrh« (A lee may be assessed if samples are retained Innqnr than 1 mr)ftt/t*f

Turn Around Time Required

D 24 Hours D 48 Hours D 7 Days • !4Da/s • 21 Days PI Clth*r

QC Requirements (Specify)

J Relinquished By	..:•:.- , /K-.U--'""	Date	Time	1. Received By	Date	Time
2 Relinquished By		Oa(e /	Time	2. Received By	Oate	Time
3 Relinquished By		Dale	Time	3. Received By	Date	Time

Comments

DISTRIBUTION: Stays m'tfi (he Sample: CANARY • Retarded to Client with Report: PINK - Field Copy •

APPENDIX
F

APPENDIX F

MASS REMOVAL CALCULATIONS

MASS REMOVAL CALCULATION - SVE WELLS ONLY

Date 11/07/00

'Based on 4" diameter pipe.

	Velocity fpm	'Flow Rate scfm
SVE-1	1000	87
SVE-2	1000	87
SVE-3	1000	87
SVE-4	370	32
		294 scfm

System Flow Rate	294	scfm		
Anticipated Time of Operation	24	hrs		
TCE ppm Concentration	0.720	ppm (ul/l)		
Air Temperature	115	F	319.26	K
System Pressure (Vacuum)	28.0	in. w.c.	6967.5	**Pa**
ppm to mg/m3 conversion (ideal Gas Law)	0.248	ppm (mg/m3)		
PID Reading (10.2 ev lamp)	1.90	ppmv		
TCE Removal Rate	0.007	lbs/day		
Carbon Usage	0.044	lbs/day		

C(mg/m3) = C(ul/l> * Mol wt / (RT/P)

Molwt. TCE	131.39	g/mol
R	8.31451	Pam3/Kmol
RT/P	0.380982	m3/mol

1 l = 1000000 ul

1 g = 1000 mg

Mass = C(mg/m3) * Flow * Time Operation

1 lb = 453600 mg

1 m3 = 35.315 ft3

1 hr = 60 min

Note: Assumed PID calibrated with TCE response factor.

MASS REMOVAL CALCULATION - FULL SYSTEM OPERATION

Date 11/28/00

"Based on 4" diameter pipe.

	Velocity fpm	"Flow Rate scfm
SVE-1	1000	87
SVE-2	1000	87
SVE-3	1000	87
SVE-4	440	22
		300 scfm

System Flow Rate	300	scfm		
Anticipated Time of Operation	24	hrs		
TCE ppm Concentration	0.310	ppm(ul/l)		
Air Temperature	110.3	F	316.65	K
System Pressure (Vacuum)	22.5	in. w.c.	5598.9	Pa
ppm to mg/m3 conversion (Ideal Gas Law)	0.087	ppm (mg/m3)		
PID Reading (10.2 ev lamp)	3.20	ppmv		
TCE Removal Rate	0.002	lbs/day		
Carbon Usage	0.016	lbs/day		

C(mg/m3) = C(ul/l) " **Mol wt** / **(RT/P)**

Molwt. TCE	131.39	g/mol
R	8.31451	Pam3/Kmol
RT/P	0.47023337	m3/mol

1 1= 1000000 ul
1 g = 1000 mg

Mass = C(mg/m3) * Flow * Time Operation

1 lb = 453600 mg
1 m3 = 35.315 ft3
1 hr = 60 min

Note: Assumed PID calibrated with TCE response factor.

>
TJ

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APPENDIX G

AS-COMPLETED SCHEDULE OF SVE/AS SYSTEM INSTALLATION

KENTUCKY AVENUE WELLFIELD SITE
FORMER RUNOFF BASIN
HORSEHEADS, NEW YORK

As-completed Summary Schedule of SVE/AS System Installation

Remedial Construction Activity	Start Date	End Date
SVE/AS System Construction	08/17/00	10/25/00
SVE/AS Point Installation	08/21/00	08/25/00
Subsurface Piping	08/23/00	09/01/00
Building Slab	09/06/00	09/08/00
Repair Asphalt	09/11/00	09/12/00
Building Erection	09/12/00	09/15/00
Equipment Installation	09/18/00	10/06/00
Utilities and Hookup	09/25/00	09/13/00
Equipment Troubleshooting	10/18/00	10/20/00
j Repair SVE Wetls	i 0/23/00	10/25/00
Baseline' Air Monitoring	09/28/00.	10/12/00
Ambient Air Monitoring	09/28/00	ONGOING
System Startup and ITP	10/16/00	11/29/00
Remedial Construction **Report**	12/18/00	12/29/00

Notes: ^{1} •) Equipment Troubleshooting refers to removing the knockout ball from the cage of the moisture separator and reversing the leads on the air compressor.

2.) SVE wells (i.e. risers) were initially constructed with perforated pipe. This pipe was replaced with solid pipe.

3.) Fagan Engineers, PC will continue Ambient Air Monitoring.

4.) For specific dates related to Start-up and ITP activities, refer to Table 3-1.

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APPENDIX H

DATA VALIDATION FOR GROUNDWATER SAMPLES

RELEASE OF VALIDATED DATA

Project: CBS Horseheads
Date: December 27, 2000
Data Package: C0J180177
Reviewer: Richard McCracken

Validation was performed on the volatile analytical results for nine water samples collected at the CBS Horseheads Site. STL, Pittsburgh analyzed the samples using SW-846 Method 8260B. The data validation was performed in accordance with the USEPA National Functional Guidelines for Organic Data Review {October 1999), as applicable to SW-846 generated data. Samples in this SDG included:

Field Sample ID	Lab Sample ID	Work Order Number
MW-11D	C0J180177-1	DNCKQ
MW-11S	C0J180177-2	DNCKV
MW-7D	C0J180177-3	DNCKW
MW-7S	C0J180177-4	DNCKX
TMP-1D	C0J180177-5	DNCK2
TMP-2D	C0J180177-6	DNCK4
TMP-1-SAT	C0J180177-7	DNCK5
Trip Blank	CO J180177-8	DNCK6
Dup-1	C0J180177-9	DNCK7

VOLATILE ORGANICS

Method: SW-846 Method 8260B.

Samples: All samples.

Sample Custody: All chain-of-custody forms were properly completed. The samples were properly preserved when received by the laboratory.

Holding Time: All sample analyses met the 14 day hold time.

GC/MS Instrument Performance Check: Bromofluorobenzene (BFB) met the ion abundance criteria for all tunes. All samples were analyzed within 12 hours of BFB injection. No transcription errors were found.

Initial Calibrations: The initial calibration met the Calibration Check Compound (CCC) relative standard deviation criteria (<30%), and System Performance Check Compound (SPCC) response factor criteria. Chloroethane had a %RSD > 15% - the lab chose the option of averaging the %RSDs for all compounds in the standard, which met the <15% criteria. All other target compounds met the %RSD < 15% criteria. The response factor and relative standard deviation for selected compounds were calculated, and no errors were found.

Continuing Calibrations: All continuing calibrations met the CCC percent difference (%D) criteria (<20.0%) and the SPCC minimum response factor criteria. All target compounds had %D < 20%. The response factor and percent difference for selected compounds were calculated and no errors were found.

Blanks: No target compounds were detected in the method blank or the trip blank (C0J180177-008).

Surrogates: All surrogate recoveries met percent recovery criteria.

Matrix Spike/Duplicate: The MS/MSD performed on sample C0J180177-6 met accuracy and precision criteria. The percent recovery and relative percent difference for selected compounds were calculated and no errors were found.

Field Duplicates: DUP-1 was a field duplicate of TMP-1-SAT. Trichloroethene was detected in both samples at an RPD of 5.7%, which met the <35% criteria.

Laboratory Control Sample: All spike recoveries met criteria. The percent recoveries for selected compounds were calculated and no errors were found.

Internal Standards: All internal standards met area and retention time criteria.

Compound Identification: The compounds identified by the laboratory were confirmed by mass spectral comparison and relative retention time.

Raw Data Review: The instrument raw data for selected instrument performance check, initial calibration, continuing calibration, matrix spike, laboratory control sample, relative retention time, and mass spectral comparisons were reviewed as detailed in the appropriate sections above. No errors were found.

Summary: The volatile results were acceptable as reported, with no data qualification.

IT CORPORATION - MONROEVILLE

Lab Name:Severn Trent Laboratories, Inc.　SDG Number:

Matrix: (soil/water) WATER　Lab Sample ID:C0J180177 001
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL　Date Received: 10/18/00
Work Order: DNCKQ1AA　Date Extracted:10/20/00
Dilution factor: 1　Date Analyzed: 10/20/00
Moisture %:NA

QC Batch: 0294159

Client Sample Id: MW-11D

CAS NO.	COMPOUND	CONCENTRATION UNITS: (uq/L or uq/kq) uq/L	Q
71-43-2	Benzene	15.0	u
75-00-3	Chloroethane	Uo	u
75-35-4	1,1-Dichloroethene	15.0	u
156-59-2	cis-1,2-Dichloroethene	12.5	u
156-60-5	trans-1,2-Dichloroethene	12.5	u
79-01-6	Trichloroethene	15.0	u
75-01-4	Vinyl chloride	Uo	u

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FORM I

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IT CORPORATION - MONROEVILLE

Lab Name:Severn Trent Laboratories, Inc. SDG Number:

Matrix: (soil/water) WATER Lab Sample ID:CQJ180177 002
Method: SW846 826OB
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL
work Order: DNCKV1AA
Dilution factor: l
Moisture %:NA

Date Received: 10/18/00
Date Extracted:10/20/00
Date Analyzed: 10/20/00

QC Batch: 0294159

Client Sample Id: MW-11S

CAS NO.	COMPOUND	CONCENTRATION UNITS: (uq/L or uq/Jcq) uq/L	Q	
1 71-43-2	Ben2ene	15.0		"j
1 75-00-3	Chloroethane	lio		u|
I 75-35-4	1,1-Dichloroethene	15.0		u|
| 156-59-2	cis-1,2-Dichloroethene	12.5		u(
1 156-60-5	trans-1,2-Dichloroethene	12.5		*l
1 79-01-6	Tricnloroethene	12.5	ij	1
| 75-01-4	Vinyl chloride	lio		u|

IT CORPORATION - MONROEVILLE

Lab Name:Severn Trent Laboratories, Inc.   SDG Number;

Matrix: (soil/water) WATER   Lab Sample ID-.C0J180177 003
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL   Date Received: 10/18/00
Work Order: DNCKW1AA   Date Extracted:10/20/00
Dilution factor: 1   Date Analyzed: 10/20/00
Moisture %:NA

QC Batch: 0294159

Client Sample Id: MW-7D

CAS NO.	COMPOUND	CONCENTRATION UNITS: (Uq/L or uq/kq) uq/L	Q
71-43-2	Benzene	[5.0	u
75-00-3	Chioroethane	110	u
75-35-4	1,1-Dichloroethene	15.0	u)
156-59-2	cis-l,2-Dichloroethene	U.5	u
156-60-5	trans-l,2-Dichloroethene	12.5	u
79-01-6	Trichloroethene	15.0	ul
75-01-4	Vinyl chloride	HO	u

FORM I

Lab Name:Severn Trent Laboratories, Inc. SDG Number:

Matrix; {soil/water} WATER Lab Sample ID;C0J180177 004
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL Date Received: 10/18/00
work Order: DNCKX1AA Date Extracted:l0/20/O0
Dilution factor: 1 Date Analyzed: 10/20/00
Moisture %:NA

QC Batch: 0294159

Client Sample Id: MW-7S

CAS NO.	COMPOUND	CONCENTRATION UNITS: (uq/L or uq/kq) uq/L	Q	
1 71-43-2	Benzene	15.0		u|
I 75-00-3	Chloroethane	110		u|
1 7S-35-4	1,l-Dichloroethene	15.0		u|
I 1S6-59-2	cis-l,2-Dichloroethene	12.5		u[
! 156-60-S	trans-1,2-Dichloroethene	U.5		u]
I 79-01-6	**Trichloroethece**	**14.9**	|J	1
I 75-01-4	vinyl chloride	Ho		u|

Lab Name:Severn Trent Laboratories, Inc.   SDG Number:

Matrix: (soil/water) WATER   Lab Sample ID:C0J180177 005
Method: SW846 8260B
Volatile Organics, GC/MS ;8260B)

Sample WT/Vol: 5 / mL   Date Received: 10/18/00
Work Order: DNCK21AA   Date Extracted:10/23/00
Dilution factor: l   Date Analyzed: 10/23/00
Moisture *:NA

QC Batch: 0297349

Client Sample Id: TMP-1D

CAS NO.	COMPOUND	CONCENTRATION UNITS: (uq/L or uq/kq) uq/L	Q
1 71-43-2	Benzene	15.0	u|
| 75-00-3	Chioroethane	lio	u|
I 75-35-4	1,1-Dichloroethene	15.0	ul
| **156-59-2**	cis**-1,2-Dichloroethene**	|3.6	1
I 156-60-5	trans-1,2-Dichloroethene	12.5	ul
1 79-01-6	**Trichloroethene**	**164**	1
| 75-01-4	Vinyl chloride	110	u|

FORM I

IT CORPORATION - MONROEVILLE

Lab Name:Severn Trent Laboratories, Inc. SDG Number:

Matrix: (soil/water) WATER Lab Sample ID:C0J180177 006
Method: SW846 8260B
Volatile Organics, GC/MS 8260B)

Sample WT/Vol: 5 / mL Date Received: 10/18/00
Work Order: DNCK41AA Date Extracted:10/20/00
Dilution factor: 1 Date Analyzed: 10/20/00
Moisture %:NA

QC Batch: 0294159

Client Sample Id: TMP-2D

CAS NO.	COMPOUND	CONCENTRATION UNITS: (uq/L or ucf/kq) uq/L	Q
1 108-88-3	Toluene	|5.0	U|
| 108-90-7	Chiorobenzene	15.0	u|
1 71-43-2	Benzene	|5.0	uL
| 75-00-3	Chioroethane	110	u|
1 75-35-4	1,1-Dichloroethene	15.0	u|
I 156-59-2	cis-1,2-Dichloroethene	12.5	uL
I 156-60-5	trans-1,2-Dichloroethene	|2.5	u|
[79-01-6	Trichloroethene	IS.O	uL
| 75-01-4	Vinyl chloride	110	u|

FORM I

IT CORPORATION - MONROEVILLE

Lab Name:Severn Trent Laboratories, Inc.　　SDG Number:

Matrix: (soil/water) WATER　　Lab Sample ID:C0J180177 007
Method: SW846 8260B
Volatile.Organics, GC/MS (8260B)

Sample WT/Vol: 5 / mL　　Date Received: 10/18/00
Work Order: DNCK51AA　　Date Extracted:10/20/00
Dilution factor: 1　　Date Analyzed: 10/20/00
Moisture %:NA

QC Batch: 0294159

Client Sample Id: TMP-1-SAT

CAS NO.	COMPOUND	CONCENTRATION UNITS: (uq/L or uq/kq) uq/L	Q
1 71-43-2	Benzene	|5.0	ul
! 75-00-3	Chloroethane	Ho	u|
1 75-35-4	l,1-Dichloroethene	|5.0	ul
I 1S6-59-2	cis-l,2-Dichloroethene	12.5	ul
1 156-60-5	trans-1,2-Dichloroethene	12.5	Ul
I 79-01-6	**Trichloroethene**	118	1
1 75-01-4	Vinyl chloride	110	u|

IT CORPORATION - MONROEVILLE

Lab Name:Severn Trent Laboratories, Inc.   SDG Number:

Matrix: (soil/water) WATER   Lab Sample ID:C0J18O177 009
Method: SW846 826OB
Volatile Organics, GC/MS (8260B!

Sample WT/Vol: 5 / mL   Date Received: 10/18/00
work Order: DNCK71AA   Date Extracted:10/20/00
Dilution factor: 1   Date Analyzed: 10/20/00
Moisture %:NA

QC Batch: 0294159

Client Sample Id: DUP-1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (uq/L or uq/kq) uq/L	Q
1 71-43-2	Benzene	15.0	o
75-00-3	Chioroethane	HO	u
I 75-35-4	l,l-Dichloroethene	15.0	u!
156-59-2	cis-1,2-Dichloroethene	12.5	ul
156-60-5	trans-1,2-Dichloroethene	2.5	u
I 79-01-6	**Trichloroethene**	117	1
1 75-01-4	vinyl chloride	Uo	u

FORM I

RELEASE OF VALIDATED DATA

Project: CBS Horseheads
Date: December 28, 2000
Data Package: C0L06O146
Reviewer: Richard McCracken

Validation was performed on the volatile analytical results for seven water samples collected at the CBS Horseheads Site. STL, Pittsburgh analyzed the samples using SW-846 Method 8260B. The data validation was performed in accordance with the USEPA National Functional Guidelines for Organic Data Review (October 1999), as applicable to SW-846 generated data. Samples in this SDG included:

Field Sample ID	Lab Sample ID	Work Order Number
MW-11D	C0L060146-1	DQWRN
TMP-1D	C0L060146-2	DQWRX
TMP-1SAT	C0L060146-3	DQWR1
TMP-2D	C0L060146-4	DQWR6
MW-11S	C0L060146-5	DQWTD
Blind Dup	C0L060146-6	DQWTE
Trip Blank	C0L060146-7	DQWTG

VOLATILE ORGANICS

Method: SW-846 Method 8260B.

Samples: All samples.

Sample Custody: All chain-of-custody forms were properly completed. The samples were properly preserved when received by the laboratory.

Holding Time: All sample analyses met the 14 day hold time.

GC/MS Instrument Performance Check: Bromofluorobenzene (BFB) met the ion abundance criteria for all tunes. All samples were analyzed within 12 hours of BFB injection. No transcription errors were found.

Initial Calibrations: The initial calibration met the Calibration Check Compound (CCC) relative standard deviation criteria (<30%), and System Performance Check Compound (SPCC) response factor criteria. All target compounds met the %RSD < 15% criteria. The response factor and relative standard deviation for selected compounds were calculated, and no errors were found.

Continuing Calibrations: All continuing calibrations met the CCC percent difference (%D) criteria (<20.0%) and the SPCC minimum response factor criteria. All target compounds had %D < 20%. The response factor and percent difference for selected compounds were calculated and no errors were found.

Blanks: No target compounds were detected in the method blank or the trip blank (CQL060146-008).

Surrogates: All surrogate recoveries met percent recovery criteria.

Matrix Spike/Duplicate: The MS/MSD performed on sample C0L060146-4 met accuracy and precision criteria. The percent recovery and relative percent difference for selected compounds were calculated and no errors were found.

Laboratory Control Sample: All spike recoveries met criteria. The percent recoveries for selected compounds were calculated and no errors were found.

Internal Standards: All internal standards met area and retention time criteria.

Compound Identification: The compounds identified by the laboratory were confirmed by mass spectral comparison and relative retention time.

Raw Data Review: The instrument raw data for selected instrument performance check, initial calibration, continuing calibration, matrix spike, laboratory control sample, relative retention time, and mass spectral comparisons were reviewed as detailed in the appropriate sections above. No errors were found.

Summary: The volatile results were acceptable as reported, with no data qualification.

IT GROUP

Lab Name:Severn Trent Laboratories, Inc.   SDG Number:

Matrix: (soil/water) WATER   Lab Sample ID:C0L060146 001
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: S / mL   Date Received: 12/06/00
Work Order: DQWRN1AA   Date Extracted:12/11/00
Dilution factor: l   Date Analyzed: 12/11/00
Moisture %:NA

QC Batch: 0346423

Client Sample Id; MW-11D

CAS NO.	COMPOUND	CONCENTRATION UNITS: (uq/L or uq/kq) uq/L	Q
1 71-43-2	Benzene	|5.0	u|
I 7S-00-3	Chioroethane	110	u|
| 75-35-4	1,l-Dichloroethene	15.0	u|
I 156-59-2	cis-l,2-Dichloroethene	12.5	u|
I 156-60-5	trans-1,2-Dichloroethene	12.5	u|-
! 79-01-6	Trichloroethene	IS.0	tr|
I 75-01-4	Vinyl chloride	Ho	ul

IT GROUP

Lab Name:Severn Trent Laboratories, Inc.   SDG Number:

Matrix: (soil/water) WATER   Lab Sample ID:C0L060146 006
Method: SW846 8260B
volatile Organics, GC/MS <8260B)

Sample WT/Vol: 5 / mL   Date Received: 12/06/00
Work Order: DQWTE1AA   Date Extracted:12/ll/00
Dilution factor: 1   Date Analyzed: 12/11/00
Moisture %:NA

QC Batch: 0346423

Client Sample Id: BLIND DUP

CAS NO.	COMPOUND	CONCENTRATION UNITS: (uq/L or uq/kq) uq/L	Q	
1 71-43-2	Benzene	5.0		u
1 75-00-3	Chloroethane	110		*
1 75-35-4	1,1-Dichloroethene	15.0		u
1 156-59-2	cis-1,2-Dichloroethene	12.S		u
1 156-60-5	trans-1,2-Dichloroethene	12.5		u
I 79-01-6	**Trichloroethene**	2.4	J	1
1 7S-01-4	Vinyl chloride	10		u

FORM I