0011
86620

WARZYN

Volume 4
Appendix Part 2
13014

Public Review Draft – Remedial Investigation Report Ninth Avenue Dump RI/FS Gary, Indiana

Prepared for:

U.S. Army Corps of Engineers – Omaha District
Omaha, Nebraska
Contract No. DACW 45-86-C-0002

Acting for:

U.S. Environmental Protection Agency
Region V
Chicago, Illinois

Prepared by:

Warzyn Engineering Inc.
Madison, Wisconsin

June 1988

WARZYN

Public Review Draft – Remedial Investigation Report Ninth Avenue Dump RI/FS Gary, Indiana

June 1988

APPENDIX N

PERMEABILITY TEST RESULTS

This Appendix contains permeability test results. Tests were performed in May 1987 by Warzyn Engineering Inc.

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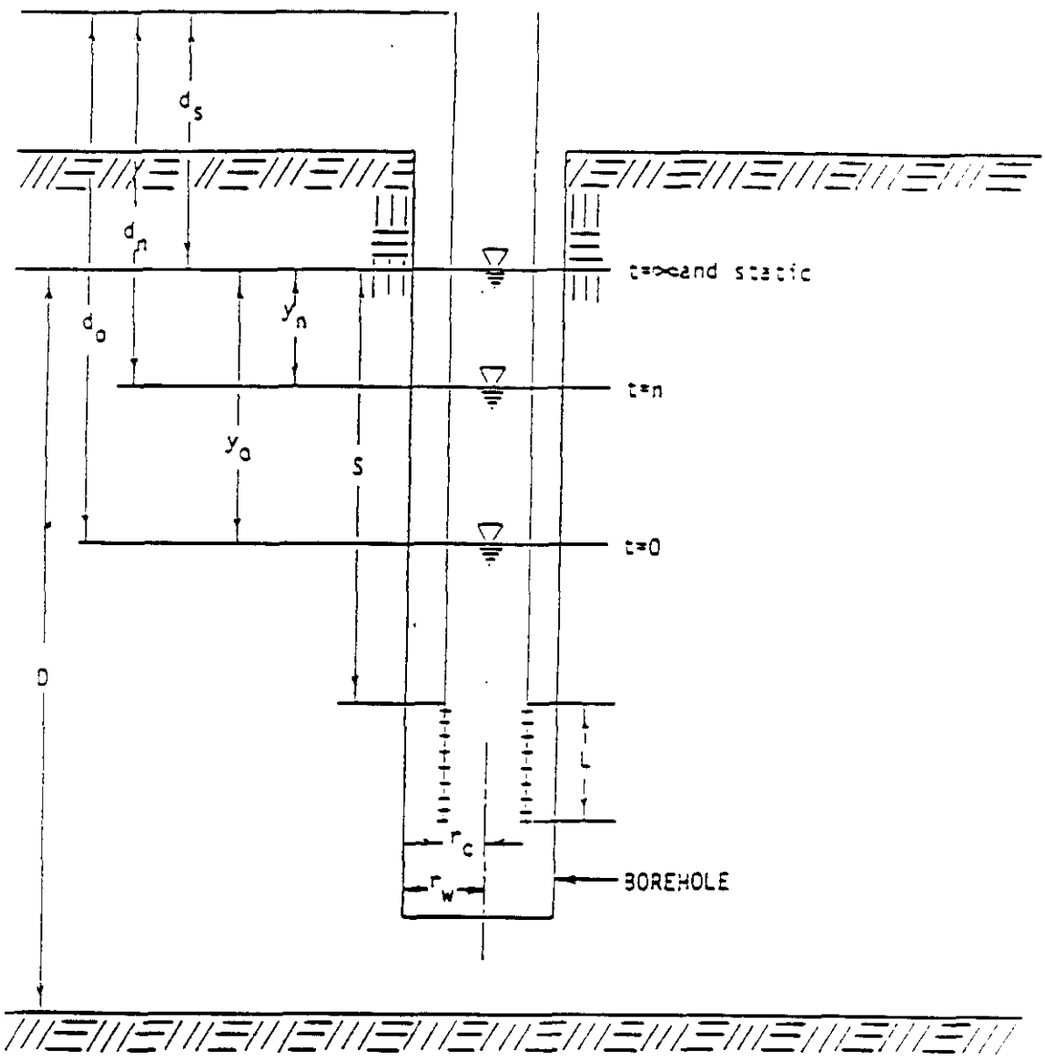
FIGURE A
BAILDOWN TEST CONFIGURATION



d_s - DEPTH TO STATIC LEVEL
d_o - DEPTH TO WATER AT t=0
d_n - DEPTH TO WATER AT t=n
y_o - RELATIVE DRAWDOWN AT t=0 (d_o-d_s)
y_n - RELATIVE DRAWDOWN AT t=n (d_n-d_s)
S - DEPTH TO TOP OF SCREEN BELOW WATER TABLE
D - AQUIFER THICKNESS

A R E A E N G I N E E R I N G , I N C .

M A D I S O N , W I S C O N S I N .

B A I L D O W N A N A L Y S I S

DATA OBTAINED BY : CSR & WFB

DATA ANALYZED BY : WFB

BAIL DOWN PARAMETERS FOR B2

EFFECTIVE WELL DIAMETER = 2.000 INCHES

EFFECTIVE SCREEN DIAMETER = 2.000 INCHES

SCREEN LENGTH = 3.000 FEET

WELL PENETRATION DEPTH = 4.420 FEET

AQUIFER THICKNESS = 25.370 FEET

STATIC WATER LEVEL = 5.520 FEET

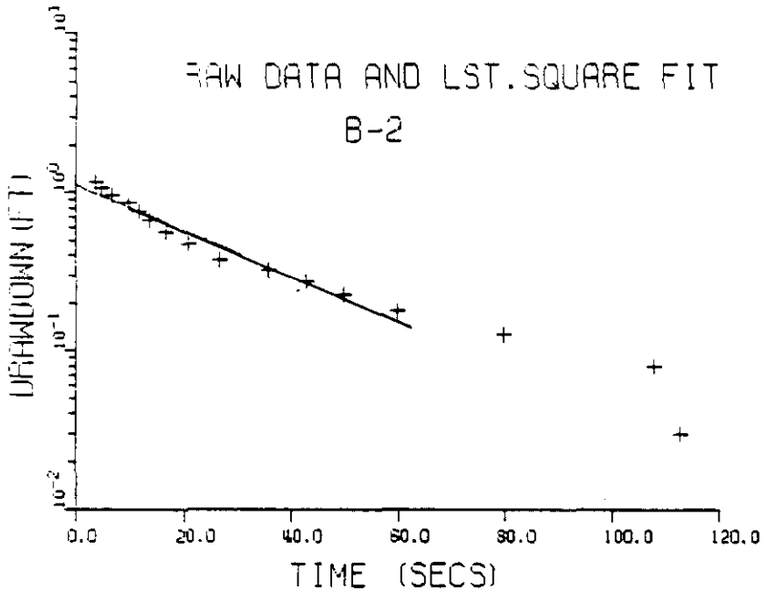
AQUIFER CONDUCTIVITY IS = .239E-02 CM/SEC

AQUIFER TRANSMISSIVITY IS = .185E+01 CM*CM/SEC

OR .128E+04 GAL/FT/DAY

WELL B2

TIME (min)	DEPTH TO WATER (feet)
[illegible]	34.00
.4166	33.60
.7500	33.45
1.0000	33.35
1.7500	33.30
2.8333	33.20
4.7333	33.10
5.8333	33.00
7.8333	32.90
10.0000	32.80
12.1666	32.70
14.2333	32.50
28.1666	32.10
[illegible]	31.90



WELL BW-3

TIME (MIN)	DEPTH TO WATER (FEET)
.1000	8.20
.1500	8.10
.4333	8.00
.7833	7.95
1.1500	7.90
1.5000	7.85
1.8166	7.80
2.2166	7.75
2.5333	7.70
2.9666	7.65
3.4166	7.60
3.8666	7.55
4.3500	7.50
4.8500	7.45
5.3666	7.40
5.9333	7.35
6.5000	7.30
7.1833	7.25
7.8666	7.20
8.5166	7.15
9.4000	7.10
10.3333	7.05
11.3333	7.00

MARIYN ENGINEERING, INC.

MADISON, WISCONSIN.

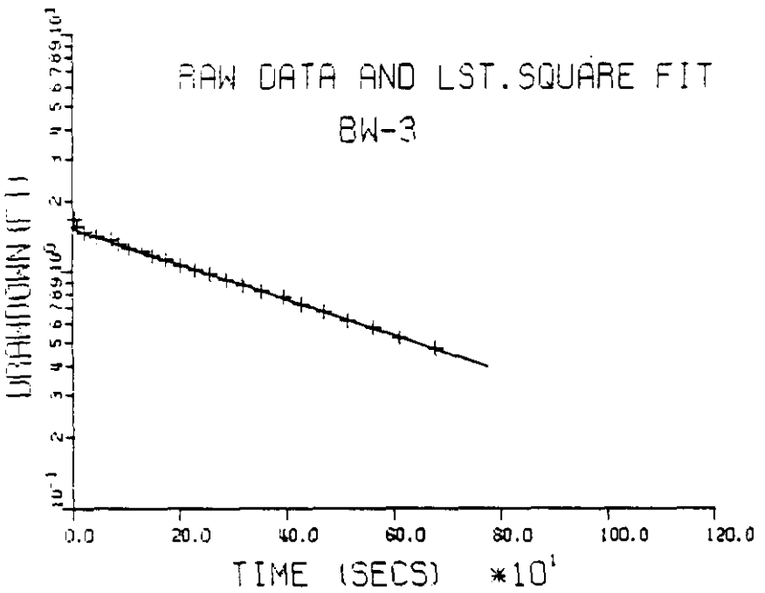
BAIL DOWN ANALYSIS

DATA OBTAINED BY : CSR & WFB

DATA ANALYZED BY : WFB

BAIL DOWN PARAMETERS FOR BW-3

EFFECTIVE WELL DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN DIAMETER	=	2.000 INCHES
SCREEN LENGTH	=	5.000 FEET
WELL PENETRATION DEPTH	=	8.16 FEET
AQUIFER THICKNESS	=	27.160 FEET
STATIC WATER LEVEL	=	6.320 FEET
AQUIFER CONDUCTIVITY IS	=	.110E-03 CM/SEC
AQUIFER TRANSMISSIVITY IS	=	.910E-01 CM*CM/SEC
	OR	.633E+02 GAL/FT/DAY



WELL (X)

TIME (MIN)	DEPTH TO WATER (FEET)
.0000	5.90
.1833	5.80
.2500	5.70
.3000	5.60
.3666	5.55
.4166	5.50
.4833	5.45
.5666	5.40
.6166	5.35
.6666	5.30
.7500	5.25
.8833	5.20
1.0000	5.15

W A R Z Y N E N G I N E E R I N G , I N C.

M A D I S O N, W I S C O N S I N.

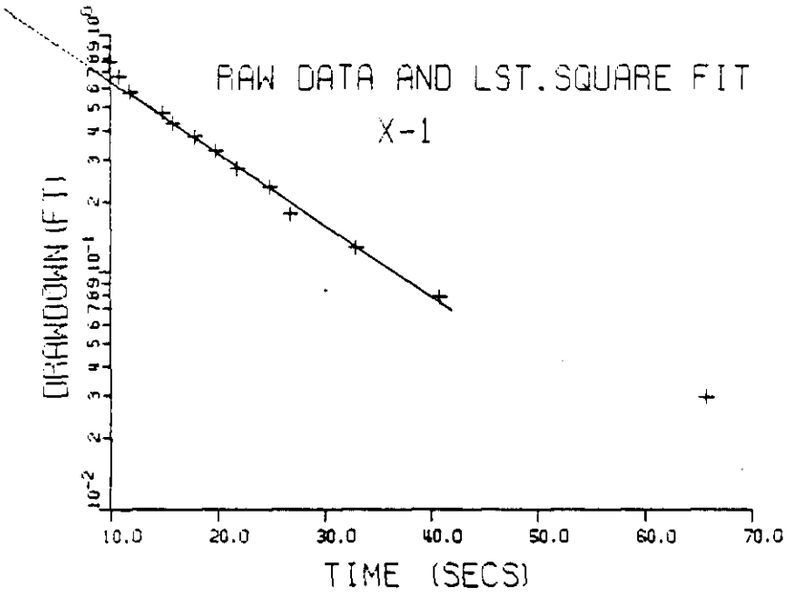
B A I L D O W N A N A L Y S I S

DATA OBTAINED BY : CSR & WFB

DATA ANALYZED BY : WFB

BAIL DOWN PARAMETERS FOR X1

EFFECTIVE WELL DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN DIAMETER	=	2.000 INCHES
SCREEN LENGTH	=	5.000 FEET
WELL PENETRATION DEPTH	=	22.850 FEET
AQUIFER THICKNESS	=	22.850 FEET
STATIC WATER LEVEL	=	5.120 FEET
AQUIFER CONDUCTIVITY IS	=	.596E-02 CM/SEC
AQUIFER TRANSMISSIVITY IS.	=	.415E+01 CM*CM/SEC
	OR	.289E+04 GAL/FT/DAY



WARZYN ENGINEERING, INC.

MADISON, WISCONSIN.

BAIL DOWN ANALYSIS

DATA OBTAINED BY : CSR & WFB

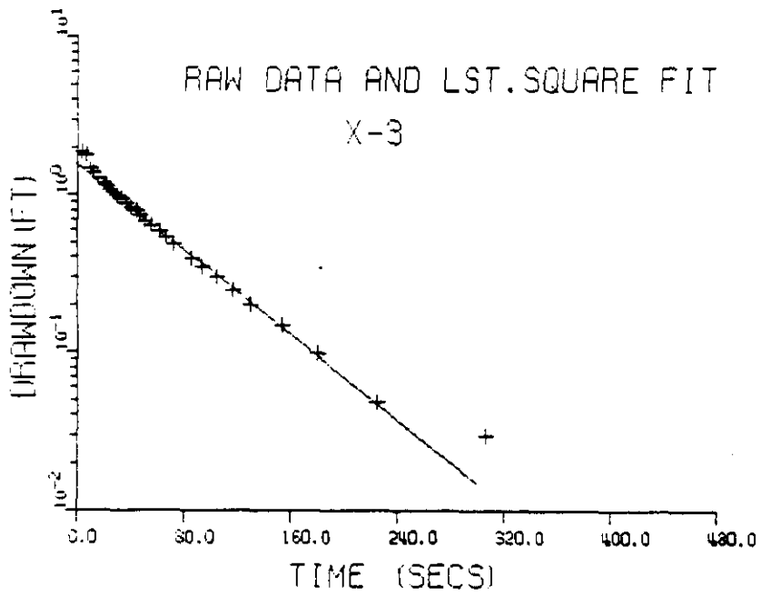
DATA ANALYZED BY : WFB

BAIL DOWN PARAMETERS FOR X3

EFFECTIVE WELL DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN DIAMETER	=	2.000 INCHES
SCREEN LENGTH	=	5.000 FEET
WELL PENETRATION DEPTH	=	25.350 FEET
AQUIFER THICKNESS	=	28.250 FEET
STATIC WATER LEVEL	=	5.100 FEET
AQUIFER CONDUCTIVITY IS	=	.117E-02 CM/SEC
AQUIFER TRANSMISSIVITY IS	=	.101E+01 CM*CM/SEC
	OR	.701E+03 GAL/FT/DAY

WELL X-3

TIME (MIN)	DEPTH TO WATER (FEET)
0.0000	7.00
0.1333	6.90
0.1833	6.80
0.2166	6.50
0.2833	6.40
0.3500	6.30
0.3833	6.25
0.4333	6.20
0.4666	6.15
0.5166	6.10
0.5833	6.05
0.6333	6.00
0.6833	5.95
0.7500	5.90
0.8000	5.85
0.8666	5.80
0.9500	5.75
1.0500	5.70
1.1333	5.65
1.2166	5.60
1.4500	5.50
1.5833	5.45
1.7666	5.40
1.9666	5.35
2.1833	5.30
2.5833	5.25
3.0166	5.20
3.7666	5.15
5.1333	5.13



[illegible] Differential Logger
[illegible] 12:42

Unit# [illegible] Test# 0

Input 1: Level (F) TOC

Reference	4.73
Scale factor	50.12
Offset	0.00

Step# [illegible] 05/13 07:07

Elapsed Time	Value
[illegible]	4.55
[illegible]	4.55
0.0066	4.55
0.0099	4.55
0.0133	4.55
0.0166	4.55
0.0200	4.55
0.0233	4.55
0.0266	4.55
0.0300	4.57
0.0333	4.55
0.0500	4.55
0.0666	4.55
0.0833	13.18
0.1000	12.44
0.1166	11.73
0.1333	11.19
0.1500	10.64
0.1666	10.20
0.1833	9.80
0.2000	9.44
0.2166	9.09
0.2333	8.81
0.2500	8.53
0.2666	8.27
0.2833	8.04
0.3000	7.82
0.3166	7.61
0.3333	7.42
0.4167	6.71
0.5000	6.19
0.5833	5.81
0.6667	5.56
0.7500	5.36
0.8333	5.21
0.9167	5.10
1.0000	5.02
1.0833	4.96
1.1667	4.90
1.2500	4.87
1.3333	4.82
1.4166	4.79
1.5000	4.77
1.5833	4.76
1.6667	4.74
1.7500	4.73
1.8333	4.71
1.9167	4.69
2.0000	4.68
2.5000	4.65
3.0000	4.63
3.5000	4.61
4.0000	4.61
4.5000	4.61
5.0000	4.60
5.5000	4.60
6.0000	4.60
6.5000	4.60
7.0000	4.60
7.5000	4.60
8.0000	4.60
8.5000	4.58
9.0000	4.60
9.5000	4.60
10.0000	4.60
12.0000	4.60
14.0000	4.58
16.0000	4.60
18.0000	4.60
20.0000	4.60

END

MARTIN ENGINEERING, INC.

MADISON, WISCONSIN.

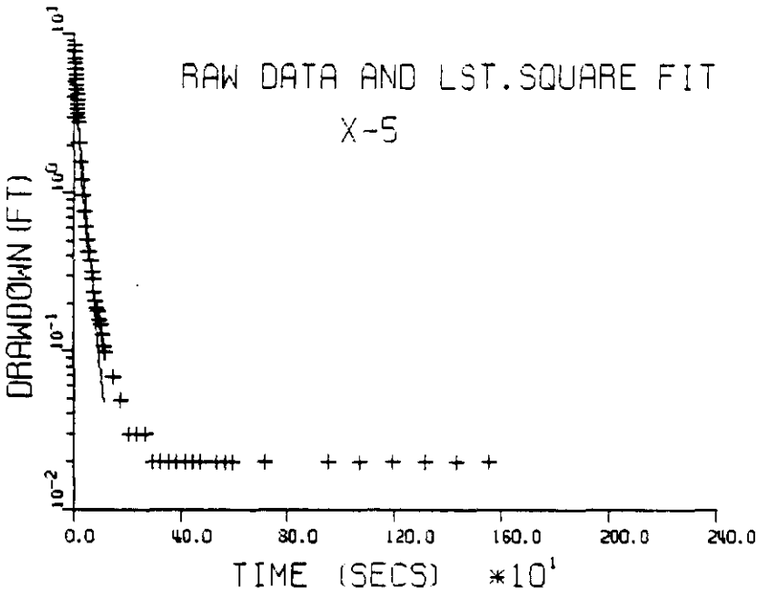
BAIL DOWN ANALYSIS

DATA OBTAINED BY : CSR & WFB

DATA ANALYZED BY : CSR

BAIL DOWN PARAMETERS FOR X-5

EFFECTIVE WELL DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN LENGTH	=	5.000 FEET
WELL PENETRATION DEPTH	=	22.740 FEET
AQUIFER THICKNESS	=	22.740 FEET
STATIC WATER LEVEL	=	4.580 FEET
AQUIFER CONDUCTIVITY IS	=	.379E-02 CM/SEC
AQUIFER TRANSMISSIVITY IS	=	.263E+01 CM*CM/SEC
	OR	.183E+04 GAL/FT/DAY



WELL [illegible]

TIME (MIN)	DEPTH TO WATER (FEET)
[illegible]	0.25
[illegible]	0.20
[illegible]	0.25
[illegible]	0.20
[illegible]	0.15
[illegible]	0.10

MARTIN ENGINEERING, INC.

MADISON, WISCONSIN.

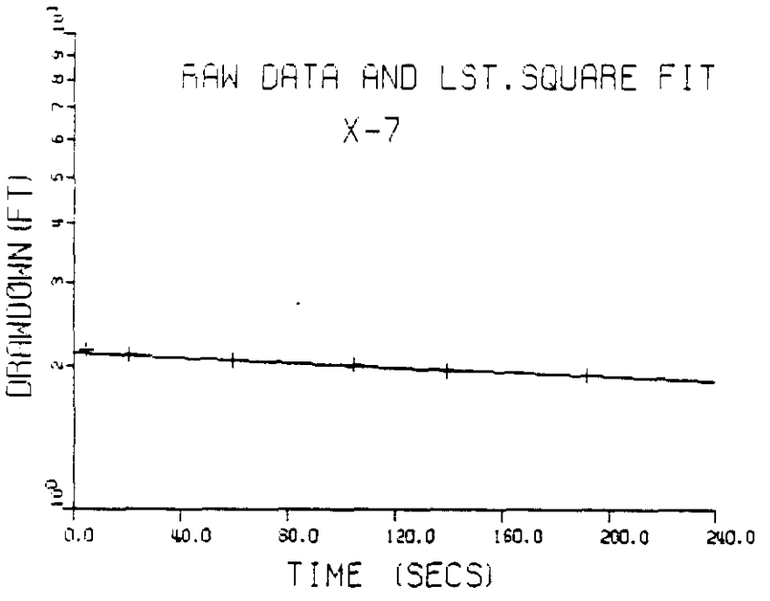
BAIL DOWN ANALYSIS

DATA OBTAINED BY : CSR & WFB

DATA ANALYZED BY : WFB

BAIL DOWN PARAMETERS FOR X7

EFFECTIVE WELL DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN DIAMETER	=	2.000 INCHES
SCREEN LENGTH	=	5.000 FEET
WELL PENETRATION DEPTH	=	6.040 FEET
AQUIFER THICKNESS	=	23.040 FEET
STATIC WATER LEVEL	=	4.180 FEET
AQUIFER CONDUCTIVITY IS	=	.344E-04 CM/SEC
AQUIFER TRANSMISSIVITY IS	=	.242E-01 CM*CM/SEC
	OR	.168E+02 GAL/FT/DAY



WELL X-2

TIME (MIN)	DEPTH TO WATER (FEET)
0.0833	5.50
0.1166	5.40
0.1333	5.30
0.1500	5.20
0.1666	5.10
0.2000	5.00
0.2500	4.90
0.2833	4.80
0.3500	4.70
0.4333	4.60
0.5000	4.55
0.6000	4.50
0.7666	4.45
1.4166	4.40

MARZYN ENGINEERING, INC.

MADISON, WISCONSIN.

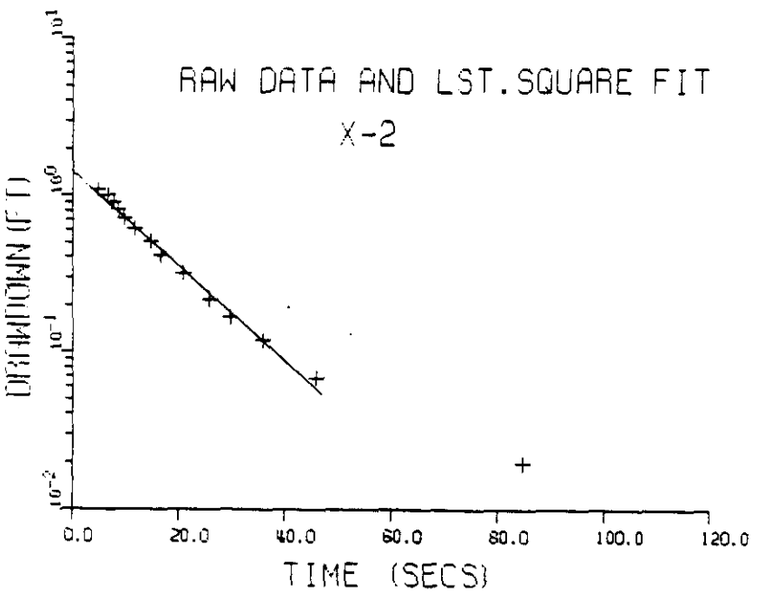
BAIL DOWN ANALYSIS

DATA OBTAINED BY : CSR & WFB

DATA ANALYZED BY : WFB

BAIL DOWN PARAMETERS FOR X2

EFFECTIVE WELL DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN DIAMETER	=	2.000 INCHES
SCREEN LENGTH	=	5.000 FEET
WELL PENETRATION DEPTH	=	16.120 FEET
AQUIFER THICKNESS	=	23.120 FEET
STATIC WATER LEVEL	=	4.380 FEET
AQUIFER CONDUCTIVITY IS	=	.483E-02 CM/SEC
AQUIFER TRANSMISSIVITY IS	=	.340E+01 CM*CM/SEC
	OR	.236E+04 GAL/FT/DAY



SET: 1
Environmental Loader
[illegible] 10:48

Units [illegible] Test# 7

INPUT 1: Level (F) TOC

Reference	5.68
Scale Factor	50.12
Offset	0.00

Steps 0 [illegible]/12 18:32

Elapsed Time	Value
[illegible]	5.58
[illegible]	5.58
[illegible]	5.58
0.0099	5.58
0.0133	5.58
0.0166	5.58
0.0200	5.58
0.0233	5.58
[illegible]	5.58
[illegible]	5.58
[illegible]	5.58
[illegible]	5.58
[illegible]	5.58
0.0833	11.31
0.1000	11.05
0.1166	10.83
0.1333	10.09
0.1500	9.85
0.1666	9.27
0.1833	8.91
0.2000	8.59
0.2166	8.34
0.2333	8.10
0.2500	7.90
0.2666	7.71
0.2833	7.54
0.3000	7.36
0.3166	7.21
0.3333	7.06
0.4167	6.56
0.5000	6.21
0.5833	6.02
0.6667	5.88
0.7500	5.80
0.8333	5.74
0.9167	5.71
1.0000	5.69
1.0833	5.68
1.1667	5.66
1.2500	5.66
1.3333	5.64
1.4166	5.64
1.5000	5.64
1.5833	5.64
1.6667	5.64
1.7500	5.64
1.8333	5.64
1.9167	5.64
2.0000	5.64
2.5000	5.64
3.0000	5.64
3.5000	5.64
4.0000	5.63
4.5000	5.64
5.0000	5.64
5.5000	5.64
6.0000	5.64
6.5000	5.63
7.0000	5.63
7.5000	5.63
8.0000	5.64
8.5000	5.64
9.0000	5.63
9.5000	5.64
10.0000	5.64
12.0000	5.64
14.0000	5.64

END

WARZYN ENGINEERING, INC.

MADISON, WISCONSIN.

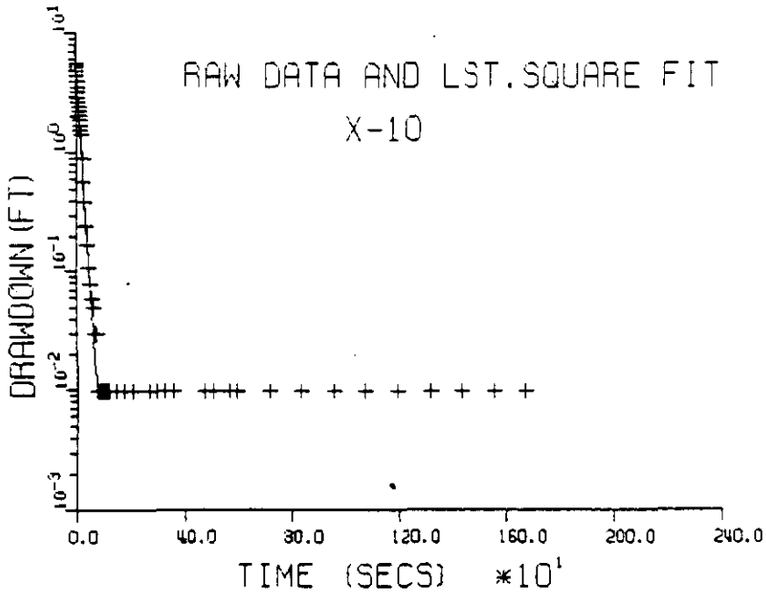
BAIL DOWN ANALYSIS

DATA OBTAINED BY : CSR & WFB

DATA ANALYZED BY : CSR

BAIL DOWN PARAMETERS FOR X-10

EFFECTIVE WELL DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN LENGTH	=	5.000 FEET
WELL PENETRATION DEPTH	=	24.880 FEET
AQUIFER THICKNESS	=	24.880 FEET
STATIC WATER LEVEL	=	5.630 FEET
AQUIFER CONDUCTIVITY IS	=	.740E-02 CM/SEC
AQUIFER TRANSMISSIVITY IS	=	.561E+01 CM*CM/SEC
	OR	.390E+04 GAL/FT/DAY



SETRONIC
Environmental Logger
05/12 10:49

Unit# 00000 Test# 6

INPUT 1: Level (F) TOC

Reference 5.68
Scale factor 50.12
Offset 0.00

Step# 0 05/12 18:15

Elapsed Time	Value
0.0000	5.63
0.0033	5.63
0.0066	5.63
0.0099	5.63
0.0133	5.63
0.0166	5.63
0.0200	5.63
0.0233	5.63
0.0266	5.63
0.0300	5.64
0.0333	5.63
0.0500	5.66
0.0666	5.64
0.0833	12.33
0.1000	11.02
0.1166	10.49
0.1333	10.04
0.1500	9.63
0.1666	9.16
0.1833	8.80
0.2000	8.50
0.2166	8.25
0.2333	8.01
0.2500	7.80
0.2666	7.62
0.2833	7.44
0.3000	7.27
0.3166	7.11
0.3333	6.97
0.4167	6.46
0.5000	6.13
0.5833	5.91
0.6667	5.79
0.7500	5.69
0.8333	5.64
0.9167	5.60
1.0000	5.58
1.0833	5.56
1.1667	5.55
1.2500	5.55
1.3333	5.53
1.4166	5.53
1.5000	5.53
1.5833	5.53
1.6667	5.53
1.7500	5.53
1.8333	5.53
1.9167	5.53
2.0000	5.53
2.5000	5.52
3.0000	5.52
3.5000	5.52
4.0000	5.52
4.5000	5.52
5.0000	5.52
5.5000	5.52
6.0000	5.52
6.5000	5.52
7.0000	5.52
7.5000	5.52
8.0000	5.52
8.5000	5.50
9.0000	5.52
9.5000	5.52
10.0000	5.52

END

WARZYN ENGINEERING, INC.

MADISON, WISCONSIN.

BAIL DOWN ANALYSIS

DATA OBTAINED BY : CSR & WFB

DATA ANALYZED BY : CSR

BAIL DOWN PARAMETERS FOR X-10 DUPLICATE

EFFECTIVE WELL DIAMETER = 2.000 INCHES

EFFECTIVE SCREEN DIAMETER = 2.000 INCHES

EFFECTIVE SCREEN LENGTH = 5.000 FEET

WELL PENETRATION DEPTH = 24.880 FEET

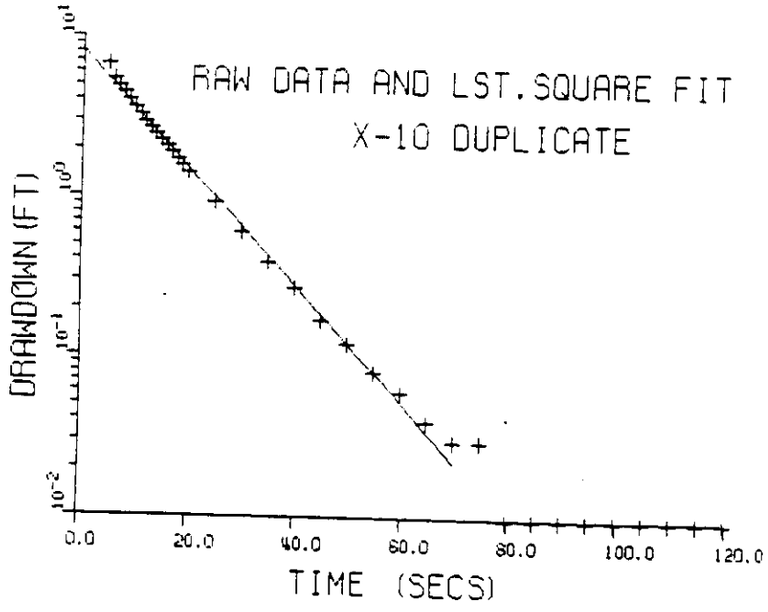
AQUIFER THICKNESS = 24.880 FEET

STATIC WATER LEVEL = 5.520 FEET

AQUIFER CONDUCTIVITY IS = .731E-02 CM/SEC

AQUIFER TRANSMISSIVITY IS = .554E+01 CM*CM/SEC

OR .385E+04 GAL/FT/DAY



WELL X-11

TIME (MIN)	DEPTH TO WATER (FEET)
.0333	5.50
.0666	5.50
.1166	5.50
.1333	5.10
.1666	5.00
.2166	4.90
.2333	4.85
.2833	4.80
.3333	4.78
.3833	4.77
.4166	4.76
.4666	4.75

WARZYN ENGINEERING, INC.

MADISON, WISCONSIN.

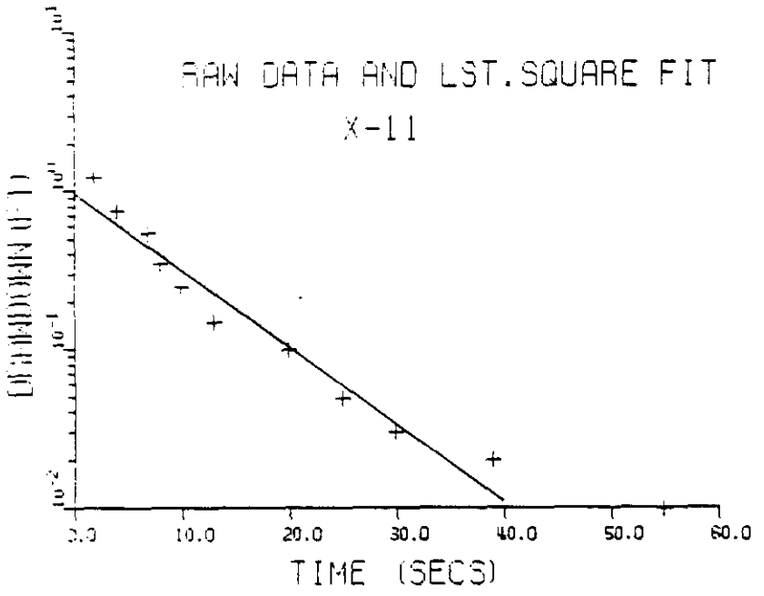
BAIL DOWN ANALYSIS

DATA OBTAINED BY : CSR & WFB

DATA ANALYZED BY : CSR

BAIL DOWN PARAMETERS FOR X-11

EFFECTIVE WELL DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN LENGTH	=	20.000 FEET
WELL PENETRATION DEPTH	=	25.320 FEET
AQUIFER THICKNESS	=	26.620 FEET
STATIC WATER LEVEL	=	4.750 FEET
AQUIFER CONDUCTIVITY IS	=	.251E-02 CM/SEC
AQUIFER TRANSMISSIVITY IS	=	.204E+01 CM*CM/SEC
	OR	.142E+04 GAL/FT/DAY



WELL X-11
DUPLICATE

TIME (MIN)	DEPTH TO WATER (FEET)
.0000	5.00
.0033	5.50
.0166	5.20
.0333	5.00
.0500	4.90
.0666	4.86
.0833	4.84
.1000	4.82
.1333	4.80
.1666	4.78
.1999	4.77
.2166	4.76

WARZYN ENGINEERING, INC.

MADISON, WISCONSIN.

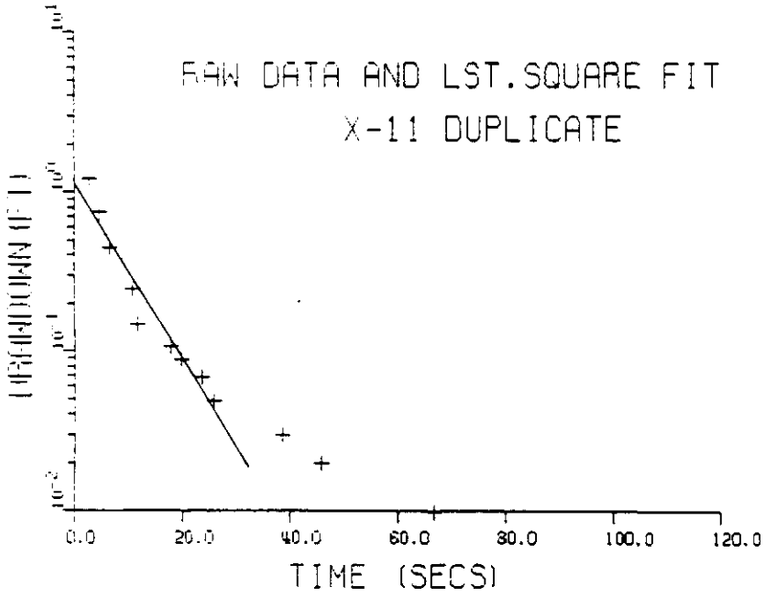
BAIL DOWN ANALYSIS

DATA OBTAINED BY : CSR & WFB

DATA ANALYZED BY : CSR

BAIL DOWN PARAMETERS FOR X-11 DUP

EFFECTIVE WELL DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN LENGTH	=	20.000 FEET
WELL PENETRATION DEPTH	=	25.320 FEET
AQUIFER THICKNESS	=	26.620 FEET
STATIC WATER LEVEL	=	4.750 FEET
AQUIFER CONDUCTIVITY IS	=	.290E-02 CM/SEC
AQUIFER TRANSMISSIVITY IS	=	.236E+01 CM*CM/SEC
	OR	.164E+04 GAL/FT/DAY



WELL X-12

TIME MIN	DEPTH TO WATER (FEET)
.0500	5.10
0.1000	5.00
0.1500	4.90
0.2000	4.70
0.2500	4.50
0.3000	4.30
0.3500	4.25
0.4000	4.20
0.5000	4.15
0.6000	4.10
0.7000	4.05
1.0000	4.00
2.0000	3.97

WARZYN ENGINEERING, INC.

MADISON, WISCONSIN.

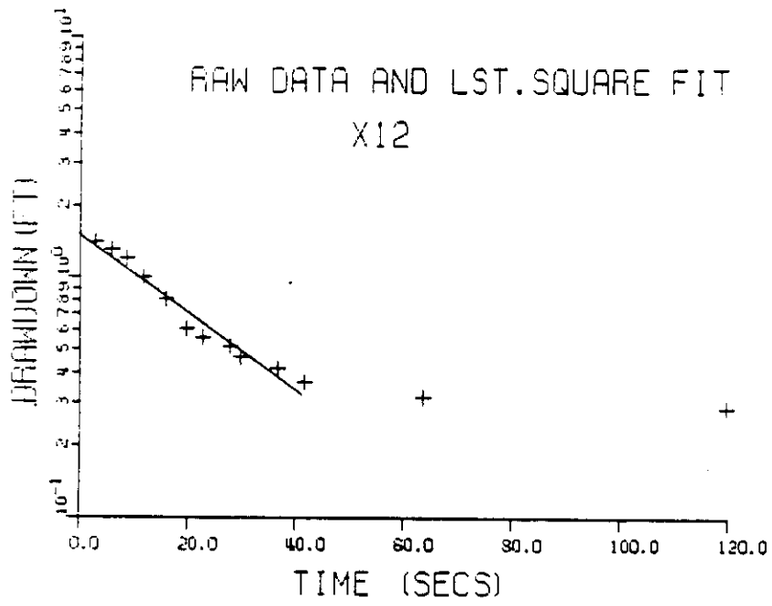
BAIL DOWN ANALYSIS

DATA OBTAINED BY : CSR & WFB

DATA ANALYZED BY : CSR

BAIL DOWN PARAMETERS FOR X-12

EFFECTIVE WELL DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN DIAMETER	=	2.000 INCHES
SCREEN LENGTH	=	5.000 FEET
WELL PENETRATION DEPTH	=	6.720 FEET
AQUIFER THICKNESS	=	24.720 FEET
STATIC WATER LEVEL	=	3.680 FEET
AQUIFER CONDUCTIVITY IS	=	.239E-02 CM/SEC
AQUIFER TRANSMISSIVITY IS	=	.180E+01 CM*CM/SEC
	OR	.125E+04 GAL/FT/DAY



WELL X-12
DUPLICATE

TIME (MIN)	DEPTH TO WATER (FEET)
0.0000	5.10
0.0833	5.00
0.1166	4.90
0.1333	4.80
0.1500	4.70
0.1666	4.60
0.2166	4.50
0.2666	4.40
0.3333	4.30
0.3833	4.25
0.4333	4.20
0.5000	4.15
0.6000	4.10
0.6833	4.05
1.0000	4.00
1.7500	3.97

W A R Z Y N E N G I N E E R I N G , I N C.

M A D I S O N, W I S C O N S I N.

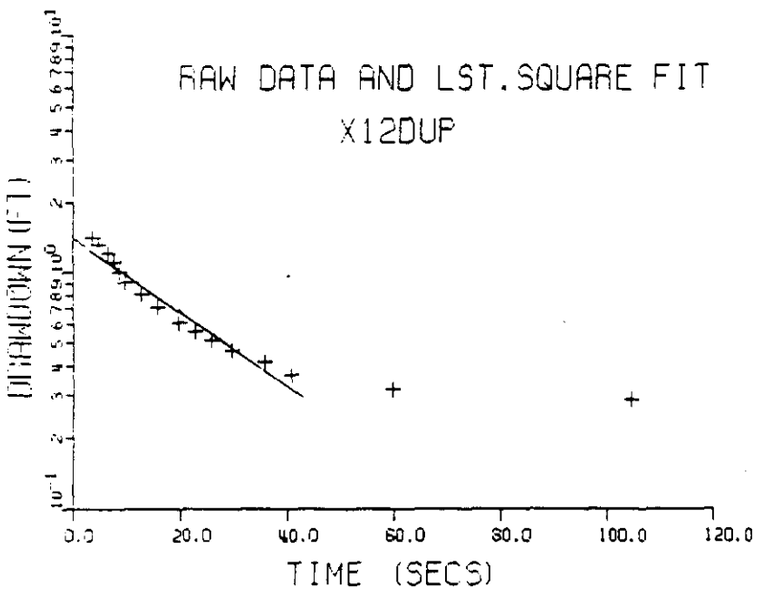
B A I L D O W N A N A L Y S I S

DATA OBTAINED BY : CSR & WFB

DATA ANALYZED BY : WFB

BAIL DOWN PARAMETERS FOR X12DUP

EFFECTIVE WELL DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN LENGTH	=	5.000 FEET
WELL PENETRATION DEPTH	=	6.720 FEET
AQUIFER THICKNESS	=	24.720 FEET
STATIC WATER LEVEL	=	3.680 FEET
AQUIFER CONDUCTIVITY IS	=	.218E-02 CM/SEC
AQUIFER TRANSMISSIVITY IS	=	.164E+01 CM*CM/SEC
	OR	.114E+04 GAL/FT/DAY



M A R Z Y N   E N G I N E E R I N G , I N C.

M A D I S O N .   W I S C O N S I N .

B A I L   D O W N   A N A L Y S I S

DATA OBTAINED BY :   CSR & WFB

DATA ANALYZED BY :   WFB

BAIL DOWN PARAMETERS FOR   X13

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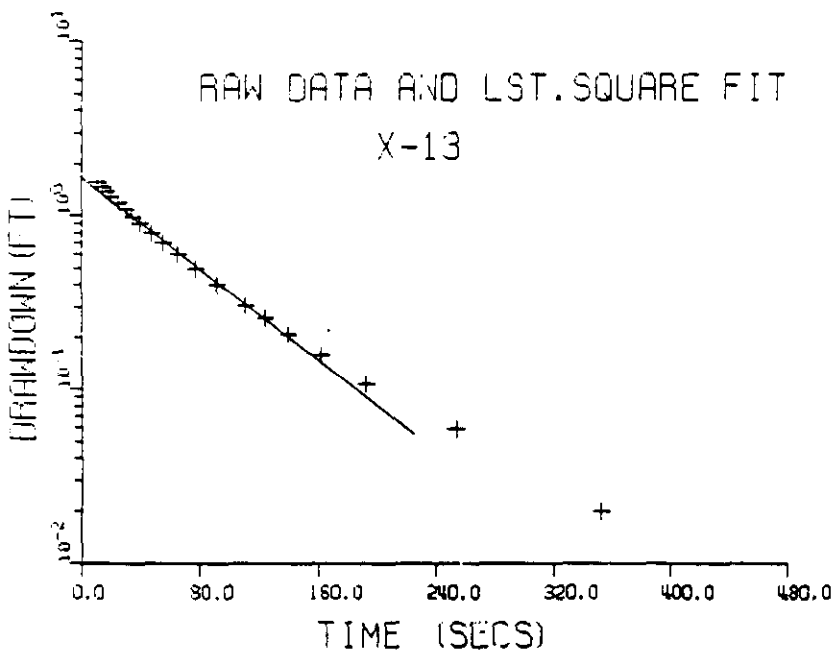
EFFECTIVE WELL DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN DIAMETER	=	2.000 INCHES
SCREEN LENGTH	=	5.000 FEET
WELL PENETRATION DEPTH	=	6.050 FEET
AQUIFER THICKNESS	=	24.050 FEET
STATIC WATER LEVEL	=	4.390 FEET
AQUIFER CONDUCTIVITY IS	=	.863E-03 CM/SEC
AQUIFER TRANSMISSIVITY IS	=	.633E+00 CM*CM/SEC
	OR	.440E+03 GAL/FT/DAY

WELL X-13

TIME (MIN)	DEPTH TO WATER (FEET)
0.2000	6.00
0.2666	5.90
0.3000	5.80
0.3500	5.70
0.4500	5.60
0.5166	5.50
0.6000	5.40
0.6833	5.30
0.8166	5.20
0.9500	5.10
1.1166	5.00
1.3166	4.90
1.5500	4.80
1.8666	4.70
2.1000	4.65
2.3500	4.60
2.7166	4.55
3.2166	4.50
4.2500	4.45
5.9833	4.41



WARZYN ENGINEERING, INC.

MADISON, WISCONSIN.

BAIL DOWN ANALYSIS

DATA OBTAINED BY : CSR & WFB

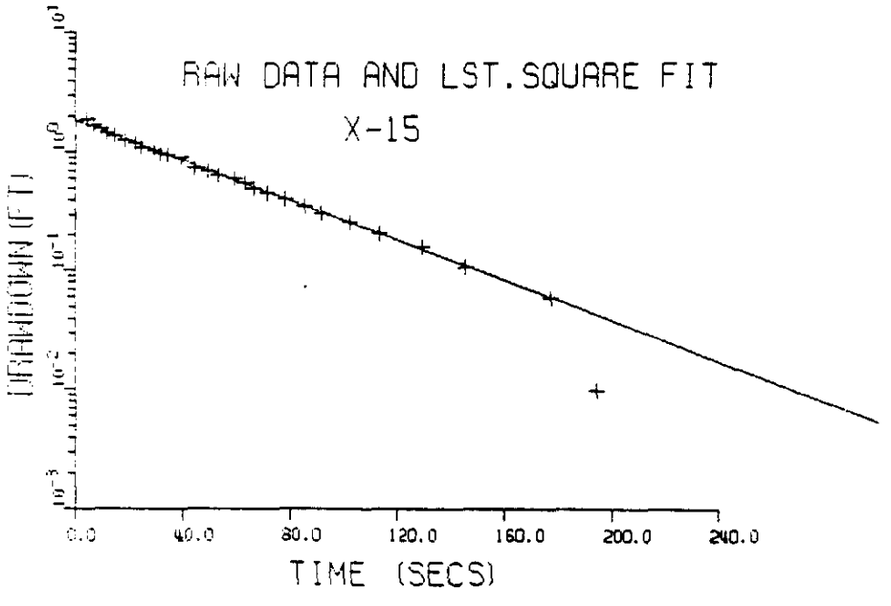
DATA ANALYZED BY : WFB

BAIL DOWN PARAMETERS FOR X15

EFFECTIVE WELL DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN DIAMETER	=	2.000 INCHES
SCREEN LENGTH	=	5.000 FEET
WELL PENETRATION DEPTH	=	5.160 FEET
AQUIFER THICKNESS	=	22.160 FEET
STATIC WATER LEVEL	=	5.090 FEET
AQUIFER CONDUCTIVITY IS	=	.111E-02 CM/SEC
AQUIFER TRANSMISSIVITY IS	=	.753E+00 CM*CM/SEC
	OR	.523E+03 GAL/FT/DAY

WELL X-15

TIME (MIN)	DEPTH TO WATER (FEET)
.0833	7.00
.1166	6.90
.1666	6.70
0.2000	6.60
0.2500	6.50
0.3166	6.40
0.3833	6.30
.4166	6.20
0.5000	6.15
0.5333	6.10
0.5833	6.05
0.6666	6.00
.7500	5.85
.8333	5.80
.9000	5.75
1.0000	5.70
1.0666	5.65
1.1166	5.60
1.2000	5.55
1.3166	5.50
1.4333	5.45
1.5333	5.40
1.7166	5.35
1.9000	5.30
2.1666	5.25
2.4333	5.20
2.7666	5.15
3.2500	5.10



WELL X-15
DUPLICATE

TIME (MIN)	DEPTH TO WATER (FEET)
.0833	5.90
.1000	5.90
.1333	5.80
0.1666	5.70
0.2000	5.60
0.2333	5.50
0.2666	5.40
0.3000	5.30
0.4166	5.20
0.4666	5.10
0.5000	5.00
0.5166	5.95
0.6500	5.90
0.7000	5.85
0.7666	5.80
0.8000	5.75
0.8833	5.70
0.9500	5.65
1.0333	5.60
1.1000	5.55
1.2000	5.50
1.2833	5.45
1.4500	5.40
1.5833	5.35
1.7500	5.30

WAAZYN ENGINEERING, INC.

MADISON, WISCONSIN.

BAIL DOWN ANALYSIS

DATA OBTAINED BY : CSR & WFB

DATA ANALYZED BY : CSR

BAIL DOWN PARAMETERS FOR X-15 DUP

EFFECTIVE WELL DIAMETER = 2.000 INCHES

EFFECTIVE SCREEN DIAMETER = 2.000 INCHES

EFFECTIVE SCREEN LENGTH = 5.000 FEET

WELL PENETRATION DEPTH = 5.160 FEET

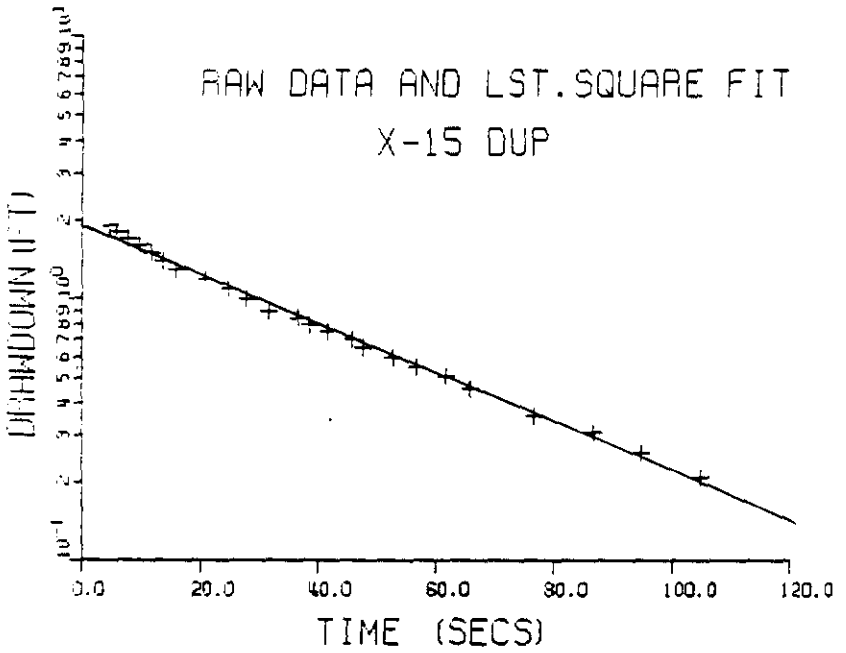
AQUIFER THICKNESS = 22.160 FEET

STATIC WATER LEVEL = 5.090 FEET

AQUIFER CONDUCTIVITY IS = .123E-02 CM/SEC

AQUIFER TRANSMISSIVITY IS = .833E+00 CM*CM/SEC

OR .579E+03 GAL/FT/DAY



WARZYN ENGINEERING, INC.

MADISON, WISCONSIN.

BAIL DOWN ANALYSIS

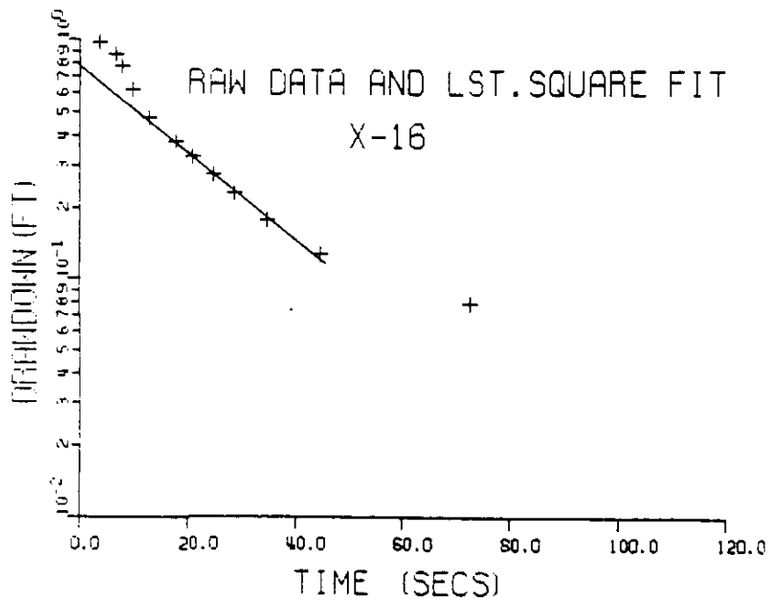
DATA OBTAINED BY : CSR & WFB

DATA ANALYZED BY : WFB

BAIL DOWN PARAMETERS FOR X16

EFFECTIVE WELL DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN DIAMETER	=	2.000 INCHES
SCREEN LENGTH	=	10.000 FEET
WELL PENETRATION DEPTH	=	13.150 FEET
AQUIFER THICKNESS	=	24.250 FEET
STATIC WATER LEVEL	=	4.620 FEET
AQUIFER CONDUCTIVITY IS	=	.151E-02 CM/SEC
AQUIFER TRANSMISSIVITY IS	=	.112E+01 CM*CM/SEC
	OR	.776E+03 GAL/FT/DAY

TIME (MIN)	DEPTH TO WATER (FEET)
.0666	5.00
.1116	4.98
.1716	5.44
.1866	5.25
.2166	5.14
.2766	5.00
.3516	4.95
.4166	4.90
.4866	4.85
.5616	4.80
.7266	4.75
1.2166	4.70



WARZYN ENGINEERING, INC.

MADISON, WISCONSIN.

BAIL DOWN ANALYSIS

DATA OBTAINED BY : CSR & WFB

DATA ANALYZED BY : CSR & TEM

BAIL DOWN PARAMETERS FOR X-17

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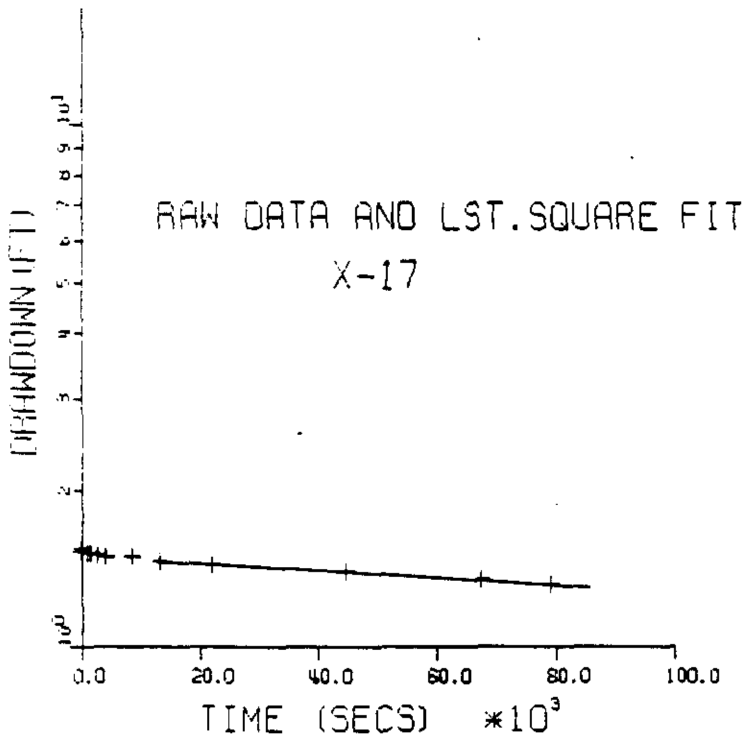
EFFECTIVE WELL DIAMETER	=	4.250 INCHES	
EFFECTIVE SCREEN DIAMETER	=	2.000 INCHES	
EFFECTIVE SCREEN LENGTH	=	19.20 FEET	
WELL PENETRATION DEPTH	=	19.20 FEET	
AQUIFER THICKNESS	=	90.00 FEET	
STATIC WATER LEVEL	=	4.290 FEET	
AQUIFER CONDUCTIVITY IS	=	.490E-06 CM/SEC	
AQUIFER TRANSMISSIVITY IS	=	.110E-02 CM*CM/SEC	
	OR	.765E-00 GAL/FT/DAY	

WELL [illegible]

TIME (MIN)	DEPTH TO WATER (FEET)
[illegible]	5.84
[illegible]	5.82
[illegible]	5.815
[illegible]	5.81
[illegible]	5.80
[illegible]	5.79
[illegible]	5.785
[illegible]	5.76
[illegible]	5.74
[illegible]	5.70
[illegible]	5.65
[illegible]	5.62
[illegible]	4.70



WARZYN ENGINEERING, INC.

MADISON, WISCONSIN.

BAIL DOWN ANALYSIS

DATA OBTAINED BY : CSR & WFB

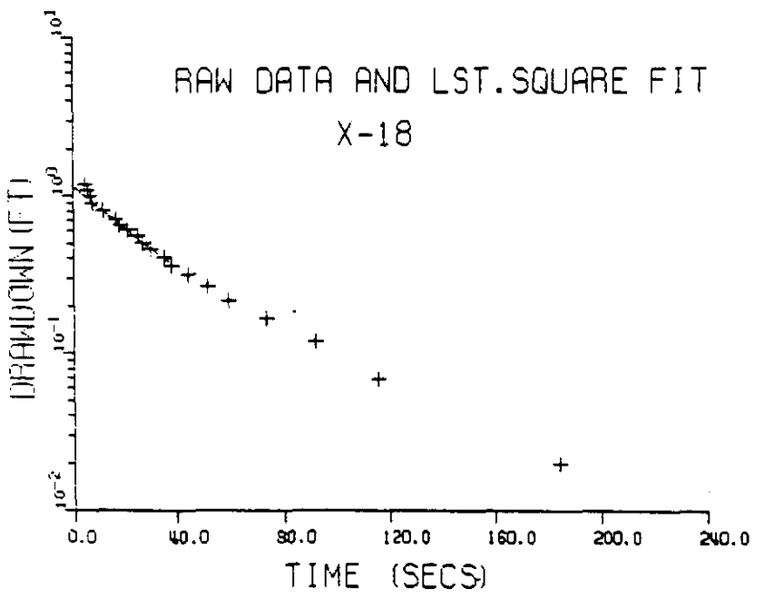
DATA ANALYZED BY : WFB

BAIL DOWN PARAMETERS FOR X18

EFFECTIVE WELL DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN DIAMETER	=	2.000 INCHES
SCREEN LENGTH	=	10.000 FEET
WELL PENETRATION DEPTH	=	13.080 FEET
AQUIFER THICKNESS	=	24.380 FEET
STATIC WATER LEVEL	=	4.680 FEET
AQUIFER CONDUCTIVITY IS	=	.106E-02 CM/SEC
AQUIFER TRANSMISSIVITY IS	=	.790E+00 CM*CM/SEC
	OR	.550E+03 GAL/FT/DAY

WELL X-18

TIME (MIN)	DEPTH TO WATER (FEET)
.0833	5.90
.1000	5.80
.1166	5.70
.1333	5.60
.2000	5.50
.2833	5.40
.3166	5.35
.3666	5.30
.4333	5.25
.4666	5.20
.5166	5.15
.5666	5.10
.6500	5.05
.7500	5.00
.8666	4.95
1.0000	4.90
1.2333	4.85
1.5333	4.80
1.9333	4.75
2.6833	4.70



WELL [illegible]

TIME (MIN)	DEPTH TO WATER (FEET)
[illegible]	8.36
[illegible]	8.10
[illegible]	8.00
[illegible]	7.95
[illegible]	7.90
[illegible]	7.85
0.2000	7.80
[illegible]	7.75
[illegible]	7.70
[illegible]	7.65
[illegible]	7.60
[illegible]	7.55
[illegible]	7.50
[illegible]	7.45
[illegible]	7.40
[illegible]	7.30

WARZYN ENGINEERING, INC.

MADISON, WISCONSIN.

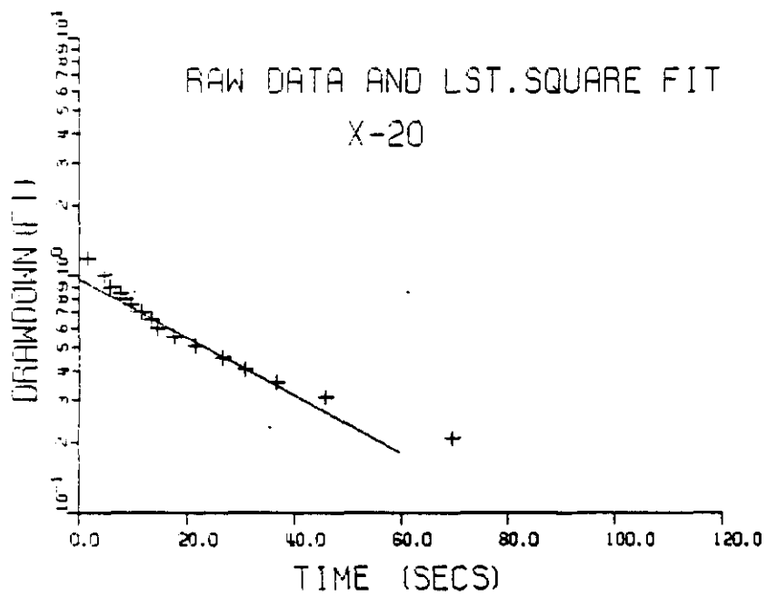
BAIL DOWN ANALYSIS

DATA OBTAINED BY : CSR & WFB

DATA ANALYZED BY : WFB

BAIL DOWN PARAMETERS FOR X20

EFFECTIVE WELL DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN DIAMETER	=	2.000 INCHES
SCREEN LENGTH	=	5.000 FEET
WELL PENETRATION DEPTH	=	15.370 FEET
AQUIFER THICKNESS	=	23.970 FEET
STATIC WATER LEVEL	=	7.090 FEET
AQUIFER CONDUCTIVITY IS	=	.194E-02 CM/SEC
AQUIFER TRANSMISSIVITY IS	=	.142E+01 CM*CM/SEC
	OR	.985E+03 GAL/FT/DAY



WELL X-21

TIME (MIN)	DEPTH TO WATER (FEET)
0.1000	8.10
0.4150	8.05
0.6000	8.00
0.9000	7.95
1.0500	7.90
1.2833	7.85
1.4833	7.80
1.7500	7.75
2.0000	7.70
2.2833	7.65
2.5000	7.60
2.8000	7.55
3.1833	7.50
3.5000	7.45
3.9000	7.40
4.2166	7.35
4.6833	7.30
5.2500	7.25
5.8000	7.20
6.1333	7.15
6.5500	7.10
7.1666	7.05
7.8333	7.00

WARZYN ENGINEERING, INC.

MADISON, WISCONSIN.

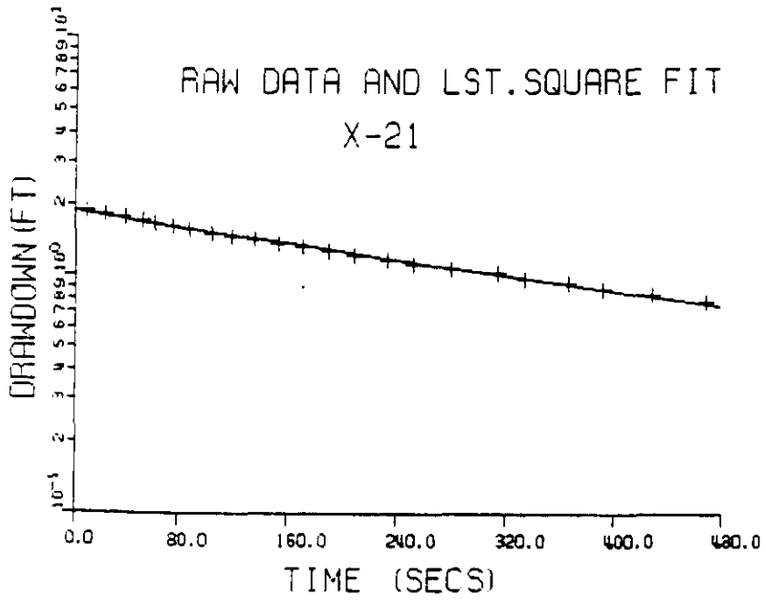
BAIL DOWN ANALYSIS

DATA OBTAINED BY : CSR & WFB

DATA ANALYZED BY : WFB

BAIL DOWN PARAMETERS FOR X21

EFFECTIVE WELL DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN DIAMETER	=	2.000 INCHES
SCREEN LENGTH	=	5.000 FEET
WELL PENETRATION DEPTH	=	24.020 FEET
AQUIFER THICKNESS	=	24.020 FEET
STATIC WATER LEVEL	=	6.210 FEET
AQUIFER CONDUCTIVITY IS	=	.166E-03 CM/SEC
AQUIFER TRANSMISSIVITY IS	=	.121E+00 CM*CM/SEC
	OR	.843E+02 GAL/FT/DAY



WELL X-22

TIME (MIN)	DEPTH TO WATER (FEET)
0.0666	6.10
0.1333	5.40
0.1666	5.30

WARZYN ENGINEERING, INC.

MADISON, WISCONSIN.

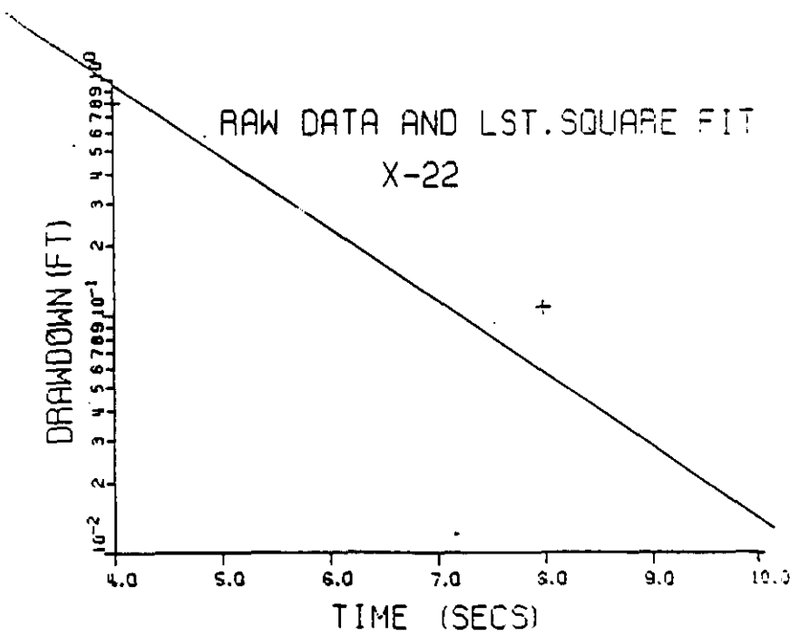
BAIL DOWN ANALYSIS

DATA OBTAINED BY : CSR & WFB

DATA ANALYZED BY : CSR

BAIL DOWN PARAMETERS FOR X-22

EFFECTIVE WELL DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN DIAMETER	=	2.000 INCHES
SCREEN LENGTH	=	10.000 FEET
WELL PENETRATION DEPTH	=	10.440 FEET
AQUIFER THICKNESS	=	29.240 FEET
STATIC WATER LEVEL	=	5.290 FEET
AQUIFER CONDUCTIVITY IS	=	.244E-01 CM/SEC
AQUIFER TRANSMISSIVITY IS	=	.218E+02 CM*CM/SEC
	OR	.151E+05 GAL/FT. DAY



WELL X-23

TIME (MIN)	DEPTH TO WATER (FEET)
[illegible]	9.00
[illegible]	8.90
[illegible]	8.85
[illegible]	8.80
[illegible]	8.75
[illegible]	8.70
[illegible]	8.65
[illegible]	8.60
[illegible]	8.55
[illegible]	8.50
[illegible]	8.45
[illegible]	8.40
[illegible]	8.35
[illegible]	8.30
[illegible]	8.25
[illegible]	8.20
[illegible]	8.15
[illegible]	8.10
[illegible]	8.05
[illegible]	8.00
[illegible]	7.95
[illegible]	7.90
[illegible]	7.85
[illegible]	7.80
[illegible]	7.75
[illegible]	7.70
[illegible]	7.65
[illegible]	7.60
[illegible]	7.55
[illegible]	7.50

WARZYN ENGINEERING, INC.

MADISON, WISCONSIN.

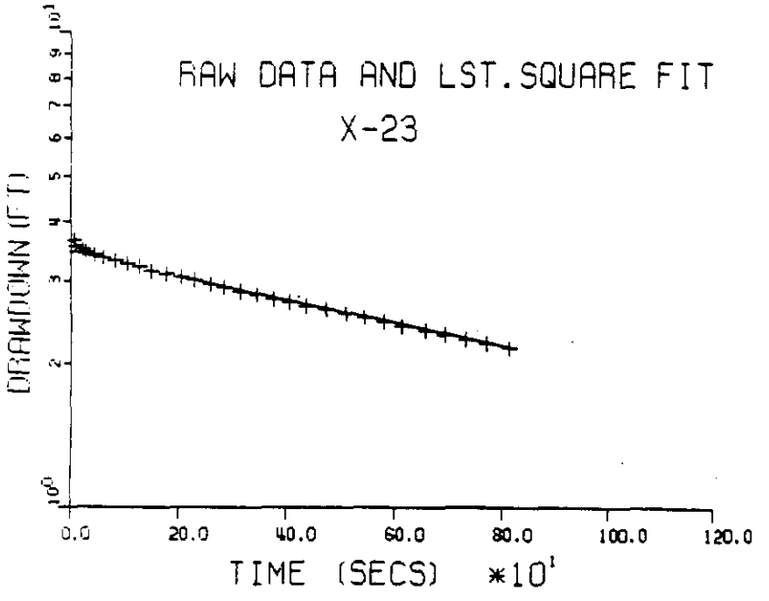
BAIL DOWN ANALYSIS

DATA OBTAINED BY : CSR & WFB

DATA ANALYZED BY : CSR

BAIL DOWN PARAMETERS FOR X-23

EFFECTIVE WELL DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN LENGTH	=	5.000 FEET
WELL PENETRATION DEPTH	=	28.420 FEET
AQUIFER THICKNESS	=	28.420 FEET
STATIC WATER LEVEL	=	5.330 FEET
AQUIFER CONDUCTIVITY IS	=	.521E-04 CM/SEC
AQUIFER TRANSMISSIVITY IS	=	.451E-01 CM*CM/SEC
	OR	.314E+02 GAL/FT/DAY



WELL X-24

TIME (MIN)	DEPTH TO WATER (FEET)
[illegible]	5.10
[illegible]	5.50
[illegible]	5.50
[illegible]	5.45
[illegible]	5.40
[illegible]	5.35
[illegible]	5.30
[illegible]	5.25
[illegible]	5.20
[illegible]	5.15
[illegible]	5.10
[illegible]	5.10

WARZYN ENGINEERING, INC.

MADISON, WISCONSIN.

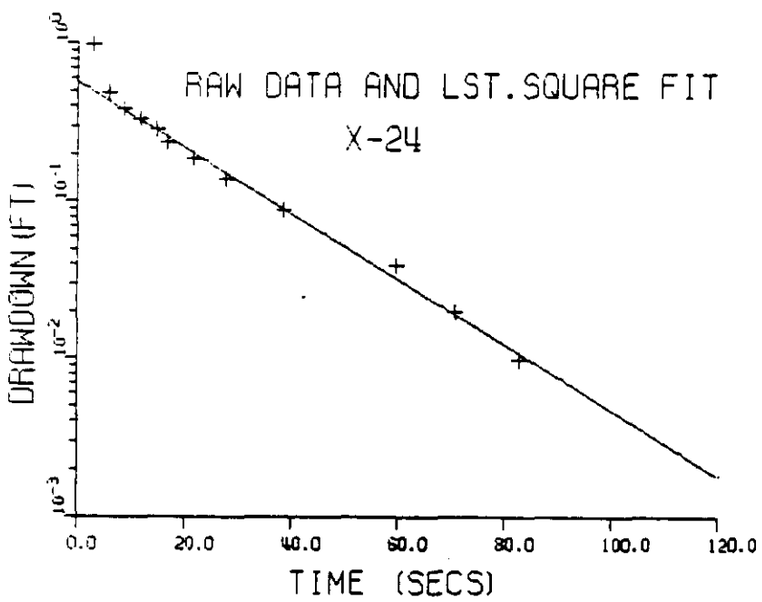
BAIL DOWN ANALYSIS

DATA OBTAINED BY : CSR & WFB

DATA ANALYZED BY : WFB

BAIL DOWN PARAMETERS FOR X24

EFFECTIVE WELL DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN DIAMETER	=	2.000 INCHES
SCREEN LENGTH	=	10.000 FEET
WELL PENETRATION DEPTH	=	12.680 FEET
AQUIFER THICKNESS	=	24.780 FEET
STATIC WATER LEVEL	=	5.110 FEET
AQUIFER CONDUCTIVITY IS	=	.174E-02 CM/SEC
AQUIFER TRANSMISSIVITY IS	=	.132E+01 CM*CM/SEC
	OR	.916E+03 GAL/FT/DAY



WELL X-25

TIME (MIN)	DEPTH TO WATER (FEET)
0.0833	5.80
0.1166	5.70
0.1333	5.60
0.1666	5.50
0.2000	5.40
0.2500	5.30
0.3333	5.20
0.4000	5.10
0.5000	5.00
0.5833	4.95
0.6500	4.90
0.7166	4.85
0.7833	4.80
0.9333	4.75
1.1000	4.70
1.2166	4.65
1.4166	4.60
1.6333	4.55
2.0000	4.50

WARZYN ENGINEERING, INC.

MADISON, WISCONSIN.

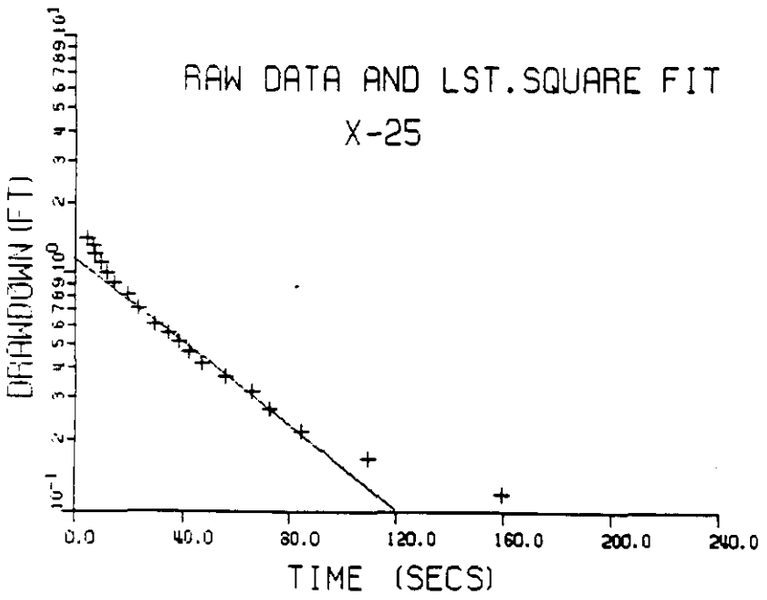
BAIL DOWN ANALYSIS

DATA OBTAINED BY : CSR & WFB

DATA ANALYZED BY : WFB

BAIL DOWN PARAMETERS FOR X25

EFFECTIVE WELL DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN DIAMETER	=	2.000 INCHES
SCREEN LENGTH	=	5.000 FEET
WELL PENETRATION DEPTH	=	23.000 FEET
AQUIFER THICKNESS	=	24.700 FEET
STATIC WATER LEVEL	=	4.380 FEET
AQUIFER CONDUCTIVITY IS	=	.153E-02 CM/SEC
AQUIFER TRANSMISSIVITY IS	=	.115E+01 CM*CM/SEC
	OR	.801E+03 GAL/FT/DAY



WELL X-26

TIME MIN	DEPTH TO WATER FEET
.077	4.00
.133	3.80
.183	3.76
.233	3.68
.283	3.64
.333	3.62
.383	3.58
.433	3.56
.483	3.54
.533	3.52
.583	3.50

MARLYN ENGINEERING, INC.

MADISON, WISCONSIN.

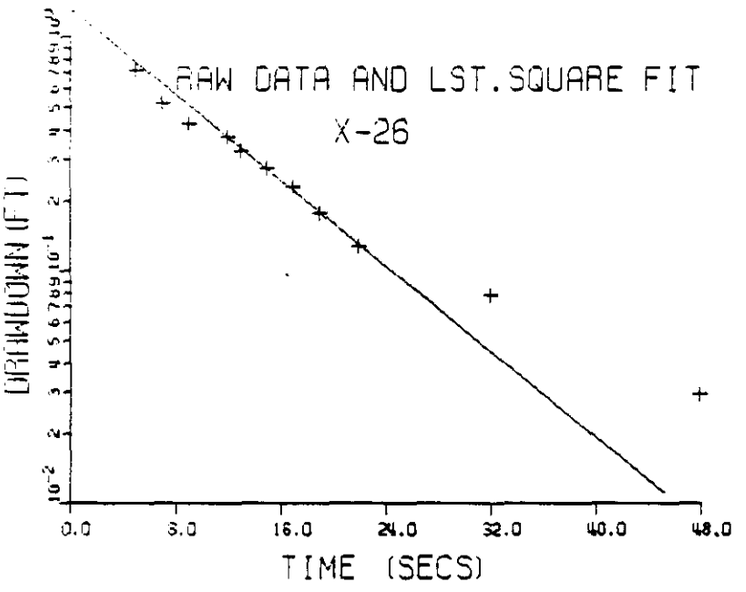
BAIL DOWN ANALYSIS

DATA OBTAINED BY : CSR & WFB

DATA ANALYZED BY : WFB

BAIL DOWN PARAMETERS FOR X26

EFFECTIVE WELL DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN DIAMETER	=	2.000 INCHES
SCREEN LENGTH	=	10.000 FEET
WELL PENETRATION DEPTH	=	14.550 FEET
AQUIFER THICKNESS	=	26.850 FEET
STATIC WATER LEVEL	=	3.270 FEET
AQUIFER CONDUCTIVITY IS	=	.391E-02 CM/SEC
AQUIFER TRANSMISSIVITY IS	=	.320E+01 CM*CM/SEC
	OR	.223E+04 GAL/FT/DAY



WELL X-27

TIME MIN.	DEPTH TO WATER FEET
.1666	5.40
.3666	5.35
.5166	5.25
.6833	5.21
1.2500	5.15
1.4500	5.10
1.7166	5.05
2.0000	5.00
2.2333	4.95
2.7500	4.90
3.0000	4.85
3.4166	4.80
3.7500	4.75
4.1333	4.70
4.3333	4.65
5.1333	4.55
5.3000	4.50
6.5000	4.45
6.9666	4.40
7.6500	4.35
8.2333	4.30
8.9500	4.25
9.7333	4.20
15.00	4.00
[illegible].00	3.86

WARZYN ENGINEERING, INC.

MADISON, WISCONSIN.

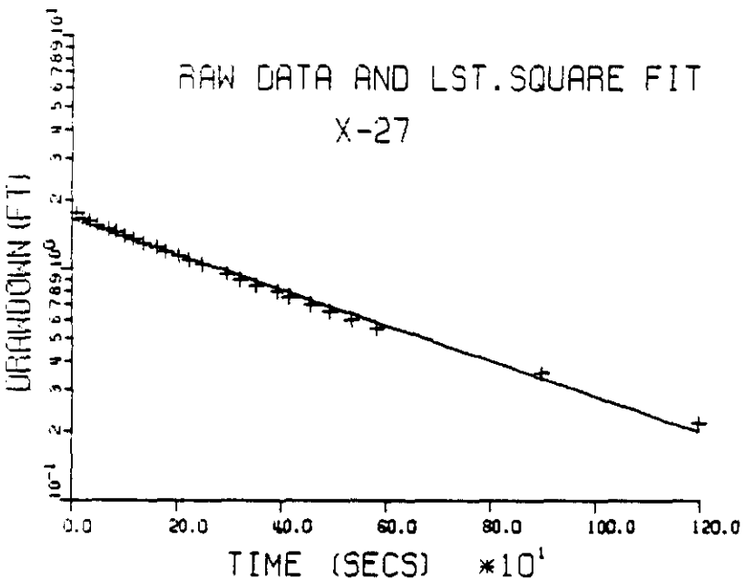
BAIL DOWN ANALYSIS

DATA OBTAINED BY : CSR & WFB

DATA ANALYZED BY : WFB

BAIL DOWN PARAMETERS FOR X27

EFFECTIVE WELL DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN DIAMETER	=	2.000 INCHES
SCREEN LENGTH	=	5.000 FEET
WELL PENETRATION DEPTH	=	26.720 FEET
AQUIFER THICKNESS	=	26.920 FEET
STATIC WATER LEVEL	=	3.640 FEET
AQUIFER CONDUCTIVITY IS	=	.147E-03 CM/SEC
AQUIFER TRANSMISSIVITY IS	=	.120E+00 CM*CM/SEC
	OR	.837E+02 GAL/FT/DAY



WELL X-28

TIME (MIN)	DEPTH TO WATER (FEET)
.0000	5.30
.1500	5.30
.1800	5.41
.2100	5.45
.2400	5.46
.3000	5.48
.3600	5.50
.4200	5.51
.4800	5.52
.5400	5.53
.6000	5.53
.6600	5.54
.7200	5.54
.7800	5.54
.8400	5.55
.9000	5.55
.9600	5.55
1.0200	5.55

W A R Z Y N E N G I N E E R I N G , I N C.

M A D I S O N, W I S C O N S I N.

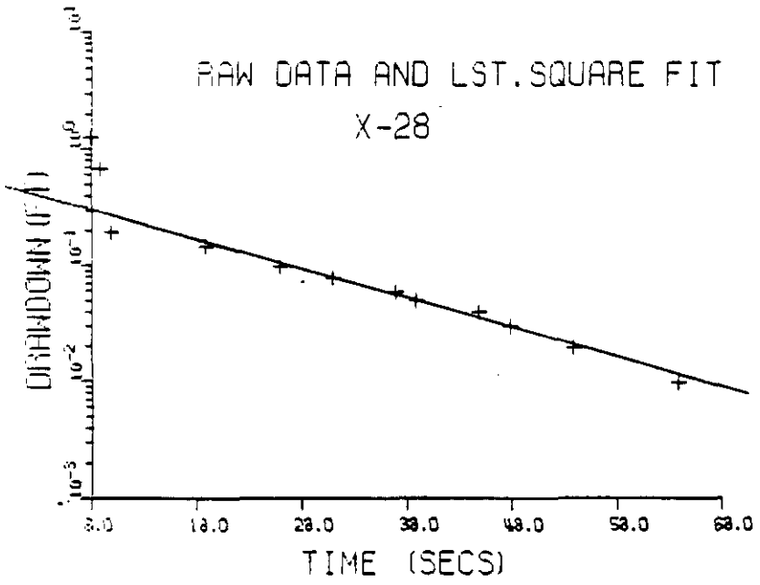
B A I L D O W N A N A L Y S I S

DATA OBTAINED BY : CGR & WFB

DATA ANALYZED BY : WFB

BAIL DOWN PARAMETERS FOR X-28

EFFECTIVE WELL DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN LENGTH	=	10.000 FEET
WELL PENETRATION DEPTH	=	12.390 FEET
AQUIFER THICKNESS	=	25.390 FEET
STATIC WATER LEVEL	=	5.300 FEET
AQUIFER CONDUCTIVITY IS	=	.214E-02 CM/SEC
AQUIFER TRANSMISSIVITY IS	=	.167E+01 CM*CM/SEC
	OR	.116E+04 GAL/FT/DAY



WELL (-28
DUPLICATE

TIME (MIN)	DEPTH TO WATER (FEET)
.033	5.60
.1333	5.70
.1500	5.82
.1833	5.90
.2500	5.90
.3167	5.95
.4167	5.90
.4666	5.90
.5666	5.75
.6666	5.75
.8500	5.70
1.0000	5.63

WARZYN ENGINEERING, INC.

MADISON, WISCONSIN.

BAIL DOWN ANALYSIS

DATA OBTAINED BY : CSR & WFB

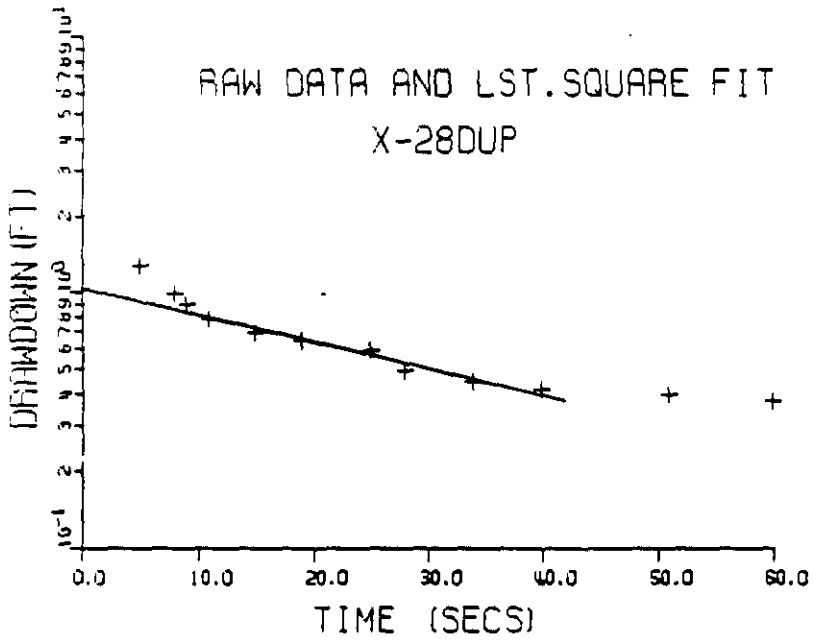
DATA ANALYZED BY : WFB

BAIL DOWN PARAMETERS FOR X-28DUP

EFFECTIVE WELL DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN LENGTH	=	10.000 FEET
WELL PENETRATION DEPTH	=	12.590 FEET
AQUIFER THICKNESS	=	25.590 FEET
STATIC WATER LEVEL	=	5.300 FEET
AQUIFER CONDUCTIVITY IS	=	.878E-03 CM/SEC
AQUIFER TRANSMISSIVITY IS	=	.685E+00 CM*CM/SEC
	OR	.476E+03 GAL/FT/DAY

RAW DATA AND LST.SQUARE FIT

X-28DUP



SE[illegible]
Environmental Logger
05 12 10:22

Unit# [illegible] Test# 2

INPUT 1: Level (F) TOC

Reference 4.96
Scale factor 50.12
Offset 0.00

Step# 0 05 12 09:28

Elapsed Time	Value
0.0000	4.56
0.0033	4.56
0.0066	4.56
0.0099	4.66
0.0133	4.66
0.0166	4.56
0.0200	4.66
0.0233	4.66
0.0266	4.66
0.0300	4.66
0.0333	4.66
0.0500	4.56
0.0666	4.64
0.0833	11.98
0.1000	9.59
0.1166	8.73
0.1333	9.03
0.1500	7.46
0.1666	6.97
0.1833	6.60
0.2000	6.28
0.2166	6.07
0.2333	5.81
0.2500	5.63
0.2666	5.49
0.2833	5.37
0.3000	5.29
0.3166	5.19
0.3333	5.11
0.4167	4.91
0.5000	4.81
0.5833	4.77
0.6667	4.75
0.7500	4.75
0.8333	4.73
0.9167	4.72
1.0000	4.72
1.0833	4.72
1.1667	4.72
1.2500	4.72
1.3333	4.70
1.4166	4.70
1.5000	4.70
1.5833	4.72
1.6667	4.72
1.7500	4.70
1.8333	4.72
1.9167	4.72
2.0000	4.70
2.5000	4.70
3.0000	4.70
3.5000	4.70
4.0000	4.70
4.5000	4.70
5.0000	4.70
5.5000	4.70
6.0000	4.70
6.5000	4.70
7.0000	4.70
7.5000	4.70
8.0000	4.70
8.5000	4.70
9.0000	4.70
9.5000	4.70
10.0000	4.70
12.0000	4.72
14.0000	4.75

END

@@@

W A R Z Y N   E N G I N E E R I N G ,   I N C.

M A D I S O N,   W I S C O N S I N.

B A I L   D O W N   A N A L Y S I S

DATA OBTAINED BY : CSR & WFB

DATA ANALYZED BY : CSR

BAIL DOWN PARAMETERS FOR X-29

@@@

EFFECTIVE WELL DIAMETER = 2.000 INCHES

EFFECTIVE SCREEN DIAMETER = 2.000 INCHES

EFFECTIVE SCREEN LENGTH = 5.000 FEET

WELL PENETRATION DEPTH = 17.710 FEET

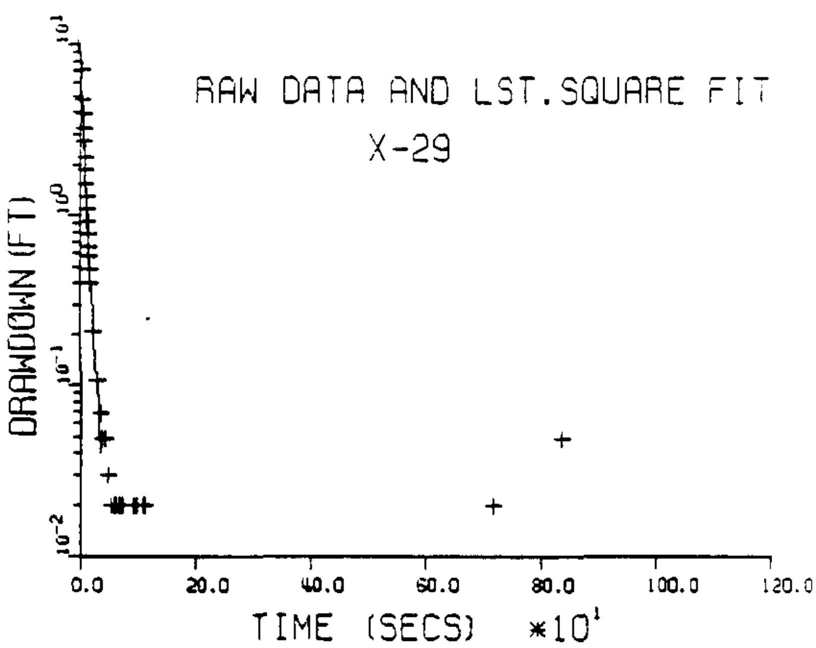
AQUIFER THICKNESS = 25.710 FEET

STATIC WATER LEVEL = 4.700 FEET

AQUIFER CONDUCTIVITY IS = .109E-01 CM/SEC

AQUIFER TRANSMISSIVITY IS = .851E+01 CM*CM/SEC

OR .592E+04 GAL/FT/DAY



[redacted]
Environmental Center
[redacted]

[redacted] Tests 1

INPUT 1: Level (FT TOC

Reference	5.47
Scale factor	50.13
Offset	0.00

Start [redacted] 5 12 16:52

Elapsed Time	Value
[redacted]	0.20
[redacted]	0.20
[redacted]	0.20
[redacted]	0.20
[redacted]	0.20
[redacted]	0.20
[redacted]	0.18
[redacted]	0.16
[redacted]	0.15
[redacted]	0.12
[redacted]	9.96
[redacted]	11.18
[redacted]	11.40
[redacted]	11.42
[redacted]	11.37
[redacted]	11.32
[redacted]	11.27
[redacted]	11.22
[redacted]	11.21
[redacted]	11.19
[redacted]	11.18
[redacted]	11.15
[redacted]	11.08
[redacted]	11.07
[redacted]	11.05
[redacted]	11.03
[redacted]	11.02
[redacted]	11.00
[redacted]	10.97
0.4167	10.84
0.5000	10.69
0.5833	10.48
[redacted]	10.25
0.7500	9.98
0.8333	9.71
0.9167	9.44
1.0000	9.20
1.0833	8.97
1.1667	8.75
1.2500	8.54
1.3333	8.34
1.4166	8.18
1.5000	8.02
1.5833	7.88
1.6667	7.74
1.7500	7.63
1.8333	7.50
1.9167	7.41
2.0000	7.31
2.5000	6.92
3.0000	6.73
3.5000	6.63
4.0000	6.57
4.5000	6.46
5.0000	6.43
5.5000	6.43
6.0000	6.43
6.5000	6.43
7.0000	6.44
7.5000	6.43
8.0000	6.40
8.5000	6.36
9.0000	6.35
9.5000	6.35
10.0000	6.33
12.0000	6.35
14.0000	6.35

END

[redacted]

WARZYN ENGINEERING, INC.

MADISON, WISCONSIN.

BAIL DOWN ANALYSIS

DATA OBTAINED BY : CSR & WFB

DATA ANALYZED BY : CSR

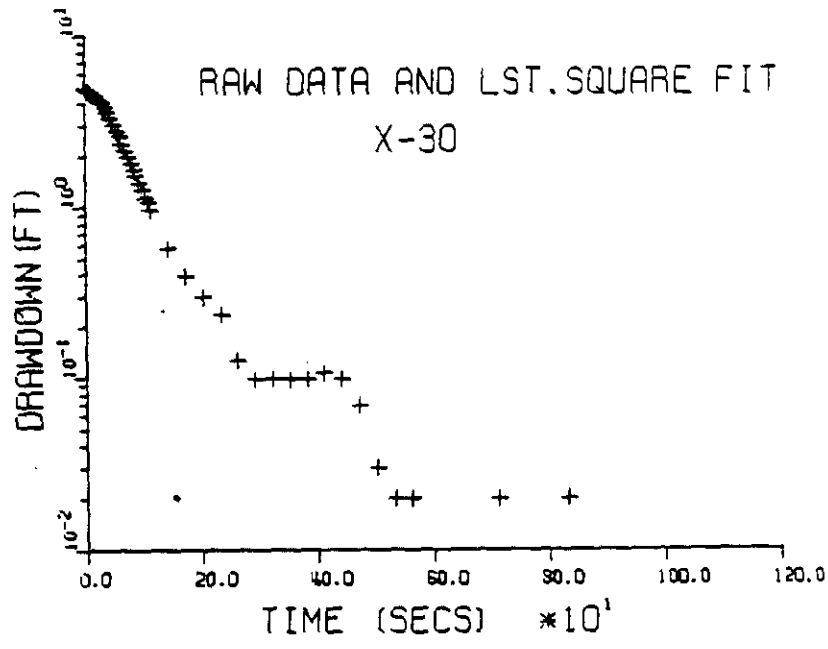
BAIL DOWN PARAMETERS FOR X-30

[redacted]

EFFECTIVE WELL DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN LENGTH	=	3.500 FEET
WELL PENETRATION DEPTH	=	25.470 FEET
AQUIFER THICKNESS	=	25.470 FEET
STATIC WATER LEVEL	=	6.330 FEET
AQUIFER CONDUCTIVITY IS	=	.172E-02 CM/SEC
AQUIFER TRANSMISSIVITY IS	=	.133E+01 CM*CM/SEC
	OR	.926E+03 GAL/FT/DAY

RAW DATA AND LST. SQUARE FIT

X-30



TIME	DEPTH TO WATER FEET
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]

WARZYN ENGINEERING, INC.

MADISON, WISCONSIN.

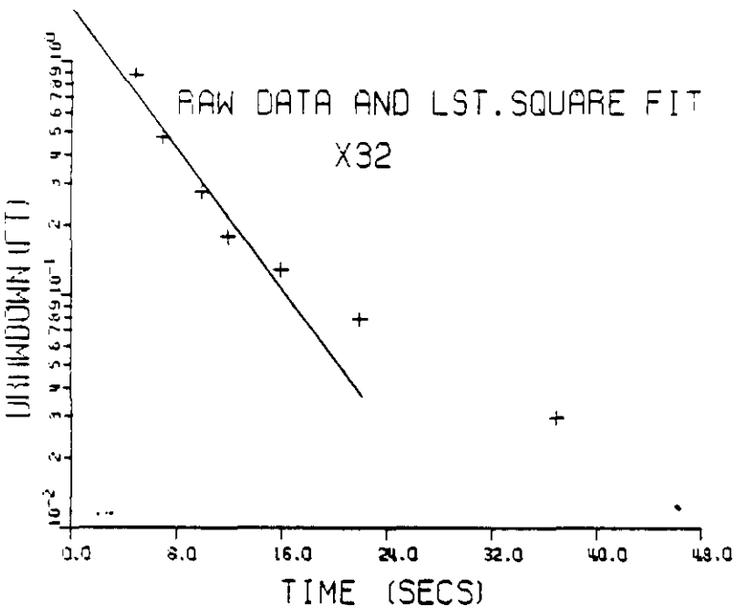
BAIL DOWN ANALYSIS

DATA OBTAINED BY : CSR & WFB

DATA ANALYZED BY : WFB

BAIL DOWN PARAMETERS FOR X-32

EFFECTIVE WELL DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN LENGTH	=	10.000 FEET
WELL PENETRATION DEPTH	=	13.190 FEET
AQUIFER THICKNESS	=	24.990 FEET
STATIC WATER LEVEL	=	4.620 FEET
AQUIFER CONDUCTIVITY IS	=	.634E-02 CM/SEC
AQUIFER TRANSMISSIVITY IS	=	.483E+01 CM*CM/SEC
	OR	.336E+04 GAL/FT/DAY



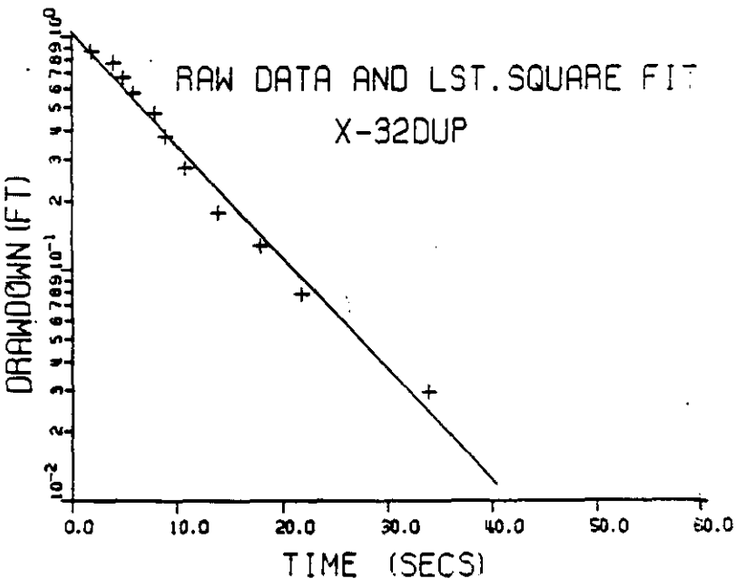
WELL X-32
DUPLICATE

TIME (MIN)	DEPTH TO WATER (FEET)
0.0333	5.50
0.0666	5.40
0.0833	5.30
0.1000	5.20
0.1333	5.10
0.1500	5.00
0.1833	4.90
0.2333	4.80
0.3000	4.75
0.3666	4.70
0.5666	4.65
1.0000	4.63

WARZYN ENGINEERING, INC.
MADISON, WISCONSIN.
BAIL DOWN ANALYSIS

DATA OBTAINED BY : CSR & WFB
DATA ANALYZED BY : WFB
BAIL DOWN PARAMETERS FOR X-32D

EFFECTIVE WELL DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN LENGTH	=	10.000 FEET
WELL PENETRATION DEPTH	=	13.190 FEET
AQUIFER THICKNESS	=	24.990 FEET
STATIC WATER LEVEL	=	4.620 FEET
AQUIFER CONDUCTIVITY IS	=	.409E-02 CM/SEC
AQUIFER TRANSMISSIVITY IS	=	.311E+01 CM*CM/SEC
	OR	.217E+04 GAL/FT/DA



SE1000B
Environmental Logger
05/12 20:57

Unit# 00000 Test# 2

INPUT 1: Level (F) TOC

Reference	4.39
Scale factor	50.12
Offset	0.00

Step 0 05/12 14:52

Elapsed Time	Value
0.0000	4.04
0.0033	4.05
0.0066	4.05
0.0099	4.05
0.0133	4.05
0.0166	4.05
0.0200	4.05
0.0233	4.05
0.0266	4.05
0.0300	4.04
0.0333	4.04
0.0500	4.02
0.0666	11.12
0.0833	10.26
0.1000	9.43
0.1166	8.71
0.1333	8.11
0.1500	7.59
0.1666	7.16
0.1833	6.80
0.2000	6.47
0.2166	6.20
0.2333	5.98
0.2500	5.76
0.2666	5.58
0.2833	5.43
0.3000	5.28
0.3166	5.16
0.3333	5.05
0.4167	4.65
0.5000	4.46
0.5833	4.34
0.6667	4.26
0.7500	4.23
0.8333	4.20
0.9167	4.18
1.0000	4.16
1.0833	4.16
1.1667	4.15
1.2500	4.15
1.3333	4.13
1.4166	4.13
1.5000	4.13
1.5833	4.13
1.6667	4.12
1.7500	4.13
1.8333	4.12
1.9167	4.12
2.0000	4.12
2.5000	4.12
3.0000	4.12
3.5000	4.10
4.0000	4.10
4.5000	4.10
5.0000	4.10
5.5000	4.10
6.0000	4.10
6.5000	4.10
7.0000	4.10
7.5000	4.10
8.0000	4.12
8.5000	4.10
9.0000	4.10
9.5000	4.10
10.0000	4.10
12.0000	4.10
14.0000	4.10
16.0000	4.10

END

@@@

W A R Z Y N E N G I N E E R I N G , I N C.

M A D I S O N. W I S C O N S I N.

B A I L D O W N A N A L Y S I S

DATA OBTAINED BY : CSR & WFB

DATA ANALYZED BY : CSR

BAIL DOWN PARAMETERS FOR X-33

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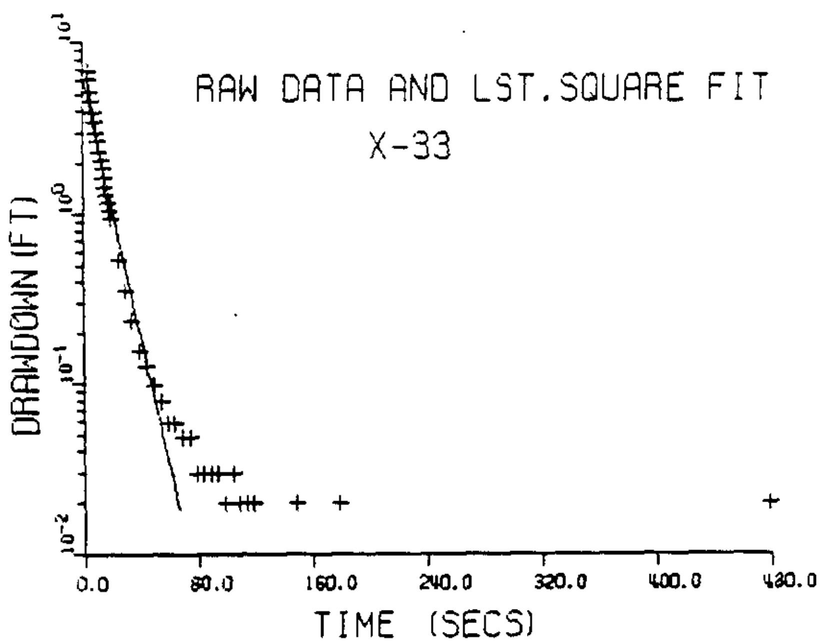
EFFECTIVE WELL DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN LENGTH	=	5.000 FEET
WELL PENETRATION DEPTH	=	18.440 FEET
AQUIFER THICKNESS	=	25.040 FEET
STATIC WATER LEVEL	=	4.100 FEET
AQUIFER CONDUCTIVITY IS	=	.617E-02 CM/SEC
AQUIFER TRANSMISSIVITY IS	=	.471E+01 CM*CM/SEC
	OR	.327E+04 GAL/FT/DAY



SE1000B
Environmental Logger
05/12 20:52

Unit# 00000 Test# 3

INPUT 1: Level (F) TOC

Reference 3.91
Scale factor 50.12
Offset 0.00

Step# 0 05/12 15:31

Elapsed Time	Value
0.0000	3.79
0.0033	3.79
0.0066	3.79
0.0099	3.79
0.0133	3.79
0.0166	3.79
0.0200	3.79
0.0233	3.79
0.0266	3.79
0.0300	3.79
0.0333	3.79
0.0500	3.79
0.0666	4.02
0.0833	12.85
0.1000	11.18
0.1166	9.79
0.1333	9.14
0.1500	8.43
0.1666	7.88
0.1833	7.39
0.2000	6.98
0.2166	6.63
0.2333	6.33
0.2500	6.08
0.2666	5.85
0.2833	5.66
0.3000	5.48
0.3166	5.32
0.3333	5.20
0.4167	4.71
0.5000	4.46
0.5833	4.28
0.6667	4.19
0.7500	4.13
0.8333	4.08
0.9167	4.05
1.0000	4.02
1.0833	4.00
1.1667	3.98
1.2500	3.98
1.3333	3.97
1.4166	3.95
1.5000	3.95
1.5833	3.95
1.6667	3.94
1.7500	3.94
1.8333	3.94
1.9167	3.94
2.0000	3.92
2.5000	3.92
3.0000	3.91
3.5000	3.89
4.0000	3.89
4.5000	3.89
5.0000	3.89
5.5000	3.89
6.0000	3.89
6.5000	3.89
7.0000	3.89
7.5000	3.89
8.0000	3.89
8.5000	3.89
9.0000	3.91
9.5000	3.91
10.0000	3.91

END

WARZYN ENGINEERING, INC.

MADISON, WISCONSIN.

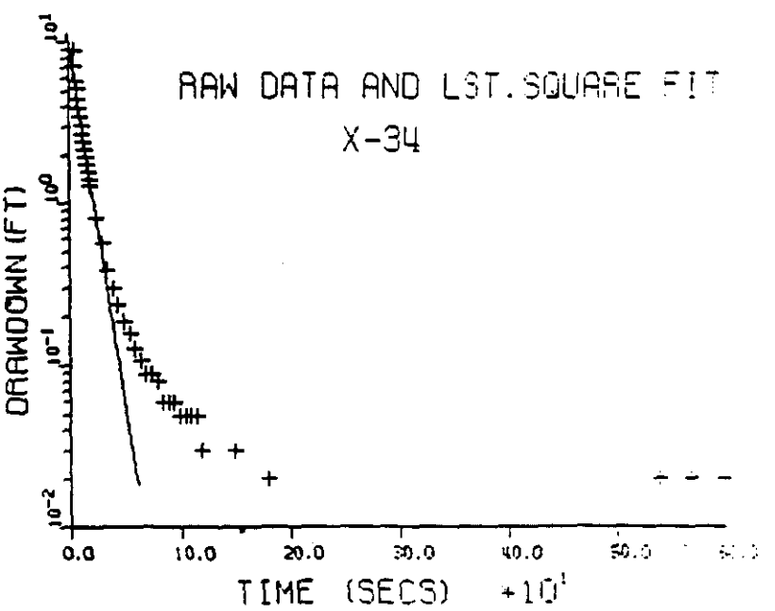
BAIL DOWN ANALYSIS

DATA OBTAINED BY : CSR & WFB

DATA ANALYZED BY : CSR

BAIL DOWN PARAMETERS FOR X-34

EFFECTIVE WELL DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN LENGTH	=	5.000 FEET
WELL PENETRATION DEPTH	=	23.490 FEET
AQUIFER THICKNESS	=	24.890 FEET
STATIC WATER LEVEL	=	3.890 FEET
AQUIFER CONDUCTIVITY IS	=	.791E-02 CM/SEC
AQUIFER TRANSMISSIVITY IS	=	.601E+01 CM*CM/SEC
	OR	.418E+04 GAL/FT/DAY



WELL X-35

TIME (MIN)	DEPTH TO WATER (FEET)
0.0666	5.30
0.1333	4.80
0.1666	4.70
0.1833	4.60
0.2333	4.50
0.3000	4.45
0.3500	4.40
0.4000	4.35
0.5166	4.30
0.6166	4.28
0.8000	4.25
1.1000	4.23

WARZYN ENGINEERING, INC.

MADISON, WISCONSIN.

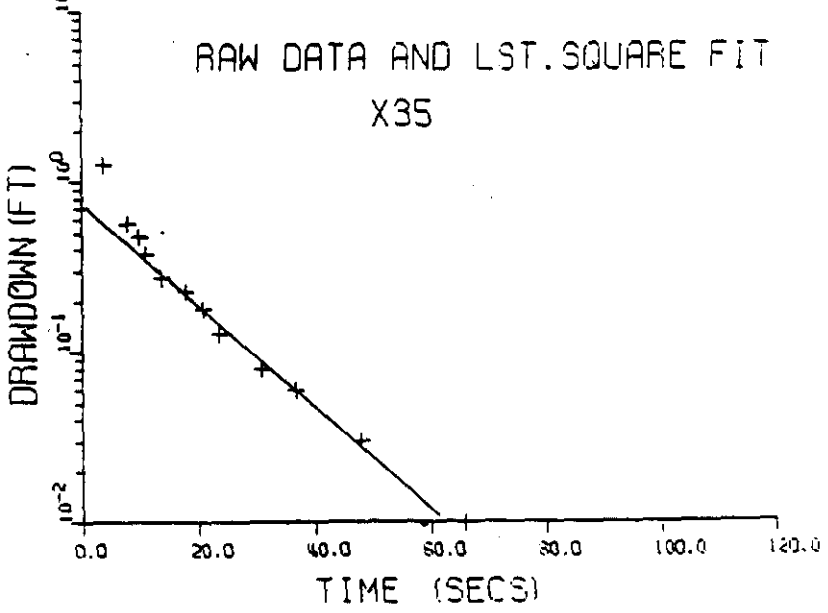
BAIL DOWN ANALYSIS

DATA OBTAINED BY : CSR & WFB

DATA ANALYZED BY : CSR

BAIL DOWN PARAMETERS FOR X-35

EFFECTIVE WELL DIAMETER	=	2.000	INCHES
EFFECTIVE SCREEN DIAMETER	=	2.000	INCHES
EFFECTIVE SCREEN LENGTH	=	10.000	FEET
WELL PENETRATION DEPTH	=	13.330	FEET
AQUIFER THICKNESS	=	27.130	FEET
STATIC WATER LEVEL	=	4.220	FEET
AQUIFER CONDUCTIVITY IS	=	.246E-02	CM/SEC
AQUIFER TRANSMISSIVITY IS	=	.204E+01	CM*CM/SEC
	OR	.142E+04	GAL/FT/DAY



SE10008
Environmental Logger
05/11 19:24

Unit# 00000 Test# 2

INPUT 1: Level (F) TOC

Reference	4.77
Scale factor	50.12
Offset	0.00

Step# 0 05/11 14:38

Elapsed Time	Value
0.0000	4.81
0.0033	4.81
0.0066	4.81
0.0099	4.81
0.0133	4.83
0.0166	4.83
0.0200	4.83
0.0233	4.83
0.0266	4.84
0.0300	4.84
0.0333	4.84
0.0500	4.81
0.0666	3.41
0.0833	8.87
0.1000	8.33
0.1166	7.81
0.1333	7.38
0.1500	7.05
0.1666	6.78
0.1833	6.50
0.2000	6.26
0.2166	6.07
0.2333	5.89
0.2500	5.73
0.2666	5.57
0.2833	5.44
0.3000	5.33
0.3166	5.21
0.3333	5.11
0.4167	4.75
0.5000	4.56
0.5833	4.51
0.6667	4.51
0.7500	4.48
0.8333	4.47
0.9167	4.45
1.0000	4.45
1.0833	4.45
1.1667	4.43
1.2500	4.43
1.3333	4.43
1.4166	4.43
1.5000	4.43
1.5833	4.43
1.6667	4.42
1.7500	4.43
1.8333	4.43
1.9167	4.43
2.0000	4.43
2.5000	4.43
3.0000	4.43
3.5000	4.43
4.0000	4.43
4.5000	4.43
5.0000	4.43
5.5000	4.43
6.0000	4.43
6.5000	4.43
7.0000	4.43
7.5000	4.43
8.0000	4.43
8.5000	4.43
9.0000	4.43
9.5000	4.42
10.0000	4.42

END

WARZYN ENGINEERING, INC.

MADISON, WISCONSIN.

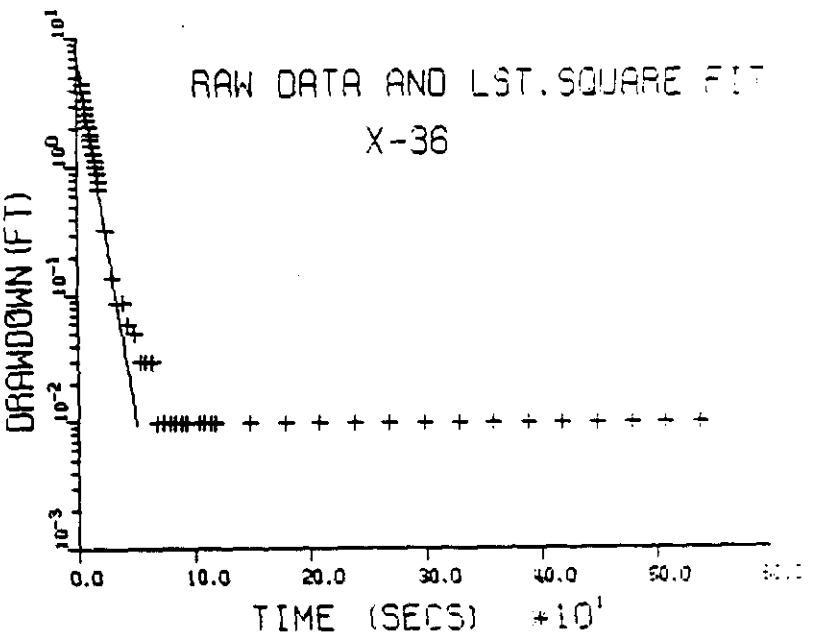
BAIL DOWN ANALYSIS

DATA OBTAINED BY : CSR & WFB

DATA ANALYZED BY : CSR

BAIL DOWN PARAMETERS FOR X-36

EFFECTIVE WELL DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN LENGTH	=	5.000 FEET
WELL PENETRATION DEPTH	=	17.620 FEET
AQUIFER THICKNESS	=	26.860 FEET
STATIC WATER LEVEL	=	4.420 FEET
AQUIFER CONDUCTIVITY IS	=	.9196-02 CM/SEC
AQUIFER TRANSMISSIVITY IS	=	.753E+01 CM*CM/SEC
	OR	.523E+04 GAL/FT DAY



RAW DATA AND LST. SQUARE FIT

X-36

SE1000B
Environmental Logger
05/11 19:23

Unit# 00000 Test# 3

INPUT 1: Level (F) TOC

Reference	4.29
Scale factor	50.12
Offset	0.00

Step# 0 05/11 15:59

Elapsed Time	Value
0.0000	2.25
0.0033	2.25
0.0066	2.27
0.0099	2.27
0.0133	2.34
0.0166	5.42
0.0200	12.06
0.0233	12.24
0.0266	12.13
0.0300	12.11
0.0333	12.08
0.0500	11.97
0.0666	11.89
0.0833	11.84
0.1000	11.78
0.1166	11.73
0.1333	11.70
0.1500	11.65
0.1666	11.64
0.1833	11.60
0.2000	11.57
0.2166	11.54
0.2333	11.51
0.2500	11.49
0.2666	11.46
0.2833	11.43
0.3000	11.40
0.3166	11.38
0.3333	11.35
0.4167	11.26
0.5000	11.15
0.5833	11.07
0.6667	10.97
0.7500	10.89
0.8333	10.82
0.9167	10.74
1.0000	10.66
1.0833	10.61
1.1667	10.50
1.2500	10.44
1.3333	10.36
1.4166	10.30
1.5000	10.23
1.5833	10.17
1.6667	10.09
1.7500	10.03
1.8333	9.96
1.9167	9.90
2.0000	9.85
2.5000	9.48
3.0000	9.13
3.5000	8.81
4.0000	8.53
4.5000	8.28
5.0000	8.02
5.5000	7.79
6.0000	7.57
6.5000	7.36
7.0000	7.17
7.5000	6.98
8.0000	6.81
8.5000	6.65
9.0000	6.51
9.5000	6.35
10.0000	6.21

END

WARZYN ENGINEERING, INC.

MADISON, WISCONSIN.

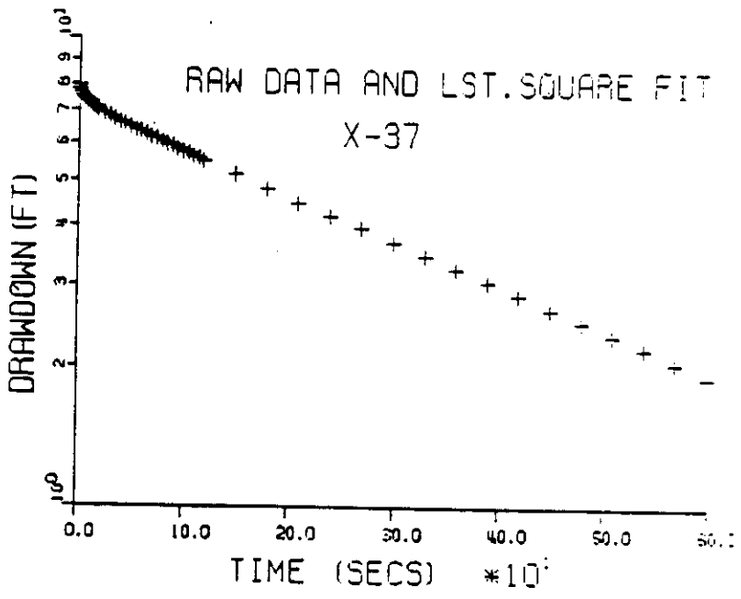
BAIL DOWN ANALYSIS

DATA OBTAINED BY : WFB & CSR

DATA ANALYZED BY CSR

BAIL DOWN PARAMETERS FOR X-37

EFFECTIVE WELL DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN LENGTH	=	4.200 FEET
WELL PENETRATION DEPTH	=	24.840 FEET
AQUIFER THICKNESS	=	24.840 FEET
STATIC WATER LEVEL	=	4.290 FEET
AQUIFER CONDUCTIVITY IS	=	.232E-03 CM/SEC
AQUIFER TRANSMISSIVITY IS	=	.175E+00 CM*CM/SEC
OR		.122E+03 GAL/FT/DA



WELL X-38

TIME (MIN)	DEPTH TO WATER (FEET)
0.0833	6.80
0.1166	6.50
0.1500	6.30
0.1666	6.20
0.2000	6.10
0.2500	6.00
0.3000	5.95
0.3500	5.90
0.3833	5.85
0.5166	5.80
0.7000	5.77
0.8166	5.75
1.0666	5.73

WARZYN ENGINEERING, INC.

MADISON, WISCONSIN.

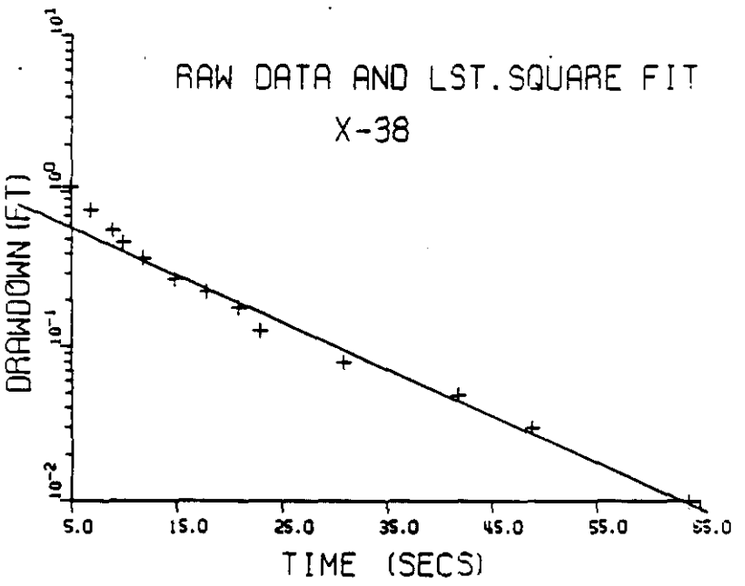
BAIL DOWN ANALYSIS

DATA OBTAINED BY : CSR & WFB

DATA ANALYZED BY : CSR

DAIL DOWN PARAMETERS FOR X-38

EFFECTIVE WELL DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN LENGTH	=	10.000 FEET
WELL PENETRATION DEPTH	=	10.100 FEET
AQUIFER THICKNESS	=	25.500 FEET
STATIC WATER LEVEL	=	5.720 FEET
AQUIFER CONDUCTIVITY IS	=	.245E-02 CM/SEC
AQUIFER TRANSMISSIVITY IS	=	.190E+01 CM*CM/SEC
	OR	.132E+04 GAL/FT/DAY



WELL X-39

TIME (MIN)	DEPTH TO WATER (FEET)
0.0166	5.00
0.0333	4.60
0.0666	4.40
0.1000	4.10
0.1333	4.00
0.1666	3.90
0.2666	3.80
0.6333	3.75

@@@

W A R Z Y N E N G I N E E R I N G , I N C.

M A D I S O N, W I S C O N S I N.

B A I L D O W N A N A L Y S I S

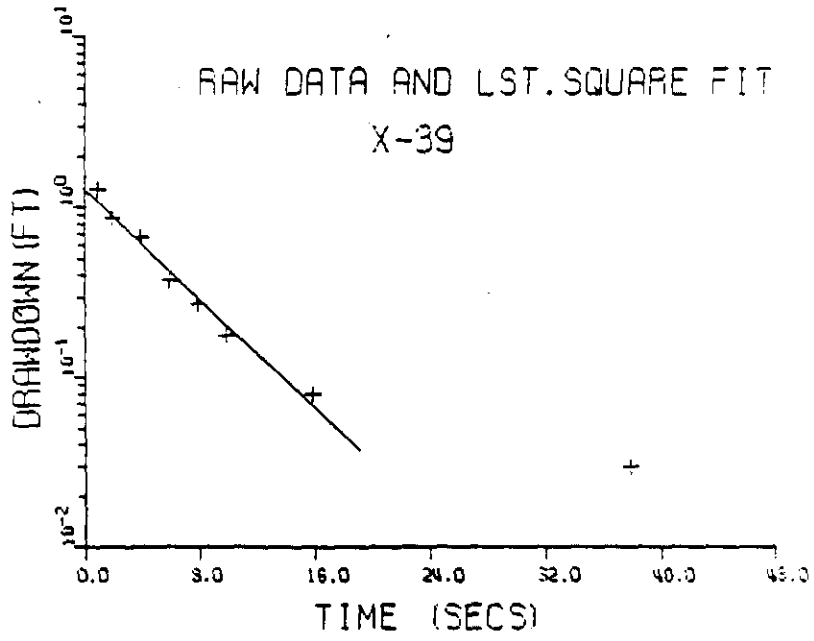
DATA OBTAINED BY : CSR & WFB

DATA ANALYZED BY : CSR

BAIL DOWN PARAMETERS FOR X-39

@@@

EFFECTIVE WELL DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN DIAMETER	=	2.000 INCHES
SCREEN LENGTH	=	10.000 FEET
WELL PENETRATION DEPTH	=	14.090 FEET
AQUIFER THICKNESS	=	26.990 FEET
STATIC WATER LEVEL	=	3.720 FEET
AQUIFER CONDUCTIVITY IS	=	.681E-02 CM/SEC
AQUIFER TRANSMISSIVITY IS	=	.560E+01 CM*CM/SEC
	OR	.389E+04 GAL/FT/DAY



SE10008
Environmental Logger
05/12 20:51

Unit# 00000 Tests 4

INPUT 1: Level (F) TOC

Reference	3.64
Scale factor	50.12
Offset	0.00

Steps 0 05/12 14:26

Elapsed Time	Value
0.0000	3.65
0.0033	3.65
0.0066	3.65
0.0099	3.65
0.0133	3.65
0.0166	3.65
0.0200	3.65
0.0233	3.65
0.0266	3.65
0.0300	3.65
0.0333	3.65
0.0500	3.65
0.0666	4.57
0.0833	8.75
0.1000	7.52
0.1166	6.63
0.1333	5.97
0.1500	5.46
0.1666	5.09
0.1833	4.79
0.2000	4.55
0.2166	4.38
0.2333	4.23
0.2500	4.12
0.2666	4.03
0.2833	3.97
0.3000	3.92
0.3166	3.87
0.3333	3.84
0.4167	3.73
0.5000	3.70
0.5833	3.68
0.6667	3.68
0.7500	3.67
0.8333	3.67
0.9167	3.67
1.0000	3.67
1.0833	3.68
1.1667	3.68
1.2500	3.68
1.3333	3.67
1.4166	3.67
1.5000	3.67
1.5833	3.67
1.6667	3.68
1.7500	3.68
1.8333	3.67
1.9167	3.67
2.0000	3.68
2.5000	3.67
3.0000	3.68
3.5000	3.68
4.0000	3.68
4.5000	3.68
5.0000	3.68
5.5000	3.68
6.0000	3.68
6.5000	3.68
7.0000	3.68
7.5000	3.68
8.0000	3.68
8.5000	3.68
9.0000	3.68
9.5000	3.68
10.0000	3.68
12.0000	3.70

END

WARZYN ENGINEERING, INC.

MADISON, WISCONSIN.

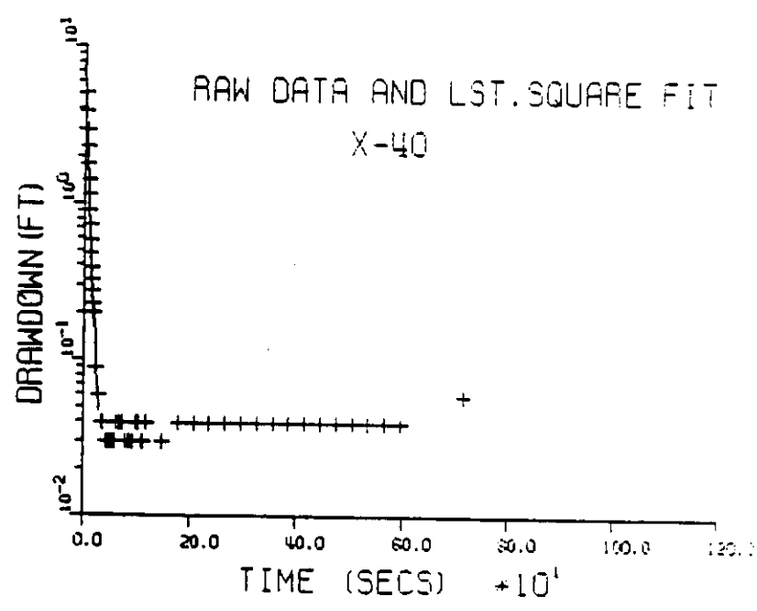
BAIL DOWN ANALYSIS

DATA OBTAINED BY : CSR & WFB

DATA ANALYZED BY : CSR

BAIL DOWN PARAMETERS FOR X-40

EFFECTIVE WELL DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN LENGTH	=	5.000 FEET
WELL PENETRATION DEPTH	=	16.750 FEET
AQUIFER THICKNESS	=	27.150 FEET
STATIC WATER LEVEL	=	3.640 FEET
AQUIFER CONDUCTIVITY IS	=	.117E-01 CM/SEC
AQUIFER TRANSMISSIVITY IS	=	.966E-01 CM*CM/SEC
	OR	.671E+04 GAL/FT/DAY



SE10008
Environmental Logger
05/12 20:50

Unit# 00000 Teste 5

INPUT 1: Level (F) TOC

Reference 5.60
Scale factor 50.12
Offset 0.00

Steps 0 05/12 17:11

Elapsed Time	Value
0.0000	5.61
0.0033	5.61
0.0066	5.61
0.0099	5.61
0.0133	5.61
0.0166	5.60
0.0200	5.60
0.0233	5.60
0.0266	5.60
0.0300	5.60
0.0333	5.58
0.0500	5.56
0.0666	5.60
0.0833	14.43
0.1000	13.99
0.1166	13.48
0.1333	13.03
0.1500	12.60
0.1666	12.20
0.1833	11.84
0.2000	11.51
0.2166	11.18
0.2333	10.88
0.2500	10.60
0.2666	10.33
0.2833	10.06
0.3000	9.82
0.3166	9.59
0.3333	9.38
0.4167	8.47
0.5000	7.77
0.5833	7.25
0.6667	6.86
0.7500	6.56
0.8333	6.32
0.9167	6.13
1.0000	6.02
1.0833	5.91
1.1667	5.83
1.2500	5.78
1.3333	5.74
1.4166	5.71
1.5000	5.67
1.5833	5.66
1.6667	5.64
1.7500	5.63
1.8333	5.63
1.9167	5.61
2.0000	5.61
2.5000	5.60
3.0000	5.60
3.5000	5.60
4.0000	5.60
4.5000	5.58
5.0000	5.58
5.5000	5.58
6.0000	5.58
6.5000	5.60
7.0000	5.60
7.5000	5.60
8.0000	5.60
8.5000	5.58
9.0000	5.58
9.5000	5.60
10.0000	5.60
12.0000	5.60
14.0000	5.61

END

WARZYN ENGINEERING, INC.

MADISON, WISCONSIN.

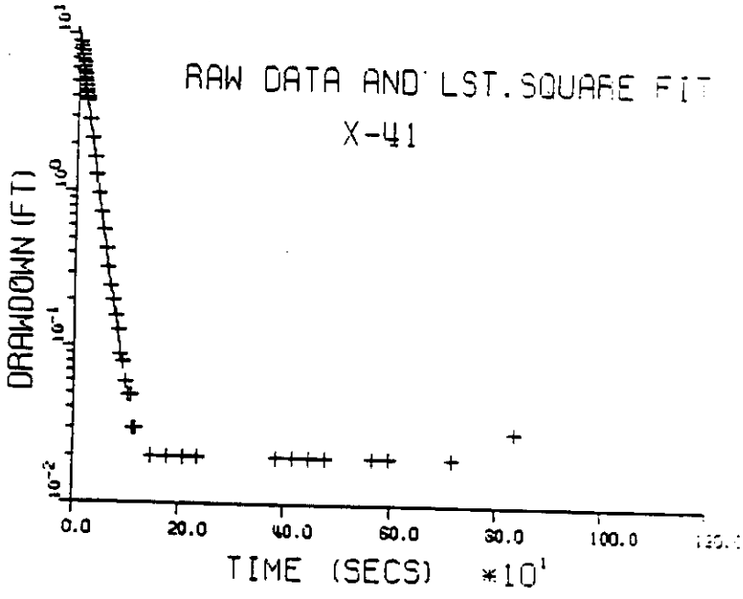
BAIL DOWN ANALYSIS

DATA OBTAINED BY : CSR & WFB

DATA ANALYZED BY : CSR

BAIL DOWN PARAMETERS FOR X-41

EFFECTIVE WELL DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN LENGTH	=	4.200 FEET
WELL PENETRATION DEPTH	=	25.970 FEET
AQUIFER THICKNESS	=	25.970 FEET
STATIC WATER LEVEL	=	5.580 FEET
AQUIFER CONDUCTIVITY IS	=	.547E-02 CM/SEC
AQUIFER TRANSMISSIVITY IS	=	.433E+01 CM*CM/SEC
	OR	.301E+04 GAL/FT/D[illegible]



WELL X-42

TIME (MIN)	DEPTH TO WATER (FEET)
0.1333	6.50
0.1666	6.40
0.2500	6.35
0.8500	6.30
3.0000	6.27
7.0000	6.25
16.000	6.25
37.000	6.23
75.000	6.21
145.00	6.17
775.00	6.06
1060.0	6.03
1278.0	5.98
1595.0	5.94
2290.0	5.89
2555.0	5.87

WARZYN ENGINEERING, INC.

MADISON, WISCONSIN.

BAIL DOWN ANALYSIS

DATA OBTAINED BY : CSR & WFB

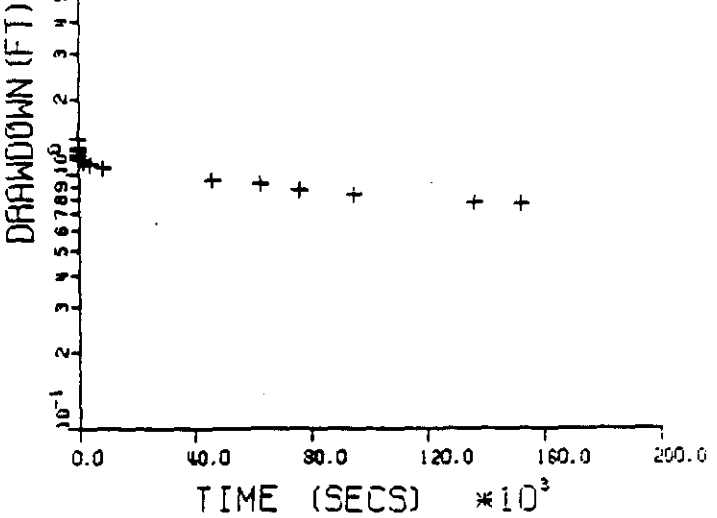
DATA ANALYZED BY : CSR & TEM

BAIL DOWN PARAMETERS FOR X-42

EFFECTIVE WELL DIAMETER	=	4.250 INCHES
EFFECTIVE SCREEN DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN LENGTH	=	8.600 FEET
WELL PENETRATION DEPTH	=	19.10 FEET
AQUIFER THICKNESS	=	90.00 FEET
STATIC WATER LEVEL	=	5.100 FEET
AQUIFER CONDUCTIVITY IS	=	.753E-06 CM/SEC
AQUIFER TRANSMISSIVITY IS	=	.208E-02 CM*CM/SEC
	OR	.143E+01 GAL/FT/DAY

RAW DATA AND LST. SQUARE FIT

X42



SE10008
Environmental Logger
05/12 20:34

Unit# 00000 Test# 0

INPUT 1: Level (F) TOC

Reference	3.68
Scale factor	50.12
Offset	0.00

Step# 0 05/12 13:24

Elapsed Time	Value
0.0000	3.69
0.0033	3.69
0.0066	3.69
0.0099	3.71
0.0133	3.69
0.0166	3.69
0.0200	3.69
0.0233	3.69
0.0266	3.69
0.0300	3.71
0.0333	3.71
0.0500	3.79
0.0666	9.43
0.0833	8.47
0.1000	7.71
0.1166	7.04
0.1333	6.50
0.1500	6.04
0.1666	5.68
0.1833	5.36
0.2000	5.11
0.2166	4.91
0.2333	4.72
0.2500	4.57
0.2666	4.43
0.2833	4.32
0.3000	4.23
0.3166	4.13
0.3333	4.07
0.4167	3.80
0.5000	3.68
0.5833	3.61
0.6667	3.56
0.7500	3.53
0.8333	3.53
0.9167	3.53
1.0000	3.53
1.0833	3.53
1.1667	3.56
1.2500	3.58
1.3333	3.58
1.4166	3.60
1.5000	3.61
1.5833	3.61
1.6667	3.61
1.7500	3.61
1.8333	3.61
1.9167	3.61
2.0000	3.61
2.5000	3.61
3.0000	3.61
3.5000	3.61
4.0000	3.61
4.5000	3.61
5.0000	3.61
5.5000	3.61
6.0000	3.61
6.5000	3.63
7.0000	3.61
7.5000	3.61
8.0000	3.61
8.5000	3.61
9.0000	3.61
9.5000	3.61
10.0000	3.61
12.0000	3.63
14.0000	3.63
16.0000	3.63

END

WARZYN ENGINEERING, INC.

MADISON, WISCONSIN.

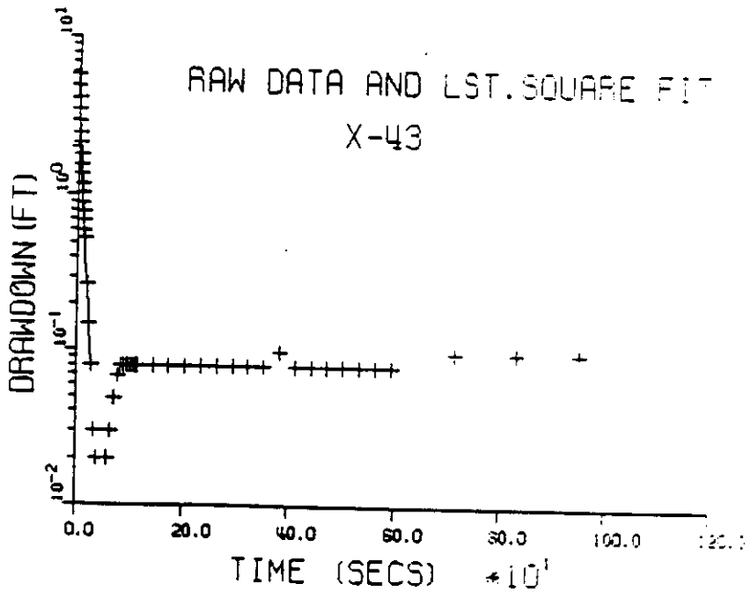
BAIL DOWN ANALYSIS

DATA OBTAINED BY : CSR & WFB

DATA ANALYZED BY : CSR

BAIL DOWN PARAMETERS FOR X-43

EFFECTIVE WELL DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN LENGTH	=	5.000 FEET
WELL PENETRATION DEPTH	=	18.900 FEET
AQUIFER THICKNESS	=	24.900 FEET
STATIC WATER LEVEL	=	3.330 FEET
AQUIFER CONDUCTIVITY IS	=	.965E-02 CM/SEC
AQUIFER TRANSMISSIVITY IS	=	.733E+01 CM*CM/SEC
	OR	.509E+04 GAL/FT/DAY



SE1000B
Environmental Logger
05/12 20:53

Unit# 00000 Test# 1

INPUT 1: Level (F) TOC

Reference	3.70
Scale factor	50.12
Offset	0.00

Step# 0 05/12 13:59

Elapsed Time	Value
0.0000	3.73
0.0033	3.73
0.0066	3.73
0.0099	3.71
0.0133	3.71
0.0166	3.73
0.0200	3.71
0.0233	3.71
0.0266	3.73
0.0300	3.74
0.0333	3.74
0.0500	3.81
0.0666	4.31
0.0833	11.16
0.1000	10.18
0.1166	9.14
0.1333	8.36
0.1500	7.73
0.1666	7.20
0.1833	6.74
0.2000	6.33
0.2166	5.98
0.2333	5.67
0.2500	5.40
0.2666	5.18
0.2833	4.97
0.3000	4.80
0.3166	4.66
0.3333	4.52
0.4167	4.04
0.5000	3.81
0.5833	3.66
0.6667	3.62
0.7500	3.58
0.8333	3.57
0.9167	3.55
1.0000	3.55
1.0833	3.54
1.1667	3.54
1.2500	3.54
1.3333	3.54
1.4166	3.54
1.5000	3.54
1.5833	3.52
1.6667	3.52
1.7500	3.54
1.8333	3.52
1.9167	3.54
2.0000	3.52
2.5000	3.52
3.0000	3.54
3.5000	3.54
4.0000	3.54
4.5000	3.54
5.0000	3.54
5.5000	3.54
6.0000	3.54
6.5000	3.54
7.0000	3.54
7.5000	3.54
8.0000	3.54
8.5000	3.54
9.0000	3.54
9.5000	3.54
10.0000	3.54

END

WARZYN ENGINEERING, INC.

MADISON, WISCONSIN.

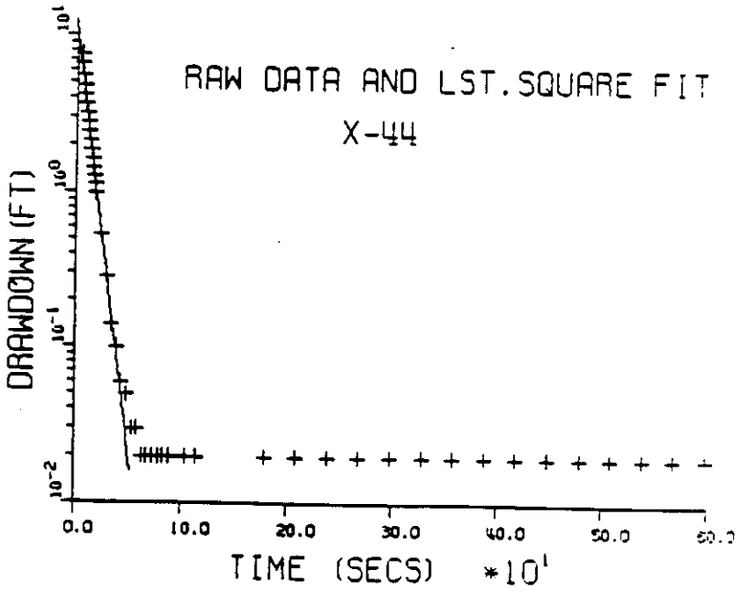
BAIL DOWN ANALYSIS

DATA OBTAINED BY : CSR & WFB

DATA ANALYZED BY : CSR

BAIL DOWN PARAMETERS FOR X-44

EFFECTIVE WELL DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN LENGTH	=	5.000 FEET
WELL PENETRATION DEPTH	=	23.920 FEET
AQUIFER THICKNESS	=	24.820 FEET
STATIC WATER LEVEL	=	3.520 FEET
AQUIFER CONDUCTIVITY IS	=	.960E-02 CM/SEC
AQUIFER TRANSMISSIVITY IS	=	.727E+01 CM*CM/SEC
	OR	.505E+04 GAL/FT/DAY



WELL X-45

TIME (MIN)	DEPTH TO WATER (FEET)
0.0333	5.30
0.1000	5.20
0.1666	4.40
0.2166	4.20
0.2500	4.15
0.3000	4.11
0.3333	4.10
0.4166	4.07
0.5000	4.06
0.5166	4.05
0.6500	4.04

****

WARIYN ENGINEERING, INC.

MADISON, WISCONSIN.

BAIL DOWN ANALYSIS

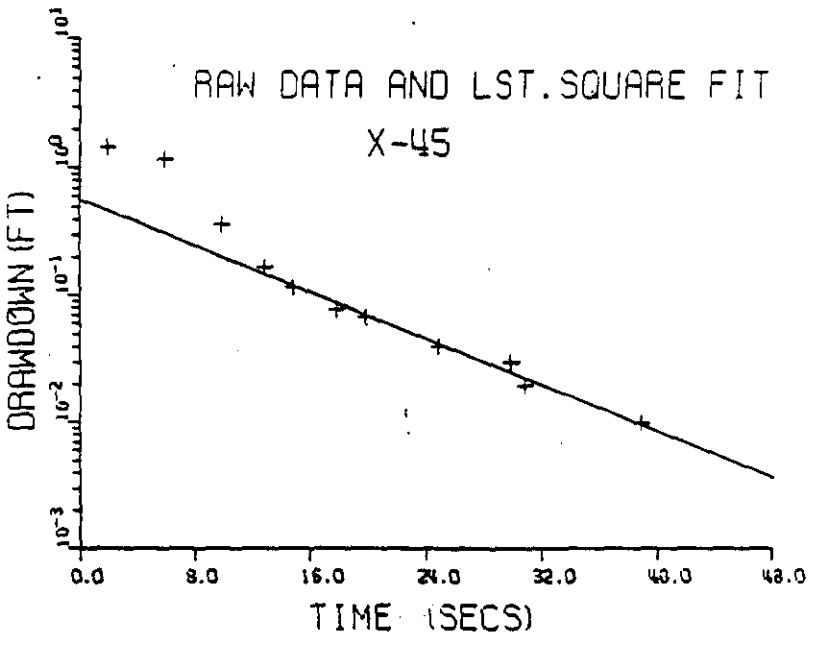
DATA OBTAINED BY : CSR & WFB

DATA ANALYZED BY : CSR

BAIL DOWN PARAMETERS FOR X-45

****

EFFECTIVE WELL DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN LENGTH	=	10.000 FEET
WELL PENETRATION DEPTH	=	12.740 FEET
AQUIFER THICKNESS	=	24.040 FEET
STATIC WATER LEVEL	=	4.030 FEET
AQUIFER CONDUCTIVITY IS	=	.383E-02 CM/SEC
AQUIFER TRANSMISSIVITY IS	=	.281E+01 CM*CM/SEC
	OR	.195E+04 GAL/FT/DAY



SE1000B
Environmental Logger
05/11 19:25

Unit# 00000 Test# 1

INPUT 1: Level (F) TOC

Reference 4.42
Scale factor 50.12
Offset 0.00

Step# 0 05/11 13:33

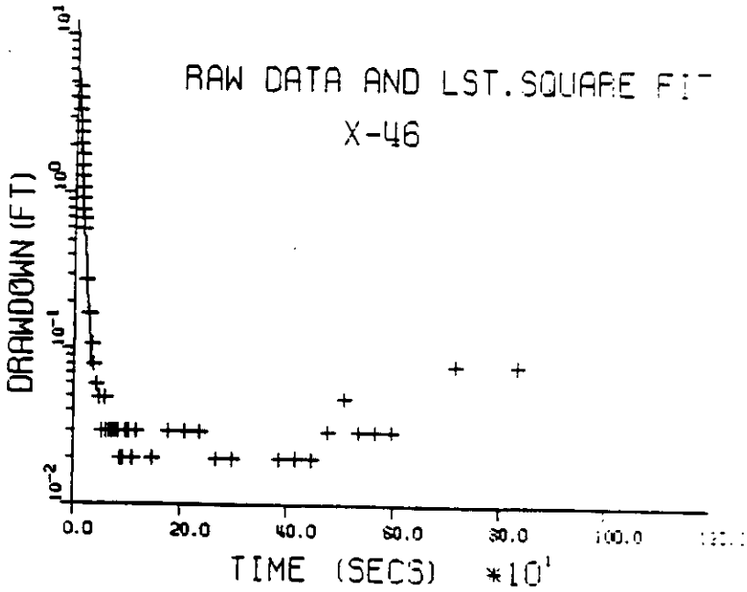
Elapsed Time	Value
0.0000	4.46
0.0033	4.46
0.0066	4.48
0.0099	4.48
0.0133	4.48
0.0166	4.48
0.0200	4.48
0.0233	4.48
0.0266	4.48
0.0300	4.48
0.0333	4.48
0.0500	4.48
0.0666	4.43
0.0833	4.45
0.1000	5.50
0.1166	9.02
0.1333	8.33
0.1500	7.70
0.1666	7.18
0.1833	6.75
0.2000	6.39
0.2166	6.09
0.2333	5.82
0.2500	5.61
0.2666	5.41
0.2833	5.25
0.3000	5.11
0.3166	5.01
0.3333	4.92
0.4167	4.60
0.5000	4.49
0.5833	4.43
0.6667	4.40
0.7500	4.38
0.8333	4.37
0.9167	4.35
1.0000	4.37
1.0833	4.35
1.1667	4.35
1.2500	4.35
1.3333	4.35
1.4166	4.35
1.5000	4.34
1.5833	4.34
1.6667	4.35
1.7500	4.35
1.8333	4.34
1.9167	4.34
2.0000	4.35
2.5000	4.34
3.0000	4.35
3.5000	4.35
4.0000	4.35
4.5000	4.34
5.0000	4.34
5.5000	4.32
6.0000	4.32
6.5000	4.34
7.0000	4.34
7.5000	4.34
8.0000	4.35
8.5000	4.37
9.0000	4.35
9.5000	4.35
10.0000	4.35
12.0000	4.40
14.0000	4.40

END

WARZYN ENGINEERING, INC.
MADISON, WISCONSIN.
BAIL DOWN ANALYSIS

DATA OBTAINED BY : CSR & WFB
DATA ANALYZED BY : CSR
BAIL DOWN PARAMETERS FOR X-46

EFFECTIVE WELL DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN LENGTH	=	5.000 FEET
WELL PENETRATION DEPTH	=	18.010 FEET
AQUIFER THICKNESS	=	24.000 FEET
STATIC WATER LEVEL	=	4.320 FEET
AQUIFER CONDUCTIVITY IS	=	.106E-01 CM/SEC
AQUIFER TRANSMISSIVITY IS	=	.774E+01 CM*CM/SEC
	OR	.538E+04 GAL/FT DAY



Environmental Logger
05/11 19:26

Units 00000 Tests 0

INPUT 1: Level (F) TOC

Reference	4.41
Scale factor	50.12
Offset	0.00

Steps 0 05/11 12:43

Elapsed Time	Value
0.0000	2.40
0.0033	2.40
0.0066	2.40
0.0099	2.50
0.0133	2.50
0.0166	2.50
0.0200	2.50
0.0233	2.51
0.0266	2.51
0.0300	2.51
0.0333	2.51
0.0500	2.53
0.0666	2.54
0.0833	2.54
0.1000	2.56
0.1166	2.58
0.1333	9.32
0.1500	13.76
0.1666	13.43
0.1833	13.19
0.2000	12.97
0.2166	12.77
0.2333	12.50
0.2500	12.39
0.2666	12.20
0.2833	12.02
0.3000	11.84
0.3166	11.66
0.3333	11.47
0.4167	10.57
0.5000	9.75
0.5833	9.09
0.6667	8.40
0.7500	7.97
0.8333	7.56
0.9167	7.21
1.0000	6.91
1.0833	6.65
1.1667	6.41
1.2500	6.20
1.3333	6.03
1.4166	5.89
1.5000	5.76
1.5833	5.65
1.6667	5.57
1.7500	5.49
1.8333	5.41
1.9167	5.35
2.0000	5.29
2.5000	5.00
3.0000	4.99
3.5000	4.94
4.0000	4.89
4.5000	4.88
5.0000	4.86
5.5000	4.86
6.0000	4.86
6.5000	4.85
7.0000	4.83
7.5000	4.83
8.0000	4.85
8.5000	4.85
9.0000	4.86
9.5000	4.85
10.0000	4.85

END

@@

W A R Z Y N   E N G I N E E R I N G . I N C.

M A D I S O N,   W I S C O N S I N.

B A I L   D O W N   A N A L Y S I S

DATA OBTAINED BY : CSR & WFB

DATA ANALYZED BY : CSR

BAIL DOWN PARAMETERS FOR X-47

@@

EFFECTIVE WELL DIAMETER = 2.000 INCHES

EFFECTIVE SCREEN DIAMETER = 2.000 INCHES

EFFECTIVE SCREEN LENGTH = 1.000 FEET

WELL PENETRATION DEPTH = 24.000 FEET

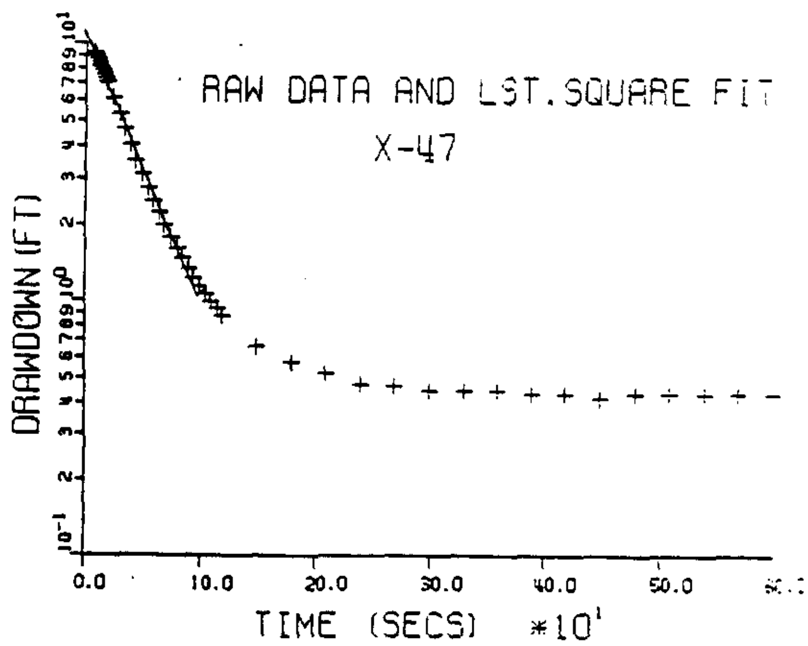
AQUIFER THICKNESS = 24.000 FEET

STATIC WATER LEVEL = 4.410 FEET

AQUIFER CONDUCTIVITY IS = .857E-02 CM/SEC

AQUIFER TRANSMISSIVITY IS = .627E+01 CM*CM/SEC

OR .436E+04 GAL/FT/DAY



SE10008
Environmental Logger
05/11 19:26

Unit# 00000 Test# 0

INPUT 1: Level (F) TOC

Reference	4.41
Scale factor	50.12
Offset	0.00

Step# 0 05/11 12:45

Elapsed Time	Value
0.0000	2.4[illegible]
0.0033	2.48
0.0066	2.48
0.0099	2.50
0.0133	2.50
0.0166	2.50
0.0200	2.50
0.0233	2.51
0.0266	2.51
0.0300	2.51
0.0333	2.51
0.0500	2.53
0.0666	2.54
0.0833	2.54
0.1000	2.56
0.1166	2.58
0.1333	9.32
0.1500	13.76
0.1666	13.43
0.1833	13.19
0.2000	12.97
0.2166	12.77
0.2333	12.58
0.2500	12.39
0.2666	12.20
0.2833	12.02
0.3000	11.84
0.3166	11.66
0.3333	11.47
0.4167	10.57
0.5000	9.75
0.5833	9.09
0.6667	8.48
0.7500	7.97
0.8333	7.56
0.9167	7.21
1.0000	6.91
1.0833	6.65
1.1667	6.41
1.2500	6.20
1.3333	6.03
1.4166	5.89
1.5000	5.76
1.5833	5.65
1.6667	5.57
1.7500	5.49
1.8333	5.41
1.9167	5.35
2.0000	5.29
2.5000	5.08
3.0000	4.99
3.5000	4.94
4.0000	4.89
4.5000	4.88
5.0000	4.86
5.5000	4.86
6.0000	4.86
6.5000	4.85
7.0000	4.85
7.5000	4.83
8.0000	4.85
8.5000	4.85
9.0000	4.85
9.5000	4.85
10.0000	4.85

END

WARIYN ENGINEERING, INC.

MADISON, WISCONSIN

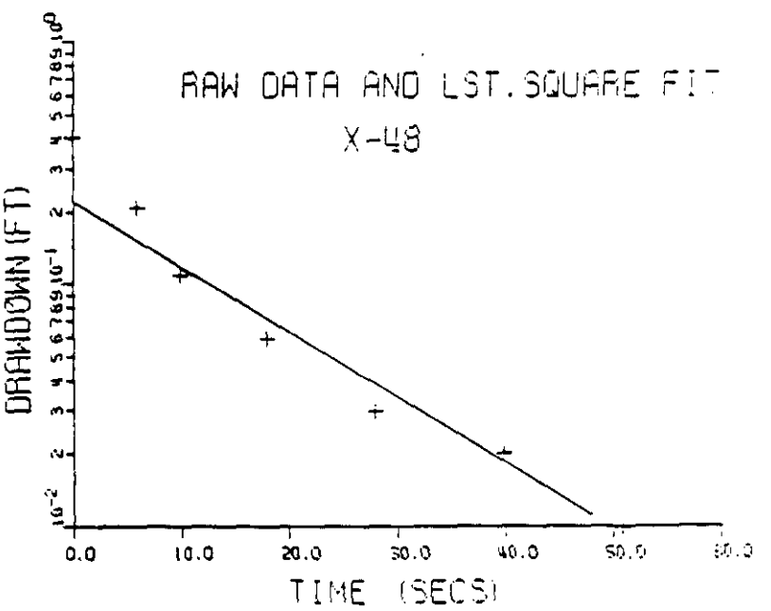
BAIL DOWN ANALYSIS

DATA OBTAINED BY : CSR MWFB

DATA ANALYZED BY : CSR

BAIL DOWN PARAMETERS FOR X-48

EFFECTIVE WELL DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN LENGTH	=	10.000 FEET
WELL PENETRATION DEPTH	=	12.860 FEET
AQUIFER THICKNESS	=	27.460 FEET
STATIC WATER LEVEL	=	4.890 FEET
AQUIFER CONDUCTIVITY IS	=	.228E-02 CM/SEC
AQUIFER TRANSMISSIVITY IS	=	.191E-01 CM*CM/SEC
	OR	.133E+04 GAL/FT/DAY



WELL X-48
DUPLICATE

TIME (MIN)	DEPTH TO WATER (FEET)
0.0666	6.00
0.1166	5.50
0.1666	5.30
0.2333	5.15
0.3000	5.05
0.4000	5.00
0.5333	4.95
0.7000	4.93
0.7666	4.92
0.8333	4.91
1.0333	4.90

WARZYN ENGINEERING, INC.

MADISON, WISCONSIN.

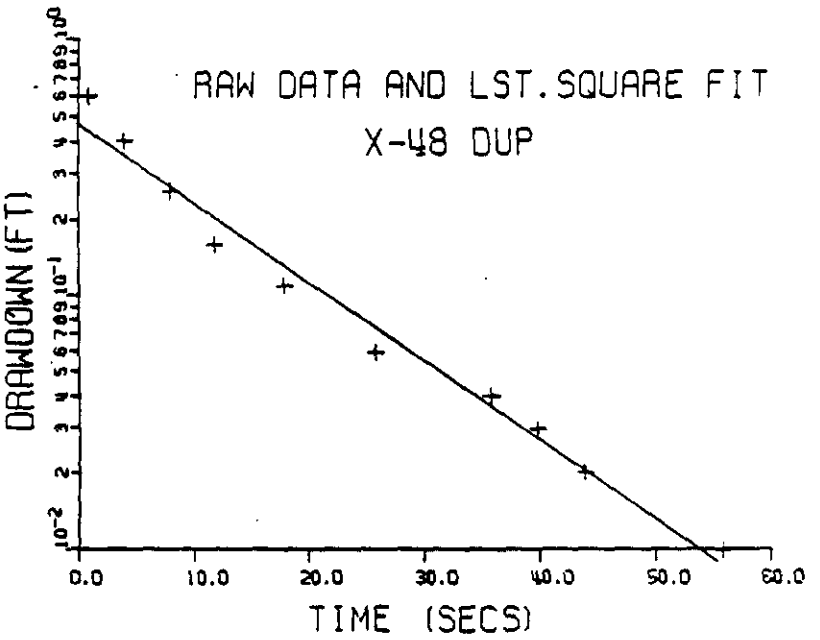
BAIL DOWN ANALYSIS

DATA OBTAINED BY : CSR &WFB

DATA ANALYZED BY : CSR

BAIL DOWN PARAMETERS FOR X-48 DUP

EFFECTIVE WELL DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN LENGTH	=	10.000 FEET
WELL PENETRATION DEPTH	=	12.860 FEET
AQUIFER THICKNESS	=	27.460 FEET
STATIC WATER LEVEL	=	4.890 FEET
AQUIFER CONDUCTIVITY IS	=	.259E-02 CM/SEC
AQUIFER TRANSMISSIVITY IS	=	.217E+01 CM*CM/SEC
	OR	.151E+04 GAL/FT/DAY



SE1000B
Environmental Logger
05/12 10:23

Units 00000 Tests 0

INPUT 1: Level (F) TOC

Reference	4.40
Scale factor	50.12
Offset	0.00

Steps 0 05/12 06:46

Elapsed Time	Value
0.0000	4.28
0.0033	4.28
0.0066	4.28
0.0099	4.28
0.0133	4.28
0.0166	4.28
0.0200	4.28
0.0233	4.28
0.0266	4.30
0.0300	4.28
0.0333	4.30
0.0500	10.20
0.0666	10.56
0.0833	9.84
0.1000	9.21
0.1166	8.64
0.1333	8.13
0.1500	7.69
0.1666	7.31
0.1833	6.97
0.2000	6.67
0.2166	6.40
0.2333	6.15
0.2500	5.94
0.2666	5.75
0.2833	5.58
0.3000	5.42
0.3166	5.31
0.3333	5.18
0.4167	4.76
0.5000	4.52
0.5833	4.40
0.6667	4.32
0.7500	4.28
0.8333	4.27
0.9167	4.25
1.0000	4.25
1.0833	4.24
1.1667	4.24
1.2500	4.24
1.3333	4.22
1.4166	4.24
1.5000	4.22
1.5833	4.22
1.6667	4.22
1.7500	4.22
1.8333	4.22
1.9167	4.22
2.0000	4.22
2.5000	4.22
3.0000	4.22
3.5000	4.22
4.0000	4.22
4.5000	4.22
5.0000	4.22
5.5000	4.21
6.0000	4.22
6.5000	4.22
7.0000	4.22
7.5000	4.24
8.0000	4.24
8.5000	4.22
9.0000	4.22
9.5000	4.22
10.0000	4.22
12.0000	4.24
14.0000	4.22
16.0000	4.22

END

WARZYN ENGINEERING, INC.

MADISON, WISCONSIN.

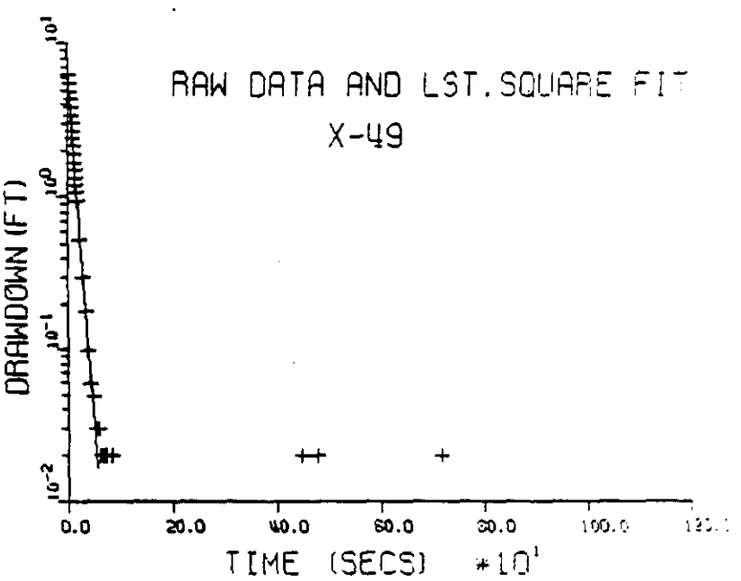
BAIL DOWN ANALYSIS

DATA OBTAINED BY : CSR & WFB

DATA ANALYZED BY : CSR

BAIL DOWN PARAMETERS FOR X-49

EFFECTIVE WELL DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN LENGTH	=	4.500 FEET
WELL PENETRATION DEPTH	=	27.410 FEET
AQUIFER THICKNESS	=	27.410 FEET
STATIC WATER LEVEL	=	4.220 FEET
AQUIFER CONDUCTIVITY IS	=	.105E-01 CM/SEC
AQUIFER TRANSMISSIVITY IS	=	.874E-01 CM*CM/SEC
	OR	.607E+04 GAL/FT/DAY



SE10008
Environmental Logger
05/11 19:20

Units 00000 Tests 5

INPUT 1: Level (F) TOC

Reference	4.37
Scale factor	30.12
Offset	0.00

Steps 0 05/11 18:34

Elapsed Time	Value
0.0000	4.25
0.0033	4.25
0.0066	4.25
0.0099	4.25
0.0133	4.25
0.0166	4.25
0.0200	4.27
0.0233	4.27
0.0266	4.27
0.0300	4.27
0.0333	4.27
0.0500	5.83
0.0666	5.56
0.0833	5.41
0.1000	5.19
0.1166	5.01
0.1333	4.89
0.1500	4.78
0.1666	4.70
0.1833	4.62
0.2000	4.57
0.2166	4.57
0.2333	4.52
0.2500	4.51
0.2666	4.49
0.2833	4.49
0.3000	4.48
0.3166	4.46
0.3333	4.46
0.4167	4.44
0.5000	4.41
0.5833	4.41
0.6667	4.38
0.7500	4.38
0.8333	4.38
0.9167	4.38
1.0000	4.37
1.0833	4.37
1.1667	4.37
1.2500	4.37
1.3333	4.37
1.4166	4.37
1.5000	4.37
1.5833	4.37
1.6667	4.37
1.7500	4.37
1.8333	4.37
1.9167	4.37
2.0000	4.35
2.5000	4.35
3.0000	4.35
3.5000	4.35
4.0000	4.35
4.5000	4.35
5.0000	4.35
5.5000	4.35
6.0000	4.35
6.5000	4.35
7.0000	4.35
7.5000	4.35
8.0000	4.35
8.5000	4.35
9.0000	4.35
9.5000	4.37
10.0000	4.35

END

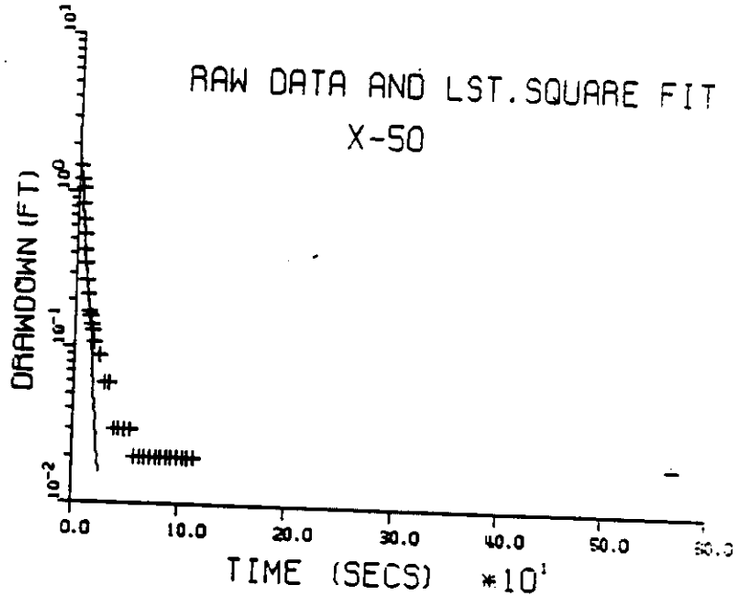
WARZYN ENGINEERING, INC.
MADISON, WISCONSIN.
BAIL DOWN ANALYSIS

DATA OBTAINED BY : CSR & WFB

DATA ANALYZED BY : CSR

BAIL DOWN PARAMETERS FOR X-50

EFFECTIVE WELL DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN LENGTH	=	10.000 FEET
WELL PENETRATION DEPTH	=	13.490 FEET
AQUIFER THICKNESS	=	30.290 FEET
STATIC WATER LEVEL	=	4.350 FEET
AQUIFER CONDUCTIVITY IS	=	.714E-02 CM/SEC
AQUIFER TRANSMISSIVITY IS	=	.659E+01 CM*CM/SEC
	OR	.458E+04 GAL/FT/DAY



SE1000B
Environmental Logger
05/11 19:22

Unit# 00000 Test# 4

INPUT 1: Level (F) TOC

Reference	4.76
Scale factor	50.12
Offset	0.00

Step# 0 05/11 17:50

Elapsed Time	Value
0.0000	4.64
0.0033	4.66
0.0066	4.66
0.0099	4.66
0.0133	4.79
0.0166	5.09
0.0200	5.45
0.0233	5.78
0.0266	6.03
0.0300	6.19
0.0333	6.32
0.0500	12.78
0.0666	11.93
0.0833	11.27
0.1000	10.70
0.1166	10.18
0.1333	9.71
0.1500	9.27
0.1666	8.89
0.1833	8.54
0.2000	8.21
0.2166	7.91
0.2333	7.64
0.2500	7.39
0.2666	7.17
0.2833	6.95
0.3000	6.74
0.3166	6.57
0.3333	6.41
0.4167	5.76
0.5000	5.34
0.5833	5.12
0.6667	4.99
0.7500	4.93
0.8333	4.85
0.9167	4.80
1.0000	4.79
1.0833	4.80
1.1667	4.77
1.2500	4.72
1.3333	4.71
1.4166	4.69
1.5000	4.69
1.5833	4.69
1.6667	4.69
1.7500	4.69
1.8333	4.71
1.9167	4.71
2.0000	4.69
2.5000	4.69
3.0000	4.71
3.5000	4.71
4.0000	4.71
4.5000	4.72
5.0000	4.72
5.5000	4.72
6.0000	4.74
6.5000	4.74
7.0000	4.74
7.5000	4.74
8.0000	4.76

END

WARZYN ENGINEERING, INC.

MADISON, WISCONSIN.

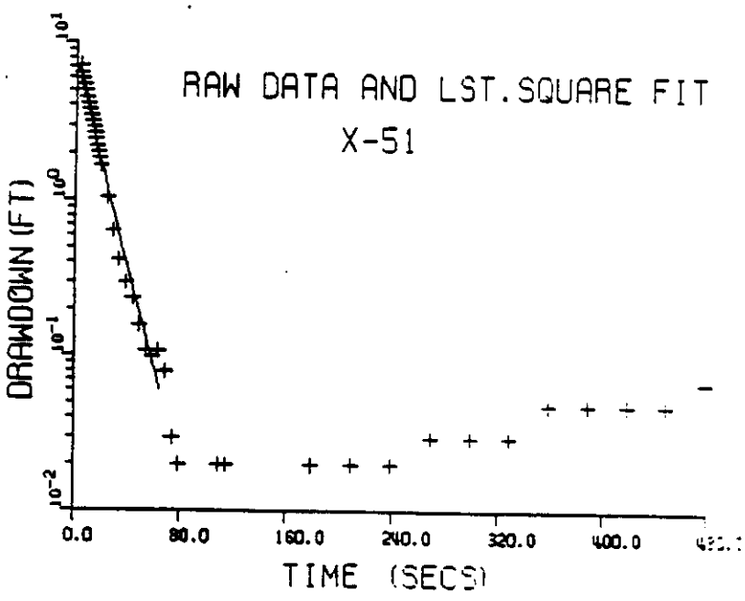
BAIL DOWN ANALYSIS

DATA OBTAINED BY : CSR & WFB

DATA ANALYZED BY : CSR

BAIL DOWN PARAMETERS FOR X-51

EFFECTIVE WELL DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN LENGTH	=	5.000 FEET
WELL PENETRATION DEPTH	=	27.630 FEET
AQUIFER THICKNESS	=	29.730 FEET
STATIC WATER LEVEL	=	4.690 FEET
AQUIFER CONDUCTIVITY IS	=	.573E-02 CM/SEC
AQUIFER TRANSMISSIVITY IS	=	.519E+01 CM*CM/SEC
	OR	.561E+04 GAL/FT/DAY



[illegible] Submersible Logger
05/13 19:41

Data 0000) Test# 1

INPUT 1: Level (F) TOC

Reference 7.30
Scale factor 50.12
Offset 0.00

Step# 0 05/13 08:42

Elapsed Time	Value
0.0000	7.23
0.0033	7.25
0.0066	7.25
0.0099	7.25
0.0133	7.25
0.0166	7.25
0.0200	7.25
0.0233	7.25
0.0266	7.25
0.0300	7.26
0.0333	7.26
0.0500	7.26
0.0666	7.26
0.0833	14.39
0.1000	12.99
0.1166	12.06
0.1333	11.27
0.1500	10.64
0.1666	10.12
0.1833	9.68
0.2000	9.31
0.2166	9.00
0.2333	8.75
0.2500	8.53
0.2666	8.35
0.2833	8.19
0.3000	8.05
0.3166	7.94
0.3333	7.84
0.4167	7.56
0.5000	7.42
0.5833	7.34
0.6667	7.31
0.7500	7.30
0.8333	7.28
0.9167	7.28
1.0000	7.26
1.0833	7.26
1.1667	7.26
1.2500	7.25
1.3333	7.25
1.4166	7.25
1.5000	7.25
1.5833	7.25
1.6667	7.25
1.7500	7.23
1.8333	7.23
1.9167	7.23
2.0000	7.25
2.5000	7.22
3.0000	7.22
3.5000	7.22
4.0000	7.20
4.5000	7.20
5.0000	7.20
5.5000	7.18
6.0000	7.18
6.5000	7.18
7.0000	7.17
7.5000	7.17
8.0000	7.17
8.5000	7.15
9.0000	7.15
9.5000	7.14
10.0000	7.12
12.0000	7.11
14.0000	7.09
16.0000	7.06
18.0000	7.04
20.0000	7.01
22.0000	7.00
24.0000	6.98
26.0000	6.98
28.0000	6.96
30.0000	6.96
32.0000	6.95
34.0000	6.96
36.0000	6.98
38.0000	6.98
40.0000	7.00
42.0000	7.01
44.0000	7.01
46.0000	7.03
48.0000	7.03
50.0000	7.04
52.0000	7.06
54.0000	7.06
56.0000	7.07
58.0000	7.07
60.0000	7.07
END	

WARZYN ENGINEERING, INC.

MADISON, WISCONSIN.

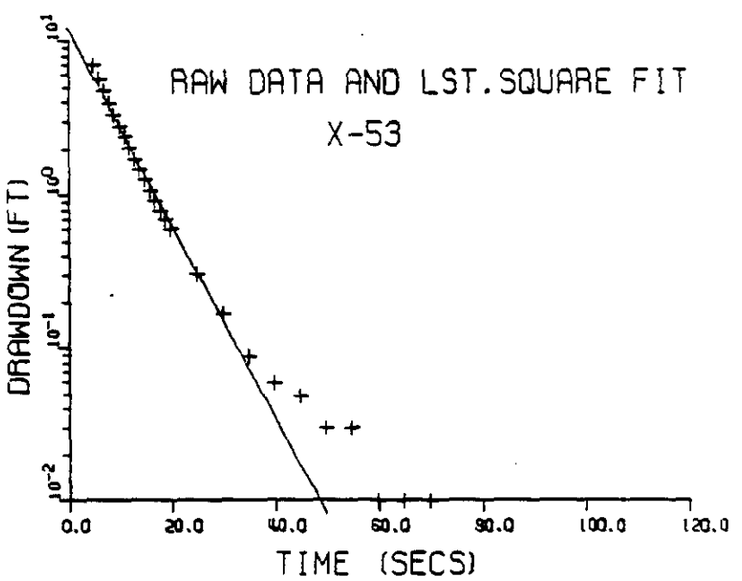
BAIL DOWN ANALYSIS

DATA OBTAINED BY : CSR & WFB

DATA ANALYZED BY : CSR

BAIL DOWN PARAMETERS FOR X-53

EFFECTIVE WELL DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN LENGTH	=	5.000 FEET
WELL PENETRATION DEPTH	=	15.470 FEET
AQUIFER THICKNESS	=	24.870 FEET
STATIC WATER LEVEL	=	6.950 FEET
AQUIFER CONDUCTIVITY IS	=	.953E-02 CM/SEC
AQUIFER TRANSMISSIVITY IS	=	.723E+01 CM*CM/SEC
	OR	.502E+04 GAL/FT/DAY



WELL X-52

TIME (MIN)	DEPTH TO WATER (FEET)
0.0500	7.00
0.0666	6.90
0.0833	6.80
0.1000	6.70
0.1333	6.50
0.1666	6.30

WARZYN ENGINEERING, INC.

MADISON, WISCONSIN.

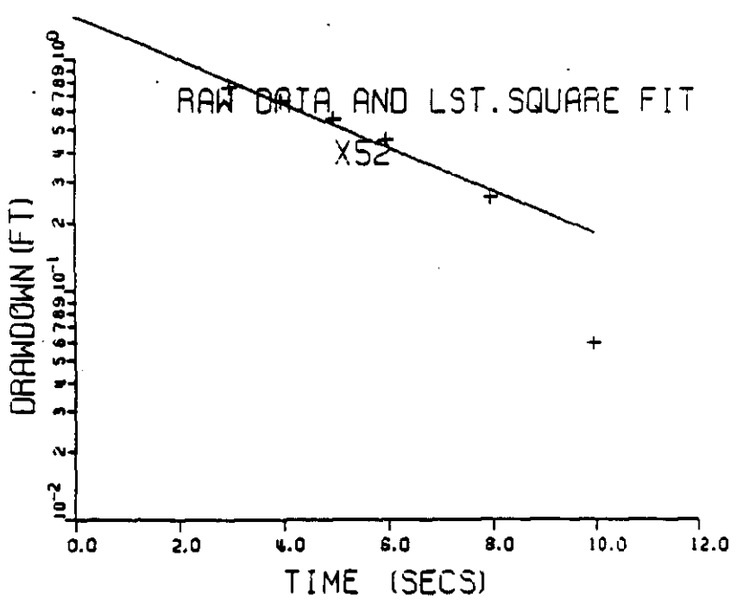
BAIL DOWN ANALYSIS

DATA OBTAINED BY : CSR & WFB

DATA ANALYZED BY : WFB

BAIL DOWN PARAMETERS FOR X-52

EFFECTIVE WELL DIAMETER	=	2.000 INCHES
EFFECTIVE SCREEN DIAMETER	=	2.000 INCHES
SCREEN LENGTH	=	9.610 FEET
WELL PENETRATION DEPTH	=	9.610 FEET
AQUIFER THICKNESS	=	26.310 FEET
STATIC WATER LEVEL	=	6.240 FEET
AQUIFER CONDUCTIVITY IS	=	.769E-02 CM/SEC
AQUIFER TRANSMISSIVITY IS	=	.617E+01 CM*CM/SEC
	OR	.429E+04 GAL/FT/DAY



BAILDOWN HYDRAULIC CONDUCTIVITY TESTS
TEST METHODS AND RESULTS

The purpose of baildown testing is to measure the in-situ saturated hydraulic conductivity of subsurface materials. Baildown tests measure the saturated hydraulic conductivity of undisturbed, in-place aquifer material, whereas laboratory tests require removal of a sample from its natural environment.

The general procedure for a baildown test is to instantaneously change the head within the well and measure the rate at which the water level in the well recovers to its static level. The hydraulic conductivity of the aquifer material is a function of the rate of water level recovery and the well geometry. In permeable aquifer materials, the location of the well screen with respect to the water table and the base of the aquifer are important. The configuration of a typical baildown test is illustrated in Figure A.

Test Methods

Piezometers were tested using air pressure to create a head within the well. The water level within the well falls until the total head within the well equals the total head outside the well. The air pressure is instantaneously released, creating a low head within the well and a subsequent recovery. A pressure transducer with an In-Situ Environmental Logger Model SE 1000B (Hermit Data Logger) was used to measure and record the water level recovery in the well. The PVC air pressure device was fitted over the top of the well casing and a non-reactive fluorosilicate gel was used to create a proper seal. An electric water level indicator and the pressure transducer were lowered into the well through a rubber stopper in the top of the device. The air space above the water column in the well was pressurized using breathing air (SCBA tank) or nitrogen until the water level dropped to the desired depth. When the desired water level was attained, a 2-inch ball valve was opened to instantaneously release the pressure. The data logger was started simultaneously with the release of pressure to measure the rate of water level recovery.

Hydraulic conductivity tests were conducted on water table wells by instantaneously removing a known volume of water from the well with a stainless steel bailer. Water level recovery was measured using an oil interface probe and was timed with a digital stopwatch.

Data Reduction

Several methods are available to interpret the water level versus time data that are obtained from a baildown test. These include Hvorslev (1951), NAVFAC (1971), Papadopulos, et al. (1963), and the Bouwer and Rice (1976). The first three references use an analytical solution to a well fully penetrating a confined aquifer. The method by Bouwer and Rice utilizes an analog model of both fully and partially penetrating wells to aid in solution of the modified Thiem equation. The Bouwer and Rice method was selected because of its ability to incorporate the effects on recovery rate due to partially penetrating wells.

The Bouwer and Rice method is based on solution of a modified Thiem equation for radial flow to a pumped well as shown in Equation 1.

$$Q = 2\pi (KLy)/(\ln(R_e/r_w)) \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \quad (1)$$

Where:

Q = flow into the well (L^3/T)

K = hydraulic conductivity of the aquifer (L/T)

L = length of open interval in the well (L)

y = differences between the water level in the well and the equilibrium level in the aquifer (L)

R_e = radius of influence of the well (L)

r_w = effective well radius (L)

In a single well test, the value of R_e is unknown. Values of R_e, in terms of the $\ln(R_e/r_w)$ were determined by Bouwer and Rice (1976) with an electric analog model of a homogeneous isotropic aquifer. The analog model was used to analyze the effects of the aquifer and well geometry. Results of the study for a partially penetrating well is shown in Equation 2 using Equation 3 to determine the value of $\ln(R_e/r_w)$.

$$K = \frac{r_c^2 \ln(R_e/r_w)}{2L} \quad \frac{1}{t} \quad \ln\left[\frac{y_0}{y_t}\right] \quad \ldots\ldots\ldots\ldots\ldots\ldots\ldots \quad (2)$$

Where:

r_c = radius of the well casing (L)

t = time (T)

y_o, y_t = difference between the water level in the well and the equilibrium level in the aquifer at times 0 and t

$$\ln(R_e/r_w) = \left[1.1/\ln(Hr_w) + \frac{A+B \ln(D-H)/r_w)}{L/r_w} \right]^{-1} \quad \ldots\ldots \quad (3)$$

Where:

A,B = constants obtained from Figure 8

H = depth to the bottom of the screen from the water table

D = thickness of the aquifer

As noted by Bouwer and Rice, a semilog plot of y_0/y_t versus time (t) (on the linear scale) should yield a straight line.

A FORTRAN program entitled BAIL was developed by WEI to reduce the baildown field test data. The program allows for skewed data points and outliers to be deleted from the time-drawdown plot, and the remaining data points are then matched to a linear least squares fit.

Input to the BAIL program includes the following variables:

- Static Water Level - water level measured at the start of the test before water is removed from the well
- Time-Drawdown Data - data obtained during recovery of the well after a volume of water is removed
- Effective Well Diameter - diameter of the borehole (diameter of well casing plus the thickness of the sand pack or developed zone)
- Effective Screen Diameter - inside diameter of the well casing
- Screen Length - the height of the portion of well through which water enters (height of screen or perforated zone)
- Well Penetration Depth - depth in the aquifer below the water table or upper limit of the aquifer to which the well penetrates
- Aquifer Thickness - thickness of water-bearing zone

Input data and program results for each test are presented in the following pages.

REFERENCES CITED

Bouwer, H. and Rice, R.C., 1976, A Slug Test for Determining Hydraulic Conductivity of Unconfined Aquifers with Completely or Partially Penetrating Wells. Water Resources Research, Vol. 12, No. 3, p. 423-428.

Hvorslev, M.J., 1951, Time Lag and Soil Permeability in Groundwater Observations, U.S. Army Corps of Engineers, Waterways Exp. Sta. Bull 36, Vicksburg, MS.

Papadopulos, S.S., Bredehoeft, J.D., and Cooper, H.H., Jr., 1973, On the Analysis of 'Slug Test' Data. Water Resources Research, Vol. 9, No. 4., P. 1087-1089.

United States Department of the Navy, Design Manual: Soil Mechanics, Foundations, and Earth Structures, NAVFAC DM-F, March 1971, p. 7-4-9.

RJK/jpl/KJQ
[jpl-601-83]

APPENDIX O

SURFACE WATER
ANALYTICAL DATA

O-1 - ROUND 1 SURFACE WATER SAMPLE DATA
COLLECTED IN OCTOBER 1986
BY WARZYN ENGINEERING INC.
O-2 - ROUND 2 SURFACE WATER SAMPLE DATA
COLLECTED IN JUNE 1987
BY WARZYN ENGINEERING INC.

WARZYN

O-1 - ROUND 1 SURFACE WATER SAMPLE DATA
COLLECTED IN OCTOBER 1986
BY WARZYN ENGINEERING INC.

9TH AVENUE DUMP
SURFACE WATER ORGANICS - ROUND 1
CONCENTRATION (UG/L)

CRL#	SN01S16	SN01S04	SN01S17	SN01S18	SN01S06	SN01S07	SN01S19	SN01S20	SN01S21	SN01S05
SAMPLE IDENTIFICATION	SW01-01	SW02-01	SW03-01	SW03-91	SW04-01	SW04-91	SW05-01	SW06-01	SW07-01	SW08-01
DATE	10/16/86	10/15/86	10/16/86	10/16/86	10/15/86	10/15/86	10/16/86	10/16/86	10/15/86	10/15/86
CRDL MULTIPLE	1	1	1	1	1	1	1	1	1	50
VOLATILES										
CHLOROMETHANE										
BROMOMETHANE										
VINYL CHLORIDE										130J
CHLOROETHANE										310J
METHYLENE CHLORIDE	140B	14B	350B	98B	12B	13B	6.7B	57B	110B	760B
ACETONE		6.38BJ								6400B
CARBON DISULFIDE										
DICHLOROETHENE 1,1-										
DICHLOROETHANE 1,1-										170J
TRANS-1,2-DICHLOROETHENE										
CHLOROFORM										
DICHLOROETHANE1,2-										
BUTANONE 2-										5100
TRICHLOROETHANE 1,1,1-										
CARBON TETRACHLORIDE										
VINYL ACETATE										
BROMODICHLOROMETHANE										
DICHLOROPROPANE 1,2-										
TRANS-1,3-DICHLOROPROPENE										
TRICHLOROETHENE										
DIBROMOCHLOROMETHANE										
TRICHLOROETHANE1,1,2-										
BENZENE										
CIS-1,3-DICHLOROPROPENE										
CHLOROETHYLVINYLETHER 2-										
BROMOFORM										
METHYL4-PENTANONE2-										410J
HEXANONE 2-										8900
TETRACHLOROETHENE										
TETRACHLOROETHANE1,1,2,2-										
TOLUENE		11								160J
CHLOROBENZENE										
ETHYLBENZENE										
STYRENE										
TOTAL XYLENES										
SEMI-VOLATILES										
CRDL MULTIPLE		2								1
PHENOL										
BIS(-2-CHLOROETHYL)ETHER										

9TH AVENUE DUMP
SURFACE WATER ORGANICS - ROUND 1
CONCENTRATION (UG/L)

CRL*	DN01S16	DN01S04	DN01S17	DN01S18	DN01S06	DN01S07	DN01S19	DN01S20	DN01S21	DN01S05
SAMPLE IDENTIFICATION	SW01-01	SW02-01	SW03-01	SW03-91	SW04-01	SW04-91	SW05-01	SW06-01	SW07-01	SW08-01
DATE	10/16/86	10/15/86	10/16/86	10/16/86	10/15/86	10/15/86	10/16/86	10/15/86	10/16/86	10/15/86
CHLOROPHENOL 2-										
DICHLOROBENZENE 1,3-										
DICHLOROBENZENE 1,4-										
BENZYL ALCOHOL										
DICHLOROBENZENE 1,2-										
METHYLPHENOL-2										
BIS(2-CHLOROISOPROPYL)ETHER										
METHYLPHENOL 4-										
N-NITROSO-DI-N-PROPYLAMINE										
HEXACHLOROETHANE										
NITROBENZENE										
ISOPHORONE										5.7J
NITROPHENOL 2-										
DIMETHYLPHENOL 2,4-										
BENZOIC ACID										
BIS(-2-CHLOROETHOOXY)METHANE										
DICHLOROPHENOL 2,4-										
TRICHLOROBENZENE1,2,4-										
NAPHTHALENE										2.2J
CHLOROANILINE 4-										
HEXACHLOROBUTADIENE										
CHLORO-4 METHYLPHENOL 3-										
METHYLNAPHTHALENE 2-										
HEXACHLOROCYCLOPENTADIENE										
TRICHLOROPHENOL 2,4,6-										
TRICHLOROPHENOL 2,4,5-										
CHLORONAPHTHALENE 2-										
NITROANILINE 2-										
DIMETHYL PHTHALATE										
ACANAPHTHYLENE										
NITROANILINE 3-										
ACENAPHTHENE										
DINITROPHENOL 2,4-										
NITROPHENOL 4-										
DIBENZOFURAN										
DINITROTOLUENE 2,4-										
DINITROTOLUENE 2,6-										
DIETHYLPHTHALATE								4.0J		
CHLOROPHENYL-PHENYLETHER 4-										
FLUORENE										
NITROANILINE 4-										
DINITRO 4,6- METHYLPHENOL 2-										
N-NITROSODIPHENYLAMINE (1)										
BROMOPHENYL 4- PHENYLETHER										
HEXACHLOROBENZENE										
PENTACHLOROPHENOL										

9TH AVENUE DUMP
SURFACE WATER ORGANICS - ROUND 1
CONCENTRATION (UG/L)

CRL#	SN01S16	SN01S04	SN01S17	SN01S18	SN01S06	SN01S07	SN01S19	SN01S20	SN01S21	SN01S05
SAMPLE IDENTIFICATION	SW01-01	SW02-01	SW03-01	SW03-91	SW04-01	SW04-91	SW05-01	SW06-01	SW07-01	SW08-01
DATE	10/16/86	10/15/86	10/16/86	10/16/86	10/15/86	10/15/86	10/16/86	10/16/86	10/16/86	10/15/86
PHENANTHRENE										
ANTHRACENE										
DI-N-BUTYLPHTHALATE										
FLUORANTHENE										
PYRENE										
BUTYLBENZYLPHTHALATE										
DICHLOROBENZIDINE 3,3-										
BENZO(A)ANTHRACENE										
BIS(2-ETHYLEXYL)PHTHALATE	4.5JB							4.5BJ		
CHRYSENE										
DI-N-OCTYL PHTHALATE										
BENZO(B)FLUORANTHENE										
BENZO(K)FLUORANTHENE										
BENZO(A)PYRENE										
INDENOL(1,2,3-CD)PYRENE										
DIBENZ(A H)ANTHRACENE										
BENZO(G.H.I)PERYLENE										
PESTICIDES/PCB'S										
CRDL MULTIPLE		1								1
ALPHA-BHC				0.04J						
BETA-BHC										
DELTA-BHC										
GAMMA-BHC (LINDANE)										0.05
HEPTACHLOR										0.17
ALDRIN				0.05J						
HEPTACHLOR EPOXIDE			0.04J							
ENDOSULFAN 1										
DIELDRIN										
DDE 4,4-										
ENDRIN										
ENDOSULFAN 11										
DDD 4,4										
ENDOSULFAN SULFATE										
DDT 4,4-										
METHOXYCHLOR										
ENDRIN KETONE										
CHLORDANE										
TOXAPHENE										
AROCLOR-1016										
AROCLOR-1221										
AROCLOR-1232										
AROCLOR-1242										
AROCLOR 1248										

9TH AVENUE DUMP
SURFACE WATER ORGANICS - ROUND 1
CONCENTRATION (UG/L)

CRL#	DN01S16	DN01S04	DN01S17	DN01S18	DN01S06	DN01S07	DN01S19	DN01S20	DN01S21	DN01S05
SAMPLE IDENTIFICATION	SW01-01	SW02-01	SW03-01	SW03-91	SW04-01	SW04-91	SW05-01	SW06-01	SW07-01	SW08-01
DATE	10/16/86	10/15/86	10/16/86	10/16/86	10/15/86	10/15/86	10/16/86	10/16/86	10/16/86	10/15/86
AROCLOR 1254										
AROCLOR 1260										

9TH AVENUE DUMP
SURFACE WATER ORGANICS - ROUND 1
CONCENTRATION (UG/L)

CRL#	DN01S34	DN01S32	DN01S37	DN01S02	DN01S03	DN01S15	DN01S33	DN01S36	DN01S35	DN01S01
SAMPLE IDENTIFICATION	SW09-01	SW10-01	SW11-01	SW12-01	SW13-01	SW14-01	SW15-01	SW16-01	SW18-01	SW19-01
DATE	10/17/86	10/17/86	10/17/86	10/15/86	10/15/86	10/16/86	10/17/86	10/17/86	10/17/86	10/15/86
CRDL MULTIPLE	1	1	1	1	1	1	1	1	1	1
VOLATILES										
CHLOROMETHANE										
BROMOMETHANE										
VINYL CHLORIDE										
CHLOROETHANE			6.4J							
METHYLENE CHLORIDE	12B	5.3B	28B	9.3B	28B	11B	8.3B	14B	20B	22B
ACETONE	7.68J						3.18J			
CARBON DISULFIDE										
DICHLOROETHENE 1,1-										
DICHLOROETHANE 1,1-										
TRANS-1,2-DICHLOROETHENE										
CHLOROFORM										
DICHLOROETHANE1,2-										
BUTANONE 2-										
TRICHLOROETHANE 1,1,1-										
CARBON TETRACHLORIDE										
VINYL ACETATE										
BROMODICHLOROMETHANE										
DICHLOROPROPANE 1,2-										
TRANS-1,3-DICHLOROPROPENE										
TRICHLOROETHENE										
DIBROMOCHLOROMETHANE										
TRICHLOROETHANE1,1,2-										
BENZENE										
CIS-1,3-DICHLOROPROPENE										
CHLOROETHYLVINYLETHER 2-										
BROMOFORM										
METHYL4-PENTANONE2-										
HEXANONE 2-				10						
TETRACHLOROETHENE										
TETRACHLOROETHANE1,1,2,2-										
TOLUENE									2.5J	
CHLOROBENZENE										
ETHYLBENZENE										
STYRENE										
TOTAL XYLENES										
SEMI-VOLATILES										
CRDL MULTIPLE			2							
PHENOL										
BIS(-2-CHLOROETHYL)ETHER										

9TH AVENUE DUMP
SURFACE WATER ORGANICS - ROUND 1
CONCENTRATION (UG/L)

CRL#	DN01S34	DN01S32	DN01S37	DN01S02	DN01S03	DN01S15	DN01S33	DN01S36	DN01S35	DN01S01
SAMPLE IDENTIFICATION	SW09-01	SW10-01	SW11-01	SW12-01	SW13-01	SW14-01	SW15-01	SW16-01	SW18-01	SW19-01
DATE	10/17/86	10/17/86	10/17/86	10/15/86	10/15/86	10/16/86	10/17/86	10/17/86	10/17/86	10/15/86
CHLOROPHENOL 2-										
DICHLOROBENZENE 1,3-										
DICHLOROBENZENE 1,4-										
BENZYL ALCOHOL										
DICHLOROBENZENE 1,2-										
METHYLPHENOL-2										
BIS(2-CHLOROISOPROPYL)ETHER										
METHYLPHENOL 4-										
N-NITROSO-DI-N-PROPYLAMINE										
HEXACHLOROETHANE										
NITROBENZENE										
ISOPHORONE										
NITROPHENOL 2-										
DIMETHYLPHENOL 2,4-										
BENZOIC ACID										
BIS(-2-CHLOROETHOOXY)METHANE										
DICHLOROPHENOL 2,4-										
TRICHLOROBENZENE1,2,4-										
NAPHTHALENE										
CHLOROANILINE 4-										
HEXACHLOROBUTADIENE										
CHLORO-4 METHYLPHENOL 3-										
METHYLNAPHTHALENE 2-										
HEXACHLOROCYCLOPENTADIENE										
TRICHLOROPHENOL 2,4,6-										
TRICHLOROPHENOL 2,4,5-										
CHLORONAPHTHALENE 2-										
NITROANILINE 2-										
DIMETHYL PHTHALATE										
ACANAPHTHYLENE										
NITROANILINE 3-										
ACENAPHTHENE										
DINITROPHENOL 2,4-										
NITROPHENOL 4-										
DIBENZOFURAN										
DINITROTOLUENE 2,4-										
DINITROTOLUENE 2,6-										
DIETHYLPHTHALATE										
CHLOROPHENYL-PHENYLETHER 4-										
FLUORENE										
NITROANILINE 4-										
DINITRO 4,6- METHYLPHENOL 2-										
N-NITROSODIPHENYLAMINE (1)										
BROMOPHENYL 4- PHENYLETHER										
HEXACHLOROBENZENE										
PENTACHLOROPHENOL										

9TH AVENUE DUMP
SURFACE WATER ORGANICS - ROUND 1
CONCENTRATION (UG/L)

CRL#	SN01S34	SN01S32	SN01S37	SN01S02	SN01S03	SN01S15	SN01S33	SN01S36	SN01S35	SN01S01
SAMPLE IDENTIFICATION	SW09-01	SW10-01	SW11-01	SW12-01	SW13-01	SW14-01	SW15-01	SW16-01	SW18-01	SW19-01
DATE	10/17/86	10/17/86	10/17/86	10/15/86	10/15/86	10/16/86	10/17/86	10/17/86	10/17/86	10/15/86
PHENANTHRENE										
ANTHRACENE										
DI-N-BUTYLPHTHALATE							1.2J			
FLUORANTHENE										
PYRENE										
BUTYLBENZYLPHTHALATE										
DICHLOROBENZIDINE 3,3-										
BENZO(A)ANTHRACENE										
BIS(2-ETHYLEXYL)PHTHALATE			40B			15B		17B		
CHRYSENE										
DI-N-OCTYL PHTHALATE										
BENZO(B)FLUORANTHENE										
BENZO(K)FLUORANTHENE										
BENZO(A)PYRENE										
INDENOL(1,2,3-CD)PYRENE										
DIBENZ(A H)ANTHRACENE										
BENZO(G.H.I)PERYLENE										
PESTICIDES/PCB'S										
CROL MULTIPLE			1							
ALPHA-BHC		0.07				0.04J				
BETA-BHC		0.2				0.13			0.03J	
DELTA-BHC										
GAMMA-BHC (LINDANE)					0.06	0.14				
HEPTACHLOR						0.06				
ALDRIN										
HEPTACHLOR EPOXIDE						0.05				
ENDOSULFAN 1										
DIELDRIN										
DDE 4,4-										
ENDRIN										
ENDOSULFAN 11										
DDD 4,4										
ENDOSULFAN SULFATE										
DDT 4,4-										
METHOXYCHLOR										
ENDRIN KETONE										
CHLORDANE										
TOXAPHENE										
AROCLOR-1016										
AROCLOR-1221										
AROCLOR-1232										
AROCLOR-1242										
AROCLOR 1248										

9TH AVENUE DUMP
SURFACE WATER ORGANICS - ROUND 1
CONCENTRATION (UG/L)

CRL#	DN01S34	DN01S32	DN01S37	DN01S02	DN01S03	DN01S15	DN01S33	DN01S36	DN01S35	DN01S01
SAMPLE IDENTIFICATION	SW09-01	SW10-01	SW11-01	SW12-01	SW13-01	SW14-01	SW15-01	SW16-01	SW18-01	SW19-01
DATE	10/17/86	10/17/86	10/17/86	10/15/86	10/15/86	10/16/86	10/17/86	10/17/86	10/17/86	10/15/86
AROCLOR 1254										
AROCLOR 1260										

9TH AVENUE DUMP
SURFACE WATER ORGANICS - ROUND 1
CONCENTRATION (UG/L)

CRL#	DN01529
SAMPLE IDENTIFICATION	SB04-01
DATE	10/16/86
CRDL MULTIPLE	1
VOLATILES	
CHLOROMETHANE	
BROMOMETHANE	
VINYL CHLORIDE	
CHLOROETHANE	
METHYLENE CHLORIDE	8.3B
ACETONE	5.8BJ
CARBON DISULFIDE	
DICHLOROETHENE 1,1-	
DICHLOROETHANE 1,1-	
TRANS-1,2-DICHLOROETHENE	
CHLOROFORM	
DICHLOROETHANE1,2-	
BUTANONE 2-	28B
TRICHLOROETHANE 1,1,1-	
CARBON TETRACHLORIDE	
VINYL ACETATE	
BROMODICHLOROMETHANE	
DICHLOROPROPANE 1,2-	
TRANS-1,3-DICHLOROPROPENE	
TRICHLOROETHENE	
DIBROMOCHLOROMETHANE	
TRICHLOROETHANE1,1,2-	
BENZENE	
CIS-1,3-DICHLOROPROPENE	
CHLOROETHYLVINYLETHER 2-	
BROMOFORM	
METHYL4-PENTANONE2-	
HEXANONE 2-	
TETRACHLOROETHENE	
TETRACHLOROETHANE1,1,2,2-	
TOLUENE	3.6J
CHLOROBENZENE	
ETHYLBENZENE	
STYRENE	
TOTAL XYLENES	
SEMI-VOLATILES	
CRDL MULTIPLE	
PHENOL	
BIS(-2-CHLOROETHYL)ETHER	

9TH AVENUE DUMP
SURFACE WATER ORGANICS - ROUND 1
CONCENTRATION (UG/L)

CRL#	0N01S29
SAMPLE IDENTIFICATION	S804-01
DATE	10/16/86

CHLOROPHENOL 2-	
DICHLOROBENZENE 1,3-	
DICHLOROBENZENE 1,4-	
BENZYL ALCOHOL	
DICHLOROBENZENE 1,2-	
METHYLPHENOL-2	
BIS(2-CHLORDISOPROPYL)ETHER	
METHYLPHENOL 4-	
N-NITROSO-DI-N-PROPYLAMINE	
HEXACHLOROETHANE	
NITROBENZENE	
ISOPHORONE	
NITROPHENOL 2-	
DIMETHYLPHENOL 2,4-	
BENZOIC ACID	
BIS(-2-CHLOROETHOOXY)METHANE	
DICHLOROPHENOL 2,4-	
TRICHLOROBENZENE1,2,4-	
NAPHTHALENE	
CHLOROANILINE 4-	
HEXACHLOROBUTADIENE	
CHLORO-4 METHYLPHENOL 3-	
METHYLNAPHTHALENE 2-	
HEXACHLOROCYCLOPENTADIENE	
TRICHLOROPHENOL 2,4,6-	
TRICHLOROPHENOL 2,4,5-	
CHLORONAPHTHALENE 2-	
NITROANILINE 2-	
DIMETHYL PHTHALATE	
ACANAPHTHYLENE	
NITROANILINE 3-	
ACENAPHTHENE	
DINITROPHENOL 2,4-	
NITROPHENOL 4-	
DIBENZOFURAN	
DINITROTOLUENE 2,4-	
DINITROTOLUENE 2,6-	
DIETHYLPHTHALATE	
CHLOROPHENYL-PHENYLETHER 4-	
FLUORENE	
NITROANILINE 4-	
DINITRO 4,6- METHYLPHENOL 2-	
N-NITROSODIPHENYLAMINE (1)	
BROMOPHENYL 4- PHENYLETHER	
HEXACHLOROBENZENE	
PENTACHLOROPHENOL	

9TH AVENUE DUMP
SURFACE WATER ORGANICS - ROUND 1
CONCENTRATION (UG/L)

CRL#	DN01929
SAMPLE IDENTIFICATION	SB04-01
DATE	10/16/86

PHENANTHRENE	
ANTHRACENE	
DI-N-BUTYLPHTHALATE	
FLUORANTHENE	
PYRENE	
BUTYLBENZYLPHTHALATE	
DICHLOROBENZIDINE 3,3-	
BENZO(A)ANTHRACENE	
BIS(2-ETHYLEXYL)PHTHALATE	
CHRYSENE	
DI-N-OCTYL PHTHALATE	
BENZO(B)FLUORANTHENE	
BENZO(K)FLUORANTHENE	
BENZO(A)PYRENE	
INDENOL(1,2,3-CD)PYRENE	
DIBENZ(A H)ANTHRACENE	
BENZO(G.H.I)PERYLENE	
PESTICIDES/PCB'S	
CRDL MULTIPLE	
ALPHA-BHC	
BETA-BHC	
DELTA-BHC	
GAMMA-BHC (LINDANE)	
HEPTACHLOR	
ALDRIN	
HEPTACHLOR EPOXIDE	
ENDOSULFAN 1	
DIELDRIN	
DDE 4,4-	
ENDRIN	
ENDOSULFAN 11	
DDD 4,4	
ENDOSULFAN SULFATE	
DDT 4,4-	
METHOXYCHLOR	
ENDRIN KETONE	
CHLORDANE	
TOXAPHENE	
AROCLOR-1016	
AROCLOR-1221	
AROCLOR-1232	
AROCLOR-1242	
AROCLOR 1248	

9TH AVENUE DUMP
SURFACE WATER ORGANICS - ROUND 1
CONCENTRATION (UG/L)

CRL#	9N01529
SAMPLE IDENTIFICATION	S804-01
DATE	10/16/86
AROCLOR 1254	
AROCLOR 1260	

9TH AVENUE DUMP
INORGANIC WATER TEST
CONCENTRATION (UG/L)

CRL#	DN01S16	DN01S04	DN01S17	DN01S18	DN01S06	DN01S07	DN01S19	DN01S20	DN01S21	DN01S05
SAMPLE IDENTIFICATION	SW01-01	SW02-01	SW03-01	SW03-91	SW04-01	SW04-91	SW05-01	SW06-01	SW07-91	SW08-01
DATE	10/22/86	10/22/86	10/22/86	10/22/86	10/22/86	10/22/86	10/22/86	10/22/86	10/22/86	10/22/86
ALUMINUM	131U	131U	520	470	500	131U	131U	131U	[150]	[190]
ANTIMONY	46U	46U	46U	46U	46U	46U	46U	46U	46U	46U
ARSENIC	10U	10U	10U	10U	10U	10U	10U	10U	10U	[5.1]
BARIUM	200	[160]	[90]	[80]	[170]	[170]	[170]	[100]	[80]	[150]
BERYLLIUM	2.9U	2.9U	2.9U	2.9U	2.9U	2.9U	2.9U	2.9	2.9U	2.9U
CADMIUM	5U	5U	5.0U	5.0U	5U	5U	5U	5U	5U	5U
CALCIUM	218000	217000	95600	90600	230000	227000	154000	106000	90600	276000
CHROMIUM	3.7UJ	3.7UJ	3.7UJ	3.7UJ	3.7UJ	3.7UJ	3.7U	3.7U	3.7U	11UJ
COBALT	28U	28U	28U	28U	28U	28U	28U	28U	28U	28U
COPPER	23U	23U	23U	23U	23U	23U	23U	23U	23U	31
IRON	5140J	1290J	2880J	2700J	2800J	1840J	1300	1620	2100	27000J
LEAD	10J	5.1J	10J	9.2J	[4.0]J	5UJ	5UJ	29	5UJ	590J
MAGNESIUM	68700	69600	25900	25200	70700	70300	48900	32600	24300	102000
MANGANESE	770	620	430	430	940	840	660	250	400	3330
MERCURY	0.2U	0.2U	0.2U	0.2U	0.2U	0.2U	0.2U	0.2U	0.2U	0.2U
NICKEL	32U	32U	32U	32U	32U	32U	32U	32U	32U	54
POTASSIUM	20900	22800	7860	8300	22300	23700	2120	13000	8020	12400
SELENIUM	5UR	5UR	5UR	5U4	5UR	5UR	5UR	5UR	5UR	5UR
SILVER	8.8U	8.8U	8.8U	8.8U	8.8U	8.8U	8.8U	8.8	8.8U	8.8U
SODIUM	727000	716000	421000	430000	722000	744000	1050000	520000	405000	16900
THALLIUM	10U	10UJ	10UJ	10UJ	10UJ	10UJ	10UJ	10UJ	10UJ	10UJ
TIN										
VANADIUM	30U	30U	30U	30U	30U	30U	30U	30U	30U	30U
ZINC	63	40	44	39	43J	31J	[16]	29	29	470
PERCENT SOLIDS (Z)										
CYANIDE	10U	10U	10U	10U	10U	10U	10U	10U	10U	20.2

9TH AVENUE DUMP
INORGANIC WATER TEST
CONCENTRATION (UG/L)

CRL#	DN01S34	DN01S32	DN01S37	DN01S02	DN01S03	DN01S15	DN01S33	DN01S35	DN01S36	DN01S01
SAMPLE IDENTIFICATION	SW09-01	SW10-01	SW11-01	SW12-01	SW13-01	SX14-01	SW15-01	SW18-01	SW16-01	SW19-01
DATE	10/22/86	10/22/86	10/17/86	10/22/86	10/22/86	10/22/86	10/22/86	10/22/86	10/22/86	10/22/86
ALUMINUM	1860	4720	131U	131U	131U	410	[190]	131U	131U	131U
ANTIMONY	46U	46U	46U	46U	46U	46U	46U	46U	46U	46U
ARSENIC	10U	11	10U	10U	10U	10U	10U	10U	10U	10U
BARIUM	270	630	[120]	[140]	[95]	[180]	[180]	[85]	[94]	[140]
BERYLLIUM	2.9U	2.9U	2.9U	2.9U	2.9U	2.9U	2.9U	2.9U	2.9U	2.9U
CADMIUM	5.0U	6.5	5.0U	5.0U	5.0U	5.0U	5.0U	5.0U	5.0U	5.0U
CALCIUM	351000	159000	134000	234000	125000	311000	160000	10100	106000	225000
CHROMIUM	[7.0]	18	3.7U	3.7UJ	3.7UJ	3.7UJ	3.7U	3.7U	3.7U	3.7UJ
COBALT	28U	28U	28U	28U	28U	28U	28U	28U	28U	28U
COPPER	23U	23U	23U	23U	23U	23U	23U	23U	23U	23U
IRON	29600	58600	[780]	6370J	1080J	950J	2500	1780	1260	1270J
LEAD	120	130	5UJ	27.2J	5UJ	5UJ	5UJ	5UJ	5UJ	6.4J
MAGNESIUM	69200	46600	76500	71700	40600	102000	49500	27600	27800	69200
MANGANESE	2650	680	84	470	170	1540	710	200	230	220
MERCURY	0.2U	0.2U	0.2U	0.2U	0.2U	0.2U	0.2U	0.2U	0.2U	0.2U
NICKEL	32U	32U	70	32U	32U	150	32U	32U	32U	32U
POTASSIUM	13800	29000	34500	34100	20200	26200	19600	10100	7940	27600
SELENIUM	5UR	5UR	5UR	5UR	5UR	5UR	5UR	5UR	5UR	5UR
SILVER	8.8U	8.8U	8.8U	8.8U	8.8U	8.8U	8.8U	8.8U	8.8U	8.8U
SODIUM	592000	784000	98100	556000	171000	585000	1050000	348000	389000	608000
THALLIUM	10UJ	10UJ	10UJ	10UJ	10UJ	10UJ	10UJ	10UJ	10UJ	10UJ
TIN										
VANADIUM	30U	30U	30U	30U	30U	30U	30U	30U	30U	30U
ZINC	300	240	56	140	24	40	[16]	[18]	16U	75
PERCENT SOLIDS (%)										
CYANIDE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U

9TH AVENUE DUMP
INORGANIC WATER TEST
CONCENTRATION (UG/L)

CRL#	DN01S29
SAMPLE IDENTIFICATION	S804-01
DATE	10/22/86
ALUMINUM	131U
ANTIMONY	46U
ARSENIC	10U
BARIUM	20U
BERYLLIUM	2.9U
CADMIUM	5.0U
CALCIUM	3900U
CHROMIUM	3.7U
COBALT	28U
COPPER	23U
IRON	88UJ
LEAD	5UJ
MAGNESIUM	4800U
MANGANESE	7.9U
MERCURY	0.2U
NICKEL	32U
POTASSIUM	2200U
SELENIUM	5UR
SILVER	8.8U
SODIUM	2500U
THALLIUM	10UJ
TIN	
VANADIUM	30U
ZINC	16U
PERCENT SOLIDS (%)	
CYANIDE	10U

9th AVENUE DUMP
DATA QUALIFIERS

- B = Detected in method blank as well as the sample, possible/probable blank contamination.

- U = The material was analzyed for but was not detected. The associated numerical value is the quantitation limit.

- J = The associated numerical value is an estimated quantity because quality control criteria were not met.

- UJ = The associated numerical value is the estimated quantitation limit.

- R = The data is unusable because quality control criteria were not met.

- N = The instrument detection limit exceeded contract required detection limit (CRDL), and the associated value is the detection limit.

- [] = Bracketed numbers are concentrations quantified at below contract required detection limits (CRDL).

- CRDL Multiple = is a correction factor which takes into account (based on matrix) % moisture, sample size, unit conversions and dilutions. The correction factor is based on the low level detection limit.

- The qualifier found to the left of the compounds concentration is from Warzyn's data validation. Those qualifiers to the right of the value are from the contract Laboratories and/or EPA's data validation.

O-2 - ROUND 2 SURFACE WATER SAMPLE DATA
COLLECTED IN JUNE 1987
BY WARZYN ENGINEERING INC.

9TH AVENUE DUMP
SURFACE WATER ORGANICS - ROUND 2
CONCENTRATION (UG/L)

CRL#	DN04S07	DN03S97	DN03S98	DN04S04	DN04S03	DN04S09	DN04S12	DN03S99	DN04S01
SAMPLE IDENTIFICATION	SW2-03	SW3-03	SW6-03	SW9-03	SW10-03	SW11-03	SW12-03	SW13-03	SW15-03
CRDL MULTIPLE	1	1	1	1	1	1	1	1	1
CHLOROMETHANE									
BROMOMETHANE									
VINYL CHLORIDE			4J						
CHLOROETHANE									
METHYLENE CHLORIDE			UJ6						
ACETONE	UJ3JB	UJ3JB	30BUJ	UJ5JB		4JB	2JB	6JBUJ	7JBUJ
CARBON DISULFIDE					1J	1J			
1,1-DICHLOROETHENE									
1,1-DICHLOROETHANE			2J						
TRANS-1,2-DICHLOROETHENE			4J						
CHLOROFORM									
1,2-DICHLOROETHANE									
2-BUTANONE	10UR	10UR	20BR	10UR	10UR	10UR	10UR	10UR	10UR
1,1,1-TRICHLOROETHANE									
CARBON TETRACHLORIDE									
VINYL ACETATE									
BROMODICHLOROMETHANE									
1,2-DICHLOROPROPANE									
TRANS-1,3-DICHLOROPROPENE									
TRICHLOROETHENE									
DIBROMOCHLOROMETHANE									
1,1,2-TRICHLOROETHANE									
BENZENE									
CIS-1,3-DICHLOROPROPENE									
2-CHLOROETHYLVINYLETHER	10UR	10UR	10UR	10UR	10UR	10UR		10UR	10UR
BROMOFORM									
4-METHYL-2-PENTANONE									
2-HEXANONE									
TETRACHLOROETHENE									
1,1,2,2-TETRACHLOROETHANE									
TOLUENE									
CHLOROBENZENE									
ETHYLBENZENE									
STYRENE									
TOTAL XYLENES			5						
CRDL MULTIPLE	1	1	1	1	1	1	1	1	1
PHENOL									
BIS(-2-CHLOROETHYL)ETHER									
2-CHLOROPHENOL									
1,3-DICHLOROBENZENE									
1,4-DICHLOROBENZENE									
BENZYL ALCOHOL									
1,2-DICHLOROBENZENE									
2-METHYLPHENOL									

9TH AVENUE DUMP
SURFACE WATER ORGANICS - ROUND 2
CONCENTRATION (UG/L)

CRL#	DN04S07	DN03S97	DN03S98	DN04S04	DN04S03	DN04S09	DN04S12	DN03S99	DN04S01
SAMPLE IDENTIFICATION	SW2-03	SW3-03	SW6-03	SW9-03	SW10-03	SW11-03	SW12-03	SW13-03	SW15-03
CRDL MULTIPLE	1	1	1	1	1	1	1	1	1
BIS(2-CHLOROISOPROPYL)ETHER									
4-METHYLPHENOL									
N-NITROSO-DI-N-PROPYLAMINE									
HEXACHLOROETHANE									
NITROBENZENE									
ISOPHORONE									
2-NITROPHENOL									
2,4-DIMETHYLPHENOL									
BENZOIC ACID									
BIS(2-CHLOROETHOXY)METHANE									
2,4-DICHLOROPHENOL									
1,2,4-TRICHLOROBENZENE									
NAPHTHALENE									
4-CHLOROANILINE									
HEXACHLOROBUTADIENE									
4-CHLORO-3-METHYLPHENOL									
2-METHYLNAPHTHALENE									
HEXACHLOROCYCLOPENTADIENE									
2,4,6-TRICHLOROPHENOL									
2,4,5-TRICHLOROPHENOL									
2-CHLORONAPHTHALENE									
2-NITROANILINE									
DIMETHYL PHTHALATE									
ACANAPHTHYLENE									
3-NITROANILINE									
ACENAPHTHENE	2J								
2,4-DINITROPHENOL									
4-NITROPHENOL									
DIBENZOFURAN									
2,4-DINITROTOLUENE									
2,6-DINITROTOLUENE									
DIETHYLPHTHALATE									
4-CHLOROPHENYL-PHENYLETHER									
FLUORENE									
4-NITROANILINE									
4,6-DINITRO-2-METHYLPHENOL									
N-NITROSODIPHENYLAMINE (1)									
4-BROMOPHENYL-PHENYLETHER									
HEXACHLOROBENZENE									
PENTACHLOROPHENOL									
PHENANTHRENE									
ANTHRACENE									
DI-N-BUTYLPHTHALATE									
FLUORANTHENE									
PYRENE	9J								
BUTYLBENZYLPHTHALATE									

9TH AVENUE DUMP
SURFACE WATER ORGANICS - ROUND 2
CONCENTRATION (UG/L)

CRL#	DN04S07	DN03S97	DN03S98	DN04S04	DN04S03	DN04S09	DN04S12	DN03S99	DN04S01
SAMPLE IDENTIFICATION	SW2-03	SW3-03	SW6-03	SW9-03	SW10-03	SW11-03	SW12-03	SW13-03	SW15-03
CRDL MULTIPLE	1	1	1	1	1	1	1	1	1
3,3-DICHLOROBENZIDINE									
BENZO(A)ANTHRACENE									
BIS(2-ETHYLEXYL)PHTHALATE				3JB	4JB	3JB	2JB		
CHRYSENE									
DI-N-OCTYL PHTHALATE									
BENZO(B)FLUORANTHENE									
BENZO(K)FLUORANTHENE									
BENZO(A)PYRENE									
INDENO(1,2,3-CD)PYRENE									
DIBENZ(A,H)ANTHRACENE									
BENZO(G,H,I)PERYLENE									
CRDL MULTIPLE	1	1	1	1	1	1	1	1	1
ALPHA-BHC									
BETA-BHC									
DELTA-BHC									
GAMMA-BHC (LINDANE)									
HEPTACHLOR									
ALDRIN									
HEPTACHLOR EPOXIDE									
ENDOSULFAN I									
DIELDRIN									
4,4-DDE									
ENDRIN									
ENDOSULFAN II									
4,4-DDD									
ENDOSULFAN SULFATE									
DDT 4,4-									
METHOXYCHLOR									
ENDRIN KETONE									
CHLORDANE									
TOXAPHENE									
AROCLOR-1016									
AROCLOR-1221									
AROCLOR-1232									
AROCLOR-1242									
AROCLOR-1248									
AROCLOR-1254									
AROCLOR-1260									

9TH AVENUE DUMP
SURFACE WATER ORGANICS - ROUND 2
CONCENTRATION (UG/L)

CRL#	DN04D02	DN04S08	DN04S06	DN04S11	DN04D10	DN04S05
SAMPLE IDENTIFICATION	SW15-93	SW20-03	SW21-03	SW22-03	SW22-93	SB03-03
CRDL MULTIPLE	1	1	1	1	1	1
CHLOROMETHANE						
BROMOMETHANE						
VINYL CHLORIDE						
CHLOROETHANE						
METHYLENE CHLORIDE						UJ5
ACETONE	6JBUJ	UJ5JB	UJ5JB			2JB
CARBON DISULFIDE						
1,1-DICHLOROETHENE						
1,1-DICHLOROETHANE						
TRANS-1,2-DICHLOROETHENE						
CHLOROFORM						
1,2-DICHLOROETHANE						
2-BUTANONE		10UR	10UR	10UR	10UR	10UR
1,1,1-TRICHLOROETHANE						
CARBON TETRACHLORIDE						
VINYL ACETATE						
BROMODICHLOROMETHANE						
1,2-DICHLOROPROPANE						
TRANS-1,3-DICHLOROPROPENE						
TRICHLOROETHENE						
DIBROMOCHLOROMETHANE						
1,1,2-TRICHLOROETHANE						
BENZENE						
CIS-1,3-DICHLOROPROPENE						
2-CHLOROETHYLVINYLETHER		10UR	10UR			10UR
BROMOFORM						
4-METHYL-2-PENTANONE						
2-HEXANONE						
TETRACHLOROETHENE						
1,1,2,2-TETRACHLOROETHANE						
TOLUENE						UJ6
CHLOROBENZENE						
ETHYLBENZENE						
STYRENE						
TOTAL XYLENES						
CRDL MULTIPLE	1	1	1	1	1	1
PHENOL						
BIS(-2-CHLOROETHYL)ETHER						
2-CHLOROPHENOL						
1,3-DICHLOROBENZENE						
1,4-DICHLOROBENZENE						
BENZYL ALCOHOL						
1,2-DICHLOROBENZENE						
2-METHYLPHENOL						

9TH AVENUE DUMP
SURFACE WATER ORGANICS - ROUND 2
CONCENTRATION (UG/L)

CRL#	DN04D02	DN04S08	DN04S06	DN04S11	DN04D10	DN04S05
SAMPLE IDENTIFICATION	SW15-93	SW20-03	SW21-03	SW22-03	SW22-93	SB03-03
CRDL MULTIPLE	1	1	1	1	1	1
BIS(2-CHLOROISOPROPYL)ETHER						
4-METHYLPHENOL						
N-NITROSO-DI-N-PROPYLAMINE						
HEXACHLOROETHANE						
NITROBENZENE						
ISOPHORONE						
2-NITROPHENOL						
2,4-DIMETHYLPHENOL						
BENZOIC ACID						
BIS(-2-CHLOROETHOOIY)METHANE						
2,4-DICHLOROPHENOL						
1,2,4-TRICHLOROBENZENE						
NAPHTHALENE						
4-CHLOROANILINE						
HEXACHLOROBUTADIENE						
4-CHLORO-3-METHYLPHENOL						
2-METHYLNAPHTHALENE						
HEXACHLOROCYCLOPENTADIENE						
2,4,6-TRICHLOROPHENOL						
2,4,5-TRICHLOROPHENOL						
2-CHLORONAPHTHALENE						
2-NITROANILINE						
DIMETHYL PHTHALATE						
ACANAPHTHYLENE						
3-NITROANILINE						
ACENAPHTHENE						
2,4-DINITROPHENOL						
4-NITROPHENOL						
DIBENZOFURAN						
2,4-DINITROTOLUENE						
2,6-DINITROTOLUENE						
DIETHYLPHTHALATE						
4-CHLOROPHENYL-PHENYLETHER						
FLUORENE						
4-NITROANILINE						
4,6-DINITRO-2-METHYLPHENOL						
N-NITROSODIPHENYLAMINE (1)						
4-BROMOPHENYL-PHENYLETHER						
HEXACHLOROBENZENE						
PENTACHLOROPHENOL						
PHENANTHRENE						
ANTHRACENE						
DI-N-BUTYLPHTHALATE			JJ			
FLUORANTHENE						
PYRENE						
BUTYLBENZYLPHTHALATE						

9TH AVENUE DUMP
SURFACE WATER ORGANICS - ROUND 2
CONCENTRATION (UG/L)

CRL#	DN04D02	DN04S08	DN04S06	DN04S11	DN04D10	DN04S05
SAMPLE IDENTIFICATION	SW15-93	SW20-03	SW21-03	SW22-03	SW22-93	SB03-03
CRDL MULTIPLE	1	1	1	1	1	1
3,3-DICHLOROBENZIDINE						
BENZO(A)ANTHRACENE						
BIS(2-ETHYLEXYL)PHTHALATE		3JB		3JB	4JB	
CHRYSENE						
DI-N-OCTYL PHTHALATE						
BENZO(B)FLUORANTHENE						
BENZO(K)FLUORANTHENE						
BENZO(A)PYRENE						
INDENO(1,2,3-CD)PYRENE						
DIBENZ(A,H)ANTHRACENE						
BENZO(G,H,I)PERYLENE						
CRDL MULTIPLE	1	1	1	1	1	1
ALPHA-BHC						
BETA-BHC						
DELTA-BHC						
GAMMA-BHC (LINDANE)						
HEPTACHLOR						
ALDRIN						
HEPTACHLOR EPOXIDE						
ENDOSULFAN I						
DIELDRIN						
4,4-DDE						
ENDRIN						
ENDOSULFAN II						
4,4-DDD						
ENDOSULFAN SULFATE						
DDT 4,4-						
METHOXYCHLOR						
ENDRIN KETONE						
CHLORDANE						
TOXAPHENE						
AROCLOR-1016						
AROCLOR-1221						
AROCLOR-1232						
AROCLOR-1242						
AROCLOR-1248						
AROCLOR-1254						
AROCLOR-1260						

9TH AVENUE DUMP
SURFACE WATER METALS AND CYANIDE - ROUND 2
CONCENTRATION (UG/L)

CRL#	DN04S07	DN03S97	DN03S98	DN04S04	DN04S03	DN04S09	DN04S06	DN03S99	DN04S01	DN04D02	DN04S08
SAMPLE #	SW02-03	SW03-03	SW06-03	SW09-03	SW10-03	SW11-03	SW12-03	SW13-03	SW15-03	SW15-93	SW20-03
COMPOUND	07/10/87	07/10/87	07/10/87	07/10/87	07/10/87	07/10/87	07/10/87	07/10/87	07/10/87	07/10/87	07/10/87
ALUMINUM	100U	100U	100U	[124]	551	100U	[140]	100U	J223	J323	210
ANTIMONY	38U	38U	38U	38U	38U	38U	38U	38U	38U	38U	38U
ARSENIC	9U	9U	9U	9U	9U	9U	9U	9U	9U	9U	9U
BARIUM	[169]	[161]	[175]	365	411	39U	[114]	39U	J213	J303	[67]
BERYLLIUM	5U	5U	5U	5U	5U	5U	5U	5U	5U	5U	5U
CADMIUM	4U	4U	4U	4U	4U	6.3	[4.1]	4U	4U	4U	4U
CALCIUM	132000	122000	10900	219000	163000	25500	132000	26100	112000	114000	45900
CHROMIUM	5U	[6]	[8]	[7]	5U	[7]	[8.5]	5U	5U	5U	[7]
COBALT	7U	7U	7U	7U	7U	7U	7U	7U	7U	7U	7U
COPPER	17U	47	[24]	26	44	[23]	[19]	[22]	J43	J26	40
IRON	550	850	1390	3160	16100	954	327	656	5740	4770	789
LEAD	30UJ	30UJ	30UJ	30UJ	3UJ	3UJ	3UJ	5.3UJ	3UJ	3UJ	5.5UJ
MAGNESIUM	78800	37400	40400	88900	51600	66600	78300	21000	74800	76000	27200
MANGANESE	352	507	587	739	739	163	63	71	711	676	133
MERCURY	0.2UJ	R2.8J	R2.56J	R1.7J	R0.44J	0.2UJ	0.2UJ	R1.2J	R1.8J	R1.8J	0.2UJ
NICKEL	59	14U	14U	46	[15]	114	[16]	14U	[29]	[38]	[15]
POTASSIUM	23400	10800	10700	25000	13100	24000	229000	10600	24600	25700	8880
SELENIUM	3UJ	30UJ	3UJ	3UJ	30UJ	3UJ	3UJ	30UJ	30UJ	12UJ	3UJ
SILVER	9UJ	437J	138J	9UJ	9UJ	10.7J	15J	9UJ	9UJ	9UJ	9UJ
SODIUM	924000	655000	663000	516000	1270000	100000	185000	86400	J1270000	J1830000	75200
THALLIUM	9U	9U	9U	9U	9U	9U	9U	9U	9U	9U	9U
VANADIUM	11U	11U	11U	[17]	[18]	11U	11U	11U	[13]	[14]	11U
ZINC	20U	20U	20U	77	85	76	42	30	J78	J106	56
CYANIDE	34	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U

9TH AVENUE DUMP
SURFACE WATER METALS AND CYANIDE - ROUND 2
CONCENTRATION (UG/L)

CRL#	DN04S12	DN04S11	DN04D10	DN04S05
SAMPLE #	SW21-03	SW22-03	SW22-93	SB03-03
COMPOUND	07/10/87	07/10/87	07/10/87	07/10/87
ALUMINUM	100U	J[152]	J406	100U
ANTIMONY	38U	38U	38U	38U
ARSENIC	9U	9U	9U	9U
BARIUM	[70]	39U	[66]	39U
BERYLLIUM	5U	5U	5U	5U
CADMIUM	4U	4U	4U	4U
CALCIUM	71800	57100	58100	5000
CHROMIUM	5U	J55	J14	5U
COBALT	7U	7U	7U	7U
COPPER	17U	28	29	17U
IRON	509	1100	1340	100U
LEAD	[3.4]UJ	J10.3UJ	J18UJ	3UJ
MAGNESIUM	24600	20100	20500	J24U
MANGANESE	412	J165	J247	10U
MERCURY	R2.20J	R2.0J	R1.8J	R1.2J
NICKEL	14U	14U	14U	14U
POTASSIUM	[4900]	[3980]	[3840]	500U
SELENIUM	3UJ	3UJ	3UJ	3UJ
SILVER	9UJ	J212J	J570J	9UJ
SODIUM	259000	265000	268000	3513U
THALLIUM	9U	9U	9U	9U
VANADIUM	11U	11U	11U	11U
ZINC	21.4	67	73	20U
CYANIDE	10U	10U	10U	10U

9TH AVENUE DUMP
SURFACE WATER INORGANICS - ROUND 2
CONCENTRATION (MG/L)

CRL#	DN04S07	DN03S97	DN03S98	DN04S04	DN04S03	DN04S09	DN04S06	DN03S99	DN04S01
SAMPLE #	SW02-03	SW03-03	SW06-03	SW09-03	SW10-03	SW11-03	SW12-03	SW13-03	SW15-03
COMPOUND	07/10/87	07/10/87	07/10/87	07/10/87	07/10/87	07/10/87	07/10/87	07/10/87	07/10/87
CHLORIDE	264	1042	874	989	1909	175	954	163	J6210
SULFATE	123	135	97	54	105	29	143	97	41.9
TOTAL ORGANIC CARBON	103	408	49.8	84.7	79.7	70.1	86.2	35.1	61.5
TOTAL DISSOLVED SOLIDS	1250	2305	2321	3341	4190	936	3969	543.5	5158
NITRITE + NITRATE NITROGEN	0.1U	0.1U	0.1U	0.1U	0.1U	0.1U	0.1U	0.1U	0.1U
BIOCHEMICAL OXYGEN DEMAND	3	3	1.5U	7	5	2	3	4	8
CHEMICAL OXYGEN DEMAND	130	115	149	138	185	151	114	120	297
AMMONIA	0.91	0.61	0.28	1.06	2.6	2.9	0.23	0.11	0.5
TOTAL SUSPENDED SOLIDS	16	8	5	0.4	91	5	3	5	37
TOTAL KJELDAHL NITROGEN	0.56J	0.10UJ	0.10UJ	0.56J	0.28J	0.10U	0.10UJ	0.7J	0.10UJ
TOTAL PHOSPHORUS	0.02U	0.04	0.02U	0.15	0.999	0.17	0.02	0.02U	0.16
OIL & GREASE	5.0U	24	8	5.0U	5.0U	5.0U	5.0U	6	J6
ALKALINITY	579	222	228	490	376	318	494	142	196

9TH AVENUE DUMP
SURFACE WATER INORGANICS - ROUND 2
CONCENTRATION (MG/L)

CRL#	DN04D02	DN04S08	DN04S12	DN04S11	DN04D10	DN04S05
SAMPLE #	SW15-93	SW20-03	SW21-03	SW22-03	SW22-93	SB03-03
COMPOUND	07/10/87	07/10/87	07/10/87	07/10/87	07/10/87	07/10/87
CHLORIDE	J2139	1.0U	110	334	333	1.0U
SULFATE	45	73	92	84	78	3U
TOTAL ORGANIC CARBON	62.7	40.1	40.0	30.1	33.1	2U
TOTAL DISSOLVED SOLIDS	5382	774.5	126	1180	997	5.0U
NITRITE + NITRATE NITROGEN	0.1U	0.1U	0.1U	0.1U	0.1U	0.1U
BIOCHEMICAL OXYGEN DEMAND	9	3	3	6	8	1.5U
CHEMICAL OXYGEN DEMAND	275	72	62	85	101	2
AMMONIA	0.4	0.32	0.1U	0.11	0.13	0.11
TOTAL SUSPENDED SOLIDS	29	5	4	4	10	4
TOTAL KJELDAHL NITROGEN	0.92 J	0.10UJ	0.10UJ	0.10UJ	0.13J	0.98J
TOTAL PHOSPHORUS	0.2	0.02U	0.2U	0.29	0.22	0.20U
OIL & GREASE	J33	5.0U	9	6	6	5.0U
ALKALINITY	202	174	186	147	148	3

9th AVENUE DUMP
DATA QUALIFIERS

- B = Detected in method blank as well as the sample, possible/probable blank contamination.

- U = The material was analzyed for but was not detected. The associated numerical value is the quantitation limit.

- J = The associated numerical value is an estimated quantity because quality control criteria were not met.

- UJ = The associated numerical value is the estimated quantitation limit.

- R = The data is unusable because quality control criteria were not met.

- N = The instrument detection limit exceeded contract required detection limit (CRDL), and the associated value is the detection limit.

- [] = Bracketed numbers are concentrations quantified at below contract required detection limits (CRDL).

- CRDL Multiple = is a correction factor which takes into account (based on matrix) % moisture, sample size, unit conversions and dilutions. The correction factor is based on the low level detection limit.

- The qualifier found to the left of the compounds concentration is from Warzyn's data validation. Those qualifiers to the right of the value are from the contract Laboratories and/or EPA's data validation.

APPENDIX P

SEDIMENT SAMPLING
ANALYTICAL DATA

SAMPLES WERE COLLECTED IN OCTOBER 1986
BY WARZYN ENGINEERING INC. AND WERE ANALYZED BY CLP

This Appendix contains sediment data. The sample SD01-01 denotes a sediment sample (SD) collected at site 1 during sampling event 1. The designation SB05-01 denotes the 5th sample blank taken during sampling event 1.

WARZYN

9TH AVENUE DUMP
SEDIMENT ORGANICS - ROUND 1
CONCENTRATION (UG/KG)

CRL#	DN01S23	DN01S11	DN01S24	DN01S25	DN01S13	DN01S14	DN01S26	DN01S27	DN01S28	DN01S12
SAMPLE IDENTIFICATION	SD01-01	SD02-01	SD03-01	SD03-91	SD04-01	SD04-91	SD05-01	SD06-01	SD07-01	SD08-01
DATE	10/16/86	10/15/86	10/16/86	10/16/86	10/15/86	10/15/86	10/16/86	10/16/86	10/16/86	10/15/86
CRDL MULTIPLE	1	2	2	1	8	8	3	3	2	2
CHLOROMETHANE										
BROMOMETHANE										
VINYL CHLORIDE										
CHLOROETHANE										
METHYLENE CHLORIDE	17B	21B	17B	16B	230B	160B	37B	28B	29B	35B
ACETONE										
CARBON DISULFIDE										
DICHLOROETHENE 1,1-										
DICHLOROETHANE 1,1-										23
TRANS-1,2-DICHLOROETHENE										
CHLOROFORM										
DICHLOROETHANE1,2-										
BUTANONE 2-										
TRICHLOROETHANE 1,1,1-										
CARBON TETRACHLORIDE										
VINYL ACETATE										
BROMODICHLOROMETHANE										
DICHLOROPROPANE 1,2-										
TRANS-1,3-DICHLOROPROPENE										
TRICHLOROETHENE										
DIBROMOCHLOROMETHANE										
TRICHLOROETHANE1,1,2-										
BENZENE										
CIS-1,3-DICHLOROPROPENE										
CHLOROETHYLVINYLETHER 2-										
BROMOFORM										
METHYL4-PENTANONE2-										
HEXANONE 2-										
TETRACHLOROETHENE										
TETRACHLOROETHANE1,1,2,2-										
TOLUENE					260	550	92		17	
CHLOROBENZENE										
ETHYLBENZENE										
STYRENE										
TOTAL XYLENES										
SEMI-VOLATILES										
CRDL MULTIPLE		6			9	9				2.1
PHENOL										
BIS(-2-CHLOROETHYL)ETHER										
CHLOROPHENOL 2-										
DICHLOROBENZENE 1,3-										

9TH AVENUE DUMP
SEDIMENT ORGANICS - ROUND 1
CONCENTRATION (UG/KG)

CRL#	0N01S23	0N01S11	0N01S24	0N01S25	0N01S13	0N01S14	0N01S26	0N01S27	0N01S28	0N01S12
SAMPLE IDENTIFICATION	SD01-01	SD02-01	SD03-01	SD03-91	SD04-01	SD04-91	SD05-01	SD06-01	SD07-01	SD08-01
DATE	10/16/86	10/15/86	10/16/86	10/16/86	10/15/86	10/15/86	10/16/86	10/16/86	10/16/86	10/15/86
DICHLOROBENZENE 1,4-										
BENZYL ALCOHOL										
DICHLOROBENZENE 1,2-										
METHYLPHENOL-2										
BIS(2-CHLOROISOPROPYL)ETHER										
METHYLPHENOL 4-										640J
N-NITROSO-DI-N-PROPYLAMINE										
HEXACHLOROETHANE										
NITROBENZENE										
ISOPHORONE										
NITROPHENOL 2-										
DIMETHYLPHENOL 2,4-										
BENZOIC ACID			1400J	810J						
BIS(-2-CHLOROETHOOXY)METHANE										
DICHLOROPHENOL 2,4-										
TRICHLOROBENZENE1,2,4-										
NAPHTHALENE										
CHLOROANILINE 4-										
HEXACHLOROBUTADIENE										
CHLORO-4 METHYLPHENOL 3-										
METHYLNAPHTHALENE 2-										
HEXACHLOROCYCLOPENTADIENE										
TRICHLOROPHENOL 2,4,6-										
TRICHLOROPHENOL 2,4,5-										
CHLORONAPHTHALENE 2-										
NITROANILINE 2-										
DIMETHYL PHTHALATE										
ACANAPHTHYLENE										
NITROANILINE 3-										
ACENAPHTHENE										
DINITROPHENOL 2,4-										
NITROPHENOL 4-										
DIBENZOFURAN										
DINITROTOLUENE 2,4-										
DINITROTOLUENE 2,6-										
DIETHYLPHTHALATE										
CHLOROPHENYL-PHENYLETHER 4-										
FLUORENE										
NITROANILINE 4-										
DINITRO 4,6- METHYLPHENOL 2-										
N-NITROSODIPHENYLAMINE (1)										
BROMOPHENYL 4- PHENYLETHER										
HEXACHLOROBENZENE										
PENTACHLOROPHENOL										
PHENANTHRENE		700J								740
ANTHRACENE										

9TH AVENUE DUMP
SEDIMENT ORGANICS - ROUND 1
CONCENTRATION (UG/KG)

CRL#	0N01S23	0N01S11	0N01S24	0N01S25	0N01S13	0N01S14	0N01S26	0N01S27	0N01S28	0N01S12
SAMPLE IDENTIFICATION	SD01-01	SD02-01	SD03-01	SD03-91	SD04-01	SD04-91	SD05-01	SD06-01	SD07-01	SD08-01
DATE	10/16/86	10/15/86	10/16/86	10/16/86	10/15/86	10/15/86	10/16/86	10/16/86	10/15/86	10/15/86
DI-N-BUTYLPHTHALATE								730J		490J
FLUORANTHENE		1300J						420J		350
PYRENE		2000						560J		1700
BUTYLBENZYLPHTHALATE										
DICHLOROBENZIDINE 3,3-										
BENZO(A)ANTHRACENE										
BIS(2-ETHYLEXYL)PHTHALATE	280JB			2800B	25000B	16000B	520JB	18000B	10000B	4000B
CHRYSENE										2300
DI-N-OCTYL PHTHALATE						17000		840J		
BENZO(B)FLUORANTHENE								640J		
BENZO(K)FLUORANTHENE										
BENZO(A)PYRENE										
INDENOL(1,2,3-CD)PYRENE										
DIBENZ(A H)ANTHRACENE										
BENZO(G.H.I)PERYLENE										
PESTICIDES/PCB'S										
CRDL MULTIPLE		4.4			8	8				50
ALPHA-BHC										
BETA-BHC										
DELTA-BHC										
GAMMA-BHC (LINDANE)										
HEPTACHLOR										
ALDRIN										
HEPTACHLOR EPOXIDE										
ENDOSULFAN 1										
DIELDRIN										
DDE 4,4-										
ENDRIN										
ENDOSULFAN 11										
DDD 4,4										
ENDOSULFAN SULFATE										
DDT 4,4-										
METHOXYCHLOR										
ENDRIN KETONE										
CHLORDANE										
TOXAPHENE										
AROCLOR-1016										
AROCLOR-1221										
AROCLOR-1232										
AROCLOR-1242										
AROCLOR-1248										
AROCLOR-1254										7400J
AROCLOR-1260										

9TH AVENUE DUMP
SEDIMENT ORGANICS - ROUND 1
CONCENTRATION (UG/KG)

CRL#	ON01S40	ON01S42	ON01S45	ON01S09	ON01S10	ON01S22	ON01S41	ON01S44	ON01S43	ON01S08
SAMPLE IDENTIFICATION	SD09-01	SD10-01	SD11-01	SD12-01	SD13-01	SD14-01	SD15-01	SD16-01	SD18-01	SD19-01
DATE	10/17/86	10/17/86	10/17/86	10/15/86	10/15/86	10/16/86	10/17/86	10/17/86	10/17/86	10/15/86
CRDL MULTIPLE	2	4	4	2	2	3	3	9	2	3
CHLOROMETHANE										
BROMOMETHANE										
VINYL CHLORIDE										
CHLOROETHANE										
METHYLENE CHLORIDE		610	640	65B	34B	74B		660	290B	53B
ACETONE	80J	220J	96J				130J	240J	480J	
CARBON DISULFIDE										
DICHLOROETHENE 1,1-										
DICHLOROETHANE 1,1-										
TRANS-1,2-DICHLOROETHENE										
CHLOROFORM										
DICHLOROETHANE1,2-										
BUTANONE 2-		44R								
TRICHLOROETHANE 1,1,1-										
CARBON TETRACHLORIDE										
VINYL ACETATE										
BROMODICHLOROMETHANE										
DICHLOROPROPANE 1,2-										
TRANS-1,3-DICHLOROPROPENE										
TRICHLOROETHENE										
DIBROMOCHLOROMETHANE										
TRICHLOROETHANE1,1,2-										
BENZENE										
CIS-1,3-DICHLOROPROPENE										
CHLOROETHYLVINYLETHER 2-										
BROMOFORM										
METHYL4-PENTANONE2-										
HEXANONE 2-										
TETRACHLOROETHENE										
TETRACHLOROETHANE1,1,2,2-										
TOLUENE	50	57	66			44	430	1900	910	
CHLOROBENZENE								30J		
ETHYLBENZENE										
STYRENE										
TOTAL XYLENES										
SEMI-VOLATILES										
CRDL MULTIPLE	12	4	4	1.8	1.5			9	4	3.3
PHENOL										
BIS(-2-CHLOROETHYL)ETHER										
CHLOROPHENOL 2-										
DICHLOROBENZENE 1,3-										

9TH AVENUE DUMP
SEDIMENT ORGANICS - ROUND 1
CONCENTRATION (UG/KG)

CRL#	DN01S40	DN01S42	DN01S45	DN01S09	DN01S10	DN01S22	DN01S41	DN01S44	DN01S43	DN01S08
SAMPLE IDENTIFICATION	SD09-01	SD10-01	SD11-01	SD12-01	SD13-01	SD14-01	SD15-01	SD16-01	SD18-01	SD19-01
DATE	10/17/86	10/17/86	10/17/86	10/15/86	10/15/86	10/16/86	10/17/86	10/17/86	10/17/86	10/15/86
DICHLOROBENZENE 1,4-										
BENZYL ALCOHOL										
DICHLOROBENZENE 1,2-										
METHYLPHENOL-2										
BIS(2-CHLOROISOPROPYL)ETHER										
METHYLPHENOL 4-										
N-NITROSO-DI-N-PROPYLAMINE										
HEXACHLOROETHANE										
NITROBENZENE										
ISOPHORONE										
NITROPHENOL 2-										
DIMETHYLPHENOL 2,4-										
BENZOIC ACID										1200J
BIS(-2-CHLOROETHOOXY)METHANE										
DICHLOROPHENOL 2,4-										
TRICHLOROBENZENE1,2,4-										
NAPHTHALENE			820J		520J					
CHLOROANILINE 4-										
HEXACHLOROBUTADIENE										
CHLORO-4 METHYLPHENOL 3-										
METHYLNAPHTHALENE 2-										
HEXACHLOROCYCLOPENTADIENE										
TRICHLOROPHENOL 2,4,6-										
TRICHLOROPHENOL 2,4,5-										
CHLORONAPHTHALENE 2-										
NITROANILINE 2-										
DIMETHYL PHTHALATE										
ACANAPHTHYLENE					1000					
NITROANILINE 3-										
ACENAPHTHENE										
DINITROPHENOL 2,4-										
NITROPHENOL 4-										
DIBENZOFURAN					470J					
DINITROTOLUENE 2,4-										
DINITROTOLUENE 2,6-										
DIETHYLPHTHALATE										
CHLOROPHENYL-PHENYLETHER 4-										
FLUORENE			170J		770					
NITROANILINE 4-										
DINITRO 4,6- METHYLPHENOL 2-										
N-NITROSODIPHENYLAMINE (1)										
BROMOPHENYL 4- PHENYLETHER										
HEXACHLOROBENZENE										
PENTACHLOROPHENOL										
PHENANTHRENE			1400		4300					530J
ANTHRACENE					1500					

9TH AVENUE DUMP
SEDIMENT ORGANICS - ROUND 1
CONCENTRATION (UG/KG)

CRL#	DN01S40	DN01S42	DN01S45	DN01S09	DN01S10	DN01S22	DN01S41	DN01S44	DN01S43	DN01S08
SAMPLE IDENTIFICATION	SD09-01	SD10-01	SD11-01	SD12-01	SD13-01	SD14-01	SD15-01	SD16-01	SD18-01	SD19-01
DATE	10/17/86	10/17/86	10/17/86	10/15/86	10/15/86	10/16/86	10/17/86	10/17/86	10/17/86	10/15/86
DI-N-BUTYLPHTHALATE				290J						680J
FLUORANTHENE			1300J		4300					740J
PYRENE			1300J		3700					740J
BUTYLBENZYLPHTHALATE										
DICHLOROBENZIDINE 3,3-										
BENZO(A)ANTHRACENE					1900					
BIS(2-ETHYLEXYL)PHTHALATE			650J	35000	18000	81000		6900		230000
CHRYSENE			1000J		2100			720J		680J
DI-N-OCTYL PHTHALATE						600J		5400		
BENZO(B)FLUORANTHENE			1200J		2400					710J
BENZO(K)FLUORANTHENE					2100					
BENZO(A)PYRENE			820J		2700					
INDENOL(1,2,3-CD)PYRENE			320J		1500					
DIBENZ(A H)ANTHRACENE					290J					
BENZO(G.H.I)PERYLENE					1400					
PESTICIDES/PCB'S										
CRDL MULTIPLE	12	3	25	2	1.6			50	5	30
ALPHA-BHC										
BETA-BHC										
DELTA-BHC										
GAMMA-BHC (LINDANE)										
HEPTACHLOR										
ALDRIN										
HEPTACHLOR EPOXIDE										
ENDOSULFAN 1										
DIELDRIN										
DDE 4,4-										
ENDRIN										
ENDOSULFAN 11										
DDD 4,4										
ENDOSULFAN SULFATE										
DDT 4,4-										
METHOXYCHLOR										
ENDRIN KETONE										
CHLORDANE					310					5400J
TOXAPHENE										
AROCLOR-1016										
AROCLOR-1221										
AROCLOR-1232										
AROCLOR-1242										
AROCLOR-1248										
AROCLOR-1254					400					
AROCLOR-1260										

9TH AVENUE DUMP
SEDIMENT ORGANICS - ROUND 1
CONCENTRATION (UG/KG)

CRL#	DN01S30
SAMPLE IDENTIFICATION	S805-01
DATE	10/16/86
CRDL MULTIPLE	1
CHLOROMETHANE	
BROMOMETHANE	
VINYL CHLORIDE	
CHLOROETHANE	
METHYLENE CHLORIDE	15B
ACETONE	
CARBON DISULFIDE	
DICHLOROETHENE 1,1-	
DICHLOROETHANE 1,1-	
TRANS-1,2-DICHLOROETHENE	
CHLOROFORM	
DICHLOROETHANE1,2-	
BUTANONE 2-	
TRICHLOROETHANE 1,1,1-	
CARBON TETRACHLORIDE	
VINYL ACETATE	
BROMODICHLOROMETHANE	
DICHLOROPROPANE 1,2-	
TRANS-1,3-DICHLOROPROPENE	
TRICHLOROETHENE	
DIBROMOCHLOROMETHANE	
TRICHLOROETHANE1,1,2-	
BENZENE	
CIS-1,3-DICHLOROPROPENE	
CHLOROETHYLVINYLETHER 2-	
BROMOFORM	
METHYL4-PENTANONE2-	
HEXANONE 2-	
TETRACHLOROETHENE	
TETRACHLOROETHANE1,1,2,2-	
TOLUENE	
CHLOROBENZENE	
ETHYLBENZENE	
STYRENE	
TOTAL XYLENES	
SEMI-VOLATILES	
CRDL MULTIPLE	
PHENOL	
BIS(-2-CHLOROETHYL)ETHER	
CHLOROPHENOL 2-	
DICHLOROBENZENE 1,3-	

9TH AVENUE DUMP
SEDIMENT ORGANICS - ROUND 1
CONCENTRATION (UG/KG)

CRL#	9N01S30
SAMPLE IDENTIFICATION	SB05-01
DATE	10/16/86

DICHLOROBENZENE 1,4-	
BENZYL ALCOHOL	
DICHLOROBENZENE 1,2-	
METHYLPHENOL-2	
BIS(2-CHLOROISOPROPYL)ETHER	
METHYLPHENOL 4-	
N-NITROSO-DI-N-PROPYLAMINE	
HEXACHLOROETHANE	
NITROBENZENE	
ISOPHORONE	
NITROPHENOL 2-	
DIMETHYLPHENOL 2,4-	
BENZOIC ACID	
BIS(-2-CHLOROETHOOXY)METHANE	
DICHLOROPHENOL 2,4-	
TRICHLOROBENZENE1,2,4-	
NAPHTHALENE	
CHLOROANILINE 4-	
HEXACHLOROBUTADIENE	
CHLORO-4 METHYLPHENOL 3-	
METHYLNAPHTHALENE 2-	
HEXACHLOROCYCLOPENTADIENE	
TRICHLOROPHENOL 2,4,6-	
TRICHLOROPHENOL 2,4,5-	
CHLORONAPHTHALENE 2-	
NITROANILINE 2-	
DIMETHYL PHTHALATE	
ACANAPHTHYLENE	
NITROANILINE 3-	
ACENAPHTHENE	
DINITROPHENOL 2,4-	
NITROPHENOL 4-	
DIBENZOFURAN	
DINITROTOLUENE 2,4-	
DINITROTOLUENE 2,6-	
DIETHYLPHTHALATE	
CHLOROPHENYL-PHENYLETHER 4-	
FLUORENE	
NITROANILINE 4-	
DINITRO 4,6- METHYLPHENOL 2-	
N-NITROSODIPHENYLAMINE (1)	
BROMOPHENYL 4- PHENYLETHER	
HEXACHLOROBENZENE	
PENTACHLOROPHENOL	
PHENANTHRENE	
ANTHRACENE	

9TH AVENUE DUMP
SEDIMENT ORGANICS - ROUND 1
CONCENTRATION (UG/KG)

CRL#	DN01S30
SAMPLE IDENTIFICATION	SB05-01
DATE	10/16/86
DI-N-BUTYLPHTHALATE	
FLUORANTHENE	
PYRENE	
BUTYLBENZYLPHTHALATE	
DICHLOROBENZIDINE 3,3-	
BENZO(A)ANTHRACENE	
BIS(2-ETHYLEXYL)PHTHALATE	5408
CHRYSENE	
DI-N-OCTYL PHTHALATE	
BENZO(B)FLUORANTHENE	
BENZO(K)FLUORANTHENE	
BENZO(A)PYRENE	
INDENOL(1,2,3-CD)PYRENE	
DIBENZ(A H)ANTHRACENE	
BENZO(G.H.I)PERYLENE	

PESTICIDES/PCB'S

CRDL MULTIPLE	
ALPHA-BHC	
BETA-BHC	
DELTA-BHC	
GAMMA-BHC (LINDANE)	
HEPTACHLOR	
ALDRIN	
HEPTACHLOR EPOXIDE	
ENDOSULFAN 1	
DIELDRIN	
DDE 4,4-	
ENDRIN	
ENDOSULFAN 11	
DDD 4,4	
ENDOSULFAN SULFATE	
DDT 4,4-	
METHOXYCHLOR	
ENDRIN KETONE	
CHLORDANE	
TOXAPHENE	
AROCLOR-1016	
AROCLOR-1221	
AROCLOR-1232	
AROCLOR-1242	
AROCLOR-1248	
AROCLOR-1254	
AROCLOR-1260	

9TH AVENUE DUMP
INORGANIC SOIL TESTS
CONCENTRATION (MG/KG DRY WEIGHT)

CRL#	0N01S23	0N01S11	0N01S24	0N01S25	0N01S13	0N01S14	0N01S26	0N01S27	0N01S28	0N01S12
SAMPLE IDENTIFICATION	SD01-01	SD02-01	SD03-01	SD03-91	SD04-01	SD04-91	SD05-01	SD06-01	SD07-01	SD08-01
DATE	10/16/86	10/15/86	10/16/86	10/16/86	10/15/86	10/15/86	10/16/86	10/16/86	10/16/86	10/15/86
ALUMINUM	2054	766	1888J	2845J	5646	4892	3921	33852	1200	12296
ANTIMONY	19UR	17UR	17UR	16UR	77UR	77UR	36UR	37UR	21UR	21UR
ARSENIC	4UR	3UR	3UR	4.1R	15UR	15UR	7UR	7UR	4UR	4UR
BARIUM	[23]R	17UR	[22]R	[30]R	[165]R	[143]R	[57]R	577R	21UR	345R
BERYLLIUM	1UJ	0.7UJ	1UR	1UJ	3UJ	3UJ	1UJ	2UJ	1UJ	1UJ
CADMIUM	2UJ	2UJ	2UR	2UJ	8UJ	8UJ	4UJ	4UJ	2UJ	5UJ
CALCIUM	3115	4170	2339J	4419J	70923	66154	11500	32889	[833]J	121250
CHROMIUM	4UJ	15UJ	4UJ	4UJ	34UJ	29UJ	10UJ	46UJ	5UJ	100UJ
COBALT	4UJ	3UJ	3UJ	3UJ	15UJ	15UJ	7UJ	7UJ	4UJ	14UJ
COPPER	4UJ	12J	3UJ	3UJ	51J	48J	24J	193J	4U	60J
IRON	3234	3852	3583	4182	17125	14412	6565	64593	1593	57583
LEAD	36R	55R	22R	44R	292R	228R	80R	222R	18R	572R
MAGNESIUM	385	[1220]	339U	322U	[2923]	1540U	714U	[2741]	417U	5375
MANGANESE	26	57	49J	84J	686	545	165	526	18	2507
MERCURY	0.2UJ	0.2UJ	0.2UJ	0.2UJ	1.0UJ	1.0UJ	0.4UJ	0.4UJ	0.2UJ	0.2UJ
NICKEL	11UJ	16UJ	10UJ	10UJ	46UJ	46UJ	21UJ	38UJ	12UJ	49UJ
POTASSIUM	384U	339U	339U	322U	1540U	1540U	714U	3778	417	[1167]
SELENIUM	2UR	2UR	2UR	24U	8UR	8UR	4UR	4UR	2UR	2UR
SILVER	4UR	3UR	3UR	3UR	15UR	15UR	7UR	7UR	4UR	37R
SODIUM	[577]	[576]	[915]	322U	[4154]	[4308]	7857	4296	[458]	[417]
THALLIUM	2UR	2UR	2UR	2UR	15UR	15UR	4UR	4UR	2UR	2UR
TIN										
VANADIUM	15UJ	14UJ	14UJ	13UJ	61UJ	61UJ	29UJ	54UJ	17UR	30UJ
ZINC	88J	58J	46J	76J	506J	440J	228J	303J	55J	790J
PERCENT SOLIDS (%)	52	59	59	62	13	13	28	27	48	48
CYANIDE	0.1UR	0.1UR	0.1UR	0.1UR	0.1UR	0.1UR	0.1UR	0.1UR	0.1UR	0.2R
OIL & GREASE										

9TH AVENUE DUMP
INORGANIC SOIL TESTS
CONCENTRATION (MG/KG DRY WEIGHT)

CRL#	DN01S40	DN01S42	DN01S45	DN01S09	DN01S10	DN01S22	DN01S41	DN01S44	DN01S43	DN01S08
SAMPLE IDENTIFICATION	SD09-01	SD10-01	SD11-01	SD12-01	SD13-01	SD14-01	SD15-01	SD16-01	SD18-01	SD19-01
DATE	10/17/86	10/17/86	10/17/86	10/15/86	10/15/86	10/16/86	10/17/86	10/17/86	10/17/86	10/15/86
ALUMINUM	1903	4336	10110	1529	4896	6210	3333	5156	5686	1974
ANTIMONY	29UR	45UR	35UR	61R	18UR	50UR	48UR	111R	48UR	32UR
ARSENIC	29UR	4.8R	[3.9]R	4.9R	4UR	10UR	48UR	22UR	5UR	6.5UR
BARIUM	[46]R	[63]R	190R	[39]R	[40]R	[67]R	[83]R	[149]R	[78]R	[43]R
BERYLLIUM	1UJ	2UJ	1UJ	1UJ	0.7UJ	2UJ	2UJ	4UJ	2UJ	1.3UJ
CADMIUM	3UJ	4UJ	3UJ	2UJ	1.8UJ	5UJ	5UF	11UJ	5UJ	3.2UJ
CALCIUM	16686	6364	23103	21667	9214	12400	24476	67556	9238	17614
CHROMIUM	6UJ	9UJ	92UJ	9UJ	20UJ	25UJ	11UJ	22UJ	11UJ	10UJ
COBALT	6UJ	9UJ	7UJ	5UJ	4UJ	10UJ	10UJ	22UJ	10UJ	6.5UJ
COPPER	6UJ	9J	57UJ	30J	14J	42J	10UJ	100UJ	47J	388J
IRON	9266	9379	49448J	14362	8993	11686	13110	35580J	8828	8367
LEAD	70R	57R	84R	170R	65R	131R	50R	56UR	225R	197R
MAGNESIUM	571	910U	3517	476U	[1750]	[1500]	952U	2220U	950U	[1742]
MANGANESE	234	49	526	283	97	188	182	480	170	156
MERCURY	0.3J	0.5UJ	0.9J	0.2UJ	0.2UJ	0.5J	0.5UJ	1.1J	0.5UJ	0.3UJ
NICKEL	17UJ	27UJ	72UJ	14UJ	14UJ	30UJ	28UJ	67UJ	29UJ	19UJ
POTASSIUM	571	910U	690U	476U	357U	1000U	950U	2220U	950U	645U
SELENIUM	3UR	5UR	3UR	2UR	2UR	5UR	5UR	11UR	5UR	3.2UR
SILVER	6UR	9UR	7R	5UR	4UR	10UR	10UR	22UR	10UR	6.5UR
SODIUM	[971]	[1365]	[1035]	[810]	357U	[3300]	8000	[6444]	[2952]	[1613]
THALLIUM	6R	5UR	7UR	2.4UR	2UR	5UR	10UR	22UR	5UR	3.2UR
TIN										
VANADIUM	23UJ	36UJ	28UJ	19UJ	14UJ	40UJ	38UR	89UJ	38UJ	26UJ
ZINC	81J	271J	400J	229J	95J	353J	242J	531J	285J	181J
PERCENT SOLIDS (%)	35	22	29	42	56	20	21	9	21	31
CYANIDE	0.1UR	0.5R	2R	0.1UR	0.1U	0.1UR	2.3R	1.1UR	0.1UR	0.1UR
OIL & GREASE										

9TH AVENUE DUMP
INORGANIC SOIL TESTS
CONCENTRATION (MG/KG DRY WEIGHT)

CRL#	GN01S30
SAMPLE IDENTIFICATION	SB05-01
DATE	10/16/86
ALUMINUM	100
ANTIMONY	10UR
ARSENIC	2UR
BARIUM	10UR
BERYLLIUM	0.4UJ
CADMIUM	1.0UJ
CALCIUM	200U
CHROMIUM	2UJ
COBALT	2UJ
COPPER	2UJ
IRON	79
LEAD	1UR
MAGNESIUM	200U
MANGANESE	2U
MERCURY	0.1UJ
NICKEL	6UJ
POTASSIUM	200U
SELENIUM	1UR
SILVER	2UR
SODIUM	200U
THALLIUM	1UR
TIN	
VANADIUM	8UJ
ZINC	17J
PERCENT SOLIDS (%)	100
CYANIDE	0.1UR
OIL & GREASE	

9th AVENUE DUMP
DATA QUALIFIERS

- B = Detected in method blank as well as the sample, possible/probable blank contamination.

- U = The material was analzyed for but was not detected. The associated numerical value is the quantitation limit.

- J = The associated numerical value is an estimated quantity because quality control criteria were not met.

- UJ = The associated numerical value is the estimated quantitation limit.

- R = The data is unusable because quality control criteria were not met.

- N = The instrument detection limit exceeded contract required detection limit (CRDL), and the associated value is the detection limit.

- [] = Bracketed numbers are concentrations quantified at below contract required detection limits (CRDL).

- CRDL Multiple = is a correction factor which takes into account (based on matrix) % moisture, sample size, unit conversions and dilutions. The correction factor is based on the low level detection limit.

- The qualifier found to the left of the compounds concentration is from Warzyn's data validation. Those qualifiers to the right of the value are from the contract Laboratories and/or EPA's data validation.

APPENDIX Q

AIR SAMPLING
ANALYTICAL DATA

SAMPLES WERE COLLECTED IN OCTOBER 1986
BY WARZYN ENGINEERING INC. AND WERE ANALYZED BY CLP

This Appendix contains air sampling data. The sample AA-01-01 denotes an air sample (AA) taken at site 1, sampling event 1. The designation SB01-02 denotes a sample blank taken (SB) during sampling event 2.

WARZYN

Weather conditions monitored during the October 8 and October 9, 1986 air sampling event (24-hour air sampling period) included.

- Temperature: High 65°, Low 38°F
- Wind Speed: Varied between 5 to 15 mph, predominantly from the northeast. Occasional gusts up to 20 mph near the end of the sampling period.
- Wind Direction: Predominant wind direction was from the North-Northeast.
- Precipitation: No precipitation was recorded during this sampling period.
- Cloud Cover: Cloud cover varied from clear to overcast to broken clouds.

Weather conditions monitored during the October 15 and 16, 1986 air sampling event (8-hour air sampling period) were as follows:

- Temperature: High 55°, Low 37°F
- Wind Speed: Wind speed was essentially steady at 5 mph throughout sampling period.
- Wind Direction: Predominant wind direction was from the West-Northwest.
- Precipitation: Light intermittent precipitation was noted during October 16, 1986 sampling activities; not considered appreciable. Humidity was 70%.
- Cloud Cover: Cloud cover varied from clear sky to mostly cloudy.

The conditions noted are typical of meteorologic conditions in the Gary area in the early fall.

[jpl-601-85]

9TH AVENUE DUMP
ORGANIC AIR SAMPLE TEST RESULTS - ROUND 1
CONCENTRATION (NG)

CRL#	ON01S01	ON01B01	ON01S02	ON01B02	ON01S03	ON01B03	ON01S04	ON01B04	ON01S05	ON01B05
SAMPLE IDENTIFICATION	AA01-01	AA01-02	AA02-01	AA02-02	AA03-01	AA03-02	AA04-01	AA04-02	AA05-01	AA05-02
DATE	10/11/86	10/16/86	10/11/86	10/16/86	10/11/86	10/16/86	10/11/86	10/16/86	10/11/86	10/16/86
CRDL MULTIPLE	1	1	1	1	1	1	1	1	1	1
% MOISTURE										
CHLOROMETHANE	25JB		21JB		25JB	9JB				
BROMOMETHANE										
VINYL CHLORIDE										
CHLOROETHANE			140R							
METHYLENE CHLORIDE	140BJ	20BJ	34BJ		110BJ			58JB		21JB
ACETONE	800BJ	790BJ	450BJ	390BJ	860BJ	460BJ	180BJ	370JB	380BJ	190JB
CARBON DISULFIDE					37R		15R		58R	
DICHLOROETHENE 1,1-										
DICHLOROETHANE 1,1-										
TRANS-1,2-DICHLOROETHENE										
CHLOROFORM	25J									
DICHLOROETHANE1,2-										
BUTANONE 2-	94J	240J	85J	190J	89J	180J	75J	180J	84J	170J
TRICHLOROETHANE 1,1,1-	26J	31J		32J	28J	35J	35J	37J	22J	79J
CARBON TETRACHLORIDE	41J	38J				42J	40J			110J
VINYL ACETATE										
BROMODICHLOROMETHANE										
DICHLOROPROPANE 1,2-										
TRANS-1,3-DICHLOROPROPENE										
TRICHLOROETHENE	4J	29J	2J	31J	4J	26J	2J	27J	2J	39J
DIBROMOCHLOROMETHANE										
TRICHLOROETHANE1,1,2-										
BENZENE	49BJ	230BJ	41BJ	240BJ	48BJ	210BJ	36BJ	200BJ	33BJ	190BJ
CIS-1,3-DICHLOROPROPENE										
CHLOROETHYLVINYLETHER 2-										
BROMOFORM										
METHYL4-PENTANONE2-	21J		21J	480J			19J		45J	
HEXANONE 2-		1200J		1500J	350J	5700J	250J	3400J	270J	1400J
TETRACHLOROETHENE	16J	190J	8J	180J	11J	150J	7J	150J	5J	160J
TETRACHLOROETHANE1,1,2,2-										
TOLUENE	410J	560BJ	200J	1200BJ	190J	570BJ	140J	500JB	94J	530JB
CHLOROBENZENE	3J									
ETHYLBENZENE	54J	210J	42J	1100J	48J	200J		160J	29J	200J
STYRENE	16J	218J	12J		13J		10J		11J	158J
TOTAL XYLENES	270J	910J	220J	2700J	250J	800J	210J	600J	170J	810J
SEMI-VOLATILES										
PHENOL										
BIS(-2-CHLOROETHYL)ETHER										
CHLOROPHENOL 2-										
DICHLOROBENZENE 1,3-										

9TH AVENUE DUMP
ORGANIC AIR SAMPLE TEST RESULTS - ROUND 1
CONCENTRATION (NG)

CRL#	DN01S01	DN01B01	DN01S02	DN01B02	DN01S03	DN01B03	DN01S04	DN01B04	DN01S??	DN01B05
SAMPLE IDENTIFICATION	AA01-01	AA01-02	AA02-01	AA02-02	AA03-01	AA03-02	AA04-01	AA04-02	AA05-01	AA05-02
DATE	10/11/86	10/16/86	10/11/86	10/16/86	10/11/86	10/16/86	10/11/86	10/16/86	10/11/86	10/15/86
DICHLOROBENZENE 1,4-										
BENZYL ALCOHOL										
DICHLOROBENZENE 1,2-										
METHYLPHENOL-2										
BIS(2-CHLORDISOPROPYL)ETHER										
METHYLPHENOL 4-										
N-NITROSO-DI-N-PROPYLAMINE										
HEXACHLOROETHANE										
NITROBENZENE										
ISOPHORONE										
NITROPHENOL 2-										
DIMETHYLPHENOL 2,4-										
BENZOIC ACID										
BIS(-2-CHLOROETHOOXY)METHANE										
DICHLOROPHENOL 2,4-										
TRICHLOROBENZENE1,2,4-										
NAPHTHALENE										
CHLOROANILINE 4-										
HEXACHLOROBUTADIENE										
CHLORO-4 METHYLPHENOL 3-										
METHYLNAPHTHALENE 2-										
HEXACHLOROCYCLOPENTADIENE										
TRICHLOROPHENOL 2,4,6-										
TRICHLOROPHENOL 2,4,5-										
CHLORONAPHTHALENE 2-										
NITROANILINE 2-										
DIMETHYL PHTHALATE										
ACANAPHTHYLENE										
NITROANILINE 3-										
ACENAPHTHENE										
DINITROPHENOL 2,4-										
NITROPHENOL 4-										
DIBENZOFURAN										
DINITROTOLUENE 2,4-										
DINITROTOLUENE 2,6-										
DIETHYLPHTHALATE										
CHLOROPHENYL-PHENYLETHER 4-										
FLUORENE										
NITROANILINE 4-										
DINITRO 4,6- METHYLPHENOL 2-										
N-NITROSODIPHENYLAMINE (1)										
BROMOPHENYL 4- PHENYLETHER										
HEXACHLOROBENZENE										
PENTACHLOROPHENOL										
PHENANTHRENE										
ANTHRACENE										

9TH AVENUE DUMP
ORGANIC AIR SAMPLE TEST RESULTS - ROUND 1
CONCENTRATION (NG)

	CRL#	0N01S01	0N01B01	0N01S02	0N01B02	0N01S03	0N01B03	0N01S04	0N01B04	0N01S??	0N01B05
	SAMPLE IDENTIFICATION	AA01-01	AA01-02	AA02-01	AA02-02	AA03-01	AA03-02	AA04-01	AA04-02	AA05-01	AA05-02
	DATE	10/11/86	10/16/86	10/11/86	10/16/86	10/11/86	10/16/86	10/11/86	10/16/86	10/11/86	10/16/86
DI-N-BUTYLPHTHALATE											
FLUORANTHENE											
PYRENE											
BUTYLBENZYLPHTHALATE											
DICHLOROBENZIDINE 3,3-											
BENZO(A)ANTHRACENE											
BIS(2-ETHYLEXYL)PHTHALATE											
CHRYSENE											
DI-N-OCTYL PHTHALATE											
BENZO(B)FLUORANTHENE											
BENZO(K)FLUORANTHENE											
BENZO(A)PYRENE											
INDENOL(1,2,3-CD)PYRENE											
DIBENZ(A H)ANTHRACENE											
BENZO(G.H.I)PERYLENE											
PESTICIDES/PCB'S											
ALPHA-BHC											
BETA-BHC											
DELTA-BHC											
GAMMA-BHC (LINDANE)											
HEPTACHLOR											
ALDRIN											
HEPTACHLOR EPOXIDE											
ENDOSULFAN 1											
DIELDRIN											
DDE 4,4-											
ENDRIN											
ENDOSULFAN 11											
DDD 4,4											
ENDOSULFAN SULFATE											
DDT 4,4-											
METHOXYCHLOR											
ENDRIN KETONE											
CHLORDANE											
TOXAPHENE											
AROCLOR-1016											
AROCLOR-1221											
AROCLOR-1232											
AROCLOR-1242											
AROCLOR 1248											
AROCLOR 1254											
AROCLOR 1260											

9TH AVEN'E DUMP
ORGANIC AIR SAMPLE TEST RESULTS - ROUND 1
CONCENTRATION (NG)

CRL#	DN01D01	DN01D01	DN01R01	DN01R01
SAMPLE IDENTIFICATION	AA91-01	AA91-02	SB01-01	SB01-02
DATE	10/11/86	10/16/86	10/11/86	10/16/86
CRDL MULTIPLE	1	1	1	1
% MOISTURE				
CHLOROMETHANE	42J			41R
BROMOMETHANE				
VINYL CHLORIDE				
CHLOROETHANE	82R			120J
METHYLENE CHLORIDE		70JB		
ACETONE	1600BJ	8308J	890BJ	760BJ
CARBON DISULFIDE		28R		29R
DICHLOROETHENE 1,1-				
DICHLOROETHANE 1,1-				
TRANS-1,2-DICHLOROETHENE				
CHLOROFORM				
DICHLOROETHANE1,2-				
BUTANONE 2-	93J	210J	74J	160J
TRICHLOROETHANE 1,1,1-		50J		
CARBON TETRACHLORIDE		65J		
VINYL ACETATE				
BROMODICHLOROMETHANE				
DICHLOROPROPANE 1,2-				
TRANS-1,3-DICHLOROPROPENE				
TRICHLOROETHENE	2J	26J		
DIBROMOCHLOROMETHANE				
TRICHLOROETHANE1,1,2-				
BENZENE	828J	2008J	158J	278J
CIS-1,3-DICHLOROPROPENE				
CHLOROETHYLVINYLETHER 2-				
BROMOFORM				
METHYL4-PENTANONE2-				
HEXANONE 2-	340J	1600J	13J	
TETRACHLOROETHENE	7J	140J		
TETRACHLOROETHANE1,1,2,2-				
TOLUENE	180J	1000J	9J	15J
CHLOROBENZENE		3J		
ETHYLBENZENE	40J	910J		16J
STYRENE	15J		3J	13J
TOTAL XYLENES	180J	1900J	19J	57J
SEMI-VOLATILES				
PHENOL				
BIS(-2-CHLOROETHYL)ETHER				
CHLOROPHENOL 2-				
DICHLOROBENZENE 1,3-				

9TH AVENUE DUMP
ORGANIC AIR SAMPLE TEST RESULTS - ROUND 1
CONCENTRATION (NG)

	CRL#	DN01D01	DN01D01	DN01R01	DN01R01
	SAMPLE IDENTIFICATION	AA91-01	AA91-02	SB01-01	SB01-02
	DATE	10/11/86	10/16/86	10/11/86	10/16/86
DICHLOROBENZENE 1,4-					
BENZYL ALCOHOL					
DICHLOROBENZENE 1,2-					
METHYLPHENOL-2					
BIS(2-CHLOROISOPROPYL)ETHER					
METHYLPHENOL 4-					
N-NITROSO-DI-N-PROPYLAMINE					
HEXACHLOROETHANE					
NITROBENZENE					
ISOPHORONE					
NITROPHENOL 2-					
DIMETHYLPHENOL 2,4-					
BENZOIC ACID					
BIS(-2-CHLOROETHOOXY)METHANE					
DICHLOROPHENOL 2,4-					
TRICHLOROBENZENE1,2,4-					
NAPHTHALENE					
CHLOROANILINE 4-					
HEXACHLOROBUTADIENE					
CHLORO-4 METHYLPHENOL 3-					
METHYLNAPHTHALENE 2-					
HEXACHLOROCYCLOPENTADIENE					
TRICHLOROPHENOL 2,4,6-					
TRICHLOROPHENOL 2,4,5-					
CHLORONAPHTHALENE 2-					
NITROANILINE 2-					
DIMETHYL PHTHALATE					
ACANAPHTHYLENE					
NITROANILINE 3-					
ACENAPHTHENE					
DINITROPHENOL 2,4-					
NITROPHENOL 4-					
DIBENZOFURAN					
DINITROTOLUENE 2,4-					
DINITROTOLUENE 2,6-					
DIETHYLPHTHALATE					
CHLOROPHENYL-PHENYLETHER 4-					
FLUORENE					
NITROANILINE 4-					
DINITRO 4,6- METHYLPHENOL 2-					
N-NITROSODIPHENYLAMINE (1)					
BROMOPHENYL 4- PHENYLETHER					
HEXACHLOROBENZENE					
PENTACHLOROPHENOL					
PHENANTHRENE					
ANTHRACENE					

9TH AVENUE DUMP
ORGANIC AIR SAMPLE TEST RESULTS - ROUND 1
CONCENTRATION (NG)

	CRL#	DN01D01	DN01D01	DN01R01	DN01R01
SAMPLE IDENTIFICATION		AA91-01	AA91-02	SB01-01	SB01-02
	DATE	10/11/86	10/16/86	10/11/86	10/16/86
DI-N-BUTYLPHTHALATE					
FLUORANTHENE					
PYRENE					
BUTYLBENZYLPHTHALATE					
DICHLOROBENZIDINE 3,3-					
BENZO(A)ANTHRACENE					
BIS(2-ETHYLEXYL)PHTHALATE					
CHRYSENE					
DI-N-OCTYL PHTHALATE					
BENZO(B)FLUORANTHENE					
BENZO(K)FLUORANTHENE					
BENZO(A)PYRENE					
INDENOL(1,2,3-CD)PYRENE					
DIBENZ(A H)ANTHRACENE					
BENZO(G,H,I)PERYLENE					
PESTICIDES/PCB'S					
ALPHA-BHC					
BETA-BHC					
DELTA-BHC					
GAMMA-BHC (LINDANE)					
HEPTACHLOR					
ALDRIN					
HEPTACHLOR EPOXIDE					
ENDOSULFAN 1					
DIELDRIN					
DDE 4,4-					
ENDRIN					
ENDOSULFAN 11					
DDD 4,4					
ENDOSULFAN SULFATE					
DDT 4,4-					
METHOXYCHLOR					
ENDRIN KETONE					
CHLORDANE					
TOXAPHENE					
AROCLOR-1016					
AROCLOR-1221					
AROCLOR-1232					
AROCLOR-1242					
AROCLOR 1248					
AROCLOR 1254					
AROCLOR 1260				1900	

9TH AVENUE DUMP
INORGANIC AIR TEST RESULTS
CONCENTRATION (MG/FILTER/L)

CRL#	DN01S01	DN01B01	DN01S02	DN01B02	DN01S03	DN01B03	DN01S04	DN01B04	DN01S05	DN01B05
SAMPLE IDENTIFICATION	AA01-01	AA01-02	AA02-01	AA02-02	AA03-01	AA03-02	AA04-01	AA04-02	AA05-01	AA05-02
DATE	11/07/86	11/12/86	11/07/86	11/12/86	11/07/86	11/12/86	11/07/86	11/12/86	11/07/86	11/12/86
ALUMINUM	8.81R	[7.59]R	[6.64]R	[7.54O]R	[5.61]R	[5.75O]R	[6.43]R	[5.51O]R	[6.68]R	[6.12O]R
BERYLLIUM	0.04U	0.04U	0.04U	0.04U	0.04U	0.04U	0.04U	0.04U	0.04U	[0.048]R
CADMIUM	0.2U	0.2U	0.2U	0.2U	0.2U	0.2U	0.2U	0.2U	0.2U	0.2U
BARIUM	[0.423]R	[0.357]R	[0.428]R	[0.411]R	[0.431]R	[0.558]R	[0.394]R	[0.387]R	[0.502]R	[0.406]R
CHROMIUM	0.953R	0.777R	0.960JR	0.885JR	0.926JR	0.824JR	0.898R	0.756JR	0.939R	1.060R
COBALT	0.2U	0.2U	0.2U	0.2U	0.2U	0.2U	0.2U	0.2U	0.2U	0.2U
LEAD	1.12U	1.12U	1.12U	1.12U	1.12U	1.12U	1.12U	1.12U	1.12U	1.12U
NICKEL	[0.971]J	0.28U	3.44J	[0.951]R	0.28U	[0.457]R	[1.02]J	0.28U	[0.993]J	0.28U
ZINC	286R	2.800R	5.10JR	3.100JR	2.77JR	2.660JR	15.1R	2.430R	1.86R	1.670R

9TH AVENUE DUMP
INORGANIC AIR TEST RESULTS
CONCENTRATION (MG/FILTER/L)

CRL#	DN01D01	DN01D01	DN01R01	DN01R01	DN01R02	DN01R02	DN01R03	DN01R03
SAMPLE IDENTIFICATION	AA91-01	AA91-02	SB01-01	SB01-02	SB02-01	SB02-02	SB03-01	SB03-02
DATE	11/07/86	11/12/86	11/07/86	11/12/86	11/07/86	11/12/86	11/07/86	11/12/86
ALUMINUM	11.30R	[6.970]R	[7.19]R	[7.000]R	[6.79]	[5.500]R	[4.91]R	[5.110]R
BERYLLIUM	0.04U	[0.048]R	0.04U	[0.048]R	0.04U	0.04U	[0.106]	[0.096]R
CADMIUM	0.20U	0.20U	0.20U	0.20U	0.20U	0.20U	0.20U	0.20U
BARIUM	[0.707]R	[0.382]R	[0.531]J	[0.388]R	[0.405]	[0.357]R	[0.440]R	[0.403]R
CHROMIUM	2.00R	0.851R	0.802RJ	0.919JR	0.788J	0.959RJ	0.912R	0.844JR
COBALT	0.2U	0.2U	0.2U	0.2U	0.2U	0.2U	0.2U	0.2U
LEAD	1.12U	1.12U	1.12U	1.12U	1.12U	1.12U	1.12U	1.12U
NICKEL	6.54J	0.28U	0.28U	[0.469]R	0.28U	0.28U	[0.318]J	[0.297]R
ZINC	2.53R	3.640R	1.65J	3.800R	2.06J	4.650R	2.74R	8.680JR

9th AVENUE DUMP
DATA QUALIFIERS

- B = Detected in method blank as well as the sample, possible/probable blank contamination.

- U = The material was analzyed for but was not detected. The associated numerical value is the quantitation limit.

- J = The associated numerical value is an estimated quantity because quality control criteria were not met.

- UJ = The associated numerical value is the estimated quantitation limit.

- R = The data is unusable because quality control criteria were not met.

- N = The instrument detection limit exceeded contract required detection limit (CRDL), and the associated value is the detection limit.

- [] = Bracketed numbers are concentrations quantified at below contract required detection limits (CRDL).

- CRDL Multiple = is a correction factor which takes into account (based on matrix) % moisture, sample size, unit conversions and dilutions. The correction factor is based on the low level detection limit.

- The qualifier found to the left of the compounds concentration is from Warzyn's data validation. Those qualifiers to the right of the value are from the contract Laboratories and/or EPA's data validation.

APPENDIX R

GROUNDWATER AND HYDROCARBON LAYER ANALYTICAL DATA

R-1 - ROUND 1 GROUNDWATER SAMPLES WERE COLLECTED IN DECEMBER 1986
BY WARZYN ENGINEERING INC.
R-2 - ROUND 1 HYDROCARBON LAYER SAMPLES WERE COLLECTED IN DECEMBER 1986
BY WARZYN ENGINEERING INC.
R-3 - ROUND 2 GROUNDWATER SAMPLES WERE COLLECTED IN JUNE 1987
BY WARZYN ENGINEERING INC.
R-4 - ROUND 2 HYDROCARBON LAYER SAMPLES WERE COLLECTED IN JUNE 1987
BY WARZYN ENGINEERING INC.
R-5 - ROUND 3 GROUNDWATER SAMPLES WERE COLLECTED IN JUNE & JULY 1987
BY WARZYN ENGINEERING INC.

Specific conductivity, pH, color, odor and turbidity were determined by Warzyn Engineering Inc. Samples were analyzed by the Contract Laboratory Program (CLP)

This Appendix contains groundwater, hydrocarbon layer, bottle blank and sample blank analytical data. The letter "G" designates a groundwater sample with the exception of GBB01 or GSB01. In these cases, the "BB" following the "G" denotes a bottle blank and the "SB" denotes a sample blank. Other examples include GX-01-02, which is a groundwater sample from Well X-1 during sampling event 2 or GFX-71-04, which is a groundwater sample from Well FX-71 (the "F" denotes an offsite well) during sampling event 4.

WARZYN

R-1 - ROUND 1 GROUNDWATER SAMPLES WERE COLLECTED IN DECEMBER 1986
BY WARZYN ENGINEERING INC.

Well #	pH	Specific Conductivity at 25°C N	Sample Odor	Color	Turbidity
X1	6.68	48530	None	White	Slight
X2	6.58	24265	None	Light Brown	Slight
X2DUP	6.54	24285	--	--	--
X3	6.43	11765	Chemical	Light Brown	Slight
X3DUP	6.44	11940	--	--	--
X4	6.30	5635	--	Brown	Moderate
X5	6.55	6300	Chemical	Green	Moderate
X6	6.54	5070	Leachate	Light Green	Slight
X7	6.82	3155	Mephetic	Black	Very
X8	6.28	3525	--	Green	Slight
X9	6.64	10540	--	Amber	Slight
X10	6.86	23860	None	Light Brown	Moderate
X10DUP	6.82	17000	--	--	--
X11	7.00	2180	None	Gray-Brown	Moderate
X12	6.83	3610	None	Light Brown	Slight
X13	6.82	3735	Chemical	Amber	Slight
X14	6.08	3975	--	Dark Brown	Moderate
X15	6.19	2250	Chemical	Brown	Very
X16	6.80	6390	Chemical	Dark Brown	Slight
X17	7.65	12330	None	Brown	Moderate
X18	6.70	6820	--	Brown	Very
X19	6.58	7855	Mephetic	Black	Very
X20	6.65	2630	--	Black	Very
X21	6.41	7640	Mephetic	Black	Very
X22	6.31	3110	Chemical	Light Brown	Moderate
X22DUP	6.34	3025	--	--	--
X23	6.52	8335	Chemical	Gray-Brown	Moderate
X24	6.28	2030	Oil	Black	Moderate
X25	6.19	10525	Oil	Gray	Very
X26	6.78	4685	Chemical	Black	Very
X27	6.50	11430	Chemical	Light Brown	Very
X28	7.05	2195	Slight	Gray-Brown	Moderate
X29	6.91	2795	None	Clear	None
X30	6.60	44735	None	Light Brown	Moderate
X31	6.32	2685	Oil	Black	Moderate
X32	6.60	4985	None	Gray-Brown	Moderate
X33	6.78	7645	Pungent Plastic	Clear	None
X34	6.90	10715	None	Light Brown	Slight
X35	6.56	1715	None	Brown	Very
X36	6.90	9590	Bitter Pungent	Gray-Brown	Slight
X36DUP	6.94	9230	--	--	--
X37	6.99	9595	None	Gray-Brown	Moderate
X38	6.66	925	Slight Leachate	Light Brown	Moderate
X38DUP	6.67	915	--	--	--
X39	6.84	5445	None	Dark Brown	Very
X40	6.88	13380	None	Light Green	Slight

Well #	pH	Specific Conductivity at 25°C N	Sample Odor	Color	Turbidity
X41	6.43	21125	None	Clear	None
X42	7.80	640	None	Dark Brown	Moderate
X43	6.63	5835	Methanol	Light Brown	Slight
X44	6.27	13890	Methanol	Clear	Slight
X44DUP	6.26	13425	--	--	--
X45	6.75	3080	None	Brown	Slight
X46	6.65	5610	None	Yellow	Slight
X47	6.48	6460	None	Brown	Moderate
X48	8.67	1080	Septic-Sulfur	Gray-Brown	Moderate
X49	6.80	1820	None	Gray	Slight
X50	10.82	1790	Rotten Egg	Black	Very
X51	6.67	2235	None	Brown	Moderate
X52	6.64	1855	None	Brown	Moderate
X53	6.95	4120	Slight Organic	Clear	None
X54	6.94	4225	Slight Organic	Clear	None
X55	6.95	2705	None	Brown	Very
X56	--	--	--	Brown	Moderate
X57	6.50	3560	Chemical	Gray-Brown	Moderate
X58	7.21	1715	Oil	Black	Moderate
X59	7.12	4575	--	--	--
B2	6.87	1795	None	Clear	None
B3	5.73	2830	Oil	Black	Moderate
B4	6.92	2725	Rancid	Brown	Slight
BW3	6.60	1970	None	Green-Brown	Moderate
BW4	6.90	2845	--	--	--
Blanks					
SB01	5.41	<14			
SB02	5.64	<15			
SB03	5.60	<14			
Field Lab Duplicates					
X55	7.02	2695			
X50	10.83	1760			
X30	6.62	44735			
X43	6.60	5835			
X5	6.54	6215			
X1	6.62	47500			
X16	6.81	6370			
X17	7.70	12330			
X4	6.32	5645			
X21	6.40	7060			

GFP/cac
[cac-400-10]

9TH AVENUE DUMP
GROUNDWATER ORGANICS - ROUND 1
CONCENTRATION (UG/L)

CRL#	GN02949	GN02951	GN02950	GN02959	GN02967	GN02960	GN02960 REANALYSIS	GN02935	GN02934	GN02936
SAMPLE IDENTIFICATION	GX01-02	GX02-02	GX02-01	GX03-02	GX03-01	GX04-02	GX04-02	GX05-02	GX06-02	GX07-02
DATE	12/11/86	12/11/86	12/11/86	12/13/87	12/13/87	12/13/87	12/13/87	12/10/86	12/10/86	12/11/86
CRQL MULTIPLE	1	1	1	5	50	500		1000	5000	5000
VOLATILES										
CHLOROMETHANE										
BROMOMETHANE										
VINYL CHLORIDE						26000				
CHLOROETHANE				40J		580J		1200J		
METHYLENE CHLORIDE				UJ21B	1400B			UJ1800JB	UJ6700JB	UJ7000B
ACETONE	UJ57B	UJ11B	UJ11B	UJ260BJ	UJ1100BJ	UJ19000BJ		UJ6700JB	UJ24000JB	UJ5900B
CARBON DISULFIDE										
DICHLOROETHENE 1,1-										
DICHLOROETHANE 1,1-						730J				
TRANS-1,2-DICHLOROETHENE						20000				
CHLOROFORM										
DICHLOROETHANE1,2-										
BUTANONE 2-				600B	UJ1000	71000B		UJ8800J		32000B
TRICHLOROETHANE 1,1,1-										
CARBON TETRACHLORIDE										
VINYL ACETATE										
BROMODICHLOROMETHANE										
DICHLOROPROPANE 1,2-										
TRANS-1,3-DICHLOROPROPENE										
TRICHLOROETHENE										
DIBROMOCHLOROMETHANE										
TRICHLOROETHANE1,1,2-										
BENZENE				5J						
CIS-1,3-DICHLOROPROPENE										
CHLOROETHYLVINYLETHER 2-										
BROMOFORM										
METHYL4-PENTANONE2-				1100J	1300J	65000J				
HEXANONE 2-				82J						
TETRACHLOROETHENE										
TETRACHLOROETHANE1,1,2,2-										
TOLUENE		1J		62J	190J	3300J				10000J
CHLOROBENZENE										
ETHYLBENZENE								1400J		
STYRENE										
TOTAL XYLENES				8J						
SEMI-VOLATILES										
CRQL MULTIPLE				3	3	20	25	1	5	1
PHENOL							250J			350
BIS(-2-CHLOROETHYL)ETHER										
CHLOROPHENOL 2-										

9TH AVENUE DUMP
GROUNDWATER ORGANICS - ROUND 1
CONCENTRATION (UG/L)

CRL#	DN02S49	DN02S51	DN02S50	DN02S59	DN02S67	DN02S60	DN02S60 REANALYSIS	DN02S35	DN02S34	DN02S36
SAMPLE IDENTIFICATION	GX01-02	GX02-02	GX02-91	GX03-02	GX03-91	GX04-02	GX04-02	GX05-02	GX06-02	GX07-02
DATE	12/11/86	12/11/86	12/11/86	12/13/87	12/13/87	12/13/87	12/13/87	12/10/86	12/10/86	12/10/86
DICHLOROBENZENE 1,3-										
DICHLOROBENZENE 1,4-										
BENZYL ALCOHOL										
DICHLOROBENZENE 1,2-										
METHYLPHENOL-2							230J			380
BIS(2-CHLORDISOPROPYL)ETHER										
METHYLPHENOL 4-				14J	15J	3000	4600J			760
N-NITROSO-DI-N-PROPYLAMINE										
HEXACHLOROETHANE										
NITROBENZENE										
ISOPHORONE										
NITROPHENOL 2-										
DIMETHYLPHENOL 2,4-						220	250J		43J	430
BENZOIC ACID						4300	5400J		76J	
BIS(2-CHLOROETHOXY)METHANE										
DICHLOROPHENOL 2,4-										
TRICHLOROBENZENE1,2,4-										
NAPHTHALENE										21
CHLOROANILINE 4-										
HEXACHLOROBUTADIENE										
CHLORO-4 METHYLPHENOL 3-										
METHYLNAPHTHALENE 2-										8J
HEXACHLOROCYCLOPENTADIENE										
TRICHLOROPHENOL 2,4,6-										
TRICHLOROPHENOL 2,4,5-										
CHLORONAPHTHALENE 2-										
NITROANILINE 2-										
DIMETHYL PHTHALATE										
ACANAPHTHYLENE										
NITROANILINE 3-										
ACENAPHTHENE										
DINITROPHENOL 2,4-										
NITROPHENOL 4-										
DIBENZOFURAN										
DINITROTOLUENE 2,4-										
DINITROTOLUENE 2,6-										
DIETHYLPHTHALATE										
CHLOROPHENYL-PHENYLETHER 4-										
FLUORENE										
NITROANILINE 4-										
DINITRO 4,6- METHYLPHENOL 2-										
N-NITROSODIPHENYLAMINE (1)										
BROMOPHENYL 4- PHENYLETHER										
HEXACHLOROBENZENE										
PENTACHLOROPHENOL										
PHENANTHRENE										
ANTHRACENE										

9TH AVENUE DUMP
GROUNDWATER ORGANICS - ROUND 1
CONCENTRATION (UG/L)

CRL#	SN02849	SN02851	SN02850	SN02859	SN02867	SN02860	SN02860 REANAL/SIS	SN02835	SN02834	SN02836
SAMPLE IDENTIFICATION	GX01-02	GX02-02	GX02-01	GX03-02	GX03-01	GX04-02	GX04-02	GX05-02	GX05-02	GX07-02
DATE	12/11/86	12/11/86	12/11/86	12/13/87	12/13/87	12/13/87	12/13/87	12/10/86	12/10/86	12/10/86
DI-N-BUTYLPHTHALATE			JJ							
FLUORANTHENE										
PYRENE										
BUTYLBENZYLPHTHALATE										
DICHLOROBENZIDINE 3,3-										
BENZO(A)ANTHRACENE										
BIS(2-ETHYLEXYL)PHTHALATE										
CHRYSENE										
DI-N-OCTYL PHTHALATE										
BENZO(B)FLUORANTHENE										
BENZO(K)FLUORANTHENE										
BENZO(A)PYRENE										
INDENOL(1,2,3-CD)PYRENE										
DIBENZ(A,H)ANTHRACENE										
BENZO(G,H,I)PERYLENE										
PESTICIDES/PCB'S										
CRDL MULTIPLE				10	10	10		10	10	100
ALPHA-BHC									0.09	
BETA-BHC										
DELTA-BHC										
GAMMA-BHC (LINDANE)										
HEPTACHLOR										
ALDRIN										
HEPTACHLOR EPOXIDE										
ENDOSULFAN I										
DIELDRIN										
DDE 4,4-										
ENDRIN										
ENDOSULFAN II										
DDD 4,4										
ENDOSULFAN SULFATE										
DDT 4,4-										
METHOXYCHLOR										
ENDRIN KETONE										
CHLORDANE										
TOXAPHENE										
AROCLOR-1016										
AROCLOR-1221										
AROCLOR-1232										
AROCLOR-1242										
AROCLOR 1248										
AROCLOR 1254										
AROCLOR 1260										

9TH AVENUE DUMP
GROUNDWATER ORGANICS - ROUND 1
CONCENTRATION (UG/L)

CRL#	DN02S46	DN02S46 REANALYSIS	DN02S44	DN02S21	DN02S20	DN02S08	DN02S33	DN02S53	DN02S76	DN02S45
SAMPLE IDENTIFICATION	GX08-02	GX08-02	GX09-02	GX10-02	GX10-91	GX11-02	GX12-02	GX13-02	GX14-02	GX15-02
DATE	12/11/86	12/11/86	12/11/86	12/05/87	12/05/87	12/04/86	12/06/86	12/12/86	12/17/86	11/12/86
CRDL MULTIPLE	500		50	1	1	1	1	100	500	25
VOLATILES										
CHLOROMETHANE										
BROMOMETHANE										
VINYL CHLORIDE	2500J								1600J	
CHLOROETHANE										
METHYLENE CHLORIDE									2000J	
ACETONE	33000B		UJ460JB	UJ15B	UJ6JB	UJ5JB	UJ16B	UJ1900JB	UJ2600JB	UJ94008
CARBON DISULFIDE										
DICHLOROETHENE 1,1-										
DICHLOROETHANE 1,1-	750J								1200J	1000J
TRANS-1,2-DICHLOROETHENE	34000			1J					3900	
CHLOROFORM										
DICHLOROETHANE1,2-										370J
BUTANONE 2-	130000B		UJ540	4	6		UJ15	6700B	UJ45000	UJ13000
TRICHLOROETHANE 1,1,1-	1200J								870J	
CARBON TETRACHLORIDE										
VINYL ACETATE										
BROMODICHLOROMETHANE										
DICHLOROPROPANE 1,2-										380J
TRANS-1,3-DICHLOROPROPENE										
TRICHLOROETHENE										
DIBROMOCHLOROMETHANE										
TRICHLOROETHANE1,1,2-										
BENZENE	9100			6	5			120J		
CIS-1,3-DICHLOROPROPENE										
CHLOROETHYLVINYLETHER 2-										
BROMOFORM										
METHYL4-PENTANONE2-	36000							2800J	5400J	8600
HEXANONE 2-										1900J
TETRACHLOROETHENE										
TETRACHLOROETHANE1,1,2,2-										
TOLUENE	21000							15000	83000	31000
CHLOROBENZENE										
ETHYLBENZENE	24000		56J					890	2400J	2900
STYRENE										
TOTAL XYLENES	150000		160J					4500J	13000J	8900
SEMI-VOLATILES										
CRDL MULTIPLE	4000	25	1					15	15	10
PHENOL	540J	540J		3J	5J					630
BIS(-2-CHLOROETHYL)ETHER										
CHLOROPHENOL 2-										

9TH AVENUE DUMP
GROUNDWATER ORGANICS - ROUND 1
CONCENTRATION (UG/L)

CRL#	GW02946	GW02946 REANALYSIS	GW02944	GW02821	GW02820	GW02818	GW02933	GW02953	GW02976	GW02945
SAMPLE IDENTIFICATION	GX08-02	GX08-02	GX09-02	GX10-02	GX10-91	GX11-02	GX12-02	GX13-02	GX14-02	GX15-02
DATE	12/11/86	12/11/86	12/11/86	12/05/87	12/05/87	12/04/86	12/06/86	12/12/86	12/17/86	12/12/86
DICHLOROBENZENE 1,3-										
DICHLOROBENZENE 1,4-										
BENZYL ALCOHOL										
DICHLOROBENZENE 1,2-										
METHYLPHENOL-2	320	320J						61J	1200	76J
BIS(2-CHLOROISOPROPYL)ETHER										
METHYLPHENOL 4-	350	340J						73J	16000	1900
N-NITROSO-DI-N-PROPYLAMINE										
HEXACHLOROETHANE										
NITROBENZENE										
ISOPHORONE	170000	1200J								
NITROPHENOL 2-										
DIMETHYLPHENOL 2,4-								56J	3900	210
BENZOIC ACID		6900J	57						950	2300
BIS(2-CHLOROETHOXY)METHANE										
DICHLOROPHENOL 2,4-										
TRICHLOROBENZENE1,2,4-										
NAPHTHALENE	100000	420J						46J	360	120
CHLOROANILINE 4-										
HEXACHLOROBUTADIENE										
CHLORO-4 METHYLPHENOL 3-										
METHYLNAPHTHALENE 2-	100000	360J							440J	56J
HEXACHLOROCYCLOPENTADIENE										
TRICHLOROPHENOL 2,4,6-										
TRICHLOROPHENOL 2,4,5-										
CHLORONAPHTHALENE 2-										
NITROANILINE 2-										
DIMETHYL PHTHALATE										
ACANAPHTHYLENE										
NITROANILINE 3-										
ACENAPHTHENE										
DINITROPHENOL 2,4-										
NITROPHENOL 4-										
DIBENZOFURAN										
DINITROTOLUENE 2,4-										
DINITROTOLUENE 2,6-										
DIETHYLPHTHALATE										
CHLOROPHENYL-PHENYLETHER 4-										
FLUORENE										
NITROANILINE 4-										
DINITRO 4,6- METHYLPHENOL 2-										
N-NITROSODIPHENYLAMINE (1)									110J	
BROMOPHENYL 4- PHENYLETHER										
HEXACHLOROBENZENE										
PENTACHLOROPHENOL										
PHENANTHRENE	12000J								130J	
ANTHRACENE										

9TH AVENUE DUMP
GROUNDWATER ORGANICS - ROUND 1
CONCENTRATION (UG/L)

CRL#	9N02S46	9N02S46 REANALYSIS	9N02S44	9N02S21	9N02S20	9N02S08	9N02S33	9N02S53	9N02S76	9N02S45
SAMPLE IDENTIFICATION	GX08-02	GX08-02	GX09-02	GX10-02	GX10-91	GX11-02	GX12-02	GX13-02	GX14-02	GX15-02
DATE	12/11/86	12/11/86	12/11/86	12/05/87	12/05/87	12/04/86	12/06/86	12/12/86	12/17/86	11/12/86
DI-N-BUTYLPHTHALATE			4J						68J	
FLUORANTHENE									63J	
PYRENE									71J	
BUTYLBENZYLPHTHALATE			31							
DICHLOROBENZIDINE 3,3-										
BENZO(A)ANTHRACENE									61J	
BIS(2-ETHYLEXYL)PHTHALATE	200000	580J	7J	3J	5J				120J	
CHRYSENE									64J	
DI-N-OCTYL PHTHALATE	39000J									
BENZO(B)FLUORANTHENE										
BENZO(K)FLUORANTHENE										
BENZO(A)PYRENE										
INDENOL(1,2,3-CD)PYRENE										
DIBENZ(A H)ANTHRACENE										
BENZO(G,H,I)PERYLENE										
PESTICIDES/PCB'S										
CRDL MULTIPLE	100							10	10	100
ALPHA-BHC										
BETA-BHC										
DELTA-BHC										
GAMMA-BHC (LINDANE)										
HEPTACHLOR										
ALDRIN										
HEPTACHLOR EPOXIDE										
ENDOSULFAN I										
DIELDRIN										
DDE 4,4-										
ENDRIN										
ENDOSULFAN II										
DDD 4,4										
ENDOSULFAN SULFATE										
DDT 4,4-										
METHOXYCHLOR										
ENDRIN KETONE										
CHLORDANE										
TOXAPHENE										
AROCLOR-1016										
AROCLOR-1221										
AROCLOR-1232										
AROCLOR-1242										
AROCLOR 1248										
AROCLOR 1254										
AROCLOR 1260										

9TH AVENUE DUMP
GROUNDWATER ORGANICS - ROUND 1
CONCENTRATION (UG/L)

CRL#	DN02954	DN02952	DN02968	DN02968 REANALYSIS	DN02978	DN02978 REANALYSIS	DN02974A	DN02972	DN02958	DN02951
SAMPLE IDENTIFICATION	GX16-02	GX17-02	GX18-02	GX18-02	GX19-02	GX19-02	GX20-02	GX21-02	GX22-02	GX22-02
DATE	12/12/86	12/12/86	12/13/87	12/13/87	12/17/86	12/17/87	12/17/86	12/17/86	12/12/86	12/12/86
CRDL MULTIPLE	50	1	500		250		50	100	500	500
VOLATILES										
CHLOROMETHANE										
BROMOMETHANE										
VINYL CHLORIDE					4500		120J		3000J	
CHLOROETHANE										
METHYLENE CHLORIDE					2700		180J	630J	UJ1800J	UJ2400J
ACETONE	UJ1500B	64JB	UJ3700JB		4600JB		UJ410JB	19000B	UJ6200B	
CARBON DISULFIDE										
DICHLOROETHENE 1,1-										
DICHLOROETHANE 1,1-	250				870J		370		2300	3500
TRANS-1,2-DICHLOROETHENE			560J		19000		250	170J	54000	55000
CHLOROFORM					310J			360J		
DICHLOROETHANE1,2-									7400	7500
BUTANONE 2-	12000JB				UJ23000		3700B	140000B	24000JB	19000JB
TRICHLOROETHANE 1,1,1-										
CARBON TETRACHLORIDE										
VINYL ACETATE										
BROMODICHLOROMETHANE										
DICHLOROPROPANE 1,2-										
TRANS-1,3-DICHLOROPROPENE										
TRICHLOROETHENE					860J				3300	3000
DIBROMOCHLOROMETHANE										
TRICHLOROETHANE1,1,2-										
BENZENE	460				1100J		1700J	1400J		
CIS-1,3-DICHLOROPROPENE										
CHLOROETHYLVINYLETHER 2-										
BROMOFORM										
METHYL4-PENTANONE2-	3400J				53000J		7500	11000	13000J	14000J
HEXANONE 2-					5600J					
TETRACHLOROETHENE										
TETRACHLOROETHANE1,1,2,2-										
TOLUENE	1000		8600B		11000		2700B	1100	76000	85000
CHLOROBENZENE										
ETHYLBENZENE	760		4500		1000J		400	380J	9000	10000J
STYRENE										
TOTAL XYLENES	6300	2J	16000		2300R		1200	450J	35000	36000
SEMI-VOLATILES										
CRDL MULTIPLE	10		15	15	15	25	5	10	5	5
PHENOL					2700	3700J			620	610
BIS(-2-CHLOROETHYL)ETHER										
CHLOROPHENOL 2-										

9TH AVENUE DUMP
GROUNDWATER ORGANICS - ROUND 1
CONCENTRATION (UG/L)

CRL#	DN02S54	DN02S52	DN02S68	DN02S68 REANALYSIS	DN02S78	DN02S78 REANALYSIS	DN02S74A	DN02S72	DN02S55	DN02S61
SAMPLE IDENTIFICATION	GX16-02	GX17-02	GX18-02	GX18-02	GX19-02	GX19-02	GX20-02	GX21-02	GX22-02	GX22-01
DATE	12/12/86	12/12/86	12/13/87	12/13/87	12/17/86	12/17/87	12/17/86	12/17/86	12/12/86	12/12/86
DICHLOROBENZENE 1,3-										
DICHLOROBENZENE 1,4-										
BENZYL ALCOHOL										
DICHLOROBENZENE 1,2-										
METHYLPHENOL-2	54J				2000	2500J	500		990	1100
BIS(2-CHLOROISOPROPYL)ETHER										
METHYLPHENOL 4-	190		130J	150J	8200	10000J	1000		630	770
N-NITROSO-DI-N-PROPYLAMINE										
HEXACHLOROETHANE										
NITROBENZENE						610J				
ISOPHORONE					96J		29J			
NITROPHENOL 2-			68J							
DIMETHYLPHENOL 2,4-	70J			83J	3300	4000J	750	97J	140	99
BENZOIC ACID				300J	190J					6200J
BIS(-2-CHLOROETHOOXY)METHANE										
DICHLOROPHENOL 2,4-									740	910
TRICHLOROBENZENE1,2,4-										
NAPHTHALENE	170		130J	100J	1600	3400J			74	58
CHLOROANILINE 4-										
HEXACHLOROBUTADIENE										
CHLORO-4 METHYLPHENOL 3-										
METHYLNAPHTHALENE 2-	190				2100	5800J				
HEXACHLOROCYCLOPENTADIENE										
TRICHLOROPHENOL 2,4,6-										
TRICHLOROPHENOL 2,4,5-										
CHLORONAPHTHALENE 2-										
NITROANILINE 2-										
DIMETHYL PHTHALATE										
ACANAPHTHYLENE					90J					
NITROANILINE 3-										
ACENAPHTHENE					120J	270J				
DINITROPHENOL 2,4-										
NITROPHENOL 4-										
DIBENZOFURAN					83J					
DINITROTOLUENE 2,4-										
DINITROTOLUENE 2,6-										
DIETHYLPHTHALATE										
CHLOROPHENYL-PHENYLETHER 4-										
FLUORENE					200	500J				
NITROANILINE 4-										
DINITRO 4,6- METHYLPHENOL 2-										
N-NITROSODIPHENYLAMINE (1)					520			65J		
BROMOPHENYL 4- PHENYLETHER										
HEXACHLOROBENZENE										
PENTACHLOROPHENOL										
PHENANTHRENE					530	1500J				
ANTHRACENE					90J	500J				

9TH AVENUE DUMP
GROUNDWATER ORGANICS - ROUND 1
CONCENTRATION (UG/L)

CPL#	ON02954	ON02952	ON02968	ON02968 REANALYSIS	ON02973	ON02978 REANALYSIS	ON02974A	ON02972	ON02955	ON02941
SAMPLE IDENTIFICATION	GX16-02	GX17-02	GX18-02	GX18-02	GX19-02	GX19-02	GX20-02	GX21-02	GX22-02	GX22-02
DATE	12/12/86	12/12/86	12/13/87	12/13/87	12/17/86	12/17/87	12/17/86	12/17/86	12/12/86	12/12/86
DI-N-BUTYLPHTHALATE					54J			73J		
FLUORANTHENE					130	180J				
PYRENE					190	430J				
BUTYLBENZYLPHTHALATE										
DICHLOROBENZIDINE 3,3-										
BENZO(A)ANTHRACENE					86J					
BIS(2-ETHYLEXYL)PHTHALATE					190J	460J				35J
CHRYSENE					74J					
DI-N-OCTYL PHTHALATE										
BENZO(B)FLUORANTHENE					60J					
BENZO(K)FLUORANTHENE					60J					
BENZO(A)PYRENE										
INDENO(1,2,3-CD)PYRENE										
DIBENZ(A,H)ANTHRACENE										
BENZO(G,H,I)PERYLENE										
PESTICIDES/PCB'S										
CRDL MULTIPLE	10		10		100		100	100	100	10
ALPHA-BHC										
BETA-BHC										
DELTA-BHC										
GAMMA-BHC (LINDANE)										
HEPTACHLOR										
ALDRIN										
HEPTACHLOR EPOXIDE										
ENDOSULFAN I										
DIELDRIN										
DDE 4,4-										
ENDRIN										
ENDOSULFAN II										
DDD 4,4										
ENDOSULFAN SULFATE										
DDT 4,4-										
METHOXYCHLOR										
ENDRIN KETONE										
CHLORDANE										
TOXAPHENE										
AROCLOR-1016										
AROCLOR-1221										
AROCLOR-1232										
AROCLOR-1242										
AROCLOR 1248										
AROCLOR 1254										
AROCLOR 1260										

9TH AVENUE DUMP
GROUNDWATER ORGANICS - ROUND 1
CONCENTRATION (UG/L)

CRL#	0N02S62	0N02S71	0N02S70	0N02S63	0N02S66	0N02S02	0N02S01	0N02S03	0N02S74B	0N02S31
SAMPLE IDENTIFICATION	GX23-02	GX24-02	GX25-02	GX26-02	GX27-02	GX28-02	GX29-02	GX30-02	GX31-02	GX32-02
DATE	12/12/86	12/16/86	12/16/86	12/12/86	12/12/86	12/03/86	12/03/86	12/03/86	12/17/86	12/06/86
CRDL MULTIPLE	500	1000	2500	10	5	1	1	2	250	1
VOLATILES										
CHLOROMETHANE										
BROMOMETHANE										
VINYL CHLORIDE									480J	
CHLOROETHANE					19J					100
METHYLENE CHLORIDE	21000B		14000		UJ60B			3J	1600	UJ1JB
ACETONE		UJ16000B	450000B	UJ140B	UJ240BJ	UJ5JB	UJ11B	190B	UJ1300	UJ83B
CARBON DISULFIDE										
DICHLOROETHENE 1,1-										
DICHLOROETHANE 1,1-	3100								930J	
TRANS-1,2-DICHLOROETHENE	62000				8J				7300	4J
CHLOROFORM										
DICHLOROETHANE1,2-	13000									
BUTANONE 2-	17000BJ	UJ15000	1800000B	UJ180B	1300B	UJ4JB	UJ5JB	UJ23B	UJ22000	UJ16
TRICHLORDETHANE 1,1,1-					6J				1600J	
CARBON TETRACHLORIDE										
VINYL ACETATE										
BROMODICHLOROMETHANE										
DICHLOROPROPANE 1,2-										
TRANS-1,3-DICHLOROPROPENE										
TRICHLOROETHENE	78000									
DIBROMOCHLOROMETHANE										
TRICHLOROETHANE1,1,2-										
BENZENE				32J					860J	8?
CIS-1,3-DICHLOROPROPENE										
CHLOROETHYLVINYLETHER 2-										
BROMOFORM										
METHYL4-PENTANONE2-	13000J		140000		800J				4700J	
HEXANONE 2-										
TETRACHLOROETHENE										
TETRACHLOROETHANE1,1,2,2-										
TOLUENE	80000	51000B	7100JB	1500	520			2JB	20000	3J
CHLOROBENZENE										
ETHYLBENZENE	6100	6500		1200	570				1400	2J
STYRENE									780J	
TOTAL XYLENES	22000	18000		2000	620J				8700J	
SEMI-VOLATILES										
CRDL MULTIPLE	5	5	10	1	10			1	50	
PHENOL	630	110J	1500						760	
BIS(-2-CHLOROETHYL)ETHER										
CHLOROPHENOL 2-										

9TH AVENUE DUMP
GROUNDWATER ORGANICS - ROUND 1
CONCENTRATION (UG/L)

CRL#	0N02S62	0N02S71	0N02S70	0N02S63	0N02S66	0N02S02	0N02S01	0N02S03	0N02S748	0N02S3(
SAMPLE IDENTIFICATION	GX23-02	GX24-02	GX25-02	GX26-02	GX27-02	GX28-02	GX29-02	GX30-02	GX31-02	GX32-02
DATE	12/12/86	12/16/86	12/16/86	12/12/86	12/12/86	12/03/86	12/03/86	12/03/86	12/[illegible]6	12/06/86
DICHLOROBENZENE 1,3-										
DICHLOROBENZENE 1,4-										
BENZYL ALCOHOL										
DICHLOROBENZENE 1,2-										
METHYLPHENOL-2	910	120J	1100	4J					[illegible]	
BIS(2-CHLOROISOPROPYL)ETHER										
METHYLPHENOL 4-	620	580	2900						820	
N-NITROSO-DI-N-PROPYLAMINE										
HEXACHLOROETHANE										
NITROBENZENE										
ISOPHORONE										
NITROPHENOL 2-										
DIMETHYLPHENOL 2,4-	57	110J		6J						7J
BENZOIC ACID	4800	2100	13000						2200J	
BIS(2-CHLOROETHOOXY)METHANE										
DICHLOROPHENOL 2,4-	1600									
TRICHLOROBENZENE1,2,4-										
NAPHTHALENE	33J	450		17					1100	
CHLOROANILINE 4-										
HEXACHLOROBUTADIENE										
CHLORO-4 METHYLPHENOL 3-										
METHYLNAPHTHALENE 2-		560							2400	
HEXACHLOROCYCLOPENTADIENE										
TRICHLOROPHENOL 2,4,6-										
TRICHLOROPHENOL 2,4,5-										
CHLORONAPHTHALENE 2-										
NITROANILINE 2-										
DIMETHYL PHTHALATE										
ACANAPHTHYLENE										
NITROANILINE 3-										
ACENAPHTHENE										
DINITROPHENOL 2,4-										
NITROPHENOL 4-										
DIBENZOFURAN										
DINITROTOLUENE 2,4-										
DINITROTOLUENE 2,6-										
DIETHYLPHTHALATE										
CHLOROPHENYL-PHENYLETHER 4-										
FLUORENE										
NITROANILINE 4-										
DINITRO 4,6- METHYLPHENOL 2-										
N-NITROSODIPHENYLAMINE (1)										
BROMOPHENYL 4- PHENYLETHER										
HEXACHLOROBENZENE										
PENTACHLOROPHENOL										
PHENANTHRENE		160							490J	
ANTHRACENE										

[illegible] AVENUE DUMP
GROUNDWATER ORGANICS - ROUND 1
CONCENTRATION (UG/L)

LAB #	DN02S62	DN02S71	DN02S70	DN02S63	DN02S66	DN02S02	DN02S01	DN02S03	DN02S749	DN02S51
SAMPLE IDENTIFICATION	GX23-02	GX24-02	GX25-02	GX26-02	GX27-02	GX28-02	GX29-02	GX30-02	GX31-02	GX32-02
DATE	12/12/86	12/16/86	12/16/86	12/12/86	12/12/86	12/03/86	12/03/86	12/03/86	12/17/86	12/06/86
DI-N-BUTYLPHTHALATE						3J				5J
FLUORANTHENE		53J								
PYRENE										
BUTYLBENZYLPHTHALATE										
DICHLOROBENZIDINE 3,3-										
BENZO(A)ANTHRACENE										
BIS(2-ETHYLEXYL)PHTHALATE									210J	4J
CHRYSENE										
DI-N-OCTYL PHTHALATE										
BENZO(B)FLUORANTHENE										
BENZO(K)FLUORANTHENE										
BENZO(A)PYRENE										
INDENOL(1,2,3-CD)PYRENE										
DIBENZ(A H)ANTHRACENE										
BENZO(G.H.I)PERYLENE										
PESTICIDES/PCB'S										
CRDL MULTIPLE	100	100	100	1	10			1	100	
ALPHA-BHC										
BETA-BHC										
DELTA-BHC										
GAMMA-BHC (LINDANE)										
HEPTACHLOR										
ALDRIN										
HEPTACHLOR EPOXIDE										
ENDOSULFAN 1										
DIELDRIN										
DDE 4,4-										
ENDRIN										
ENDOSULFAN 11										
DDD 4,4										
ENDOSULFAN SULFATE										
DDT 4,4-										
METHOXYCHLOR										
ENDRIN KETONE										
CHLORDANE										
TOXAPHENE										
AROCLOR-1016										
AROCLOR-1221										
AROCLOR-1232										
AROCLOR-1242										
AROCLOR 1248										
AROCLOR 1254										
AROCLOR 1260										

9TH AVENUE DUMP
GROUNDWATER ORGANICS - ROUND 1
CONCENTRATION (UG/L)

CRL#	DN02532	DN02530	DN02538	DN02539	DN02540	DN02537	DN02542	DN02543	DN02519	DN02518
SAMPLE IDENTIFICATION	GX33-02	GX34-02	GX35-02	GX36-02	GX3a-01	GX37-02	GX28-01	GX38-01	GX39-02	GX40-02
DATE	12/06/86	12/06/86	12/10/86	12/10/86	12/10/86	12/10/86	12/10/86	12/10/86	12/05/87	12/05/87
CRDL MULTIPLE	1	1	1	1	5	1	100	1	1	1
VOLATILES										
CHLOROMETHANE										
BROMOMETHANE										
VINYL CHLORIDE										
CHLOROETHANE	5J		10					11		
METHYLENE CHLORIDE	UJ1JB	UJ2JB				85B	UJ170JB	UJ2J		
ACETONE	UJ48B	UJ26B	UJ29B	57B	81JB			UJ13JB	UJ23B	JJ13B
CARBON DISULFIDE										
DICHLOROETHENE 1,1-										
DICHLOROETHANE 1,1-								2J		
TRANS-1,2-DICHLOROETHENE								1J		
CHLOROFORM										
DICHLOROETHANE1,2-										
BUTANONE 2-	83J	UJ23		24J	110B			UJ5JB	UJ6	UJ7
TRICHLOROETHANE 1,1,1-										
CARBON TETRACHLORIDE										
VINYL ACETATE										
BROMODICHLOROMETHANE										
DICHLOROPROPANE 1,2-										
TRANS-1,3-DICHLOROPROPENE										
TRICHLOROETHENE										
DIBROMOCHLOROMETHANE										
TRICHLOROETHANE1,1,2-										
BENZENE	2J		16	2J				1J		
CIS-1,3-DICHLOROPROPENE										
CHLOROETHYLVINYLETHER 2-										
BROMOFORM										
METHYL4-PENTANONE2-				8J	34J					
HEXANONE 2-										
TETRACHLOROETHENE										
TETRACHLOROETHANE1,1,2,2-										
TOLUENE	1J	2J		2J	5J					
CHLOROBENZENE										
ETHYLBENZENE										
STYRENE										
TOTAL XYLENES										
SEMI-VOLATILES										
CRDL MULTIPLE	1		1	50	25	5	1			
PHENOL										
BIS(-2-CHLOROETHYL)ETHER										
CHLOROPHENOL 2-										

9TH AVENUE DUMP
GROUNDWATER ORGANICS - ROUND 1
CONCENTRATION (UG/L)

CRL#	DN02S32	DN02S30	DN02S38	DN02S39	DN02S40	DN02S37	DN02S42	DN02S43	DN02S19	DN02S18
SAMPLE IDENTIFICATION	GX33-02	GX34-02	GX35-02	GX36-02	GX36-91	GX37-02	GX38-02	GX38-91	GX39-02	GX40-02
DATE	12/06/86	12/06/86	12/10/86	12/10/86	12/10/86	12/10/86	12/10/86	12/10/86	12/05/87	12/05/87
DICHLOROBENZENE 1,3-										
DICHLOROBENZENE 1,4-										
BENZYL ALCOHOL										
DICHLOROBENZENE 1,2-										
METHYLPHENOL-2										
BIS(2-CHLORDISOPROPYL)ETHER										
METHYLPHENOL 4-										
N-NITROSO-DI-N-PROPYLAMINE										
HEXACHLOROETHANE										
NITROBENIENE										
ISOPHORONE										
NITROPHENOL 2-										
DIMETHYLPHENOL 2,4-										
BENZOIC ACID		13J					7&J			
BIS(-2-CHLORDETHOOXY)METHANE										
DICHLOROPHENOL 2,4-										
TRICHLOROBENZENE1,2,4-										
NAPHTHALENE										
CHLOROANILINE 4-										
HEXACHLOROBUTADIENE										
CHLORO-4 METHYLPHENOL 3-										
METHYLNAPHTHALENE 2-										
HEXACHLOROCYCLOPENTADIENE										
TRICHLOROPHENOL 2,4,6-										
TRICHLOROPHENOL 2,4,5-										
CHLORONAPHTHALENE 2-										
NITROANILINE 2-										
DIMETHYL PHTHALATE										
ACANAPHTHYLENE										
NITROANILINE 3-										
ACENAPHTHENE										
DINITROPHENOL 2,4-										
NITROPHENOL 4-										
DIBENZOFURAN										
DINITROTOLUENE 2,4-										
DINITROTOLUENE 2,6-										
DIETHYLPHTHALATE										
CHLOROPHENYL-PHENYLETHER 4-										
FLUORENE										
NITROANILINE 4-										
DINITRO 4,6- METHYLPHENOL 2-										
N-NITROSODIPHENYLAMINE (1)										
BROMOPHENYL 4- PHENYLETHER										
HEXACHLOROBENZENE										
PENTACHLOROPHENOL										
PHENANTHRENE										
ANTHRACENE										

9TH AVENUE DUMP
GROUNDWATER ORGANICS - ROUND 1
CONCENTRATION (UG/L)

LAB #	GN02832	GN02830	GN02838	GN02839	GN02840	GN02837	GN02842	GN02843	GN02819	GN02818
SAMPLE IDENTIFICATION	BKGS-02	BKG4-02	BKG5-01	BKG6-02	BKG6-D1	BKG7-02	BKG8-02	BKG8-D1	BKG9-02	BKA0-02
DATE	12/06/86	12/06/86	12/10/86	12/10/86	12/10/86	12/10/86	12/10/86	12/10/86	12/05/86	12/05/86
DI-N-BUTYLPHTHALATE		4J								
FLUORANTHENE										
PYRENE										
BUTYLBENZYLPHTHALATE										
DICHLOROBENZIDINE 3,3-										
BENZO(A)ANTHRACENE										
BIS(2-ETHYLEXYL)PHTHALATE	5J	6J					3J	2J	3J	2J
CHRYSENE										
DI-N-OCTYL PHTHALATE										
BENZO(B)FLUORANTHENE										
BENZO(K)FLUORANTHENE										
BENZO(A)PYRENE										
INDENOL(1,2,3-CD)PYRENE										
DIBENZ(A H)ANTHRACENE										
BENZO(G,H,I)PERYLENE										
PESTICIDES/PCB'S										
CROL MULTIPLE	10		10	10	10	10	1			
ALPHA-BHC										
BETA-BHC										
DELTA-BHC										
GAMMA-BHC (LINDANE)										
HEPTACHLOR										
ALDRIN										
HEPTACHLOR EPOXIDE										
ENDOSULFAN 1										
DIELDRIN										
DDE 4,4-										
ENDRIN										
ENDOSULFAN 11										
DDD 4,4										
ENDOSULFAN SULFATE										
DDT 4,4-										
METHOXYCHLOR										
ENDRIN KETONE										
CHLORDANE										
TOXAPHENE										
AROCLOR-1016										
AROCLOR-1221										
AROCLOR-1232										
AROCLOR-1242										
AROCLOR 1248										
AROCLOR 1254										
AROCLOR 1260										

9TH AVENUE DUMP
GROUNDWATER ORGANICS - ROUND 1
CONCENTRATION (UG/L)

CRL#	DN02S27	DN02S24	DN02S29	DN02S25	DN02S28	DN02S14	DN02S17	DN02S16	DN02S06	DN02S07
SAMPLE IDENTIFICATION	GX41-02	GX42-02	GX43-02	GX44-02	GX44-91	GX45-02	GX46-02	GX47-02	GX48-02	GX4[illegible]
DATE	12/06/86	12/06/86	12/06/86	12/06/86	12/06/86	12/05/87	12/05/87	12/05/87	12/04/86	12/04/86
CRDL MULTIPLE	1	1	1	1	1	1	1	1	1	1
VOLATILES										
CHLOROMETHANE										
BROMOMETHANE										
VINYL CHLORIDE				14	9J					
CHLOROETHANE										
METHYLENE CHLORIDE	UJ1JB		UJ2JB							
ACETONE	UJ14B	UJ4JB	UJ10B	UJ15B	UJ12B	UJ5JB	UJ13B	UJ14B	UJ12B	UJ31B
CARBON DISULFIDE										
DICHLOROETHENE 1,1-										
DICHLOROETHANE 1,1-									9	
TRANS-1,2-DICHLOROETHENE									3J	
CHLOROFORM										
DICHLOROETHANE1,2-										
BUTANONE 2-		4		UJ5JB	6JB	UJ4J			UJ5	UJ5JB
TRICHLOROETHANE 1,1,1-										
CARBON TETRACHLORIDE										
VINYL ACETATE										
BROMODICHLOROMETHANE										
DICHLOROPROPANE 1,2-										
TRANS-1,3-DICHLOROPROPENE										
TRICHLOROETHENE									1J	
DIBROMOCHLOROMETHANE										
TRICHLOROETHANE1,1,2-										
BENZENE						6			4J	
CIS-1,3-DICHLOROPROPENE										
CHLOROETHYLVINYLETHER 2-										
BROMOFORM										
METHYL4-PENTANONE2-										
HEXANONE 2-										
TETRACHLOROETHENE										
TETRACHLOROETHANE1,1,2,2-										
TOLUENE	1J	1J	2J	1J		3J	1J		3J	
CHLOROBENZENE										
ETHYLBENZENE									17	
STYRENE										
TOTAL XYLENES									4J	
SEMI-VOLATILES										
CRDL MULTIPLE										
PHENOL	3J			4J	4J					
BIS(-2-CHLOROETHYL)ETHER										
CHLOROPHENOL 2-										

9TH AVENUE DUMP
GROUNDWATER ORGANICS - ROUND 1
CONCENTRATION (UG/L)

TRL#	0N02S27	0N02S24	0N02S29	0N02S25	0N01S28	0N02S14	0N02S17	0N02S16	0N02S06	0N02S07
SAMPLE IDENTIFICATION	SX41-02	SX42-02	SX43-02	SX44-02	SX44-91	SX45-02	SX46-02	SX47-02	SX48-02	SX49-02
DATE	12/06/86	12/06/86	12/06/86	12/06/86	12/06/86	12/05/87	12/05/87	12/04/86	12/04/86	
DICHLOROBENZENE 1,3-										
DICHLOROBENZENE 1,4-										
BENZYL ALCOHOL										
DICHLOROBENZENE 1,2-										
METHYLPHENOL-2										
BIS(2-CHLOROISOPROPYL)ETHER										
METHYLPHENOL 4-										
N-NITROSO-DI-N-PROPYLAMINE										
HEXACHLOROETHANE										
NITROBENZENE										
ISOPHORONE								1J	1J	
NITROPHENOL 2-										
DIMETHYLPHENOL 2,4-										
BENZOIC ACID	11J		13J							
BIS(2-CHLOROETHOXY)METHANE										
DICHLOROPHENOL 2,4-										
TRICHLOROBENZENE1,2,4-										
NAPHTHALENE										
CHLOROANILINE 4-										
HEXACHLOROBUTADIENE										
CHLORO-4 METHYLPHENOL 3-										
METHYLNAPHTHALENE 2-										
HEXACHLOROCYCLOPENTADIENE										
TRICHLOROPHENOL 2,4,6-										
TRICHLOROPHENOL 2,4,5-										
CHLORONAPHTHALENE 2-										
NITROANILINE 2-										
DIMETHYL PHTHALATE										
ACENAPHTHYLENE										
NITROANILINE 3-										
ACENAPHTHENE										
DINITROPHENOL 2,4-										
NITROPHENOL 4-	4J									
DIBENZOFURAN										
DINITROTOLUENE 2,4-										
DINITROTOLUENE 2,6-										
DIETHYLPHTHALATE										
CHLOROPHENYL-PHENYLETHER 4-										
FLUORENE										
NITROANILINE 4-										
DINITRO 4,6- METHYLPHENOL 2-										
N-NITROSODIPHENYLAMINE (1)										
BROMOPHENYL 4- PHENYLETHER										
HEXACHLOROBENZENE										
PENTACHLOROPHENOL										
PHENANTHRENE										
ANTHRACENE										

9TH AVENUE DUMP
GROUNDWATER ORGANICS - ROUND 1
CONCENTRATION (UG/L)

CRL#	DN02S27	DN02S24	DN02S29	DN02S25	DN02S28	DN02S14	DN02S17	DN02S16	DN02S06	DN02S07
SAMPLE IDENTIFICATION	GX41-02	GX42-02	GX43-02	GX44-02	GX44-91	GX45-02	GX46-02	GX47-02	GX48-02	GX49-02
DATE	12/06/86	12/06/86	12/06/86	12/06/86	12/06/86	12/05/87	12/05/87	12/05/87	12/04/86	12/04/86
DI-N-BUTYLPHTHALATE										
FLUORANTHENE										
PYRENE										
BUTYLBENZYLPHTHALATE			81	6J	5J					
DICHLOROBENZIDINE 3,3-										
BENZO(A)ANTHRACENE										
BIS(2-ETHYLEXYL)PHTHALATE			6J			2J	5J	2J		
CHRYSENE										
DI-N-OCTYL PHTHALATE										
BENZO(B)FLUORANTHENE										
BENZO(K)FLUORANTHENE										
BENZO(A)PYRENE										
INDENOL(1,2,3-CD)PYRENE										
DIBENZ(A H)ANTHRACENE										
BENZO(G,H,I)PERYLENE										
PESTICIDES/PCB'S										
CRDL MULTIPLE										
ALPHA-BHC										
BETA-BHC										
DELTA-BHC										
GAMMA-BHC (LINDANE)										
HEPTACHLOR										
ALDRIN										
HEPTACHLOR EPOXIDE										
ENDOSULFAN 1										
DIELDRIN										
DDE 4,4-										
ENDRIN										
ENDOSULFAN 11										
DDD 4,4										
ENDOSULFAN SULFATE										
DDT 4,4-										
METHOXYCHLOR										
ENDRIN KETONE										
CHLORDANE										
TOXAPHENE										
AROCLOR-1016										
AROCLOR-1221										
AROCLOR-1232										
AROCLOR-1242										
AROCLOR 1248										
AROCLOR 1254										
AROCLOR 1260										

9TH AVENUE DUMP
GROUNDWATER ORGANICS - ROUND 1
CONCENTRATION (UG/L)

CRL#	SN02S04	SN02S05	SN02S09	SN02S10	SN02S11	SN02S22	SN02S76	SN02S64	SN02S58	SN02S43
SAMPLE IDENTIFICATION	SB53-02	SB51-02	SB52-02	SB53-02	SB54-02	SB55-02	SB56-02	SB57-02	SB58-02	SB59-02
DATE	12/04/86	12/04/86	12/04/86	12/04/86	12/04/86	12/05/86	12/17/86	12/12/86	12/11/86	12/11/86
CRQL MULTIPLE	1	1	1	1	1	1	250	50	1250	50
VOLATILES										
CHLOROMETHANE										
BROMOMETHANE										
VINYL CHLORIDE							720J			
CHLOROETHANE										
METHYLENE CHLORIDE							110000	UJ708J		
ACETONE	UJ19B	UJ12B	UJ14B	UJ14B	UJ8BJ	23B	UJ1600	UJ7208J	UJ8500JB	UJ1500B
CARBON DISULFIDE										
DICHLOROETHENE 1,1-										
DICHLOROETHANE 1,1-							490J	140J		130J
TRANS-1,2-DICHLOROETHENE							33000			
CHLOROFORM							280J			
DICHLOROETHANE1,2-										
BUTANONE 2-	UJ8	UJ5	UJ4	UJ5J	UJ5	UJ5J	UJ9900	UJ470	UJ3300	790UJB
TRICHLOROETHANE 1,1,1-							850J	130J		
CARBON TETRACHLORIDE										
VINYL ACETATE										
BROMODICHLOROMETHANE										
DICHLOROPROPANE 1,2-										
TRANS-1,3-DICHLOROPROPENE										
TRICHLOROETHENE							1500J			
DIBROMOCHLOROMETHANE										
TRICHLOROETHANE1,1,2-										
BENZENE							660J			470J
CIS-1,3-DICHLOROPROPENE										
CHLOROETHYLVINYLETHER 2-										
BROMOFORM										
METHYL4-PENTANONE2-							15000J			2700J
HEXANONE 2-										
TETRACHLOROETHENE							620J			
TETRACHLOROETHANE1,1,2,2-										
TOLUENE	7		1J	1J		2J	26000	5100	38000B	1000
CHLOROBENZENE										
ETHYLBENZENE							3000	2600	4200J	1100
STYRENE										
TOTAL XYLENES	3J						14000J	6400J	13000	6700
SEMI-VOLATILES										
CRQL MULTIPLE							15	10	5	
PHENOL	99						2600		88	
BIS(-2-CHLOROETHYL)ETHER										
CHLOROPHENOL 2-										

9TH AVENUE DUMP
GROUNDWATER ORGANICS - ROUND 1
CONCENTRATION (UG/L)

CRL#	DN02S04	DN02S05	DN02S09	DN02S10	DN02S11	DN02S22	DN02S75	DN02S64	DN02S58	DN02S48
SAMPLE IDENTIFICATION	GX50-02	GX51-02	GX52-02	GX53-02	GX54-02	GX55-02	GX56-02	GX57-02	GX58-02	GX59-02
DATE	12/04/86	12/04/86	12/04/86	12/04/86	12/04/86	12/05/87	12/17/86	12/12/86	12/15/86	12/12/86
DICHLOROBENZENE 1,3-										
DICHLOROBENZENE 1,4-										
BENZYL ALCOHOL										
DICHLOROBENZENE 1,2-										
METHYLPHENOL-2							1500		110	
BIS(2-CHLOROISOPROPYL)ETHER										
METHYLPHENOL 4-							4900		560	350J
N-NITROSO-DI-N-PROPYLAMINE										
HEXACHLOROETHANE										
NITROBENZENE										
ISOPHORONE							570			
NITROPHENOL 2-										
DIMETHYLPHENOL 2,4-							2700		99	
BENZOIC ACID							1900		1100	
BIS(-2-CHLOROETHOOXY)METHANE										
DICHLOROPHENOL 2,4-										
TRICHLOROBENZENE1,2,4-							77J			
NAPHTHALENE	120						1100		350	
CHLOROANILINE 4-										
HEXACHLOROBUTADIENE										
CHLORO-4 METHYLPHENOL 3-										
METHYLNAPHTHALENE 2-	7J						3900		400	
HEXACHLOROCYCLOPENTADIENE										
TRICHLOROPHENOL 2,4,6-										
TRICHLOROPHENOL 2,4,5-										
CHLORONAPHTHALENE 2-										
NITROANILINE 2-										
DIMETHYL PHTHALATE										
ACANAPHTHYLENE	2J									
NITROANILINE 3-										
ACENAPHTHENE	2J						140J		24J	
DINITROPHENOL 2,4-										
NITROPHENOL 4-										
DIBENZOFURAN	3J								19J	
DINITROTOLUENE 2,4-										
DINITROTOLUENE 2,6-										
DIETHYLPHTHALATE										
CHLOROPHENYL-PHENYLETHER 4-										
FLUORENE	4J						170		31J	
NITROANILINE 4-										
DINITRO 4,6- METHYLPHENOL 2-										
N-NITROSODIPHENYLAMINE (1)										
BROMOPHENYL 4- PHENYLETHER										
HEXACHLOROBENZENE										
PENTACHLOROPHENOL	64									
PHENANTHRENE	7J						610		100	
ANTHRACENE							110J		17J	

9TH AVENUE DUMP
GROUNDWATER ORGANICS - ROUND 1
CONCENTRATION (UG/L)

CRL#	3N02S04	3N02S05	3N02S09	3N02S10	3N02S11	3N02S22	3N02S75	3N02S64	3N02S58	3N02S48
SAMPLE IDENTIFICATION	SX50-02	SX51-02	SX52-02	SX53-02	SX54-02	SX55-02	SX56-02	SX57-02	SX58-02	SX59-02
DATE	12/04/86	12/04/86	12/04/86	12/04/86	12/04/86	12/05/86	12/17/86	12/12/86	12/12/86	12/12/86
DI-N-BUTYLPHTHALATE							100		13J	
FLUORANTHENE	2J						79J		27J	
PYRENE	2J						87J		33J	
BUTYLBENZYLPHTHALATE										
DICHLOROBENZIDINE 3,3-										
BENZO(A)ANTHRACENE									15J	
BIS(2-ETHYLEXYL)PHTHALATE				3J	2J	4J	530J			
CHRYSENE									15J	
DI-N-OCTYL PHTHALATE							110J			
BENZO(B)FLUORANTHENE									18J	
BENZO(K)FLUORANTHENE									16J	
BENZO(A)PYRENE									11J	
INDENOL(1,2,3-CD)PYRENE										
DIBENZ(A,H)ANTHRACENE										
BENZO(G,H,I)PERYLENE										
PESTICIDES/PCB'S										
CRDL MULTIPLE							100	10	10	
ALPHA-BHC										
BETA-BHC										
DELTA-BHC										
GAMMA-BHC (LINDANE)										
HEPTACHLOR										
ALDRIN										
HEPTACHLOR EPOXIDE										
ENDOSULFAN 1										
DIELDRIN										
DDE 4,4-										
ENDRIN										
ENDOSULFAN II										
DDD 4,4										
ENDOSULFAN SULFATE										
DDT 4,4-										
METHOXYCHLOR										
ENDRIN KETONE										
CHLORDANE										
TOXAPHENE										
AROCLOR-1016										
AROCLOR-1221										
AROCLOR-1232										
AROCLOR-1242										
AROCLOR 1248		300								
AROCLOR 1254										
AROCLOR 1260										

9TH AVENUE DUMP
GROUNDWATER ORGANICS - ROUND 1
CONCENTRATION (UG/L)

SDG#	DN02S23	DN02S69	DN02S47	DN02S13	DN02S15	DN02S65	DN02S12	DN02S73	DN02S26	DN02S77
SAMPLE IDENTIFICATION	GB2-02	GB3-02	GB4-02	GBW3-02	GBW4-02	BB02-02	GBB01-02	GBB03-02	GSB01-02	GSB03-02
DATE	12/05/87	12/16/86	12/11/86	12/04/86	12/05/87	12/12/86	12/04/86	12/16/86	12/05/87	12/17/86
CRDL MULTIPLE	1	1000	50	1	1	1	1	1	1	5
VOLATILES										
CHLOROMETHANE										
BROMOMETHANE										
VINYL CHLORIDE										
CHLOROETHANE										
METHYLENE CHLORIDE		24000	110J					1J	1JB	6J
ACETONE	UJ6JB	UJ48000B	UJ390JB	UJ90B	120B	22B	2JB	11B	14B	39R
CARBON DISULFIDE										
DICHLOROETHENE 1,1-										
DICHLOROETHANE 1,1-		1800J								
TRANS-1,2-DICHLOROETHENE		6900								
CHLOROFORM										
DICHLOROETHANE1,2-										
BUTANONE 2-	UJ5	UJ9600	UJ460	UJ6	UJ5J	18BJ	5JB			
TRICHLOROETHANE 1,1,1-		2000J								
CARBON TETRACHLORIDE										
VINYL ACETATE										
BROMODICHLOROMETHANE										
DICHLOROPROPANE 1,2-										
TRANS-1,3-DICHLOROPROPENE										
TRICHLOROETHENE										
DIBROMOCHLOROMETHANE										
TRICHLOROETHANE1,1,2-										
BENZENE		1600J								
CIS-1,3-DICHLOROPROPENE										
CHLOROETHYLVINYLETHER 2-										
BROMOFORM										
METHYL4-PENTANONE2-			560							
HEXANONE 2-										
TETRACHLOROETHENE										
TETRACHLOROETHANE1,1,2,2-										
TOLUENE	1J	610008		5			1J	1JB	2J	
CHLOROBENZENE										
ETHYLBENZENE		4500J	1100							
STYRENE										
TOTAL XYLENES			8400							
SEMI-VOLATILES										
CRDL MULTIPLE		10	3	-						1
PHENOL		690								
BIS(-2-CHLOROETHYL)ETHER										
CHLOROPHENOL 2-										

9TH AVENUE DUMP
GROUNDWATER ORGANICS - ROUND 1
CONCENTRATION UG/L)

LAB #	3N02903	3N02896	3N02847	3N02813	3N02815	3N02865	3N02812	3N02873	3N02826	3N02[illegible]
SAMPLE IDENTIFICATION	SB2-02	SB3-02	SB4-02	SBW3-02	SBW4-02	SB02-02	SB201-02	SB203-02	SB204-02	SB2[illegible]-02
DATE	12/05/87	12/16/86	12/11/86	12/04/86	12/05/87	12/12/86	12/04/86	12/16/86	12/05/87	12/17/86
DICHLOROBENZENE 1,3-										
DICHLOROBENZENE 1,4-										
BENZYL ALCOHOL										
DICHLOROBENZENE 1,2-										
METHYLPHENOL-2		800	10J							
BIS(2-CHLOROISOPROPYL)ETHER										
METHYLPHENOL 4-		970	12J							
N-NITROSO-DI-N-PROPYLAMINE										
HEXACHLOROETHANE										
NITROBENZENE										
ISOPHORONE										
NITROPHENOL 2-										
DIMETHYLPHENOL 2,4-		450	110							
BENZOIC ACID		3800								
BIS(-2-CHLOROETHOOXY)METHANE										
DICHLOROPHENOL 2,4-										
TRICHLOROBENZENE1,2,4-										
NAPHTHALENE		190	19J							
CHLOROANILINE 4-										
HEXACHLOROBUTADIENE										
CHLORO-4 METHYLPHENOL 3-										
METHYLNAPHTHALENE 2-			10J							
HEXACHLOROCYCLOPENTADIENE										
TRICHLOROPHENOL 2,4,6-										
TRICHLOROPHENOL 2,4,5-										
CHLORONAPHTHALENE 2-										
NITROANILINE 2-										
DIMETHYL PHTHALATE										
ACANAPHTHYLENE										
NITROANILINE 3-										
ACENAPHTHENE										
DINITROPHENOL 2,4-										
NITROPHENOL 4-										
DIBENZOFURAN										
DINITROTOLUENE 2,4-										
DINITROTOLUENE 2,6-										
DIETHYLPHTHALATE										
CHLOROPHENYL-PHENYLETHER 4-										
FLUORENE										
NITROANILINE 4-										
DINITRO 4,6- METHYLPHENOL 2-										
N-NITROSODIPHENYLAMINE (1)										
BROMOPHENYL 4- PHENYLETHER										
HEXACHLOROBENZENE										
PENTACHLOROPHENOL										
PHENANTHRENE										
ANTHRACENE										

9TH AVENUE DUMP
GROUNDWATER ORGANICS - ROUND 1
CONCENTRATION (UG/L)

CRL#	DN02S23	DN02S69	DN02S47	DN02S13	DN02S15	DN02S65	DN02S12	DN02S73	DN02S26	DN02S77
SAMPLE IDENTIFICATION	GB2-02	GB3-02	GB4-02	GBW3-02	GBW4-02	BB02-02	GBB01-02	GBB03-02	GSB01-02	GSB03-02
DATE	12/05/87	12/16/86	12/11/86	12/04/86	12/05/87	12/12/86	12/04/86	12/16/86	12/05/87	12/17/86
DI-N-BUTYLPHTHALATE										
FLUORANTHENE										
PYRENE										
BUTYLBENZYLPHTHALATE										
DICHLOROBENZIDINE 3,3-										
BENZO(A)ANTHRACENE										
BIS(2-ETHYLEXYL)PHTHALATE	3J			3J						
CHRYSENE										
DI-N-OCTYL PHTHALATE										
BENZO(B)FLUORANTHENE										
BENZO(K)FLUORANTHENE										
BENZO(A)PYRENE										
INDENOL(1,2,3-CD)PYRENE										
DIBENZ(A H)ANTHRACENE										
BENZO(G,H,I)PERYLENE										
PESTICIDES/PCB'S										
CRDL MULTIPLE		100	10							1
ALPHA-BHC										
BETA-BHC										
DELTA-BHC										
GAMMA-BHC (LINDANE)										
HEPTACHLOR										
ALDRIN										
HEPTACHLOR EPOXIDE										
ENDOSULFAN 1										
DIELDRIN										
DDE 4,4-										
ENDRIN										
ENDOSULFAN 11										
DDD 4,4										
ENDOSULFAN SULFATE										
DDT 4,4-										
METHOXYCHLOR										
ENDRIN KETONE										
CHLORDANE										
TOXAPHENE										
AROCLOR-1016										
AROCLOR-1221										
AROCLOR-1232										
AROCLOR-1242										
AROCLOR 1248										
AROCLOR 1254										
AROCLOR 1260										

7TH AVENUE DUMP
GROUNDWATER ORGANICS - ROUND 1
CONCENTRATION (UG/L)

SDG#	GN02941
SAMPLE IDENTIFICATION	8802-02
DATE	12/10/86
CROL MULTIPLE	1
VOLATILES	
CHLOROMETHANE	
BROMOMETHANE	
VINYL CHLORIDE	
CHLOROETHANE	
METHYLENE CHLORIDE	1J
ACETONE	33B
CARBON DISULFIDE	
DICHLOROETHENE 1,1-	
DICHLOROETHANE 1,1-	
TRANS-1,2-DICHLOROETHENE	
CHLOROFORM	
DICHLOROETHANE1,2-	
BUTANONE 2-	11RB
TRICHLOROETHANE 1,1,1-	
CARBON TETRACHLORIDE	
VINYL ACETATE	
BROMODICHLOROMETHANE	
DICHLOROPROPANE 1,2-	
TRANS-1,3-DICHLOROPROPENE	
TRICHLOROETHENE	
DIBROMOCHLOROMETHANE	
TRICHLOROETHANE1,1,2-	
BENZENE	
CIS-1,3-DICHLOROPROPENE	
CHLOROETHYLVINYLETHER 2-	
BROMOFORM	
METHYL4-PENTANONE2-	
HEXANONE 2-	
TETRACHLOROETHENE	
TETRACHLOROETHANE1,1,2,2-	
TOLUENE	1J
CHLOROBENZENE	
ETHYLBENZENE	
STYRENE	
TOTAL XYLENES	
SEMI-VOLATILES	
CROL MULTIPLE	
PHENOL	
BIS(-2-CHLOROETHYL)ETHER	
CHLOROPHENOL 2-	

9TH AVENUE DUMP
GROUNDWATER ORGANICS - ROUND 1
CONCENTRATION (UG/L)

CRL#	DN02S41
SAMPLE IDENTIFICATION	SB02-02
DATE	12/10/86
DICHLOROBENZENE 1,3-	
DICHLOROBENZENE 1,4-	
BENZYL ALCOHOL	
DICHLOROBENZENE 1,2-	
METHYLPHENOL-2	
BIS(2-CHLOROISOPROPYL)ETHER	
METHYLPHENOL 4-	
N-NITROSO-DI-N-PROPYLAMINE	
HEXACHLOROETHANE	
NITROBENZENE	
ISOPHORONE	
NITROPHENOL 2-	
DIMETHYLPHENOL 2,4-	
BENZOIC ACID	
BIS(-2-CHLOROETHOOXY)METHANE	
DICHLOROPHENOL 2,4-	
TRICHLOROBENZENE1,2,4-	
NAPHTHALENE	
CHLOROANILINE 4-	
HEXACHLOROBUTADIENE	
CHLORO-4 METHYLPHENOL 3-	
METHYLNAPHTHALENE 2-	
HEXACHLORDCYCLOPENTADIENE	
TRICHLOROPHENOL 2,4,6-	
TRICHLOROPHENOL 2,4,5-	
CHLORONAPHTHALENE 2-	
NITROANILINE 2-	
DIMETHYL PHTHALATE	
ACANAPHTHYLENE	
NITROANILINE 3-	
ACENAPHTHENE	
DINITROPHENOL 2,4-	
NITROPHENOL 4-	
DIBENZOFURAN	
DINITROTOLUENE 2,4-	
DINITROTOLUENE 2,6-	
DIETHYLPHTHALATE	
CHLOROPHENYL-PHENYLETHER 4-	
FLUORENE	
NITROANILINE 4-	
DINITRO 4,6- METHYLPHENOL 2-	
N-NITROSODIPHENYLAMINE (1)	
BROMOPHENYL 4- PHENYLETHER	
HEXACHLOROBENZENE	
PENTACHLOROPHENOL	
PHENANTHRENE	
ANTHRACENE	

9TH AVENUE DUMP
GROUNDWATER ORGANICS - ROUND 1
CONCENTRATION (UG/L)

CRL#	3N01841
SAMPLE IDENTIFICATION	33[illegible]-02
DATE	12/19/86

DI-N-BUTYLPHTHALATE	
FLUORANTHENE	
PYRENE	
BUTYLBENZYLPHTHALATE	
DICHLOROBENZIDINE 3,3-	
BENZO(A)ANTHRACENE	
BIS(2-ETHYLEXYL)PHTHALATE	
CHRYSENE	
DI-N-OCTYL PHTHALATE	
BENZO(B)FLUORANTHENE	
BENZO(K)FLUORANTHENE	
BENZO(A)PYRENE	
INDENOL(1,2,3-CD)PYRENE	
DIBENZ(A,H)ANTHRACENE	
BENZO(G,H,I)PERYLENE	
PESTICIDES/PCB'S	
CROL MULTIPLE	
ALPHA-BHC	
BETA-BHC	
DELTA-BHC	
GAMMA-BHC (LINDANE)	
HEPTACHLOR	
ALDRIN	
HEPTACHLOR EPOXIDE	
ENDOSULFAN 1	
DIELDRIN	
DDE 4,4-	
ENDRIN	
ENDOSULFAN 11	
DDD 4,4	
ENDOSULFAN SULFATE	
DDT 4,4-	
METHOXYCHLOR	
ENDRIN KETONE	
CHLORDANE	
TOXAPHENE	
AROCLOR-1016	
AROCLOR-1221	
AROCLOR-1232	
AROCLOR-1242	
AROCLOR 1248	
AROCLOR 1254	
AROCLOR 1260	

9th AVENUE DUMP
DATA QUALIFIERS

B = Detected in method blank as well as the sample, possible/probable blank contamination.

U = The material was analzyed for but was not detected. The associated numerical value is the quantitation limit.

J = The associated numerical value is an estimated quantity because quality control criteria were not met.

UJ = The associated numerical value is the estimated quantitation limit.

R = The data is unusable because quality control criteria were not met.

N = The instrument detection limit exceeded contract required detection limit (CRDL), and the associated value is the detection limit.

[] = Bracketed numbers are concentrations quantified at below contract required detection limits (CRDL).

CRDL Multiple = is a correction factor which takes into account (based on matrix) % moisture, sample size, unit conversions and dilutions. The correction factor is based on the low level detection limit.

Reanalysis at GX04, GX08, GX18 and GX19 was done on semi-volatile data only.

- One qualifier found to the left of the compounds concentration is from Warzyn Engineering's data validation. Those qualifiers to the right of the value are from the contract laboratory and/or EPA's data validation.

9TH AVENUE DUMP
INORGANIC WATER TEST
CONCENTRATION (MG/L)

CRL#	ON02S23	ON02S69	ON02S47	ON02S13	ON02S15	ON02S49	ON02S51	ON02S50	ON02S59	ON02S67
SAMPLE IDENTIFICATION	GB02-02	GB03-02	GB04-02	GBW3-02	GBW4-02	GI01-02	GX02-02	GI02-91	GI03-02	GI03-91
DATE	12/29/86	01/14/87	01/09/87	12/29/86	12/29/86	01/09/87	01/09/87	01/09/87	01/09/87	01/09/87
CHLORIDE	97.0J	250.J	525.0J	10.0J	272.0J	20000	8750.0J	10000J	2250	825
SULFATE	180	44	283	470	565	28.3	29.9	33.7	175.1J	283.2J
NITRATE/NITRITE	0.45J	1.2	0.02U	0.02U	0.21J	0.02U	0.02U	0.02U	0.02	0.02U
TOTAL ORGANIC CARBON	137.2	2342	201.7	228	90.6	106.5	104.5J	70.4J	799.6	753.8
BIOCHEMICAL OXYGEN DEMAND	9J	>1353	47	3J	3J	9	4	1	149	126
CHEMICAL OXYGEN DEMAND	72	4820	360	92	108	700	200.0J	270.0J	704.0J	524.0J
AMMONIA	1.78	6.7	134	2.61	1.8	11.2	15.1	12.7	316.0J	181.0J
FLUORIDE			0.29			0.06	0.13	0.11	0.19	0.13
TOTAL SUSPENDED SOLIDS	125	95	197	64	168	187	108.0J	67.0J	29	36
ALKALINITY	658	700	650	706	708	550	350	400	3422	3400
TOTAL KJELDAHL NITROGEN	3.38	45.30	148.0J	4.50	1.73	11.80J	16.10J	13.80J	328.0J	201.0J
TOTAL PHOSPHATE	0.05	0.03	0.04J	0.05	0.050R	0.03J	0.04J	0.05J	0.05J	0.03J
OIL & GREASE	5.0U	32.40	18.00	5.0U	6.25U	982.8	5U	7.63	5U	5U

9TH AVENUE DUMP
INORGANIC WATER TEST
CONCENTRATION (MG/L)

CRL#	DN02S60	DN02SJ5	DN02SJ4	DN02S36	DN02S46	DN02S44	DN02S21	DN02S20	DN02S08	DN02SJ3
SAMPLE IDENTIFICATION	GX04-02	GX05-02	GX06-02	GX07-02	GX08-02	GX09-02	GX10-02	GX10-91	GX11-02	GX12-02
DATE	01/09/87	01/09/87	01/09/87	01/09/87	01/09/87	01/09/87	12/29/86	12/29/86	12/29/86	12/29/86
CHLORIDE	825.0J	515	5.0J	225.0J	275.0J	1600	728.0J	727.0J	28.0J	47.0J
SULFATE	19.1	71.6	28.9	242	23.9	24.6	610	530	14.5	7.3
NITRATE/NITRITE	0.02	0.02U	0.02U	0.02U	0.02U	0.02U	0.06J	0.02UJ	0.04J	0.08J
TOTAL ORGANIC CARBON	1765.8	511	1019	307.9	1698.8	735.9	218.5	232.6	216	179.2
BIOCHEMICAL OXYGEN DEMAND	1728	34	14	437	1545	52	100.0J	76.0J	17.5	48.5J
CHEMICAL OXYGEN DEMAND	3390	672	640	1460	4040	1000	319.0J	498.0J	112	179
AMMONIA	315	218	203	67	92	335	291.0J	359.0J	23.1	10.5
FLUORIDE	0.7	0.12	0.7	0.56	0.46	0.26				
TOTAL SUSPENDED SOLIDS	124	53	141	893	266	159	279	252	153	509
ALKALINITY	2150	3210	2754	1250	1200	3498	702	666	632	660
TOTAL KJELDAHL NITROGEN	350.0J	240.0J	267.0J	85.7J	129.0J	370.0J	308	350	39.5	11.4
TOTAL PHOSPHATE	0.03J	0.05J	0.03J	0.03J	0.05J	0.07J	0.063R	0.065R	0.09	0.024
OIL & GREASE	5.3	5.13	6.25	7.75	97	6.88	5.0UJ	6.75J	5.0U	5.0U

9TH AVENUE DUMP
INORGANIC WATER TEST
CONCENTRATION (MG/L)

CRL#	DN02S53	DN02S76	DN02S45	DN02S54	DN02S52	DN02S68	DN02S78	DN02S74A	DN02S78	DN02S55
SAMPLE IDENTIFICATION	GX13-02	GX14-02	GX15-02	GX16-02	GX17-02	GX18-02	GX19-02	GX20-02	GX21-02	GX22-02
DATE	01/09/87	01/14/87	01/09/87	01/09/87	01/14/87	01/09/87	01/17/87	01/14/87	01/14/87	01/09/87
CHLORIDE	500.0J	150.0J	750.0J	1325.0J	3800.0J	1350.0J	250.0J	250.J	925.0J	280.0J
SULFATE	24.6	366	26.1	21.4	40.7	51.5	528	46.8	40.1U	84.5J
NITRATE/NITRITE	0.02	0.5	0.02U	0.02U	0.5	0.02U	0.6	0.3	0.02U	0.02
TOTAL ORGANIC CARBON	350.4	1304.8	676.1	425.8	25.5	482.3	4521	423.6	2223.1	618.9
BIOCHEMICAL OXYGEN DEMAND	81	3437	1189	155	9	175	4398	514	501	728.0J
CHEMICAL OXYGEN DEMAND	480	2080	1660	1100	80	900	7200	640	4280	1450
AMMONIA	140	58.8	78.4	173	1.8	381	20.6	5.5	9.5	63.3
FLUORIDE	0.49		1.23	1.29		0.47				0.95
TOTAL SUSPENDED SOLIDS	153	2020	105	564	153	30	3310	96	742	148.0J
ALKALINITY	1350	1200	650	1260	246	1520	3700	1100	2800	1200
TOTAL KJELDAHL NITROGEN	180.0J	58	94.40J	172.0J	1.8	389.0J	26.4	28.2	9.9	67.70J
TOTAL PHOSPHATE	0.04J	0.05	0.04J	0.05J	0.1	0.04J	0.09	0.03	0.03	0.05J
OIL & GREASE	6.63	279.8	116.5	13.5	28.1	5U	35.8	8.7	26.9	8.8

9TH AVENUE DUMP
INORGANIC WATER TEST
CONCENTRATION (MG/L)

CRL#	DN02S61	DN02S62	DN02S71	DN02S70	DN02S63	DN02S66	DN02S02	DN02S01	DN02S03	DN02S74A
SAMPLE IDENTIFICATION	GX22-91	GX23-02	GX24-02	GX25-02	GX26-02	GX27-02	GX28-02	GX29-02	GX30-02	GX31-02
DATE	01/09/87	01/09/87	01/14/87	01/14/87	01/09/87	01/09/87	12/29/86	12/29/86	12/29/86	01/14/87
CHLORIDE	250.0J	1575	75.0J	1050	1260.0J	4000.0J	40.9J	73.9J	158	300.0J
SULFATE	489.2J	1015.9	9.9	15.4	20.3	25.7	1450	16.3	255	11.6
NITRATE/NITRITE	0.02	0.02U	0.4	0.02U	0.02	0.02	0.02UJ	0.02UJ	0.02UJ	1.1
TOTAL ORGANIC CARBON	597	559.8	623.8	4998	114.9	701.9	69.5	94	170	790.6
BIOCHEMICAL OXYGEN DEMAND	540.0J	2750	789	768	30	194	4J	4J	8J	>9110
CHEMICAL OXYGEN DEMAND	1390	752	1510	9320	140	868	112	128	518	17100
AMMONIA	65.5	219	6	260	11.1	393	1.27	2.17	22	44
FLUORIDE	0.95	0.34			0.65	0.17				
TOTAL SUSPENDED SOLIDS	118.0J	79	216	208	710	219	362	436	347	7575
ALKALINITY	1170	1880	800	3050	390	1980	190	264	460	1250
TOTAL KJELDAHL NITROGEN	102.0J	235.0J	24.8	236	10.9J	450.0J	1.64	2.39	21	40.4
TOTAL PHOSPHATE	0.54J	0.28J	0.03	0.1	0.21J	0.07J	0.85	0.175	0.2	0.07
OIL & GREASE	11	5U	38.5	7.1	5U	5U	5U	5U	5U	3467.6

9TH AVENUE DUMP
INORGANIC WATER TEST
CONCENTRATION (MG/L)

CRL#	DN02S31	DN02S32	DN02S30	DN02S38	DN02S39	DN02S40	DN02S37	DN02S42	DN02S43	DN02S19
SAMPLE IDENTIFICATION	GX32-02	GX33-02	GX34-02	GX35-02	GX36-02	GX36-91	GX37-02	GX38-02	GX38-91	GX39-02
DATE	12/29/86	12/29/86	12/29/86	01/09/87	01/09/87	01/09/87	01/09/87	01/09/87	01/09/87	12/29/86
CHLORIDE	336.0J	67.0J	120	140.0J	800.0J	790.0J	550	50.0J	45.0J	95.0J
SULFATE	23.5	6.25	9	296.8	42.8	36.9	55.6	81.3	80.7	275
NITRATE/NITRITE	0.06J	0.23J	0.06J	0.02U	0.02U	0.02U	0.02U	0.02U	0.02U	0.09J
TOTAL ORGANIC CARBON	490.6	531.3	641.4	87.7	614.8J	133.8J	664.8	119.0J	148.7J	233.1
BIOCHEMICAL OXYGEN DEMAND	45.5J	53.5J	24.0J	15	42.0J	24.0J	78	4	7	17J
CHEMICAL OXYGEN DEMAND	837	685	749.0J	320	1008	856	984	320	300	104
AMMONIA	143	263	212.0J	106	226.0J	354.0J	52	2.15J	4.84J	22
FLUORIDE				0.4	0.46	0.45	0.43	0.71	0.69	
TOTAL SUSPENDED SOLIDS	643	166	234	1048	152	154	783	1289.0J	1815.0J	952
ALKALINITY	2370	3040	3720	750	4798	4766	4950	300	300	1010
TOTAL KJELDAHL NITROGEN	164	282	215	109.0J	246.0J	288.0J	137.0J	2.20J	6.02J	27.3
TOTAL PHOSPHATE	0.126	0.03	0.035	0.06R	0.08J	0.06J	0.21J	0.04R	0.04R	0.070R
OIL & GREASE	5U	5.0U	5.0U	8.13	5U	5.38J	5U	5U	5U	5.0U

9TH AVENUE DUMP
INORGANIC WATER TEST
CONCENTRATION (MG/L)

CRL#	DN02S18	DN02S27	DN02S24	DN02S29	DN02S25	DN02S28	DN02S14	DN02S17	DN02S16	DN02S06
SAMPLE IDENTIFICATION	GX40-02	GX41-02	GX42-02	GX43-02	GX44-02	GX44-91	GX45-02	GX46-02	GX47-02	GX48-02
DATE	12/29/86	12/29/86	12/29/86	12/29/86	12/29/86	12/29/86	12/29/86	12/29/86	12/29/86	12/29/86
CHLORIDE	335.0J	648	39.0J	88.0J	320	312	250.0J	80.0J	112.0J	24.0J
SULFATE	290	675	125	175	1438	1225	340	380	605	400
NITRATE/NITRITE	0.09J	0.19J	0.09J	0.32J	0.09J	0.06J	0.09J	0.17J	0.09J	0.02UJ
TOTAL ORGANIC CARBON	240.6	270.8	182.8	439.2	303	313.3	207.5	291.2	264.4	101
BIOCHEMICAL OXYGEN DEMAND	26J	20J	12J	280J	104.0J	15.0J	10J	27J	26.5J	15J
CHEMICAL OXYGEN DEMAND	275	677	59.8	645	367	486	239	231	207	143
AMMONIA	111	82.5	0.97	18.3	54.5J	40.5J	2.62	110	99.8	14.5
FLUORIDE										
TOTAL SUSPENDED SOLIDS	118	440	12800	407	190	182	629	257	321	2130
ALKALINITY	1020	556	608	1870	876	950	1090	1400	1350	114
TOTAL KJELDAHL NITROGEN	130	120	0.98	22	60.3	66.6	25.8	98.9	103	25.7
TOTAL PHOSPHATE	0.060R	0.025	0.055	0.045	0.038	0.021	0.055R	0.075R	0.055R	0.307
OIL & GREASE	5.0U	5.0U	5.0U	5.0U	5.0U	5.0U	5.38U	5.0U	5.0U	5.0U

9TH AVENUE DUMP
INORGANIC WATER TEST
CONCENTRATION (MG/L)

CRL#	DN02S07	DN02S04	DN02S05	DN02S09	DN02S10	DN02S11	DN02S22	DN02S64	DN02S58	DN02S48
SAMPLE IDENTIFICATION	GX49-02	GX50-02	GX51-02	GX52-02	GX53-02	GX54-02	GX55-02	GX57-02	GX58-02	GX59-02
DATE	12/29/86	12/29/86	12/29/86	12/29/86	12/29/86	12/29/86	12/29/86	01/09/87	01/14/87	01/09/87
CHLORIDE	98.0J	34.0J	6	73.0J	90.0J	85	30.0J	750.0J	350.0J	275.0J
SULFATE	390	345	625	380	210	310	360	17	10.2	43.3
NITRATE/NITRITE	0.04J	0.02UJ	0.02UJ	0.06	0.02U	0.02U	5.85J	0.02	0.02U	0.03
TOTAL ORGANIC CARBON	192	45.3	190	195	222	166	125.9	221.8	440	933.4
BIOCHEMICAL OXYGEN DEMAND	8J	38J	4J	14.5J	60J	60J	12J	55	394	468
CHEMICAL OXYGEN DEMAND	80	406	120	223	143	120	379	296	2680	1800
AMMONIA	1.21	25	2.21	2.98	2.86	9.61	1.99	15.2	11.7	790
FLUORIDE								1		1.22
TOTAL SUSPENDED SOLIDS	281	705	438	628	267	154	1150	167	694	331
ALKALINITY	470	286	462	528	654	570	626	490	750	2540
TOTAL KJELDAHL NITROGEN	1.67	26.5	2.25	2.7	4.18	8.46	2.15	15.6J	12	802.0J
TOTAL PHOSPHATE	0.13	0.08	0.07	0.075	0.088	0.085	0.052R	0.06J	2	0.12J
OIL & GREASE	5.0U	5.0U	18.5	5.0U	5.0U	5.0U	5.5	5U	84.9	15.4

9TH AVENUE DUMP
INORGANIC WATER TEST
CONCENTRATION (MG/L)

CRL#	DN02S65	DN02S12	DN02S73	DN02S26	DN02S77	DN02S41
SAMPLE IDENTIFICATION	8802-02	6BB01-02	6B803-02	6SB01-02	6SB03-02	SB02-02
DATE	01/09/87	12/29/86	01/14/87	12/29/86	01/14/87	01/09/87
CHLORIDE	10.0J	1.0J	50.0J	1.0UJ	25.0J	80.0J
SULFATE	3.0U	3.0U	3.0U	3.0U	3.0U	3U
NITRATE/NITRITE	0.02	0.02U	0.02U	0.03J	0.02U	0.02U
TOTAL ORGANIC CARBON	2.0U	1.17	2.0U	2.0U	2.0U	2.0U
BIOCHEMICAL OXYGEN DEMAND	1	1.0U	1.5U	1.0U	1.5U	1.0U
CHEMICAL OXYGEN DEMAND	5U	132	50U	50U	50U	5U
AMMONIA	0.1U	0.1U	0.1U	0.1U	0.1U	0.1U
FLUORIDE	0.05U					0.05U
TOTAL SUSPENDED SOLIDS	3U	3.0U	3.0U	3.0U	3.0U	3U
ALKALINITY	2	2	3.0U	2	3.0U	2
TOTAL KJELDAHL NITROGEN	0.1UJ	0.1U	0.1U	0.1U	0.1U	0.1UJ
TOTAL PHOSPHATE	0.05J	0.035	0.01U	0.03	0.01U	0.09J
OIL & GREASE	5U	5U	13.5	5U	5.0U	5U

9TH AVENUE DUMP
INORGANIC WATER TEST
CONCENTRATION (UG/L)

CRL#	DN02S49	DN02S51	DN02S50	DN02S59	DN02S67	DN02S60	DN02S35	DN02S34	DN02S36	DN02S46
SAMPLE IDENTIFICATION	GX01-02	GX02-02	GX02-91	GX03-02	GX03-91	GX04-02	GX05-02	GX06-02	GX07-02	GX08-02
DATE	01/08/87	01/08/87	01/08/87	01/08/87	01/08/87	01/08/87	01/08/87	01/08/87	01/08/87	01/08/87
ALUMINUM	1440U	360U	360U	180U	[360]J	[141]J	72U	72U	72U	[248]J
ANTIMONY	1480U	370U	370U	185U	185U	74U	74U	74U	74U	74U
ARSENIC	80U	80U	80U	8U	8U	8U	8U	8U	8U	8U
BARIUM	[2770]J	[1510]J	[1530]J	[880]J	1040J	494J	962J	1160J	[220]J	[147]J
BERYLLIUM	80U	20U	20U	10U	10U	4U	4U	4U	4U	4U
CADMIUM	200U	51	51	37	45	19	10U	10U	12	12U
CALCIUM	504000	736000	737000	523000	590000	805000	600000	576000	538000	336000
CHROMIUM	428	70U	70U	57	71	233	52	44	14U	22
COBALT	360U	90U	90U	45U	45U	[23]J	18U	15U	18U	[25]J
COPPER	800U	296	200U	100U	100U	52	40U	40U	40U	40U
IRON	28900J	48800	48800J	22300	23400	58900	16100	19200	13800	51400
LEAD	40UJ	40UJ	40UJ	40UJ	40UJ	40UJ	40UJ	23J	4UJ	23J
MAGNESIUM	118000	195000	193000	741000	838000	278000	300000	268000	158000	267000
MANGANESE	1410	2890	2890	256J	358J	7250	858	1890	2030	6600
MERCURY	0.2U	0.2U	0.2U	0.2U	0.2U	0.2U	0.2U	0.2U	0.2U	0.2U
NICKEL	600U	150U	150	1060	1260	473	778	564	[52]J	133
POTASSIUM	10600J	8190	21600J	48800J	63800J	41100	60200	26100	47700	32400
SELENIUM	30U	30U	3U	3U	3U	3U	3.0U	3.0U	3.0U	3U
SILVER	320U	80U	80U	40U	40U	16U	16U	16U	26	16U
SODIUM	9120000	4070000	4070000	822000	966000	188000	428000	202000	40400	71700
THALLIUM	60UJ	60UJ	60UJ	60UJ	60UJ	6UJ	60UJ	6UJ	6UJ	6UJ
VANADIUM	760U	190U	190U	113O	1280	154	500	204	[66]J	[74]J
ZINC	10400	11800	10000	179J	251J	1500	298	6190	70R	476
PERCENT SOLIDS (%)										
CYANIDE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U

* UNFILTERED SAMPLES

9TH AVENUE DUMP
INORGANIC WATER TEST
CONCENTRATION (UG/L)

CRL#	DN02S46*	DN02S44*	DN02S44	DN02S21*	DN02S21	DN02S20	DN02S20*	DN02S08	DN02S33	DN02S53
SAMPLE IDENTIFICATION	GX08-02	GX09-02	GX09-02	GX10-02	GX10-02	GX10-91	GX10-91	GX11-02	GX12-02	GX13-02
DATE	01/08/87	01/08/87	01/08/87	01/08/87	12/23/86	01/17/87	01/08/87	12/23/86	12/23/86	01/08/87
ALUMINUM	[381]	360U	72U	360U	360U	720U	1860J	212	36U	72U
ANTIMONY	[75]	370U	74U	370U	370U	740U	74U	37U	37U	74U
ARSENIC	[103]R	80UR	8U	8U	8U	8U	8UR	8U	8U	8U
BARIUM	142	[1600]	1200J	2760J	2760J	[2440]J	1140J	[192]	[180]	1440J
BERYLLIUM	4U	20U	4U	20UJ	20U	40U	4U	2U	2U	4U
CADMIUM	13J	50UJ	10U	50UJ	70J	100U	10UJ	6	5U	10U
CALCIUM	272000	331000	325000	883000	800000	705000	360000	134000	224000	148000
CHROMIUM	113	104	91	100J	70U	140U	[16]J	7U	7U	14U
COBALT	29	90U	18U	90U	90U	180U	18U	9U	9U	18U
COPPER	250	200U	40U	100U	200U	400U	40U	20U	20U	40U
IRON	49800	32000	19600	28900	17400	17400	18600	13000	9960	9190
LEAD	4300J	40UJ	4UJ	41J	4U	40U	4UJ	40U	40U	4UJ
MAGNESIUM	244000	687000	659000	263000	251000	216000	189000J	78700	219000	244000
MANGANESE	5980	176	142	970J	980	986	1040	331	1240	820
MERCURY	0.2U	0.2U	0.2U	0.2U	0.3R	0.3R	0.2U	0.2UR	0.3R	0.2U
NICKEL	144	13300	12800	150U	150U	[350]	311J	[23]	15U	[49]
POTASSIUM	30300	25100	24900	633000	1100000	1240000	191000	10700	47200	99000
SELENIUM	3UR	3UR	3U	30UR	30U	30UR	30UR	3U	3U	3U
SILVER	16UJ	80UJ	16U	80UJ	80UJ	160UJ	16UJ	8UJ	13J	16U
SODIUM	76400	816000	743000	2700000	2950000	2270000	339000	201000	219000	170000
THALLIUM	6UJ	60UJ	60UJ	60UJ	60UJ	6UJ	60UJ	6UJ	60UJ	6UJ
VANADIUM	38U	190U	120	190U	190U	380U	[87]	[24]	19U	[43]
ZINC	7990	3250	995	71000	14900J	14300J	3250	1870J	9910J	2130
PERCENT SOLIDS (%)										
CYANIDE			10U		10U	10U		10U	10U	10U

* UNFILTERED SAMPLES

9TH AVENUE DUMP
INORGANIC WATER TEST
CONCENTRATION (UG/L)

CRL#	DN02S76	DN02S45	DN02S45#	DN02S54	DN02S54#	DN02S52#	DN02S52	DN02S68	DN02S78	DN02S74A
SAMPLE IDENTIFICATION	GX14-02	GX15-02	GX15-02	GX16-02	GX16-02	GX17-02	GX17-02	GX18-02	GX19-02	GX20-02
DATE	01/12/87	01/08/87	01/08/87	01/08/87	01/08/87	01/12/87	01/12/87	01/08/87	01/12/87	01/12/87
ALUMINUM	473R	492	36U	[272]	2570	360U	[630]	[105]	72U	[79]R
ANTIMONY	131	[106]	[51]	74U	74U	370U	370U	74U	74U	74U
ARSENIC	8U	8U	8UR	8U	102R	8U	8U	8U	8U	8U
BARIUM	[124]	116UJ	[73]	418J	511	[1040]	[1010]	952J	[222]	[184]
BERYLLIUM	4U	4U	2U	4U	4U	20U	20	4U	4U	4U
CADMIUM	120J	25J	20	10U	10UJ	50UJ	50UJ	20	10UJ	10UJ
CALCIUM	877000	39800	286000	320000	350000	308000	309000	306000	589000	635000
CHROMIUM	88	27	13	55	337	70UJ	70U	14U	62	34
COBALT	[18]	18U	9U	18U	18U	90UJ	90U	18U	18U	18U
COPPER	40U	40U	43	40U	67	200U	200U	40U	40U	56R
IRON	232000	58300	66500	12600	18100	250U	250U	33500	15400	519
LEAD	4U	4UJ	19.5	4UJ	150UJ	273	40U	4UJ	40U	4U
MAGNESIUM	182000	76700	67000	237000	232000	160000	154000	339000	540000	72800
MANGANESE	4890	3050	2380	2600	2650	130U	130U	2410	4970	443
MERCURY	0.2U	0.2U	0.2U	0.2U	0.2U	0.2U	0.2U	0.2U	0.2U	0.2U
NICKEL	278	91	[21]	[51]	[46]	150U	150U	[68]	132R	- 92R
POTASSIUM	17600	10200	8820	20800	17600	9570	9980	146000	169000	9060
SELENIUM	6U	3U	3UR	3U	3UR	6U	6U	3U	6U	3U
SILVER	16U	16U	8UJ	16U	16UJ	80U	80U	16U	16U	16U
SODIUM	19400	22500	23100	520000	574000	148000	1420000	481000	175000	16800
THALLIUM	6UJ	6UJ	6UJ	60UJ	60UJ	6U	6UJ	60UJ	60UJ	6UJ
VANADIUM	117R	[75]	19U	[98]	[79]	190U	190U	[59]	[94]R	[51]R
ZINC	3630	406	830	66	1780	386J	471	1830	47J	115R
PERCENT SOLIDS (Z)										
CYANIDE	50U	10U		10U			10U	10U	10U	10U

UNFILTERED SAMPLES

9TH AVENUE DUMP
INORGANIC WATER TEST
CONCENTRATION (UG/L)

CRL#	DN02S72	DN02S55	DN02S61	DN02S62	DN02S71	DN02S71*	DN02S70*	DN02S70	DN02S63	DN02S63*
SAMPLE IDENTIFICATION	GX21-02	GX22-02	GX22-91	GX23-02	GX24-02	GX24-02	GX25-02	GX25-02	GX26-02	GX26-02
DATE	01/12/87	01/08/87	01/08/87	01/08/87	01/12/87	01/12/87	01/12/87	01/12/87	01/08/87	01/08/87
ALUMINUM	[234]	[129]J	[161]J	[319]	233	4990	360U	[1440]	[352]	4510
ANTIMONY	185U	37U	37U	74U	37U	37U	370U	370U	74U	74U
ARSENIC	16.5	8U	8U	8U	8U	14.2	8U	8U	8U	8UR
BARIUM	290U	[73]J	[72]J	[326]J	[194]	301	580U	[800]	[153]J	[183]
BERYLLIUM	10U	2U	2U	4U	2U	2U	20U	20U	4U	4U
CADMIUM	25U	5U	5U	10U	8.7J	34J	50UJ	69J	10U	10UJ
CALCIUM	1530000	328000	323000	499000	185000	260000	593000	762000	97900	107000
CHROMIUM	754	10	11	14U	52	867J	207J	193	14U	28
COBALT	45U	9U	9U	18U	9U	[11]	90U	70U	18U	18U
COPPER	133	24	[[2]	40U	29	103	200U	200U	40U	40U
IRON	8030	11800	14200	2910	9340	25600	13300	7740	12700	22700
LEAD	40U	4UJ	4UJ	4UJ	4U	342	40U	40U	4UJ	180J
MAGNESIUM	16900	167000	164000	377000	164000	182000	612000	701000	37400	37700
MANGANESE	3970]	2490	2260	724	8740	12000	12100	12900	1410	1540
MERCURY	0.2U	0.2U	0.2U	0.2U	0.2U	0.2UJ	0.2UJ	0.2U	0.2U	0.2U
NICKEL	6600	125	77	169	54	176	403	2290	[65]	30U
POTASSIUM	188000	37400	41100	9780	[26600]	14400	[68700]	[73000]	10800	8410
SELENIUM	3U	3U	3U	30U	3U	[3]	6U	6U	3U	3UR
SILVER	40U	8U	8U	16U	8U	8U	156J	80U	16U	16UJ
SODIUM	312000	56000	54200	404000	29100	27400	761000	797000	623000	584000
THALLIUM	6UJ	6UJ	6UJ	60UJ	6UJ	6U	60U	60UJ	60UJ	60UJ
VANADIUM	2410	[40]	[36]	249	57	172	190U	1170	[46]	38U
ZINC	169	79J	51J	5850	154	2600J	4500J	334	9980	9480
PERCENT SOLIDS (%)										
CYANIDE	10U	10U	10U	10U	10U			10U	10U	

* UNFILTERED SAMPLES

9TH AVENUE DUMP
INORGANIC WATER TEST
CONCENTRATION (UG/L)

CRL#	DN02S66*	DN02S66	DN02S02	DN02S01	DN02S03	DN02S74B	DN02S31	DN02S32	DN02S30	DN02S38
SAMPLE IDENTIFICATION	GX27-02	GX27-02	GX28-02	GX29-02	GX30-02	GX31-02	GX32-02	GX33-02	GX34-02	GX35-02
DATE	01/08/87	01/08/87	12/23/86	12/23/86	12/23/86	01/12/87	12/23/86	12/23/86	12/23/86	01/08/87
ALUMINUM	1200	180U	36U	[62]	1440U	597R	[80]	36U	72U	276
ANTIMONY	148U	185U	37U	37U	1480U	74U	37U	37U	74U	37U
ARSENIC	8UR	8U	8U	8U	8U	8U	8U	8U	8U	8U
BARIUM	3490	3450J	[100]	[105]	2320U	484	1040	1370	1090	276J
BERYLLIUM	8U	10U	2U	2U	80U	4U	2U	2U	4U	2U
CADMIUM	20UJ	27	5U	11	200U	34R	5U	5U	10U	5U
CALCIUM	523000	650000	115000	89400	582000	679000	327000	168000	87600	153000
CHROMIUM	97	35U	7U	19	280U	561	23	28	35	[9]
COBALT	36U	45U	9U	9U	360U	18U	9U	[28]	[36]	9U
COPPER	80U	100U	20U	28	800U	57R	20U	20U	40U	[21]R
IRON	45900	43700	6680	1130	34500	53400	13200	13100	12800	6220
LEAD	50J	40UJ	4U	7.3	40U	4U	40U	40U	40U	40UJ
MAGNESIUM	297000	349000	32900	27500	[107000]	81500	321000	338000	36900	71200
MANGANESE	556	874	391	713	1560	4010	2760	1010	831	1150
MERCURY	0.28	0.72	0.2UR	0.2UR	0.2UR	0.2U	0.2UR	0.3R	0.2UR	0.2U
NICKEL	446	472	45	41	600U	566	666	1570	2720	108
POTASSIUM	125000	126000	6250	8100	24900	18000	119000	243000	287000	10000
SELENIUM	163R	3U	3U	3U	3U	3U	3U	3U	3U	3U
SILVER	32U	40U	8UJ	[9]J	320UJ	16U	8UJ	15J	16UJ	8U
SODIUM	1150000	1280000	244000	438000	10300000	33900	232000	306000	615000	41900
THALLIUM	60UJ	60UJ	6UJ	6UJ	60UJ	6UJ	6UJ	60UJ	6UJ	6UJ
VANADIUM	[105]	[140]	[38]	[34]	760	120R	[45]	90	174	53
ZINC	7540	5950	1807J	4740J	4770J	224	3110J	1060J	1730J	7040
PERCENT SOLIDS (%)										
CYANIDE		10U	10U	10U	10U	50U	10U	10U	10U	10U

* UNFILTERED SAMPLES

9TH AVENUE DUMP
INORGANIC WATER TEST
CONCENTRATION (UG/L)

CRL#	DN02S39	DN02S40	DN02S37	DN02S42	DN02S43	DN02S19	DN02S18	DN02S27	DN02S24	DN02S29
SAMPLE IDENTIFICATION	GI36-02	GI36-91	GI37-02	GI38-02	GI38-91	GI39-02	GI40-02	GI41-02	GI42-02	GI43-02
DATE	01/08/87	01/08/87	01/08/87	01/08/87	01/08/87	12/23/86	12/23/86	12/23/86	12/23/86	12/23/86
ALUMINUM	878J	1340J	72U	36U	36U	360U	720U	360U	352	36U
ANTIMONY	148U	185U	74U	37U	[44]J	370U	740U	370U	37U	37U
ARSENIC	8OU	8U	8U	8U	8U	8U	8U	8U	8U	8U
BARIUM	1170J	[965]J	976J	58UJ	58UJ	[790]	[1190]	[1130]	[102]	1640
BERYLLIUM	8U	10U	4U	2U	2U	20U	40U	20U	[2]	2U
CADMIUM	20U	25U	10U	5U	5U	50U	100U	50U	5U	5U
CALCIUM	150000	154000	133000	87500	90200	155000	277000	942000	53300	475000
CHROMIUM	[35]J	35U	24	7U	7U	70U	140U	70U	7U	16
COBALT	36U	45U	[36]	9U	9U	90U	180U	90U	9U	9U
COPPER	80U	100U	40R	20U	[21]R	200U	400U	200U	20U	20U
IRON	15800J	8930J	7030	4120	3950	3090	6530	87300	122	16500
LEAD	4UJ	4UJ	4UJ	4UJ	4UJ	40U	40U	40U	4U	40U
MAGNESIUM	859000	888000	600000	47900	49300	95700	121000	307000	21500	3620000
MANGANESE	114	122	50	408	416	2860	2230	4510	187	11800
MERCURY	0.2U	0.2U	0.2U	0.2U	0.2U	0.2UR	0.2UR	0.36R	0.3R	0.2UR
NICKEL	3540	3730	4940	[16]	[24]	150U	300U	150U	58	96
POTASSIUM	38100	39800	41200	3360	3430	622000	1030000	855000	8290	199000
SELENIUM	3U	3U	3U	3U	3U	3U	30U	30U	3U	3U
SILVER	32U	40U	16U	8U	11	80UJ	160UJ	80UJ	8UJ	8UJ
SODIUM	330000	326000	686000	13800	13700	474000	1460000	2150000	81700	253000
THALLIUM	60UJ	60UJ	60UJ	6UJ	6UJ	6UJ	6UJ	6UJ	6UJ	6UJ
VANADIUM	[186]	[235]	234	19U	19U	190U	380U	190U	[41]	[34]
ZINC	1410J	1790J	5120	432J	726J	2210J	7600J	10100J	831J	4620J
PERCENT SOLIDS (Z)										
CYANIDE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U

* UNFILTERED SAMPLES

9TH AVENUE DUMP
INORGANIC WATER TEST
CONCENTRATION (UG/L)

CRL#	DN02S25	DN02S28	DN02S14*	DN02S14	DN02S17*	DN02S17	DN02S16	DN02S16*	DN02S06	DN02S07
SAMPLE IDENTIFICATION	GX44-02	GX44-91	GX45-02	GX45-02	GX46-02	GX46-02	GX47-02	GX47-02	GX48-02	GX49-02
DATE	12/23/86	12/23/86	01/08/87	12/23/86	01/08/87	12/23/86	12/23/86	01/08/87	12/23/86	12/23/86
ALUMINUM	[907]J	360U	16800	36U	1780	36U	360U	266	[192]	[193]
ANTIMONY	370U	370U	37U	37U	74U	37U	370U	37U	37U	37U
ARSENIC	8U	8U	8UR	8U	8UR	8U	8U	8UR	8U	8U
BARIUM	580U	580U	908	733	[342]	920	580U	[154]	[96]	381
BERYLLIUM	20U	20U	2U	2U	4U	2U	20U	2U	2U	2U
CADMIUM	109J	50U	5UJ	5U	10UJ	5U	50U	5UJ	5U	64
CALCIUM	705000	711000	290000	261000	520000	307000	451000	367000	133000	267000
CHROMIUM	70U	70U	47	7U	14U	7U	70U	26	7U	7U
COBALT	90U	90U	[20]	9U	18U	9U	90U	9U	9U	9U
COPPER	200U	200U	60	20U	[43]	20U	200U	29	[21]	25
IRON	114000	128000	46000	10000	28700	19700	23500	51800	103	15800
LEAD	40U	40U	110J	4U	10J	40U	40U	29J	4U	10
MAGNESIUM	39400	422000	137000	131000	280000	168000	252000	132000	8910	56700
MANGANESE	3050	2620	1630	1390	1220	932	1190	2410	70	1000
MERCURY	0.2R	0.2UR	0.2U	0.36R	0.2U	0.2UR	0.2R	0.2U	0.36R	0.2UR
NICKEL	[361]	150U	81	48R	402	204	520	57	[18]	[18]
POTASSIUM	645000	676000	88800	124000	81000	426000	173000	12400	26700	3360
SELENIUM	30U	30U	3UR	3U	30UR	3U	3U	3UR	3U	3U
SILVER	80UJ	80UJ	8UJ	8UJ	16UJ	8UJ	80UJ	8UJ	13J	8U
SODIUM	1030000	1010000	134000	154000	450000	318000	421000	158000	38400	72800
THALLIUM	6UJ	6UJ	6UJ	6UJ	60UJ	6UJ	6UJ	6UJ	6UJ	6U
VANADIUM	[260]J	190U	59	[37]	[86]	[43]	[220]	[31]	[32]	[27]
ZINC	8940J	7790J	7400	5220J	7330	2750J	8250J	10100	75J	4050J
PERCENT SOLIDS (%)										
CYANIDE	10U	10U		10U		10U	10U		10U	10U

* UNFILTERED SAMPLES

9TH AVENUE DUMP
INORGANIC WATER TEST
CONCENTRATION (UG/L)

CRL#	DN02S04#	DN02S04	DN02S05	DN02S05#	DN02S09	DN02S10	DN02S11	DN02S22	DN02S64	DN02S64#
SAMPLE IDENTIFICATION	GX50-02	GX50-02	GX51-02	GX51-02	GX52-02	GX53-02	GX54-02	GX55-02	GX57-02	GX57-02
DATE	01/08/87	12/23/86	12/23/86	01/08/87	12/23/86	12/27/86	12/23/86	12/23/86	01/08/87	01/08/87
ALUMINUM	11800	418	[140]	14800	210	298	303	36U	458	2760
ANTIMONY	74U	37U	37U	37U	37U	37U	37U	37U	74U	74U
ARSENIC	35.7R	22	8U	8UR	8U	8U	8U	8U	8U	8UR
BARIUM	[183]	[73]	395	422	230	322	824	272	[289]J	[393]
BERYLLIUM	4U	2U	2U	2U	2U	2U	2U	2U	4U	4U
CADMIUM	13J	45	7	13J	6	5U	5U	5U	10U	10UJ
CALCIUM	228000	188000	294000	291000	260000	270000	277000	117000	117000	156000
CHROMIUM	52	7U	7U	27	7U	7U	7U	7U	14U	31
COBALT	18U	9U	9U	9U	9U	9U	9U	9U	18U	18U
COPPER	40U	20U	20U	74U	20U	20U	20U	28	40U	57
IRON	29900	104	22400	43600	910	4820	6950	82	17000	23700
LEAD	83J	6.3	4U	33J	4U	4U	40U	4U	5J	92J
MAGNESIUM	11700	[690]	66000	72700	75500	146000	136000	175000	52000	58200
MANGANESE	1110	13U	843	1030	461	893	230	253	3410	3780
MERCURY	0.2U	0.2UR	0.36R	0.2U	0.2UR	0.36R	0.2UR	0.2UR	0.2U	0.2U
NICKEL	[39]	15U	[16]	42	[29]	41	64	15U	[60]	[32]
POTASSIUM	33200	46500	[3420]	5770	7820	27100	26900	49100	10300	10600
SELENIUM	3UR	[3.0]	[3.2]	3UR	8	3U	3U	19	3U	3UR
SILVER	18UJ	8UJ	26J	8UJ	25J	12J	8UJ	8UJ	16U	16UJ
SODIUM	117000	115000	122000	10900	48800	363000	404000	175000	309000	462000
THALLIUM	6UJ	6UJ	6UJ	6UJ	6UJ	6UJ	6UJ	6UJ	6UJ	60UJ
VANADIUM	[50]	[23]	[26]	53	[28]	[43]	[44]	19U	[54]	38U
ZINC	4020	51J	3560J	4250	465J	3970J	4100J	724J	3620	3690
PERCENT SOLIDS (%)										
CYANIDE		10U	10U		10U	10U	10U	10U	10U	

UNFILTERED SAMPLES

9TH AVENUE DUMP
INORGANIC WATER TEST
CONCENTRATION (UG/L)

CRL#	DN02S58*	DN02S58	DN02S48	DN02S48*	DN02S48	DN02S12	DN02S65	DN02S73	DN02S26	DN02S41
SAMPLE IDENTIFICATION	GX58-02	GX58-02	GX59-02	GX59-02	GX59-02	BB01-02	BB02-02	BB03-02	SB01-02	SB02-02
DATE	01/12/87	01/12/87	01/08/87	01/08/87	01/08/87	12/23/86	01/08/87	01/12/87	12/23/86	01/08/87
ALUMINUM	1710	36U	72U	[1980]	72U	36U	537	[97]	[108]	36U
ANTIMONY	37U	37U	74U	370U	74U	37U	37U	37U	37U	37U
ARSENIC	8U	8U	8U	8UR	8U	8U	8U	8U	8U	8U
BARIUM	[196]	[137]	[136]J	580U	[136]J	58U	58UJ	58U	58U	58UJ
BERYLLIUM	2U	2U	4U	20U	4U	2U	2U	2U	2U	2U
CADMIUM	5.7J	5UJ	17	50UJ	17	5U	5U	5UJ	5U	5U
CALCIUM	155000	137000	227000	227000	227000	[440]	433	392U	[1170]	392U
CHROMIUM	312J	33	71	707	71	7U	7U	7U	7U	7U
COBALT	9U	9U	18U	9U	18U	9U	9U	9U	9U	9U
COPPER	67	[21]	40U	20U	40U	20U	31	20U	20U	40
IRON	6140	1150	3490	33800	3490	120	254	[65]	[77]	[291
LEAD	235	4U	4UJ	600J	4UJ	4U	[4]J	4U	4U	4UJ
MAGNESIUM	155000	146000	418000	405000	418000	329U	408	329U	[354]	329U
MANGANESE	4190	3140	2610	2610	2610	13U	19	13U	21	13U
MERCURY	0.2UJ	0.2U	0.2U	0.2U	0.2U	0.68R	0.2U	0.2U	0.2UR	0.2U
NICKEL	61	15U	119	150U	119	[20]	71	[18]	[24]	15U
POTASSIUM	15000	15900	36700	2960	36700	500U	500U	500U	[670]	500U
SELENIUM	3U	3U	3U	3UR	3U	3U	3U	3U	3U	3U
SILVER	8U	8U	16U	80UJ	16U	8UJ	8U	8U	14J	8U
SODIUM	23100	22400	94700	95600	94700	903U	903U	903U	[3390]	903
THALLIUM	6U	6UJ	60UJ	60UJ	60UJ	6UJ	6UJ	6UJ	6UJ	6UJ
VANADIUM	128	71	185	190U	185	19U	[46]	19U	19U	19U
ZINC	702J	97	1670	9210	1670	83J	42	101	88J	31
PERCENT SOLIDS (%)										
CYANIDE		10U	10U		10U	10U	10U	10U	10U	10U

* UNFILTERED SAMPLES

9TH AVENUE DUMP
INORGANIC WATER TEST
CONCENTRATION (UG/L)

CRL#	DN02S13	DN02S15	DN02S23	DN02S69	DN02S47	DN02S22#	DN02S15#
SAMPLE IDENTIFICATION	GBW3-02	GBW4-02	GB2-02	GB3-02	GB4-02	GB2-02	GBW4-02
DATE	12/23/86	12/23/86	12/23/86	01/12/87	01/08/87	01/08/87	01/08/87
ALUMINUM	[55]	36U	36U	412	36U	360U	[160]
ANTIMONY	37U	37U	37U	37U	37U	370U	37U
ARSENIC	8U	8U	8U	8U	8U	8UR	8UR
BARIUM	211	[123]	[60]	[165]	58UJ	2740	[63]
BERYLLIUM	2U	2U	2U	2U	2U	20U	2U
CADMIUM	5U	8	12	33J	15	50U	5UJ
CALCIUM	322000	313000	97500	444000	118000	880000	106000
CHROMIUM	7U	7U	7U	29	7U	70U	11
COBALT	9U	9U	9U	77	9U	90U	9U
COPPER	20U	36	20U	38	26	200U	37
IRON	12100	27300	1450	102000	58500	19000	2410
LEAD	4U	4U	4U	4U	4UJ	7J	58J
MAGNESIUM	94600	117000	134000	118000	111000	260000	138000
MANGANESE	2610	2210	1290	4390	445	980	1540
MERCURY	0.58R	0.2R	0.3R	0.2U	0.2U	0.2U	0.2U
NICKEL	[26]	[24]R	15U	296	114	150U	15U
POTASSIUM	16000	21100	741000	14300	8070	698000	57200
SELENIUM	3U	3U	3U	3U	3U	30UR	3UR
SILVER	8UJ	8UJ	8UJ	8U	8U	80UJ	8UJ
SODIUM	11000	167000	76800	24700	119000	2650000	68700
THALLIUM	6UJ	6UJ	6UJ	6UJ	6UJ	60UJ	6UJ
VANADIUM	41	[32]	19U	47	[19]	190U	19U
ZINC	1950J	1910J	824J	1480	1770	35200	2910
PERCENT SOLIDS (%)							
CYANIDE	10U	10U	10U	10U	10U		

9TH AVENUE DUMP
INORGANIC WATER TEST
CONCENTRATION (UG/L)

CRL#	0N02S77
SAMPLE IDENTIFICATION	S803-02
DATE	01/12/87
ALUMINUM	310
ANTIMONY	J7U
ARSENIC	8U
BARIUM	58U
BERYLLIUM	2U
CADMIUM	12J
CALCIUM	[460]
CHROMIUM	7U
COBALT	9U
COPPER	[24]
IRON	131
LEAD	4U
MAGNESIUM	329U
MANGANESE	13U
MERCURY	0.2U
NICKEL	47
POTASSIUM	500U
SELENIUM	3U
SILVER	8U
SODIUM	903U
THALLIUM	6UJ
VANADIUM	[24]
ZINC	56
PERCENT SOLIDS (%)	
CYANIDE	10U

UNFILTERED SAMPLES

R-2 - ROUND 1 HYDROCARBON LAYER SAMPLES WERE COLLECTED IN DECEMBER 1986
BY WARZYN ENGINEERING INC.

9TH AVENUE DUMP
HYDROCARBON LAYER TEST RESULTS - ROUND1
CONCENTRATION (UG/KG)

CRL#	0N02556	0N02579	0N02580	0N02957	0N02981
SAMPLE IDENTIFICATION	SX08-02	SX14-02	SX19-02	SX31-02	SX56-02
DATE	12/19/87	12/19/87	12/19/87	12/19/87	12/19/87
CRDL MULTIPLE	50000	50000	1000000	1000000	50000
VOLATILES					
CHLOROMETHANE					
BROMOMETHANE					
VINYL CHLORIDE					
CHLOROETHANE					
METHYLENE CHLORIDE	170000JB	1200000B	400000J	440000JB	
ACETONE	260000JB	2700000B			
CARBON DISULFIDE					
DICHLOROETHENE 1,1-					
DICHLOROETHANE 1,1-					
TRANS-1,2-DICHLOROETHENE				1100000J	3000000J
CHLOROFORM					
DICHLOROETHANE1,2-					
BUTANONE 2-					
TRICHLOROETHANE 1,1,1-				1300000J	590000J
CARBON TETRACHLORIDE					
VINYL ACETATE					
BROMODICHLOROMETHANE					
DICHLOROPROPANE 1,2-					
TRANS-1,3-DICHLOROPROPENE					
TRICHLOROETHENE			420000J		1100000J
DIBROMOCHLOROMETHANE					
TRICHLOROETHANE1,1,2-					
BENZENE	290000J		340000J	250000J	210000J
CIS-1,3-DICHLOROPROPENE					
CHLOROETHYLVINYLETHER 2-					
BROMOFORM					
METHYL4-PENTANONE2-	530000J				190000J
HEXANONE 2-					
TETRACHLOROETHENE					
TETRACHLOROETHANE1,1,2,2-					2100000J
TOLUENE	6100000J	55000000J	120000008J	17000000JB	23000000J
CHLOROBENZENE					
ETHYLBENZENE	7300000BJ	7600000BJ	4500000BJ	5900000BJ	9400000BJ
STYRENE					
TOTAL XYLENES	45000000JB	23000000JB	77000008J	22000000JB	37000000BJ
SEMI-VOLATILES					
CRDL MULTIPLE	1818	10909	10909	10909	10909
PHENOL					
BIS(-2-CHLOROETHYL)ETHER					
CHLOROPHENOL 2-					

97th AVENUE DUMP
HYDROCARBON LAYER TEST RESULTS - ROUND1
CONCENTRATION (UG/KG)

LAB #	ON02S56	ON02S79	ON02S80	ON02S57	ON02S81
SAMPLE IDENTIFICATION	GX08-02	GX14-02	GX19-02	GXJ1-02	GX56-02
DATE	12/19/87	12/19/87	12/19/87	12/19/87	12/19/87
DICHLOROBENZENE 1,3-					
DICHLOROBENZENE 1,4-					
BENZYL ALCOHOL					
DICHLOROBENZENE 1,2-					
METHYLPHENOL-3					
BIS(2-CHLOROISOPROPYL)ETHER					
METHYLPHENOL 4-					
N-NITROSO-DI-N-PROPYLAMINE					
HEXACHLOROETHANE					
NITROBENZENE					
ISOPHORONE					
NITROPHENOL 2-					
DIMETHYLPHENOL 2,4-					
BENZOIC ACID					
BIS(-2-CHLOROETHOOXY)METHANE					
DICHLOROPHENOL 2,4-					
TRICHLOROBENZENE1,2,4-					
NAPHTHALENE	530000J	1200000J	4000000J	2600000J	2000000J
CHLOROANILINE 4-					
HEXACHLOROBUTADIENE					
CHLORO-4 METHYLPHENOL 3-					
METHYLNAPHTHALENE 2-		3000000J	11000000J	8200000J	7200000J
HEXACHLOROCYCLOPENTADIENE					
TRICHLOROPHENOL 2,4,6-					
TRICHLOROPHENOL 2,4,5-					
CHLORONAPHTHALENE 2-					
NITROANILINE 2-					
DIMETHYL PHTHALATE					
ACANAPHTHYLENE					
NITROANILINE 3-					
ACENAPHTHENE					
DINITROPHENOL 2,4-					
NITROPHENOL 4-					
DIBENZOFURAN					
DINITROTOLUENE 2,4-					
DINITROTOLUENE 2,6-					
DIETHYLPHTHALATE					
CHLOROPHENYL-PHENYLETHER 4-					
FLUORENE			930000J		
NITROANILINE 4-			-		
DINITRO 4,6- METHYLPHENOL 2-					
N-NITROSODIPHENYLAMINE (1)					
BROMOPHENYL 4- PHENYLETHER					
HEXACHLOROBENZENE					
PENTACHLOROPHENOL					
PHENANTHRENE			3100000J	2000000J	1600000J

9TH AVENUE DUMP
HYDROCARBON LAYER TEST RESULTS - ROUND1
CONCENTRATION (UG/KG)

CRL#	9N02956	9N02979	9N02980	9N02957	9N02981
SAMPLE IDENTIFICATION	SX08-02	SX14-02	SX19-02	SX31-02	SX56-02
DATE	12/19/87	12/19/87	12/19/87	12/19/87	12/19/87
ANTHRACENE					
DI-N-BUTYLPHTHALATE					
FLUORANTHENE					
PYRENE					
BUTYLBENZYLPHTHALATE					
DICHLOROBENZIDINE 3,3-					
BENZO(A)ANTHRACENE					
BIS(2-ETHYLEXYL)PHTHALATE					
CHRYSENE					
DI-N-OCTYL PHTHALATE					
BENZO(B)FLUORANTHENE					
BENZO(K)FLUORANTHENE					
BENZO(A)PYRENE					
INDENOL(1,2,3-CD)PYRENE					
DIBENZ(A H)ANTHRACENE					
BENZO(G.H.I)PERYLENE					
PESTICIDES/PCB'S					
CRDL MULTIPLE	9000000	9000000	9000000	9000000	9000000
ALPHA-BHC					
BETA-BHC					
DELTA-BHC					
GAMMA-BHC (LINDANE)					
HEPTACHLOR					
ALDRIN					
HEPTACHLOR EPOXIDE					
ENDOSULFAN 1					
DIELDRIN					
DDE 4,4-					
ENDRIN					
ENDOSULFAN 11					
DDD 4,4					
ENDOSULFAN SULFATE					
DDT 4,4-					
METHOXYCHLOR					
ENDRIN KETONE					
CHLORDANE					
TOXAPHENE					
AROCLOR-1016					
AROCLOR-1221					
AROCLOR-1232					
AROCLOR-1242					
AROCLOR 1248					
AROCLOR 1254					
AROCLOR 1260					

9TH AVENUE DUMP
INORGANIC OIL TEST
MG/KG WET WEIGHT

CRL#	DN02S56	DN02S79 NON-WATER	DN02S79 WATER	DN02S80	DN02S57	DN02S81
SAMPLE IDENTIFICATION	GX8-02	GX14-02	GX14-02	GX19-02	GX31-02	GX56-02
DATE	01/30/87	01/30/87	01/30/87	01/30/87	01/30/87	01/30/87
WATER (%)			54.9			
SOLID (%)						
NON-WATER (%)	100	45.1		100	100	100
ALUMINUM	480	392U	400U	400U	625	406U
ANTIMONY	20UJ	20UJ	20UJ	20UJ	20UJ	20UJ
ARSENIC	20U	20U	20U	20U	20U	20U
BARIUM	120U	118U	120U	120U	121U	122U
BERYLLIUM	40U	39U	40U	40U	40U	41U
CADMIUM	10U	10U	10U	10U	10U	10U
CALCIUM	1740	1710	800U	800U	1390	843U
CHROMIUM	28U	29	28U	50	202	539
COBALT	20U	196	200U	200U	202U	203U
COPPER	76M	102M	40U	46M	107M	51M
IRON	356M	559M	200U	200U	202U	203U
LEAD	100U	100U	100U	100U	100U	100U
MAGNESIUM	800U	874U	800U	800U	806U	813U
MANGANESE	40U	39M	40U	40U	40U	41U
MERCURY	0.3UJ	0.3UJ	0.3UJ	0.3UJ	0.3UJ	0.3UJ
NICKEL	40U	39U	40U	40U	40U	40U
POTASSIUM						
SELENIUM	20U	20U	20U	20U	20U	20U
SILVER	40U	39U	40U	40U	105	45
SODIUM	4000U	3920U	4000U	4000U	5320	4060U
THALLIUM	400U	392U	400U	400U	403U	406U
TIN						
VANADIUM	200U	196U	200U	200U	202U	203U
ZINC	90	80		52	74	163
CYANIDE	12	4.7			1.6	1.4U

9th AVENUE DUMP
DATA QUALIFIERS

- B = Detected in method blank as well as the sample, possible/probable blank contamination.

- U = The material was analzyed for but was not detected. The associated numerical value is the quantitation limit.

- J = The associated numerical value is an estimated quantity because quality control criteria were not met.

- UJ = The associated numerical value is the estimated quantitation limit.

- R = The data is unusable because quality control criteria were not met.

- N = The instrument detection limit exceeded contract required detection limit (CRDL), and the associated value is the detection limit.

- [] = Bracketed numbers are concentrations quantified at below contract required detection limits (CRDL).

- CRDL Multiple = is a correction factor which takes into account (based on matrix) % moisture, sample size, unit conversions and dilutions. The correction factor is based on the low level detection limit.

- The qualifier found to the left of the compounds concentration is from Warzyn's data validation. Those qualifiers to the right of the value are from the contract Laboratories and/or EPA's data validation.

R-3 - ROUND 2 GROUNDWATER SAMPLES WERE COLLECTED IN JUNE 1987
BY WARZYN ENGINEERING INC.

9TH AVENUE DUMP
JUNE 1987 MONITORING

Well #	pH	Specific Conductivity at 25°C	Odor	Color	Turbidity
GX1	6.57	47,436	None	Light Brown	Slight
GX2	6.59	25,000	Slight	Gray	Moderate
GX3	6.57	11,628	--	Brown Black	Slight
GX4	6.42	5,465	Organic	Light Brown	Slight
GX5	6.72	5,833	Oily Organic	Green-Brown	Slight
GX6	6.67	4,755	Slight	Brown	Moderate
GX7	7.04	2,725	Oily Organic	Brown	Very
GX8	6.36	3,381	--	Light Green	Slight
GX9	6.81	8,854	Slight Organic	Light Brown	Slight
GX10	6.99	22,000	None	Clear to Lt. Brown	Slight
GX11	7.00	1,438	None	Light Brown	None
GX12	6.96	2,820	None	Light Brown	Moderate
GX13	6.92	3,622	Organic	Brown-Black	Moderate
GX14	6.61	3,085	Organic	Brown	Slight
GX15	6.57	2,020	Organic	Gray-Brown	Slight
GX16	7.06	4,375	Organic	Green-Black	Very
GX16 Dup	7.04	4,360	--	--	--
GX17	8.20	20,238	None	Clear	None
GX18	6.85	3,488	Organic Septic	Black	Very
GX19	6.88	7,083	Oily	Black	Moderate
GX20	6.76	2,781	Organic	Black	Very
GX21	6.52	5,750	Organic	Black	Very
GX22	6.52	2,442	Org. Leachate	Black-Gray	Slight
GX22 Dup	6.55	2,473	--	--	--
GX23	7.04	3,895	Org. Leachate	Brown	Moderate
GX24	6.93	2,057	Oily Leachate	Dark Gray to Black	Moderate
GX25	6.38	9,787	Oily Leachate	Dark Gray to Black	Moderate

Well #	pH	Specific Conductivity at 25°C	Odor	Color	Turbidity
GX26	6.71	4,940	Organic	Light Brown	None
GX26 Dup	6.74	4,940	--	--	--
GX27	6.73	11,111	Organic	Clear	None
GX28	6.95	2,061	None	Light Brown	Slight
GX29	6.94	2,500	None	Light Brown	None
GX30	6.72	35,521	None	Light Brown	None
GX31	6.17	1,957	--	Black	Moderate
GX32	6.96	4,808	Leachate	Brown	Moderate
GX33	6.89	7,065	Org. Leachate	Brown	Moderate
GX34	7.04	10,227	Leachate	Brown	Moderate
GX35	6.88	1,534	Leachate	Brown	Very
GX35 Dup	6.96	1,467	--	--	--
GX36	6.97	8,913	Leachate	Brown	Moderate
GX37	7.06	9,186	Leachate	Light Brown	Slight
GX38	7.16	704	Septic	Dark Brown	Moderate
GX39	7.05	4,034	None	Clear	Slight
GX40	7.17	10,738	Oily	Light Brown	Slight
GX41	6.53	20,610	None	Clear	Slight
GX42	9.56	693	None	Light Brown	Moderate
GX43	6.79	5,398	Organic	Light Gray	Slight
GX44	6.41	11,222	Septic	Gray	Moderate
GX45	6.94	2,955	Slight Septic	Gray	Slight
GX46	6.92	4,767	None	Gray	Moderate
GX47	6.71	6,250	None	Green-Brown	Moderate
GX47 Dup	6.70	6,444	--	--	--
GX48	8.34	1,117	Septic	Dark Gray	Very
GX49	6.82	1,298	Septic	Gray	Moderate
GX50	10.46	1,645	H_2S and Tar	Gray-Black	Moderate
GX51	6.76	2,150	None	Gray	Moderate
GX52	6.83	1,458	None	Light Brown	Some
GX53	7.08	4,022	Septic	Gray Brown	Moderate
GX54	7.22	4,578	None	Light Brown	Slight
GX55	7.19	2,213	None	Brown	Moderate
GX55 Dup	7.25	2,120	--	--	--

Well #	pH	Specific Conductivity at 25°C	Odor	Color	Turbidity
GX56	--	--	--	--	--
GX57	6.57	2,035	Organic	Gray-Brown	Moderate
GX58	7.28	2,100	Oily	Dark Black	Moderate
GX59	7.27	4,118	Organic	Brown to Black	Very
GX60	6.65	5,740	Strong Leachate	Gray-Brown	Moderate
GX61	6.67	39,000	None	Light Brown	Moderate
GX62	6.64	4,380	Strong Leachate	Light Brown	Some
GX63	6.80	2,170	Septic	Dark Gray	Very
GX64	6.91	2,560	None	Light Brown	Moderate
GB2	7.18	1,543	None	Brown	None
GB3	6.00	2,531	Organic	Clear to Lt. Green	None
GB4	6.99	2,738	Organic-Septic	Clear to Lt. Brown	Slight
GBW3	6.96	1,449	None	Light Brown	Slight
GBW4	7.04	2,587	None	Light Brown	None
Blanks					
SB01	5.54	<10			
SB02	7.63	<10			
SB03	7.20	<10			
SB04	7.00	<10			
SB05	--	--			
SB06	6.50	<10			
Surface Water					
SW02	7.48	2,364	None	Yellowish-Brown	Clear
SW03	7.15	4,135	None	Yellowish-Brown	Clear
SW06	7.30	4,069	Fuel Oil	Yellowish-Brown	Clear
SW09	7.35	4,215	Fuel Oil	Yellowish-Brown	Clear
SW10	6.84	8,929	None	Yellowish-Brown	Slight
SW11	8.88	1,167	Slight Septic	Yellow-Brown	Clear

Well #	pH	Specific Conductivity at 25°C	Odor	Color	Turbidity
SW12	7.57	2,028	None	Light Yellow-Brown	Clear
SW13	8.91	846	None	Light Yellow-Brown	Clear
SW15	8.51	7,909	None	Yellow-Brown	Clear
SW15 Dup	8.39	8,000	--	--	--
SW20	8.69	800	None	Yellow-Brown	Clear
SW21	7.23	1,847	Slight Septic	Light Yellow	Clear
SW22	7.40	1,750	Slight Septic	Light Yellow	Clear
SW22 Dup	7.44	1,600	--	--	--
Private Well					
PW01	6.85	414	None	Clear	None
PW01 Dup	6.90	425	--	--	--

13014.34
SGW2/jpl/SGW2
[jpl-400-22]

9TH AVENUE DUMP
GROUNDWATER ORGANICS - ROUND 2
CONCENTRATION (UG/L)

CRL#	9N03S70	9N03S72	9N03S82	9N03S81	9N03S69	9N03S67	9N03S79	9N03S92	9N03S96
SAMPLE IDENTIFICATION	GX01-03	GX02-03	GX03-03	GX04-03	GX05-03	GX06-03	GX07-03	GX08-03	GX09-03
CRQL MULTIPLE	1	1	5	500	5	10	67	250	10
CHLOROMETHANE									
BROMOMETHANE									
VINYL CHLORIDE				25000				2500	
CHLOROETHANE			28J		1300	860	470J		
METHYLENE CHLORIDE	3UJ	7UJ	9J	840J	46UJ	56UJ	330UJ	2600UJ	20UJ
ACETONE	30B	5UJ	190UJ	390000J	63UJ	90UJ	120008J	35000	650UJ
CARBON DISULFIDE									
1,1-DICHLOROETHENE									
1,1-DICHLOROETHANE				870J			250J	920J	
TRANS-1,2-DICHLOROETHENE				26000			220J	12000	
CHLOROFORM									
1,2-DICHLOROETHANE									
2-BUTANONE	10UR	10UR	290J	85000J	50UR	100UR	9200J	38000	1700J
1,1,1-TRICHLOROETHANE									
CARBON TETRACHLORIDE									
VINYL ACETATE	10UR	10UR	50UR	5000UR	50UR	100UR	670UR		100UR
BROMODICHLOROMETHANE	5UR	5UR	25UR	2500UR	25UR	50UR	330RU		50UR
1,2-DICHLOROPROPANE									
TRANS-1,3-DICHLOROPROPENE									
TRICHLOROETHENE									
DIBROMOCHLOROMETHANE									
1,1,2-TRICHLOROETHANE									
BENZENE					120	450	580	1200J	38J
CIS-1,3-DICHLOROPROPENE									
2-CHLOROETHYLVINYLETHER	10UR	10UR	50UR	5000UR	50UR	100UR	670UR		100UR
BROMOFORM									
4-METHYL-2-PENTANONE			50UR	5000UR				630J	
2-HEXANONE	10UR	10UR	350	84000	50UR	100UR	4800J	43000	190J
TETRACHLOROETHENE	5UR	5UR	25UR	2500UR	25UR	50UR	710R		50UR
1,1,2,2-TETRACHLOROETHANE							330UR		
TOLUENE		2J	5J	4100	17J		4600	12000	51
CHLOROBENZENE	1UJ	1UJ	10UJ	950JB	7UJ	13UJ	120J	550J	21J
ETHYLBENZENE					630	1400	1900	2500	
STYRENE	5UR	5UR			25UR				
TOTAL XYLENES						110	2700UJ	3200	
CRQL MULTIPLE	1	1	1	2	1	1	2	300	2
PHENOL				170			450		
BIS(2-CHLOROETHYL)ETHER									
2-CHLOROPHENOL									
1,3-DICHLOROBENZENE									
1,4-DICHLOROBENZENE									
BENZYL ALCOHOL									
1,2-DICHLOROBENZENE									

9TH AVENUE DUMP
GROUNDWATER ORGANICS - ROUND 2
CONCENTRATION (UG/L)

CRL#	0N03S70	0N03S72	0N03S82	0N03S81	0N03S69	0N03S67	0N03S79	0N03S92	0N03S96
SAMPLE IDENTIFICATION	GX01-03	GX02-03	GX03-03	GX04-03	GX05-03	GX06-03	GX07-03	GX08-03	GX09-03
3,3-DICHLOROBENZIDINE									
BENZO(A)ANTHRACENE								1200J	
BIS(2-ETHYLHEXYL)PHTHALATE		3J	2J		2J	2J	5J		
CHRYSENE								1200J	
DI-N-OCTYL PHTHALATE		10	12						
BENZO(B)FLUORANTHENE								890J	
BENZO(K)FLUORANTHENE									
BENZO(A)PYRENE								970J	
INDENO(1,2,3-CD)PYRENE									
DIBENZ(A,H)ANTHRACENE									
BENZO(G,H,I)PERYLENE								610J	
CRDL MULTIPLE	1	1	1	10	1	1	1	1	1
ALPHA-BHC								1.3	
BETA-BHC									
DELTA-BHC									
GAMMA-BHC (LINDANE)									
HEPTACHLOR									
ALDRIN									
HEPTACHLOR EPOXIDE				0.71				0.20	
ENDOSULFAN I								0.062	
DIELDRIN									
4,4-DDE								0.25	
ENDRIN				0.56J					
ENDOSULFAN II									
4,4-DDD									
ENDOSULFAN SULFATE									
DDT 4,4-									
METHOXYCHLOR									
ENDRIN KETONE									
CHLORDANE									
TOXAPHENE									
AROCLOR-1016									
AROCLOR-1221									
AROCLOR-1232									
AROCLOR-1242									
AROCLOR-1248									
AROCLOR-1254									
AROCLOR-1260									

9TH AVENUE DUMP
GROUNDWATER ORGANICS - ROUND 2
CONCENTRATION (UG/L)

CRL#	0N03S92	0N03S96	0N03S60	0N03S78	0N03S95	0N04S38	0N03D75	0N03S74	0N03S73
SAMPLE IDENTIFICATION	GX10-03	GX11-03	GX12-03	GX13-03	GX14-03	GX15-03	GX16-93	GX16-03	GX17-03
2-METHYLPHENOL				100	2400	330	110		
BIS(2-CHLOROISOPROPYL)ETHER									
4-METHYLPHENOL				560	11000		780	260	
N-NITROSO-DI-N-PROPYLAMINE									
HEXACHLOROETHANE									
NITROBENZENE									
ISOPHORONE									
2-NITROPHENOL									
2,4-DIMETHYLPHENOL				140		200	180	47	
BENZOIC ACID									
BIS(-2-CHLOROETHOOXY)METHANE									
2,4-DICHLOROPHENOL									
1,2,4-TRICHLOROBENZENE									
NAPHTHALENE				71	460	140	240	210	
4-CHLOROANILINE									
HEXACHLOROBUTADIENE									
4-CHLORO-3-METHYLPHENOL							160		
2-METHYLNAPHTHALENE				12	920	62	360	320	
HEXACHLOROCYCLOPENTADIENE									
2,4,6-TRICHLOROPHENOL									
2,4,5-TRICHLOROPHENOL									
2-CHLORONAPHTHALENE									
2-NITROANILINE									
DIMETHYL PHTHALATE									
ACANAPHTHYLENE									
3-NITROANILINE									
ACENAPHTHENE				5J			16J	15	
2,4-DINITROPHENOL									
4-NITROPHENOL									
DIBENZOFURAN							11J	9J	
2,4-DINITROTOLUENE									
2,6-DINITROTOLUENE									
DIETHYLPHTHALATE			78						
4-CHLOROPHENYL-PHENYLETHER									
FLUORENE				8J			20	17	
4-NITROANILINE									
4,6-DINITRO-2-METHYLPHENOL									
N-NITROSODIPHENYLAMINE (1)									
4-BROMOPHENYL-PHENYLETHER									
HEXACHLOROBENZENE									
PENTACHLOROPHENOL									
PHENANTHRENE				21	170J	17	46	38	
ANTHRACENE				5J			6J	6J	
DI-N-BUTYLPHTHALATE				10					
FLUORANTHENE				12					
PYRENE				9J			10J	8J	
BUTYLBENZYLPHTHALATE				5J					

9TH AVENUE DUMP
GROUNDWATER ORGANICS - ROUND 2
CONCENTRATION (UG/L)

CRL#	DN03577	DN03593	DN03590	DN03591	DN03583	DN03584	DN03580	DN03587	DN03589
SAMPLE IDENTIFICATION	GX18-03	GX19-03	GX20-03	GX21-03	GX22-03	GX22-93	GX23-03	GX24-03	GX25-03
CRDL MULTIPLE	100	5000	1000	500	330	200	500	200	10000
CHLOROMETHANE									
BROMOMETHANE									
VINYL CHLORIDE					1700J	1300J	2000J		
CHLOROETHANE									
METHYLENE CHLORIDE	1100UJ	15000UJ	8800UJ	2300UJ	1300J	1100	4500	340J	30000J
ACETONE	2700	61000	79000J	9200UJ	32000UJ	870UJ		3700B	660000UJ
CARBON DISULFIDE									
1,1-DICHLOROETHENE									
1,1-DICHLOROETHANE					2200	1900	1800J	1000	
TRANS-1,2-DICHLOROETHENE		37000			38000	34000	49000		
CHLOROFORM									
1,2-DICHLOROETHANE					5300	5000	6900		
2-BUTANONE	3100J	520000	110000	54000RJ	3300UR	2000UR	5000UR	6500J	2100000J
1,1,1-TRICHLOROETHANE						270J			
CARBON TETRACHLORIDE									
VINYL ACETATE	1000UR			5000UR	3300UR	2000UR	5000UR	2000UR	100000UR
BROMODICHLOROMETHANE	500UR			2500UR	1700UR	1000UR	2500UR	1000UR	50000UR
1,2-DICHLOROPROPANE									
TRANS-1,3-DICHLOROPROPENE									
TRICHLOROETHENE							9900		
DIBROMOCHLOROMETHANE									
1,1,2-TRICHLOROETHANE									
BENZENE		16000J	2200J	1700J				500J	
CIS-1,3-DICHLOROPROPENE									
2-CHLOROETHYLVINYLETHER	1000UR			5000UR	3300UR	2000UR	5000UR	2000UR	100000UR
BROMOFORM									
4-METHYL-2-PENTANONE					3300UR	2000UR	5000UR	2000UR	100000UR
2-HEXANONE	2200J	47000J	12000	5400J	9400J	9300J	12000J	2500J	140000J
TETRACHLOROETHENE	500UR			2500UR	1700UR	1000UR	2500UR	1000UR	50000UR
1,1,2,2-TETRACHLOROETHANE									
TOLUENE	14000	9100J	5700	780J	55000	47000	47000	39000	
CHLOROBENZENE		11000J		1000J	660UJ	400UJ	990UJ	420UJ	
ETHYLBENZENE	6300				6900	5400	4900	4900	
STYRENE									
TOTAL XYLENES	27000				39000	33000	20000	17000	
CRDL MULTIPLE	2	3	2	2.5	2	2	2	1.5	1.5
PHENOL	32	490	680		710	760	690	120	
BIS(-2-CHLOROETHYL)ETHER									
2-CHLOROPHENOL									
1,3-DICHLOROBENZENE									
1,4-DICHLOROBENZENE									
BENZYL ALCOHOL									
1,2-DICHLOROBENZENE									

9TH AVENUE DUMP
GROUNDWATER ORGANICS - ROUND 2
CONCENTRATION (UG/L)

CRL#	DN03S70	DN03S72	DN03S82	DN03S81	DN03S69	DN03S67	DN03S79	DN03S92	DN03S96
SAMPLE IDENTIFICATION	GX01-03	GX02-03	GX03-03	GX04-03	GX05-03	GX06-03	GX07-03	GX08-03	GX09-03
2-METHYLPHENOL				1300J			260		
BIS(2-CHLOROISOPROPYL)ETHER									
4-METHYLPHENOL				1300J			860		
N-NITROSO-DI-N-PROPYLAMINE									
HEXACHLOROETHANE									
NITROBENZENE									
ISOPHORONE	JJ								
2-NITROPHENOL									
2,4-DIMETHYLPHENOL				480		75	430		
BENZOIC ACID									
BIS(-2-CHLOROETHOOXY)METHANE									
2,4-DICHLOROPHENOL									
1,2,4-TRICHLOROBENZENE									
NAPHTHALENE							23	31000	
4-CHLOROANILINE									
HEXACHLOROBUTADIENE									
4-CHLORO-3-METHYLPHENOL									
2-METHYLNAPHTHALENE							12J	63000	
HEXACHLOROCYCLOPENTADIENE									
2,4,6-TRICHLOROPHENOL									
2,4,5-TRICHLOROPHENOL									
2-CHLORONAPHTHALENE									
2-NITROANILINE									
DIMETHYL PHTHALATE									
ACANAPHTHYLENE								1600J	
3-NITROANILINE									
ACENAPHTHENE								3200	
2,4-DINITROPHENOL									
4-NITROPHENOL									
DIBENZOFURAN									
2,4-DINITROTOLUENE									
2,6-DINITROTOLUENE									
DIETHYLPHTHALATE									
4-CHLOROPHENYL-PHENYLETHER									
FLUORENE								5700	
4-NITROANILINE									
4,6-DINITRO-2-METHYLPHENOL									
N-NITROSODIPHENYLAMINE (1)									
4-BROMOPHENYL-PHENYLETHER									
HEXACHLOROBENZENE									
PENTACHLOROPHENOL									
PHENANTHRENE							6J	19000	
ANTHRACENE								2300J	
DI-N-BUTYLPHTHALATE									
FLUORANTHENE								4800	
PYRENE								5200	
BUTYLBENZYLPHTHALATE									

9TH AVENUE DUMP
GROUNDWATER ORGANICS - ROUND 2
CONCENTRATION (UG/L)

CRL#	DN03577	DN03593	DN03590	DN03591	DN03583	DN03084	DN03580	DN03587	DN03589
SAMPLE IDENTIFICATION	GX18-03	GX19-03	GX20-03	GX21-03	GX22-03	GX22-93	GX23-03	GX24-03	GX25-03
3,3-DICHLOROBENZIDINE									
BENZO(A)ANTHRACENE	9J							44	
BIS(2-ETHYLHEXYL)PHTHALATE	20		32		59	29	65		
CHRYSENE	7J							43	
DI-N-OCTYL PHTHALATE	10J		8J		7J	7J	12J		
BENZO(B)FLUORANTHENE								33	
BENZO(K)FLUORANTHENE									
BENZO(A)PYRENE								21	
INDENO(1,2,3-CD)PYRENE								7J	
DIBENZ(A,H)ANTHRACENE								4J	
BENZO(G,H,I)PERYLENE								9J	
CRDL MULTIPLE	1	1	10	10	10	1	1	1	10
ALPHA-BHC				46				0.46	14
BETA-BHC									
DELTA-BHC									
GAMMA-BHC (LINDANE)									
HEPTACHLOR			25	2.7	0.28J	0.14		0.053	0.34J
ALDRIN						0.069J			
HEPTACHLOR EPOXIDE		0.096	1.1					0.064	
ENDOSULFAN I								0.15	
DIELDRIN									
4,4-DDE									
ENDRIN								5.3	
ENDOSULFAN II									
4,4-DDD						0.25J			
ENDOSULFAN SULFATE									
DDT 4,4-									
METHOXYCHLOR									
ENDRIN KETONE									
CHLORDANE									
TOXAPHENE									
AROCLOR-1016									
AROCLOR-1221									
AROCLOR-1232									
AROCLOR-1242									
AROCLOR-1248									
AROCLOR-1254									
AROCLOR-1260									

9TH AVENUE DUMP
GROUNDWATER ORGANICS - ROUND 2
CONCENTRATION (UG/L)

CRL#	DN03S92	DN03S96	DN03S60	DN03S78	DN03S95	DN04S38	DN03D75	DN03S74	DN03S73
SAMPLE IDENTIFICATION	GX10-03	GX11-03	GX12-03	GX13-03	GX14-03	GX15-03	GX16-93	GX16-03	GX17-03
CRDL MULTIPLE	1	1	1	500	500	100	140	140	1
CHLOROMETHANE									
BROMOMETHANE									
VINYL CHLORIDE						180J			
CHLOROETHANE									
METHYLENE CHLORIDE	2JBU	3JBU		6500UJ	29000B	450JB	550UJ	790UJ	10UJ
ACETONE	2JBU	6JBU		21000B	21000J	14000BJ	3700	4500	44B
CARBON DISULFIDE									
1,1-DICHLOROETHENE									
1,1-DICHLOROETHANE					2100J	1400			
TRANS-1,2-DICHLOROETHENE					4800	370J			
CHLOROFORM									
1,2-DICHLOROETHANE									
2-BUTANONE	10UR	10UR	10UR	29000J	20000J	9500J	29000J	34000J	10UR
1,1,1-TRICHLOROETHANE					2100J				
CARBON TETRACHLORIDE									
VINYL ACETATE	10UR		10UR	500UR	5000UR		1400UR	1400UR	10UR
BROMODICHLOROMETHANE	5UR	5UR	5UR	2500UR	2500UR	500UR	710UR	710UR	5UR
1,2-DICHLOROPROPANE						480J			
TRANS-1,3-DICHLOROPROPENE									
TRICHLOROETHENE									
DIBROMOCHLOROMETHANE									
1,1,2-TRICHLOROETHANE									
BENZENE	5				800J	110J	580J	690J	
CIS-1,3-DICHLOROPROPENE									
2-CHLOROETHYLVINYLETHER	10UR		10UR	500UR	5000UR	1000UR	1400UR	1400UR	10UR
BROMOFORM									
4-METHYL-2-PENTANONE	10UR	10UR				1000UR			
2-HEXANONE	10UR	10UR	10UR	6800J	5600J	6200BJ	4700J	5400J	10UR
TETRACHLOROETHENE			5UR	2500UR	2500UR		710UR	710UR	5UR
1,1,2,2-TETRACHLOROETHANE									
TOLUENE				70000	90000	30000	1400	1600	3J
CHLOROBENZENE					1100J	250JB	210J	210J	1UJ
ETHYLBENZENE				4100	2900	2700	1800	1500	
STYRENE							710UR	710UR	
TOTAL XYLENES				19000B	7800	11000	11000	9400	
CRDL MULTIPLE	1	1	1	1	30		2	1	2
PHENOL				130	2200	630			
BIS(2-CHLOROETHYL)ETHER									
2-CHLOROPHENOL									
1,3-DICHLOROBENZENE									
1,4-DICHLOROBENZENE									
BENZYL ALCOHOL									
1,2-DICHLOROBENZENE									

9TH AVENUE DUMP
GROUNDWATER ORGANICS - ROUND 2
CONCENTRATION (UG/L)

CRL#	0N30039	0N30040	0N30037	0N03520	0N30033	0N03534	0N03594	0N03564	0N03568
SAMPLE IDENTIFICATION	GX26-03	GX26-93	GX27-03	GX28-03	GX29-03	GX30-03	GX31-03	GX32-03	GX33-03
2-METHYLPHENOL									
BIS(2-CHLOROISOPROPYL)ETHER									
4-METHYLPHENOL									
N-NITROSO-DI-N-PROPYLAMINE									
HEXACHLOROETHANE									
NITROBENZENE									
ISOPHORONE									
2-NITROPHENOL									
2,4-DIMETHYLPHENOL									
BENZOIC ACID									
BIS(-2-CHLOROETHOOXY)METHANE									
2,4-DICHLOROPHENOL									
1,2,4-TRICHLOROBENZENE									
NAPHTHALENE	11	12					77000J		
4-CHLOROANILINE									
HEXACHLOROBUTADIENE									
4-CHLORO-3-METHYLPHENOL									
2-METHYLNAPHTHALENE	2J	2J					220000J		
HEXACHLOROCYCLOPENTADIENE									
2,4,6-TRICHLOROPHENOL									
2,4,5-TRICHLOROPHENOL									
2-CHLORONAPHTHALENE									
2-NITROANILINE									
DIMETHYL PHTHALATE									
ACANAPHTHYLENE									
3-NITROANILINE									
ACENAPHTHENE							13000J		
2,4-DINITROPHENOL									
4-NITROPHENOL									
DIBENZOFURAN									
2,4-DINITROTOLUENE									
2,6-DINITROTOLUENE									
DIETHYLPHTHALATE									
4-CHLOROPHENYL-PHENYLETHER									
FLUORENE							20000J		
4-NITROANILINE									
4,6-DINITRO-2-METHYLPHENOL									
N-NITROSODIPHENYLAMINE (1)									
4-BROMOPHENYL-PHENYLETHER									
HEXACHLOROBENZENE									
PENTACHLOROPHENOL									
PHENANTHRENE							56000J		
ANTHRACENE							5700J		
DI-N-BUTYLPHTHALATE									
FLUORANTHENE							12000J		
PYRENE							8900J		
BUTYLBENZYLPHTHALATE									

9TH AVENUE DUMP
GROUNDWATER ORGANICS - ROUND 2
CONCENTRATION (UG/L)

CRL#	DN03S92	DN03S96	DN03S60	DN03S78	DN03S95	DN04S38	DN03D75	DN03S74	DN03S73
SAMPLE IDENTIFICATION	GX10-03	GX11-03	GX12-03	GX13-03	GX14-03	GX15-03	GX16-93	GX16-03	GX17-03
3,3-DICHLOROBENZIDINE									
BENZO(A)ANTHRACENE									
BIS(2-ETHYLHEXYL)PHTHALATE		3J	5J	86			15J	17	
CHRYSENE									
DI-N-OCTYL PHTHALATE				62		3J	9J	10	
BENZO(B)FLUORANTHENE									
BENZO(K)FLUORANTHENE									
BENZO(A)PYRENE									
INDENO(1,2,3-CD)PYRENE									
DIBENZ(A,H)ANTHRACENE									
BENZO(G,H,I)PERYLENE									
CRDL MULTIPLE	1	1	1	1	10	5	1	1	1
ALPHA-BHC					0.22J	14			
BETA-BHC									
DELTA-BHC					0.63				
GAMMA-BHC (LINDANE)					0.68				
HEPTACHLOR									
ALDRIN					3.0				
HEPTACHLOR EPOXIDE					1.0				
ENDOSULFAN I									
DIELDRIN									
4,4-DDE									
ENDRIN									
ENDOSULFAN II									
4,4-DDD									
ENDOSULFAN SULFATE									
DDT 4,4-						0.49J			
METHOXYCHLOR									
ENDRIN KETONE									
CHLORDANE									
TOXAPHENE									
AROCLOR-1016									
AROCLOR-1221									
AROCLOR-1232									
AROCLOR-1242									
AROCLOR-1248									
AROCLOR-1254									
AROCLOR-1260									

9TH AVENUE DUMP
GROUNDWATER ORGANICS - ROUND 2
CONCENTRATION (UG/L)

CRL#	0N03S66	0N03S08	0N03S06	0N03S01	0N03S10	0N03S36	0N03S47	0N03S46	0N03S44
SAMPLE IDENTIFICATION	GX34-03	GX35-03	GX35-93	GX36-03	GX37-03	GX38-03	GX39-03	GX40-03	GX41-03
CRDL MULTIPLE	1	1	1	1	1	1	1	1	1
CHLOROMETHANE									
BROMOMETHANE									
VINYL CHLORIDE									
CHLOROETHANE									
METHYLENE CHLORIDE	2UJ	3JBUJ	7J	68UJ	58UJ	2JBU	58UJ	2JBU	1JBU
ACETONE	31UJ	26BUJ	3JBU	828UJ	178UJ	8JBU	128UJ	9JBU	
CARBON DISULFIDE			248UJ						
1,1-DICHLOROETHENE									
1,1-DICHLOROETHANE						4J			
TRANS-1,2-DICHLOROETHENE									
CHLOROFORM									
1,2-DICHLOROETHANE									
2-BUTANONE	10UR	10UR	10UR	10UR	10UR	10UR	58J	10UR	10UR
1,1,1-TRICHLOROETHANE									
CARBON TETRACHLORIDE									
VINYL ACETATE	10UR						10UR	10UR	10UR
BROMODICHLOROMETHANE	5UR	5UR	5UR	5UR	5UR	5UR	5UR	5UR	5UR
1,2-DICHLOROPROPANE									
TRANS-1,3-DICHLOROPROPENE									
TRICHLOROETHENE									
DIBROMOCHLOROMETHANE									
1,1,2-TRICHLOROETHANE									
BENZENE		4J	7						
CIS-1,3-DICHLOROPROPENE									
2-CHLOROETHYLVINYLETHER	10UR			10UR	10UR	10UR	10UR	10UR	10UR
BROMOFORM									
4-METHYL-2-PENTANONE		10UR	10UR	47J	10UR	10UR	10UR	10UR	10UR
2-HEXANONE	10UR	10UR	10UR	47J	10UR	10UR	10UR	10UR	10UR
TETRACHLOROETHENE	5UR								
1,1,2,2-TETRACHLOROETHANE									
TOLUENE									
CHLOROBENZENE	1UJ							1JBU	1J
ETHYLBENZENE									
STYRENE	5UR								
TOTAL XYLENES									
CRDL MULTIPLE	3	1	2	2	1	1	1	1	1
PHENOL									
BIS(-2-CHLOROETHYL)ETHER									
2-CHLOROPHENOL									
1,3-DICHLOROBENZENE									
1,4-DICHLOROBENZENE									
BENZYL ALCOHOL									
1,2-DICHLOROBENZENE									

9TH AVENUE DUMP
GROUNDWATER ORGANICS - ROUND 2
CONCENTRATION (UG/L)

CRL#	DN03S77	DN03S93	DN03S90	DN03S91	DN03S83	DN03D84	DN03S80	DN03S87	DN03S89
SAMPLE IDENTIFICATION	GX18-03	GX19-03	GX20-03	GX21-03	GX22-03	GX22-93	GX23-03	GX24-03	GX25-03
2-METHYLPHENOL	100		890			590J	690	81J	1200J
BIS(2-CHLOROISOPROPYL)ETHER									
4-METHYLPHENOL	480		2200		660	540J		390J	6600J
N-NITROSO-DI-N-PROPYLAMINE									
HEXACHLOROETHANE									
NITROBENZENE									
ISOPHORONE	6J			39					
2-NITROPHENOL									
2,4-DIMETHYLPHENOL	20		1300		150	140	68	110	
BENZOIC ACID									
BIS(-2-CHLOROETHOOXY)METHANE									
2,4-DICHLOROPHENOL					980	1400	1500		
1,2,4-TRICHLOROBENZENE									
NAPHTHALENE	220	220	78	8J	82	76	54	400	
4-CHLOROANILINE									
HEXACHLOROBUTADIENE									
4-CHLORO-3-METHYLPHENOL									
2-METHYLNAPHTHALENE	29	220	230	17J				770	
HEXACHLOROCYCLOPENTADIENE									
2,4,6-TRICHLOROPHENOL									
2,4,5-TRICHLOROPHENOL									
2-CHLORONAPHTHALENE									
2-NITROANILINE									
DIMETHYL PHTHALATE									
ACANAPHTHYLENE									
3-NITROANILINE									
ACENAPHTHENE	12J		10J					49	
2,4-DINITROPHENOL									
4-NITROPHENOL									
DIBENZOFURAN	9J							52	
2,4-DINITROTOLUENE									
2,6-DINITROTOLUENE									
DIETHYLPHTHALATE									
4-CHLOROPHENYL-PHENYLETHER									
FLUORENE	16J		13J					92	
4-NITROANILINE									
4,6-DINITRO-2-METHYLPHENOL									
N-NITROSODIPHENYLAMINE (1)									
4-BROMOPHENYL-PHENYLETHER									
HEXACHLOROBENZENE									
PENTACHLOROPHENOL									
PHENANTHRENE	52	36	48		4J			270	
ANTHRACENE	10J		6J					36	
DI-N-BUTYLPHTHALATE	4J	16J							
FLUORANTHENE	25							100	
PYRENE	19J		7J					75J	
BUTYLBENZYLPHTHALATE									

9TH AVENUE DUMP
GROUNDWATER ORGANICS - ROUND 2
CONCENTRATION (UG/L)

CRL#	ONO3S66	ONO3S08	ONO3S06	ONO3S01	ONO3S10	ONO3S36	ONO3S47	ONO3S46	ONO3S44
SAMPLE IDENTIFICATION	GX34-03	GX35-03	GX35-93	GX36-03	GX37-03	GX38-03	GX39-03	GX40-03	GX41-03
3,3-DICHLOROBENZIDINE									
BENZO(A)ANTHRACENE									
BIS(2-ETHYLHEXYL)PHTHALATE									
CHRYSENE									
DI-N-OCTYL PHTHALATE				5J					
BENZO(B)FLUORANTHENE									
BENZO(K)FLUORANTHENE									
BENZO(A)PYRENE									
INDENO(1,2,3-CD)PYRENE									
DIBENZ(A,H)ANTHRACENE									
BENZO(G,H,I)PERYLENE									
CRDL MULTIPLE	1	1	1	1	1	1	1	1	1
ALPHA-BHC				0.79					
BETA-BHC				0.51	2.9				
DELTA-BHC									
GAMMA-BHC (LINDANE)									
HEPTACHLOR									
ALDRIN									
HEPTACHLOR EPOXIDE									
ENDOSULFAN I				0.055					
DIELDRIN									
4,4-DDE									
ENDRIN									
ENDOSULFAN II									
4,4-DDD									
ENDOSULFAN SULFATE								0.093J	
DDT 4,4-									
METHOXYCHLOR								0.34	
ENDRIN KETONE									
CHLORDANE									
TOXAPHENE									
AROCLOR-1016									
AROCLOR-1221									
AROCLOR-1232									
AROCLOR-1242									
AROCLOR-1248									
AROCLOR-1254									
AROCLOR-1260									

9TH AVENUE DUMP
GROUNDWATER ORGANICS - ROUND 2
CONCENTRATION (UG/L)

CRL#	DN30D39	DN30D40	DN30D37	DN03S20	DN30D33	DN03S34	DN03S94	DN03S64	DN03S68
SAMPLE IDENTIFICATION	GX26-03	GX26-93	GX27-03	GX28-03	GX29-03	GX30-03	GX31-03	GX32-03	GX33-03
CRDL MULTIPLE	1	1	5	1	1	1	200	2	1
CHLOROMETHANE									
BROMOMETHANE									
VINYL CHLORIDE							550J		
CHLOROETHANE								140	5J
METHYLENE CHLORIDE	7BUJ	7BUJ	20JBU	3JBU	3JBU	2JBU	2800UJ	8UJ	2UJ
ACETONE	188UJ	15BUJ	4008	2JBU	7JBU	5JBU	31000B	20UJ	25UJ
CARBON DISULFIDE									
1,1-DICHLOROETHENE									
1,1-DICHLOROETHANE	3J	3J	100				2400		
TRANS-1,2-DICHLOROETHENE	2J	2J	14J				15000		
CHLOROFORM									
1,2-DICHLOROETHANE									
2-BUTANONE	59J	59J	1600J	10UR	10UR	10UR	40000J	20UR	10UR
1,1,1-TRICHLOROETHANE			10J				2800		
CARBON TETRACHLORIDE									
VINYL ACETATE	10UR	10UR					2000UR	20UR	10UR
BROMODICHLOROMETHANE	5UR	5UR	25UR	5UR	5UR		1000UR	10UR	5UR
1,2-DICHLOROPROPANE			7J						
TRANS-1,3-DICHLOROPROPENE									
TRICHLOROETHENE									
DIBROMOCHLOROMETHANE									
1,1,2-TRICHLOROETHANE									
BENZENE	21	22	6J				1300	180	2J
CIS-1,3-DICHLOROPROPENE									
2-CHLOROETHYLVINYLETHER	10UR	10UR	50UR	10UR	10UR	10UR	2000UR	20UR	10UR
BROMOFORM									
4-METHYL-2-PENTANONE	10UR	10UR	50UR	10UR	10UR	10UR			
2-HEXANONE	2J	1J	480J	10UR	10UR	10UR	12000J	20UR	10UR
TETRACHLOROETHENE							1000UR	10UR	5UR
1,1,2,2-TETRACHLOROETHANE									
TOLUENE	75	83	940				25000		
CHLOROBENZENE			7J				440J	3UJ	1UJ
ETHYLBENZENE	160	170	820				4000	3J	
STYRENE								10UR	
TOTAL XYLENES	260	260	1200J				12000	3J	
CRDL MULTIPLE	1	1	1	1	1	1	400	1	2
PHENOL									
BIS(-2-CHLOROETHYL)ETHER									
2-CHLOROPHENOL									
1,3-DICHLOROBENZENE									
1,4-DICHLOROBENZENE									
BENZYL ALCOHOL									
1,2-DICHLOROBENZENE									

9TH AVENUE DUMP
GROUNDWATER ORGANICS - ROUND 2
CONCENTRATION (UG/L)

CRL#	DN03S59	DN03S61	DN03S65	DN03S17	DN03S18	DN03S15	DN03D16	DN03S04	DN03S07
SAMPLE IDENTIFICATION	GX42-03	GX43-03	GX44-03	GX45-03	GX46-03	GX47-03	GX47-93	GX48-03	GX49-03
2-METHYLPHENOL									
BIS(2-CHLOROISOPROPYL)ETHER									
4-METHYLPHENOL									
N-NITROSO-DI-N-PROPYLAMINE									
HEXACHLOROETHANE									
NITROBENZENE									
ISOPHORONE					9J	12	19		3J
2-NITROPHENOL									
2,4-DIMETHYLPHENOL									
BENZOIC ACID									
BIS(2-CHLOROETHOXY)METHANE									
2,4-DICHLOROPHENOL									
1,2,4-TRICHLOROBENZENE									
NAPHTHALENE									
4-CHLOROANILINE									
HEXACHLOROBUTADIENE									
4-CHLORO-3-METHYLPHENOL									
2-METHYLNAPHTHALENE									
HEXACHLOROCYCLOPENTADIENE									
2,4,6-TRICHLOROPHENOL									
2,4,5-TRICHLOROPHENOL									
2-CHLORONAPHTHALENE									
2-NITROANILINE									
DIMETHYL PHTHALATE									
ACANAPHTHYLENE									
3-NITROANILINE									
ACENAPHTHENE									
2,4-DINITROPHENOL									
4-NITROPHENOL									
DIBENZOFURAN									
2,4-DINITROTOLUENE									
2,6-DINITROTOLUENE									
DIETHYLPHTHALATE									
4-CHLOROPHENYL-PHENYLETHER									
FLUORENE									
4-NITROANILINE									
4,6-DINITRO-2-METHYLPHENOL									
N-NITROSODIPHENYLAMINE (1)									
4-BROMOPHENYL-PHENYLETHER									
HEXACHLOROBENZENE									
PENTACHLOROPHENOL									
PHENANTHRENE								2J	
ANTHRACENE									
DI-N-BUTYLPHTHALATE							2J		
FLUORANTHENE									
PYRENE								2J	
BUTYLBENZYLPHTHALATE									

9TH AVENUE DUMP
GROUNDWATER ORGANICS - ROUND 2
CONCENTRATION (UG/L)

CRL#	ON30039	ON30040	ON30037	ON03S20	ON30033	ON03S34	ON03S94	ON03S64	ON03S68
SAMPLE IDENTIFICATION	GX26-03	GX26-93	GX27-03	GX28-03	GX29-03	GX30-03	GX31-03	GX32-03	GX33-03
3,3-DICHLOROBENZIDINE									
BENZO(A)ANTHRACENE									
BIS(2-ETHYLHEXYL)PHTHALATE	7J	8J	4JBU		3JBU	3JBU			
CHRYSENE							3100J		
DI-N-OCTYL PHTHALATE									
BENZO(B)FLUORANTHENE									
BENZO(K)FLUORANTHENE									
BENZO(A)PYRENE									
INDENO(1,2,3-CD)PYRENE									
DIBENZ(A,H)ANTHRACENE									
BENZO(G,H,I)PERYLENE									
CRDL MULTIPLE	1	1	1	1	1	1	1	1	1
ALPHA-BHC									
BETA-BHC									
DELTA-BHC									
GAMMA-BHC (LINDANE)							8.4J		
HEPTACHLOR									
ALDRIN									
HEPTACHLOR EPOXIDE							4.2J		
ENDOSULFAN I									
DIELDRIN									
4,4-DDE									
ENDRIN									
ENDOSULFAN II									
4,4-DDD									
ENDOSULFAN SULFATE									
DDT 4,4-									
METHOXYCHLOR									
ENDRIN KETONE									
CHLORDANE									
TOXAPHENE									
AROCLOR-1016									
AROCLOR-1221									
AROCLOR-1232									
AROCLOR-1242									
AROCLOR-1248									
AROCLOR-1254									
AROCLOR-1260									

9TH AVENUE DUMP
GROUNDWATER ORGANICS - ROUND 2
CONCENTRATION (UG/L)

CRL#	ONO3803	ONO3802	ONO3819	ONO3812	ONO3813	ONO3862	ONO3863	ONO3841	ONO3888
SAMPLE IDENTIFICATION	GX50-03	GX51-03	GX52-03	GX53-03	GX54-03	GX55-03	GX55-93	GX57-03	GX58-03
CRDL MULTIPLE	5	1	1	1	1	1	1	10	500
CHLOROMETHANE									
BROMOMETHANE			89						
VINYL CHLORIDE									
CHLOROETHANE									
METHYLENE CHLORIDE	32BUJ	4JBU	5BUJ	2JBU	2JBU	1UJ		52BUJ	3000UJ
ACETONE	350B	108UJ	9JBU					97JBU	2000UJ
CARBON DISULFIDE									
1,1-DICHLOROETHENE			3J					69	
1,1-DICHLOROETHANE			10					11J	
TRANS-1,2-DICHLOROETHENE			170						
CHLOROFORM			13						
1,2-DICHLOROETHANE									
2-BUTANONE	50UR	10UR	10UR	10UR	10UR	10UR	10UR	420J	
1,1,1-TRICHLOROETHANE			13					22J	
CARBON TETRACHLORIDE									
VINYL ACETATE						10UR	10UR	100UR	
BROMODICHLOROMETHANE	25UR	5UR	5UR	5UR	5UR	5UR	5UR	50UR	
1,2-DICHLOROPROPANE									
TRANS-1,3-DICHLOROPROPENE									
TRICHLOROETHENE			20						
DIBROMOCHLOROMETHANE									
1,1,2-TRICHLOROETHANE									
BENZENE			4J					14J	
CIS-1,3-DICHLOROPROPENE									
2-CHLOROETHYLVINYLETHER	50UR		10UR	10UR	10UR	10UR	10UR	100UR	100000UR
BROMOFORM									
4-METHYL-2-PENTANONE	50UR	10UR	10UR	10UR	10UR			100UR	
2-HEXANONE	50UR	10UR	10UR	10UR	10UR	10UR	10UR	35J	
TETRACHLOROETHENE			130			5UR	5UR		
1,1,2,2-TETRACHLOROETHANE									
TOLUENE								1800	33000
CHLOROBENZENE								26JB	
ETHYLBENZENE								1800	3200
STYRENE									
TOTAL XYLENES								5400	11000
CRDL MULTIPLE	1	1	1	1	1	1	1	2	3
PHENOL	150								130
BIS(-2-CHLOROETHYL)ETHER									
2-CHLOROPHENOL									
1,3-DICHLOROBENZENE									
1,4-DICHLOROBENZENE									
BENZYL ALCOHOL									
1,2-DICHLOROBENZENE									

9TH AVENUE DUMP
GROUNDWATER ORGANICS - ROUND 2
CONCENTRATION (UG/L)

CRL#	DN03S66	DN03S08	DN03S06	DN03S01	DN03S10	DN03S36	DN03S47	DN03S46	DN03S44
SAMPLE IDENTIFICATION	GX34-03	GX35-03	GX35-93	GX36-03	GX37-03	GX38-03	GX39-03	GX40-03	GX41-03
2-METHYLPHENOL									
BIS(2-CHLOROISOPROPYL)ETHER									
4-METHYLPHENOL									
N-NITROSO-DI-N-PROPYLAMINE									
HEXACHLOROETHANE									
NITROBENZENE									
ISOPHORONE				27					
2-NITROPHENOL									
2,4-DIMETHYLPHENOL									
BENZOIC ACID									
BIS(-2-CHLOROETHOOXY)METHANE									
2,4-DICHLOROPHENOL									
1,2,4-TRICHLOROBENZENE									
NAPHTHALENE									
4-CHLOROANILINE									
HEXACHLOROBUTADIENE									
4-CHLORO-3-METHYLPHENOL									
2-METHYLNAPHTHALENE									
HEXACHLOROCYCLOPENTADIENE									
2,4,6-TRICHLOROPHENOL									
2,4,5-TRICHLOROPHENOL									
2-CHLORONAPHTHALENE									
2-NITROANILINE									
DIMETHYL PHTHALATE									
ACANAPHTHYLENE									
3-NITROANILINE									
ACENAPHTHENE									
2,4-DINITROPHENOL									
4-NITROPHENOL									
DIBENZOFURAN									
2,4-DINITROTOLUENE									
2,6-DINITROTOLUENE									
DIETHYLPHTHALATE									
4-CHLOROPHENYL-PHENYLETHER									
FLUORENE									
4-NITROANILINE									
4,6-DINITRO-2-METHYLPHENOL									
N-NITROSODIPHENYLAMINE (1)									
4-BROMOPHENYL-PHENYLETHER									
HEXACHLOROBENZENE									
PENTACHLOROPHENOL									
PHENANTHRENE									
ANTHRACENE		3J	4J						
DI-N-BUTYLPHTHALATE				7J					
FLUORANTHENE									
PYRENE									
BUTYLBENZYLPHTHALATE				21					

9TH AVENUE DUMP
GROUNDWATER ORGANICS - ROUND 2
CONCENTRATION (UG/L)

CRL#	ONO3S03	ONO3S02	ONO3S19	ONO3S12	ONO3S13	ONO3S62	ONO3S63	ONO3B41	ONO3S88
SAMPLE IDENTIFICATION	GX50-03	GX51-03	GX52-03	GX53-03	GX54-03	GX55-03	GX55-93	GX57-03	GX58-03
3,3-DICHLOROBENZIDINE									
BENZO(A)ANTHRACENE									23J
BIS(2-ETHYLHEXYL)PHTHALATE			5JBU	2JBU				8J	
CHRYSENE									18J
DI-N-OCTYL PHTHALATE									
BENZO(B)FLUORANTHENE									
BENZO(K)FLUORANTHENE									
BENZO(A)PYRENE									
INDENO(1,2,3-CD)PYRENE									
DIBENZ(A,H)ANTHRACENE									
BENZO(G,H,I)PERYLENE									7J
CRDL MULTIPLE	1	1	1	1	1	1	1	1	1
ALPHA-BHC									0.036J
BETA-BHC									
DELTA-BHC								1.3	
GAMMA-BHC (LINDANE)									
HEPTACHLOR									0.16
ALDRIN									
HEPTACHLOR EPOXIDE									
ENDOSULFAN I									0.21
DIELDRIN									
4,4-DDE	0.13								
ENDRIN									6.7
ENDOSULFAN II									
4,4-DDD	0.085J								
ENDOSULFAN SULFATE									
DDT 4,4-									
METHOXYCHLOR									
ENDRIN KETONE									
CHLORDANE									
TOXAPHENE									
AROCLOR-1016									
AROCLOR-1221									
AROCLOR-1232									
AROCLOR-1242									
AROCLOR-1248									
AROCLOR-1254									
AROCLOR-1260									

9TH AVENUE DUMP
GROUNDWATER ORGANICS - ROUND 2
CONCENTRATION (UG/L)

CRL#	DN03S59	DN03S61	DN03S65	DN03S17	DN03S18	DN03S15	DN03D16	DN03S04	DN03S07
SAMPLE IDENTIFICATION	GX42-03	GX43-03	GX44-03	GX45-03	GX46-03	GX47-03	GX47-93	GX48-03	GX49-03
CRDL MULTIPLE	1	1	1	1	1	1	1	1	1
CHLOROMETHANE									
BROMOMETHANE									
VINYL CHLORIDE			19						
CHLOROETHANE									
METHYLENE CHLORIDE	1UJ		2UJ	4JBU	4JBU	4JBU	4JBU	4JBU	3JBU
ACETONE		10UJ	54UJ	548UJ	398UJ	6JBU	428UJ	6JBU	2JBU
CARBON DISULFIDE									
1,1-DICHLOROETHENE									
1,1-DICHLOROETHANE								8	
TRANS-1,2-DICHLOROETHENE								4J	
CHLOROFORM									
1,2-DICHLOROETHANE									
2-BUTANONE	10UR	10UR	10UR	10UR	10UR	10UR	10UR	10UR	10UR
1,1,1-TRICHLOROETHANE									
CARBON TETRACHLORIDE									
VINYL ACETATE	10UR	10UR	10UR						
BROMODICHLOROMETHANE	5UR	5UR	5UR	5UR	5UR	5UR	5UR	5UR	5UR
1,2-DICHLOROPROPANE									
TRANS-1,3-DICHLOROPROPENE									
TRICHLOROETHENE								2J	
DIBROMOCHLOROMETHANE									
1,1,2-TRICHLOROETHANE									
BENZENE							J9	5	
CIS-1,3-DICHLOROPROPENE									
2-CHLOROETHYLVINYLETHER	10UR	10UR	10UR	10UR	10UR	10UR	10UR		
BROMOFORM									
4-METHYL-2-PENTANONE				10UR	10UR	10UR	10UR	10UR	10UR
2-HEXANONE	10UR	10UR	10UR	10UR	10UR	10UR	10UR	10UR	10UR
TETRACHLOROETHENE	5UR	5UR	5UR					1J	
1,1,2,2-TETRACHLOROETHANE									
TOLUENE	5							2J	
CHLOROBENZENE								1J	
ETHYLBENZENE								19	
STYRENE									
TOTAL XYLENES								8	
CRDL MULTIPLE		1	1	1	1	1	1	1	1
PHENOL			20						
BIS(-2-CHLOROETHYL)ETHER									
2-CHLOROPHENOL									
1,3-DICHLOROBENZENE									
1,4-DICHLOROBENZENE									
BENZYL ALCOHOL									
1,2-DICHLOROBENZENE									

9TH AVENUE DUMP
GROUNDWATER ORGANICS - ROUND 2
CONCENTRATION (UG/L)

CRL#	0N03576	0N04937	0N04940	0N04939	0N04936	0N04935	0N03542	0N03585	0N03571
SAMPLE IDENTIFICATION	SX59-03	SX60-03	SX61-03	SX62-03	SX63-03	SX64-03	SB2-03	SB3-03	SB4-03
2-METHYLPHENOL	97								4J
BIS(2-CHLOROISOPROPYL)ETHER									
4-METHYLPHENOL	670								13J
N-NITROSO-DI-N-PROPYLAMINE									
HEXACHLOROETHANE									
NITROBENZENE									
ISOPHORONE									
2-NITROPHENOL									
2,4-DIMETHYLPHENOL	160								7J
BENZOIC ACID									
BIS(2-CHLOROETHOXY)METHANE									
2,4-DICHLOROPHENOL									
1,2,4-TRICHLOROBENZENE									
NAPHTHALENE	120								
4-CHLOROANILINE									
HEXACHLOROBUTADIENE									
4-CHLORO-3-METHYLPHENOL									
2-METHYLNAPHTHALENE	170								35
HEXACHLOROCYCLOPENTADIENE									
2,4,6-TRICHLOROPHENOL									
2,4,5-TRICHLOROPHENOL									
2-CHLORONAPHTHALENE									
2-NITROANILINE									
DIMETHYL PHTHALATE									
ACENAPHTHYLENE									
3-NITROANILINE									
ACENAPHTHENE	8J								
2,4-DINITROPHENOL									
4-NITROPHENOL									
DIBENZOFURAN									
2,4-DINITROTOLUENE									
2,6-DINITROTOLUENE									
DIETHYLPHTHALATE									
4-CHLOROPHENYL-PHENYLETHER									
FLUORENE									
4-NITROANILINE									
4,6-DINITRO-2-METHYLPHENOL									
N-NITROSODIPHENYLAMINE (1)									
4-BROMOPHENYL-PHENYLETHER									
HEXACHLOROBENZENE									
PENTACHLOROPHENOL									
PHENANTHRENE	23						23		
ANTHRACENE	5J						4J		
DI-N-BUTYLPHTHALATE									
FLUORANTHENE							19J		
PYRENE							11J		
BUTYLBENZYLPHTHALATE									

9TH AVENUE DUMP
GROUNDWATER ORGANICS - ROUND 2
CONCENTRATION (UG/L)

CRL#	DN03S59	DN03S61	DN03S65	DN03S17	DN03S18	DN03S15	DN03D16	DN03S04	DN03S07
SAMPLE IDENTIFICATION	GX42-03	GX43-03	GX44-03	GX45-03	GX46-03	GX47-03	GX47-93	GX48-03	GX49-03
3,3-DICHLOROBENZIDINE									
BENZO(A)ANTHRACENE									
BIS(2-ETHYLHEXYL)PHTHALATE	6J	5J					3JBU		12
CHRYSENE									
DI-N-OCTYL PHTHALATE									
BENZO(B)FLUORANTHENE									
BENZO(K)FLUORANTHENE									
BENZO(A)PYRENE									
INDENO(1,2,3-CD)PYRENE									
DIBENZ(A,H)ANTHRACENE									
BENZO(G,H,I)PERYLENE									
CRDL MULTIPLE	1	1	1	1	1	1	1	1	1
ALPHA-BHC								0.16	
BETA-BHC			0.039J					0.11	0.38J
DELTA-BHC									
GAMMA-BHC (LINDANE)									
HEPTACHLOR									
ALDRIN									
HEPTACHLOR EPOXIDE									
ENDOSULFAN I									
DIELDRIN									
4,4-DDE									
ENDRIN									
ENDOSULFAN II									
4,4-DDD									
ENDOSULFAN SULFATE									
DDT 4,4-									
METHOXYCHLOR									
ENDRIN KETONE									
CHLORDANE									
TOXAPHENE									
AROCLOR-1016									
AROCLOR-1221									
AROCLOR-1232									
AROCLOR-1242									
AROCLOR-1248									
AROCLOR-1254									
AROCLOR-1260									

9TH AVENUE DUMP
GROUNDWATER ORGANICS - ROUND 2
CONCENTRATION (UG/L)

CRL#	SN03835	SN03844	SN03886	SN03915	SN03845	SN03869	SN03838
SAMPLE IDENTIFICATION	82W3-03	83W4-03	83B04-03	8201-03	8602-03	8B01-03	8B02-03
DRQL MULTIPLE	1	1	1	1	1	1	1
CHLOROMETHANE							
BROMOMETHANE							
VINYL CHLORIDE							
CHLOROETHANE							
METHYLENE CHLORIDE	41BU	3JBU	5UJ	3J8U	2J2U	4J2U	2JBU
ACETONE	63BUJ	36BUJ	2UJ	3JBU	9JBU		5JBU
CARBON DISULFIDE							
1,1-DICHLOROETHENE							
1,1-DICHLOROETHANE							
TRANS-1,2-DICHLOROETHENE							
CHLOROFORM					4J		
1,2-DICHLOROETHANE							
2-BUTANONE	J13		10UR	10UR	10UR	10UR	10UR
1,1,1-TRICHLOROETHANE							
CARBON TETRACHLORIDE							
VINYL ACETATE			10UR				
BROMODICHLOROMETHANE			5UR		10UR		
1,2-DICHLOROPROPANE				5UR	5UR	5UR	5UR
TRANS-1,3-DICHLOROPROPENE							
TRICHLOROETHENE							
DIBROMOCHLOROMETHANE							
1,1,2-TRICHLOROETHANE							
BENZENE							
CIS-1,3-DICHLOROPROPENE							
2-CHLOROETHYLVINYLETHER			10UR	10UR	10UR		10UR
BROMOFORM							
4-METHYL-2-PENTANONE			10UR	10UR	10UR	1	10UR
2-HEXANONE			10UR	10UR	10UR	1	10UR
TETRACHLOROETHENE			5UR				
1,1,2,2-TETRACHLOROETHANE							
TOLUENE					2J		
CHLOROBENZENE					1J		
ETHYLBENZENE							
STYRENE							
TOTAL XYLENES							
DRQL MULTIPLE	1	1	1	1	1	1	1
PHENOL							
BIS(2-CHLOROETHYL)ETHER							
2-CHLOROPHENOL							
1,3-DICHLOROBENZENE							
1,4-DICHLOROBENZENE							
BENZYL ALCOHOL							
1,2-DICHLOROBENZENE							

9TH AVENUE DUMP
GROUNDWATER ORGANICS - ROUND 2
CONCENTRATION (UG/L)

CRL#	DN03S03	DN03S02	DN03S19	DN03S12	DN03S13	DN03S62	DN03S63	DN03S41	DN03S88
SAMPLE IDENTIFICATION	GX50-03	GX51-03	GX52-03	GX53-03	GX54-03	GX55-03	GX55-93	GX57-03	GX58-03
2-METHYLPHENOL									92J
BIS(2-CHLOROISOPROPYL)ETHER	7J								
4-METHYLPHENOL								22	540J
N-NITROSO-DI-N-PROPYLAMINE									
HEXACHLOROETHANE									
NITROBENZENE									
ISOPHORONE				2J					
2-NITROPHENOL									
2,4-DIMETHYLPHENOL									120
BENZOIC ACID									
BIS(2-CHLOROETHOOXY)METHANE									
2,4-DICHLOROPHENOL									
1,2,4-TRICHLOROBENZENE									
NAPHTHALENE	110							55	450
4-CHLOROANILINE									
HEXACHLOROBUTADIENE									
4-CHLORO-3-METHYLPHENOL									
2-METHYLNAPHTHALENE	16							19J	880
HEXACHLOROCYCLOPENTADIENE									
2,4,6-TRICHLOROPHENOL									
2,4,5-TRICHLOROPHENOL									
2-CHLORONAPHTHALENE									
2-NITROANILINE									
DIMETHYL PHTHALATE									
ACANAPHTHYLENE	4J								
3-NITROANILINE									
ACENAPHTHENE	10								46
2,4-DINITROPHENOL									
4-NITROPHENOL									
DIBENZOFURAN	8J								44
2,4-DINITROTOLUENE									
2,6-DINITROTOLUENE									
DIETHYLPHTHALATE									
4-CHLOROPHENYL-PHENYLETHER									
FLUORENE	9J								78
4-NITROANILINE									
4,6-DINITRO-2-METHYLPHENOL									
N-NITROSODIPHENYLAMINE (1)									
4-BROMOPHENYL-PHENYLETHER									
HEXACHLOROBENZENE									
PENTACHLOROPHENOL	7J								
PHENANTHRENE	14								220
ANTHRACENE									24J
DI-N-BUTYLPHTHALATE				9J					
FLUORANTHENE	3J								80
PYRENE	2J								53J
BUTYLBENZYLPHTHALATE									

9TH AVENUE DUMP
GROUNDWATER ORGANICS - ROUND 2
CONCENTRATION (UG/L)

IFL#	2N03635	2N03814	2N03886	2N03905	2N03945	2N03909	2N03938
SAMPLE IDENTIFICATION	32W3-03	6BW4-03	6S804-03	9801-03	9502-03	9201-03	9302-03
3,3-DICHLOROBENZIDINE							
BENZO(A)ANTHRACENE							
BIS(2-ETHYLHEXYL)PHTHALATE	10BUJ	4JBU	2J				
CHRYSENE							
DI-N-OCTYL PHTHALATE							
BENZO(B)FLUORANTHENE							
BENZO(K)FLUORANTHENE							
BENZO(A)PYRENE							
INDENO(1,2,3-CD)PYRENE							
DIBENZ(A,H)ANTHRACENE							
BENZO(G,H,I)PERYLENE							
C30L MULTIPLE	1	1	1	1	1	1	1
ALPHA-BHC							
BETA-BHC							
DELTA-BHC							
GAMMA-BHC (LINDANE)							
HEPTACHLOR							
ALDRIN							
HEPTACHLOR EPOXIDE							
ENDOSULFAN I							
DIELDRIN							
4,4-DDE							
ENDRIN							
ENDOSULFAN II							
4,4-DDD							
ENDOSULFAN SULFATE							
DDT 4,4-							
METHOXYCHLOR							
ENDRIN KETONE							
CHLORDANE							
TOXAPHENE							
AROCLOR-1016							
AROCLOR-1221							
AROCLOR-1232							
AROCLOR-1242							
AROCLOR-1248							
AROCLOR-1254							
AROCLOR-1260							

9TH AVENUE DUMP
GROUNDWATER ORGANICS - ROUND 2
CONCENTRATION (UG/L)

CRL#	DN03S76	DN04S37	DN04S40	DN04S39	DN04S36	DN04S35	DN03S42	DN03S85	DN03S71
SAMPLE IDENTIFICATION	GX59-03	GX60-03	GX61-03	GX62-03	GX63-03	GX64-03	GB2-03	GB3-03	GB4-03
CROL MULTIPLE	140	10	1	1	1	1	1	330	33
CHLOROMETHANE									
BROMOMETHANE									
VINYL CHLORIDE								1100J	
CHLOROETHANE		1300							
METHYLENE CHLORIDE	1000UJ	44UJ	2UJ	68UJ	2UJ	3UJ	2JBU	27000	140UJ
ACETONE	6400	130UJ	7J	258UJ	4J	13		UJ34000B	
CARBON DISULFIDE									
1,1-DICHLORDRETHENE									
1,1-DICHLOROETHANE								2400	
TRANS-1,2-DICHLOROETHENE								9300	
CHLOROFORM									
1,2-DICHLORDETHANE									
2-BUTANONE	29000J		10UR	19J	10UR	10UR		6800J	330UR
1,1,1-TRICHLORDETHANE								1400J	
CARBON TETRACHLORIDE									
VINYL ACETATE	1400UR							3300UR	330UR
BROMODICHLOROMETHANE	710UR	50UR	50UR	5UR	5UR	5UR		1700UR	170UR
1,2-DICHLOROPROPANE									
TRANS-1,3-DICHLOROPROPENE									
TRICHLOROETHENE								640J	
DIBROMOCHLOROMETHANE									
1,1,2-TRICHLOROETHANE									
BENZENE	670J							2200	
CIS-1,3-DICHLOROPROPENE									
2-CHLOROETHYLVINYLETHER	1400UR	100UR	10UR	10UR	10UR	10UR		3300UR	330UR
BROMOFORM									
4-METHYL-2-PENTANONE		100UR	10UR	10UR	10UR	10UR		3300UR	
2-HEXANONE	6000J	100UR	10UR	10UR	10UR	10UR		14000J	90J
TETRACHLORDETHENE	710UR							1700UR	170UR
1,1,2,2-TETRACHLORDETHANE									
TOLUENE	1100	13J	3J	3J	1B			72000	
CHLORDBENZENE	230J	25UJ	2J	3UJ	2J			6800J	
ETHYLBENZENE	1100				4J			5300	780
STYRENE									170UR
TOTAL XYLENES	6400							22000	8900
CROL MULTIPLE	2	1	1	1	1	1	1	1	1
PHENOL									
BIS(2-CHLORDETHYL)ETHER									
2-CHLOROPHENOL									
1,3-DICHLOROBENZENE									
1,4-DICHLOROBENZENE									
BENZYL ALCOHOL									
1,2-DICHLOROBENZENE									

9TH AVENUE DUMP
GROUNDWATER METALS AND CYANIDE - ROUND 2
CONCENTRATION (UG/L)

CRL #	DN03S70	DN03S72	DN03S82	DN03S81	DN03S69	DN03S67	DN03S79	DN03S92	DN03S96	DN03S43	DN03S11	DN03S60
SAMPLE #	GX01-03	GX02-03	GX03-03	GX04-03	GX05-03	GX06-03	GX07-03	GX08-03	GX09-03	GX10-03	GX11-03	GX12-03
COMPOUND	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87
ALUMINUM	228	[165]	[128]	100U	100U	100U	100U	[187]	[143]	[128]	100U	100U
ANTIMONY	38U	38U	38U	38U	38U	38U	38U	38U	38U	38U	38U	38U
ARSENIC	90U	9U	9U	9U	9U	9U	9U	13	9U	9U	9U	9U
BARIUM	2960	1500	746	401	700	[122]	[143]	310	1420	2150	[168]	[151]
BERYLLIUM	5U	5U	5U	5U	5U	5U	5U	5U	5U	5U	5U	5U
CADMIUM	4U	5	4U	11	5	4U	4U	4U	4U	4U	4U	4U
CALCIUM	631000	312000	486000	703000	510000	517000	367000	528000	368000	797000	141000	215000
CHROMIUM	5U	5U	52	186	49	34	[6]	97	92	5U	[6]	9U
COBALT	7U	7U	7U	[17]	7U	[7.6]	7U	7U	7U	7U	7U	7U
COPPER	33J	36J	17UJ	[22]J	17UJ	[29]J	28J	17UJ	26J	17UJ	51J	38J
IRON	32400	40000	11800	63300	12600	17800	3420	682	25600	18900	3850	6980
LEAD	30UR	3UR	30UR	3UR	3UR	30J	[3.3]R	3UR	30UR	30UR	3UR	3UR
MAGNESIUM	134000	182000	645000	233000	288000	241000	121000	712000	597000	230000	62100	203000
MANGANESE	1260	2600	238	8220	788	1890	1380	3320	210	77U	368	1010
MERCURY	0.2UJ	0.2UJ	R3.54J	0.2UJ	0.2UJ	0.2UJ	0.2UJ	0.2UJ	0.2UJ	R0.90J	0.2UJ	0.2UJ
NICKEL	[25]	[27]	885	463	631	445	63	161	12500	[16]	140	140
POTASSIUM	[693000]J	13600J	500UJ	119000J	[639000]J	[780000]J	133000J	200000J	[734000]J	3070000J	7570J	414000J
SELENIUM	3UR	150UR	30UR	30UR	30UR	3UR	3UR	3UR	30UR	30UR	3UR	30UR
SILVER	9U	36J	43J	9U	9U	[9.2]J	9U	37J	29J	9U	9U	16J
SODIUM	10300000	4350000	811000	179000	494000	271000	39700	196000	781000	2580000	166000	235000
THALLIUM	90UR	90UR	90UR	9UR	9UR	9UR	9UR	9UR	9UR	90UR	9UR	9UR
VANADIUM	11U	[40]	840	126	432	206	[34]	105	127	[33]	11U	[20]
ZINC	10800J	23300J	200J	458J	461J	2330J	215J	20UR	694J	12700J	1150J	4670J
CYANIDE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U

9TH AVENUE DUMP
GROUNDWATER ORGANICS - ROUND 2
CONCENTRATION (UG/L)

CRL#	DN03576	DN04537	DN04540	DN04539	DN04536	DN04535	DN03542	DN03585	DN03571
SAMPLE IDENTIFICATION	GX59-03	GX60-03	GX61-03	GX62-03	GX63-03	GX64-03	GB2-03	GB3-03	GB4-03
3,3-DICHLOROBENZIDINE									
BENZO(A)ANTHRACENE									
BIS(2-ETHYLHEXYL)PHTHALATE	14J							14J	
CHRYSENE									
DI-N-OCTYL PHTHALATE								10J	
BENZO(B)FLUORANTHENE									
BENZO(K)FLUORANTHENE									
BENZO(A)PYRENE									
INDENO(1,2,3-CD)PYRENE									
DIBENZ(A,H)ANTHRACENE									
BENZO(G,H,I)PERYLENE									
CRDL MULTIPLE	1	1	1	1	1	1	1	1	1
ALPHA-BHC	0.027J								
BETA-BHC									
DELTA-BHC								0.072	
GAMMA-BHC (LINDANE)									
HEPTACHLOR									
ALDRIN									
HEPTACHLOR EPOXIDE									
ENDOSULFAN I									
DIELDRIN									
4,4-DDE									
ENDRIN								6.2	
ENDOSULFAN II									
4,4-DDD									
ENDOSULFAN SULFATE									
DDT 4,4-								0.38	
METHOXYCHLOR									
ENDRIN KETONE									
CHLORDANE									
TOXAPHENE									
AROCLOR-1016									
AROCLOR-1221									
AROCLOR-1232									
AROCLOR-1242									
AROCLOR-1248									
AROCLOR-1254									
AROCLOR-1260									

9TH AVENUE DUMP
GROUNDWATER METALS AND CYANIDE - ROUND 2
CONCENTRATION (UG/L)

CRL#	DN03S80	DN03S87	DN03S89	DN03S39	DN03D40	DN03S37	DN03S20	DN03S33	DN03S34	DN03S94	DN03S64	DN03S68
SAMPLE #	GX23-03	GX24-03	GX25-03	GX26-03	GX26-93	GX27-03	GX28-03	GX29-03	GX30-03	GX31-03	GX32-03	GX33-03
COMPOUND	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87
ALUMINUM	100U	100U	1040	100U	100U	100U	100U	100U	[154]	454	100U	100U
ANTIMONY	38U	38U	38U	38U	38U	38U	38U	38U	38U	38U	38U	38U
ARSENIC	9U	9U	9U	9U	9U	9U	9U	9U	9U	9U	9U	9U
BARIUM	409	265	725	216	212	2820	[147]	[91]	1030	[187]	795	1500
BERYLLIUM	5U	5U	5U	5U	5U	5U	5U	5U	5U	5U	5U	5U
CADMIUM	4U	[4]	4U	4U	4U	5	4U	4U	6	5.3	[4]	4U
CALCIUM	388000	178000	717000	158000	155000	497000	151000	101000	482000	384000	293000	186000
CHROMIUM	[8.3]	60	179	5U	5U	26	5U	[9.8]	[8]	508	16	27
COBALT	[11]	7U	[13]	7U	7U	[18]	7U	7U	7U	[11]	7U	[20]
COPPER	32J	[17.4]J	29J	25J	25J	[21]J	[24]J	38J	28J	[20]J	[21]J	170J
IRON	523	3120	16500	19400	18200	25800	3180	856	21000	39500	11700	13600
LEAD	[3.5]R	9.8J	30UR	3UR	3UR	30UR	21J	3UR	30UR	15J	3UR	3UR
MAGNESIUM	246000	192000	591000	52300	51500	321000	32300	34000	87000	54200	283000	353000
MANGANESE	1460	5340	15000	1860	1860	348	491	808	1030	3080	987	630
MERCURY	0.2UJ	0.2UJ	0.2UJ	0.2UJ	0.2UJ	R0.42J	R0.34J	R0.42J	0.2UJ	0.2UJ	0.2UJ	0.2UJ
NICKEL	145	[26]	1900	14U	14U	465	14U	14U	[23]	172	434	1400
POTASSIUM	181000J	10200J	[67400]J	19400J	18500J	444000J	6990J	6490J	27000J	12300J	235000J	328000J
SELENIUM	30UR	30UR	3UR	3UR	3UR	3UR	3UR	3UR	3UR	30UR	30UR	3UR
SILVER	9U	48J	9U	9U	9U	9U	9U	9U	9U	47J	9U	20J
SODIUM	218000	30300	716000	J700000	J702000	1260000	235000	357000	8590000	25500	269000	346000
THALLIUM	9UR	9UR	9UR	90UR	90UR	90UR	90UR	90UR	90UR	9UR	9UR	90UR
VANADIUM	105	[36]	849	11U	11U	104	11U	11U	11U	[20]	[34]	94
ZINC	9480J	44J	191J	8020J	6780J	2340J	1040J	3780J	3500J	60J	7110J	2100J
CYANIDE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U

8TH AVENUE DUMP
GROUNDWATER ORGANICS - ROUND 2
CONCENTRATION (UG/L)

CRL#	DN03S35	DN03S14	DN03S86	DN03S05	DN03S45	DN03S09	DN03S38
SAMPLE IDENTIFICATION	GBW3-03	GBW4-03	GSB04-03	BB01-03	BB02-03	SB01-03	SB02-03
2-METHYLPHENOL							
BIS(2-CHLOROISOPROPYL)ETHER							
4-METHYLPHENOL							
N-NITROSO-DI-N-PROPYLAMINE							
HEXACHLOROETHANE							
NITROBENZENE							
ISOPHORONE							
2-NITROPHENOL							
2,4-DIMETHYLPHENOL							
BENZOIC ACID							
BIS(-2-CHLOROETHOOXY)METHANE							
2,4-DICHLOROPHENOL							
1,2,4-TRICHLOROBENZENE							
NAPHTHALENE						5J	
4-CHLOROANILINE							
HEXACHLOROBUTADIENE							
4-CHLORO-3-METHYLPHENOL							
2-METHYLNAPHTHALENE							
HEXACHLOROCYCLOPENTADIENE							
2,4,6-TRICHLOROPHENOL							
2,4,5-TRICHLOROPHENOL							
2-CHLORONAPHTHALENE							
2-NITROANILINE							
DIMETHYL PHTHALATE							
ACANAPHTHYLENE							
3-NITROANILINE							
ACENAPHTHENE							
2,4-DINITROPHENOL							
4-NITROPHENOL							
DIBENZOFURAN							
2,4-DINITROTOLUENE							
2,6-DINITROTOLUENE							
DIETHYLPHTHALATE							
4-CHLOROPHENYL-PHENYLETHER							
FLUORENE							
4-NITROANILINE							
4,6-DINITRO-2-METHYLPHENOL							
N-NITROSODIPHENYLAMINE (1)							
4-BROMOPHENYL-PHENYLETHER							
HEXACHLOROBENZENE							
PENTACHLOROPHENOL							
PHENANTHRENE							
ANTHRACENE							
DI-N-BUTYLPHTHALATE							
FLUORANTHENE							
PYRENE							
BUTYLBENZYLPHTHALATE							

9TH AVENUE DUMP
GROUNDWATER METALS AND CYANIDE - ROUND 2
CONCENTRATION (UG/L)

CRL#	0N03S17	0N03S18	0N03S15	0N03016	0N03S04	0N03S07	0N03S03	0N03S02	0N03S19	0N03S12	0N03S13	0N03562
SAMPLE #	GX45-03	GX46-03	GX47-03	GX47-93	GX48-03	GX49-03	GX50-03	GX51-03	GX52-03	GX53-03	GX54-03	GX55-03
COMPOUND	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87
ALUMINUM	100U	100U	100U	100U	100U	100U	100U	100U	100U	100U	100U	100U
ANTIMONY	38U	38U	38U	38U	38U	38U	38U	38U	38U	38U	38U	38U
ARSENIC	15	39	9U	9U	9U	9U	9U	26	9U	9U	9U	9U
BARIUM	726	557	220	203	[70]	318	311	[50]	[125]	347	570	[76]
BERYLLIUM	5U	5U	5U	5U	5U	5U	5U	5U	5U	5U	5U	5U
CADMIUM	4U	6	J20	J5	4U	4U	4U	4U	4U	4U	4U	4U
CALCIUM	274000	360000	430000	424000	161000	256000	301000	154000	222000	268000	250000	120000
CHROMIUM	[7]	[8]	[8]	[9.7]	[7]	5U	5U	5U	[6]	5U	[5.6]	5U
COBALT	7U	7U	7U	7U	7U	7U	7U	7U	7U	7U	7U	7U
COPPER	35J	26J	61J	44J	38J	30J	[28]J	17UJ	31J	[20]J	46J	73J
IRON	19200	23000	19800	18700	127	3690	8720J	100	217	682	2380	100U
LEAD	3UR	3UR	3UR	30UR	30UR	3UR	3UR	6.9J	30UR	[3.6]R	3UR	3UR
MAGNESIUM	128000	211000	260000	254000	13400	56700	8720	[1500]	62000	138000	143000	163000
MANGANESE	1150	518	615	580	108	596	733	10U	415	921	159	311
MERCURY	R0.5J	R0.24J	R0.42J	R0.24J	0.2UJ	R2.26J	0.2UJ	R0.2J	R1.5J	R0.39J	0.2UJ	0.2UJ
NICKEL	[20]	124	253	246	14U	14U	14U	147U	14U	14U	[24]	14U
POTASSIUM	210000J	11000J	335000J	445000J	31500J	[3690]J	[3520]J	106000J	7310J	305000J	30100J	148000J
SELENIUM	30UR	30UR	30UR	30UR	3UR	3UR	30UR	3UR	3UR	3UR	3UR	30UR
SILVER	9U	9U	9U	9U	9U	9U	9U	9UR	9U	9U	9U	100
SODIUM	114000	312000	430000	413000	30900	93400	139000	119000	34700	398000	498000	118000
THALLIUM	9UR	90UR	90UR	90UR	9UR	9UR	9U	9UR	9UR	90UR	90UR	9UR
VANADIUM	[16]	[28]	[40]	[37]	11U	11U	[16]	11U	11U	[17]	11U	[14]
ZINC	1480J	3610J	5090J	3000J	151J	2180J	2420J	71J	1600J	1210J	5070J	978J
CYANIDE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U

9th AVENUE DUMP
DATA QUALIFIERS

- B = Detected in method blank as well as the sample, possible/probable blank contamination.

- U = The material was analzyed for but was not detected. The associated numerical value is the quantitation limit.

- J = The associated numerical value is an estimated quantity because quality control criteria were not met.

- UJ = The associated numerical value is the estimated quantitation limit.

- R = The data is unusable because quality control criteria were not met.

- N = The instrument detection limit exceeded contract required detection limit (CRDL), and the associated value is the detection limit.

- [] = Bracketed numbers are concentrations quantified at below contract required detection limits (CRDL).

- CRDL Multiple = is a correction factor which takes into account (based on matrix) % moisture, sample size, unit conversions and dilutions. The correction factor is based on the low level detection limit.

- The qualifier found to the left of the compounds concentration is from Warzyn's data validation. Those qualifiers to the right of the value are from the contract Laboratories and/or EPA's data validation.

9TH AVENUE DUMP
GROUNDWATER METALS AND CYANIDE - ROUND 2
CONCENTRATION (UG/L)

CRL#	0N03S35	0N03S14	0N03S09	0N03S38	0N03S86	0N03S05	0N03S45
SAMPLE #	SBW3-03	SBW4-03	SB01-03	SB02-03	SE304-03	B801-03	B802-03
COMPOUND	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87
ALUMINUM	100U	1290	100U	100U	100U	100U	100U
ANTIMONY	38U	38U	38U	38U	38U	38U	38U
ARSENIC	9U	9U	9U	9U	9U	9U	9U
BARIUM	[152]	[98]	39U	39U	39U	39U	39U
BERYLLIUM	5U	5U	5U	5U	5U	5U	5U
CADMIUM	4U	4U	4U	4U	4U	4U	4U
CALCIUM	242000	345000	500U	500U	500U	500U	500U
CHROMIUM	5U	5U	5U	5U	5U	5U	5U
COBALT	7U	7U	7U	7U	7U	7U	7U
COPPER	29J	[22]J	17UJ	17UJ	42J	[22]J	[23]J
IRON	8880	25400	100U	100U	100U	100U	100U
LEAD	3UR	3UR	3UR	[4]R	3UR	3UR	[4.95]R
MAGNESIUM	77300	118000	324U	324U	324U	324U	324U
MANGANESE	1700	2570	10U	10U	10U	10U	10U
MERCURY	R0.6J	0.2UJ	R2.26J	R0.42J	0.2UJ	R2.9J	R1.10J
NICKEL	14U	[20]	14U	14U	14U	14U	14U
POTASSIUM	13600J	17000J	500UJ	500UJ	500UJ	500UJ	500UJ
SELENIUM	3UR	30UR	3UR	3UR	3UR	3UR	3UR
SILVER	9U	9U	9U	9UR	52J	9U	9U
SODIUM	10300	101000	3513U	3513U	3513U	3513U	3513U
THALLIUM	9UR	9UR	9UR	9U	9UR	9UR	9UR
VANADIUM	11U	[19]	11U	11U	11U	11U	11U
ZINC	2060J	2850J	20UR	20UR	31J	20UR	24J
CYANIDE	10U	10U	43	10U	10U	10U	10U

9TH AVENUE DUMP
GROUNDWATER METALS AND CYANIDE - ROUND 2
CONCENTRATION (UG/L)

CRL#	DN03S78	DN03S95	DN04S38	DN03S74	DN03D75	DN03S73	DN03S77	DN03S93	DN03S90	DN03S91	DN03S83	DN03D84
SAMPLE #	GX13-03	GX14-03	GX15-03	GX16-03	GX16-93	GX17-03	GX18-03	GX19-03	GX20-03	GX21-03	GX22-03	GX22-93
COMPOUND	07/08/87	07/08/87	07/23/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87
ALUMINUM	100U	100U	100U	100U	100U	[180]	100U	100U	100U	212	100U	100U
ANTIMONY	38U	38U	38U	38U	38U	38U	38U	38U	38U	38U	[39]	38U
ARSENIC	9U	9U	9U	9U	13.4	90U	9U	9U	9U	30	9U	9U
BARIUM	1980	[66]	[82]	[184]	[193]	1440	474	[91]	231	[91]	J[55]	J[113]
BERYLLIUM	587	5U	5U	5U	5U	5U	5U	5U	5U	5U	5U	5U
CADMIUM	4U	12	14	4U	4U	4U	4U	5.5	4U	4U	4U	4U
CALCIUM	156000	574000	300000	238000	195000	491000	175000	359000	588000	1060000	354000	339000
CHROMIUM	[8]	86	[7]	68	75	5U	10	17	49	558	[9.8]	11
COBALT	7U	7U	7U	7U	7U	7U	7U	7U	7U	[19]	7U	7U
COPPER	[21]J	[17.4]J	35	34J	[21]J	[22]J	17UJ	[20]J	17UJ	17UJ	17UJ	29J
IRON	6290	67000	126000	J12100	J9230	100U	178000	39700	101	2920	J10200	J7840
LEAD	3UR	3UR	[3.96]R	3UR	[4]R	30UJ	3UR	7.3J	6UR	3UR	7.4J	6UR
MAGNESIUM	244000	117000	50200	280000	291000	196000	188000	278000	76400	141000	139000	134000
MANGANESE	984	4540	2340	1610	1500	604	1840	9240	914	3410	2550	2460
MERCURY	0.2UJ	0.2UJ	0.2U	0.2UJ	0.2UJ	0.2UJ	0.2UJ	R0.2J	0.2UJ	0.2UJ	R.024J	R0.2J
NICKEL	[23]	76	92	[33]	[29]	[15]	[33]	68	[15]	4720	49	55
POTASSIUM	566000J	214000J	8800	101000J	108000J	13700J	545000J	137000J	9240J	[33800]J	[4070]J	[4070]J
SELENIUM	30UR	30UR	30UJ	30UR	30UR	3UR	3UR	30UR	3UR	30UR	3UR	3UR
SILVER	9U	69J	9UJ	74J	9U	27J	38J	9U	9U	59J	9U	52J
SODIUM	178000	14700	16000	J362000	J171000	3480000	225000	77000	22800	345000	50100	50800
THALLIUM	9UR	9UR	9U	9UR	9UR	90UR	9UR	9UR	9UR	9UR	9UR	9UR
VANADIUM	[38]	[24]	[24]	[48]	[46]	[35]	[37]	53	[21]	1880	[27]	[24]
ZINC	3540J	84J	804	168J	182J	1690J	1190J	102J	22J	73J	78J	232J
CYANIDE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U

9TH AVENUE DUMP
GOUNDWATER INORGANICS - ROUND 2
CONCENTRATION (MG/L)

CRL#	GN03S11	GN03S60	GN03S78	GN03S95	GN04S38	GN03S74	GN03075	GN03S73	GN03S77	GN03S93
SAMPLE #	GX11-03	GX12-03	GX13-03	GX14-03	GX15-03	GX16-03	GX16-93	GX17-03	GX18-03	GX19-03
COMPOUND	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87
CHLORIDE	243.6	682.6	462.1	147.0	82.5	J1050	J451.6	7351	s72.1	210.0
SULFATE	14.5	370	17.2	57.2	86.4	21.8	33.9	93.6	12.5	13.9
NITRATE/NITRITE NITROGEN	0.84	1.3	2.4	1.59	1.05	1.46	1.78	0.57	0.92	0.49
TOTAL DISSOLVED SOLIDS	1104	2444	2387	3267	1811.0	J3229	J2525	11250	2445	5382
TOTAL ORGANIC CARBON	204	283	552	749	467	574	674	43.7	384	2720
BIOCHEMICAL OXYGEN DEMAND	J23	J3.0	J271	J4386	J695	J255	J44	J16	J140	J2010
CHEMICAL OXYGEN DEMAND	94.9	160.4	1064.4	6671	1731	1806	185	63	1125	6285
AMMONIA NITROGEN	13.8	0.22	51.2	179.3	26.0	61.1	74.9	2.8	21.7	32.6
SULFIDE	0.135	0.1	0.07	0.06	0.05U	0.41	0.24	0.05U	0.1	0.05U
TOTAL KJELDAHL NITROGEN	15.7	0.98	75.6	17.6	0.10U	J112	J77	1.82	3.1	0.1U
ALKALINITY	750	900	1460	1230	750	1490	1710	36	11..	1750
TOTAL DISSOLVED PHOSPHATE	0.124	0.02U	0.026	0.093	0.02U	0.12	0.1	0.022	0.024	0.023
TOTAL SUSPENDED SOLIDS	89	539	389	606	260	J1335	J1003	68	712	102
OIL & GREASE	5U	5U	J23.6	J99.1	5.0U	J70.3	J31.1	J28.5	5U	J171

+ NOT RUN DUE TO LABORATORY PROBLEMS

9TH AVENUE DUMP
GROUNDWATER METALS AND CYANIDE - ROUND 2
CONCENTRATION (UG/L)

CRL#	DN03S66	DN03S08	DN03D06	DN03S01	DN03S10	DN03S36	DN03S47	DN03S46	DN03S44	DN03S59	DN03S61	DN03S65
SAMPLE #	GX34-03	GX35-03	GX35-93	GX36-03	GX37-03	GX38-03	GX39-03	GX40-03	GX41-03	GX42-03	GX43-03	GX44-03
COMPOUND	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87
ALUMINUM	100U	100U	100U	100U	100U	100U	100U	100U	[133]	100U	1130	[198]
ANTIMONY	38U	38U	38U	38U	38U	38U	38U	38U	38U	38U	38U	38U
ARSENIC	9U	9U	9U	9U	9U	9U	9U	9U	9U	90U	9U	9U
BARIUM	796	236	227	945	837	39U	424	698	709	39U	1050	[138]
BERYLLIUM	5U	5U	5U	5U	5U	5U	5U	5U	5U	5U	5U	5U
CADMIUM	4U	4U	4U	4U	4U	4U	7U	4U	12	4U	8	16
CALCIUM	50200	164000	163000	120000	111000	71500	147000	280000	906000	16900	210000	634000
CHROMIUM	38	[8]	[6]	50	38	[5.3]	5U	5U	5U	5U	15	5U
COBALT	51	7U	7U	[24]	[33]	7U	7U	7U	7U	7U	7U	7U
COPPER	17UJ	28J	60J	17UJ	53J	30J	17UJ	17UJ	17UJ	17UJ	27J	37J
IRON	9930	J2840	J1240	6000	3460	321	1890	4620	76400	100U	26300	94700
LEAD	3UR	3UR	3UR	3UR	3UR	3UR	3UR	30UR	30UR	10.6J	16J	30UR
MAGNESIUM	390000	83000	81800	800000	654000	41200	113000	116000	283000	7760	327000	411000
MANGANESE	524	1110	1090	81	52	208	2320	1990	2240	[11]	394	1200
MERCURY	0.2UJ	R1.10J	R2.06J	0.2UJ	R0.24J	R0.42J	0.2UJ	R0.24J	R0.60J	R0.2J	0.2UJ	0.2UJ
NICKEL	2740	[26]	14U	3150	4920	14U	[16]	[25]	51	14U	117	169
POTASSIUM	933000J	20500J	19700J	125000J	496000J	[2240]J	818000J	[340000]J	1460000J	8090J	14100J	[230000]J
SELENIUM	3UR	3UR	3UR	3UR	3UR	3UR	30UR	30UR	3UR	30UR	30UR	30UR
SILVER	9U	9U	9U	9U	9U	9U	9U	9U	9U	[9.7]	66J	22J
SODIUM	721000	44200	43900	376000	206000	12600	430000	1170000	2440000	119000	827000	1100000
THALLIUM	90UR	9UR	9UR	90UR	9UR	9UR	9UR	90UR	90UR	9UR	90UR	90UR
VANADIUM	165	[14]	11U	85	209	11U	[24]	[25]	[42]	11U	[33]	77
ZINC	850J	2380J	2410J	2070	8450J	452J	1950J	3610J	4100J	84J	4670J	6560J
CYANIDE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	185	10U

9TH AVENUE DUMP
GOUNDWATER INORGANICS - ROUND 2
CONCENTRATION (MG/L)

CRL#	9N03S20	9N03S33	9N03S34	9N03S94	9N03S64	9N03S68	9N03S66	9N03S08	9N03D06	9N03S01
SAMPLE #	GX28-03	GX29-03	GX30-03	GX31-03	GX32-03	GX33-03	GX34-03	GX35-03	GX35-93	GX36-03
COMPOUND	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87
CHLORIDE	344.5	598.0	13442	38.2	388.6	735.1	1260	J77.7	J56.8	819.3
SULFATE	255	110	42	15.9	36.5	34.5	97.5	213	210	75
NITRATE/NITRITE NITROGEN	0.62	0.51	1.46	0.62	1.03	1.54	2.4	J1.23	J0.62	2.86
TOTAL DISSOLVED SOLIDS	1356	1570	25040	3319	3000	4526	4390	1120	1030	5295
TOTAL ORGANIC CARBON	112	90.6	173	991	700	856	856	240	200	2132
BIOCHEMICAL OXYGEN DEMAND	J26	J3.0	J13	J>4986	J30	J40	J33	J79	J28	J87
CHEMICAL OXYGEN DEMAND	108.9	39.6	902	36412	678.5	740.2	820.3	J5U	J414.5	1131.4
AMMONIA NITROGEN	0.47	1.26	11.8	19.7	116.2	354.6	610.7	24.6	21.2	455
SULFIDE	0.05U	0.05U	0.05	0.12	0.05U	0.11	0.34	0.05U	0.05U	0.155
TOTAL KJELDAHL NITROGEN	0.1U	0.84	5.6	1.4	104	182	462	0.1U	0.1U	98
ALKALINITY	273	212	410	880	2800	3260	4000	645	620	4845
TOTAL DISSOLVED PHOSPHATE	0.042	0.07	0.05	0.028	0.02U	0.021	0.02U	0.025	0.04	0.36
TOTAL SUSPENDED SOLIDS	385	87	210	2480	780	713	152	1016	782	91
OIL & GREASE	5U	5.0U	5U	73977	5U	5U	J9.3	J13.1	5.0U	J5.1

* NOT RUN DUE TO LABORATORY PROBLEMS

9TH AVENUE DUMP
GROUNDWATER METALS AND CYANIDE - ROUND 2
CONCENTRATION (UG/L)

CRL#	DN03D63	DN03S41	DN03S88	DN03S76	DN04S37	DN04S40	DN04S39	DN04S36	DN04S35	DN03S42	DN03S85	DN03S71
SAMPLE #	GX55-93	GX57-03	GX58-03	GX59-03	GX60-03	GX61-03	GX62-03	GX63-03	GX64-03	GB2-03	GB3-03	GB4-03
COMPOUND	07/08/87	07/08/87	07/08/87	07/08/87	07/23/87	07/23/87	07/23/87	07/23/87	07/23/87	07/08/87	07/08/87	07/08/87
ALUMINUM	100U	100U	100U	100U	100U	248	100U	100U	100U	100U	[119]	100U
ANTIMONY	38U	38U	38U	38U	38U	38U	38U	38U	38U	38U	38U	38U
ARSENIC	9U	9U	9U	9U	9U	9U	9U	9U	9U	9U	9U	9U
BARIUM	[67]	335	268	280	708	3750	891	396	534	[56]	212	[44]
BERYLLIUM	5U	5U	5U	5U	5U	5U	5U	5U	5U	5U	5U	5U
CADMIUM	4U	4U	4U	4U	4U	4U	4U	4U	4U	4U	14	7
CALCIUM	112000	127000	156000	186000	352000	652000	355000	369000	288000	94900	364000	123000
CHROMIUM	5U	[5]	56	58	90	5U	26	5U	5U	5U	26	5U
COBALT	7U	7U	7U	7U	[11]	7U	[13]	7U	7U	7U	67	7U
COPPER	69J	[23]J	[22]J	45J	32	27	34	[18]	40	17UJ	47J	[17.3]J
IRON	100U	16500	2680	78U	16400	32400	16000	7030	7380	267	92000	46300
LEAD	3UR	3UR	8.4J	5.6J	71	300UR	6UR	68	69	3UR	6UR	3UR
MAGNESIUM	162000	52900	208000	366000	460000	144000	281000	132000	98700	121000	100000	119000
MANGANESE	278	4080	4100	1830	618	1480	741	4070	704	1770	4250	421
MERCURY	0.2UJ	RO.42J	02.UJ	0.2UJ	0.2U	0.2	0.2U	0.2U	0.2U	R1.10J	0.2UJ	0.2UJ
NICKEL	14U	[17]	[23]	89	3940	43	468	44	46	14U	231	71
POTASSIUM	167000J	21100J	[515001]J	129000J	20700	10600	7340	12200	[2350]	12800J	12300J	13400J
SELENIUM	30UR	3UR	30UR	30UR	3UJ	30UJ	3UJ	3UJ	3UJ	3UR	30UR	3UR
SILVER	9U	9U	9U	9U	9UJ	9UJ	37UJ	21UJ	9UJ	9U	15J	9U
SODIUM	98900	21000	37400	87200	358000	7530000	313000	33000	165000	48800	27200	154000
THALLIUM	9UR	9UR	9UR	9UR	90U	90U	9U	9U	9U	9UR	9UR	9UR
VANADIUM	11U	11U	6U	70	653	[24]	83	[27]	[16]	11U	[17]	[30]
ZINC	942J	4830J	47J	5300J	3570	5770	3420	1470	4210	1100J	1000J	798J
CYANIDE	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U	10U

9TH AVENUE DUMP
GROUNDWATER INORGANICS - ROUND 2
CONCENTRATION (MG/L)

CRL#	9N03S15	9N03D16	9N03S04	9N03S07	9N03S03	9N03S02	9N03S19	9N03S12	9N03S13	9N03S62
SAMPLE #	GX47-03	GX47-93	GX48-03	GX49-03	GX50-03	GX51-03	GX52-03	GX53-03	GX54-03	GX55-03
COMPOUND	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87
CHLORIDE	1113	1113	23.1	107.1	170.1	58.8	33.6	903.0	1176	179.0
SULFATE	530	620	440	445	350	355	390	285	355	210
NITRATE/NITRITE NITROGEN	1.38	1.08	0.32	0.96	0.34	0.65	0.59	0.95	0.38	320.3
TOTAL DISSOLVED SOLIDS	4388	4444	1688	1456	1006	1764	1112	2702	3164	1621
TOTAL ORGANIC CARBON	462	448	103.3	193	76.7	168	159	186	161	195
BIOCHEMICAL OXYGEN DEMAND	J36	J41	J21	J27	J39	J2.0	J7.0	J18	J5.0	J7.0
CHEMICAL OXYGEN DEMAND	238.7	203	503.1	145.5	303.3	74.7	47.5	133	64.2	201.4
AMMONIA NITROGEN	120	112	9.9	1.38	59.1	0.51	3	3.5	0.65	1.38
SULFIDE	0.075	0.05U	0.155	0.065	4.86	0.05U	0.165	0.05U	0.05U	0.05U
TOTAL KJELDAHL NITROGEN	J0.1U	J70	15.2	0.84	12.7	0.1U	1.82	3.4	4.2	0.1U
ALKALINITY	1452	1500	182	418	220	394	361	650	447	700
TOTAL DISSOLVED PHOSPHATE	0.03	0.03	0.05	0.04	0.03	0.06	0.04	0.12	0.023	0.039
TOTAL SUSPENDED SOLIDS	J206	J161	1052	576	300	436	154	71	54	J665
OIL & GREASE	5U	5U	J5.6	5U	5.0U	J17.6	J5.4	5U	J7.4	5U

NOT RUN DUE TO LABORATORY PROBLEMS

9TH AVENUE DUMP
GOUNDWATER INORGANICS - ROUND 2
CONCENTRATION (MG/L)

CRL#	DN03S70	DN03S72	DN03S82	DN03S81	DN03S69	DN03S67	DN03S79	DN03S92	DN03S96	DN03S43
SAMPLE #	GX01-03	GX02-03	GX03-03	GX04-03	GX05-03	GX06-03	GX07-03	GX08-03	GX09-03	GX10-03
COMPOUND	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87
CHLORIDE	16277	4935	2100	882.1	567.1	346.6	189.0	252.0	1680	6616
SULFATE	320	172	208	16.1	78	41	234	112	13	460
NITRATE/NITRITE NITROGEN	1.43	2.16	1.65	1.30	1.76	2.24	1.05	2.00	1.4	1.78
TOTAL DISSOLVED SOLIDS	3355	18485	7520	4828	3655	4190	1707	8330	6906	13905
TOTAL ORGANIC CARBON	161	130	464	1351	820	745	570	2675	671	254
BIOCHEMICAL OXYGEN DEMAND	J6.0	J11	J132	J1410	J15	J37	J452	J3186	J95	J99
CHEMICAL OXYGEN DEMAND	729.8	443.5	835	4874	742	546.9	1351	16678	1752	538.3
AMMONIA NITROGEN	23.6	5.1	394	110	49.3	98.5	21.7	167.5	137	206.9
SULFIDE	0.10	0.07	0.065	0.12	0.12	0.05U	0.13	0.25	0.10	0.05U
TOTAL KJELDAHL NITROGEN	6.4	3.64	241	79.8	109	84	8.4	84	144	1.82
ALKALINITY	545	386	3310	1780	3170	2380	1350	440	3485	720
TOTAL DISSOLVED PHOSPHATE	0.02U	0.02U	0.02U	0.033	0.021	0.02U	0.064	0.98	*	0.02
TOTAL SUSPENDED SOLIDS	175	427	120	190	60	562	361	164	153	12
OIL & GREASE	5U	J26.4	J12.0	J21.1	J6.4	J5.6	11.3	2039	J30.8	5U

* NOT RUN DUE TO LABORATORY PROBLEMS

9TH AVENUE DUMP
GOUNDWATER INORGANICS - ROUND 2
CONCENTRATION (MG/L)

CRL#	ONO3S85	ONO3S71	ONO3S35	ONO3S14	ONO3S09	ONO3S38	ONO3S86	ONO3S05	ONO3S45
SAMPLE #	GB3-03	GB4-03	GBW3-03	GBW4-03	SB01-03	SB02-03	GSB04-03	BB01-03	BB02-03
COMPOUND	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87
CHLORIDE	210.0	546.1	183.0	235.2	1U	1.0U	1U	1U	1U
SULFATE	286	22.5	205	400	3U	3U	3U	3U	3U
NITRATE/NITRITE NITROGEN	1.03	1.24	17.8	0.84	0.1U	0.1U	0.7	0.57	0.3
TOTAL DISSOLVED SOLIDS	2795	1795	1157	2068	20U	20U	3.5	20U	20U
TOTAL ORGANIC CARBON	2600	261	214	230	2U	2U	2U	4.7	2U
BIOCHEMICAL OXYGEN DEMAND	J1928	J36	J17	J199	J1.5U	J1.5U	J1.5U	J1.5U	J1.5U
CHEMICAL OXYGEN DEMAND	8500	337.2	45.5	86.4	5U	5U	5U	5U	5U
AMMONIA NITROGEN	21.67	47.3	2.96	1.67	0.1U	0.1U	0.1U	0.1U	0.1U
SULFIDE	0.05U	0.09	0.095	0.05U	0.05	0.09	0.13	0.05U	0.05U
TOTAL KJELDAHL NITROGEN	11.2	0.1U	2.1	2.8	0.1U	0.1U	0.1U	0.1U	0.1U
ALKALINITY	830	800	740	768	3U	3.0	3.6	3U	3U
TOTAL DISSOLVED PHOSPHATE	0.075	0.02U	0.03	0.022	0.02U	0.02U	0.02U	0.03	0.027
TOTAL SUSPENDED SOLIDS	3U	130	67	131	3U	3U	6	3U	3U
OIL & GREASE	J41.3	5U	5U	5U	5U	5U	J12.5	J51	5U

NOT RUN DUE TO LABORATORY PROBLEMS

9TH AVENUE DUMP
GOUNDWATER INORGANICS - ROUND 2
CONCENTRATION (MG/L)

CRL#	DN03S90	DN03S91	DN03S83	DN03D84	DN03S80	DN03S87	DN03S89	DN03S39	DN03D40	DN03S37
SAMPLE #	GX20-03	GX21-03	GX22-03	GX22-93	GX23-03	GX24-03	GX25-03	GX26-03	GX26-93	GX27-03
COMPOUND	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87
CHLORIDE	210.0	336.0	126.0	130.2	567.1	61.96	1134	1323	1281	2541
SULFATE	200.2	816.0	354	356	317.2	10.9	44.2	12	13	19.3
NITRATE/NITRITE NITROGEN	1.57	0.16	J2.6	J1.35	1.24	1.0	0.36	J7.29	J3.4	1.78
TOTAL DISSOLVED SOLIDS	2549	4682	2048	2110	2298	1767	4122	2980	2976	6992
TOTAL ORGANIC CARBON	490	1598	473	567	547	584	569	139	148	665
BIOCHEMICAL OXYGEN DEMAND	J303	J165	J431	J376	J407	J571	J2718	J17	J22	J215
CHEMICAL OXYGEN DEMAND	1313	7080	1321	1270	1411	2690	15889	167.3	185.5	948.7
AMMONIA NITROGEN	15.97	42.36	12.8	12.41	22.7	10.44	13.79	3.4	3.2	124
SULFIDE	67.5	0.14	0.05U	0.14	0.65	0.09	0.42	0.13	0.14	0.10
TOTAL KJELDAHL NITROGEN	0.1U	105.0	J5.6	J0.1U	0.1U	7.14	218	J0.1U	J0.98	105
ALKALINITY	1440	1880	1000	940	1160	1070	3850	253	252	2180
TOTAL DISSOLVED PHOSPHATE	0.33	0.092	J0.45	J0.07	0.033	0.17	0.38	0.024	0.022	0.04
TOTAL SUSPENDED SOLIDS	72	248.0	59	64	177	484	778	579	597	367
OIL & GREASE	J39.1	J47.8	J27.1	J32.8	J44.5	J93.1	J21.3	5U	5U	5U

NOT RUN DUE TO LABORATORY PROBLEMS

9th AVENUE DUMP
DATA QUALIFIERS

- B = Detected in method blank as well as the sample, possible/probable blank contamination.

- U = The material was analzyed for but was not detected. The associated numerical value is the quantitation limit.

- J = The associated numerical value is an estimated quantity because quality control criteria were not met.

- UJ = The associated numerical value is the estimated quantitation limit.

- R = The data is unusable because quality control criteria were not met.

- N = The instrument detection limit exceeded contract required detection limit (CRDL), and the associated value is the detection limit.

- [] = Bracketed numbers are concentrations quantified at below contract required detection limits (CRDL).

- CRDL Multiple = is a correction factor which takes into account (based on matrix) % moisture, sample size, unit conversions and dilutions. The correction factor is based on the low level detection limit.

- The qualifier found to the left of the compounds concentration is from Warzyn's data validation. Those qualifiers to the right of the value are from the contract Laboratories and/or EPA's data validation.

9TH AVENUE DUMP
GOUNDWATER INORGANICS - ROUND 2
CONCENTRATION (MG/L)

CRL#	0N03S10	0N03S36	0N03S47	0N03S46	0N03S44	0N03S59	0N03S61	0N03S65	0N03S17	0N03S18
SAMPLE #	GXJ7-03	GXJ8-03	GXJ9-03	GX40-03	GX41-03	GX42-03	GX43-03	GX44-03	GX45-03	GX46-03
COMPOUND	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87
CHLORIDE	109.2	30.5	651.1	2730	6196	399.1	829.6	3465	181.0	630.0
SULFATE	675	40.5	208	278	470	45	40.5	950	555	890
NITRATE/NITRITE NITROGEN	2.05	0.66	1.13	1.1	2.4	0.51	1.57	0.86	0.81	0.89
TOTAL DISSOLVED SOLIDS	5156	492	3149	6914	13075	431	3992	9688	2128	3502
TOTAL ORGANIC CARBON	1556	131	339	338	337	51	624	427	356	396
BIOCHEMICAL OXYGEN DEMAND	J130	J20	J13	J38	J217	J3.0	J31	J70	J63	J25
CHEMICAL OXYGEN DEMAND	927.7	140	193.3	250.8	616.8	27.5	678.5	505.8	298.6	532.7
AMMONIA NITROGEN	502	0.99	9.9	72.9	141.8	0.53	16.7	40.4	28.6	76.8
SULFIDE	0.26	0.065	0.095	0.05	0.05U	0.05U	0.34	0.05U	0.115	0.085
TOTAL KJELDAHL NITROGEN	318	0.1U	0.1U	0.1U	0.1U	2.58	0.42	0.1U	6.2	70.8
ALKALINITY	5280	236	1062	1400	510	230	2200	900	1010	1180
TOTAL DISSOLVED PHOSPHATE	0.38	0.032	0.048	0.026	0.02U	0.106	0.022	0.02U	0.02U	0.021
TOTAL SUSPENDED SOLIDS	199	945	526	109	132	365	212	372	2245	557
OIL & GREASE	5U	5U	5U	J5.0	5U	5U	J36.4	J17.4	5U	5U

NOT RUN DUE TO LABORATORY PROBLEMS

9TH AVENUE DUMP
PRIVATE WELL ORGANICS - ROUND 2
CONCENTRATION (UG/L)

CRL#	DN04S33	DN04032	DN04S31
SAMPLE IDENTIFICATION	PW01-03	PW01-93	SB06-03
2-METHYLPHENOL			
BIS(2-CHLOROISOPROPYL)ETHER			
4-METHYLPHENOL			
N-NITROSO-DI-N-PROPYLAMINE			
HEXACHLOROETHANE			
NITROBENZENE			
ISOPHORONE			
2-NITROPHENOL			
2,4-DIMETHYLPHENOL			
BENZOIC ACID			
BIS(-2-CHLOROETHOOXY)METHANE			
2,4-DICHLOROPHENOL			
1,2,4-TRICHLOROBENZENE			
NAPHTHALENE			
4-CHLOROANILINE			
HEXACHLOROBUTADIENE			
4-CHLORO-3-METHYLPHENOL			
2-METHYLNAPHTHALENE			
HEXACHLOROCYCLOPENTADIENE			
2,4,6-TRICHLOROPHENOL			
2,4,5-TRICHLOROPHENOL			
2-CHLORONAPHTHALENE			
2-NITROANILINE			
DIMETHYL PHTHALATE			
ACANAPHTHYLENE			
3-NITROANILINE			
ACENAPHTHENE			
2,4-DINITROPHENOL			
4-NITROPHENOL			
DIBENZOFURAN			
2,4-DINITROTOLUENE			
2,6-DINITROTOLUENE			
DIETHYLPHTHALATE			
4-CHLOROPHENYL-PHENYLETHER			
FLUORENE			
4-NITROANILINE			
4,6-DINITRO-2-METHYLPHENOL			
N-NITROSODIPHENYLAMINE (1)			
4-BROMOPHENYL-PHENYLETHER			
HEXACHLOROBENZENE			
PENTACHLOROPHENOL			
PHENANTHRENE			
ANTHRACENE			
DI-N-BUTYLPHTHALATE			
FLUORANTHENE			
PYRENE			
BUTYLBENZYLPHTHALATE			

9TH AVENUE DUMP
GOUNDWATER INORGANICS - ROUND 2
CONCENTRATION (MG/L)

CRL#	DN03D63	DN03S41	DN03S88	DN03S76	DN04S37	DN04S40	DN04S39	DN04S36	DN04S35	DN03S42
SAMPLE #	GX55-93	GX57-03	GX58-03	GX59-03	GX60-03	GX61-03	GX62-03	GX63-03	GX64-03	G82-03
COMPOUND	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87	07/08/87
CHLORIDE	174.0	630.0	77.7	294.0	421.0	15162	644.0	38.4	364.0	59.9
SULFATE	205	14	10.9	31.7	162	219	135	254	194	41.5
NITRATE/NITRITE NITROGEN	J14.3	0.95	1.35	1.54	0.29	0.29	0.62	0.29	0.25	1.94
TOTAL DISSOLVED SOLIDS	1499	1301	1775	1951	3811	26350	3561	1955	4066	1002
TOTAL ORGANIC CARBON	198	301	595	730	437	92	391	199	128	208
BIOCHEMICAL OXYGEN DEMAND	J6.0	J51	J756	J341	J45	J5	J117	J21	J7	J6.0
CHEMICAL OXYGEN DEMAND	246.7	395.1	1726	1863	1267	897	922	696	149	72.6
AMMONIA NITROGEN	1.28	7.7	11.82	143.8	113	10.6	35.1	3.8	3.2	2.8
SULFIDE	0.12	0.075	0.11	0.09	0.05U	0.05U	0.05U	0.05U	0.05U	0.05U
TOTAL KJELDAHL NITROGEN	0.1U	2.94	11.5	120	0.10U	0.10U	0.10U	0.10U	0.10U	0.1U
ALKALINITY	664	546	1140	2190	3070	430	1785	1245	770	1080
TOTAL DISSOLVED PHOSPHATE	0.041	0.022	0.28	0.068	0.02U	0.02U	0.08	0.02U	0.02U	0.025
TOTAL SUSPENDED SOLIDS	J373	83	168	143	784	244	205	1440	364	13
OIL & GREASE	5U		J46.8	J17.3	5.0U	5.0U	5.0U	5.0U	5.0U	5U

* NOT RUN DUE TO LABORATORY PROBLEMS

9TH AVENUE DUMP
PRIVATE WELL METALS AND CYANIDE - ROUND 2
CONCENTRATION (UG/L)

CRL#	0N04032	0N04S33	0N04S31
SAMPLE #	PW01-93	PW01-03	SB06-03
COMPOUND	06/25/87	06/25/87	06/25/87
ALUMINUM	24U	24U	24U
ANTIMONY	5U	5U	5U
ARSENIC	5U	5U	5U
BARIUM	[15]	[20]	2U
BERYLLIUM	1U	1U	1U
CADMIUM	0.5U	0.5U	0.5U
CALCIUM	63800	65000	[273]
CHROMIUM	4U	4U	4U
COBALT	5U	5U	5U
COPPER	JC5.9]	J40	12
IRON	J119	J457	[28]
LEAD	2U	4	2U
CYANIDE	10U	10U	10U
MAGNESIUM	20000	20500	51U
MANGANESE	63	65	5U
MERCURY	0.2U	0.2U	0.2U
NICKEL	8U	[8.3]	8U
POTASSIUM	4390	4580	151U
SELENIUM	2U	2U	2U
SILVER	J4U	J4U	J4U
SODIUM	5230	5370	898U
THALLIUM	2U	2U	2U
TIN	16U	16U	16U
VANADIUM	4U	4U	4U
ZINC	J281	J496	[16]

9TH AVENUE DUMP
WATERS SPECIFIC GRAVITY AND KINEMATIC VISCOSITY - ROUND 2

CRL#	DN04S42	DN04S43	DN04S46	DN04S45	DN04S44
SAMPLE #	GX24-03	GX25-03	GX30-03	GX39-03	GX60-03
COMPOUND	07/16/87	07/16/87	07/16/87	07/16/87	07/16/87
SPECIFIC GRAVITY (G/ML)	1.0018	1.0012	1.0013	1.0012	1.0009
VISCOSITY (CENISTOKES)	1.34	1.25	1.19	1.21	1.17

9th AVENUE DUMP
DATA QUALIFIERS

- B = Detected in method blank as well as the sample, possible/probable blank contamination.

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- J = The associated numerical value is an estimated quantity because quality control criteria were not met.

- UJ = The associated numerical value is the estimated quantitation limit.

- R = The data is unusable because quality control criteria were not met.

- N = The instrument detection limit exceeded contract required detection limit (CRDL), and the associated value is the detection limit.

- [] = Bracketed numbers are concentrations quantified at below contract required detection limits (CRDL).

- CRDL Multiple = is a correction factor which takes into account (based on matrix) % moisture, sample size, unit conversions and dilutions. The correction factor is based on the low level detection limit.

- The qualifier found to the left of the compounds concentration is from Warzyn's data validation. Those qualifiers to the right of the value are from the contract Laboratories and/or EPA's data validation.

9TH AVENUE DUMP
PRIVATE WELL ORGANICS - ROUND 2
CONCENTRATION (UG/L)

CRL#	DN04S33	DN04032	DN04S31
SAMPLE IDENTIFICATION	PW01-03	PW01-93	SB06-03
CRDL MULTIPLE	1	1	1
CHLOROMETHANE			
BROMOMETHANE			
VINYL CHLORIDE			
CHLOROETHANE			
METHYLENE CHLORIDE			7
ACETONE		1UJ	1UJ
CARBON DISULFIDE			
1,1-DICHLOROETHENE			
1,1-DICHLOROETHANE			
TRANS-1,2-DICHLOROETHENE			
CHLOROFORM			
1,2-DICHLOROETHANE			
2-BUTANONE			1UJ
1,1,1-TRICHLOROETHANE			
CARBON TETRACHLORIDE			
VINYL ACETATE			
BROMODICHLOROMETHANE			
1,2-DICHLOROPROPANE			
TRANS-1,3-DICHLOROPROPENE			
TRICHLOROETHENE			
DIBROMOCHLOROMETHANE			
1,1,2-TRICHLOROETHANE			
BENZENE			
CIS-1,3-DICHLOROPROPENE			
2-CHLOROETHYLVINYLETHER			
BROMOFORM			
4-METHYL-2-PENTANONE			
2-HEXANONE			
TETRACHLOROETHENE			
1,1,2,2-TETRACHLOROETHANE			
TOLUENE		2J	1
CHLOROBENZENE			
ETHYLBENZENE			
STYRENE			
TOTAL XYLENES			
CRDL MULTIPLE	1	1	2
PHENOL			
BIS(-2-CHLOROETHYL)ETHER			
2-CHLOROPHENOL			
1,3-DICHLOROBENZENE			
1,4-DICHLOROBENZENE			
BENZYL ALCOHOL			
1,2-DICHLOROBENZENE			

R-4 - ROUND 2 HYDROCARBON LAYER SAMPLES WERE COLLECTED IN JUNE 1987
BY WARZYN ENGINEERING INC.

9TH AVENUE DUMP
HYDROCARBON LAYER ORGANICS - ROUND 2
CONCENTRATION (UG/KG)

CRL#	DN04S16	DN04D17	DN04S20	DN04S19	DN04S18	DN04S21	DN04S22
SAMPLE IDENTIFICATION	GX08-03	GX08-93	GX14-03	GX19-03	GX31-03	GX56-03	S805-03
CRQL MULTIPLE	100	100	1	100	100	1	1
CHLOROMETHANE							
BROMOMETHANE							
VINYL CHLORIDE							
CHLOROETHANE							
METHYLENE CHLORIDE	UJ200000JB		J1500UJ	UJ5700008	UJ730000B	4700UJ	1400UJ
ACETONE	UJ130000JB	UJ110000JB	J3800UJ	UJ2800008J	UJ2600000B	UJ32000B	2500UJ
CARBON DISULFIDE							
1,1-DICHLOROETHENE							
1,1-DICHLOROETHANE					160000J		
TRANS-1,2-DICHLOROETHENE	130000J	120000J	22000	140000J	940000	1600J	
CHLOROFORM							
1,2-DICHLOROETHANE							
2-BUTANONE						16000	
1,1,1-TRICHLOROETHANE					1000000		
CARBON TETRACHLORIDE							
VINYL ACETATE							
BROMODICHLOROMETHANE							
1,2-DICHLOROPROPANE							
TRANS-1,3-DICHLOROPROPENE							
TRICHLOROETHENE							
DIBROMOCHLOROMETHANE							
1,1,2-TRICHLOROETHANE							
BENZENE	370000	390000			170000J		
CIS-1,3-DICHLOROPROPENE							
2-CHLOROETHYLVINYLETHER							
BROMOFORM							
4-METHYL-2-PENTANONE	460000J	540000	2700J				
2-HEXANONE							
TETRACHLOROETHENE					120000J		
1,1,2,2-TETRACHLOROETHANE							
TOLUENE	6700000	7600000	27000	1800000	15000000	50000	1100J
CHLOROBENZENE							
ETHYLBENZENE	7800000	8800000	7400	710000	4600000	3400	
STYRENE					530000		
TOTAL XYLENES	56000000	63000000	38000	1400000	19000000	14000	
CRQL MULTIPLE	1.8	1.8	1	5	5	1	1
PHENOL							
BIS(-2-CHLOROETHYL)ETHER							
2-CHLOROPHENOL							
1,3-DICHLOROBENZENE							
1,4-DICHLOROBENZENE							
BENZYL ALCOHOL							
1,2-DICHLOROBENZENE	50000	52000					

9TH AVENUE DUMP
HYDROCARBON LAYER ORGANICS - ROUND 2
CONCENTRATION (UG/KG)

CRL#	DN04S16	DN04D17	DN04S20	DN04S19	DN04S18	DN04S21	DN04S22
SAMPLE IDENTIFICATION	GX08-03	GX08-93	GX14-03	GX19-03	GX31-03	GX56-03	SB05-03
3,3-DICHLOROBENZIDINE							
BENZO(A)ANTHRACENE				240000	73000		
BIS(2-ETHYLEXYL)PHTHALATE	490000	520000		91000	340000		
CHRYSENE	J35000J			230000	78000J		
DI-N-OCTYL PHTHALATE					54000J		
BENZO(B)FLUORANTHENE				180000	110000		
BENZO(K)FLUORANTHENE				[2]			
BENZO(A)PYRENE				210000	72000J		
INDENO(1,2,3-CD)PYRENE				160000	39000J		
DIBENZ(A,H)ANTHRACENE				42000			
BENZO(G,H,I)PERYLENE				170000	31000J		
CRDL MULTIPLE	1.8	1.8	5	5	1	1	1
ALPHA-BHC							
BETA-BHC							
DELTA-BHC							
GAMMA-BHC (LINDANE)							
HEPTACHLOR							
ALDRIN							
HEPTACHLOR EPOXIDE							
ENDOSULFAN I							
DIELDRIN							
4,4-DDE							
ENDRIN							
ENDOSULFAN II							
4,4-DDD							
ENDOSULFAN SULFATE							
DDT 4,4-							
METHOXYCHLOR							
ENDRIN KETONE							
CHLORDANE							
TOXAPHENE							
AROCLOR-1016							
AROCLOR-1221							
AROCLOR-1232							
AROCLOR-1242							
AROCHLOR-1248							
AROCHLOR-1254							
AROCHLOR-1260							

9TH AVENUE DUMP
HYDROCARBON LAYER PCB RESULTS - ROUND 2
CONCENTRATION (UG/KG)

CRL#	DN04S16	DN04D17	DN04S20	DN04S19	DN05S18	DN04S21	DN04S22
SAMPLE IDENTIFICATION	GX08-03	GX08-93	GX14-03	GX19-03	GX31-03	GX56-03	SB05-03
AROCLOR-1016	1200U	1200U	60000U	1200U	1200U	60000U	1200U
AROCLOR-1221	1200U	1200U	60000U	1200U	1200U	60000U	1200U
AROCLOR-1232	1200U	1200U	60000U	1200U	1200U	60000U	1200U
AROCLOR-1242	1200U	1200U	60000U	1200U	1200U	60000U	1200U
AROCLOR-1248	J7300	J3700	1500000	1200U	1200U	360000	1200U
AROCLOR-1254	79600	J6000	120000U	2400U	2400U	120000U	2400U
AROCLOR-1260	2400U	2400U	120000U	5100	5700	120000U	2400U

9TH AVENUE DUMP
HYDROCARBON LAYER - METALS - ROUND 2
CONCENTRATION MG/KG

CRL#	DN04S16	DN04D17	DN04S20	DN04S20	DN04S19	DN04S18	DN04S21	DN04S22
SAMPLE #	GX08-03	GX08-93	GX14-03 WATER	GX14-03 NON-WATER	GX19-03	GX31-03	GX56-03	SB05-03 WATER
COMPOUND	07/16/87	07/16/87	07/16/87	07/16/87	07/16/87	07/16/87	07/16/87	07/16/87
ALUMINUM	400U	400U	400U	400U	400U	410	400U	400U
ANTIMONY	20U	20U	20U	20U	20U	20U	20U	20U
ARSENIC	20U	20U	20U	20U	20U	20U	20U	20U
BARIUM	120U	120U	120U	120U	120U	120U	120U	120U
BERYLLIUM	40U	40U	40U	40U	40U	40U	40U	40U
CADMIUM	10U	10U	10U	10U	10U	10U	17	10U
CALCIUM	800U	800U	1560J	800U	800U	800U	800U	800UJ
CHROMIUM	71	55	135	920	62	242	311	28U
COBALT	200U	200U	200UJ	200U	200U	200U	200U	200U
COPPER	40U	40U	40U	40U	40U	40U	40U	40U
IRON	200U	200U	J514	239	200U	200U	200U	200UJ
LEAD	100U	100U	100U	100U	100U	100U	100U	100U
CYANIDE	16	16	1.5U	1.8	1.5U	1.5U	1.5U	1.5U
MAGNESIUM	800U	800U	800U	800U	800U	800U	800U	800U
MANGANESE	40U	40U	40U	40U	40U	40U	40U	40U
MERCURY	0.3UJ	0.3UJ	0.3U	0.3UJ	0.3UJ	0.3UJ	0.3UJ	0.3U
MOLYBDENUM	40U	40U	40U	40U	40U	40U	40U	40U
NICKEL	40U	40U	40U	40U	40U	70	46	40U
SELENIUM	20U	20U	20U	20U	20U	20U	20U	20U
SILICON	800U	800U	800U	800U	800U	800U	800U	800U
SILVER	40U	40U	40U	40U	40U	66	40U	40U
SODIUM	4000U	4000U	4000U	4000U	4000U	4000U	4000U	4000U
THALLIUM	400U	400U	400U	400U	400U	400U	400U	400U
TITANIUM	40U	40U	40U	40U	40U	40U	40U	40U
VANADIUM	200U	200U	200U	200U	200U	200U	200U	200U
ZINC	409	43	40UJ	291	40U	40U	543	40UJ

9TH AVENUE DUMP
HYDROCARBON LAYER - INCINERATION.
SPECIFIC GRAVITY, KINEMATIC VISCOSITY - ROUND 2

CRL#	87DN04S16	87DN04017	87DN04S20	87DN04S20	87DN04S19	87DN04S18	87DN04S18	87DN04S21	87DN04S22
SAMPLE #	GX08-03	GX08-93	GX14-03	GX14-03 AQUEOUS	GX19-03	GX31-03	GX31-93	GX56-03	S805-03 AQUEOUS
COMPOUND	08/04/87	08/04/87	08/04/87	08/04/87	08/04/87	08/04/87	08/04/87	08/04/87	08/04/87
VISCOSITY - CP	65.8J	63.3J	*6.8J		*6.5J	8.9J	8.2J	**<20J	*1.8J
TEMPERATURE - C°	12.6	15	13.1		13.0	13.7	13.5	12.3	14.5
RPM	60	60	60		60	60	60	60	60
VISCOSITY - CP	21.6J	19.2J	*4.4J		*3.6J	*4.9J	*4.9J	*<2J	*
TEMPERATURE - C°	36.5	37.8	36.6		36.7	36.7	36.5	36.6	
RPM	60	60	60		60	60	60	60	
DENSITY - Kg/L	0.9263	0.9265	0.8886		0.9109	0.9005	0.8930	0.9387	1.0010
TEMPERATURE - C°	10.9	10.6	10.5		10.4	10.6	10.7	10.2	13.0
DENSITY - Kg/L	0.9103	0.9100	0.8672		0.8910	0.8800	0.8765	**	0.9994
TEMPERATURE - C°	38.3	38.3	38.3		38.3	38.3	38.3	**	38.3
MOISTURE - %	21.8	21.6	50.8	99.6	49.2	44.8	44.6	31.8	100.0
ASH - %	0.1	<0.1	0.3	0.3	<0.1	0.1	0.1	0.3	<0.1
VOLATILE MATTER - %	77.8	77.9	48.2	<0.1	49.3	53.8	54.6	66.5	<0.1
FIXED CARBON - %	0.2	0.5	0.6	<0.1	1.4	1.3	0.7	1.4	<0.1
CARBON - %	86.5	88.5	86.5	<0.1	88.3	87.3	86.8	86.3	<0.1
HYDROGEN - %	11.5	11.6	11.3	11.0	11.1	13.0	12.9	11.4	11.1
SULFUR - %	0.4	0.4	0.4	0.4	0.54	0.6	0.6	0.4	<0.1
OXYGEN - %	1.5	<0.1	1.5	88.2	0.1	<0.1	<0.1	1.6	88.9
NITROGEN - %	0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
HEATING VALUE - BTU/lb	18550	18750	18450	<50	18550	18700	18750	18150	<50

9TH AVENUE DUMP
HYDROCARBON LAYER - INCINERATION,
SPECIFIC GRAVITY, KINEMATIC VISCOSITY - ROUND 2

CRL#	87DN04S16	87DN04D17	87DN04S20	87DN04S20	87DN04S19	87DN04S18	87DN04S18	87DN04S13
SAMPLE #	GX08-03	GX08-93	GX14-03	GX14-03 AQUEOUS	GX19-03	GX31-03	GX31-93	GX31-93 AQUEOUS
COMPOUND	08/04/87	08/04/87	08/04/87	08/04/87	08/04/87	08/04/87	08/04/87	08/04/87
KINEMATIC VISCOSITY - CST	61.2	59.2	7.52	1.022	6.91	8.85	9.07	1.015
SPECIFIC GRAVITY - Kg/L	0.9245	0.9243	0.8835		0.9083	0.8947	0.8907	
FLASH POINT - C°	47.3	45.2	30.3		48.3	-	32.3	

9TH AVENUE DUMP
HYDROCARBON LAYER - INCINERATION,
SPECIFIC GRAVITY, KINEMATIC VISCOSITY - ROUND 2

CRL#	87DN04S21	87DN04S21	87DN04S22
SAMPLE #	GX56-03	GX56-03 AQUEOUS	SB05-03 AQUEOUS
COMPOUND	08/04/87	08/04/87	08/04/87
KINEMATIC VISCOSITY - CST	15.9	1.028	1.009
SPECIFIC GRAVITY - Kg/L	0.9270		1.0000
FLASH POINT - C	28.3		N/A

9th AVENUE DUMP
DATA QUALIFIERS

- B = Detected in method blank as well as the sample, possible/probable blank contamination.

- U = The material was analzyed for but was not detected. The associated numerical value is the quantitation limit.

- J = The associated numerical value is an estimated quantity because quality control criteria were not met.

- UJ = The associated numerical value is the estimated quantitation limit.

- R = The data is unusable because quality control criteria were not met.

- N = The instrument detection limit exceeded contract required detection limit (CRDL), and the associated value is the detection limit.

- [] = Bracketed numbers are concentrations quantified at below contract required detection limits (CRDL).

- CRDL Multiple = is a correction factor which takes into account (based on matrix) % moisture, sample size, unit conversions and dilutions. The correction factor is based on the low level detection limit.

- The qualifier found to the left of the compounds concentration is from Warzyn's data validation. Those qualifiers to the right of the value are from the contract Laboratories and/or EPA's data validation.

R-5 - ROUND 3 GROUNDWATER SAMPLES WERE COLLECTED IN JUNE & JULY 1987
BY WARZYN ENGINEERING INC.

NINTH AVENUE DUMP
JUNE-JULY 1987
MONITORING
ROUND 3

Well #	pH	Specific Conductivity at 25°C	Odor	Color	Turbidity
GX1	6.88	47100	slight chemical	clear	none
GX2	6.81	2500	none	lt. brown	slight
GX3	6.62	11,740	chemical	clear to lt. brown	none
GX4	6.38	5850	chemical	lt. brown	slight
GX5	6.81	5980	strong chemical	lt. brown	slight
GX5 dup	6.85	5910	strong chemical	lt. brown	slight
GX6	6.82	4780	strong chemical	lt. brown	slight
GX9	6.83	10,000	chemical	lt. brown	slight
GX10	7.11	22,100	slight septic	lt. brown	slight
GX15	6.50	1950	chemical	lt. brown	slight
GX16	6.85	4440	chemical	black	moderate
GX20	6.84	2940	chemical-leachate	black	moderate
GX21	6.67	6120	chemical-leachate	black	moderate
GX23	7.28	3490	chemical	lt. brown	slight
GX25	6.54	10,000	organic	black	moderate
GX28	7.06	2230	septic	lt. black	slight
GX29	7.07	2820	none	lt. brown	slight
GX29 Dup	7.04	2780	none	lt. brown	slight
GX30	6.84	40,910	none	lt. brown	slight
GX34	7.13	10,200	septic	lt. brown	slight
GX36	7.20	9290	chemical	brown	slight
GX37	7.07	9570	chemical	brown	slight
GX41	6.70	20,200	none	lt. gray	slight
GX42	9.25	552	slight chemical	clear	none
GX43	6.87	5500	chemical (windex)	lt. brown	moderate
GX44	6.58	12,200	chemical (windex)	lt. brown	moderate
GX47	6.84	5840	none	lt. brown	slight
GX49	7.02	1810	none	lt. brown	slight
GX51	6.95	2050	none	lt.brown-gray	moderate
GX54	7.29	4710	chemical	lt. yellow	slight
GX60	6.68	5460	chemical-leachate	lt. brown	slight

GX61	6.77	37,770	slight chemical	lt. yellow	none
GX62	6.73	4520	chemical	lt. brown	moderate
GX63	6.85	2440	septic	lt. black	moderate
GX63 dup	6.40	2500	septic	lt. black	moderate
GX64	6.92	2560	none	brown	moderate
GFX65	7.15	714	none	dark brown	moderate
GFX66	7.34	4370	none	brown	moderate
GFX67	6.94	3020	swampy	lt. brown	slight
GFX67 dup	6.90	3045	swampy	lt. brown	slight
GFX68	6.94	4510	musty	lt. brown	slight
GFX69	9.33	3560	septic	dark brown	moderate
GFX70	6.95	27,600	septic	lt. brown	moderate
GFX71	6.70	>50,000	none	lt. brown	slight
GFX71 dup	6.71	>50,000	none	lt. brown	slight
GFX72	7.11	30,700	slight septic	dark brown	very
GFX73	6.88	31,250	septic	lt. brown	moderate
GFX74	6.73	50,600	septic	lt. brown	moderate
GFX75	7.05	8860	swampy	dark brown	very
GFX76	6.79	22,800	H_2S	lt. brown	slight
GFX77	6.71	51,700	septic	lt. brown	slight
GFX78	7.24	4540	septic	lt. brown	moderate
GFX79	7.23	12,500	none	lt. brown	slight
GB4	7.11	2330	chemical	lt. brown	slight
C-10	7.27	6770	organic	black	very
C-30	6.61	>50,000	organic	lt. brown	slight
I-10	6.95	29,800	none	brown	moderate
I-30	6.61	>50,000	none	lt. brown	moderate
I-30 dup	6.57	>50,000	none	dk. brown	slight
MW-7	7.02	21,400	none	lt. brown	slight
MW10	6.96	1330	septic	lt. gray-brown	slight
GSB01	7.34	<10	none	clear	none
GSB02	6.12	<10	none	clear	none
GSB03	5.48	<10	none	clear	none

[jpl-400-70]

9TH AVENUE DUMP
GROUNDWATER ORGANICS - ROUND 3
CONCENTRATION (UG/L)

CRL#	DN05S04	DN05S03	DN05S06	DN05S01	DN05D02	DN05S07	DN05S05
SAMPLE IDENTIFICATION	GX60-04	GX61-04	GX62-04	GX63-04	GX63-94	GX64-04	GSB03-04
CORL MULTIPLE	10	1	1	1	1	1	1
CHLOROMETHANE							
BROMOMETHANE							
VINYL CHLORIDE		1J					
CHLOROETHANE			3J				
METHYLENE CHLORIDE	9UJ		1J			0.8J	
ACETONE	93UJ	12UJ	21UJ	17UJ	15UJ	12UJ	
CARBON DISULFIDE	20J						
1,1-DICHLOROETHENE							
1,1-DICHLOROETHANE							
TRANS-1,2-DICHLOROETHENE							
CHLOROFORM							
1,2-DICHLOROETHANE							
2-BUTANONE	100UR	10UR	10UR	10UR	10UR	10UR	10UR
1,1,1-TRICHLOROETHANE							
CARBON TETRACHLORIDE							
VINYL ACETATE							
BROMODICHLOROMETHANE							
1,2-DICHLOROPROPANE							
TRANS-1,3-DICHLOROPROPENE							
TRICHLOROETHENE							
DIBROMOCHLOROMETHANE							
1,1,2-TRICHLOROETHANE							
BENZENE	7J						
CIS-1,3-DICHLOROPROPENE							
2-CHLOROETHYLVINYLETHER							
BROMOFORM							
4-METHYL-2-PENTANONE							
2-HEXANONE							
TETRACHLOROETHENE							
1,1,2,2-TETRACHLOROETHANE							
TOLUENE	12J	3J	0.6J	2J	4J	1J	2J
CHLOROBENZENE							0.8J
ETHYLBENZENE				3J	2J		
STYRENE							
TOTAL XYLENES							
CRDL MULTIPLE	1	1	1	1	2	1	1
PHENOL							
BIS(-2-CHLOROETHYL)ETHER							
2-CHLOROPHENOL							
1,3-DICHLOROBENZENE							
1,4-DICHLOROBENZENE							
BENZYL ALCOHOL							
1,2-DICHLOROBENZENE							

9TH AVENUE DUMP
GROUNDWATER ORGANICS - ROUND 3
CONCENTRATION (UG/L)

CRL#	DN05S04	DN05S03	DN05S06	DN05S01	DN05D02	DN05S07	DN05S05
SAMPLE IDENTIFICATION	GX60-04	GX61-04	GX62-04	GX63-04	GX63-94	GX64-04	GSB03-04
2-METHYLPHENOL							
BIS(2-CHLOROISOPROPYL)ETHER							
4-METHYLPHENOL							
N-NITROSO-DI-N-PROPYLAMINE							
HEXACHLOROETHANE							
NITROBENZENE							
ISOPHORONE							
2-NITROPHENOL							
2,4-DIMETHYLPHENOL							
BENZOIC ACID							
BIS(-2-CHLOROETHOOXY)METHANE							
2,4-DICHLOROPHENOL							
1,2,4-TRICHLOROBENZENE							
NAPHTHALENE							
4-CHLOROANILINE							
HEXACHLOROBUTADIENE							
4-CHLORO-3-METHYLPHENOL							
2-METHYLNAPHTHALENE							
HEXACHLOROCYCLOPENTADIENE							
2,4,6-TRICHLOROPHENOL							
2,4,5-TRICHLOROPHENOL							
2-CHLORONAPHTHALENE							
2-NITROANILINE							
DIMETHYL PHTHALATE							
ACANAPHTHYLENE							
3-NITROANILINE							
ACENAPHTHENE							
2,4-DINITROPHENOL							
4-NITROPHENOL							
DIBENZOFURAN							
2,4-DINITROTOLUENE							
2,6-DINITROTOLUENE							
DIETHYLPHTHALATE		12UJ					
4-CHLOROPHENYL-PHENYLETHER							
FLUORENE							
4-NITROANILINE							
4,6-DINITRO-2-METHYLPHENOL							
N-NITROSODIPHENYLAMINE (1)							
4-BROMOPHENYL-PHENYLETHER							
HEXACHLOROBENZENE							
PENTACHLOROPHENOL							
PHENANTHRENE							
ANTHRACENE					2J		
DI-N-BUTYLPHTHALATE					3J		
FLUORANTHENE							
PYRENE				1J			
BUTYLBENZYLPHTHALATE							

9TH AVENUE DUMP
GROUNDWATER ORGANICS - ROUND 3
CONCENTRATION (UG/L)

CRL#	DN05S04	DN05S03	DN05S06	DN05S01	DN05D02	DN05S07	DN05S05
SAMPLE IDENTIFICATION	GX60-04	GX61-04	GX62-04	GX63-04	GX63-94	GX64-04	GSB0J-04
3,3-DICHLOROBENZIDINE	28N		28N	28N		28N	28N
BENZO(A)ANTHRACENE				1J	56N		
BIS(2-ETHYLHEXYL)PHTHALATE	20J	20J	57UJ	20J	88UJ	20J	19J
CHRYSENE							
DI-N-OCTYL PHTHALATE							
BENZO(B)FLUORANTHENE	11N	11N	11N	11N		11N	11N
BENZO(K)FLUORANTHENE							
BENZO(A)PYRENE							
INDENO(1,2,3-CD)PYRENE	13N	13N	13N	13N	26N	13N	13N
DIBENZ(A,H)ANTHRACENE	16N	16N	16N	16N	32N	16N	16N
BENZO(G,H,I)PERYLENE	17N	17N	17N	17N	34N	17N	17N
CRDL MULTIPLE	5	1	1	1	1	1	1

ALPHA-BHC
BETA-BHC
DELTA-BHC
GAMMA-BHC (LINDANE)
HEPTACHLOR
ALDRIN
HEPTACHLOR EPOXIDE
ENDOSULFAN I
DIELDRIN
4,4-DDE
ENDRIN
ENDOSULFAN II
4,4-DDD
ENDOSULFAN SULFATE
DDT 4,4-
METHOXYCHLOR
ENDRIN KETONE
CHLORDANE
TOXAPHENE
AROCLOR-1016
AROCLOR-1221
AROCLOR-1232
AROCLOR-1242
AROCLOR-1248
AROCLOR-1254
AROCLOR-1260

9TH AVENUE DUMP
GROUNDWATER METALS - ROUND 3
CONCENTRATION (UG/L)

CRL#	GN05851	GN05850	GN05855	GN05857	GN05854	GN05858	GN05853	GN05856	GN05826	GN05859
SAMPLE IDENTIFICATION	GX01-04	GX02-04	GX03-04	GX04-04	GX05-04	GX05-94	GX06-04	GX09-04	GX10-04	GX15-04
ALUMINUM	480U	240U	JC15]	15U	JC21]	JC19]	15U	15U	120U	15U
ANTIMONY	420U	210U	25U	25U	25U	25U	25U	25U	105U	25U
ARSENIC	100U	100U	10U	10U	10U	10U	10U	13	50U	10U
BARIUM	[3100]	[1700]	718	447	649	684	[110]	1330	2210	[118]
BERYLLIUM	20U	10U	[1.4]	1U	JC1.1]	1U	1U	1U	5U	1U
CADMIUM	100U	50U	4U	[4.8]	J6.4	4U	4U	[4.7]	25U	4U
CALCIUM	723000	825000	531000	805000	544000	555000	541000	382000	815000	337000
CHROMIUM	80U	40U	56	178	46	49	35	82	20U	[7.7]
COBALT	100U	50U	9U	[18]	9U	9U	9U	[9.7]	25U	9U
COPPER	80U	40U	6U	6U	6U	6U	6U	6U	JC24]	6U
IRON	40700	52200	15100	56000	9560	12100	17100	20600	20400	103000
LEAD	88	132	46	7.5J	14J	13J	12J	39J	25U	6.8J
MAGNESIUM	149000	206000	680000	250000	296000	299000	250000	659000	233000	58700
MANGANESE	1480	2980J	266	9140	827	853	1890	202	812	2890
MERCURY	0.2U	0.2U	0.2U	0.2U	0.2U	0.2U	0.2U	0.2U	0.2U	0.2U
NICKEL	160U	80U	868	609	635	645	470	12700	40U	97
POTASSIUM	[36000]	[26800]	81000	63000	66400	66500	40700	38600	1520000	16800
SELENIUM	50UR	50U	50UR	50UR	50UR	50UR	50UR	50UR	50UJ	50UR
SILVER	80U	40U	4U	4U	4U	4U	4U	4U	20U	4U
SODIUM	11300000	4910000	834000	187000	476000	481000	262000	840000	2630000	24300
THALLIUM	100UR	100U	100U	100U	100U	100U	100U	100U	100UR	100
TIN	320U	160U	22U	22U	22U	22U	22U	22U	80U	22U
VANADIUM	80U	40U	867	104	384	397	184	99	20U	[8.9]
ZINC	7210	11600	168	750	375	288	2420	923	8850	336
CYANIDE										

9TH AVENUE DUMP
GROUNDWATER METALS - ROUND 3
CONCENTRATION (UG/L)

CRL#	ON05S60	ON05S61	ON05S64	ON05S63	ON05S62	ON05S45	ON05S43	ON05D44	ON05S36	ON05S41
SAMPLE IDENTIFICATION	GX16-04	GX20-04	GX21-04	GX23-04	GX25-04	GX28-04	GX29-04	GX29-94	GX30-04	GX34-04
ALUMINUM	[64]	JC64]	[235]	JC30]	955	24U	JC31]	JC38]	240U	24U
ANTIMONY	25U	25U	50U	25U	25U	21U	21U	21U	210U	21U
ARSENIC	10U	10U	39	10U	10U	10U	10U	10U	100U	10U
BARIUM	[120]	213	[104]	297	603	[152]	[106]	[101]	[1250]	780
BERYLLIUM	1U	1U	2U	1U	[4.7]	1U	1U	1U	[13]	1U
CADMIUM	4U	4U	8U	6.7	8.7	5U	5U	5U	50U	5U
CALCIUM	270000	673000	1330000	347000	807000	86300	98700	97000	500000	53600
CHROMIUM	35	39	587	[9.1]	172	4U	4U	4U	40U	3e
COBALT	9U	9U	[21]	[11]	[14]	5U	5U	5U	50U	5U
COPPER	6U	6U	12U	6U	JC8.7]	4U	J[5.3]	4U	40U	4U
IRON	7120	248	5120	352	26900	7010	1240J	1140J	30000J	10600
LEAD	11J	8.2J	21J	11J	39J	5U	5U	5U	50U	17J
MAGNESIUM	259000	80200	156000	231000	640000	26800	32100	31400	91600	372000
MANGANESE	1560	696	3910	1510	17400	298	789	782	1170	470J
MERCURY	0.2U	0.2U	0.2U	0.2U	0.2U	0.2U	0.2U	0.2U	0.2U	0.2U
NICKEL	[34]	43	5240	110	1920	8U	8U	8U	80U	2510
POTASSIUM	44600	11700	21100	77100	36900	6670	8460	7000	[256003	284000
SELENIUM	50UR	50UR	50UR	50UR	50UR	5U	5U	5U	50U	50U
SILVER	4U	4U	8U	4U	[6]	5U	4U	4U	40U	4U
SODIUM	306000	25000	363000	199000	768000	309000	432000	428000	9070000	753000
THALLIUM	100U	10U	100U	100U	100U	10U	10UJ	10UJ	100UR	100U
TIN	22U	22U	44U	22U	22U	16U	16U	[17]	160U	16U
VANADIUM	[38]	[14]	2000	[28]	906	4U	4U	4U	40U	138
ZINC	195	J33	J58	4230	229	215	J1440	J2000	2210	749
CYANIDE										

9TH AVENUE DUMP
GROUNDWATER METALS - ROUND 3
CONCENTRATION (UG/L)

CRL#	ON05S46	ON05S31	ON05S27	ON05S52	ON05S39	ON05S49	ON05S38	ON05S40	ON05S37	ON05S42
SAMPLE IDENTIFICATION	GX36-04	GX37-04	GX41-04	GX42-04	GX43-04	GX44-04	GX47-04	GX49-04	GX51-04	GX54-04
ALUMINUM	JC39]	JC44]	120U	JC28]	JC27]	48U	JC36]	24U	JC31]	JC26]
ANTIMONY	21U	21U	105U	21U	21U	42U	21U	21U	21U	21U
ARSENIC	11	10U	10U	10U	10U	10U	10U	10U	10U	10U
BARIUM	975	839	[836]	[36]	1340	[131]	202	363	306	750
BERYLLIUM	1U	[2.1]	5U	1U	1U	2U	1U	1U	1U	1U
CADMIUM	5U	5U	28	5U	5U	10U	5U	5U	5U	5U
CALCIUM	118000	104000	895000	20100	448000	655000	448000	277000	295000	253000
CHROMIUM	39	41	20U	4U	4U	8U	[5.3]	4U	4U	4U
COBALT	[27]	[39]	25U	5U	5U	10U	5U	5U	5U	5U
COPPER	JC5.6]	JC17]	20U	4U	4U	8U	4U	4U	JC6.5]	JC7.3]
IRON	10700J	5080J	83400J	[29]	20200	108000	20500	146000	18100	4690J
LEAD	30	34	50U	23J	15	36J	13	5U	5.1	5U
MAGNESIUM	758000	670000	282000	18400	345000	398000	267000	59600	67600	133000
MANGANESE	103	69	2320	16J	782J	1190J	591J	681J	690J	178
MERCURY	0.2U	0.2U	0.2U	0.2U	0.2U	0.2U	0.2U	0.2U	0.2U	0.2U
NICKEL	3010	4920	40U	8U	75	131	237	8U	8U	[33]
POTASSIUM	68700	51600	857000	8240	167000	527000	198000	[4780]	[3740]	32400
SELENIUM	5U	5U	50U	5U	5U	50U	50U	50U	50U	5U
SILVER	4U	4U	20U	4U	4U	8U	4U	4U	4U	4U
SODIUM	371000	700000	2490000	93000	343000	1150000	474000	106000	147000	526000
THALLIUM	100UJ	100UJ	100UR	10U	100U	100U	100U	10U	10U	100UJ
TIN	[16]	[18]	80U	16U	16U	32U	16U	16U	16U	16U
VANADIUM	67	212	20U	4U	[7.1]	[31]	[15]	4U	4U	4U
ZINC	1260	5770	3720	J120	1250	2880	2620	2840	1410	2870
CYANIDE										

8TH AVENUE DUMP
GROUNDWATER METALS - ROUND 3
CONCENTRATION (UG/L)

CRL#	ON05S04	ON05S03	ON05S06	ON05S01	ON05D02	ON05S07	ON05S18	ON05S19	ON05S25	ON05S23
SAMPLE IDENTIFICATION	GX60-04	GX61-04	GX62-04	GX63-04	GX63-04	GX64-04	GFX65-04	GFX66-04	GFX67-04	GFX67-04
ALUMINUM	15U	150U	JC24]	JC28]	JC23]	JC28]	JC29]	JC29]	JC31]	JC31]
ANTIMONY	25U	250U	25U	25U	25U	25U	21U	21U	21U	21U
ARSENIC	10U	100U	10U	10U	10U	10U	10U	10U	10U	10U
BARIUM	566	3350	804	345	326	464	[78]	321	355	349
BERYLLIUM	1U	[10]	1U	1U	1U	[1.3]	1U	1U	1U	1U
CADMIUM	5.7	40U	[4.3]	4U	4U	5.3	5U	5U	5U	5U
CALCIUM	357000	754000	360000	363000	359000	286000	113000	119000	122000	122000
CHROMIUM	84	40U	21	4U	4U	[7]	[6.8]	[4.1]	4U	4U
COBALT	9U	90U	[11]	9U	9U	9U	5U	5U	5U	5U
COPPER	6U	60U	6U	6U	6U	J[9.8]	4U	4U	J[6.3]	J[7.4]
IRON	10400	28500	15400	J7470	J5580	4960	20U	[39]	156J	152J
LEAD	18J	188	12J	5U	11J	26J	5.1	5U	50U	5U
MAGNESIUM	478000	168000	288000	156000	154000	99800	21700	31100	36500	36400
MANGANESE	600	1730	824	3390	3200	1100	448	531	1410	1390
MERCURY	0.2U	0.2U	0.2U	0.2U	0.2U	0.2U	0.4U	0.4U	0.2U	0.2U
NICKEL	4100	80U	456	[10]	[12]	8U	8U	8U	8U	8U
POTASSIUM	27200	[197001	13000	26600	26800	5060	5580	5990	9950	9700
SELENIUM	50UR	50UR	50UR	50UR	50UR	50UR	50U	5U	5U	5U
SILVER	4U	40U	4U	4U	4U	4U	4U	4U	4U	4U
SODIUM	373000	8610000	319000	40100	39800	163000	26100	745000	486000	480000
THALLIUM	100U	100U	100U	10U	10U	100U	10U	10U	100UJ	100UJ
TIN	22U	220U	22U	22U	22U	22U	16U	16U	16U	16U
VANADIUM	625	70U	62	7U	7U	7U	4U	4U	4U	4U
ZINC	2020	12500	2500	J55	J48	2880	J24	J23	J42	J30
CYANIDE	10U	15	10U	11	13	10U				

9TH AVENUE DUMP
GROUNDWATER METALS - ROUND 3
CONCENTRATION (UG/L)

CRL#	0N05S24	0N05S21	0N05S22	0N05S20	0N05S28	0N05S30	0N05S34	0N05S32	0N05S33	0N05S35
SAMPLE IDENTIFICATION	GFX68-04	GFX69-04	GFX70-04	GFX71-04	GFX71-94	GFX72-04	GFX73-04	GFX74-04	GFX75-04	GFX76-04
ALUMINUM	JC333	JC96]	240U	1200U	1200U	240U	240U	480U	JC74]	[400
ANTIMONY	21U	21U	210U	1050U	1050U	210U	210U	420U	42U	210U
ARSENIC	10U	10UJ	20U	100U	100U	20U	20U	50U	10U	10U
BARIUM	390	[57]	[646]	[1040]	[737]	[893]	[878]	[686]	641	[1090]
BERYLLIUM	1U	1U	10U	360	50U	10U	10U	20U	2U	[42]
CADMIUM	5U	5U	50U	290	250U	50U	50U	100U	10U	51
CALCIUM	165000	47200	575000	892000	871000	354000	271000	530000	181000	221000
CHROMIUM	4U	[5.9]	40U	[443]	200U	40U	40U	80U	8U	[63]
COBALT	5U	5U	50U	[330]	250U	50U	50U	100U	10U	[65]
COPPER	JC5.1]	4U	40U	[431]	200U	40U	40U	80U	8U	[53]
IRON	3570J	181	7780	27100	29300	1650	6900	26200	999J	10400J
LEAD	5U	7	25UJ	J453J	J196	64	59	77	14	16
MAGNESIUM	44500	9980	141000	[1870001	[1530001	90800	[41600]	[72500]	47600	[360001
MANGANESE	1370	122	2230	4720	4560	2720	2790	1340	2240	2540
MERCURY	0.2U	0.2U	0.2U	0.2U	0.2U	0.2U	0.2U	0.2U	0.2U	0.2U
NICKEL	[8]	8U	80U	[452]	400U	80U	80U	160U	16U	80U
POTASSIUM	6590	46500	597000	[1730001	[1850001	[35100]	[22100]	[40200]	11500	[230001
SELENIUM	5U	5U	50U	500UR	500UR	50U	50U	71J	50U	50U
SILVER	4U	4U	40U	[385]	200U	40U	40U	80U	8U	40U
SODIUM	685000	689000	5570000	22900000	22600000	6910000	7370000	12700000	1650000	5090000
THALLIUM	100UJ	10U	100U	100UR	100UR	100U	100U	100U	100UJ	100UJ
TIN	16U	16U	160U	800U	800U	160U	160U	320U	32U	160U
VANADIUM	4U	53	40U	[314]	200U	40U	40U	80U	8U	[76]
ZINC	J44	JC14]	JC91]	[662]	[579]	JC82]	JC60]	JC85]	J41	JC119]
CYANIDE										

9TH AVENUE DUMP
GROUNDWATER METALS - ROUND 3
CONCENTRATION (UG/L)

CRL#	ON05S29	ON05S11	ON05S17	ON05S48	ON05S10	ON05S08	ON05S12	ON05S14	ON05S13	ON05S15
SAMPLE IDENTIFICATION	GFX77-04	GFX78-04	GFX79-04	GB4-04	GC10-04	GD30-04	GI10-04	GI30-04	GI30-R4	GMW7-04
ALUMINUM	480U	J[49]	[142]	J[56]	43U	240U	240U	1200U	1200U	[597]
ANTIMONY	420U	21U	105U	21U	42U	210U	210U	1050U	1050U	210U
ARSENIC	100U	10U	10U	10U	2B	10U	20U	100U	100U	50U
BARIUM	[1230]	313	[364]	[29]	[84]	[1560]	[259]	[674]	[693]	[250]
BERYLLIUM	20U	1U	5U	[3.7]	2U	10U	10U	50U	50U	10U
CADMIUM	100U	5U	25U	5U	10	50U	50U	250U	250U	50U
CALCIUM	619000	107000	129000	83700	50200	314000	334000	597000	621000	92100
CHROMIUM	80U	[6]	20U	[6.4]	36	40U	40U	200U	[210]	40U
COBALT	100U	5U	25U	[6.6]	10U	50U	50U	250U	250U	50U
COPPER	80U	J[4.2]	20U	J[10]	8U	40U	40U	200U	200U	40U
IRON	25800J	[80]	2150	23500	269	12500	7910	27500	27300	5270
LEAD	36	5U	28	5U	5U	28	45	316J	J232J	80
MAGNESIUM	112000	20600	31000	90700	18300	62400	106000	[77900]	[81900]	[14100]
MANGANESE	2240	1080	845	261J	712	639	1690	2910	2940	545
MERCURY	0.2U	0.2U	0.2U	0.2U	0.2U	0.2U	0.2U	0.2U	0.2U	0.2U
NICKEL	160U	[10]	[69]	65	[35]	80U	[181]	400U	400U	80U
POTASSIUM	[40800]	[4590]	25500	13600	10300	[16100]	[26000]	[96800]	[98600]	[15600]
SELENIUM	50U	5U	50U	5U	50U	50U	50U	500UR	500UR	50U
SILVER	80U	4U	20U	4U	8U	40U	40U	200U	200U	40U
SODIUM	12600000	823000	2430000	160000	1530000	6070000	6780000	20200000	20800000	4720000
THALLIUM	100UR	10U	100U	10U	10U	100U	100U	100UR	100UR	100U
TIN	320U	16U	80U	[26]	32U	160U	160U	800U	800U	160U
VANADIUM	80U	4U	20U	[17]	8U	40U	40U	200U	200U	40U
ZINC	[268]	J[19]	J[75]	288	J[39]	J[84]	J[90]	[354]	[353]	[147]
CYANIDE										

9TH AVENUE DUMP
GROUNDWATER METALS - ROUND 3
CONCENTRATION (UG/L)

CRL#	0N05S09	0N05S47	0N05S05
SAMPLE IDENTIFICATION	GMW10-04	GSB02-04	GSB03-04
ALUMINUM	J[73]	24U	J[21]
ANTIMONY	21U	21U	25U
ARSENIC	10U	10U	10U
BARIUM	[36]	2U	3U
BERYLLIUM	1U	1U	1U
CADMIUM	5U	5U	4U
CALCIUM	47500	[246]	J[268]
CHROMIUM	[7.8]	4U	4U
COBALT	5U	5U	9U
COPPER	4U	J[5.3]	[8.1]
IRON	1040	20U	24U
LEAD	5U	5U	J8.9J
MAGNESIUM	9550	[154]	153U
MANGANESE	404	5UJ	J[7.5]
MERCURY	0.2U	0.2U	0.2U
NICKEL	8U	8U	8U
POTASSIUM	[3450]	151U	175U
SELENIUM	5U	5U	5UR
SILVER	4U	4U	4U
SODIUM	206000	898U	1090U
THALLIUM	10U	10U	10U
TIN	16U	16U	22U
VANADIUM	4U	4U	7U
ZINC	J[15]	J22	J[19]
CYANIDE			

9TH AVENUE DUMP
GROUNDWATER INORGANICS - ROUND 3
CONCENTRATION (MG/L)

CRL#	DN05S51	DN05S50	DN05S55	DN05S57	DN05S54	DN05D58	DN05S53	DN05S56	DN05S26	DN05S59
SAMPLE IDENTIFICATION	GX01-04	GX02-04	GX03-04	GX04-04	GX05-04	GX05-94	GX06-04	GX09-04	GX10-04	GX15-04
SULFATE	395	210	275	200	J78	J56	60	30U	358	100
CHLORIDE	J15271J	J12366J	J3256J	J1445J	J733J	J673J	J302J	J3014J	J9278J	
TOTAL DISSOLVED SOLIDS	32220	17400	7890	5360	4090	4100	3170	7070	15630	1810
ALKALINITY	493	353	1207	1572	3103	3020	2612	3120	741	880

9TH AVENUE DUMP
GROUNDWATER INORGANICS - ROUND 3
CONCENTRATION (MG/L)

CRL#	DN05S60	DN05S61	DN05S64	DN05S63	DN05S62	DN05S45	DN05S43	DN05D44	DN05S36	DN05S41
SAMPLE IDENTIFICATION	GX16-04	GX20-04	GX21-04	GX23-04	GX25-04	GX28-04	GX29-04	GX29-94	GX30-04	GX34-04
SULFATE	54	220	630	107	315	80	J60	J90	317	30U
CHLORIDE	J1377J	J178J	J310J	J825J	J1927J	J586J	J593J	J800J	J16474J	J1752J
TOTAL DISSOLVED SOLIDS	3400	2460	7020	3070	8760	1290	1680	1670	28030	4310
ALKALINITY	1312	2103	2355	1044	3570	310	262	291	508	3075

9TH AVENUE DUMP
GROUNDWATER INORGANICS - ROUND 3
CONCENTRATION (MG/L)

CRL#	DN05S46	DN04S31	DN05S27	DN05S52	DN05S39	DN05S49	DN05S38	DN05S40	DN05S37	DN05S42
SAMPLE IDENTIFICATION	GX36-04	GX37-04	GX41-04	GX42-04	GX43-04	GX44-04	GX47-04	GX49-04	GX51-04	GX54-04
SULFATE	50	60U	467	15U	170	240	610	515	790	395
CHLORIDE	J923J	J695J	J8540J		J1032J	J4050J	J1385J	J95J	J58J	J1346J
TOTAL DISSOLVED SOLIDS	5230	4990	14940	370	4240	9720	4460	1480	1750	3630
ALKALINITY	881	1074	525	436	1901	859	1073	502	471	700

9TH AVENUE DUMP
GROUNDWATER INORGANICS - ROUND 3
CONCENTRATION (MG/L)

CRL#	DN05S04	DN05S03	DN05S06	DN05S01	DN05D02	DN05S07	DN05S18	DN05S19	DN05S25	DN05D23
SAMPLE IDENTIFICATION	GX60-04	GX61-04	GX62-04	GX63-04	GX63-94	GX64-04	GFX65-04	GFX66-04	GFX67-04	GFX67-94
SULFATE	230	259	160	291	350	251	67	115	J98	J138
CHLORIDE	J445J	J2025J	J531J	R52J	R3434J	J9476J	J908J	J1538J	J790J	J1329J
TOTAL DISSOLVED SOLIDS							490	2700	1920	1816
ALKALINITY	2830	410	2052	1430	1270	602	393	197	431	532

9TH AVENUE DUMP
GROUNDWATER INORGANICS - ROUND 3
CONCENTRATION (MG/L)

CRL#	DN05S24	DN05S21	DN05S22	DN05S20	DN05D28	DN05S30	DN05S34	DN05S32	DN05S33	DN05S35
SAMPLE IDENTIFICATION	GFX68-04	GFX69-04	GFX70-04	GFX71-04	GFX71-94	GFX72-04	GFX73-04	GFX74-04	GFX75-04	GFX76-04
SULFATE	90	195	386	398	393	360	126	254	290	160
CHLORIDE	J1429J	J1756J	J13687J	J47004J	J46118J	J13564J	J13153J	J22830J	J3719J	J10527J
TOTAL DISSOLVED SOLIDS	2750	2149	18689	63812	62434	19180	19680	35440	5260	13890
ALKALINITY	437	202	512	553	560	711	667	654	482	543

9TH AVENUE DUMP
GROUNDWATER INORGANICS - ROUND 3
CONCENTRATION (MG/L)

CRL#	DN05S29	DN05S11	DN05S17	DN05S48	DN05S10	DN05S08	DN05S12	DN05S14	DN05D13	DN05S15
SAMPLE IDENTIFICATION	GFX77-04	GFX78-04	GFX79-04	GB4-04	GC10-04	GC30-04	GI10-04	GI30-40	GI30-94	GMW7-04
SULFATE	30U	51	49	3U	68	15	635	780	760	25
CHLORIDE	J27896J	J1680J	J6068J	J332J	J4863J	J12505J	J12576J	J42012J	J49212J	J13063J
TOTAL DISSOLVED SOLIDS	35760	2730	6920	1320	4093	17570	720	J133930	J56090	13480
ALKALINITY	370	302	1160	598	515	1143	735	592	601	921

9TH AVENUE DUMP
GROUNDWATER INORGANICS - ROUND 3
CONCENTRATION (MG/L)

CRL#	DN05S09	DN05S16	DN05S47	DN05S05
SAMPLE IDENTIFICATION	GMW10-04	GSB01-04	GSB02-04	GSB03-04
SULFATE	30	3U	30U	60U
CHLORIDE	J266J		1UJ	1UJ
TOTAL DISSOLVED SOLIDS	777	26	20	
ALKALINITY	181	537	4	3

9TH AVENUE DUMP
GROUNDWATER INORGANICS - ROUND 3
CONCENTRATION (MG/L)

CRL#	DN05S04	DN05S03	DN05S06	DN05S01	DN05D02	DN05S07	DN05S05
SAMPLE IDENTIFICATION	GX60-04	GX61-04	GX62-04	GX63-04	GX63-94	GX64-04	GSB03-04
CHEMICAL OXYGEN DEMAND	895	486	723	159	159	71	<5UJ
BIOCHEMICAL OXYGEN DEMAND	62	<3	140	8J	7J	5	<3U
SULFATE	246	244	133	263	262	209	<1U
SULFIDE	<1UJ	<1UJ	<1UJ	2J	2J	2J	1J
CHLORIDE	46	45	634	380J	<1J	408	13400J
TOTAL DISSOLVED PHOSPHORUS	0.14	<0.02	2.3J	<0.02	<0.02	<0.02	<0.02
TOTAL SUSPENDED SOLIDS	256J	199J	134J	758	503	843	<2U
TOTAL ORGANIC CARBON	304	18	224	169	162	48	0.4
TOTAL DISSOLVED SOLIDS	3820J	24000J	3070J	1870	1890	1740	7
ALKALINITY	2770J	360J	1620J	1230J	1230J	680J	<3UJ
OIL & GREASE	<5U	<5U	<5U	<5U	<5U	<5U	<5U
AMMONIA NITROGEN	88	9.0	28	4.7	4.7	2.5	0.2
TOTAL KJELDAHL NITROGEN	120	9.8	47	10	10	4.1	0.5
NITRATE+NITRATE NITROGEN	17J	9J	22J	8J	14J	13J	10J

9th AVENUE DUMP
DATA QUALIFIERS

- B = Detected in method blank as well as the sample, possible/probable blank contamination.

- U = The material was analzyed for but was not detected. The associated numerical value is the quantitation limit.

- J = The associated numerical value is an estimated quantity because quality control criteria were not met.

- UJ = The associated numerical value is the estimated quantitation limit.

- R = The data is unusable because quality control criteria were not met.

- N = The instrument detection limit exceeded contract required detection limit (CRDL), and the associated value is the detection limit.

- [] = Bracketed numbers are concentrations quantified at below contract required detection limits (CRDL).

- CRDL Multiple = is a correction factor which takes into account (based on matrix) % moisture, sample size, unit conversions and dilutions. The correction factor is based on the low level detection limit.

- The qualifier found to the left of the compounds concentration is from Warzyn's data validation. Those qualifiers to the right of the value are from the contract Laboratories and/or EPA's data validation.

APPENDIX S

GROUNDWATER LEVEL DATA
SURFACE WATER LEVEL DATA
VERTICAL GRADIENTS
HYDROGRAPHS
GRADIENT GRAPHS
WARZYN ENGINEERING INC.

S-1 - GROUNDWATER SURFACE WATER LEVEL DATA AND VERTICAL GRADIENTS
S-2 - HYDROGRAPHS AND GRADIENT GRAPHS

This Appendix contains groundwater and surface water data from May 1986 to August 1987 collected by Warzyn Engineering Inc. This Appendix also contains vertical gradients, hydrographs and gradient graphs.

S-1 - GROUNDWATER SURFACE WATER LEVEL DATA AND VERTICAL GRADIENTS

The measured water level in a well screened below the salt water/fresh water interface has a column of salt water in the well. The total head measured in that well is therefore:

$$h = z + \frac{\rho}{\rho_s g}$$

where z = the elevation of the well screen
ρ = pressure in the well screen
ρ_s = density of the salt solution
g = acceleration due to gravity

To correct the measured water level to an equivalent water level of fresh water the additional head due to the difference between the fresh water density and the salt water density through the well column was added to the measured head, as follows:

$$h_{corrected} = h_{measured} + d\ (\rho_s - 1)$$

where: d = height of the water column in the well

ρ_s = density of the salt water solution in the well

In a stratified system, such as is present at some locations at the Ninth Avenue Dump, the variability of water density with elevation and the location of the salt water/fresh water interface may be additional variables to consider when calculating adjusted head levels. Detailed data on variable density with depth is not available for the Ninth Avenue Dump site. Using the available data, the corrected head levels in the following table are a best estimate of piezometric heads at locations affected by high salt concentrations and could be subject to further interpretation.

[jpl-601-79]

WATER LEVEL OBSERVATIONS
9TH AVENUE DUMP
GARY, INDIANA

WELL OR STAFF GAGE	WELL DEPTH FROM TOC (ft)	GROUND ELEV	TOP OF CASING OR GAGE ELEV.	07-May-86				15-May-86				17-May-86			
				DEPTH TO WATER (Ft)	ELEVATION	OIL THICKNESS	TRUE WATER ELEVATION	DEPTH TO WATER (Ft)	ELEVATION	OIL THICKNESS	TRUE WATER ELEVATION	DEPTH TO WATER (Ft)	ELEVATION	OIL THICKNESS	TRUE WATER ELEVATION
SG1			598.70	3.03	595.67		595.67	3.09	595.61		595.61	2.91	595.79		595.79
SG2			599.78	4.05	595.73		595.73	4.10	595.68		595.68	3.79	595.99		595.99
SG3			597.87	2.00	595.87		595.87	2.03	595.84		595.84	2.90	594.97		594.97
SG4			598.88	3.01	595.87		595.87	3.04	595.84		595.84	2.88	596.00		596.00
SG5			597.81	2.52	595.29		595.29	2.66	595.15		595.15	2.45	595.36		595.36
SG6			597.89	2.54	595.35		595.35	2.58	595.31		595.31	2.41	595.48		595.48
SG7			598.64	3.15	595.49		595.49	NOT MEASURED				NOT MEASURED			
SG8			599.06	3.24	595.84		595.84	NOT MEASURED				NOT MEASURED			
SG9			597.97	2.75	595.22		595.22	2.93	595.04		595.04	2.59	595.38		595.38
SG-10			601.06	NOT MEASURED				NOT MEASURED				NOT MEASURED			
SG-11			599.97	NOT MEASURED				NOT MEASURED				NOT MEASURED			
B-2	14.9	598.9	601.09	5.54	595.55		595.55	5.82	595.27		595.27	5.51	595.58		595.58
B-3	14.9	598.1	600.05	4.40	595.65	0.14	595.61	4.57	595.48		595.48	4.18	595.87		595.87
B-4	14.9	597.6	600.24	4.58	595.86		595.86	4.39	595.85		595.85	4.18	596.06		596.06
A-1	26.6	597.9	600.87	5.95	595.82		596.04	5.06	595.81		596.03	4.89	595.98		596.20
A-2	15.6	597.8	600.34	4.43	595.87		595.96	5.05	595.83		595.94	4.27	596.03		596.12
A-3	19.7	598.5	600.95	4.98	595.97		595.98	5.31	595.64		595.65	5.14	595.81		595.82
A-4	27.4	598.3	600.58	5.38	595.20		595.20	4.90	595.68		595.68	4.76	595.82		595.82
A-5	27.2	598.1	600.42	4.95	595.47		595.47	4.93	595.49		595.49	4.66	595.76		595.76
A-6	13.1	597.8	600.33	4.84	595.49		595.49	4.86	595.47		595.47	4.58	595.75		595.75
A-7	9.8	597.6	599.82	4.32	595.50		595.50	4.73	595.09		595.09	4.38	595.44		595.44
A-8	9.9	597.2	599.66	6.61	593.05	2.60	595.44	6.35	593.31	2.35	595.43	7.02	592.64	3.14	595.73
A-9	27.5	597.2	600.17	4.75	595.42		595.42	4.74	595.43		595.43	4.45	595.72		595.72
A-10	29.8	598.6	601.16	5.80	595.36		595.36	5.95	595.21		595.26	5.63	595.53		595.53
A-11	29.4	598.1	600.17	6.86	595.31		595.31	5.11	595.06		595.06	4.59	595.58		595.58
A-12	9.1	596.9	599.50	3.86	595.64		595.64	4.02	595.28		595.28	3.65	595.65		595.65
A-13	7.9	597.9	600.36	4.42	595.92		595.92	4.55	595.79		595.79	4.00	596.34		596.34
A-14	12.2	599.8	602.70	9.07	593.63	2.59	595.84	8.81	593.89	2.26	595.89	8.70	594.00	2.25	595.95
A-15	10.1	598.7	600.65	4.86	596.09		596.09	4.93	596.02		596.02	4.24	596.71		596.71
BW-3	12.1	599.7	601.88	6.72	595.16		595.16	7.13	594.75		594.75	6.63	595.25		595.25
BW-4	14.3	601.1	603.76	8.13	595.63		595.63	NOT MEASURED				8.11	595.65		595.65

WELL OR STAFF GAGE	29-May-86 DEPTH TO WATER (FT)	ELEVATION	OIL THICKNESS	TRUE WATER ELEVATION	05-Jun-86 DEPTH TO WATER (FT)	ELEVATION	OIL THICKNESS	TRUE WATER ELEVATION	14-Jun-86 DEPTH TO WATER (FT)	ELEVATION	OIL THICKNESS	TRUE WATER ELEVATION	20-Jun-86 DEPTH TO WATER (FT)	ELEVATION	OIL THICKNESS	TRUE WATER ELEVATION
SG1	2.91	595.79		595.79	2.94	595.76		595.76	2.90	595.80		595.80	2.66	596.04		596.04
SG2	3.04	595.94		595.94	3.01	595.87		595.87	3.70	596.08		596.08	3.34	596.43		596.07
SG3	2.86	595.61		595.61	3.11	594.76		594.76	1.70	596.17		596.17	1.60	596.07		595.07
SG4	2.90	595.90		595.90	2.90	595.90		595.90	2.60	596.20		596.20	2.30	595.90		595.90
SG5	2.43	595.38		595.38	2.45	595.36		595.36	1.97	595.84		595.84	2.20	595.61		595.61
SG6	2.39	595.50		595.50	2.47	595.42		595.42	1.77	596.12		596.12	1.86	596.03		596.03
SG7	NOT MEASURED				3.11	595.53		595.53	2.60	596.04		596.04	2.70	595.94		595.94
SG8	3.11	595.97		595.97	2.95	596.13		596.13	2.90	596.18		596.18	3.00	596.04		596.08
SG9	2.34	595.41		595.41	2.44	595.31		595.31	2.25	595.72		595.72	1.99	595.98		595.98
SG-10	NOT MEASURED				NOT MEASURED				NOT MEASURED				NOT MEASURED			
SG-11	NOT MEASURED				NOT MEASURED				NOT MEASURED				NOT MEASURED			
B-2	5.55	595.34		595.34	5.77	595.32		595.32	4.93	596.16		596.16	5.06	596.03		596.03
B-3	4.17	595.88		595.88	4.31	595.74		595.74	3.60	596.45		596.45	3.91	596.14		596.14
B-4	4.25	596.06		596.01	4.25	595.99		595.99	3.96	596.28		596.28	4.13	596.11		596.11
I-1	4.93	595.94		596.16	4.94	595.93		596.15	4.67	596.20		596.42	4.69	596.07		596.29
I-2	4.31	595.99		596.00	4.33	595.97		596.06	4.05	596.25		596.34	4.21	596.09		596.18
I-3	5.09	595.86		595.87	5.10	595.77		595.78	4.61	596.34		596.36	4.97	595.98		595.99
I-4	4.71	595.87		595.87	4.69	595.89		595.89	4.20	596.38		596.38	4.58	596.00		596.00
I-5	4.75	595.69		595.69	4.80	595.63		595.62	4.25	596.17		596.17	4.61	596.01		596.01
I-6	4.64	595.69		595.69	4.72	595.61		595.61	4.12	596.21		596.21	4.53	596.00		596.00
I-7	4.14	595.68		595.68	4.23	595.59		595.59	3.56	596.26		596.26	4.14	595.68		595.68
I-8	7.01	592.65	3.35	595.72	6.39	592.87	2.90	595.61	7.04	591.72	2.46	593.99	6.65	593.41	3.18	595.94
I-9	4.51	595.66		595.66	4.73	595.44		595.44	3.91	596.26		596.26	4.21	595.96		595.96
I-10	5.70	595.46		595.46	5.70	595.37		595.37	5.16	596.00		596.00	5.22	595.94		595.94
I-11	4.64	595.53		595.53	4.77	595.40		595.40	3.97	596.20		596.20	4.18	595.99		595.99
I-12	3.73	595.57		595.57	3.89	595.41		595.41	3.23	596.07		596.07	3.30	596.00		596.00
I-13	4.09	596.25		596.25	4.44	595.94		595.94	3.76	596.58		596.58	4.19	596.15		595.15
I-14	8.00	593.90	2.47	596.09	8.03	593.87	2.38	595.90	6.92	595.78	3.81	599.15	8.48	594.22	2.54	596.47
I-15	4.75	596.20		596.20	4.86	596.15		596.15	4.58	596.57		596.53	4.55	596.42		596.42
BW-3	4.54	595.34		595.34	4.79	595.09		595.09	5.05	596.03		596.03	5.09	595.99		595.99
BW-4	8.11	595.65		595.65	8.14	595.62		595.62	7.62	596.14		596.14	7.63	596.13		596.13

WELL OR STAFF GAGE	24-Jun-86 DEPTH TO WATER (FT)	ELEVATION	OIL THICKNESS	TRUE WATER ELEVATION	01-Jul-86 DEPTH TO WATER (FT)	ELEVATION	OIL THICKNESS	TRUE WATER ELEVATION	09-Jul-86 DEPTH TO WATER (FT)	ELEVATION	OIL THICKNESS	TRUE WATER ELEVATION	17-Jul-86 DEPTH TO WATER (FT)	ELEVATION	OIL THICKNESS	TRUE WATER ELEVATION
SG1	3.02	595.80		595.80	2.81	595.89		595.89	2.86	595.84		595.84	2.87	595.83		595.83
SG2	3.00	595.98		595.98	3.75	596.03		596.03	3.72	596.06		596.06	3.80	595.98		595.98
SG3	1.90	595.97		595.97	1.60	596.07		596.07	1.80	596.07		596.07	NOT MEASURED			
SG4	2.90	595.90		595.90	2.85	596.03		596.03	2.80	596.00		596.00	1.87	597.01		597.01
SG5	2.32	595.49		595.49	2.30	595.51		595.51	2.20	595.53		595.53	2.28	595.55		595.53
SG6	2.02	595.87		595.87	2.02	595.87		595.87	2.11	595.78		595.78	2.09	595.80		595.80
SG7	2.85	595.79		595.79	2.75	595.89		595.89	2.70	595.94		595.94	2.84	595.80		595.80
SG8	3.10	595.98		595.98	3.10	595.98		595.98	3.00	596.08		596.08	3.12	595.96		595.96
SG9	2.18	595.79		595.79	2.13	595.84		595.84	2.18	595.79		595.79	2.17	595.80		595.80
SG-10	NOT MEASURED				NOT MEASURED				NOT MEASURED				NOT MEASURED			
SG-11	NOT MEASURED				NOT MEASURED				NOT MEASURED				NOT MEASURED			
B-2	5.25	595.84		595.84	5.23	595.86		595.86	5.26	595.83		595.83	5.31	595.78		595.78
B-3	4.39	595.66		595.66	4.24	595.81		595.81	4.19	595.86	0.04	595.90	4.25	595.80	0.01	595.81
B-4	4.24	596.00		596.00	4.14	596.10		596.10	4.13	596.13		596.13	4.24	596.00		596.00
I-1	4.91	595.96		596.18	4.82	596.05		596.27	4.81	596.06		596.28	4.92	595.95		596.17
I-2	4.30	596.00		596.09	4.22	596.08		596.17	4.19	596.11		596.30	4.32	595.98		596.07
I-3	5.26	595.69		595.70	5.01	595.94		595.95	5.05	595.90		595.91	5.12	595.83		595.84
I-4	4.85	595.73		595.73	4.61	595.97		595.97	4.65	595.93		595.93	4.77	595.81		595.81
I-5	4.66	595.76		595.76	4.48	595.94		595.94	4.50	595.92		595.92	4.65	595.77		595.77
I-6	4.03	596.30		596.30	4.41	595.92		595.92	4.41	595.92		595.92	4.57	595.76		595.76
I-7	4.56	595.26		595.26	3.89	595.93		595.93	3.89	595.93		595.93	4.05	595.77		595.77
I-8	6.59	593.07	2.64	595.69	3.56	596.19		596.19	6.85	592.81	3.40	595.94	6.67 TO PRODUCT			
I-9	4.47	595.70		595.70	4.26	595.89		595.89	4.26	595.91		595.91	4.51	595.66		595.66
I-10	5.41	595.75		595.75	5.36	595.80		595.80	5.40	595.76		595.76	5.47	595.69		595.69
I-11	4.45	595.72		595.72	4.32	595.85		595.85	4.33	595.84		595.84	4.42	595.75		595.75
I-12	3.49	595.81		595.81	3.42	595.86		595.88	3.40	595.90		595.90	3.56	595.74		595.74
I-13	4.35	595.99		595.99	4.16	596.18		596.16	4.05	596.31		596.31	4.31	596.03		596.03
I-14	8.86	593.84	2.62	596.16	8.11	594.59		596.59	8.67	594.03	2.43	596.16	NOT MEASURED			
I-15	5.05	595.90		595.90	4.87	596.28		596.28	4.64	596.31		596.31	4.66	596.27		596.29
BW-3	6.13	595.75		595.75	6.10	595.78		595.78	6.26	595.62		595.62	6.12	595.76		595.76
BW-4	7.79	595.97		595.97	7.99	595.86		595.86	8.01	595.75		595.75	7.95	595.81		595.81

WELL OR STAFF GAGE	22-Jul-86 DEPTH TO WATER (FT)	ELEVATION	OIL THICKNESS	TRUE WATER ELEVATION	01-Oct-86 DEPTH TO WATER (FT)	ELEVATION	OIL THICKNESS(FT)	TRUE WATER ELEVATION
SG1	3.05	595.65		595.65	NOT MEASURED			
SG2	4.10	595.60		595.60	NOT MEASURED			
SG3	2.00	595.87		595.87	NOT MEASURED			
SG4	2.90	595.98		595.98	NOT MEASURED			
SG5	2.50	595.31		595.31	NOT MEASURED			
SG6	2.60	595.29		595.29	NOT MEASURED			
SG7	3.10	595.56		595.56	NOT MEASURED			
SG8	3.20	595.88		595.88	NOT MEASURED			
SG9	2.49	595.40		595.40	NOT MEASURED			
SG-10	NOT MEASURED				NOT MEASURED			
SG-11	NOT MEASURED				NOT MEASURED			
B-2	5.60	595.49		595.49	6.55	594.54		594.54
B-3	4.65 TO PRODUCT				NOT MEASURED			
B-4	4.48	595.76		595.76	4.59	595.65		595.65
A-1	5.18	595.69		595.90	5.24	595.63		595.84
A-2	4.55	595.75		595.84	4.79	595.51		595.60
A-3	5.40	595.55		595.56	5.93	595.02		595.03
A-4	5.04	595.58		595.58	NOT MEASURED			
A-5	4.94	595.40		595.40	5.70	594.72		594.72
A-6	4.87	595.46		595.46	5.63	594.68		594.68
A-7	4.33	595.49		595.49	5.00	594.74		594.74
A-8	4.05 TO PRODUCT				4.5 TO PRODUCT			
A-9	4.81	595.36		595.36	5.35	594.82		594.82
A-10	5.92	595.24		595.24	NOT MEASURED			
A-11	5.81	594.36		594.36	5.49	594.68		594.68
A-12	3.02	595.48		595.48	4.82	594.48		594.48
A-13	4.52	595.82		595.82	4.60	595.94		595.94
A-14	6.63 TO PRODUCT				6.05 TO PRODUCT			
A-15	5.05	595.90		595.90	5.38	595.57		595.57
BW-3	6.69	595.19		595.19				
BW-4	8.20	595.56		595.56				

WELL OR STAFF GAGE	WELL DEPTH FROM TOC (ft)	GROUND ELEV	TOP OF CASING OR GAGE ELEV.	24-May-86 DEPTH TO WATER (FT)	24-May-86 ELEVATION	24-May-86 OIL THICKNESS	24-May-86 TRUE WATER ELEVATION	12-Dec-86 DEPTH (pre-sampling) (ft)	12-Dec-86 ELEVATION	12-Dec-86 OIL THICKNESS	12-Dec-86 TRUE WATER ELEVATION	17-Dec-86 DEPTH (post sampling) (ft)	17-Dec-86 ELEVATION	17-Dec-86 OIL THICKNESS	17-Dec-86 TRUE WATER ELEVATION
SG1			598.70	2.75	595.95		595.95	NOT MEASURED				NOT MEASURED			
SG2			599.70	3.70	596.00		596.00	NOT MEASURED				NOT MEASURED			
SG3			597.87	1.90	595.97		595.97	NOT MEASURED				NOT MEASURED			
SG4			598.80	NOT MEASURED				NOT MEASURED				NOT MEASURED			
SG5			597.81	2.48	595.33		595.33	NOT MEASURED				NOT MEASURED			
SG6			597.89	2.50	595.39		595.39	NOT MEASURED				NOT MEASURED			
SG7			598.64	2.71	595.93		595.93	NOT MEASURED				NOT MEASURED			
SG8			599.08	3.12	595.96		595.96	NOT MEASURED				NOT MEASURED			
SG9			597.93	2.38	595.59		595.59	NOT MEASURED				NOT MEASURED			
SG-10			601.06	NOT MEASURED				NOT MEASURED				NOT MEASURED			
SG-11			599.97	NOT MEASURED				NOT MEASURED				NOT MEASURED			
B-2	10.0	598.9	601.09	5.49	595.60		595.60	5.04	596.05		596.05	5.07	596.02		596.02
B-3	10.0	598.1	600.05	4.18	595.87		595.87	3.95	596.10		596.10	3.93	596.12		596.12
B-4	10.0	597.6	600.24	4.20	596.04		596.04	4.07	596.17		596.17	4.10	596.14		596.14
A-1	26.6	597.9	600.87	4.88	595.99		596.21	4.79	596.08		596.30	4.96	595.91		596.13
A-2	19.6	597.8	600.30	4.28	596.02		596.11	4.15	596.15		596.24	4.22	596.08		596.17
A-3	19.7	598.5	600.95	NOT MEASURED				5.01	595.94		595.95	4.96	595.99		596.10
A-4	29.8	598.3	600.50	4.74	595.84		595.84	4.62	595.96		595.96	4.44	596.14		596.14
A-5	27.2	598.1	600.42	4.63	595.79		595.79	4.15	596.27		596.27	4.34	596.08		596.08
A-6	19.1	593.8	600.33	4.55	595.78		595.78	4.09	596.24		596.24	4.26	596.07		596.07
A-7	9.8	597.6	599.82	4.08	595.74		595.74	3.55	596.27		596.27	3.77	596.05		596.05
A-8	9.9	597.2	599.66	6.85	592.81	5.44	595.70	6.55	593.11	3.25	596.16	3.98	595.68	0.45	596.09
A-9	27.5	597.2	600.17	4.49	595.68		595.68	4.05	596.12		596.12	4.13	596.04		596.04
A-10	29.8	598.6	601.16	5.65	595.51		595.51	5.18	595.98		595.98	5.27	595.89		595.89
A-11	29.0	598.1	600.17	4.58	595.59		595.59	4.65	596.12		596.12	4.25	595.94		595.94
A-12	9.1	596.9	599.36	3.68	595.62		595.62	3.23	596.07		596.07	3.25	596.05		596.05
A-13	9.9	597.0	600.34	3.98	596.36		596.36	4.00	596.34		596.34	4.16	596.18		596.18
A-14	12.2	599.8	602.70	7.03	594.87	1.61	596.29	7.63	595.07	1.54	596.43	6.90	595.80	1.60	597.22
A-15	10.1	598.7	600.95	4.60	596.35		596.35	4.41	596.54		596.54	4.76	596.19	0.01	596.20
GW-3	12.1	599.7	601.88	6.43	595.45		595.45	5.77	596.11		596.11	5.91	595.97		595.97
GW-4	14.3	605.1	603.76	7.93	595.83		595.83	7.56	596.22		596.22	7.66	596.10		596.10
B-16	17.8	597.8	600.67	NOT MEASURED				6.43	596.24		596.24	6.49	596.18		596.18
A-17	47.4	598.1	600.26	10.11	590.15		590.22	6.23	594.03		594.11	24.49	575.77		575.82
B-18	17.8	597.6	600.66	4.56	596.10		596.10	4.47	596.19		596.19	4.42	596.24		596.24
A-19	17.8	598.8	601.95	8.81	593.14	3.09	595.92	8.25	593.72	2.87	596.30	5.72	596.23	0.08	596.30
A-20	22.4	600.8	603.06	6.98	596.08		596.08	6.85	596.21		596.21	6.71	596.35		596.35
A-21	30.4	599.9	602.13	6.10	596.03		596.03	5.98	596.15		596.15	5.92	596.21		596.21
A-22	15.7	599.8	601.33	5.18	596.15		596.15	4.92	596.41		596.41	5.09	596.24		596.24
A-23	35.4	599.6	601.35	5.30	596.05		596.05	5.04	596.31		596.31	5.13	596.22		596.22
A-24	17.8	598.1	600.99	5.00	595.99		595.99	4.79	596.20		596.20	4.81	596.18		596.18
A-25	27.4	598.1	600.18	4.32	595.86		595.86	4.17	596.01		596.01	4.04	596.14		596.14
A-26	13.8	596.9	599.02	3.17	595.85		595.85	3.07	595.95		595.95	3.10	595.92		595.92
A-27	30.4	596.9	599.46	3.55	595.91		595.96	3.45	596.01		596.06	3.52	595.94		595.99
A-28	17.9	600.1	602.69	NOT MEASURED				-0.83	597.86		597.86	5.04	597.65		597.65
A-29	22.4	600.6	602.31	NOT MEASURED				4.54	597.77		597.77	4.76	597.55		597.55
A-30	32.4	600.0	602.44	NOT MEASURED				4.63	597.81		598.09	5.29	597.15		597.42
A-31	17.8	600.3	603.26	9.06 TO PRODUCT				9.23	594.03	2.59	596.33	8.84	594.40	2.33	596.29
A-32	17.8	597.6	600.21	4.33	595.68		595.68	4.18	596.03		596.03	4.16	596.05		596.05
A-33	22.6	597.8	599.94	4.27	595.67		595.67	3.90	596.04		596.04	3.91	596.03		596.03
A-34	27.4	597.7	599.48	3.85	595.63		595.63	3.48	596.00		596.00	3.48	596.00		596.00
A-35	17.8	597.4	599.75	4.15	595.60		595.60	3.72	596.03		596.03	3.84	595.91		595.91
A-36	22.4	597.5	600.19	4.66	595.53		595.53	4.22	595.97		595.97	4.35	595.84		595.84
A-37	53.4	593.2	599.83	4.29	595.54		595.54	3.82	596.01		596.01	3.98	595.85		595.85
A-38	15.8	599.0	601.22	5.66	595.56		595.56	5.39	595.83		595.83	5.41	595.81		595.81
A-39	17.8	598.1	599.31	3.67	595.64		595.64	3.29	596.02		596.02	3.29	596.02		596.02
A-40	26.4	598.9	599.19	3.59	595.60		595.60	3.19	596.00		596.00	3.22	595.97		595.97
A-41	32.4	598.5	601.07	5.54	595.53		595.65	5.15	595.92		596.04	5.16	595.91		596.03
A-42	56.4	598.2	599.93	13.47	586.52		586.52	9.39	590.60		590.60	24.67	575.32		575.32
A-43	22.4	596.8	599.23	3.59	595.64		595.64	3.22	596.01		596.01	3.25	595.98		595.98
A-44	27.4	596.9	599.24	3.65	595.59		595.63	3.28	595.96		596.00	3.32	595.92		595.96
A-45	46.8	597.9	599.47	3.96	595.51		595.51	3.70	595.77		595.77	3.66	595.81		595.81
A-46	22.4	597.5	599.71	4.11	595.60		595.60	4.03	595.68		595.68	4.02	595.69		595.69
A-47	32.4	597.9	599.80	4.12	595.68		595.68	4.04	595.76		595.76	4.02	595.78		595.78
A-48	53.8	593.5	600.35	4.69	595.66		595.66	4.19	596.16		596.16	4.36	595.97		595.97
A-49	32.4	597.4	599.83	4.18	595.65		595.65	3.68	596.15		596.15	3.96	595.87		595.67
A-50	17.8	597.8	600.44	4.70	595.74		595.74	4.26	596.18		596.18	4.48	595.96		595.96
A-51	32.4	597.5	599.99	4.40	595.59		595.59	4.00	595.99		595.99	4.15	595.84		595.84
A-52	15.9	598.7	601.25	6.86	594.39		594.39	5.23	596.02		596.02	5.64	595.61		595.61
A-53	22.4	601.2	603.02	7.26	595.76		595.76	6.83	596.19		596.19	6.55	596.03		596.03
A-54	32.4	601.0	603.40	7.63	595.77		595.77	7.21	596.19		596.19	7.33	596.07		596.07
A-55	17.8	600.6	603.18	7.59	595.59		595.59	7.10	596.08		596.08	7.15	596.03		596.03
A-56	7.5	600.0	602.89	7.78	595.11	1.37	596.31	7.63	595.26	1.36	596.43	7.46	595.53	1.63	596.36
A-57	7.5	597.1	599.50	3.58	595.92		595.92	3.47	596.03		596.03	3.46	596.02		596.02
A-58	7.5	598.0	600.76	4.71	596.05		596.05	4.50	596.26		596.26	4.61	596.15		596.15
A-59	7.5	597.3	600.35	3.71	596.64		596.64	3.55	596.80		596.80	3.68	596.67		596.67

WELL OR STAFF GAGE	16-Jan-87 DEPTH TO WATER (FT)	ELEVATION	OIL THICKNESS	TRUE WATER ELEVATION	27-Jan-87 DEPTH TO WATER (FT)	ELEVATION	OIL THICKNESS	TRUE WATER ELEVATION	25-Mar-87 DEPTH TO WATER (FT)	ELEVATION	OIL THICKNESS	TRUE WATER ELEVATION	23-Apr-87 DEPTH TO WATER (FT)	ELEVATION	OIL THICKNESS	TRUE WATER ELEVATION
SG1	2.70	596.00		596.00	2.67	596.03		596.03	2.81	595.89		595.89	2.50	596.20		596.20
SG2	3.75	596.03		596.03	3.87	595.91		595.91	3.90	595.88		595.88	3.69	596.09		596.09
SG3	1.84	596.03		596.03	1.70	596.17		596.17	1.96	595.91		595.91	1.77	596.10		596.10
SG4	1.66	596.04		596.04	2.70	596.18		596.18	3.10	595.78		595.78	2.70	596.18		596.18
SG5	2.17	595.64		595.64	2.25	595.56		595.56	2.40	595.41		595.41	2.40	595.41		595.41
SG6	2.09	595.40		595.00	2.18	595.71		595.71	2.50	595.59		595.59	1.99	595.90		595.90
SG7	3.10	595.50		595.50	2.50	596.14		596.14	2.70	595.94		595.94	3.20	595.44		595.44
SG8	2.72	594.36		596.36	3.19	595.90		595.90	3.20	595.88		595.88	2.80	596.28		596.28
SG9	2.09	595.88		595.88	2.14	595.83		595.83	2.50	595.47		595.47	2.02	595.95		595.95
SG-10	NOT MEASURED				NOT MEASURED				NOT MEASURED				NOT MEASURED			
SG-11	NOT MEASURED				NOT MEASURED				NOT MEASURED				NOT MEASURED			
B-2	5.21	595.80		595.80	5.19	595.60		595.60	5.43	595.62		595.62	5.15	595.94		595.94
B-3	4.05	596.02		596.02	4.23	595.82		595.82	4.29	595.76		595.76	3.91	596.14		596.14
B-4	4.13	596.11		596.11	4.17	596.07		596.07	4.22	596.02		596.02	3.99	596.25		596.25
E-1	5.00	595.69		596.69	5.03	595.84		596.86	5.30	595.77		595.99	4.85	596.02		596.24
E-2	4.20	596.86		596.15	4.28	596.02		596.13	4.36	595.94		596.03	NOT MEASURED			
E-3	5.05	595.90		595.91	4.96	595.99		596.00	5.15	595.80		595.81	4.82	596.13		596.14
E-4	4.85	595.93		595.93	4.56	596.02		596.02	4.76	595.82		595.82	NOT MEASURED			
E-5	4.54	595.88		595.88	4.54	595.88		595.88	4.70	595.72		595.72	4.31	596.11		596.11
E-6	4.63	595.90		595.90	4.51	595.82		595.82	4.62	595.71		595.71	4.23	596.10		596.10
E-7	3.92	595.90		595.90	4.02	595.80		595.80	4.12	595.70		595.70	3.79	596.03		596.03
E-8	5.33	590.33	1.71	595.90	5.60	594.06	1.84	595.75	6.22	593.44	2.45	595.70	6.26	593.40	2.80	596.05
E-9	4.29	595.80		595.80	4.46	595.71		595.71	4.47	595.70		595.70	4.15	596.02		596.02
E-10	5.38	595.78		595.78	5.67	595.49		595.49	5.87	595.49		595.69	5.31	595.85		595.85
E-11	4.30	595.87		595.87	4.64	595.53		595.53	4.67	595.50		595.50	4.13	596.04		596.04
E-12	3.35	595.95		595.95	3.50	595.72		595.72	3.50	595.72		595.72	3.27	596.03		596.03
E-13	3.97	596.37		596.37	4.22	596.12		596.12	4.23	596.11		596.11	3.73	596.61		596.61
E-14	7.94	594.76	1.44	596.05	6.93	595.77	0.42	596.14	7.23	595.47	0.73	596.12	6.79	595.91	0.67	596.50
E-15	5.02	595.93		595.93	4.85	596.10		596.10	5.01	595.94		595.94	4.78	596.17		596.17
BW-3	6.12	595.76		595.76	6.42	595.46		595.46	6.48	595.44		595.44	5.96	595.92		595.92
BW-4	7.14	596.62		596.62	7.25	596.51		596.51	7.91	595.85		595.85	7.27	595.99		595.99
E-16	4.52	596.15		596.15	NOT MEASURED				4.83	596.06		596.06	4.35	596.32		596.32
E-17	5.51	589.25		594.63	4.72	595.54		595.63	6.27	593.99		594.00	4.22	596.04		596.13
E-18	4.54	596.12		596.12	4.46	596.20		596.20	4.56	596.08		596.08	4.24	596.42		596.42
E-19	7.52	594.38	1.79	595.99	7.44	594.51	1.71	596.05	7.42	594.53	1.56	595.93	7.95	594.00	2.49	596.24
E-20	6.95	596.11		596.11	NOT MEASURED				7.00	596.06		596.06	6.71	596.35		596.35
E-21	6.09	596.04		596.04	NOT MEASURED				6.11	596.02		596.02	5.84	596.29		596.29
E-22	5.25	596.08		596.08	5.18	596.15		596.15	5.25	596.08		596.08	4.96	596.33		596.37
E-23	5.31	596.04		596.04	5.18	596.17		596.17	5.32	596.03		596.03	5.02	596.33		596.33
E-24	4.80	596.19		596.19	4.99	596.00		596.00	5.05	595.94		595.94	4.45	596.54		596.54
E-25	4.23	595.95		595.95	4.19	595.99		595.99	4.32	595.86		595.86	3.93	596.25		596.25
E-26	3.14	595.86		595.60	3.12	595.90		595.90	3.24	595.78		595.78	3.01	596.01		596.01
E-27	3.53	595.93		595.98	3.50	595.96		596.01	3.62	595.89		595.89	3.39	596.07		596.12
E-28	5.20	597.45		597.45	5.32	597.32		597.32	NOT MEASURED				NOT MEASURED			
E-29	4.84	597.45		597.45	5.02	597.26		597.29	5.04	593.25		597.25	5.00	596.71		596.71
E-30	5.38	593.06		597.33	5.52	596.92		597.19	5.57	596.87		597.14	5.10	597.36		597.57
E-31	6.00	596.20		596.20	8.97	594.29	2.09	596.16	9.14	594.12	2.67	596.06	9.57	593.89	2.65	596.26
E-32	4.30	595.91		595.91	4.48	595.73		595.73	4.59	595.62		595.62	4.16	596.05		596.05
E-33	4.05	595.89		595.89	NOT MEASURED				4.37	595.57		595.57	3.97	595.97		595.97
E-34	3.62	595.86		595.84	4.75	594.73		594.73	3.90	595.58		595.58	3.46	596.02		596.02
E-35	3.90	595.85		595.85	4.12	595.63		595.63	4.00	595.67		595.67	3.87	595.88		595.88
E-36	4.39	595.84		595.84	4.57	595.62		595.62	4.56	595.63		595.63	4.36	595.83		595.83
E-37	4.02	595.81		595.81	4.22	595.61		595.61	4.17	595.66		595.66	3.95	595.86		595.88
E-38	5.46	595.76		595.76	5.68	595.54		595.54	5.61	595.61		595.61	5.49	595.73		595.73
E-39	3.40	595.91		595.91	3.63	595.68		595.68	3.73	595.58		595.58	3.29	596.02		596.02
E-40	3.31	595.88		595.88	3.51	595.68		595.68	3.75	595.44		595.44	3.28	595.99		595.99
E-41	5.27	595.80		595.92	NOT MEASURED				NOT MEASURED				NOT MEASURED			
E-42	9.30	590.69		590.69	7.51	592.48		592.48	5.56	594.43		594.43	5.06	594.93		594.93
E-43	3.33	595.90		595.90	3.55	595.68		595.68	3.60	595.63		595.63	3.25	595.98		595.98
E-44	3.35	595.89		595.93	3.59	595.65		595.69	3.61	595.63		595.63	3.27	595.97		596.01
E-45	3.69	595.78		595.78	NOT MEASURED				3.93	595.54		595.54	3.75	595.72		595.72
E-46	4.03	595.68		595.68	NOT MEASURED				4.25	595.46		595.46	4.00	595.63		595.65
E-47	4.69	595.71		595.71	4.28	595.52		595.52	4.23	595.53		595.53	4.09	595.71		595.71
E-48	4.38	595.97		595.97	4.79	595.56		595.56	4.79	595.56		595.56	4.33	596.02		596.02
E-49	3.69	595.94		595.94	4.34	595.49		595.49	4.36	595.53		595.53	3.85	595.98		595.98
E-50	4.52	596.12		596.12	4.99	595.65		595.65	4.96	595.68		595.68	4.23	596.21		596.21
E-51	4.12	595.87		595.87	4.55	595.44		595.44	4.57	595.42		595.42	3.85	596.14		596.14
E-52	5.25	595.50		595.50	5.19	595.06		595.06	5.30	595.95		595.95	5.36	595.89		595.89
E-53	7.51	595.51		595.51	7.62	595.40		595.40	7.76	595.76		595.76	7.03	595.99		595.99
E-54	8.85	594.55		594.55	8.95	595.45		595.45	7.59	595.81		595.81	7.41	595.99		595.99
E-55	7.29	595.89		595.89	7.59	595.59		595.59	7.59	595.59		595.59	7.23	595.95		595.95
E-56	8.94	593.95	2.52	596.16	6.51	596.38	0.95	596.62	8.08	594.81	1.53	596.15	7.48	595.21		595.21
E-57	3.54	595.96		595.56	3.49	596.01		596.01	3.61	595.89		595.89	3.40	596.10		596.10
E-58	4.54	596.22		596.22	4.78	595.98		595.98	4.82	595.94		595.94	4.21	596.55		596.55
E-59	3.54	596.41		596.41	4.13	596.22		596.22	4.17	596.18		596.18	3.70	596.65		596.65

WELL OR STAFF GAGE	17-Jun-87 DEPTH TO WATER (FT)	ELEVATION	OIL THICKNESS	TRUE WATER ELEVATION	07-Jul-87 DEPTH TO WATER (FT)	ELEVATION	OIL THICKNESS	TRUE WATER ELEVATION	16-Jul-87 DEPTH TO WATER (FT)	ELEVATION	OIL THICKNESS	TRUE WATER ELEVATION	24-Jul-87 DEPTH TO WATER (FT)	ELEVATION	OIL THICKNESS	TRUE WATER ELEVATION
SG1	NOT MEASURED				3.05	595.65		595.65	3.22	595.48		595.48	3.47	595.23		595.23
SG2	NOT MEASURED				4.10	595.60		595.60	NOT MEASURED				NOT MEASURED			
SG3	NOT MEASURED				2.00	595.87		595.87	2.00	595.87		595.87	2.69	595.27		595.27
SG4	NOT MEASURED				2.98	595.90		595.90	3.00	595.88		595.88	3.10	595.78		595.78
SG5	NOT MEASURED				NOT MEASURED				NOT MEASURED				NOT MEASURED			
SG6	NOT MEASURED				2.60	595.29		595.29	2.80	595.09		595.09	3.40	594.49		594.49
SG7	NOT MEASURED				3.14	595.50		595.50	3.34	595.30		595.30	3.58	595.06		595.06
SG8	NOT MEASURED				3.25	595.83		595.83	3.50	595.58		595.58	3.68	595.40		595.40
SG9	NOT MEASURED				2.69	595.28		595.28	2.90	595.07		595.07	3.28	594.69		594.69
SG10	NOT MEASURED				2.96	598.10		598.10	3.15	597.91		597.91	3.55	597.51		597.51
SG11	NOT MEASURED				2.15	597.82		597.82	2.33	597.64		597.64	2.71	597.26		597.26
A-2	4.85	596.24		596.24	5.72	595.37		595.37	6.04	595.09		595.09	6.45	594.68		594.68
A-3	4.20	595.85		595.85	4.65	595.40		595.40	4.76	595.29		595.29	4.96	595.09		595.09
A-4	4.13	596.11		596.11	4.40	595.84		595.84	4.53	595.71		595.71	4.78	595.46		595.46
A-1	4.98	595.89		596.11	5.20	595.59		595.80	5.39	595.40		595.63	5.64	595.23		595.44
A-2	4.25	596.05		596.14	4.55	595.75		595.84	4.63	595.67		595.76	4.88	595.42		595.51
A-3	5.07	595.88		595.09	5.36	595.59		595.60	5.50	595.37		595.38	5.86	595.09		595.10
A-4	4.76	595.88		595.88	4.98	595.66		595.66	5.14	595.44		595.44	5.48	595.10		595.10
A-5	4.41	596.01		596.01	4.93	595.49		595.49	5.23	595.19		595.19	5.62	594.80		594.80
A-6	4.35	595.98		595.98	4.84	595.49		595.49	5.12	595.21		595.21	5.54	594.79		594.79
A-7	3.81	596.01		596.01	4.36	595.46		595.46	4.57	595.25		595.25	4.95	594.87		594.87
A-8	6.47	593.19	NOT MEASURED		7.16	592.50	3.00	595.26	6.91	593.25	2.05	595.14	6.97	592.69	2.30	594.89
A-9	4.29	595.88		595.88	4.88	595.29		595.29	5.09	595.08		595.08	5.40	594.77		594.77
A-10	5.00	596.16		596.16	5.94	595.22		595.22	6.18	594.98		594.98	6.64	594.52		594.52
A-11	3.70	596.47		596.47	4.90	595.19		595.19	5.31	594.86		594.86	5.73	594.44		594.44
A-12	3.26	596.04		596.04	3.90	595.60		595.60	4.10	595.12		595.12	4.56	594.80		594.80
A-13	4.25	596.09		596.09	4.62	595.72		595.72	4.71	595.63		595.63	4.82	595.52		595.52
*A-14	6.74	595.96	0.68	596.56	7.06	595.64	0.24	595.85	7.24	595.44	0.29	595.72	7.40	595.22	0.29	595.48
A-15	4.96	595.99		595.99	5.26	595.69		595.69	5.46	595.49		595.49	5.77	595.18		595.18
BH-3	5.50	596.38		596.38	7.13	594.75		594.75	7.40	594.28		594.28	8.11	593.77		593.77
BH-4	7.54	596.22		596.22	8.19	595.57		595.57	8.51	595.25		595.25	8.93	594.83		594.83
A-16	4.56	596.11		596.11	4.83	595.84		595.84	4.96	595.71		595.81	5.16	595.51		595.51
A-17	4.38	595.88		595.97	5.51	594.75		594.83	5.18	595.08		595.16	5.65	595.21		595.29
A-18	4.54	596.12		596.12	4.82	595.84		595.84	4.94	595.72		595.72	5.17	595.49		595.49
A-19	7.97	593.98	NOT MEASURED		7.75	594.20	1.68	595.64	8.20	593.67	1.95	595.43	8.87	593.08	2.25	595.14
A-20	6.84	596.22		596.22	7.25	595.81		595.81	7.45	595.61		595.61	7.71	595.35		595.35
A-21	6.00	596.13		596.13	6.40	595.73		595.73	6.56	595.57		595.57	6.83	595.30		595.30
A-22	4.90	596.43		596.43	5.37	595.96		595.96	5.46	595.87		595.87	5.63	595.70		595.70
A-23	5.00	596.35		596.35	5.40	595.95		595.95	5.50	595.85		595.85	5.67	595.68		595.68
A-24	4.86	596.13		596.13	5.37	595.62		595.62	5.51	595.48		595.48	5.62	595.37	0.27	595.64
A-25	4.21	595.97		595.97	4.49	595.69		595.69	4.90	595.28		595.28	5.17	595.01		595.01
A-26	2.97	596.05		596.05	3.38	595.64		595.64	3.45	595.57		595.57	3.93	595.09		595.09
A-27	3.29	596.17		596.22	3.77	595.69		595.74	3.85	595.61		595.66	4.32	595.19		595.19
A-28	3.86	598.83		598.83	5.30	597.31		597.31	5.50	597.11		597.11	5.95	596.74		596.74
A-29	3.60	598.71		598.71	5.00	597.31		597.31	5.17	597.14		597.14	5.56	596.75		596.75
A-30	4.21	598.23		598.51	5.50	596.94		597.21	5.76	596.74		597.01	6.02	596.42		596.68
A-31	9.38	593.88	NOT MEASURED		9.24	594.02	1.99	595.80	9.19	594.07	1.73	595.62	9.42	593.84	1.64	595.31
A-32	4.16	596.05		596.05	4.95	595.26		595.26	5.06	595.15		595.15	5.42	594.79		594.79
A-33	3.90	596.04		596.04	4.53	595.41		595.41	4.79	595.15		595.15	5.16	594.78		594.78
A-34	3.67	596.01		596.01	4.09	595.59		595.59	4.37	595.31		595.31	4.73	594.75		594.75
A-35	3.62	596.13		596.13	4.39	595.36		595.36	4.62	595.13		595.13	4.98	594.77		594.77
A-36	4.15	596.04		596.04	4.88	595.31		595.31	5.11	595.08		595.08	5.46	594.73		594.73
A-37	3.73	596.10		596.10	4.53	595.30		595.30	4.74	595.09		595.09	5.10	594.73		594.74
A-38	5.28	595.94		595.94	5.80	595.34		595.34	6.11	595.11		595.11	6.48	594.74		594.73
A-39	3.12	596.19		596.19	3.94	595.37		595.37	4.17	595.14		595.14	4.58	594.73		594.72
A-40	3.91	596.18		596.18	5.05	595.34		595.34	4.09	595.10		595.10	4.47	594.72		594.75
A-41	6.97	596.10		596.22	5.80	595.27		595.39	6.04	595.03		595.15	6.43	594.64		594.76
A-42	5.02	594.97		594.97	11.56	588.43		588.43	19.03	580.16		580.16	14.31	585.68		585.68
A-43	3.26	595.92		595.92	3.87	595.36		595.36	4.15	595.08		595.08	4.48	594.75		594.75
A-44	3.25	595.95		595.99	3.94	595.30		595.34	4.18	595.06		595.10	4.53	594.71		594.75
A-45	3.51	595.96		595.96	4.17	595.30		595.30	4.39	595.08		595.08	4.73	594.74		594.74
A-46	3.84	595.87		595.87	4.49	595.22		595.22	4.71	595.00		595.00	5.05	594.66		594.66
A-47	3.57	595.83		595.83	4.43	595.17		595.17	4.65	594.95		594.95	5.16	594.62		594.62
A-48	3.52	596.43		596.43	5.05	595.30		595.30	5.35	595.00		595.00	5.79	594.56		594.56
A-49	3.42	596.41		596.41	4.56	595.27		595.27	4.88	594.99		594.99	5.30	594.53		594.53
A-50	3.35	596.69		596.69	5.25	595.31		595.21	5.58	594.96		594.96	5.95	594.49		594.49
A-51	3.64	596.35		596.35	4.79	595.20		595.20	5.06	594.93		594.93	5.55	594.44		594.44
A-52	4.55	596.70		596.70	6.57	594.68		594.68	6.83	594.42		594.42	13.94	587.31		587.31
A-53	6.60	596.42		596.42	7.56	595.44		595.44	7.87	595.15		595.15	8.38	594.64		594.64
A-54	6.98	596.42		596.42	7.94	595.46		595.46	8.25	595.15		595.15	8.81	594.59		594.59
A-55	7.16	596.98		596.98	7.82	595.36		595.36	8.11	595.07		595.07	7.28	595.90		595.96
A-56	7.25	595.14	NOT MEASURED		6.37	594.57	1.51	595.90	8.43	594.46	1.45	595.73	8.43	594.46	1.22	595.53
A-57	3.36	596.34		596.34	3.75	595.75		595.75	3.85	595.65		595.65	4.30	595.20		595.20
A-58	4.63	596.13		596.13	5.11	595.65		595.65	5.47	595.29	0.28	595.54	5.71	595.05		595.05
A-59	4.16	596.17		596.17	4.59	595.76		595.76	4.63	595.72		595.72	4.77	595.58		595.58

WELL OR STAFF GAGE	17-Jun-87 DEPTH TO WATER (FT)	ELEVATION	OIL THICKNESS	TRUE WATER ELEVATION	07-Jul-87 DEPTH TO WATER (FT)	ELEVATION	OIL THICKNESS	TRUE WATER ELEVATION	16-Jul-87 DEPTH TO WATER (FT)	ELEVATION	OIL THICKNESS	TRUE WATER ELEVATION	24-Jul-87 DEPTH TO WATER (FT)	ELEVATION	OIL THICKNESS	TRUE WATER ELEVATION
A-60	5.08	595.97		595.97	5.30	595.67		595.67	5.67	595.30		595.30	5.90	595.07		595.07
A-61	4.54	595.94		595.94	4.68	595.80		595.80	4.82	595.66		595.66	5.06	595.42		595.42
A-62	5.84	595.60		595.60	6.08	595.36		595.36	6.34	595.10		595.10	6.67	594.77		594.77
A-63	7.29	595.91		595.91	8.08	595.12		595.12	8.38	594.82		594.82	9.44	593.76		593.76
A-64	7.19 *	595.58		596.10	7.97 *	595.20		595.32	8.29	594.88		595.00	8.77	594.40		594.51
FA-65					7.89	600.29		600.29	7.96	600.22		600.22	8.04	600.12		600.13
FA-66					7.68	600.21		600.21	7.73	600.16		600.16	7.81	600.08		600.08
FA-67					5.17	598.66		598.66	NOT MEASURED				NOT MEASURED			
FA-68					5.29	598.64		598.64	NOT MEASURED				NOT MEASURED			
FA-69					6.20	598.03		598.03	6.52	597.83		597.83	6.91	597.44		597.44
FA-70					6.33 *	597.96		598.07	6.56	597.73		597.84	6.95	597.34		597.45
FA-71					7.26 *	597.38		598.10	7.44	597.20		597.92	7.84	596.80		597.50
FA-72					4.54 *	596.72		598.79	4.67	596.59		598.66	5.08	598.18		598.25
FA-73					4.95 *	596.75		598.86	5.08	598.62		598.73	5.50	598.20		598.30
FA-74					4.69 *	598.60		598.93	4.82	598.47		598.80	5.18	598.11		598.43
FA-75					4.69 *	598.33		598.35	4.94	598.08		598.10	5.33	597.69		597.71
FA-76					4.93 *	598.23		598.33	5.11	598.05		598.15	5.53	597.63		597.73
FA-77					5.38 *	597.92		598.35	5.60	597.70		598.13	5.97	597.33		597.75
FA-78					4.56	598.73		598.73	4.62	598.66		598.66	5.01	598.18		598.18
FA-79					4.85 *	598.31		598.36	4.95	598.61		598.66	5.56	598.06		598.11

WELL OR STAFF GAGE	DEPTH TO WATER (FT)	03-Aug-87 ELEVATION	OIL THICKNESS	TRUE WATER ELEVATION
SG1	3.45	595.25		595.25
SG2	NOT MEASURED			
SG3	2.62	595.25		595.25
SG4	3.20	595.68		595.68
SG5	NOT MEASURED			
SG6	3.20	594.61		594.61
SG7	3.60	595.04		595.04
SG8	3.70	595.38		595.38
SG9	3.45	594.52		594.52
SG-10	5.61	593.45		593.45
SG-11	2.75	597.22		597.22
B-2	6.71	594.38		594.38
B-3	5.10	594.95		594.95
B-4	4.70	595.45		595.45
A-1	5.65	595.22		595.43
A-2	6.98	595.40		595.49
A-3	6.07	590.80	0.01	594.96
A-4	5.66	594.92		594.92
A-5	5.84	594.61		594.61
A-6	5.73	594.60		594.60
A-7	5.17	594.65		594.65
A-8	7.83	591.83	2.95	594.55
A-9	5.56	594.61	0.01	594.62
A-10	6.86	594.30		594.30
A-11	5.99	594.18		594.18
A-12	4.73	594.53		594.53
A-13	4.88	595.46		595.46
A-14	2.58	595.12	0.25	595.34
A-15	6.01	594.94		594.94
BW-3	8.23	593.65		593.65
BW-4	9.20	594.56		594.56
A-16	5.15	595.52		595.92
A-17	4.83	595.43		595.53
A-18	5.20	595.38		595.38
A-19	9.21	592.72	2.50	594.97
A-20	7.85	595.23		595.23
A-21	6.97	595.16		595.16
A-22	5.86	595.47		595.47
A-23	5.92	595.43		595.43
A-24	5.87	595.12		595.12
A-25	6.35	594.83		594.83
A-26	6.19	594.81		594.81
A-27	6.58	594.88		594.93
A-28	5.97	596.72		596.72
A-29	5.63	596.68		596.68
A-30	6.12	596.32		596.58
A-31	9.65	593.85	1.56	595.25
A-32	5.62	594.59		594.59
A-33	4.38	595.56		595.56
A-34	6.93	594.55		594.55
A-35	5.11	594.64		594.64
A-36	5.59	594.60		594.60
A-37	5.24	594.59		594.59
A-38	6.63	594.59		594.59
A-39	4.82	594.49		594.49
A-40	4.76	594.49		594.49
A-41	6.67	594.40		594.51
A-42	10.68	589.31		589.31
A-43	4.74	594.49		594.49
A-44	4.75	594.49		594.53
A-45	4.89	594.58		594.58
A-46	5.23	594.68		594.68
A-47	5.36	594.46		594.46
A-48	5.97	594.38		594.38
A-49	5.51	594.32		594.32
A-50	6.13	594.31		594.31
A-51	5.66	594.33		594.33
A-52	7.42	593.83		593.83
A-53	6.63	594.39		594.39
A-54	8.99	594.41		594.41
A-55	7.76	595.92		595.92
A-56	8.50	594.19	1.04	595.35
A-57	4.56	594.94		594.94
A-58	5.78	594.98	0.28	595.23
A-59	4.60	595.37		595.37

WELL OR STAFF GAGE	DEPTH TO WATER (FT)	03-Aug-87 ELEVATION	OIL THICKNESS	TRUE WATER ELEVATION
A-60	6.13	594.92		594.92
A-61	5.46	595.42		595.42
A-62	6.86	594.58		594.58
A-63	9.89	594.11		594.11
A-64	9.00	594.17		594.28
FA-65	7.98	600.20		600.20
FA-66	7.60	600.09		600.09
FA-67	5.69	598.09		598.09
FA-68	5.85	598.08		598.08
FA-69	6.98	597.37		597.37
FA-70	7.03	597.26		597.37
FA-71	7.96	596.74		597.44
FA-72	5.21	598.05		598.12
FA-73	5.49	598.21		598.31
FA-74	5.48	598.21		598.53
FA-75	5.38	597.64		597.64
FA-76	5.58	597.58		597.68
FA-77	6.03	597.27		597.69
FA-78	4.94	598.13		598.13
FA-79	5.42	598.14		598.19

NOTES: WATER LEVELS HAVE BEEN CORRECTED FOR OIL DENSITY AS FOLLOWS:

LOCATION	OIL DENSITY
A-8	0.921
A-14	0.885
A-19	0.900
A-51	0.896
A-56	0.878
A-58	0.900

WATER LEVELS HAVE BEEN CORRECTED FOR ADDED DENSITY RESULTING FROM HIGH SODIUM CHLORIDE CONCENTRATIONS IN SOLUTION AT THE FOLLOWING WELLS)

LOCATION	DENSITY(APPROXIMATE)
A-1	1.010
A-2	1.006
A-3	1.001
A-17	1.002
A-27	1.002
A-30	1.010
A-41	1.004
A-44	1.002
A-64	1.005
FA-70	1.0075
FA-71	1.030
FA-72	1.0075
FA-73	1.0072
FA-74	1.0135
FA-75	1.0017
FA-76	1.0054
FA-77	1.017
FA-79	1.003

VERTICAL GROUNDWATER GRADIENTS
NIXON AVENUE DUMP SUPERFUND SITE
GARY, INDIANA

LOCATION	WATER TABLE OR TOP OF SCREEN	MIDDLE OF LOWER SCREEN	07-May-86	15-May-86	19-May-86	27-May-86	03-Jun-86	10-Jun-86	20-Jun-86	24-Jun-86	01-Jul-86	09-Jul-86	17-Jul-86	22-Jul-86	01-Oct-86
B-4/I-2	WT	582.00	0.007	0.007	0.004	0.005	0.005	0.004	0.005	0.007	0.005	0.005	0.005	0.006	-0.004
B-4/I-1	WT	575.00	0.008	0.008	0.007	0.007	0.007	0.007	0.008	0.008	0.008	0.007	0.006	0.007	0.009
I-2/I-1	582.00	575.00	0.011	0.012	0.011	0.011	0.012	0.011	0.015	0.012	0.014	0.011	0.010	0.009	0.015
B-3/I-4	WT	583.00	-0.013	0.016	-0.004	-0.001	0.012	-0.005	-0.011	0.006	0.012	0.007			
B-3/I-3	WT	573.00	0.017	0.008	-0.002	0.000	0.002	-0.004	-0.006	0.002	0.006	0.003			
I-4/I-3	583.00	573.00	0.018	-0.005	0.004	0.000	-0.011	-0.002	-0.001	-0.005	-0.002	-0.002	0.005	-0.002	
C-7/I-6	WT	582.00	-0.001	0.029	0.021	0.001	0.001	-0.004	0.021	0.018	-0.001	-0.001	-0.001	-0.002	-0.005
I-7/I-5	WT	576.00	-0.002	0.021	0.016	0.001	0.002	-0.008	0.017	0.026	0.003	-0.001	0.000	-0.003	-0.004
I-6/I-5	582.00	576.00	-0.003	0.003	0.002	0.000	0.002	-0.007	0.002	-0.000	0.003	0.000	0.002	0.003	0.007
I-8/I-9	WT	575.00	-0.001	-0.002	-0.001	-0.003	-0.000	0.120	0.001	0.001	-0.010	-0.001			
B-2/I-10	WT	573.00	-0.008	-0.003	-0.002	-0.004	0.002	-0.007	-0.004	-0.004	-0.003	-0.003	-0.004	-0.011	

LOCATION	WATER TABLE OR TOP OF SCREEN	MIDDLE OF LOWER SCREEN	24-Nov-86	12-Dec-86	17-Dec-86	14-Jan-87	27-Jan-87	25-Mar-87	25-Apr-87
B-1/B-2	WT	582.00	0.005	0.005	0.002	0.001	0.005	0.001	
B-1/B-1	WT	575.00	0.008	0.006	-0.001	-0.001	-0.001	0.002	-0.001
B-2/B-1	582.00	575.00	0.014	0.008	-0.007	-0.009	-0.008	-0.007	
B-3/B-4	WT	583.00	-0.002	-0.011	0.002	-0.007	0.015	0.005	
B-1/B-5	WT	573.00		-0.006	-0.001	-0.005	0.008	0.002	0.000
B-4/B-5	585.00	573.00		0.001	-0.004	-0.002	-0.002	-0.001	
A-7/B-6	WT	582.00	0.003	-0.002	0.001	-0.000	0.001	0.001	0.005
B-7/B-5	WT	576.00	0.003	0.000	0.001	-0.001	0.004	0.001	0.004
A-6/B-5	582.00	576.00	0.002	0.005	0.002	-0.003	0.010	0.002	0.002
C-8/C-9	WT	575.00	-0.001	0.001	-0.005	-0.005	-0.007	0.000	-0.002
B-2/B-10	WT	573.00	-0.004	-0.003	-0.006	-0.004	-0.005	-0.006	-0.005
114/120	WT	583.10	-0.016	-0.017	-0.061	0.006		0.004	-0.011
114/121	WT	578.20	-0.012	-0.013	-0.044	0.000		-0.004	-0.010
120/121	583.10	578.20	-0.006	-0.007	-0.018	-0.008		-0.004	-0.007
116/117	595.00	556.40		-0.057		-0.035		0.000	-0.005
122/123	WT	566.50	-0.004	-0.004	-0.001	-0.001	0.001	-0.002	-0.001
126/125	595.10	575.30	-0.007	-0.010	-0.002	0.038	-0.001	-0.004	-0.015
126/127	593.00	571.60	0.005	0.005	0.003	0.005	0.005	0.005	0.005
128/129	WT	582.40		-0.006	-0.007	-0.003	-0.002		
128/130	WT	572.50		0.009	-0.009	-0.006	-0.005		
129/130	582.40	572.50		0.052	-0.015	-0.012	-0.010	-0.011	0.007
132/133	595.60	582.30	-0.001	0.001	-0.002	-0.002		-0.004	-0.006
132/134	595.60	574.60	-0.002	-0.001	-0.002	-0.002	-0.048	-0.002	-0.001
133/134	582.30	574.60	-0.005	-0.005	-0.004	-0.004	77.138	0.001	-0.006
135/136	574.60	580.50	-0.005	-0.004	-0.005	-0.004	-0.001	0.003	-0.004
135/137	574.60	569.90	-0.002	-0.001	-0.002	-0.002	-0.001	0.000	0.000
136/137	580.30	569.90	0.001	0.001	0.001	0.001	-0.001	0.003	0.005
136/152	WT	571.70							
139/140	595.40	581.30	-0.005	-0.001	-0.004	-0.002	0.000	0.010	-0.002
138/141	595.40	571.20	0.000	0.001	0.000	0.000			
139/142	595.40	552.10	-0.211	-0.125	-0.478	-0.121	-0.074	-0.027	0.025
140/141	581.30	571.20	0.005	0.004	0.006	0.004			
140/142	581.30	552.10	-0.541	-0.185		-0.178	-0.110	-0.035	-0.016
141/142	571.20	552.10	-0.478	-0.285		-0.274			
143/145	WT	574.50	0.005	-0.004	-0.004	-0.005	-0.002	-0.005	-0.005
117/144	WT	574.10	0.001	-0.003	-0.004	-0.001	-0.001	0.002	-0.001
143/144	576.10	574.30	-0.001	-0.001	-0.003	0.007	0.003	0.004	0.007
145/146	WT	579.80	-0.007	-0.006	-0.007	-0.006		-0.005	-0.006
145/147	WT	563.70	-0.001	-0.000	-0.001	0.003		0.000	-0.010
146/147	579.80	563.70	0.009	0.002	0.010	0.005		0.008	0.005
148/149	575.50	569.50	0.000	0.000	-0.004	-0.001	-0.003	0.001	0.002
150/151	WT	570.10	0.006	0.007	-0.005	-0.010	0.000	0.002	0.003
153/154	587.00	572.50	0.001	0.000	0.000	-0.003	0.003	0.001	0.000

LOCATION	WATER TABLE OR TOP OF SCREEN	MIDDLE OF LOWER SCREEN	17-Jun-87	07-Jul-87	16-Jul-87	24-Jul-87	03-Aug-87
B-4/I-2	WT	582.00	0.002	0.000	0.004	0.004	0.003
B-6/I-1	WT	577.00	0.000	-0.002	-0.001	-0.001	-0.001
A-2/B-1	582.00	575.00	-0.004	-0.005	-0.010	-0.010	-0.008
B-3/A-4	WT	583.00	0.002	0.016	0.012	0.001	-0.003
B-5/B-3	WT	573.00	0.002	0.009	0.004	0.000	-0.002
B-6/B-3	583.00	573.00	0.001	0.000	-0.006	0.000	-0.002
A-7/A-6	WT	582.00	-0.012	0.002	-0.001	-0.006	-0.004
B-7/B-5	WT	576.00	0.000	0.002	-0.003	-0.004	-0.002
A-6/A-5	582.00	576.00	0.005	0.000	-0.003	0.002	0.032
A-8/A-9	WT	575.00		0.001	-0.003	-0.002	0.004
B-2/A-10	WT	573.00	-0.003	-0.007	-0.005	-0.006	-0.004
A10/A20	WT	583.10	-0.025	-0.003	-0.008	-0.011	-0.009
A54/A31	WT	574.20	-0.019	-0.006	-0.007	-0.008	-0.009
A20/A21	583.10	574.20	-0.014	-0.009	-0.004	-0.006	-0.004
A16/A17	595.60	550.40	-0.004	-0.027	-0.017	-0.006	0.000
A22/A23	WT	560.50	-0.001	0.000	-0.001	-0.001	-0.001
A24/A25	595.10	575.30	-0.008	-0.007	-0.010	-0.032	-0.015
A26/A27	593.90	571.60	0.008	0.005	0.004	0.005	0.005
A28/A29	WT	582.40	-0.003	0.000	0.002	0.001	-0.003
A28/A30	WT	572.50	-0.012	-0.004	-0.004	-0.002	-0.006
A29/A30	582.40	572.50	-0.020	-0.010	-0.013	-0.007	-0.010
A32/A33	595.60	582.30	-0.001	0.012	0.000	-0.001	0.079
A32/A34	595.60	574.60	-0.002	0.006	-0.002	-0.002	-0.002
A33/A34	582.30	574.60	-0.004	-0.003	-0.005	-0.004	-0.131
A35/A36	594.40	580.30	-0.006	-0.004	-0.004	-0.003	-0.003
A35/A37	594.40	569.90	-0.001	-0.002	-0.002	-0.002	-0.002
A36/A37	580.30	569.90	0.006	-0.001	0.001	0.000	-0.001
A38/B62	WT	571.70	-0.014	0.001	0.000	0.001	0.000
A39/A40	595.60	581.30	-0.001	-0.002	-0.003	-0.001	0.000
A39/A41	595.60	571.20	0.001	0.001	0.000	0.001	0.001
A39/A42	595.60	552.10	-0.020	-0.160	-0.148	-0.212	-0.122
A40/A41	581.30	571.20	0.004	0.005	0.005	0.003	0.002
A40/A42	581.30	552.10	-0.041	-0.237	-0.512	-0.510	-0.177
A41/A42	571.20	552.10	-0.065	-0.364	-0.705	-0.475	-0.272
A17/A43	WT	579.30	-0.004	-0.002	-0.003	-0.003	-0.005
A17/A44	WT	574.30	-0.002	-0.003	-0.001	-0.002	-0.002
A43/A44	579.30	574.30	0.004	-0.004	0.004	0.000	0.000
A45/A46	WT	569.80	-0.006	-0.005	-0.005	-0.005	-0.003
A45/A47	WT	569.90	-0.005	-0.005	-0.005	-0.005	-0.005
A46/A47	579.80	569.90	-0.004	-0.005	-0.005	-0.004	-0.002
A48/A49	595.50	569.70	-0.001	-0.001	0.000	-0.001	-0.002
A50/A51	WT	574.10	-0.013	0.000	-0.001	-0.002	0.001
A53/A54	587.80	572.50	0.000	0.001	0.000	-0.003	0.001

LOCATION	WATER TABLE OR TOP OF SCREEN	MIDDLE OF LOWER SCREEN	17-Jun-87	07-Jul-87	16-Jul-87	24-Jul-87	03-Aug-87
A63/A64	WT	574.70	0.009	0.010	0.009	0.040	0.009
F165/F166	WT	581.90		-0.004	-0.003	-0.002	-0.006
F167/F168	WT	584.84		-0.001			-0.001
F169/F170	WT	585.30		0.000	0.001	0.001	0.000
F169/F171	WT	575.80		0.001	0.004	0.003	0.003
F170/F171	585.30	575.80		0.003	0.008	0.006	0.007
F172/F173	WT	586.50		0.006	0.005	0.005	0.016
F172/F174	WT	576.90		0.006	0.006	0.009	0.019
F173/F174	586.50	576.90		0.003	0.007	0.015	0.025
F175/F176	WT	582.90		-0.001	0.003	0.001	0.001
F175/F177	WT	575.10		0.000	0.001	0.002	0.001
F176/F177	582.90	575.10		0.003	-0.003	0.003	0.001
F178/F179	590.10	583.10		0.002	0.002	0.001	0.001

WT - INDICATES THE GRADIENT WAS CALCULATED FROM THE WATER TABLE TO THE MIDPOINT OF THE SCREEN ON THE LOWER WELL

NOTE: NEGATIVE NUMBERS INDICATE A DOWNWARD GRADIENT

S-2 - HYDROGRAPHS AND GRADIENT GRAPHS