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Document: # M00153*; Date _____;

Title/Subject _____

*K-25 Portion ONLY

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Orvin S. Bristol 2/2/93

K-25 Classification & Information Control Officer — Date

#535

DOCUMENT NUMBER: UNNUMBERED/M00153

DOCUMENT TITLE: K-25 SITE WATER RESOURCES INFORMATION

AUTHORS:

DOCUMENT TYPE: CORRESPONDENCE

DOCUMENT DATE: NOT DATED

PURPOSE OF RELEASE: HEALTH STUDY FEASIBILITY PROJECT

COPYRIGHTED MATERIAL: NO

DOCUMENT NUMBER: UNNUMBERED/M00153

DOCUMENT TITLE: REPORT OF NONCOMPLIANCE WITH NPDES PERMIT NO. TN0002950: REPORT NO. 91/47

AUTHOR:

DOCUMENT TYPE: CORRESPONDENCE

DOCUMENT DATE: 08-03-91

PURPOSE OF RELEASE: HEALTH STUDY FEASIBILITY PROJECT

COPYRIGHTED MATERIAL: NO

DOCUMENT NUMBER: UNNUMBERED/M00153

DOCUMENT TITLE: REPORT OF NONCOMPLIANCE WITH NPDES PERMIT NO TN0002950: REPORT NO 91/24

AUTHORS: LE HALL

DOCUMENT TYPE: CORRESPONDENCE

DOCUMENT DATE: 06-05-91

PURPOSE OF RELEASE: HEALTH STUDY FEASIBILITY REPORT

COPY RIGHTED MATERIAL: NO

DOCUMENT NUMBER: UNNUMBERED/M00153

DOCUMENT TITLE: REPORT OF NONCOMPLIANCE WITH NPDES PERMIT NO TN0002950: REPORT NO 91/23

AUTHORS: LE HALL

DOCUMENT TYPE: CORRESPONDENCE

DOCUMENT DATE: 06-05-91

PURPOSE OF RELEASE: HEALTH STUDY FEASIBILITY REPORT

COPY RIGHTED MATERIAL: NO

DOCUMENT NUMBER: UNNUMBERED/M00153

DOCUMENT TITLE: REPORT OF NONCOMPLIANCE WITH NPDES PERMIT NO. TN0002950: REPORT NO. 91/22

AUTHORS: LE HALL

DOCUMENT TYPE: CORRESPONDENCE

DOCUMENT DATE: 06-05-91

PURPOSE OF RELEASE: HEALTH STUDY FEASIBILITY REPORT

COPY RIGHTED MATERIAL: NO

DOCUMENT NUMBER: UNNUMBERED/M00153

DOCUMENT TITLE: REPORT OF NONCOMPLIANCE WITH NPDES PERMIT NO. TN0002950: REPORT NO. 91/21

AUTHORS: LE HALL

DOCUMENT TYPE: CORRESPONDENCE

DOCUMENT DATE: 06-05-91

PURPOSE OF RELEASE: HEALTH STUDY FEASIBILITY REPORT

COPY RIGHTED MATERIAL: NO

DOCUMENT NUMBER: UNNUMBERED/M00153

DOCUMENT TITLE: REPORT OF NONCOMPLIANCE WITH NPDES PERMIT NO TN0002950: REPORT NO. 91/18

AUTHORS: LE HALL

DOCUMENT TYPE: CORRESPONDENCE

DOCUMENT DATE: 04-25-91

PURPOSE OF RELEASE: HEALTH STUDY FEASIBILITY REPORT

COPY RIGHTED MATERIAL: NO

DOCUMENT NUMBER: UNNUMBERED/M00153

DOCUMENT TITLE: REPORT OF NONCOMPLIANCE WITH NPDES PERMIT NO. TN0002950: REPORT NO. 91/13

AUTHORS: LE HALL

DOCUMENT TYPE: CORRESPONDENCE

DOCUMENT DATE: 03-28-91

PURPOSE OF RELEASE: HEALTH STUDY FEASIBILITY REPORT

COPY RIGHTED MATERIAL: NO

DOCUMENT NUMBER: UNNUMBERED/M00153

DOCUMENT TITLE: REPORT OF NONCOMPLIANCE WITH NPDES PERMIT NO. TN0002950: REPORT NOS. 91/11,12

AUTHORS: LE HALL

DOCUMENT TYPE: CORRESPONDENCE

DOCUMENT DATE: 03-28-91

PURPOSE OF RELEASE: HEALTH STUDY FEASIBILITY REPORT

COPY RIGHTED MATERIAL: NO

DOCUMENT NUMBER: UNNUMBERED/M00153

DOCUMENT TITLE: REPORT ON NONCOMPLIANCE WITH NPDES PERMIT NO. TN002950: REPORT NOS. 91/03,04

AUTHORS: LE HALL

DOCUMENT TYPE: CORRESPONDENCE

DOCUMENT DATE: 03-13-91

PURPOSE OF RELEASE: HEALTH STUDY FEASIBILITY REPORT

COPY RIGHTED MATERIAL: NO

DOCUMENT NUMBER: UNNUMBERED/M00153

DOCUMENT TITLE: REPORT OF NONCOMPLIANCE WITH NPDES PERMIT NO TN0002950: REPORT NO 90/16

AUTHORS: LE HALL

DOCUMENT TYPE: CORRESPONDENCE

DOCUMENT DATE: 12-03-90

PURPOSE OF RELEASE: HEALTH STUDY FEASIBILITY REPORT

COPY RIGHTED MATERIAL: NO

DOCUMENT NUMBER: UNNUMBERED/M00153

DOCUMENT TITLE: REPORT OF NONCOMPLIANCE WITH NPDES PERMIT NO. TN0002950: REPORT NO. 90/15

AUTHORS: LE HALL

DOCUMENT TYPE: CORRESPONDENCE

DOCUMENT DATE: 11-19-90

PURPOSE OF RELEASE: HEALTH STUDY FEASIBILITY REPORT

COPY RIGHTED MATERIAL: NO

DOCUMENT NUMBER: UNNUMBERED/M00153

DOCUMENT TITLE: REPORT OF NONCOMPLIANCE WITH NPDES PERMIT NO. TN0002950: REPORT NO. 90/14

AUTHORS: LM CUDDY

DOCUMENT TYPE: CORRESPONDENCE

DOCUMENT DATE: 09-25-90

PURPOSE OF RELEASE: HEALTH STUDY FEASIBILITY REPORT

COPY RIGHTED MATERIAL: NO

DOCUMENT NUMBER: UNNUMBERED/M00153

DOCUMENT TITLE: REPORT OF NONCOMPLIANCE WITH NPDES PERMIT NO. TN0002950: REPORT NO. 90/12

AUTHORS: WR GOLLIHER

DOCUMENT TYPE: CORRESPONDENCE

DOCUMENT DATE: 08-03-90

PURPOSE OF RELEASE: HEALTH STUDY FEASIBILITY REPORT

COPY RIGHTED MATERIAL: NO

DOCUMENT NUMBER: UNNUMBERED/M00153

DOCUMENT TITLE: REPORT ON NONCOMPLIANCE WITH NPDES PERMIT NO. TN0002950: REPORT NO. 90/08

AUTHORS: WR GOLLIHER

DOCUMENT TYPE: CORRESPONDENCE

DOCUMENT DATE: 03-21-90

PURPOSE OF RELEASE: HEALTH STUDY FEASIBILITY REPORT

COPY RIGHTED MATERIAL: NO

DOCUMENT NUMBER: UNNUMBERED/M00153

DOCUMENT TITLE: REPORT OF NONCOMPLIANCE WITH NPDES PERMIT NO. TN0002950: REPORT NO. 90/06

AUTHORS: WR GOLLIHER

DOCUMENT TYPE: CORRESPONDENCE

DOCUMENT DATE: 03-15-90

PURPOSE OF RELEASE: HEALTH STUDY FEASIBILITY REPORT

COPY RIGHTED MATERIAL: NO

DOCUMENT NUMBER: UNNUMBERED/M00153

DOCUMENT TITLE: REPORT OF NONCOMPLIANCE WITH NPDES PERMIT NO. TN0002950: REPORT NO. 90/05

AUTHORS: WR GOLLIHER

DOCUMENT TYPE: CORRESPONDENCE

DOCUMENT DATE: 03-02-90

PURPOSE OF RELEASE: HEALTH STUDY FEASIBILITY REPORT

COPY RIGHTED MATERIAL: NO

DOCUMENT NUMBER: UNNUMBERED/M00153

DOCUMENT TITLE: REPORT OF NONCOMPLIANCE WITH NPDES PERMIT NO. TN0002950: REPORT NO. 90/03

AUTHORS: WR GOLLIHER

DOCUMENT TYPE: CORRESPONDENCE

DOCUMENT DATE: 03-02-90

PURPOSE OF RELEASE: HEALTH STUDY FEASIBILITY REPORT

COPY RIGHTED MATERIAL: NO

DOCUMENT NUMBER: UNNUMBERED/M00153

DOCUMENT TITLE: REPORT OF NONCOMPLIANCE WITH NPDES PERMIT NO. TN0002950: REPORT NO 89/67

AUTHORS: WR GOLLIHER

DOCUMENT TYPE: CORRESPONDENCE

DOCUMENT DATE: 12-07-89

PURPOSE OF RELEASE: HEALTH STUDY FEASIBILITY REPORT

COPY RIGHTED MATERIAL: NO

DOCUMENT NUMBER: UNNUMBERED/M00153

DOCUMENT TITLE: REPORT OF NONCOMPLIANCE WITH NPDES PERMIT NO. TN0002950: REPORT NO. 89/43

AUTHORS: WR GOLLIHER

DOCUMENT TYPE: CORRESPONDENCE

DOCUMENT DATE: 08-16-89

PURPOSE OF RELEASE: HEALTH STUDY FEASIBILITY REPORT

COPY RIGHTED MATERIAL: NO

DOCUMENT NUMBER: UNNUMBERED/M00153

DOCUMENT TITLE: REPORT OF NONCOMPLIANCE WITH NPDES PERMIT NO. TN0002950: REPORT NO. 89/32

AUTHORS: WR GOLLIHER

DOCUMENT TYPE: CORRESPONDENCE

DOCUMENT DATE: 07-18-89

PURPOSE OF RELEASE: HEALTH STUDY FEASIBILITY REPORT

COPY RIGHTED MATERIAL: NO

DOCUMENT NUMBER: UNNUMBERED/M00153

DOCUMENT TITLE: REPORT OF NONCOMPLIANCE WITH NPDES PERMIT NO. TN0002950: REPORT NO. 89/21

AUTHORS: WR GOLLIHER

DOCUMENT TYPE: CORRESPONDENCE

DOCUMENT DATE: 06-20-89

PURPOSE OF RELEASE: HEALTH STUDY FEASIBILITY REPORT

COPY RIGHTED MATERIAL: NO

DOCUMENT NUMBER: UNNUMBERED/M00153

DOCUMENT TITLE: REPORT OF NONCOMPLIANCE WITH NPDES PERMIT NO. TN0002950: REPORT NO. 88/43

AUTHORS: WR GOLLIHER

DOCUMENT TYPE: CORRESPONDENCE

DOCUMENT DATE: 10-17-88

PURPOSE OF RELEASE: HEALTH STUDY FEASIBILITY REPORT

COPY RIGHTED MATERIAL: NO

DOCUMENT NUMBER: UNNUMBERED/M00153

DOCUMENT TITLE: REPORT OF NONCOMPLIANCE WITH NPDES PERMIT NO. TN0002950: REPORT NO. 88/38

AUTHORS: WR GOLLIHER

DOCUMENT TYPE: CORRESPONDENCE

DOCUMENT DATE: 09-12-88

PURPOSE OF RELEASE: HEALTH STUDY FEASIBILITY REPORT

COPY RIGHTED MATERIAL: NO

DOCUMENT NUMBER: UNNUMBERED/M00153

DOCUMENT TITLE: REPORT OF NONCOMPLIANCE WITH NPDES PERMIT NO. TN0002950: REPORT NO. 88/37

AUTHORS: WR GOLLIHER

DOCUMENT TYPE: CORRESPONDENCE

DOCUMENT DATE: 09-01-88

PURPOSE OF RELEASE: HEALTH STUDY FEASIBILITY REPORT

COPY RIGHTED MATERIAL: NO

DOCUMENT NUMBER: UNNUMBERED/M00153

DOCUMENT TITLE: REPORT OF NONCOMPLIANCE WITH NPDES PERMIT NO. TN0002950: REPORT NO. 88/16

AUTHORS: WR GOLLIHER

DOCUMENT TYPE: CORRESPONDENCE

DOCUMENT DATE: 04-26-88

PURPOSE OF RELEASE: HEALTH STUDY FEASIBILITY REPORT

COPY RIGHTED MATERIAL: NO

DOCUMENT NUMBER: UNNUMBERED/M00153

DOCUMENT TITLE: REPORT OF NONCOMPLIANCE WITH NPDES PERMIT NO. TN0002950: REPORT NO 88/1

AUTHORS: WR GOLLIHER

DOCUMENT TYPE: CORRESPONDENCE

DOCUMENT DATE: 01-18-88

PURPOSE OF RELEASE: HEALTH STUDY FEASIBILITY REPORT

COPY RIGHTED MATERIAL: NO

DOCUMENT NUMBER: UNNUMBERED/M00153

DOCUMENT TITLE: REPORT OF NONCOMPLIANCE WITH NPDES PERMIT NO. TN0002950: REPORT NO. 87/39

AUTHORS: WR GOLLIHER

DOCUMENT TYPE: CORRESPONDENCE

DOCUMENT DATE: 12-21-87

PURPOSE OF RELEASE: HEALTH STUDY FEASIBILITY REPORT

COPY RIGHTED MATERIAL: NO

DOCUMENT NUMBER: UNNUMBERED/M00153

DOCUMENT TITLE: REPORT OF NONCOMPLIANCE WITH NPDES PERMIT NO. TN0002950: REPORT NO. 87/13

AUTHORS: WR GOLLIHER

DOCUMENT TYPE: CORRESPONDENCE

DOCUMENT DATE: 03-20-87

PURPOSE OF RELEASE: HEALTH STUDY FEASIBILITY REPORT

COPY RIGHTED MATERIAL: NO

DOCUMENT NUMBER: UNNUMBERED/M00153

DOCUMENT TITLE: REPORT OF NONCOMPLIANCE WITH NPDES PERMIT NO. TN0002950: REPORT NO. 87/12

AUTHORS: WR GOLLIHER

DOCUMENT TYPE: CORRESPONDENCE

DOCUMENT DATE: 03-11-87

PURPOSE OF RELEASE: HEALTH STUDY FEASIBILITY REPORT

COPY RIGHTED MATERIAL: NO

DOCUMENT NUMBER: UNNUMBERED/M00153

DOCUMENT TITLE: REPORT OF NONCOMPLIANCE WITH NPDES PERMIT NO. TN0002950: REPORT NO 87/1

AUTHORS: WR GOLLIHER

DOCUMENT TYPE: CORRESPONDENCE

DOCUMENT DATE: 02-27-87

PURPOSE OF RELEASE: HEALTH STUDY FEASIBILITY REPORT

COPY RIGHTED MATERIAL: NO

DOCUMENT NUMBER: UNNUMBERED/M00153

DOCUMENT TITLE: REPORT OF NONCOMPLIANCE WITH NPDES PERMIT NO. TN0002950: REPORT NO. 86/59

AUTHORS: WR GOLLIHER

DOCUMENT TYPE: CORRESPONDENCE

DOCUMENT DATE: 12-26-86

PURPOSE OF RELEASE: HEALTH STUDY FEASIBILITY REPORT

COPY RIGHTED MATERIAL: NO

DOCUMENT NUMBER: UNNUMBERED/M00153

DOCUMENT TITLE: REPORT OF NONCOMPLIANCE WITH NPDES PERMIT NO. TN0002950: REPORT NO. 86/54

AUTHORS: WR GOLLIHER

DOCUMENT TYPE: CORRESPONDENCE

DOCUMENT DATE: 12-17-86

PURPOSE OF RELEASE: HEALTH STUDY FEASIBILITY REPORT

COPY RIGHTED MATERIAL: NO

DOCUMENT NUMBER: UNNUMBERED/M00153

DOCUMENT TITLE: REPORT OF NONCOMPLIANCE WITH NPDES PERMIT NO. TN0002950: REPORT NO. 86/53

AUTHORS: WR GOLLIHER

DOCUMENT TYPE: CORRESPONDENCE

DOCUMENT DATE: 12-17-86

PURPOSE OF RELEASE: HEALTH STUDY FEASIBILITY REPORT

COPY RIGHTED MATERIAL: NO

DOCUMENT NUMBER: UNNUMBERED/M00153

DOCUMENT TITLE: REPORT OF NONCOMPLIANCE WITH NPDES PERMIT NO. TN0002950: REPORT NO. 86/45

AUTHORS: WR GOLLIHER

DOCUMENT TYPE: CORRESPONDENCE

DOCUMENT DATE: 12-03-86

PURPOSE OF RELEASE: HEALTH STUDY FEASIBILITY REPORT

COPY RIGHTED MATERIAL: NO

DOCUMENT NUMBER: UNNUMBERED/M00153

DOCUMENT TITLE: REPORT OF NONCOMPLIANCE WITH NPDES PERMIT NO. TN0002950: REPORT NO. 86/7

AUTHORS: JG ROGERS

DOCUMENT TYPE: CORRESPONDENCE

DOCUMENT DATE: 03-07-86

PURPOSE OF RELEASE: HEALTH STUDY FEASIBILITY REPORT

COPY RIGHTED MATERIAL: NO

DOCUMENT NUMBER: UNNUMBERED/M00153

DOCUMENT TITLE: REPORT OF NONCOMPLIANCE WITH NPDES PERMIT NO. TN0002950: REPORT NO. 86/02

AUTHORS: JG ROGERS

DOCUMENT TYPE: CORRESPONDENCE

DOCUMENT DATE: 02-06-86

PURPOSE OF RELEASE: HEALTH STUDY FEASIBILITY REPORT

COPY RIGHTED MATERIAL: NO

DOCUMENT NUMBER: UNNUMBERED/M00153

DOCUMENT TITLE: STORM DRAIN DISCHARGE MAP

AUTHORS: CK ROBERTSON

DOCUMENT TYPE: CORRESPONDENCE

DOCUMENT DATE: 06-11-91

PURPOSE OF RELEASE: HEALTH STUDY FEASIBILITY REPORT

COPY RIGHTED MATERIAL: NO

DOCUMENT NUMBER: UNNUMBERED/M00153

DOCUMENT TITLE: K-25 SITE STORM DRAIN LINES DISCHARGE POINTS AND RUN OFF FLOW PATHS

AUTHORS: PES GEODATA GROUP

DOCUMENT TYPE: CORRESPONDENCE

DOCUMENT DATE: 08-19-91

PURPOSE OF RELEASE: HEALTH STUDY FEASIBILITY REPORT

COPY RIGHTED MATERIAL: NO

DOCUMENT NUMBER: UNNUMBERED/M00153

DOCUMENT TITLE: Y-12 PLANT WATER RESOURCES

AUTHORS:

DOCUMENT TYPE: CORRESPONDENCE

DOCUMENT DATE: NOT DATED

PURPOSE OF RELEASE: HEALTH STUDY FEASIBILITY REPORT

COPY RIGHTED MATERIAL: NO

DOCUMENT NUMBER: UNNUMBERED/M00153

DOCUMENT TITLE: EAST FORK POPLAR CREEK NPDES OUTFALLS (Y-12 PLANT)

AUTHORS:

DOCUMENT TYPE: CORRESPONDENCE

DOCUMENT DATE: NOT DATED

PURPOSE OF RELEASE: HEALTH STUDY FEASIBILITY REPORT

COPY RIGHTED MATERIAL: NO

DOCUMENT NUMBER: UNNUMBERED/M00153

DOCUMENT TITLE: Y-12 OUTFALL SURVEY EAST FORK POPLAR CREEK BLOCK PLAN F-3 (MAP)

AUTHORS: LOCKWOOD GREENE

DOCUMENT TYPE: MAP

DOCUMENT DATE: NOT DATED

PURPOSE OF RELEASE: HEALTH STUDY FEASIBILITY REPORT

COPY RIGHTED MATERIAL: NO

DOCUMENT NUMBER: UNNUMBERED/M00153

DOCUMENT TITLE: Y-12 OUTFALL SURVEY EAST FORK POPLAR CREEK BLOCK PLAN E-4

AUTHORS: LOCKWOOD GREENE

DOCUMENT TYPE: MAP

DOCUMENT DATE: NOT DATED

PURPOSE OF RELEASE: HEALTH STUDY FEASIBILITY REPORT

COPY RIGHTED MATERIAL: NO

DOCUMENT NUMBER: UNNUMBERED/M00153

DOCUMENT TITLE: Y-12 OUTFALL SURVEY EAST FORK POPLAR CREEK BLOCK PLAN E-3

AUTHORS: LOCKWOOD GREENE

DOCUMENT TYPE: MAP

DOCUMENT DATE: NOT DATED

PURPOSE OF RELEASE: HEALTH STUDY FEASIBILITY REPORT

COPY RIGHTED MATERIAL: NO

DOCUMENT NUMBER: UNNUMBERED/M00153

DOCUMENT TITLE: Y-12 OUTFALL SURVEY EAST FORK POPLAR CREEK BLOCK PLAN D-4

AUTHORS: LOCKWOOD GREENE

DOCUMENT TYPE: MAP

DOCUMENT DATE: NOT DATED

PURPOSE OF RELEASE: HEALTH STUDY FEASIBILITY REPORT

COPY RIGHTED MATERIAL: NO

DOCUMENT NUMBER: UNNUMBERED/M00153

DOCUMENT TITLE: Y-12 OUTFALL SURVEY EAST FORK POPLAR CREEK BLOCK PLAN C-4

AUTHORS: LOCKWOOD GREENE

DOCUMENT TYPE: MAP

DOCUMENT DATE: NOT DATED

PURPOSE OF RELEASE: HEALTH STUDY FEASIBILITY REPORT

COPY RIGHTED MATERIAL: NO

DOCUMENT NUMBER: UNNUMBERED/M00153

DOCUMENT TITLE: Y-12 OUTFALL SURVEY EAST FORK POPLAR CREEK BLOCK PLAN B-4

AUTHORS: LOCKWOOD GREENE

DOCUMENT TYPE: MAP

PURPOSE OF RELEASE: HEALTH STUDY FEASIBILITY REPORT

COPY RIGHTED MATERIAL: NO

DOCUMENT NUMBER: UNNUMBERED/M00153

DOCUMENT TITLE: Y-12 OUTFALL SURVEY EAST FORK POPLAR CREEK BLOCK PLAN A-4

AUTHORS: LOCKWOOD GREENE

DOCUMENT TYPE: MAP

DOCUMENT DATE: NOT DATED

PURPOSE OF RELEASE: HEALTH STUDY FEASIBILITY REPORT

COPY RIGHTED MATERIAL: NO

DOCUMENT NUMBER: UNNUMBERED/M00153

DOCUMENT TITLE: Y-12 OUTFALL SURVEY EAST FORK POPLAR CREEK BLOCK PLAN A-3

AUTHORS: LOCKWOOD GREENE

DOCUMENT TYPE: MAP

DOCUMENT DATE: NOT DATED

PURPOSE OF RELEASE: HEALTH STUDY FEASIBILITY REPORT

COPY RIGHTED MATERIAL: NO

DOCUMENT NUMBER: UNNUMBERED/M00153

DOCUMENT TITLE: Y-12 OUTFALL SURVEY EAST FORK POPLAR CREEK BLOCK PLAN AA-4

AUTHORS: LOCKWOOD GREENE

DOCUMENT TYPE: MAP

DOCUMENT DATE: NOT DATED

PURPOSE OF RELEASE: HEALTH STUDY FEASIBILITY REPORT

COPY RIGHTED MATERIAL: NO

DOCUMENT NUMBER: UNNUMBERED/M00153

DOCUMENT TITLE: Y-12 OUTFALL SURVEY EAST FORK POPLAR CREEK BLOCK PLAN AA-3

AUTHORS: LOCKWOOD GREENE

DOCUMENT TYPE: CORRESPONDENCE

DOCUMENT DATE: NOT DATED

PURPOSE OF RELEASE: HEALTH STUDY FEASIBILITY REPORT

COPY RIGHTED MATERIAL: NO

DOCUMENT NUMBER: UNNUMBERED/M00153

DOCUMENT TITLE: ORNL INFORMATION - TAB G WATER RESOURCES

AUTHORS:

DOCUMENT TYPE: CORRESPONDENCE

DOCUMENT DATE: NOT DATED

PURPOSE OF RELEASE: HEALTH STUDY FEASIBILITY REPORT

COPY RIGHTED MATERIAL: NO

DOCUMENT NUMBER: UNNUMBERED/M00153

DOCUMENT TITLE: Y-12 PLANT REPORTABLE SPILLS

AUTHORS:

DOCUMENT TYPE: CORRESPONDENCE

DOCUMENT DATE: 11-08-91

PURPOSE OF RELEASE: HEALTH STUDY FEASIBILITY REPORT

COPY RIGHTED MATERIAL: NO

DOCUMENT NUMBER: K/HS-128 (PART 2)/M00153

DOCUMENT TITLE: ORGDP STORM DRAIN CHARACTERIZATION

AUTHORS: ORGDP

DOCUMENT TYPE: REPORT

DOCUMENT DATE: 09-00-87

PURPOSE OF RELEASE: HEALTH STUDY FEASIBILITY REPORT

COPY RIGHTED MATERIAL: NO

MARTIN MARIETTA

M00153

Internal Correspondence

MARTIN MARIETTA ENERGY SYSTEMS, INC.

November 15, 1991

B. A. Walker

Complex 21 - Request For Information

Enclosed are two copies of information in response to items G.1 through G.4 and G.7 through G.10 of the request for information to support the Programmatic Environmental Impact Statement for Complex 21.

If you have any questions, please call me.

Sara H. Welch

S. H. Welch, K-1001, MS 7155, (4-7864)

SHW:jr

Attachment

c: R. H. Harden
D. Hendren
B. A. Shoemaker
C. L. Stair
C. K. Valentine
L. O. Vaughan
C. K. Williams

c w/att: EC Document Center

K-25 SITE WATER RESORCES INFORMATION

1. The surface water usage for the K-25 Site averages approximately 6.6 MGD. The surface water source is Watts Bar Reservoir. G.1

2. Pond volumes: G.3

K-1407-B	3.1 acre-feet
K-1407-E	0.6 acre-feet
K-1407-F	1.1 acre-feet
K-1007-B	200 acre-feet

Note: There are several other ponds on the K-25 Site, but information on the volumes for these ponds has not been found at this time.

3. Discharges from K-25 on-site operations to surface waters. G.7

This information is given in the annual Environmental Surveillance Reports, Volume II, for 1986 through 1990. Information for K-25 can be found on the page numbers given below:

Year	Page Numbers
1986	149-152, 157, 236-265
1987	35-41, 118-135
1988	53-58, 63-64, 106-111, 114-118
1989	47-63, 68-70, 119-127
1990	49-67, 72-74, 121-128

4. See the attached noncompliance reports for non-planned releases at the K-25 Site during the last five years. G.9

G.9

REPORT OF NONCOMPLIANCE WITH NPDES PERMIT NO. TN0002950: REPORT NO.91/47

Outfall (Name and Number): Storm Drain SD-100

Date	Parameter	Permit limit	Actual measurement
8/3/91	Unpermitted Discharge	No Unpermitted Discharge	Discharge Occurred

Reason for Noncompliance, Planned Corrective Measures, and Other Pertinent Information:

During the cleaning of air conditioner evaporator coils with a cleaning compound, the compound was allowed to reach the storm drain system which discharges to the K-1007-B Holding Pond through storm drain SD-100. The discharge of this compound is not permitted under the National Pollutant Discharge Elimination System (NPDES) permit for the Oak Ridge K-25 Site, therefore, it is a noncompliance with the NPDES permit.

The refrigeration mechanics involved in the incident have been instructed to use containment structures to collect future discharges from activities of this type and to dispose of the collected wastewater in a suitable treatment facility. A plant-wide information bulletin was distributed to inform K-25 Site personnel of substances that may not be discharged to the storm drain system.

This incident was reported under the Occurrence Reporting System in accordance with the requirements of Department of Energy Order 5000.3A.

MARTIN MARIETTA ENERGY SYSTEMS, INC.

POST OFFICE BOX 2003
OAK RIDGE, TENNESSEE 37831-7134

June 5, 1991

Marianne M. Heiskell
K-25 Site Manager
DOE Field Office, Oak Ridge
Post Office Box 2003
Oak Ridge, Tennessee 37831-7136

REPORT OF NONCOMPLIANCE WITH NPDES PERMIT NO. TN0002950: REPORT NO. 91/24

Outfall (Name and Number): Storm Drain SD-292

Date	Parameter	Permit limit	Actual measurement
04/25/91	Unpermitted discharge	No unpermitted discharge	Discharge occurred

This noncompliance occurred as a result of poor best management practices that allowed the storage of rusting converter shells near the inlet to Storm Drain SD-292. This situation resulted in the leaching of rust and other pollutants, as defined by 40 CFR 122.2, into Poplar Creek. Sandbags were placed at the inlet to the storm drain, and a best management practice procedure is being developed to prevent future occurrences.

The incident was reported under the Occurrence Reporting System in accordance with the requirements of Department of Energy Order 5000.3A.

If you have questions or require additional information, please contact B. A. Shoemaker at 576-5474.

Sincerely,

M L Jones
for L. E. Hall, Manager
Oak Ridge K-25 Site

LEH:RDHendren:cmd

cc: K. L. Brady
J. M. Forstrom/R. D. Hendren
R. E. Frounfelker (DOE)
P. J. Gross (DOE)
R. G. Jordan
J. R. Merriman
J. E. Powell
B. A. Shoemaker
EMD Document Center - RC
File - LEH

MARTIN MARIETTA ENERGY SYSTEMS, INC.

POST OFFICE BOX 2003
OAK RIDGE, TENNESSEE 37831-7134

June 5, 1991

Marianne M. Heiskell
K-25 Site Manager
DOE Field Office, Oak Ridge
Post Office Box 2003
Oak Ridge, Tennessee 37831-7136

REPORT OF NONCOMPLIANCE WITH NPDES PERMIT NO. TN0002950: REPORT NO. 91/23

Outfall (Name and Number): Storm Drain SD-280

Date	Parameter	Permit limit	Actual measurement
04/25/91	Unpermitted discharge	No unpermitted discharge	Discharge occurred

Road salt storage methods in the K-1064 area made it possible for road salt to reach Poplar Creek through Storm Drain SD-280 during periods of storm water runoff. The situation developed primarily because of the deteriorating condition of the road salt storage shed. Also, storm water runoff was allowed to travel through the salt storage area. A berm has been placed around the existing road salt storage shed to divert storm water runoff. This temporary measure is being taken until a new storage shed can be completed.

After completion of the new storage shed, the road salt will be moved into the new shed. The existing shed will be demolished, and any residual road salt remaining in the area will be removed. The new storage shed will prevent storm water from coming into contact with the road salt, and storm water runoff will be diverted around the new shed.

The incident was reported under the Occurrence Reporting System in accordance with the requirements of Department of Energy Order 5000.3A.

If you have questions or require additional information, please contact B. A. Shoemaker at 576-5474.

Sincerely,

M L Jones

for L. E. Hall, Manager
Oak Ridge K-25 Site

LEH:RDHendren:cmd

cc: K. L. Brady
J. M. Forstrom/R. D. Hendren
R. E. Frounfelker (DOE)
P. J. Gross (DOE)
R. G. Jordan
J. R. Merriman
J. E. Powell
B. A. Shoemaker
EMD Document Center - RC
File - LEH

MARTIN MARIETTA ENERGY SYSTEMS, INC.

POST OFFICE BOX 2003
OAK RIDGE, TENNESSEE 37831-7134

June 5, 1991

Marianne M. Heiskell
K-25 Site Manager
DOE Field Office, Oak Ridge
Post Office Box 2003
Oak Ridge, Tennessee 37831-7136

Dear Ms. Heiskell:

REPORT OF NONCOMPLIANCE WITH NPDES PERMIT NO. TN0002950: REPORT NO. 91/22

Outfall (Name and Number): Storm Drain SD-180

Date	Parameter	Permit limit	Actual measurement
4/19/91	Unpermitted discharge	No unpermitted discharge	Unpermitted discharge

The noncompliance occurred when it was discovered that laboratory drains and a dishwasher in Building K-1405 discharge to the storm drain system without pretreatment. Potable water used as once-through cooling water for the heating, ventilating, and air-conditioning (HVAC) system also discharges to the storm drains. The use of these lines was immediately discontinued until the problem could be resolved. The lines of the dishwasher and drains have been rerouted to the sanitary water system. The water-cooled HVAC system is no longer in use and is scheduled to be replaced with an air-cooled system.

The incident was reported under the Occurrence Reporting System in accordance with the requirements of Department of Energy Order 5000.3A.

If you have questions or require additional information, please contact B. A. Shoemaker at 576-5474.

Sincerely,

M L Jones

for L. E. Hall, Manager
Oak Ridge K-25 Site

LEH:MLCoffey:cmd

cc: K. L. Brady
J. M. Forstrom/B. A. Shoemaker
R. E. Frounfelker (DOE)
P. J. Gross (DOE)
R. G. Jordan
J. R. Merriman
J. E. Powell
H. D. Whitehead, Jr.
EMD Document Center - RC
File - LEH

MARTIN MARIETTA ENERGY SYSTEMS, INC.

POST OFFICE BOX 2003
OAK RIDGE, TENNESSEE 37831-7134

June 5, 1991

Marianne M. Heiskell
K-25 Site Manager
DOE Field Office, Oak Ridge Operations
Post Office Box 2003
Oak Ridge, Tennessee 37831-7136

Dear Ms. Heiskell:

REPORT OF NONCOMPLIANCE WITH NPDES Permit No. TN0002950: REPORT NO. 91/21

Outfall (Name and Number): Storm Drain SD-890

Date	Parameter	Permit limit	Actual measurement
4/10/91	Visible sheen	No visible sheen	Visible sheen

The noncompliance occurred when a visible sheen was observed on the Clinch River at Storm Drain SD-890. Immediate actions were taken to contain the sheen and prevent further migration into the river. The storm drain discharge pipe was plugged to prevent further release, an oil boom was placed around the outfall, and the oil was skimmed from the surface with absorbent pads. An intensive investigation was initiated immediately to determine the source of the spill, and notifications were made to the Tennessee Emergency Management Agency and the National Response Center. Contact with the Environmental Protection Agency was maintained throughout the initial investigation, and written reports were submitted to the appropriate agencies.

The incident was reported under the Occurrence Reporting System in accordance with the requirements of Department of Energy Order 5000.3A.

If you have questions or require additional information, please contact B. A. Shoemaker at 576-5474.

Sincerely,

M L Jones
for L. E. Hall, Manager
Oak Ridge K-25 Site

LEH:MLCoffey:cmd

cc: K. L. Brady
J. M. Forstrom/B. A. Shoemaker
R. E. Frounfelker (DOE)
P. J. Gross (DOE)
R. G. Jordan
J. R. Merriman
J. E. Powell
H. D. Whitehead, Hr.
EMD Document Center - RC
File - LEH

MARTIN MARIETTA ENERGY SYSTEMS, INC.

POST OFFICE BOX 2003
OAK RIDGE, TENNESSEE 37831-7134

April 25, 1991

Marianne M. Heiskell
K-25 Site Manager
Department of Energy, Oak Ridge Operations
Post Office Box 2003
Oak Ridge, Tennessee 37831-7136

Dear Ms. Heiskell:

REPORT OF NONCOMPLIANCE WITH NPDES PERMIT NO. TN0002950: REPORT NO. 91/18

Outfall (Name and Number): Storm Drain SD-190

Date	Parameter	Permit limit	Actual measurement
3/20/91	Visible sheen	No sheen permitted	Visible sheen

A visible sheen of an oily substance was observed on Mitchell Branch at the discharge of Storm Drain SD-190. Containment booms and absorbent pads were placed immediately at the discharge to limit the release, and an investigation to determine the source of the oily substance was initiated. Although no specific source could be determined, the area continues to be monitored closely to ensure that no additional release occurs.

The amount of the substance released to Mitchell Branch did not appear to be significant and no adverse impact to aquatic life was observed.

The incident was reported to the Tennessee Emergency Management Agency and the National Response Center as required by federal regulations. In addition, the incident was reported under the Occurrence Reporting System in accordance with the requirements of Department of Energy Order 5000.3A.

If you have questions or require additional information, please contact B. A. Shoemaker at 576-5474.

Sincerely,

L. E. Hall

L. E. Hall, Manager
Oak Ridge K-25 Site

LEH:BAS:rtk

cc: K. L. Brady
J. M. Forstrom
R. E. Frounfelker (DOE)
P. J. Gross (DOE)
R. G. Jordan
L. W. Long
J. R. Merriman
J. E. Powell
B. A. Shoemaker
EMD Document Center - RC
File - LEH

MARTIN MARIETTA ENERGY SYSTEMS, INC.

POST OFFICE BOX 2003
OAK RIDGE, TENNESSEE 37831-7134

March 28, 1991

Marianne M. Heiskell
K-25 Site Manager
Department of Energy, Oak Ridge Operations
Post Office Box 2003
Oak Ridge, Tennessee 37831-7136

REPORT OF NONCOMPLIANCE WITH NPDES PERMIT NO. TN0002950: REPORT NO. 91/13

Outfall (Name and Number): K-1203 (005)

Date	Parameter	Permit limit	Actual measurement
2/20/91	Biological Oxygen Demand	109 lbs/day	207.71 lbs/day

This noncompliance occurred during a period of heavy rainfall which necessitated diversion conditions at the K-1203 Sewage Treatment Plant to avoid loss of the bacterial population of the facility. The excess flow was diverted to the Imhoff Holding Tanks for settling before being discharged to the chlorine contact basin for disinfection prior to discharge through the National Pollutant Discharge Elimination System (NPDES) monitoring location. The diversion condition was reported to the Department of Energy (DOE) and the Tennessee Emergency Management Agency as required by the NPDES permit. Total rainfall as measured by the Oak Ridge K-25 Site Plant Shift Superintendent's Office for the period from February 17, 1991, through February 20, 1991, was 6.31 inches. Although the daily maximum concentration value for biological oxygen demand was within permit limitations, increased flows at the facility resulted in a mass loading value that exceeded the maximum permitted value for biological oxygen demand.

This incident was reported under the Occurrence Reporting System in accordance with the requirements of DOE Order 5000.3A.

If you have questions or require additional information, please contact B. A. Shoemaker at 576-5474.

Sincerely,

L. E. Hall

L. E. Hall, Manager
Oak Ridge K-25 Site

LEH:BAShoemaker:jas

cc: K. L. Brady
J. S. Dalton
R. E. Frounfelker (DOE)
P. J. Gross (DOE)
R. G. Jordan
L. W. Long
J. R. Merriman
M. E. Mitchell
J. E. Powell
B. A. Shoemaker
EMD Document Center - RC
File - MLJ/LEH

MARTIN MARIETTA ENERGY SYSTEMS, INC.

POST OFFICE BOX 2003
OAK RIDGE, TENNESSEE 37831-7134

March 28, 1991

Marianne M. Heiskell
K-25 Site Manager
Department of Energy, Oak Ridge Operations
Post Office Box 2003
Oak Ridge, Tennessee 37831-7136

REPORT OF NONCOMPLIANCE WITH NPDES PERMIT NO. TN0002950: REPORT NOS. 91/11,12

Outfall (Name and Number): K-1203 (005)

Date	Parameter	Permit limit	Actual measurement
2/19/91	Total Suspended Solids	244 lbs/day	280.04 lbs/day
2/20/91	Total Suspended Solids	244 lbs/day	354.21 lbs/day

These noncompliances occurred during a period of heavy rainfall which necessitated diversion conditions at the K-1203 Sewage Treatment Plant to avoid loss of the bacterial population of the facility. The excess flow was diverted to the Imhoff Holding Tanks for settling before being discharged to the chlorine contact basin for disinfection prior to discharge through the National Pollutant Discharge Elimination System (NPDES) monitoring location. This diversion condition was reported to the Department of Energy (DOE) and the Tennessee Emergency Management Agency as required by the NPDES permit. Total rainfall as measured by the Oak Ridge K-25 Site Plant Shift Superintendent's Office for the period from February 17, 1991, through February 20, 1991, was 6.31 inches. Although daily maximum concentration values for total suspended solids were within permit limitations, increased flows at the facility resulted in mass loading values that exceeded the maximum permitted values for total suspended solids.

These incidents were reported under the Occurrence Reporting System in accordance with the requirements of DOE Order 5000.3A.

If you have questions or require additional information, please contact B. A. Shoemaker at 576-5474.

Sincerely,

L. E. Hall

L. E. Hall, Manager
Oak Ridge K-25 Site

LEH:BAShoemaker:jas

cc: K. L. Brady
J. S. Dalton
R. E. Frounfelker (DOE)
P. J. Gross (DOE)
R. G. Jordan
L. W. Long
J. R. Merriman
M. E. Mitchell
J. E. Powell
B. A. Shoemaker
EMD Document Center - RC
File - MLJ/LEH

MARTIN MARIETTA ENERGY SYSTEMS, INC.

POST OFFICE BOX 2003
OAK RIDGE, TENNESSEE 37831-7134

March 13, 1991

Marianne M. Heiskell
K-25 Site Manager
Department of Energy, Oak Ridge Operations
Post Office Box 2003
Oak Ridge, Tennessee 37831-7136

REPORT OF NONCOMPLIANCE WITH NPDES PERMIT NO. TN002950: REPORT NOS. 91/03,04

Outfall (Name and Number): K-1203 (05AG)

Date	Parameter	Permit limit	Actual measurement
02/19/91	Fecal coliform	400 col/100 mL	540 col/100 mL
02/20/91	Fecal coliform	400 col/100 mL	882 col/100 mL

These exceedances were attributed to heavy rainfall that resulted in flows to the K-1203 Sewage Treatment Facility which exceeded the capacity of the facility. In order to avoid loss of the bacterial population, the excess flow was diverted to the Imhoff Holding Tanks for settling and pumped to the chlorine contact basin for disinfection. The diversion conditions were initiated on February 17, 1991, and continued for 68 hours and 30 minutes until February 20, 1991. Total rainfall measured by the Oak Ridge K-25 Site, Plant Shift Superintendent, for February 17, 1991, through February 20, 1991, was 6.31 inches. Because of high flow rates in the chlorine contact basin during the diversion, the retention time was not sufficient to adequately disinfect the effluent; therefore, the fecal coliform concentrations exceeded the permit limits. Operating conditions at the facility were returned to normal on February 20, 1991, and fecal coliform concentrations for the National Pollutant Discharge Elimination System sample obtained on February 21, 1991, were below 10 col/100 mL.

The incident was reported under the Occurrence Reporting System in accordance with the requirements of Department of Energy Order 5000.3A on February 17, 1991, when the diversion conditions were initiated, and again on February 22, 1991, when the fecal coliform exceedances were identified. Notification to the Tennessee Emergency Management Agency was also made on those dates.

If you have questions or require additional information, please contact B. A. Shoemaker at 576-5474.

Sincerely,

L. E. Hall

L. E. Hall, Manager
Oak Ridge K-25 Site

LEH:BAShoemaker:rtk

cc: K. L. Brady
J. S. Dalton
R. E. Frounfelker (DOE)
P. J. Gross (DOE)
L. W. Long
J. R. Merriman
J. E. Powell
B. A. Shoemaker
EMD Document Center - RC
File - MLJ/LEH

MARTIN MARIETTA ENERGY SYSTEMS, INC.

POST OFFICE BOX 2003
OAK RIDGE, TENNESSEE 37831

December 3, 1990

Marianne M. Heiskell
K-25 Site Manager
Department of Energy, Oak Ridge Operations
Post Office Box 2003
Oak Ridge, Tennessee 37831-7468

Dear Ms. Heiskell:

REPORT OF NONCOMPLIANCE WITH NPDES PERMIT NO. TN0002950: REPORT NO. 90/16

Outfall (Name and Number): SD 620

Date	Parameter	Permit limit	Actual measurement
11/3/90	Unpermitted Discharge	No unpermitted discharge	Discharge occurred

This noncompliance occurred when approximately 200-300 gal of rainwater containing detectable levels of chromate was discharged to Poplar Creek through Storm Drain (SD) 620 as the result of a break in the underground piping connecting two cooling tower basins. The break occurred when rainwater from the K-861 Cooling Tower Basin was being pumped to the K-892 Cooling Tower Basin. Both of the cooling towers are inactive, but the sludge in the basins contains residual chromates from recirculating water that was used in the cooling towers during gaseous diffusion operations. The water was sampled and analyzed for chromate as soon as the break was discovered. It was determined to contain 0.045 mg/L hexavalent chromium. Although this concentration is below the lowest permit limitation for chromium at any of the National Pollutant Discharge Elimination System (NPDES) outfalls, the NPDES permit does not specify the discharge of chromated water at SD 620; therefore, the incident was determined to be an unpermitted discharge.

The pump was shut down, and the line was isolated to prevent further discharge to the storm drain. The reportable quantity for hexavalent chromium was not exceeded. The incident was reported under the Occurrence Reporting System (ORS) in accordance with the requirements of the Department of Energy Order 5000.3A. Corrective actions to prevent future occurrences will be developed in the final ORS report and forwarded to you when the report is complete.

If you have questions or require additional information, please contact B. A. Shoemaker at 576-5474.

Sincerely,

L. E. Hall

L. E. Hall, Manager
Oak Ridge K-25 Site

LEH:BAShoemaker:jas

cc: G. E. Butterworth, III
J. S. Dalton
R. E. Frounfelker (DOE)
C. Gist (DOE)
P. J. Gross (DOE)
R. J. Jordan
L. W. Long
J. R. Merriman
J. E. Powell
B. A. Shoemaker
H. D. Whitehead, Jr.
EMD Document Center - RC
File - MLJ/LEH

MARTIN MARIETTA

ARTIN MARIETTA ENERGY SYSTEMS, INC.

POST OFFICE BOX 2003
OAK RIDGE, TENNESSEE 37831-7134

November 19, 1990

Marianne M. Heiskell
K-25 Site Manager
Department of Energy, Oak Ridge Operations
Post Office Box 2003
Oak Ridge, Tennessee 37831-7468

Dear Ms. Heiskell:

REPORT OF NONCOMPLIANCE WITH NPDES PERMIT NO. TNO002950: REPORT NO. 90/15

Outfall (Name and Number): SD 430

Date	Parameter	Permit limit	Actual measurement
11/6/90	Visible Solids	No Visible Solids	Visible Solids Present

This noncompliance occurred when approximately 400,000 gal of firewater was discharged to Poplar Creek through Storm Drain (SD) 430 as the result of a break in the lines for the firewater system north of the K-27 building. The firewater entered the building on the upper side, traveled through the vault storage areas in the basement of the building, and exited on the south side of the building. The water then entered the SD system and was discharged to Poplar Creek at SD 430. Mud from the building foundation that was carried in the water flow resulted in a discharge of visible solids to Poplar Creek.

The break in the lines of the firewater system was isolated and valved off. Grab samples of the water entering the SDs were obtained and analyzed for pH, chlorine, oil and grease, polychlorinated biphenyl (PCB), uranium, and radiological activity. Analyses of these samples revealed concentrations which did not exceed reportable quantities or National Pollutant Discharge Elimination System (NPDES) permit limitations. In addition, 24-hour composite samples were obtained of the water entering Poplar Creek at SD 430 and analyzed for pH, suspended solids, metals, PCB, uranium, and radiological activity. Analytical results from the composite samples did not exceed reportable quantities or NPDES permit limitations.

An investigation is under way to determine the cause of the break in the lines and to determine necessary actions to prevent future occurrences. Follow-up results of the investigation will be reported to you in accordance with requirements of the Occurrence Reporting System.

Verbal notification of this event was made to the Department of Energy, Oak Ridge Operations (DOE-ORO). Although the circumstances of the incident did not mandate verbal notification to state agencies, DOE-ORO verbally notified the Tennessee Emergency Management Agency because of the large amount of water that was discharged from the plant site.

If you have any questions or require additional information, please contact B.A. Shoemaker at 576-5474.

Sincerely,

L. E. Hall

L. E. Hall, Manager
Oak Ridge K-25 Site

LEH:BAShoemaker:bsm

cc: G. E. Butterworth, III
R. E. Frounfelker (DOE)
C. Gist (DOE)
A. C. Heitzman
G. Jordan
L. W. Long
J. R. Merriman
M. E. Mitchell
C. H. Peterson
J. E. Powell
B. A. Shoemaker
H. D. Whitehead, Jr.
M. Wilson (DOE)
EMD Document Center - RC
File - MLJ/LEH

.ARTIN MARIETTA ENERGY SYSTEMS, INC.

POST OFFICE BOX 2003
OAK RIDGE, TENNESSEE 37831 -7134

September 25, 1990

Marianne M. Heiskell
K-25 Site Manager
Department of Energy, Oak Ridge Operations
Post Office Box 2003
Oak Ridge, Tennessee 37831-7468

Dear Ms. Heiskell:

REPORT OF NONCOMPLIANCE WITH NPDES PERMIT NO.TN0002950: REPORT NO.90/14

Outfall (Name and Number: Mitchell Branch

Date	Parameter	Permit limit	Actual measurement
9/20/90	Unpermitted Discharge	No Unpermitted Discharge	150 gal

This noncompliance occurred when approximately 150 gal of firewater from the Toxic Substances Control Act (TSCA) Incinerator area leaked from a drain line, passed through a Resource Conservation and Recovery Area (RCRA) storage area, and entered a storm drain which discharges to Mitchell Branch. The leak occurred during tests of the sprinkler system in the K-1435 RCRA Tank Storage Area and hydrotesting of the dike for secondary containment in the RCRA Drum Storage Area. Sampling was initiated immediately at the source of the discharge, at the entry of the discharge into the storm drain, and at the outlet of the storm drain prior to its entry into Mitchell Branch. Results of analyses of the samples indicate unacceptably high levels of polychlorinated biphenyls (PCB) and volatile organics in some of the samples, with samples from Mitchell Branch containing the highest concentrations of PCBs at 30 ppb. Samples obtained immediately after the incident at the source of the spill and at its entry into the storm drain did not contain high levels of contaminants.

It has not been fully determined at this time if the concentrations of hazardous materials detected in Mitchell Branch are directly attributable to the spill or if the source of the contaminants is another location in the TSCA Incinerator area. Further investigation to determine the source of the PCBs and organics is continuing, and a follow-up report will be issued to you when the investigation is complete.

Verbal notification of this event was made to the Department of Energy, Oak Ridge Operations, and they were requested to notify the Tennessee Emergency Management Agency to meet the 24-hour notification requirement specified in the permit. In addition to verbal notification, this written report is required by the permit to be submitted to the Tennessee Department of Health and Environment (TDHE) within five days of the event. Please forward this information to the TDHE by September 25, 1990.

If you have any questions or require additional information, please contact B. A. Shoemaker at 576-5474.

Sincerely,

L. M. Cuddy
Acting Manager, K-25 Site

LMC:BAShoemaker:bsm

cc: W. D. Bostick
G. E. Butterworth, III - RC
R. E. Frounfelker (DOE)
P. J. Gross (DOE)
R. G. Jordan
W. G. McMillan (DOE)
J. R. Merriman
C. H. Peterson
J. E. Powell
B. A. Shoemaker
H. D. Whitehead, Jr.
File - MLJ/LMC

MARTIN MARIETTA ENERGY SYSTEMS, INC.

POST OFFICE BOX 2003
OAK RIDGE, TENNESSEE 37831-7134

August 3, 1990

Marianne M. Heiskell
K-25 Site Manager
Department of Energy, Oak Ridge Operations
Post Office Box 2003
Oak Ridge, Tennessee 37831-7468

Dear Ms. Heiskell:

REPORT OF NONCOMPLIANCE WITH NPDES PERMIT NO. TN0002950: REPORT NO. 90/12

Outfall (Name and Number): Mitchell Branch

Date	Parameter	Permit Limit	Actual measurement
8/1/90	Untreated Sewage	No Unpermitted Discharge	<50 gallons

This noncompliance occurred when a leak from an underground water line north of the K-1419 Batch Plant resulted in a discharge of a small amount of untreated sewage to Mitchell Branch. Soon after the leak was discovered, sand bags and barricades were set up to prevent entry of the untreated sewage into Mitchell Branch. A small amount of the material seeped under the barricades and entered the stream, resulting in an unpermitted discharge. A shallow catch basin was excavated to contain as much of the material as possible, but some of the material entered the K-1407-B Pond. An immediate investigation was initiated to determine the source of the leak, and change houses and restrooms in the K-1420 building, which were suspected as possible sources of the raw sewage, were taken out of operation. The liquid from the catch basin was pumped into drums, and the material was analyzed for heavy metal and radiological contamination. Because the analytical results did not indicate elevated levels, the material will be disposed of at the K-1203 Sewage Treatment Facility.

The investigation to determine the source of the leak, including a review of engineering drawings of the area, is continuing, and a quality investigation to determine methods to prevent future occurrences has been initiated. Rerouting of the water lines in the area will be initiated when the investigation is completed.

Verbal notification of this event was made to the Department of Energy, Oak Ridge Operations, and they were requested to notify the Tennessee Emergency Management Agency to meet the 24-hour notification requirement specified in the permit. In addition to verbal notification, this written report is required to be submitted to the Tennessee Department of Health and Environment (TDHE) within five days of the event. Please forward this information to the TDHE by August 6, 1990.

If you have questions or require additional information, please contact B. A. Shoemaker at extension 4-9402.

Sincerely,

W. R. Golliher, Manager
Oak Ridge Gaseous Diffusion Plant

WRG:BAShoemaker:jas

cc: W. D. Bostick
J. T. Bradbury, III
G. E. Butterworth, III - RC
R. E. Frounfelker (DOE)
P. J. Gross (DOE)
R. G. Jordan
W. G. McMillan (DOE)
J. R. Merriman
J. E. Powell
B. A. Shoemaker
H. D. Whitehead, Jr.
File - MLJ/WRG

MARTIN MARIETTA ENERGY SYSTEMS, INC.

POST OFFICE BOX 2003
OAK RIDGE, TENNESSEE 37831-7134

March 21, 1990

Marianne M. Heiskell
K-25 Site Manager
Department of Energy, Oak Ridge Operations
Post Office Box 2003
Oak Ridge, Tennessee 37831-7468

Dear Ms. Heiskell:

REPORT OF NONCOMPLIANCE WITH NPDES PERMIT NO. TN0002950: REPORT NO. 90/08

Outfall (Name and Number): K-1203 (05AG)

Date	Parameter	Permit limit	Actual measurement
3/17/90	Untreated sewage	Unpermitted discharge	Unpermitted discharge

This noncompliance can be attributed to heavy rains that caused the K-1203 Sewage Treatment Plant capacity to be exceeded, resulting in a hydraulic overload. To avoid the loss of the bacterial population, flow to the extended aeration unit was diverted to the Imhoff holding tanks for settling and disinfection before being discharged through the National Pollutant Discharge Elimination System (NPDES) monitoring point. The hydraulic overload conditions were experienced at the facility. Between 5:05 a.m. and 8 a.m. on March 17, 1990, the system was not capable of treating the entire flow, and a small amount of the untreated effluent combined with rainwater was discharged directly to Poplar Creek without treatment.

A completion date of June 1990 is anticipated in a study being conducted to identify sources of rainfall that contributed to the sewage plant overload. A quality investigation will be conducted to determine interim methods to prevent or reduce the potential for future occurrences during the period it will take to correct the infiltration problem. A follow-up report will be forwarded to you when the investigation is complete.

Verbal notification of this event was made to the Department of Energy, Oak Ridge Operations, and they were requested to notify the Tennessee Emergency Management Agency to meet the 24-hour notification requirement specified in the permit. In addition to the verbal notification, this written report is required by the permit to be submitted to the Tennessee Department of Health and Environment (TDHE) within five days of the event, which is March 22, 1990. Please forward this information to the TDHE by March 22, 1990.

Sincerely,

W. R. Golliher, Manager
Oak Ridge Gaseous Diffusion Plant

WRG:BAShoemaker:scb

cc: V. Adams (DOE)
W. D. Bostick
G. E. Butterworth, III - RC
P. J. Gross (DOE)
R. G. Jordan
J. R. Merriman
C. H. Peterson
J. E. Powell
J. L. Sager (DOE)
B. A. Shoemaker
H. D. Whitehead, Jr.
File - MLJ/WRG

ARTIN MARIETTA ENERGY SYSTEMS, INC.

POST OFFICE BOX 2003
OAK RIDGE, TENNESSEE 37831 - 7134

March 15, 1990

Marianne M. Heiskell
K-25 Site Manager
Department of Energy, Oak Ridge Operations
Post Office Box 2003
Oak Ridge, Tennessee 37831-7468

Dear Ms. Heiskell:

REPORT OF NONCOMPLIANCE WITH NPDES PERMIT NO. TN0002950: REPORT NO. 90/06

Outfall (Name and Number): K-1203 (05AG)

Date	Parameter	Permit limit	Actual measurement
2/16/90	Untreated sewage	No unpermitted discharge	Unpermitted discharge

This noncompliance can be attributed to heavy rains that caused the K-1203 Sewage Treatment Plant capacity to be exceeded, resulting in a hydraulic overload. To avoid the loss of the bacterial population, flow to the extended aeration unit was diverted to the Imhoff holding tanks for settling and disinfection before being discharged through the National Pollutant Discharge Elimination System (NPDES) monitoring point. The hydraulic overload conditions were experienced at the facility between 1:20 a.m. on February 16, 1990, and 12 midnight on February 17, 1990. During a one-hour period on February 16, 1990, the system was not capable of treating the entire flow, and a small amount of the untreated effluent combined with rainwater was discharged directly to Poplar Creek without treatment.

A completion date of June 1990 is anticipated in a study being conducted to identify sources of rainfall that contributed to the sewage plant overload. A quality investigation will be conducted to determine interim methods to prevent or reduce the potential for future occurrences during the period it will take to correct the infiltration problem. A follow-up report will be forwarded to you when the investigation is complete.

Sincerely,

M L Jones
for W. R. Golliher, Manager
Oak Ridge Gaseous Diffusion Plant

WRG:BAShoemaker:scb

cc: V. Adams (DOE)
G. E. Butterworth, III - RC
L. V. Gibson, Jr.
P. J. Gross (DOE)
R. G. Jordan
J. R. Merriman
C. H. Peterson
J. E. Powell
J. L. Sager (DOE)
B. A. Shoemaker
H. D. Whitehead, Jr.
File - MLJ/WRG

MARTIN MARIETTA

MARTIN MARIETTA ENERGY SYSTEMS, INC.

POST OFFICE BOX 2003
OAK RIDGE, TENNESSEE 37831 - 7134

March 2, 1990

Marianne M. Heiskell
K-25 Site Manager
Department of Energy, Oak Ridge Operations
Post Office Box 2003
Oak Ridge, Tennessee 37831-7468

Dear Ms. Heiskell:

REPORT OF NONCOMPLIANCE WITH NPDES PERMIT NO. TN0002950: REPORT NO. 90/05

Outfall (Name and Number): K-1203 (05AG)

Date	Parameter	Permit limit	Actual measurement
2/10/90	Untreated sewage	No unpermitted discharge	Unpermitted discharge

This noncompliance can be attributed to heavy rains on February 9 and 10, 1990, that caused the K-1203 Sewage Treatment Plant capacity to be exceeded, resulting in a hydraulic overload. To avoid the loss of the bacterial population, flow to the extended aeration unit was diverted to the Imhoff holding tanks for settling and disinfection before being discharged through the National Pollutant Discharge Elimination System monitoring point. The hydraulic overload conditions were experienced at the facility between 5 a.m. on February 10, 1990, and 9 a.m. on February 11, 1990. During a three-hour period on February 10, 1990, the system was not capable of treating the entire flow, and a portion of the untreated effluent was discharged directly to Poplar Creek without treatment.

The completion date of June 1990 is anticipated in a study being conducted to identify sources of rainfall that contributed to the sewage plant overload. A quality investigation will be conducted to determine interim methods to prevent or reduce the potential for future occurrences during the period it will take to correct the infiltration problem. A follow-up report will be forwarded to you when the investigation is complete.

Sincerely,

W. R. Golliher, Manager
Oak Ridge Gaseous Diffusion Plant

WRG:BAShoemaker:scb

cc: V. Adams (DOE)
G. E. Butterworth, III - RC
L. V. Gibson, Jr.
P. J. Gross (DOE)
R. G. Jordan
J. R. Merriman
C. H. Peterson
J. E. Powell
J. L. Sager (DOE)
B. A. Shoemaker
H. D. Whitehead, Jr.
File - MLJ/WRG

MARTIN MARIETTA

MARTIN MARIETTA ENERGY SYSTEMS, INC.

POST OFFICE BOX 2003
OAK RIDGE, TENNESSEE 37831 -7134

March 2, 1990

Marianne M. Heiskell
K-25 Site Manager
Department of Energy, Oak Ridge Operations
Post Office Box 2003
Oak Ridge, Tennessee 37831-7468

Dear Ms. Heiskell:

REPORT OF NONCOMPLIANCE WITH NPDES PERMIT NO. TN0002950: REPORT NO. 90/03

Outfall (Name and Number): Storm Drain 210

Date	Parameter	Permit limit	Actual measurement
2/2/90	Unpermitted discharge	No unpermitted discharge	Not applicable

This noncompliance occurred when approximately five gallons of diesel fuel spilled onto a street in the K-25 Site and some of the material entered a storm drain that discharges into Mitchell Branch. An immediate investigation was initiated to locate the source of the spilled fuel. Absorbent pads were immediately placed around the storm drain, and the area was inspected to ensure that no other discharges to storm drains had occurred. Several vehicles within the K-25 Site were inspected, but no vehicles showed evidence of leaking or of a recent spill. Crews cleaned the area of the street where the spill had occurred and disposed of the cleanup materials in accordance with plant procedures. The material was initially reported to be gasoline, but laboratory analyses of the samples obtained during the initial investigation indicated that the material probably was diesel fuel.

A quality investigation is in progress to determine the exact cause of the incident and methods to prevent future occurrences. A follow-up report will be submitted to you when the investigation is complete.

If you have questions or require additional information, please contact B. A. Shoemaker at extension 4-9402.

Sincerely,

W. R. Golliher, Manager
Oak Ridge Gaseous Diffusion Plant

WRG:BAShoemaker:scb

cc: V. Adams (DOE)
G. E. Butterworth, III - RC
L. V. Gibson, Jr.
P. J. Gross (DOE)
R. G. Jordan
J. R. Merriman
C. H. Peterson
J. E. Powell
J. L. Sager (DOE)
B. A. Shoemaker
H. D. Whitehead, Jr.
File - MLJ/WRG

ARTIN MARIETTA ENERGY SYSTEMS, INC.

POST OFFICE BOX 2003
OAK RIDGE, TENNESSEE 37831 -7134

December 7, 1989

Marianne M. Heiskell
K-25 Site Manager
Department of Energy, Oak Ridge Operations
Post Office Box 2003
Oak Ridge, Tennessee 37831-7468

Dear Ms. Heiskell:

REPORT OF NONCOMPLIANCE WITH NPDES PERMIT NO. TN0002950: REPORT NO. 89/67

Outfall (Name and Number): Storm Drain 100

Date	Parameter	Permit limit	Actual measurement
11/3/89	Unpermitted Discharge	N/A	300 mL

This noncompliance occurred when a solution of uranyl nitrate containing 0.2 percent U-235 entered the storm drain system that discharges to the K-1007-B Pond. The 1-L solution was being reduced in volume on a hot plate located in a laboratory perchloric hood when the beaker containing the solution broke. Approximately 700 mL of the material was recovered immediately, but the remainder of the solution entered the drain located at the back of the hood and subsequently entered the storm drain system.

A composite sampler was placed immediately into operation at the storm drain located before the pond inlet, and the National Pollutant Discharge Elimination System composite sampler located at the pond outlet was activated. These samplers operated throughout the night following the incident, and the resulting samples were analyzed for uranium and nitrate. Results of these analyses did not indicate any significant elevations of these parameters in the storm drain or in the pond.

A project to reroute laboratory drains through the sanitary sewer system has been submitted, but funding for this project has not been allocated. Efforts are currently under way to design and fabricate a containment tray to fit inside the hood. This tray will be designed to contain at least 2 L of solution, which is the maximum amount of sample that will be used in the hood and will prevent any spilled material

from reaching the hood drain. In addition, a quality investigation has been initiated to determine methods to prevent future occurrences. A follow-up report will be forwarded to you when the investigation is complete.

Sincerely,

George E. Butterworth, III
for

W. R. Golliher, Manager
Oak Ridge Gaseous Diffusion Plant

WRG:BAShoemaker:scb

cc: V. Adams (DOE)
G. E. Butterworth, III - RC
L. V. Gibson, Jr.
R. G. Jordan
J. R. Merriman
C. H. Peterson
J. E. Powell
J. L. Sager (DOE)
B. A. Shoemaker
H. D. Whitehead, Jr.
M. Wilson (DOE)
File - MLJ/WRG

MARTIN MARIETTA

MARTIN MARIETTA ENERGY SYSTEMS, INC.

POST OFFICE BOX 2003
OAK RIDGE, TENNESSEE 37831 - 7134

August 16, 1989

Marianne M. Heiskell
K-25 Site Manager
Department of Energy, Oak Ridge Operations
Post Office Box 2003
Oak Ridge, Tennessee 37831-7468

Dear Ms. Heiskell:

REPORT OF NONCOMPLIANCE WITH NPDES PERMIT NO. TN0002950: REPORT NO. 89/43

Outfall (Name and Number): Storm Drain 150

Date	Parameter	Permit Limit	Actual Measurement
08/02/89	Unpermitted Discharge	N/A	Trace Amount

Reason for Noncompliance, Planned Corrective Measures, and Other Pertinent Information:

This noncompliance occurred when 50 gallons of 3 percent solution of Trimsol, a machine coolant, was spilled from a loading dock at the K-1037 building. Most of the material was contained in a pit located under the dock, but a trace amount entered the storm drain system and discharged through Storm Drain 150 into Mitchell Branch. An absorbent boom was placed at the mouth of the storm drain to minimize leakage into Mitchell Branch. A quality investigation is being initiated to determine methods to prevent future occurrences. A follow-up report will be forwarded to you when the investigation has been completed.

Sincerely,

W. R. Golliher, Manager
Oak Ridge Gaseous Diffusion Plant

WRG:BAShoemaker:scb

cc: T. A. Bowers - RC
L. V. Gibson, Jr.
H. W. Hibbitts (DOE) 2
R. G. Jordan
C. H. Peterson
J. E. Powell
B. A. Shoemaker
H. D. Whitehead, Jr.
File - MLJ/WRG

MARTIN MARIETTA ENERGY SYSTEMS, INC.

POST OFFICE BOX 2003
OAK RIDGE, TENNESSEE 37831-7134

July 18, 1989

Marianne M. Heiskell
K-25 Site Manager
Department of Energy, Oak Ridge Operations
Post Office Box 2003
Oak Ridge, Tennessee 37831-7104

Dear Ms. Heiskell:

REPORT OF NONCOMPLIANCE WITH NPDES PERMIT NO. TN0002950: REPORT NO. 89/32

Outfall (Name and Number): K-1203, 005

Date	Parameter	Permit Limit	Actual Measurement
6-20-89	Fecal Coliform	400 Colonies/100 ml	620 Colonies/100 ml

Reason for Noncompliance, Planned Corrective Measures, and Other Pertinent Information:

This noncompliance can be attributed to heavy rains on June 16, 1989, which caused the K-1203 Sewage Treatment Plant's capacity to be exceeded resulting in a hydraulic overload. To avoid the loss of the bacterial population, flow to the extended aeration unit was diverted to the Imhoff holding tanks for settling. Although chlorine addition to the effluent from the Imhoff tanks was increased in an effort to reduce fecal coliform bacterial concentrations, National Pollutant Discharge Elimination System permit levels were exceeded.

A study is currently being conducted to identify sources of rainfall infiltration which contribute to sewage plant overload, and the anticipated completion date for the study is June 1990. A quality investigation will be conducted to determine interim methods to prevent or reduce the potential for future occurrences during the period it will take to correct the infiltration problem. A follow-up report will be issued to you when the investigation is complete.

Sincerely,

W. R. Golliher, Manager
Oak Ridge Gaseous Diffusion Plant

WRG:BAShoemaker:scb

cc: T. A. Bowers - RC
L. V. Gibson, Jr.
H. W. Hibbitts (DOE) 2
R. G. Jordan
C. H. Peterson
J. E. Powell
B. A. Shoemaker
H. D. Whitehead, Jr.
File - MLJ/WRG

MARTIN MARIETTA ENERGY SYSTEMS, INC.

POST OFFICE BOX 2003
OAK RIDGE, TENNESSEE 37831-7134

June 20, 1989

Dr. Ronald O. Hultgren, Director
Enriching Operations Division
Department of Energy, Oak Ridge Operations
Post Office Box 2001
Oak Ridge, Tennessee 37831-8651

Dear Dr. Hultgren:

REPORT OF NONCOMPLIANCE WITH NPDES PERMIT NO. TN0002950: REPORT NO. 89/21

Outfall (Name and Number): Storm Drain ~~180~~ 190, Unpermitted Discharge

Date	Parameter	Permit Limit	Actual Measurement
6/13/89	Latex Paint	N/A	1 gallon

Reason for Noncompliance, Planned Corrective Measures, and Other Pertinent Information:

This noncompliance occurred when a 5-gallon pail containing approximately 1 gallon of white latex paint wash water fell from a truck onto the pavement near the northeast corner of the K-1035 building. Prior to being cleaned up with absorbent material, a portion of the material reached Storm Drain 180 which discharges to Mitchell Branch. A quality investigation will be conducted to determine methods to prevent future occurrences, and a follow-up report will be issued to you when the review is complete.

Sincerely,

W. R. Golliher, Manager
Oak Ridge Gaseous Diffusion Plant

WRG:BAShoemaker:scb

cc: T. A. Bowers - RC
L. V. Gibson, Jr.
J. C. Hall
M. M. Heiskell, DOE
H. W. Hibbitts, DOE (2)
R. G. Jordan
C. H. Peterson
J. E. Powell
B. A. Shoemaker
H. D. Whitehead, Jr.
File - MLJ/WRG

MARTIN MARIETTA

MARTIN MARIETTA ENERGY SYSTEMS, INC.

POST OFFICE BOX 2003
OAK RIDGE, TENNESSEE 37831 -7134

October 17, 1988

Dr. Ronald O. Hultgren, Director
Enriching Operations Division
Department of Energy, Oak Ridge Operations
Post Office Box 2001
Oak Ridge, Tennessee 37831-8651

Dear Dr. Hultgren:

REPORT OF NONCOMPLIANCE WITH NPDES PERMIT NO. TN0002950: REPORT NO. 88/43

Outfall (Name and Number): Unpermitted Discharge

Date	Parameter	Permit Limit	Actual Measurement
10/11/88	Incinerator Purge Water	NA	15 gallons

Reason for Noncompliance, Planned Corrective Measures, and Other Pertinent Information:

On October 11, 1988, approximately 15 gallons of the K-1435 Toxic Substance Control Act (TSCA) Incinerator purge water was inadvertently discharged into a storm drain that flows into Mitchell Branch. The discharge occurred during the cool-down phase of a planned shutdown of the incinerator, no waste feeds were in operation.

The scrubber system purge water overflowed into the containment area causing the firewater sump to overflow into the storm drain. The firewater sump receives water from all TSCA containment areas in addition to receiving noncontact once-through cooling water from the TSCA solid handling systems. The firewater sump overflow was not immediately detected because the firewater sump freeboard was above the high-level alarm point. In the future, an adequate freeboard will be maintained to allow high-level alarms to actuate. A quality investigation is under way to eliminate the potential of future occurrences.

Sincerely,

W. R. Golliher, Manager
Oak Ridge Gaseous Diffusion Plant

WRG:WJScheib:rcd

cc: T. A. Bowers - RC
L. V. Gibson, Jr.
H. W. Hibbitts, DOE (2)
R. G. Jordan
C. H. Peterson
J. E. Powell
W. J. Scheib
B. E. Vaughn
H. D. Whitehead, Jr.
File - WRG

MARTIN MARIETTA

MARTIN MARIETTA ENERGY SYSTEMS, INC.

POST OFFICE BOX 2003
OAK RIDGE, TENNESSEE 37831-7134

September 12, 1988

Dr. Ronald O. Hultgren, Director
Enriching Operations Division
Department of Energy, Oak Ridge Operations
Post Office Box 2001
Oak Ridge, Tennessee 37831-8651

Dear Dr. Hultgren:

REPORT OF NONCOMPLIANCE WITH NPDES PERMIT NO. TN0002950: Report No. 88/38

Outfall (Name and Number): Unpermitted Discharge

Date	Parameter	Permit Limit	Actual Measurement
08/30/88	Unpermitted Discharge	N/A	4,300 gallons

Reason for Noncompliance, Planned Corrective Measures, and Other Pertinent Information:

On August 30, 1988, a broken sewage line was found in a sanitary-sewer manhole. Dye tests were performed to detect if sewage was flowing into a nearby storm drain. After verifying the cross flow, the sewage was diverted around the broken section of line to another sewer line while repairs were made. The system was returned to normal service on August 31, 1988. Approximately 4,300 gallons per day of raw sewage, along with 300,000 gallons per day of once-through cooling water, have been entering the storm drain system which discharges into the K-1007-B Pond. A Quality Investigation Report has been initiated to review this incident.

Sincerely,

W. R. Golliher, Manager
Oak Ridge Gaseous Diffusion Plant

WRG:WJScheib:rcd

cc: T. A. Bowers - RC
L. V. Gibson, Jr.
H. W. Hibbitts, DOE (2)
R. G. Jordan
C. H. Peterson
W. J. Scheib
C. L. Stair
H. D. Whitehead, Jr.
File - WRG

MARTIN MARIETTA

MARTIN MARIETTA ENERGY SYSTEMS, INC.

POST OFFICE BOX 2003
OAK RIDGE, TENNESSEE 37831-7134

September 1, 1988

Dr. Ronald O. Hultgren, Director
Enriching Operations Division
Department of Energy, Oak Ridge Operations
Post Office Box 2001
Oak Ridge, Tennessee 37831-8651

Dear Dr. Hultgren:

REPORT OF NONCOMPLIANCE WITH NPDES PERMIT NO. TN0002950: Report No. 88/37

Outfall (Name and Number): Unpermitted Discharge

Date	Parameter	Permit Limit	Actual Measurement
08/18/88	K-892 Clarifier Blowdown	N/A	3,000 gallons

Reason for Noncompliance, Planned Corrective Measures, and Other Pertinent Information:

On August 18, 1988, blowdown from the firewater makeup clarifier was found discharging into a nearby storm drain that flows into Poplar Creek at the 3.0 km point. The blowdown, which contains high solids from polymer and lime addition, had plugged a section of the line leading to the normal discharge at the K-901-A Settling Pond. The flow was diverted around the plugged section of line into the K-901-A Pond. The line was unplugged, and the flow route was returned to normal on August 19, 1988. An estimated 3,000 gallons of blowdown reached Poplar Creek. A Quality Investigation is under way to eliminate the potential of future occurrences.

Sincerely,

W. R. Golliher, Manager
Oak Ridge Gaseous Diffusion Plant

WRG:WJScheib:rcd

cc: T. A. Bowers - RC
L. V. Gibson, Jr.
H. W. Hibbitts, DOE (2)
R. G. Jordan
C. H. Peterson
W. J. Scheib
C. L. Stair
H. D. Whitehead, Jr.
File - WRG

RECORD COPY

MARTIN MARIETTA

.IN MARIETTA ENERGY SYSTEMS, INC.

POST OFFICE BOX P
OAK RIDGE, TENNESSEE 37831

April 26, 1988

Dr. Ronald O. Hultgren, Director
Enriching Operations Division
Department of Energy, Oak Ridge Operations
Post Office Box E
Oak Ridge, Tennessee 37831

Dear Dr. Hultgren:

REPORT OF NONCOMPLIANCE WITH NPDES PERMIT NO. TN0002950: REPORT NO. 88/16

Outfall (Name and Number): K-1203, 005

Date	Parameter	Permit Limit	Actual Measurement
03/10/88	Settleable Solids	0.5 ml/l	0.6 ml/l

Reason for Noncompliance, Planned Corrective Measures, and Other Pertinent Information:

The elevated settleable solids were attributed to infiltration of the collection system and heavy rainfall during the sample collection period. The Imhoff tank, used as a surge volume, normally has the capacity to hold increased volumes of water. During this event, the tank overfilled and blended with the effluent from the extended aeration unit prior to final chlorination.

This noncompliance was identified during the monthly Discharge Monitoring Report data reduction effort. Normally, noncompliances are identified during routine weekly data reduction and limit checks. With recent changes in sample collections by laboratory technicians, sample menus were revised and this parameter was entered incorrectly. The existing data reduction program did not flag the parameter, and the noncompliance was not detected. An additional software mechanism is in place to flag similar future occurrences. The sample menus have been corrected.

Sincerely,

W. R. Golliher, Manager
Oak Ridge Gaseous Diffusion Plant

WRG:WJScheib:rcd

cc: T. A. Bowers - RC
J. T. Bradbury III
J. S. Dalton
H. W. Hibbitts, DOE (2)
R. G. Jordan
C. H. Peterson
W. J. Scheib
C. L. Stair
H. D. Whitehead, Jr.
File - WRG

RECORD COPY

MARTIN MARIETTA

TIN MARIETTA ENERGY SYSTEMS, INC.

POST OFFICE BOX P
OAK RIDGE, TENNESSEE 37831

January 18, 1988

Mr. Joe W. Parks, Director
Enriching Operations Division
Department of Energy, Oak Ridge Operations
Post Office Box E
Oak Ridge, Tennessee 37831

Dear Mr. Parks:

REPORT OF NONCOMPLIANCE WITH NPDES PERMIT NO. TN0002950: REPORT NO. 88/1

Outfall (Name and Number): K-1407-E, 010

Date	Parameter	Permit Limit	Measurement
01/05/87	pH	6.0-9.0	3.6

Reason for Noncompliance, Planned Corrective Measures, and Other Pertinent Information:

As a result of frozen pipelines, an acidic wastewater spill occurred. The wastewater that was spilled entered a coal pile runoff storm drain line and then entered the K-1407-E settling pond during the same time period the pond was discharging, which allowed a low pH effluent to be discharged.

Because construction modifications had just recently taken place at the pond, it was being operated in a batch mode with no continuous pH monitoring.

Direct discharging from the K-1407-E Settling Pond will be discontinued until continuous pH monitoring can be done.

Sincerely,

W. R. Golliher, Manager
Oak Ridge Gaseous Diffusion Plant

WRG:WJScheib:shh

cc: T. A. Bowers - RC
H. W. Hibbitts, DOE
R. G. Jordan
C. H. Peterson
J. E. Shoemaker
C. L. Stair
File - WRG

RECORD COPY

MARTIN MARIETTA

IN MARIETTA ENERGY SYSTEMS, INC.

POST OFFICE BOX P
OAK RIDGE, TENNESSEE 37831

December 21, 1987

Mr. Joe W. Parks, Director
Enriching Operations Division
Department of Energy, Oak Ridge Operations
Post Office Box E
Oak Ridge, Tennessee 37831

Dear Mr. Parks:

REPORT OF NONCOMPLIANCE WITH NPDES PERMIT NO. TN0002950: REPORT NO. 87/39

Outfall (Name and Number): Unpermitted storm drain

Date	Parameter	Permit Limit	Actual Measurement
12/17/87	Sewage	N/A	50 gal

Reason for Noncompliance, Planned Corrective Measures, and Other Pertinent Information:

On December 17, 1987, while Maintenance and Utilities personnel were excavating to repair a sanitary-water line break, a nearby sewer line was found to be broken. Approximately 50 gallons of raw sewage was discharged to a storm drain in the vicinity. The storm-drain line was blocked to prevent additional sewage from entering the drain, and each line is currently being repaired.

Sincerely,

W. R. Golliher, Manager
Oak Ridge Gaseous Diffusion Plant

WRG:WJScheib:rcd

cc: T. A. Bowers - RC
J. C. Hall
H. W. Hibbitts (DOE)
R. G. Jordan
C. H. Peterson
J. E. Shoemaker
C. L. Stair
File - WRG

RECORD COPY

MARTIN MARIETTA

RTIN MARIETTA ENERGY SYSTEMS, INC.

POST OFFICE BOX P
OAK RIDGE, TENNESSEE 37831

March 20, 1987

Mr. W. F. Manning, Director
Enriching Operations Division
Department of Energy, Oak Ridge Operations
Post Office Box E
Oak Ridge, Tennessee 37831

Dear Mr. Manning:

REPORT OF NONCOMPLIANCE WITH NPDES PERMIT NO. TN0002950: REPORT NO. 87/13

Outfall (Name and Number): Unpermitted storm drain (SD-140)

Date	Parameter	Permit Limit	Actual Measurement
03/13/87	Fuel Oil	None	Sheen

Reason for Noncompliance, Planned Corrective Measures, and Other Pertinent Information:

On March 13, 1987, a small sheen of fuel oil was found coming from Storm Drain SD-140, which discharges into Mitchell Branch. The fuel oil sheen was contained at the storm drain's discharge point, and no sheen was detected on Mitchell Branch directly below the storm drain. Investigations revealed that a nearby collection sump was partially drained the day before the sheen was discovered. Because a slight sheen was visible on the water of that sump, it is believed that this sump is the most likely source of the fuel oil. Operational procedures are being modified to preclude a similar occurrence.

Sincerely,

W. R. Gollher, Manager
Maintenance and Operations
Oak Ridge Gaseous Diffusion Plant

WRG:WJScheib:rcd

cc: H. W. Hibbitts, DOE (2)
R. G. Jordan
C. H. Peterson
J. G. Rogers - RC
J. E. Shoemaker
C. L. Stair
File - WRG

RECORD COPY

MARTIN MARIETTA

MARTIN MARIETTA ENERGY SYSTEMS, INC.

POST OFFICE BOX P
OAK RIDGE, TENNESSEE 37831

March 11, 1987

Mr. W. F. Manning, Director
Enriching Operations Division
Department of Energy, Oak Ridge Operations
Post Office Box E
Oak Ridge, Tennessee 37831

Dear Mr. Manning:

REPORT OF NONCOMPLIANCE WITH NPDES PERMIT NO. TN0002950: REPORT NO. 87/12

Outfall (Name and Number): Unpermitted storm drain

Date	Parameter	Permit Limit	Actual Measurement
02/26/87	Diesel Fuel	N/A	<10 gal

Reason for Noncompliance, Planned Corrective Measures, and Other Pertinent Information:

On February 24, 1987, it was determined that a diesel fuel storage tank was leaking. The diesel fuel was removed from the storage tank by the existing dispensing system. On February 25, 1987, diesel fuel was discovered on the ground adjacent to the transfer pump, and diesel fuel was also discovered seeping from the soil and into a nearby storm drain. It is estimated that less than 10 gallons of diesel fuel was discharged into the storm drain.

An inverted weir was installed in the drainage ditch near the spill site. Additional booms were placed across Mitchell Branch to contain the small amount of carryover from the inverted weir. Site cleanup is progressing without additional diesel fuel entering the storm drain. Subsequent excavation revealed diesel fuel underneath the tank, indicating a possible leak near the bottom of the tank. The investigation will continue to determine the exact location of the leak.

Sincerely,

W. R. Gilliher, Manager
Maintenance and Operations
Oak Ridge Gaseous Diffusion Plant

WRG:WJScheib:rcd

cc: J. C. Hall
H. W. Hibbitts, DOE (2)
R. G. Jordan
M. E. Mitchell
C. H. Peterson
J. G. Rogers - RC
J. E. Shoemaker
C. L. Stair
File - WRG

RECORD COPY

MARTIN MARIETTA

MARTIN MARIETTA ENERGY SYSTEMS, INC.

POST OFFICE BOX P
OAK RIDGE, TENNESSEE 37831

February 27, 1987

Mr. W. F. Manning, Director
Enriching Operations Division
Department of Energy, Oak Ridge Operations
Post Office Box E
Oak Ridge, Tennessee 37831

Dear Mr. Manning:

REPORT OF NONCOMPLIANCE WITH NPDES PERMIT NO. TN0002950: REPORT NO. 87/1

Outfall (Name and Number): K-1203, 005

Date	Parameter	Permit Limit	Actual Measurement
01/27/87	Total Suspended Solids	45.0 mg/l	54.0 mg/l

Reason for Noncompliance, Planned Corrective Measures, and Other Pertinent Information:

A hydraulic upset to the Sewage Treatment Facility occurred because of heavy runoff. The surge tanks within the system were filled to capacity, which resulted in higher than normal suspended solids in the effluent.

A new laboratory software system was installed in January 1987; however, the system failed to detect the noncompliance. The problem with the new system has been corrected.

Sincerely,

W. R. Gollher, Manager
Maintenance and Operations
Oak Ridge Gaseous Diffusion Plant

WRG:WJScheib:rcd

cc: J. T. Bradbury
H. W. Hibbitts (DOE)
S. R. Humphreys
R. G. Jordan
M. E. Mitchell
C. H. Peterson
J. G. Rogers - RC
J. E. Shoemaker
C. L. Stair
File - WRG

RECORD COPY

MARTIN MARIETTA

MARTIN MARIETTA ENERGY SYSTEMS, INC.

POST OFFICE BOX P
OAK RIDGE, TENNESSEE 37831

December 26, 1986

Mr. W. F. Manning, Director
Enriching Operations Division
Department of Energy, Oak Ridge Operations
Post Office Box E
Oak Ridge, Tennessee 37831

Dear Mr. Manning:

REPORT OF NONCOMPLIANCE WITH NPDES PERMIT NO. TN0002950: REPORT NO. 86/59

Outfall (Name and Number): Unpermitted Discharge

Date	Parameter	Permit Limit	Actual Measurement
12/19/86	Firewater	0.43 MGPD	1.4 MGPD

Reason for Noncompliance, Planned Corrective Measures, and Other Pertinent Information:

As a result of two fire system header breaks, 1.4 million gallons of firewater was discharged into Poplar Creek. ORGDP is permitted for discharging up to 0.43 MGPD of firewater which can result from tests and line breaks. The major constituent of the firewater is 3.2 mg/l of phosphates.

Sincerely,

W. R. Golliher, Manager
Maintenance and Operations
Oak Ridge Gaseous Diffusion Plant

WRG:WJScheib:rcd

cc: H. W. Hibbitts, DOE (2)
R. G. Jordan
M. E. Mitchell
C. H. Peterson
J. G. Rogers - RC
J. E. Shoemaker
C. L. Stair
File - WRG

RECORD COPY

MARTIN MARIETTA

MARTIN MARIETTA ENERGY SYSTEMS, INC.

POST OFFICE BOX P
OAK RIDGE, TENNESSEE 37831

December 17, 1986

Mr. W. F. Manning, Director
Enriching Operations Division
Department of Energy, Oak Ridge Operations
Post Office Box E
Oak Ridge, Tennessee 37831

Dear Mr. Manning:

REPORT OF NONCOMPLIANCE WITH NPDES PERMIT NO. TN0002950: REPORT NO. 86/54

Outfall (Name and Number): K-1203, 005

Date	Parameter	Permit Limit	Actual Measurement
12/09/86	Fecal Coliform	<400 colonies/ 100 ml	>500 colonies/ 100 ml

Reason for Noncompliance, Planned Corrective Measures, and Other Pertinent Information:

The fecal coliform noncompliance was attributed to heavy rainfall preceding the sample collection period. The flow through the sewage plant exceeded the plant's capacity and caused a hydraulic overload. The sewage system surge tanks were used to alleviate the problem, but the tanks were filled to their capacity.

Sincerely,

Original signed by
W. R. Golliher

W. R. Golliher, Manager
Maintenance and Operations
Oak Ridge Gaseous Diffusion Plant

WRG:WJScheib:shh

cc: H. W. Hibbitts (DOE)
R. G. Jordan
M. E. Mitchell
C. H. Peterson
J. G. Rogers - RC
J. E. Shoemaker
C. L. Stair
File - WRG

RECORD COPY

MARTIN MARIETTA

MARTIN MARIETTA ENERGY SYSTEMS, INC.

POST OFFICE BOX P
OAK RIDGE, TENNESSEE 37831

December 17, 1986

Mr. W. F. Manning, Director
Enriching Operations Division
Department of Energy, Oak Ridge Operations
Post Office Box E
Oak Ridge, Tennessee 37831

Dear Mr. Manning:

REPORT OF NONCOMPLIANCE WITH NPDES PERMIT NO. TN0002950: REPORT NO. 86/53

Outfall (Name and Number): K-1203, 005

Date	Parameter	Permit Limit	Actual Measurement
12/09/86	Settleable Solids	0.5 ml/l	1.0 ml/l

Reason for Noncompliance, Planned Corrective Measures, and Other Pertinent Information:

The settleable solids noncompliance was attributed to heavy rainfall preceding the sample collection period. The flow through the sewage plant exceeded the plant's capacity and caused a hydraulic overload. The sewage system surge tanks were used to alleviate the problem, but the tanks were filled to their capacity.

Sincerely,

Original signed by
W. R. Golliher

W. R. Golliher, Manager
Maintenance and Operations
Oak Ridge Gaseous Diffusion Plant

WRG:WJScheib:shh

cc: H. W. Hibbitts (DOE)
R. G. Jordan
M. E. Mitchell
C. H. Peterson
J. G. Rogers - RC
J. E. Shoemaker
C. L. Stair
File - WRG

RECORD COPY

MARTIN MARIETTA

RTIN MARIETTA ENERGY SYSTEMS, INC.

POST OFFICE BOX P
OAK RIDGE, TENNESSEE 37831

December 3, 1986

Mr. W. F. Manning, Director
Enriching Operations Division
Department of Energy, Oak Ridge Operations
Post Office Box E
Oak Ridge, Tennessee 37831

Dear Mr. Manning:

REPORT OF NONCOMPLIANCE WITH NPDES PERMIT NO. TN0002950: REPORT NO. 86/45

Outfall (Name and Number): Nonpermitted Discharge

Date	Parameter	Permit Limit	Actual Measurement
11/24/86	Fuel Oil	NA	NA

Reason for Noncompliance, Planned Corrective Measures, and Other Pertinent Information:

A fuel oil spill occurred as a result of a leaking valve on a storage container at the K-1045-A Fire Training Facility. Fuel oil was detected at a storm drain that flows through the K-1700 NPDES point to Poplar Creek. It has been estimated that 20 gallons of fuel oil was spilled. Oil absorbent booms and pads were placed at the storm drain outlet to contain and remove the oil.

Plant Protection personnel and Environmental Management personnel will review the methods currently used to contain fuel oil at the facility to minimize the potential for a similar occurrence in the future.

Sincerely,

Original signed by
W. R. Golliher

W. R. Golliher, Manager
Maintenance and Operations
Oak Ridge Gaseous Diffusion Plant

WRG:WJScheib:shh

cc: H. W. Hibbitts (DOE)
R. G. Jordan
M. E. Mitchell
C. H. Peterson
J. G. Rogers - RC
J. E. Shoemaker
C. L. Stair
File - WRG

RECORD COPY

MARTIN MARIETTA

RTIN MARIETTA ENERGY SYSTEMS, INC.

POST OFFICE BOX P
OAK RIDGE, TENNESSEE 37831

March 7, 1986

Mr. W. F. Manning, Director
Enriching Operations Division
Department of Energy, Oak Ridge Operations
Post Office Box E
Oak Ridge, Tennessee 37831

Dear Mr. Manning:

REPORT OF NONCOMPLIANCE WITH NPDES PERMIT NO. TN0002950: REPORT NO. 86/7

Outfall (Name and Number): K-1203, 005

Date	Parameter	Permit Limit	Actual Measurement
2/18/86	Fecal Coliform	<400 colonies/ 100 ml	>500 colonies/ 100 ml

Reason for Noncompliance, Planned Corrective Measures, and Other Pertinent Information:

The fecal coliform noncompliance was attributed to heavy rainfall and melting snow. The flow through the sewage plant exceeded the plant capacity and caused a hydraulic overload. When the hydraulic upset was noticed, the flow was diverted to the Imhoff holding tanks until both were filled. The chlorine residual in the effluent was 0.17 mg/l which was below the permit limit of 0.24 mg/l.

Sincerely,

J. G. Rogers/shh

J. G. Rogers, Environmental Coordinator
Oak Ridge Gaseous Diffusion Plant

JGR:WJScheib:shh

cc: B. J. Davis (DOE)
W. F. Furth
W. R. Golliher
S. R. Humphreys
R. G. Jordan
C. H. Peterson
J. E. Shoemaker
C. L. Stair
File - JGR - RC

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MARTIN MARIETTA

RTIN MARIETTA ENERGY SYSTEMS, INC.

POST OFFICE BOX P
OAK RIDGE, TENNESSEE 37831

February 6, 1986

Mr. W. F. Manning, Director
Enriching Operations Division
Department of Energy, Oak Ridge Operations
Post Office Box E
Oak Ridge, Tennessee 37831

Dear Mr. Manning:

REPORT OF NONCOMPLIANCE WITH NPDES PERMIT NO. TN0002950: REPORT NO. 86/02

Outfall (Name and Number): Unpermitted Storm Drain

Date	Parameter	Permit Limit	Actual Measurement
1/24/86	Chromated Water	N/A	3.1 ppm Cr

Reason for Noncompliance, Planned Corrective Measures, and Other Pertinent Information:

Last month chromated water was discovered leaking from the basin of the K-892-H Cooling Tower. The incident was reported, the water was intercepted at a nearby storm drain, and a trough was fabricated to catch the water so it could be returned to the basin.

On January 24, 1986, chromated water was discovered bypassing the trough and entering the storm drain at a rate of 1 gal/min. Sample results indicated 4.0 ppm chromium in the water entering the storm drain and 3.1 ppm chromium in the water near the entry location to Poplar Creek. In the second sample, additional storm drain water diluted the original tower stream. An estimated 0.048 lb of chromium was discharged to the environment. Plans are being developed to eliminate the chromated water from the basin. In the interim, the storm drain will remain plugged in case any additional water bypasses the trough.

Sincerely,

J G Rogers

J. G. Rogers, Environmental Coordinator
Oak Ridge Gaseous Diffusion Plant

JGR:WJScheib:rcd

cc: B. J. Davis (DOE)
W. F. Furth
W. R. Golliher
S. R. Humphreys
R. G. Jordan
C. H. Peterson
C. L. Stair
W. F. Thomas
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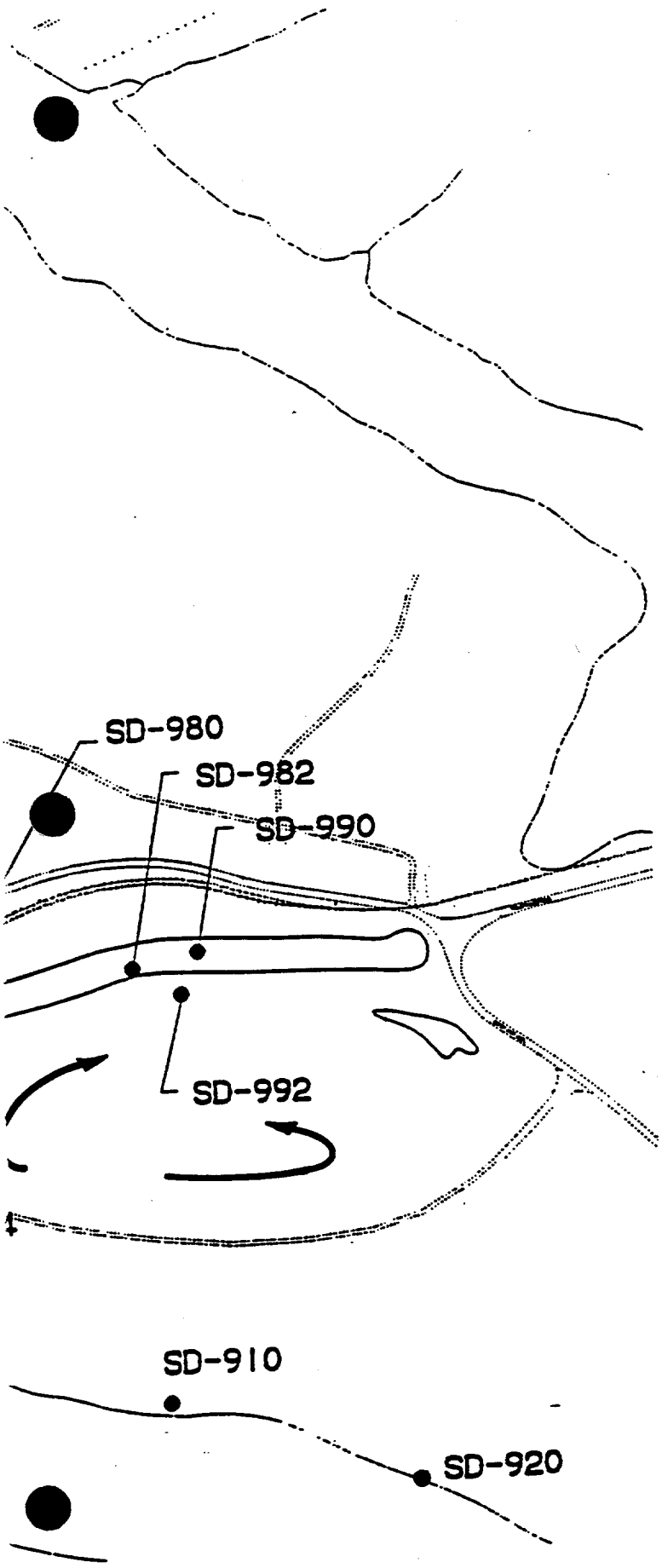


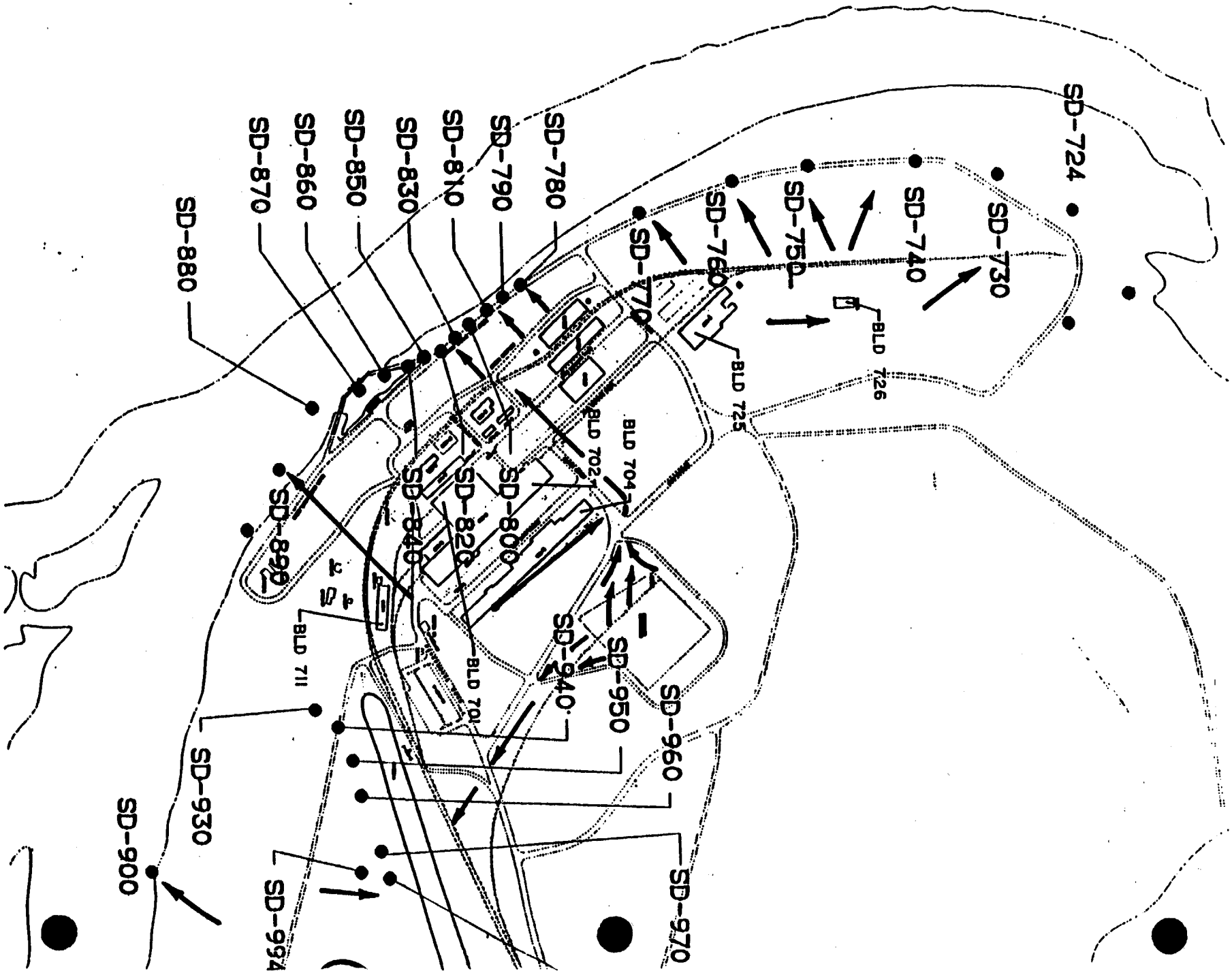
LEGEND:

SD-724 ● STORM DRAIN DISCHARGE POINT

● STORM DRAIN DISCHARGE POINT (NO IDENTIFYING NUMBER)

INTERNATIONAL TECHNOLOGY CORPORATION

STARTING DATE: 6/11/91	DATE LAST REV.:	DRAFT. CHCK. BY: J. HUBBARD	INITIATOR: J.PILE	DWG. NO.: 409511-B-C05
DRAWN BY: C.K.ROBERTSON	DRAWN BY:	ENGR. CHCK. BY: J.PILE	PROJ. MGR.: S.REAGAN	PROJ. NO.: 409511



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Part 2

ORGDP

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OAK RIDGE GASEOUS DIFFUSION PLANT

MARTIN MARIETTA

ORGDP STORM DRAIN CHARACTERIZATION

SEPTEMBER 1987

OPERATED BY
MARTIN MARIETTA ENERGY SYSTEMS, INC.
FOR THE UNITED STATES
DEPARTMENT OF ENERGY

September 1987

K/HS-128
Part 2

ORGDP STORM DRAIN CHARACTERIZATION

W. J. Scheib

Prepared by the
Oak Ridge Gaseous Diffusion Plant
Oak Ridge, Tennessee 37831
operated by
MARTIN MARIETTA ENERGY SYSTEMS, INC.
for the
U. S. DEPARTMENT OF ENERGY
under contract DE-AC05-84OR21400

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ORGDP STORM DRAIN CHARACTERIZATION

INTRODUCTION

Storm drain characterization is a requirement of the Oak Ridge Gaseous Diffusion Plant (ORGDP) National Pollutant Discharge Elimination System (NPDES) permit that was modified September 15, 1986. The permit required that a plan be issued by December 1, 1986, the characterization completed, and any remedial actions for process sources budgeted prior to February 1989 when the permit is to be reopened. The original plan was outlined in K/HS-128, Part 1; the results are listed in this document.

Although further review and investigation will be conducted to verify that all process contaminant sources have been identified, adequate information has been collected to assign discharge categories to all known storm drains. Any update on the storm drain categories, along with a proposed monitoring frequency, will be submitted by July 1988 to the Tennessee Department of Health and Environment (TDHE) and EPA with the NPDES permit renewal application. Any identified process source requiring significant monetary resources will also be discussed on the application.

The main objective of the storm drain characterization was to establish the various discharge categories of all ORGDP storm drains. A secondary objective was to obtain preliminary information on area contaminant sources and utilize this information in the Remedial Action Program (RAP). Future activities of the RAP includes additional surface water sampling from appropriate sites at ORGDP. This information will be included in the storm drain data base.

MONITORING PROGRAM

A. STRATEGY

The main objective of the characterization was to establish the various categories of all ORGDP storm drains. The assigned category depends on the effluent source of the storm drain:

I - Surface runoff
II - Once through cooling and building roof drainage
III - Drainage with potential of process effluent

Sampling at storm drain discharges was the most effective method to validate the designations. A secondary objective was to obtain preliminary information on area contaminant sources for the Remedial Action Program. The storm drain characterization sampling was divided into two phases. The two phase approach allowed identification and further study of critical drains.

Phase 1 consisted of collecting samples from all storm drains entering the waterways surrounding ORGDP during a six-week period. During this phase, drains indicating contamination were identified to be sampled during Phase 2 of the characterization. Also, for drains that showed no flow during the initial six-week period, the sampling period was extended to three months. Low rainfall persisted from March through July, and 72 drains remained dry during the entire sampling period.

Further sampling was conducted during Phase 2 on storm drains exhibiting elevated levels of contamination and containing complicated distribution systems with numerous sources and secondary lines. Drains with elevated contaminants and limited distribution systems were not sampled. Effluent concentrations were compared to the storm drain effluent guidelines to determine elevated values. The data from Phase 2 allows selected areas to be reviewed and a more specific determination made on the source of contaminants entering the drains. In some cases the exact source of contamination was determined.

Sampling was conducted by laboratory technicians and samples requiring field preservation were handled properly. A random sampling schedule was established for each phase of the characterization. The wide variety of analyses obtained during both phases of the storm-drain survey (Table 1) created an excellent base line for the ORGDP site. The permanent sampling sites established allows for future comparison as the plant site develops and new facilities are added such as the TSCA Incinerator.

In an effort to identify area contaminant sources and satisfy the secondary objective of this characterization, the time of the year when precipitation is greatest was chosen to allow for the highest potential for area runoff. All surface-water data will be incorporated into the Remedial Action Program on RCRA site characterizations. Although the sampling for the storm drain characterization is complete, future sampling from the investigation program will supplement the storm drain data base.

Table 1. Sample Protocol for Storm Drain Characterization

PARAMETER	PARAMETER
Volatile Organics	Arsenic
Residual Chlorine	Total Dissolved Solids
Total Suspended Solids	Chemical Oxygen Demand
Mercury	Oil & Grease
Cyanide	Selenium
Hardness	Alkalinity
Uranium	Conductivity
Extractable Organics	Ammonia
Total Organic Carbon	pH
Temperature	Dissolved Oxygen
Anions	Inductively Coupled Plasma Metals
Gross Alpha & Beta	

B. RAINFALL

A total of 10.5 inches of rainfall was received at ORGDP from March 2, 1987, to July 14, 1987; a deficit of 8.2 inches was experienced compared to normal expected rainfall over the entire time period. For several drains, samples were collected during rainy periods after the original six weeks of Phase 1 sampling; however, 72 out of 120 drains remained dry during the entire 3 1/2 months. The rainfall events during the sampling period are listed in Table 2.

C. PHASE 1

The objective of this phase of the storm drain characterization was to identify (1) all locations where there are outfalls from ORGDP and (2) contaminant levels present at these locations.

An extensive effort was directed toward identifying all discharge sources from ORGDP. Even though several of these lines are possibly abandoned process lines, they were given a storm drain identification number because they represent a site discharge point. The identification number consists of a "SD" designation followed by three digits. Unassigned numbers between existing storm drains allow for the addition of storm drains without affecting the numbering sequence. The storm drains are numbered in ascending order counter-clockwise on the plant site perimeter. Figure 1 identifies the location of the storm drain discharges on an overview map of ORGDP.

As previously discussed, rainfall during the sampling period was well below normal. With a reduced number of general area runoff samples, the potential of obtaining information on area source contamination was reduced. Drains that did exhibit flow tended to be discharges from once through cooling. Some steam condensate, cooling tower blow down, and groundwater also flows into the drains. The number of samples collected on individual drains is listed in Table 3. This provides useful information on active areas within the plant. Due to the rainfall, the initial sampling period of six weeks was extended to three months for dry drains in order to obtain samples from additional drains.

D. PHASE 2

The objective of this phase of the storm drain characterization was to determine more specifically the source of elevated contaminant levels at the discharge of storm drains with complicated distribution systems. Four drains were included in this phase of sampling: SD-100, SD-170, SD-180, and SD-190. Figures 2 through 4 illustrate the storm drains and sampling locations along each of the drains with the exception of SD-100. Samples were collected from both the main stream and secondary streams of the storm drains; six weeks of samples were collected during this phase. This approach allowed more specific identification of the sources of contamination. The Phase 2 data, only pertinent for source identification, were not included in this report.

Table 2. Daily Rainfall Summary[1]
(3/2/87-7/14/87)

Date	Rainfall (inches)
03/08/87	.05
03/09/87	.08
03/10/87	.46
03/12/87	.01
03/16/87	.07
03/18/87	.23
03/24/87	.07
03/25/87	.02
03/27/87	.09
03/30/87	.21
04/02/87	.02
04/05/87	.25
04/11/87	.05
04/12/87	.08
04/14/87	.29
04/15/87	.38
04/16/87	.27
04/24/87	.24
05/03/87	.14
05/04/87	.58
05/17/87	.28
05/20/87	.26
05/30/87	.81
06/01/87	.02
06/02/87	.02
06/03/87	.06
06/12/87	.1
06/13/87	.01
06/16/87	.36
06/17/87	.16
06/18/87	.01
06/12/87	.10
06/13/87	.01
06/16/87	.36
06/17/87	.16
06/18/87	.01
06/19/87	.12

[1]Only dates for rainfall above zero are shown.

Table 2. Daily Rainfall Summary[1] (Continued)
(3/2/87-7/14/87)

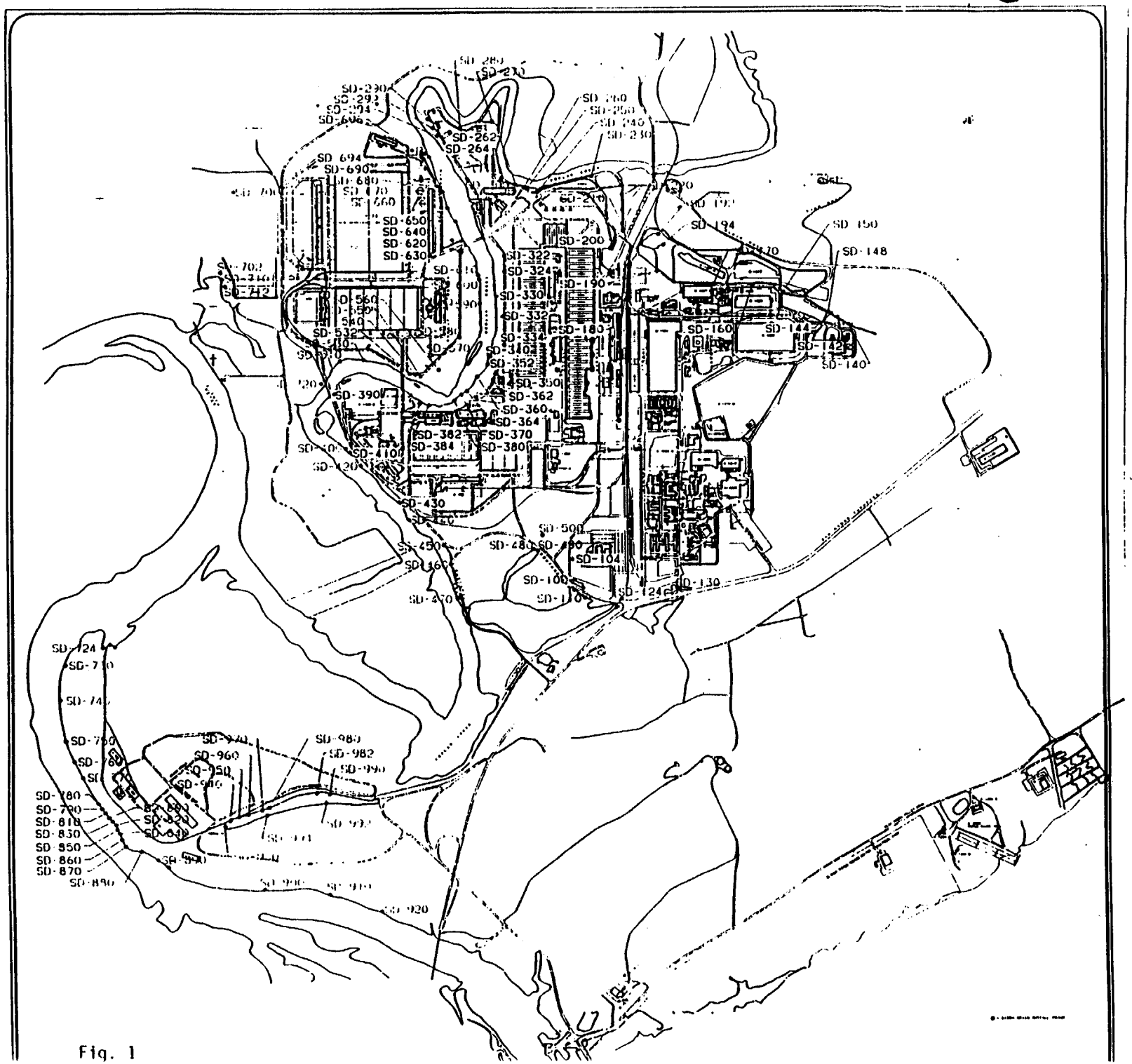
Date	Rainfall (inches)
06/20/87	.23
06/22/87	1.22
06/25/87	.12
06/26/87	.07
07/01/87	.11
07/03/87	.25
07/04/87	.47
07/05/87	.54
07/07/87	.20
07/11/87	.51
07/13/87	.03
07/14/87	.01

Table 3. Number of Samples Collected During Phase[1]

Storm Drain	Total Samples	Storm Drain	Total Samples
100/104[1]	6	430	6
130	6	440	3
140	6	480/490/500[2]	6
142	5	510	2
144	4	540	1
150	5	550	1
160	1	560	1
162	2	570	1
170	4	590	1
180	6	610	1
190	6	630	1
194	2	690	6
200	2	200	6
210	6	210	2
230	4	712	2
240	2	724	2
280	1	750	1
294	4	780	1
330	3	830	5
340	2	850	2
362	1	880	2
380	6	890	1
410	2	992	2
420	2	994	2

[1]SD-104 is on SD-100 upstream from the discharge point.

[2]SD-480 and SD-490 are common to SD-500.


SD-290
SD-294
SD-694
SD-690
SD-680
SD-650
SD-640
SD-620
SD-630
SD-262
SD-264
SD-200
SD-322
SD-324
SD-330
SD-332
SD-334
SD-340
SD-352
SD-350
SD-362
SD-360
SD-364
SD-370
SD-380
SD-382
SD-384
SD-390
SD-430
SD-500
SD-104
SD-194
SD-150
SD-148
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SD-140
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SD-950
SD-980
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SD-850
SD-860
SD-870
SD-890
SD-920

Fig. 1

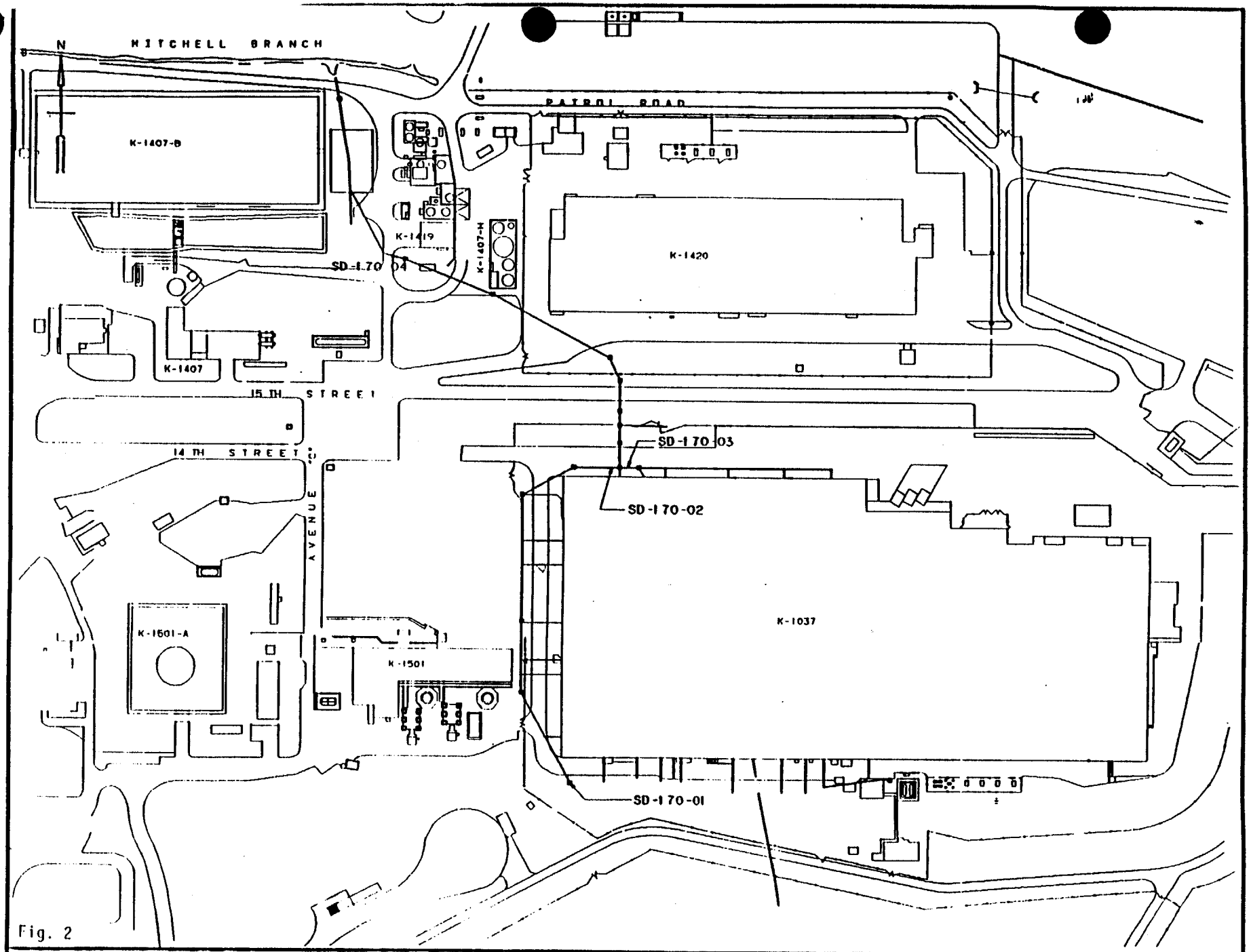


Fig. 2

STORM DRAIN SYSTEM SD 170

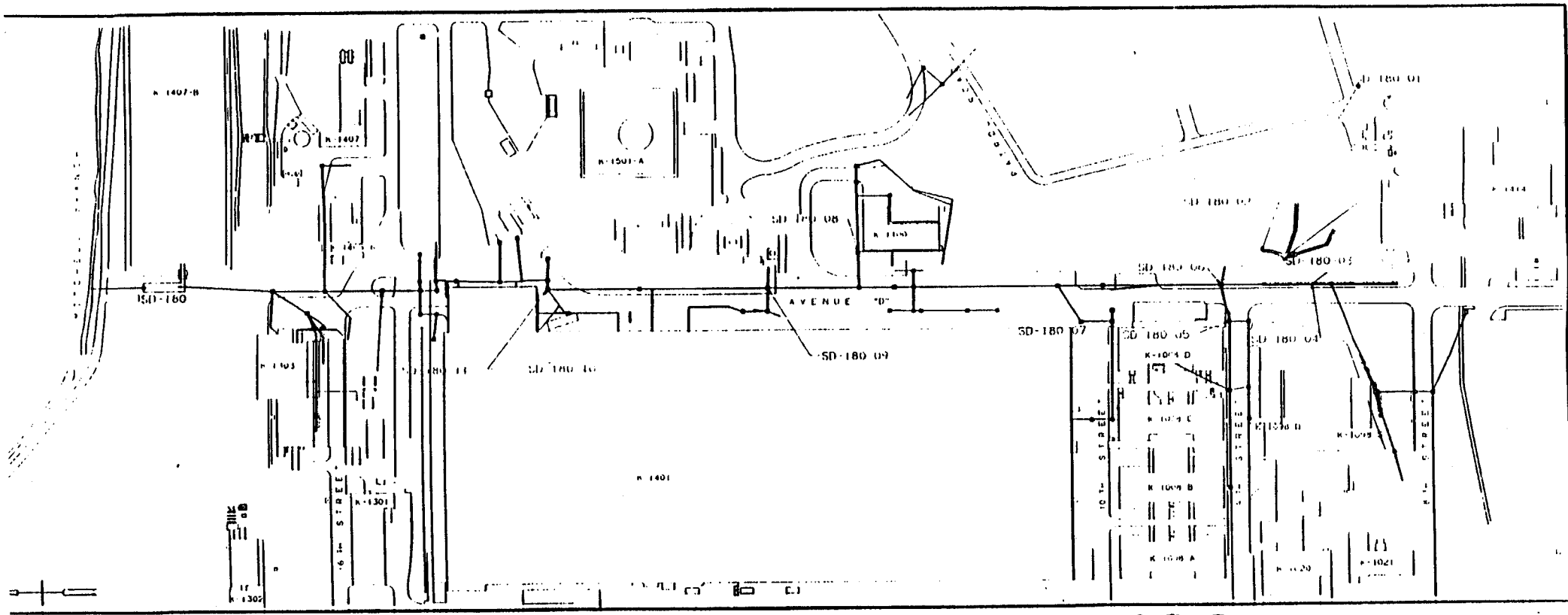


fig. 3 **STORM DRAIN SYSTEM SD 180**

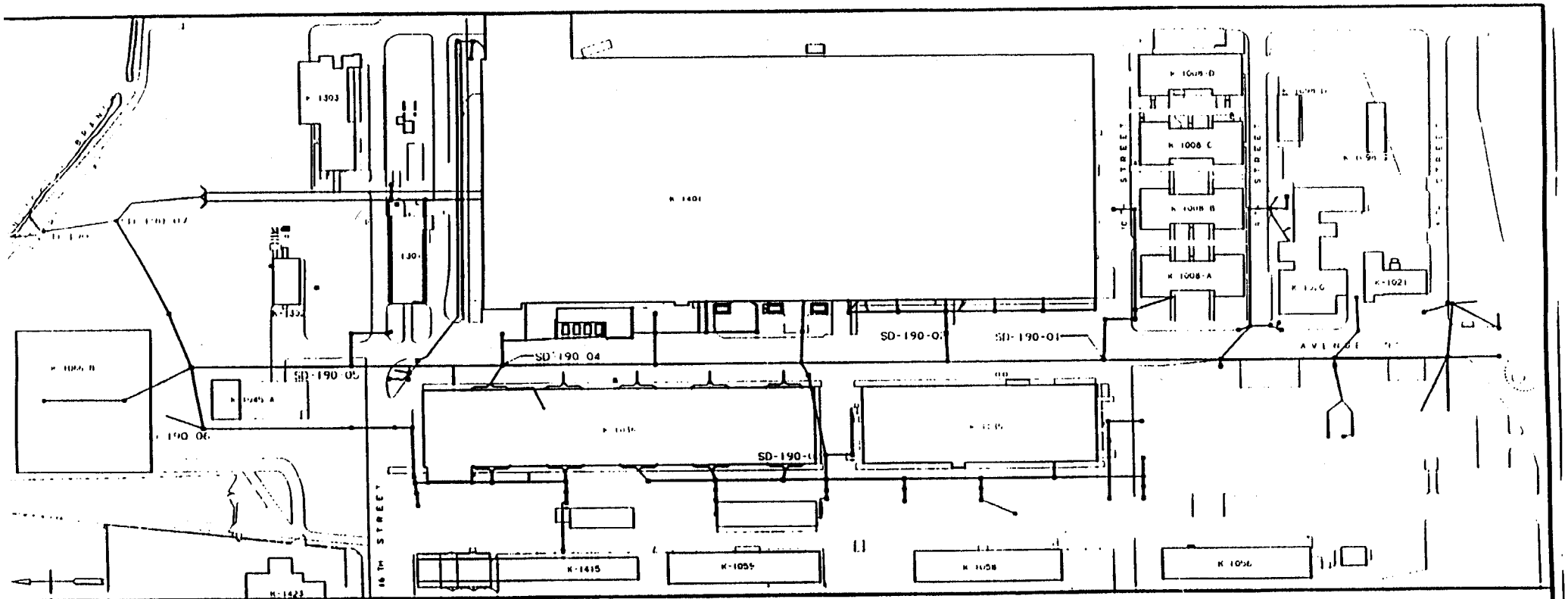


Fig. 4 **STORM DRAIN SYSTEM SD-190**

EVALUATION STANDARDS

A. GENERAL

Knowledge of the storm drain system plays an important role in establishing storm drain categories. But, this information is better defined and validated by conducting a sampling program directed at the storm drain discharges. In comparing the results to regulatory guidelines and limitations, the plant storm drains can be evaluated and efforts directed toward the source of significant contaminant levels.

B. CLASSIFICATION

Storm drains are classified according to the source of the effluent flowing in them. The definitions for storm drain categories are listed below:

1. Category I - This includes those drains which have been installed for the purpose of controlling rain water and subsurface runoff.

2. Category II - Includes services such as building roof drains, parking lot runoff, cooling water discharges, and other effluents with virtually no potential for chemical contamination from active processes.

3. Category III - Includes drains from buildings having some potential for process effluent.

C. GUIDELINES

In order to apply guidelines to most of the parameters obtained during the storm drain characterization, several regulatory limitations and guidelines were reviewed and a composite guideline table developed. These values are listed in Table 4. The intent was not to establish limits for the storm drains but to provide a review standard and concentrate efforts on a critical few drains. In most cases, the lowest value from all sources was chosen to be used for storm drain discharge guidelines.

RESULTS

A. DATA REVIEW

A summary of all data collected from the storm drain discharges is listed in Table 5. This table allows for a review of parameters to

Table 4. Storm Drain Effluent Review Guidelines

Parameter	Limit (mg/l)	Reference Table[1]
Cadmium	0.69	B
Lead	0.60	A
Zinc	1.52	F
Cyanide	1.20	B
Copper	1.0	C, E
Nickel	3.98	B
Chromium	0.05	D, F
Silver	0.027	F
Total Suspended Solids	50[2]	F
Oil & Grease	15	F
Iron	1.0	C
Total Residual Chlorine	0.24	F
Arsenic	0.05	D
Barium	1.0	D
Fluoride	1.4	D
Mercury	0.002	D
Nitrate	20.0	F
Selenium	0.01	D
G-Alpha	15 pCi/l	D
G-Beta	50 pCi/l	D
Chloride	250.0	E
pH	6.5-8.5	E
Total Dissolved Solids	500	E
Aluminum	1.0	F
Beryllium	0.002	F
Chemical Oxygen Demand	25.0	F
Sulphate	250	E

[1]A Electroplating Point Soruce Category Limitations
B Metal Finishing Point Source Category Limitations
C Steam and Electric Power Generating Point Source Category Limitations
D Primary Drinking Water Standards
E Secondary Drinking Water Standards
F ORGDP NPDES Effluent Limitations

Table 5. Storm Drain Effluent Summary

Parameter	Concentration Average	Maximun	Minimun	Units
1 1 1-TRICHLOROETHANE	8.97	170	<1	ug/L
1 1 2 2-TETRACHLOROETHANE	<5	<5	<5	ug/L
1 1 2-TRICHLOROETHANE	4.98	5	<1	ug/L
1 1-DICHLOROETHANE	5.31	22	<3	ug/L
1 1-DICHLOROETHENE	5.06	18	<4	ug/L
1 2 4-TRICHLOROBENZENE	<12	<12	<12	ug/L
1 2-DICHLOROBENZENE	<12	<12	<12	ug/L
1 2-DICHLOROETHANE	4.98	5	<1	ug/L
1 2-DICHLOROPROPANE	<5	<5	<5	ug/L
1 3-DICHLOROBENZENE	<12	<12	<12	ug/L
1 4-DICHLOROBENZENE	<12	<12	<12	ug/L
2 4 6-TRICHLOROPHENOL	<12	<12	<12	ug/L
2 4-DICHLOROPHENOL	<12	<12	<12	ug/L
2 4-DIMETHYLPHENOL	9.64	12	<1	ug/L
2 4-DINITROPHENOL	<25	<25	<25	ug/L
2 4-DINITROTOLUENE	<12	<12	<12	ug/L
2 6-DINITROTOLUENE	<12	<12	<12	ug/L
2-BUTANONE	11.30	13	8	ug/L
2-CHLOROETHYLVINYL ETHER	<10	<10	<10	ug/L
2-CHLORONAPHTHALENE	<12	<12	<12	ug/L
2-CHLOROPHENOL	<12	<12	<12	ug/L
2-HEXANONE	<10	<10	<10	ug/L
2-METHYLNAPHTHALENE	1.00	1	1	ug/L
2-NITROPHENOL	<12	<12	<12	ug/L
3 3'-DICHLOROBENZIDINE	<24	<24	<24	ug/L
4 6-DINITRO-2-METHYLPHENOL	<59	<59	<59	ug/L
4-BROMOPHENYL-PHENYLETHER	<12	<12	<12	ug/L
4-CHLORO-3-METHYLPHENOL	<12	<12	<12	ug/L
4-CHLOROPHENYL-PHENYLETHER	<12	<12	<12	ug/L
4-METHYL-2-PENTANONE	<10	<10	<10	ug/L
4-NITROPHENOL	<59	<59	<59	ug/L
ACENAPHTHENE	<12	<12	<12	ug/L
ACENAPHTHYLENE	<12	<12	<12	ug/L
ACETONE	11.00	14	3	ug/L
ACETOPHENONE	1.00	1	1	ug/L
ALIPHATIC HYDROCARBON	8.50	14	6	ug/L
ALIPHATIC HYDROCARBONS	36.67	72	13	ug/L
ALKALINITY	112.07	257	<1	ug/L
ALKYL/ALKOXY COMPOUND	9.00	9	9	ug/L
ALKYL/ALKOXY COMPOUNDS	8.00	8	8	ug/L
ALPHA	18.69	673	<1	pCi/L
ALUMINUM	0.6454	44	<.02	mg/L
AMMONIA	0.2222	2.8	<.2	ug/L
ANTHRACENE	<12	<12	<12	ug/L
AROMATIC HYDROCARBONS	220.00	220	220	ug/L
ARSENIC	0.0055	.055	<.005	mg/L
BARIUM	0.1005	.2	<.026	mg/L
BENZENE	4.96	5	<1	ug/L
BENZIDINE	<12	<12	<12	ug/L

Table 5. Storm Drain Effluent Summary - Cont.

Parameter	Concentration Average	Maximun	Minimun	Units
BENZO(A)ANTHRACENE	<12	<12	<12	ug/L
BENZO(A)PYRENE	<12	<12	<12	ug/L
BENZO(B)FLUORANTHENE	<12	<12	<12	ug/L
BENZO(G H I)PERYLENE	<12	<12	<12	ug/L
BENZO(K)FLUORANTHENE	<12	<12	<12	ug/L
BENZYL ALCOHOL	1.75	4	1	ug/L
BERYLLIUM	0.0010	.0055	<.0003	mg/L
BETA	22.49	377.1	<2	ug/L
BHT	15.44	52	3	ug/L
BIS(2-CHLOROETHOXY)METHANE	<12	<12	<12	ug/L
BIS(2-CHLOROETHYL)ETHER	<12	<12	<12	ug/L
BIS(2-CHLOROISOPROPYL)ETHER	<12	<12	<12	
BIS(2-ETHYLHEXYL)PHTHALATE	12.16	230	<.8	ug/L
BORON	0.0313	.64	<.004	ug/L
BROMODICHLOROMETHANE	5.26	16	<1	ug/L
BROMOFORM	<5.00	<5	<5	ug/L
BROMOMETHANE	<10	<10	<10	ug/L
BUTYL CARBITOL	495.50	990	1	ug/L
BUTYL CELLOSOLVE	22.00	38	6	ug/L
BUTYLBENZYLPHTHALATE	7.23	12	<.2	ug/L
CADMIUM	0.0030	.006	<.003	mg/L
CALCIUM	43.72	180	8	mg/L
CARBITOL	16.00	16	16	ug/L
CARBON DISULFIDE	2.00	5	<1	ug/L
CARBON TETRACHLORIDE	<5	<5	<5	ug/L
CHEMICAL OXYGEN DEMAND (COD)	11.75	97	<2.5	mg/L
CHLORIDE	50.59	4800	<1	ug/L
CHLORINATED HYDROCARBON	3.00	3	3	ug/L
CHLORINE TOTAL RESIDUAL WATER	0.1840	3.1	<.1	ug/L
CHLORO CYCLOHEXANOL	700.00	700	700	ug/L
CHLORO CYCLOHEXANONE	40.00	40	40	ug/L
CHLORO CYCLOHEXENE	60.00	60	60	ug/L
CHLOROBENZENE	<5	<5	<5	ug/L
CHLOROETHANE	<10	<10	<10	ug/L
CHLOROFORM	9.85	70	<1	ug/L
CHLOROMETHANE	<10	<10	<10	ug/L
CHROMIUM	0.0105	.032	<.01	mg/L
CHRYSENE	9.66	12	<3	ug/L
CIS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
COBALT	<.2	<.2	<.2	mg/L
CONDUCTIVITY	515.95	21600	68	umho/cm
COPPER	0.0097	.097	<.004	mg/L
CYANIDE	0.0058	.12	<.001	ug/L
DI-N-BUTYLPHTHALATE	9.38	12	<1	ug/L
DI-N-OCTYLPHTHALATE	5.48	10	<.1	ug/L
DIACETONE ALCOHOL	15.42	120	1	ug/L
DIACETONE ALCOHOLZ	19.00	19	19	ug/L
DIBENZ(A H)ANTHRACENE	<12	<12	<12	ug/L

Table 5. Storm Drain Effluent Summary - Cont.

Parameter	Concentration Average	Maximun	Minimun	Units
DIBROMOCHLOROMETHANE	5.00	14	<1	ug/L
DICHLORO CYCLOHEXANE	260.00	260	260	ug/L
DICHLOROFLUOROMETHANE	21.00	21	21	ug/L
DIETHYLPHTHALATE	8.61	12	<.3	ug/L
DIMETHYLPHTHALATE	<12	<12	<12	ug/L
DISSOLVED OXYGEN	10.31	20	6.2	ug/L
ETHYLBENZENE	<5	<5	<5	ug/L
FLUORANTHENE	<12	<12	<12	ug/L
FLUORENE	<12	<12	<12	ug/L
FLUORIDE	0.2251	1.2	<.1	mg/L
FREON 113	12.80	37	1	ug/L
FREON 123	10.67	16	7	ug/L
HARDNESS	162.73	643	29	mg/L
HEXACHLOROBENZENE	<12	<12	<12	ug/L
HEXACHLOROBUTADIENE	<12	<12	<12	ug/L
HEXACHLOROCYCLOPENTADIENE	<12	<12	<12	ug/L
HEXACHLOROETHANE	<12	<12	<12	ug/L
INDENO(1 2 3-CD)PYRENE	<12	<12	<12	ug/L
IRON	1.24	86	<.025	mg/L
ISOPHORONE	<12	<12	<12	ug/L
LEAD	<.1	<.1	<.1	mg/L
LITHIUM	0.0062	.12	<.004	mg/L
MAGNESIUM	9.91	53	.9	mg/L
MANGANESE	0.2018	4.4	<.0029	mg/L
MERCURY	0.0002	.0008	<.0002	mg/L
METHYLENE CHLORIDE	12.60	1200	<1	ug/L
MOLYBDENUM	0.0107	.023	<.01	ug/L
N-NITROSO-DI-N-PROPYLAMINE	<12	<12	<12	ug/L
N-NITROSODIMETHYLAMINE	<12	<12	<12	ug/L
N-NITROSODIPHENYLAMINE	<12	<12	<12	ug/L
NAPHTHALENE	9.64	12	<1	ug/L
NICKEL	0.0496	.1	<.01	mg/L
NIOBIUM	0.0074	.016	<.007	mg/L
NITRATE	2.00	10	<.2	mg/L
NITROBENZENE	<12	<12	<12	ug/L
OIL & GREASE	4.14	315	<2	ug/L
PALMITIC ACID	3.00	3	3	ug/L
PCB (AROCLOR-1016)	<5	<5	<5	ug/L
PCB (AROCLOR-1221)	<5	<5	<5	ug/L
PCB (AROCLOR-1232)	<5	<5	<5	ug/L
PCB (AROCLOR-1242)	<5	<5	<5	ug/L
PCB (AROCLOR-1248)	<5	<5	<5	ug/L
PCB (AROCLOR-1254)	<10	<10	<10	ug/L
PCB (AROCLOR-1260)	<10	<10	<10	ug/L
PENTACHLOROPHENOL	<59	<59	<59	ug/L
PH	7.64	9.3	<1	
PHENANTHRENE	12.33	280	<5	ug/L
PHENOL	<12	<12	<12	ug/L

Table 5. Storm Drain Effluent Summary - Cont.

Parameter	Concentration Average	Maximun	Minimun	Units
PHOSPHORUS	0.2646	4.1	<.2	mg/L
POTASSIUM	2.57	12	<.6	mg/L
PROMETON	1.92	4	1	ug/L
PYRENE	<12	<12	<12	ug/L
SELENIUM	0.0050	.008	<.005	mg/L
SILICON	2.27	22	<.03	mg/L
SILVER	0.0102	.043	<.006	mg/L
SODIUM	39.13	3600	.21	mg/L
STRONTIUM	0.1467	2	.0072	ug/L
STYRENE	<5	<5	<5	ug/L
SUBSTITUTED DIPHENYL PHOSPHATE	28.50	200	4	ug/L
SUBSTITUTED HEXANEDIOATE ESTER	6.00	6	6	ug/L
SUBSTITUTED HYDROCARBON	10.00	10	10	ug/L
SUBSTITUTED PHOSPHATE ESTER	4.00	4	4	ug/L
SULFATE	62.33	1280	3.4	ug/L
SULFUR	1.50	2	1	ug/L
TEMPERATURE	13.29	24	5	Deg. C
TETRACHLOROETHENE	5.65	110	<1	ug/L
THORIUM	<.4	<.4	<.4	mg/L
TITANIUM	0.0073	.11	<.003	
TOLUENE	4.69	6	<1	ug/L
TOTAL DISSOLVED SOLIDS	297.80	9748	14	mg/L
TOTAL ORGANIC CARBON (TOC)	14.19	115	1	mg/L
TOTAL SUSPENDED SOLIDS	15.70	878	<1	ug/L
TOTAL XYLENES	<5	<5	<5	ug/L
TRANS-1 2-DICHLOROETHENE	7.79	110	<3	ug/L
TRANS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
TRICHLOROETHENE	11.67	330	<2	ug/L
TRICHLOROFLUOROMETHANE	1.00	1	1	ug/L
TURBIDITY	11.15	180	<.35	ug/L
URANIUM	0.0261	1.196	<.001	mg/L
VANADIUM	<1	<1	<1	ug/L
VINYL ACETATE	<10	<10	<10	ug/L
VINYL CHLORIDE	9.99	18	<5	ug/L
XYLENE (TOTAL)	1.00	1	1	ug/L
ZINC	0.0584	.49	<.011	mg/L
ZIRCONIUM	0.9120	.01	<.005	mg/L

determine which are of concern. The value of this summary table becomes evident when individual storm drain discharge summaries, located in Appendix A, are reviewed.

Individual parameters of concern were determined by comparing the summary table to the storm drain guidelines listed in Table 4. Individual samples above guidelines were identified and listed in Table 6. One hundred and seventy-two analyses exceeded the initial guidelines established, which represents less than 1 percent of the total analyses performed.

The information from Table 6 was utilized in conjunction with the Phase 2 data, flow characteristics (number of samples), and understanding of the storm drains to provide the evaluations discussed below. A summary of elevated contaminants exhibited at the discharge of each storm drain is listed in Table 7 along with the source of effluents.

B. GENERAL TRENDS

General trends were evident when the data was reviewed. Total residual chlorine levels were elevated at numerous locations throughout the plant site. This is the result of potable water discharge which is utilized extensively throughout the plant for once through cooling water. The practice is typical among industry and generally does not pose a hazard.

Elevated aluminum levels can be seen on select drains and is usually accompanied by rain. All drains exhibiting aluminum do not exhibit the same comparative levels with the same rain. This phenomena is attributed to soils washed into the drains and has been observed at the K-1700 (001) NPDES point for some time. A separate study reviewed this phenomenon.

C. PROCESS SOURCES

Only one process discharge, coal-pile runoff, has been confirmed discharging directly to a storm drain, and the situation has been eliminated. Further review and investigation will be conducted to verify that all process contaminant sources have been identified. Any additional process discharges will be discussed in the NPDES permit application to be submitted in July 1988.

D. AREA SOURCES

1. General

Several area contaminant sources have been identified during this characterization. These sites are already part of the Remedial Action Program at ORGDP. The information obtained from this study

Table 6. Analysis Results Above Guidelines

Storm Drain	Date	Parameter	Result	Units
SD-104	3/24/87	Aluminum	1.5	mg/l
SD-162	4/14/87	Aluminum	1.5	mg/l
SD-170	4/14/87	Aluminum	1.2	mg/l
SD-170	5/22/87	Aluminum	2.9	mg/l
SD-170	7/10/87	Aluminum	1.1	mg/l
SD-180	4/3/87	Aluminum	1.6	mg/l
SD-180	4/14/87	Aluminum	12	mg/l
SD-180	6/17/87	Aluminum	2.4	mg/l
SD-190	3/19/87	Aluminum	1.3	mg/l
SD-190-C[1]	3/10/87	Aluminum	1.5	mg/l
SD-194	4/14/87	Aluminum	5.8	mg/l
SD-200	6/17/87	Aluminum	1.1	mg/l
SD-280	4/12/87	Aluminum	1.2	mg/l
SD-294	3/31/87	Aluminum	1.4	mg/l
SD-750	4/14/87	Aluminum	1.7	mg/l
SD-992	3/5/87	Aluminum	37	mg/l
SD-992	3/10/87	Aluminum	4	mg/l
SD-992	3/5/87	Arsenic	0.055	mg/l
SD-992	3/5/87	Beryllium	0.0050	mg/l
SD-992	3/10/87	Beryllium	0.0055	mg/l
SD-104	3/18/87	COD[2]	73	mg/l
SD-140	3/17/87	COD	36	mg/l
SD-142	3/2/87	COD	30	mg/l
SD-160	4/3/87	COD	34	mg/l
SD-162	4/14/87	COD	31	mg/l
SD-180	4/3/87	COD	31	mg/l
SD-180	5/28/87	COD	38	mg/l
SD-180-C	3/25/87	COD	27	mg/l
SD-280	4/12/87	COD	97	mg/l
SD-410	3/30/87	COD	46	mg/l
SD-410	4/14/87	COD	34	mg/l
SD-540	4/16/87	COD	59	mg/l
SD-550	4/16/87	COD	46	mg/l
SD-560	4/12/87	COD	27	mg/l
SD-590	4/16/87	COD	64	mg/l
SD-694	4/16/87	COD	54	mg/l
SD-700	3/16/87	COD	27	mg/l
SD-750	4/14/87	COD	27	mg/l
SD-104	4/3/87	Chloride	620	mg/l
SD-180	4/3/87	Chloride	840	mg/l
SD-280	4/12/87	Chloride	4800	mg/l

Table 6. Analysis Results Above Guidelines - cont.

Storm Drain	Date	Parameter	Result	Units
SD-104	3/24/87	Res Chlorine[3]	3.1	mg/l
SD-104	5/12/87	Res Chlorine	0.5	mg/l
SD-104	5/19/87	Res Chlorine	0.4	mg/l
SD-104	6/3/87	Res Chlorine	0.7	mg/l
SD-104	6/11/87	Res Chlorine	0.6	mg/l
SD-104	6/18/87	Res Chlorine	0.8	mg/l
SD-170	4/8/87	Res Chlorine	0.7	mg/l
SD-170	6/29/87	Res Chlorine	0.9	mg/l
SD-170	7/10/87	Res Chlorine	0.3	mg/l
SD-170	7/14/87	Res Chlorine	0.8	mg/l
SD-170-C	6/30/87	Res Chlorine	0.8	mg/l
SD-500	3/24/87	Res Chlorine	1.5	mg/l
SD-700	3/24/87	Res Chlorine	0.4	mg/l
SD-992	3/5/87	Res Chlorine	0.5	mg/l
SD-992	3/10/87	Res Chlorine	0.7	mg/l
SD-104	3/24/87	Iron	1.8	mg/l
SD-162	4/14/87	Iron	1.4	mg/l
SD-180	3/13/87	Iron	1.1	mg/l
SD-180	4/3/87	Iron	7.4	mg/l
SD-180	5/28/87	Iron	1.0	mg/l
SD-180-C	3/25/87	Iron	1.4	mg/l
SD-180-C	3/4/87	Iron	1.2	mg/l
SD-190-C	3/10/87	Iron	4.0	mg/l
SD-190-C	3/16/87	Iron	2.0	mg/l
SD-190-C	3/23/87	Iron	1.3	mg/l
SD-190-C	4/2/87	Iron	1.2	mg/l
SD-194	4/14/87	Iron	5.9	mg/l
SD-280	4/12/87	Iron	1.8	mg/l
SD-294	3/31/87	Iron	1.7	mg/l
SD-362	4/10/87	Iron	1.0	mg/l
SD-750	4/14/87	Iron	1.4	mg/l
SD-992	3/5/87	Iron	78	mg/l
SD-992	3/10/87	Iron	86	mg/l
SD-104	4/3/87	Alpha	65.7	pCi/l
SD-140	3/17/87	Alpha	33.4	pCi/l
SD-160	4/3/87	Alpha	252.2	pCi/l
SD-170	6/18/87	Alpha	18.2	pCi/l
SD-170-C	7/11/87	Alpha	25.7	pCi/l
SD-180	4/3/87	Alpha	73.3	pCi/l
SD-190	3/2/87	Alpha	42	pCi/l
SD-190	6/15/87	Alpha	61.6	pCi/l
SD-190-C	3/6/87	Alpha	26	pCi/l
SD-190-C	3/10/87	Alpha	33	pCi/l
SD-190-C	3/16/87	Alpha	46.4	pCi/l

Table 6. Analysis Results Above Guidelines - cont.

Storm Drain	Date	Parameter	Result	Unit
SD-190-C	3/23/87	Alpha	33.0	pCi/l
SD-190-C	4/2/87	Alpha	42.6	pCi/l
SD-190-C	4/10/87	Alpha	17.0	pCi/l
SD-190-C	5/12/87	Alpha	20.0	pCi/l
SD-194	3/9/87	Alpha	673	pCi/l
SD-194	4/14/87	Alpha	52.0	pCi/l
SD-200	3/9/87	Alpha	26.0	pCi/l
SD-200	4/14/87	Alpha	26.1	pCi/l
SD-280	4/12/87	Alpha	126.3	pCi/l
SD-294	3/16/87	Alpha	43.4	pCi/l
SD-294	3/25/87	Alpha	38.2	pCi/l
SD-294	3/31/87	Alpha	43.3	pCi/l
SD-294	4/7/87	Alpha	16.1	pCi/l
SD-362	4/10/87	Alpha	126.4	pCi/l
SD-380	3/19/87	Alpha	26.9	pCi/l
SD-724	3/30/87	Alpha	286.3	pCi/l
SD-780	3/30/87	Alpha	22.3	pCi/l
SD-830	3/12/87	Alpha	18	pCi/l
SD-830	3/19/87	Alpha	18.9	pCi/l
SD-830	3/30/87	Alpha	20.4	pCi/l
SD-104	4/3/87	Beta	59.7	pCi/l
SD-160	4/3/87	Beta	206.0	pCi/l
SD-170	6/12/87	Beta	71.9	pCi/l
SD-170	6/18/87	Beta	77.8	pCi/l
SD-170	6/24/87	Beta	78.9	pCi/l
SD-170-C	6/13/87	Beta	51.7	pCi/l
SD-170-C	6/19/87	Beta	56.4	pCi/l
SD-170	7/10/87	Beta	94.6	pCi/l
SD-170	7/11/87	Beta	94.7	pCi/l
SD-170	7/17/87	Beta	51.5	pCi/l
SD-180	4/3/87	Beta	60.4	pCi/l
SD-190	3/2/87	Beta	55	pCi/l
SD-190	6/15/87	Beta	61.9	pCi/l
SD-194	3/9/87	Beta	357	pCi/l
SD-362	4/10/87	Beta	140.7	pCi/l
SD-500	3/5/87	Beta	103	pCi/l
SD-500	3/11/87	Beta	126.9	pCi/l
SD-500	3/18/87	Beta	91.2	pCi/l
SD-500	3/24/87	Beta	97.8	pCi/l
SD-500	4/6/87	Beta	59.2	pCi/l
SD-724	3/30/87	Beta	377.1	pCi/l
SD-140	3/13/87	Oil & Grease	315.0	mg/l
SD-140	3/17/87	Oil & Grease	73.0	mg/l

Table 6. Analysis Results Above Guidelines - cont.

Storm Drain	Date	Parameter	Result	Unit
SD-100	6/18/87	pH	8.6	
SD-104	6/18/87	pH	8.6	
SD-162	4/14/87	pH	8.7	
SD-180	6/2/87	pH	8.5	
SD-180	6/19/87	pH	8.8	
SD-180-C	3/11/87	pH	8.8	
SD-180-C	6/10/87	pH	8.6	
SD-190	6/15/87	pH	8.5	
SD-690	3/24/87	pH	8.9	
SD-700	3/16/87	pH	8.6	
SD-700	3/24/87	pH	9.3	
SD-700	3/31/87	pH	9.3	
SD-700	4/9/87	pH	9.1	
SD-992	3/5/87	pH	2.6	
SD-992	3/10/87	pH	2.5	
SD-140	3/2/87	Sulphate	265.0	mg/l
SD-142	3/2/87	Sulphate	277.0	mg/l
SD-142	3/13/87	Sulphate	366.0	mg/l
SD-142	3/17/87	Sulphate	330.0	mg/l
SD-142	3/27/87	Sulphate	404.0	mg/l
SD-142	4/8/87	Sulphate	402.0	mg/l
SD-992	3/5/87	Sulphate	881.0	mg/l
SD-992	3/10/87	Sulphate	1280.0	mg/l
SD-104	4/3/87	TDS[4]	1096.0	mg/l
SD-140	3/2/87	TDS	648.9	mg/l
SD-140	3/13/87	TDS	575.0	mg/l
SD-140	3/17/87	TDS	622.0	mg/l
SD-140	3/27/87	TDS	608.0	mg/l
SD-142	3/2/87	TDS	590.0	mg/l
SD-142	3/13/87	TDS	748.0	mg/l
SD-142	3/17/87	TDS	718.0	mg/l
SD-142	3/27/87	TDS	822.0	mg/l
SD-142	4/8/87	TDS	814.0	mg/l
SD-180	4/3/87	TDS	1830.0	mg/l
SD-190	4/3/87	TDS	672.0	mg/l
SD-280	4/12/87	TDS	9728.0	mg/l
SD-992	3/5/87	TDS	1248.0	mg/l
SD-992	3/10/87	TDS	1320.0	mg/l

[1]"C" refers to a 24-hour composite sample.
[2]COD - Chemical Oxygen Demand
[3]Res Chlorine - Total Residual Chlorine
[4]TDS - Total Dissolved Solids

Table 7. Storm Drain Source and Contaminant Description

STORM DRAIN	CONTAMINANTS[1]	DRAINAGE SOURCES
100/104*	TDS, COD, G-Alpha, G-Beta, pH, Fe, Al, Cl, Res Cl	Groundwater, cooling tower blowdown, laboratory rinse discharges, once through cooling, roof drains, area runoff
140*	Sul, O&G, TDS, COD, G-Alpha, TOC	Groundwater, roof drains, area runoff (O&G elevated due to an oil spill 3/13/87)
142*	Sul, TDS, COD	Roof drains, area runoff
160	G-Alpha, G-Beta, COD	Oil storage area runoff, roof drains
162*	COD, Fe, Al, pH	Sludge fixation pour area drainage (limited use)
170*	G-Alpha, G-Beta, Al, Res Cl	Coal pile runoff (discontinued), once through cooling, cooling tower blowdown, roof drains, area runoff, groundwater
180*	TDS, COD, G-Alpha, G-Beta, pH, Fe, Al, Cl	Groundwater, garage area runoff, K-1401 floor drains, roof drains, once through cooling, area runoff
190*	TDS, G-Alpha, G-Beta, pH, Fe, Al	K-1401 floor drains, roof drains, once through cooling, area runoff
194*	G-Alpha, G-Beta, Fe, Al	Area runoff
200*	G-Alpha, Al	Roof drains, once through cooling, autoclave steam condensate (standby)
280*	Cl, TDS, COD, G-Alpha, Fe, Al	Salt storage area, classified scrap yard area runoff, Drum Deheading Area (discontinued)
294*	G-Alpha, Fe, Al	Classified scrap yard area runoff, vehicle wash down area
362*	G-Alpha, G-Beta, Fe	Roof drains, once through cooling, area runoff, autoclave steam condensate (standby)

Table 7. Storm Drain Source and Contaminant Description (continued)

STORM DRAIN	CONTAMINANTS[1]	DRAINAGE SOURCES
380	G-Alpha	Roof drains, area runoff, floor drains
410,540,550, 560,590, 694,	COD	K-31-K-33 area runoff
500	G-Beta, Res Cl	Roof drains, area runoff
690	pH	Roof drains, area runoff from firewater treatment
700	COD, pH, Res Cl	Roof drains, clarifier blow down, chromate reduction unit (standby), area runoff
724	G-Alpha, G-Beta	Contaminated scrap yard area runoff
750	COD, Fe, Al	Area runoff
780	G-Alpha	Powerhouse area runoff
830	G-Alpha	Powerhouse area runoff, once through cooling, building drains
992	Ar, Be, Sul, TDS, pH, Fe, Al, Res Cl	Powerhouse ash pile, area runoff

[1]Ar - Arsenic
Cl - Chloride
Be - Beryllium
Sul - Sulphate
Meth - Methylene Chloride
O&G - Oil and Grease
TDS - Total Dissolved Solids
COD - Chemical Oxygen Demand
G-Alpha - Gross Alpha
B-Beta - Gross Beta
TSS - Total Suspended Solids
TOC - Total Organic Carbon
pH - pH
Fe - Iron
Al - Aluminum

will be incorporated into the remedial investigation portion of the program which consists of collecting all necessary information to characterize potential sites. Additional information from all sites, with potential surface water discharge pathways, will be collected during the investigation. This information will be incorporated into the storm drain data base.

2. Classified Burial Ground/Garage Area - (SD-180)

Iron, total dissolved solids, and chemical oxygen demand are the elevated contaminants exiting this site. Evidence of these contaminants are seen in Storm Drains SD-100, SD-170, and SD-180. The highest levels of the contaminants are experienced at a spring (SD-180-04) west of the burial ground, below the garage area.

3. Ash Pile at the Powerhouse - (SD-992)

The elevated contaminants being discharged from this site are: aluminum, arsenic, beryllium, iron, residual chlorine, pH, sulfates, and total dissolved solids. This ash pile is a remnant from the old powerhouse electrical power generation operation.

4. Classified Scrap Yard - (SD-280, SD-294)

The elevated contaminants being discharged from this site are: aluminum, iron, G-Alpha, total dissolved solids, and chloride. Various metallic classified components are stored at this site; salt is stored for winter use.

5. Alpha and Beta Contamination

Several locations within ORGDP are exhibiting elevated levels of gross alpha and beta (Table 7). These areas all have had past activities relating to the gaseous diffusion cascade and would be expected to have some elevated levels. Again, these sites are included in the ORGDP Remedial Action Program.

CATEGORIES

Many of the storm drains exiting the ORGDP site are within Category II because they receive building roof discharges. A final declaration of categories is listed in Table 8. Any changes in this table will be accompanied by an explanation submitted with the July 1988 permit application; however, no changes are anticipated.

Table 8. Storm Drain Categories

Storm Drain	Category	Receiving Stream
100/104	III	K-1007B Pond/Poplar Creek
110	II	K-1007B Pond/Poplar Creek
120	II	K-1007B Pond/Poplar Creek
124	II	K-1007B Pond/Poplar Creek
130	II	K-1007B Pond/Poplar Creek
140	III	Mitchell Branch
142	III	Mitchell Branch
144	III	Mitchell Branch
148	II	Mitchell Branch
150	II	Mitchell Branch
152	II	Mitchell Branch
160	II	Mitchell Branch
162	III	Mitchell Branch
168	II	Mitchell Branch
170	III	Mitchell Branch
180	III	Mitchell Branch
190	III	Mitchell Branch
192	I	Mitchell Branch
194	I	Mitchell Branch
200	II	Mitchell Branch
210	II	Mitchell Branch
220	I	Mitchell Branch
230	II	~~Mitchell Branch~~
240	I	Poplar Creek
242	I	Poplar Creek
250	II	Poplar Creek
252	I	Poplar Creek
260	I	Poplar Creek
270	I	Poplar Creek
280	II	Poplar Creek
290	I	Poplar Creek
292	I	Poplar Creek

Table 8. Storm Drain Categories - cont.

Storm Drain	Category	Receiving Stream
294	II	Poplar Creek
300	I	Poplar Creek
310	II	Poplar Creek
320	I	Poplar Creek
324	I	Poplar Creek
326	I	Poplar Creek
330	II	Poplar Creek
332	I	Poplar Creek
334	I	Poplar Creek
340	II	Poplar Creek
350	I	Poplar Creek
352	I	Poplar Creek
360	II	Poplar Creek
362	II	Poplar Creek
364	II	Poplar Creek
370	II	Poplar Creek
380	II	Poplar Creek
382	II	Poplar Creek
384	II	Poplar Creek
390	I	Poplar Creek
400	I	Poplar Creek
410	I	Poplar Creek
420	I	Poplar Creek
430	I	Poplar Creek
440	II	Poplar Creek
450	II	Poplar Creek
460	I	Poplar Creek
470	II	Poplar Creek
480/490/500	II	K-1007-B Pond/Poplar Creek
510	II	Poplar Creek
520	II	Poplar Creek
522	I	Poplar Creek

Table 8. Storm Drain Categories - cont.

Storm Drain	Category	Receiving Stream
530	I	Poplar Creek
532	I	Poplar Creek
540	I	Poplar Creek
550	I	Poplar Creek
560	II	Poplar Creek
570	I	Poplar Creek
580	I	Poplar Creek
590	II	Poplar Creek
600	II	Poplar Creek
610	II	Poplar Creek
620	I	Poplar Creek
630	II	Poplar Creek
640	II	Poplar Creek
650	II	Poplar Creek
660	II	Poplar Creek
670	II	Poplar Creek
680	II	Poplar Creek
690	II	Poplar Creek
692	II	Poplar Creek
694	I	Poplar Creek
696	I	Poplar Creek
700	III	K-901A Pond/Clinch River
704	I	K-901A Pond/Clinch River
710	II	K-901A Pond/Clinch River
712	I	K-901A Pond/Clinch River
720	II	Poplar Creek
724	I	Clinch River
730	I	Clinch River
740	I	Clinch River
750	I	Clinch River
760	I	Clinch River
770	I	Clinch River

Table 8. Storm Drain Categories - cont.

Storm Drain	Category	Receiving Stream
780	I	Clinch River
790	I	Clinch River
800	I	Clinch River
810	I	Clinch River
820	I	Clinch River
830	II	Clinch River
840	II	Clinch River
850	II	Clinch River
860	II	Clinch River
870	II	Clinch River
880	II	Clinch River
890	II	Clinch River
900	I	Poplar Creek
910	I	Poplar Creek
920	I	Poplar Creek
930	I	Poplar Creek
940	I	Poplar Creek
950	I	Poplar Creek
960	I	Poplar Creek
970	I	Poplar Creek
980	I	Poplar Creek
990	I	Poplar Creek
992	I	Poplar Creek
994	I	Poplar Creek

SUMMARY:

No. of Drains	Category
9	III
51	II
60	I

SUMMARY

The storm drain characterization conducted at ORGDP proved very useful and successful. In addition to establishing a data base for future storm drain monitoring, data have been collected to supplement the Remedial Action Program and will continue to be added to the data base as the Remedial Investigation portion of the Remedial Action Program continues. Monitoring frequencies and protocols for ORGDP storm drains will be established during the permit renewal process which will be initiated July 1988.

The major points from the characterization are listed below:

1. Categories have been established for all ORGDP storm drains. (Primary Objective)

2. Monitoring frequency and sampling protocols for the storm drains will be established during the permit renewal July 1988 to February 1989.

3. Information on area contaminant sources have been obtained. (Secondary Objective) Area contaminant sources will be addressed under the ORGDP Remedial Action Program.

4. Further review and investigation will be conducted to verify that all process contaminant sources have been identified.

5. Potable water will continue to be utilized for once through cooling systems at ORGDP.

APPENDIX A

SD-100 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
1 1 1-TRICHLOROETHANE	5.18	7	<5	ug/L
1 1 2 2-TETRACHLOROETHANE	<5	<5	<5	ug/L
1 1 2-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHENE	<5	<5	<5	ug/L
1 2 4-TRICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROETHANE	<5	<5	<5	ug/L
1 2-DICHLOROPROPANE	<5	<5	<5	ug/L
1 3-DICHLOROBENZENE	<10	<10	<10	ug/L
1 4-DICHLOROBENZENE	<10	<10	<10	ug/L
2 4 6-TRICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DIMETHYLPHENOL	<10	<10	<10	ug/L
2 4-DINITROPHENOL	<25	<25	<25	ug/L
2 4-DINITROTOLUENE	<10	<10	<10	ug/L
2 6-DINITROTOLUENE	<10	<10	<10	ug/L
2-CHLOROETHYLVINYL ETHER	<10	<10	<10	ug/L
2-CHLORONAPHTHALENE	<10	<10	<10	ug/L
2-CHLOROPHENOL	<10	<10	<10	ug/L
2-NITROPHENOL	<10	<10	<10	ug/L
3 3'-DICHLOROBENZIDINE	<20	<20	<20	ug/L
4 6-DINITRO-2-METHYLPHENOL	<50	<50	<50	ug/L
4-BROMOPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-CHLORO-3-METHYLPHENOL	<10	<10	<10	ug/L
4-CHLOROPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-NITROPHENOL	<50	<50	<50	ug/L
ACENAPHTHENE	<10	<10	<10	ug/L
ACENAPHTHYLENE	<10	<10	<10	ug/L
ALKALINITY	98.67	104	93	mg/L
ALPHA	2.01	3.6	<1	pCi/L
ALUMINUM	0.0996	.13	<.055	mg/L
AMMONIA	0.2050	.26	<.2	mg/L
ANTHRACENE	<10	<10	<10	ug/L
ARSENIC	<.005	<.005	<.005	mg/L
BARIUM	0.0938	.1	<.026	mg/L
BENZENE	<5	<5	<5	ug/L
BENZIDINE	<10	<10	<10	ug/L
BENZO(A)ANTHRACENE	<10	<10	<10	ug/L
BENZO(A)PYRENE	<10	<10	<10	ug/L
BENZO(B)FLUORANTHENE	<10	<10	<10	ug/L
BENZO(G H I)PERYLENE	<10	<10	<10	ug/L
BENZO(K)FLUORANTHENE	<10	<10	<10	ug/L
BENZYL ALCOHOL	2.50	4	1	ug/L
BERYLLIUM	<.001	<.001	<.001	mg/L
BETA	3.88	7.5	<2	pCi/L
BIS(2-CHLOROETHOXY)METHANE	<10	<10	<10	ug/L
BIS(2-CHLOROETHYL)ETHER	<10	<10	<10	ug/L
BIS(2-CHLOROISOPROPYL)ETHER	<10	<10	<10	ug/L

SD-100 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
BIS(2-ETHYLHEXYL)PHTHALATE	<10	<10	<10	ug/L
BORON	0.0260	.099	<.004	mg/L
BROMODICHLOROMETHANE	8.36	16	5	ug/L
BROMOFORM	<5.00	<5	<5	ug/L
BROMOMETHANE	<10	<10	<10	ug/L
BUTYLBENZYLPHTHALATE	6.50	10	<1	ug/L
CADMIUM	<.003	<.003	<.003	mg/L
CALCIUM	32.83	35	29	mg/L
CARBITOL	16.00	16	16	ug/L
CARBON TETRACHLORIDE	<5	<5	<5	ug/L
CHEMICAL OXYGEN DEMAND (COD)	5.96	11	<4.5	mg/L
CHLORIDE	10.12	15.6	8.2	mg/L
CHLORINE TOTAL RESIDUAL WATER	0.1917	1	<.1	mg/L
CHLOROBENZENE	<5	<5	<5	ug/L
CHLOROETHANE	<10	<10	<10	ug/L
CHLOROFORM	20.73	36	13	ug/L
CHLOROMETHANE	<10	<10	<10	ug/L
CHROMIUM	<.01	<.01	<.01	mg/L
CHRYSENE	<10	<10	<10	ug/L
CIS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
COBALT	<.1	<.1	<.1	mg/L
CONDUCTIVITY	281.08	318	246	umho/cm
COPPER	0.0055	.013	<.004	mg/L
CYANIDE	0.0506	.12	<.002	mg/L
DI-N-BUTYLPHTHALATE	<10	<10	<10	ug/L
DI-N-OCTYLPHTHALATE	6.50	10	<1	ug/L
DIACETONE ALCOHOL	64.50	120	9	ug/L
DIBENZ(A H)ANTHRACENE	<10	<10	<10	ug/L
DIBROMOCHLOROMETHANE	7.27	14	<5	ug/L
DIETHYLPHTHALATE	<10	<10	<10	ug/L
DIMETHYLPHTHALATE	<10	<10	<10	ug/L
DISSOLVED OXYGEN	8.54	11.2	7.2	ppm
ETHYLBENZENE	<5	<5	<5	ug/L
FLUORANTHENE	<10	<10	<10	ug/L
FLUORENE	<10	<10	<10	ug/L
FLUORIDE	0.2000	1	<.1	mg/L
HARDNESS	166.00	586	118	mg/L
HEXACHLOROBENZENE	<10	<10	<10	ug/L
HEXACHLOROBUTADIENE	<10	<10	<10	ug/L
HEXACHLOROCYCLOPENTADIENE	<10	<10	<10	ug/L
HEXACHLOROETHANE	<10	<10	<10	ug/L
INDENO(1 2 3-CD)PYRENE	<10	<10	<10	ug/L
IRON	0.1866	.55	.073	mg/L
ISOPHORONE	<10	<10	<10	ug/L
LEAD	<.05	<.05	<.05	mg/L
LITHIUM	0.0049	.0061	<.004	mg/L
MAGNESIUM	9.43	11	8.2	mg/L
MANGANESE	0.0348	.08	.01	mg/L

SD-100 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
MERCURY	<.0002	<.0002	<.0002	mg/L
METHYLENE CHLORIDE	12.09	38	<5	ug/L
MOLYBDENUM	0.0106	.015	<.01	mg/L
N-NITROSO-DI-N-PROPYLAMINE	<10	<10	<10	ug/L
N-NITROSODIMETHYLAMINE	<10	<10	<10	ug/L
N-NITROSODIPHENYLAMINE	<10	<10	<10	ug/L
NAPHTHALENE	<10	<10	<10	ug/L
NICKEL	<.05	<.05	<.05	mg/L
NIOBIUM	0.0071	.0081	<.007	mg/L
NITRATE	2.09	3.3	1.3	mg/L
NITROBENZENE	<10	<10	<10	ug/L
OIL & GREASE	<2	<2	<2	mg/L
PCB (AROCLOR-1016)	<1	<1	<1	ug/L
PCB (AROCLOR-1221)	<1	<1	<1	ug/L
PCB (AROCLOR-1232)	<1	<1	<1	ug/L
PCB (AROCLOR-1242)	<1	<1	<1	ug/L
PCB (AROCLOR-1248)	<1	<1	<1	ug/L
PCB (AROCLOR-1254)	<1	<1	<1	ug/L
PCB (AROCLOR-1260)	<1	<1	<1	ug/L
PENTACHLOROPHENOL	<50	<50	<50	ug/L
PH	8.03	8.6	7.3	
PHENANTHRENE	<10	<10	<10	ug/L
PHENOL	<10	<10	<10	ug/L
PHOSPHORUS	0.4208	.64	<.2	mg/L
POTASSIUM	1.72	3.8	<.6	mg/L
PYRENE	<10	<10	<10	ug/L
SELENIUM	<0.0050	<.005	<.005	mg/L
SILICON	1.72	2.2	1.4	mg/L
SILVER	0.0107	.018	<.01	mg/L
SODIUM	7.43	16	5.5	mg/L
STRONTIUM	0.0723	.078	.064	mg/L
SULFATE	29.52	44	24	mg/L
TEMPERATURE	16.67	23	10	Deg. C
TETRACHLOROETHENE	<5	<5	<5	ug/L
THORIUM	<.2	<.2	<.2	mg/L
TITANIUM	0.0037	.0061	<.003	mg/L
TOLUENE	<5	<5	<5	ug/L
TOTAL DISSOLVED SOLIDS	150.00	206	54	mg/L
TOTAL ORGANIC CARBON (TOC)	9.89	26	1.4	mg/L
TOTAL SUSPENDED SOLIDS	2.75	12	<1	mg/L
TRANS-1 2-DICHLOROETHENE	<5	<5	<5	ug/L
TRANS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
TRICHLOROETHENE	<5.00	<5	<5	ug/L
TURBIDITY	2.83	8	1	NTU
UNKNOWNS	30.00	30	30	ug/L
URANIUM	0.0043	.026	<.001	mg/L
VANADIUM	<.5	<.5	<.5	mg/L
VINYL CHLORIDE	<10	<10	<10	ug/L

SD-100 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
ZINC	0.0323	.053	.02	mg/L
ZIRCONIUM	<.005	<.005	<.005	mg/L

SD-104 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
1 1 1-TRICHLOROETHANE	6.42	20	<5	ug/L
1 1 2 2-TETRACHLOROETHANE	<5	<5	<5	ug/L
1 1 2-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHENE	<5	<5	<5	ug/L
1 2 4-TRICHLOROBENZENE	<12	<12	<12	ug/L
1 2-DICHLOROBENZENE	<12	<12	<12	ug/L
1 2-DICHLOROETHANE	<5	<5	<5	ug/L
1 2-DICHLOROPROPANE	<5	<5	<5	ug/L
1 3-DICHLOROBENZENE	<12	<12	<12	ug/L
1 4-DICHLOROBENZENE	<12	<12	<12	ug/L
2 4 6-TRICHLOROPHENOL	<12	<12	<12	ug/L
2 4-DICHLOROPHENOL	<12	<12	<12	ug/L
2 4-DIMETHYLPHENOL	<12	<12	<12	ug/L
2 4-DINITROPHENOL	<25	<25	<25	ug/L
2 4-DINITROTOLUENE	<12	<12	<12	ug/L
2 6-DINITROTOLUENE	<12	<12	<12	ug/L
2-CHLOROETHYLVINYL ETHER	<10	<10	<10	ug/L
2-CHLORONAPHTHALENE	<12	<12	<12	ug/L
2-CHLOROPHENOL	<12	<12	<12	ug/L
2-NITROPHENOL	<12	<12	<12	ug/L
3 3'-DICHLOROBENZIDINE	<24	<24	<24	ug/L
4 6-DINITRO-2-METHYLPHENOL	<59	<59	<59	ug/L
4-BROMOPHENYL-PHENYLETHER	<12	<12	<12	ug/L
4-CHLORO-3-METHYLPHENOL	<12	<12	<12	ug/L
4-CHLOROPHENYL-PHENYLETHER	<12	<12	<12	ug/L
4-NITROPHENOL	<59	<59	<59	ug/L
ACENAPHTHENE	<12	<12	<12	ug/L
ACENAPHTHYLENE	<12	<12	<12	ug/L
ALKALINITY	93.08	102	69	mg/L
ALPHA	8.37	65.7	<1.9	pCi/L
ALUMINUM	0.2329	1.5	<.025	mg/L
AMMONIA	0.4167	2.8	<.2	mg/L
ANTHRACENE	<12	<12	<12	ug/L
ARSENIC	<.005	<.005	<.005	mg/L
BARIUM	0.0938	.1	<.026	mg/L
BENZENE	<5	<5	<5	ug/L
BENZIDINE	<12	<12	<12	ug/L
BENZO(A)ANTHRACENE	<12	<12	<12	ug/L
BENZO(A)PYRENE	<12	<12	<12	ug/L
BENZO(B)FLUORANTHENE	<12	<12	<12	ug/L
BENZO(G H I)PERYLENE	<12	<12	<12	ug/L
BENZO(K)FLUORANTHENE	<12	<12	<12	ug/L
BERYLLIUM	0.0009	.001	<.0003	mg/L
BETA	9.89	59.7	<2	pCi/L
BIS(2-CHLOROETHOXY)METHANE	<12	<12	<12	ug/L
BIS(2-CHLOROETHYL)ETHER	<12	<12	<12	ug/L
BIS(2-CHLOROISOPROPYL)ETHER	<12	<12	<12	ug/L

SD-104 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
BIS(2-ETHYLHEXYL)PHTHALATE	<12	<12	<12	ug/L
BORON	0.0158	.034	<.004	mg/L
BROMODICHLOROMETHANE	5.67	9	<5	ug/L
BROMOFORM	<5	<5	<5	ug/L
BROMOMETHANE	<10	<10	<10	ug/L
BUTYL CELLOSOLVE	38.00	38	38	ug/L
BUTYLBENZYLPHTHALATE	<12	<12	<12	ug/L
CADMIUM	0.0030	.0032	<.003	mg/L
CALCIUM	33.00	40	28	mg/L
CARBON TETRACHLORIDE	<5	<5	<5	ug/L
CHEMICAL OXYGEN DEMAND (COD)	13.21	73	<4.5	mg/L
CHLORIDE	69.91	620	8.4	mg/L
CHLORINE TOTAL RESIDUAL WATER	0.6500	3.1	<.1	mg/L
CHLORO CYCLOHEXANOL	700.00	700	700	ug/L
CHLORO CYCLOHEXANONE	40.00	40	40	ug/L
CHLORO CYCLOHEXENE	60.00	60	60	ug/L
CHLOROBENZENE	<5	<5	<5	ug/L
CHLOROETHANE	<10	<10	<10	ug/L
CHLOROFORM	33.75	70	12	ug/L
CHLOROMETHANE	<10	<10	<10	ug/L
CHROMIUM	<.01	<.01	<.01	mg/L
CHRYSENE	<12	<12	<12	ug/L
CIS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
COBALT	<.1	<.1	<.1	mg/L
CONDUCTIVITY	472.75	2150	248	umho/cm
COPPER	0.0063	.013	<.004	mg/L
CYANIDE	0.0048	.02	<.002	mg/L
DI-N-BUTYLPHTHALATE	<12	<12	<12	ug/L
DI-N-OCTYLPHTHALATE	4.25	10	<1	ug/L
DIACETONE ALCOHOL	36.50	67	6	ug/L
DIBENZ(A H)ANTHRACENE	<12	<12	<12	ug/L
DIBROMOCHLOROMETHANE	<5.00	<5	<5	ug/L
DICHLORO CYCLOHEXANE	260.00	260	260	ug/L
DIETHYLPHTHALATE	<12	<12	<12	ug/L
DIMETHYLPHTHALATE	<12	<12	<12	ug/L
DISSOLVED OXYGEN	8.54	11.3	7.2	ppm
ETHYLBENZENE	<5	<5	<5	ug/L
FLUORANTHENE	<12	<12	<12	ug/L
FLUORENE	<12	<12	<12	ug/L
FLUORIDE	0.1455	.6	<.1	mg/L
HARDNESS	134.67	186	114	mg/L
HEXACHLOROBENZENE	<12	<12	<12	ug/L
HEXACHLOROBUTADIENE	<12	<12	<12	ug/L
HEXACHLOROCYCLOPENTADIENE	<12	<12	<12	ug/L
HEXACHLOROETHANE	<12	<12	<12	ug/L
INDENO(1 2 3-CD)PYRENE	<12	<12	<12	ug/L
IRON	0.2700	1.8	<.025	mg/L
ISOPHORONE	<12	<12	<12	ug/L

SD-104 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
LEAD	<.05	<.05	<.05	mg/L
LITHIUM	0.0049	.0072	<.004	mg/L
MAGNESIUM	9.53	13	7.3	mg/L
MANGANESE	0.0182	.042	<.0029	mg/L
MERCURY	0.0002	.0008	<.0002	mg/L
METHYLENE CHLORIDE	16.75	46	<5	ug/L
MOLYBDENUM	0.0116	.023	<.01	mg/L
N-NITROSO-DI-N-PROPYLAMINE	<12	<12	<12	ug/L
N-NITROSODIMETHYLAMINE	<12	<12	<12	ug/L
N-NITROSODIPHENYLAMINE	<12	<12	<12	ug/L
NAPHTHALENE	<12	<12	<12	ug/L
NICKEL	<.05	<.05	<.05	mg/L
NIOBIUM	0.0070	.0072	<.007	mg/L
NITRATE	2.44	3.4	1.1	mg/L
NITROBENZENE	<12	<12	<12	ug/L
OIL & GREASE	<2	<2	<2	mg/L
PCB (AROCLOR-1016)	<1	<1	<1	ug/L
PCB (AROCLOR-1221)	<1	<1	<1	ug/L
PCB (AROCLOR-1232)	<1	<1	<1	ug/L
PCB (AROCLOR-1242)	<1	<1	<1	ug/L
PCB (AROCLOR-1248)	<1	<1	<1	ug/L
PCB (AROCLOR-1254)	<1	<1	<1	ug/L
PCB (AROCLOR-1260)	<1	<1	<1	ug/L
PENTACHLOROPHENOL	<59	<59	<59	ug/L
PH	8.12	8.6	7.5	
PHENANTHRENE	<12	<12	<12	ug/L
PHENOL	<12	<12	<12	ug/L
PHOSPHORUS	0.3817	.88	<.2	mg/L
POTASSIUM	2.35	5.1	<.6	mg/L
PYRENE	<12	<12	<12	ug/L
SELENIUM	<0.0050	<.005	<.005	mg/L
SILICON	1.83	3.4	1.4	mg/L
SILVER	0.0124	.043	<.006	mg/L
SODIUM	43.32	380	5.7	mg/L
STRONTIUM	0.0743	.092	.061	mg/L
SULFATE	31.28	66	18	mg/L
TEMPERATURE	16.75	23	11	Deg. C
TETRACHLOROETHENE	<5	<5	<5	ug/L
THORIUM	<.2	<.2	<.2	mg/L
TITANIUM	0.0074	.022	<.003	mg/L
TOLUENE	<5	<5	<5	ug/L
TOTAL DISSOLVED SOLIDS	280.00	1096	126	mg/L
TOTAL ORGANIC CARBON (TOC)	6.73	24	1.9	mg/L
TOTAL SUSPENDED SOLIDS	6.25	43	<1	mg/L
TRANS-1 2-DICHLOROETHENE	<5	<5	<5	ug/L
TRANS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
TRICHLOROETHENE	5.25	8	<5	ug/L
TURBIDITY	6.36	36	<.35	NTU

SD-104 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
UNKNOWNS	26.00	26	26	ug/L
URANIUM	0.0038	.012	<.001	mg/L
VANADIUM	<.5	<.5	<.5	mg/L
VINYL CHLORIDE	<10	<10	<10	ug/L
ZINC	0.0366	.094	.021	mg/L
ZIRCONIUM	<.005	<.005	<.005	mg/L

SD-130 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
1 1 1-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1 2 2-TETRACHLOROETHANE	<5	<5	<5	ug/L
1 1 2-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHENE	<5	<5	<5	ug/L
1 2 4-TRICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROETHANE	<5	<5	<5	ug/L
1 2-DICHLOROPROPANE	<5	<5	<5	ug/L
1 3-DICHLOROBENZENE	<10	<10	<10	ug/L
1 4-DICHLOROBENZENE	<10	<10	<10	ug/L
2 4 6-TRICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DIMETHYLPHENOL	<10	<10	<10	ug/L
2 4-DINITROPHENOL	<10	<10	<10	ug/L
2 4-DINITROTOLUENE	<10	<10	<10	ug/L
2 6-DINITROTOLUENE	<10	<10	<10	ug/L
2-CHLOROETHYLVINYL ETHER	<10	<10	<10	ug/L
2-CHLORONAPHTHALENE	<10	<10	<10	ug/L
2-CHLOROPHENOL	<10	<10	<10	ug/L
2-NITROPHENOL	<10	<10	<10	ug/L
3 3'-DICHLOROBENZIDINE	<20	<20	<20	ug/L
4 6-DINITRO-2-METHYLPHENOL	<50	<50	<50	ug/L
4-BROMOPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-CHLORO-3-METHYLPHENOL	<10	<10	<10	ug/L
4-CHLOROPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-NITROPHENOL	<50	<50	<50	ug/L
ACENAPHTHENE	<10	<10	<10	ug/L
ACENAPHTHYLENE	<10	<10	<10	ug/L
ALKALINITY	165.83	180	155	mg/L
ALPHA	3.10	5.6	<2	pCi/L
ALUMINUM	0.1483	.32	<.1	mg/L
AMMONIA	<.2	<.2	<.2	mg/L
ANTHRACENE	<10	<10	<10	ug/L
ARSENIC	<.005	<.005	<.005	mg/L
BARIUM	<.1	<.1	<.1	mg/L
BENZENE	<5	<5	<5	ug/L
BENZIDINE	<10	<10	<10	ug/L
BENZO(A)ANTHRACENE	<10	<10	<10	ug/L
BENZO(A)PYRENE	<10	<10	<10	ug/L
BENZO(B)FLUORANTHENE	<10	<10	<10	ug/L
BENZO(G H I)PERYLENE	<10	<10	<10	ug/L
BENZO(K)FLUORANTHENE	<10	<10	<10	ug/L
BENZYL ALCOHOL	1.00	1	1	ug/L
BERYLLIUM	<.001	<.001	<.001	mg/L
BETA	3.83	5.3	<2.7	pCi/L
BIS(2-CHLOROETHOXY)METHANE	<10	<10	<10	ug/L
BIS(2-CHLOROETHYL)ETHER	<10	<10	<10	ug/L

SD-130 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
BIS(2-CHLOROISOPROPYL)ETHER	<10	<10	<10	ug/L
BIS(2-ETHYLHEXYL)PHTHALATE	<10	<10	<10	ug/L
BORON	0.0078	.019	<.004	mg/L
BROMODICHLOROMETHANE	<5	<5	<5	ug/L
BROMOFORM	<5	<5	<5	ug/L
BROMOMETHANE	<10	<10	<10	ug/L
BUTYLBENZYLPHTHALATE	<10	<10	<10	ug/L
CADMIUM	<.003	<.003	<.003	mg/L
CALCIUM	44.67	46	42	mg/L
CARBON TETRACHLORIDE	<5	<5	<5	ug/L
CHEMICAL OXYGEN DEMAND (COD)	5.33	7	<5	mg/L
CHLORIDE	8.50	28	3.9	mg/L
CHLORINE TOTAL RESIDUAL WATER	<.1	<.1	<.1	mg/L
CHLOROBENZENE	<5	<5	<5	ug/L
CHLOROETHANE	<10	<10	<10	ug/L
CHLOROFORM	<5	<5	<5	ug/L
CHLOROMETHANE	<10	<10	<10	ug/L
CHROMIUM	<.01	<.01	<.01	mg/L
CHRYSENE	<10	<10	<10	ug/L
CIS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
COBALT	<.1	<.1	<.1	mg/L
CONDUCTIVITY	381.17	470	327	umho/cm
COPPER	0.0046	.006	<.004	mg/L
CYANIDE	<.002	<.002	<.002	mg/L
DI-N-BUTYLPHTHALATE	<10	<10	<10	ug/L
DI-N-OCTYLPHTHALATE	<10	<10	<10	ug/L
DIBENZ(A H)ANTHRACENE	<10	<10	<10	ug/L
DIBROMOCHLOROMETHANE	<5	<5	<5	ug/L
DIETHYLPHTHALATE	<10	<10	<10	ug/L
DIMETHYLPHTHALATE	<10	<10	<10	ug/L
DISSOLVED OXYGEN	9.70	13.5	6.7	ppm
ETHYLBENZENE	<5	<5	<5	ug/L
FLUORANTHENE	<10	<10	<10	ug/L
FLUORENE	<10	<10	<10	ug/L
FLUORIDE	0.1400	.2	<.1	mg/L
HARDNESS	199.00	210	192	mg/L
HEXACHLOROBENZENE	<10	<10	<10	ug/L
HEXACHLOROBUTADIENE	<10	<10	<10	ug/L
HEXACHLOROCYCLOPENTADIENE	<10	<10	<10	ug/L
HEXACHLOROETHANE	<10	<10	<10	ug/L
INDENO(1 2 3-CD)PYRENE	<10	<10	<10	ug/L
IRON	0.1717	.3	.12	mg/L
ISOPHORONE	<10	<10	<10	ug/L
LEAD	<.05	<.05	<.05	mg/L
LITHIUM	0.0041	.0045	<.004	mg/L
MAGNESIUM	16.67	18	15	mg/L
MANGANESE	0.0422	.047	.037	mg/L
MERCURY	<.0002	<.0002	<.0002	mg/L

SD-130 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
METHYLENE CHLORIDE	<5	<5	<5	ug/L
MOLYBDENUM	<0.0100	<.01	<.01	mg/L
N-NITROSO-DI-N-PROPYLAMINE	<10	<10	<10	ug/L
N-NITROSODIMETHYLAMINE	<10	<10	<10	ug/L
N-NITROSODIPHENYLAMINE	<10	<10	<10	ug/L
NAPHTHALENE	<10	<10	<10	ug/L
NICKEL	<.05	<.05	<.05	mg/L
NIOBIUM	0.0089	.016	<.007	mg/L
NITRATE	0.8333	1.1	<.5	mg/L
NITROBENZENE	<10	<10	<10	ug/L
OIL & GREASE	<2	<2	<2	mg/L
PCB (AROCLOR-1016)	<1	<1	<1	ug/L
PCB (AROCLOR-1221)	<1	<1	<1	ug/L
PCB (AROCLOR-1232)	<1	<1	<1	ug/L
PCB (AROCLOR-1242)	<1	<1	<1	ug/L
PCB (AROCLOR-1248)	<1	<1	<1	ug/L
PCB (AROCLOR-1254)	<1	<1	<1	ug/L
PCB (AROCLOR-1260)	<1	<1	<1	ug/L
PENTACHLOROPHENOL	<50	<50	<50	ug/L
PH	7.60	7.8	7.3	
PHENANTHRENE	<10	<10	<10	ug/L
PHENOL	<10	<10	<10	ug/L
PHOSPHORUS	<.2	<.2	<.2	mg/L
POTASSIUM	2.27	3.1	1.9	mg/L
PYRENE	<10	<10	<10	ug/L
SELENIUM	<0.0050	<.005	<.005	mg/L
SILICON	4.08	5.1	3.3	mg/L
SILVER	<.01	<.01	<.01	mg/L
SODIUM	4.43	12	2.5	mg/L
STRONTIUM	0.0837	.1	.067	mg/L
SULFATE	37.00	44	29	mg/L
TEMPERATURE	11.33	14	10	Deg. C
TETRACHLOROETHENE	<5	<5	<5	ug/L
THORIUM	<.2	<.2	<.2	mg/L
TITANIUM	0.0038	.0067	<.003	mg/L
TOLUENE	<5	<5	<5	ug/L
TOTAL DISSOLVED SOLIDS	228.00	250	190	mg/L
TOTAL ORGANIC CARBON (TOC)	14.83	45	4	mg/L
TOTAL SUSPENDED SOLIDS	5.67	8	4	mg/L
TRANS-1 2-DICHLOROETHENE	<5	<5	<5	ug/L
TRANS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
TRICHLOROETHENE	<5	<5	<5	ug/L
TURBIDITY	4.83	8	3	NTU
URANIUM	0.0028	.004	.002	mg/L
VANADIUM	<.5	<.5	<.5	mg/L
VINYL CHLORIDE	<10	<10	<10	ug/L
ZINC	<.02	<.02	<.02	mg/L
ZIRCONIUM	<.005	<.005	<.005	mg/L

SD-140 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
1 1 1-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1 2 2-TETRACHLOROETHANE	<5	<5	<5	ug/L
1 1 2-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHENE	<5	<5	<5	ug/L
1 2 4-TRICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROETHANE	<5	<5	<5	ug/L
1 2-DICHLOROPROPANE	<5	<5	<5	ug/L
1 3-DICHLOROBENZENE	<10	<10	<10	ug/L
1 4-DICHLOROBENZENE	<10	<10	<10	ug/L
2 4 6-TRICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DIMETHYLPHENOL	<10	<10	<10	ug/L
2 4-DINITROPHENOL	<10	<10	<10	ug/L
2 4-DINITROTOLUENE	<10	<10	<10	ug/L
2 6-DINITROTOLUENE	<10	<10	<10	ug/L
2-BUTANONE	10.00	10	10	ug/L
2-CHLOROETHYLVINYL ETHER	<10	<10	<10	ug/L
2-CHLORONAPHTHALENE	<10	<10	<10	ug/L
2-CHLOROPHENOL	<10	<10	<10	ug/L
2-NITROPHENOL	<10	<10	<10	ug/L
3 3'-DICHLOROBENZIDINE	<20	<20	<20	ug/L
4 6-DINITRO-2-METHYLPHENOL	<50	<50	<50	ug/L
4-BROMOPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-CHLORO-3-METHYLPHENOL	<10	<10	<10	ug/L
4-CHLOROPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-NITROPHENOL	<50	<50	<50	ug/L
ACENAPHTHENE	<10	<10	<10	ug/L
ACENAPHTHYLENE	<10	<10	<10	ug/L
ACETONE	13.00	13	13	ug/L
ALIPHATIC HYDROCARBONS	1100.00	1100	1100	ug/L
ALKALINITY	196.67	241	114	mg/L
ALPHA	8.90	33.4	<1	pCi/L
ALUMINUM	<.1	<.1	<.1	mg/L
AMMONIA	<.2	<.2	<.2	mg/L
ANTHRACENE	<10	<10	<10	ug/L
AROMATIC HYDROCARBONS	220.00	220	220	ug/L
ARSENIC	<.005	<.005	<.005	mg/L
BARIUM	<.1	<.1	<.1	mg/L
BENZENE	<5	<5	<5	ug/L
BENZIDINE	<10	<10	<10	ug/L
BENZO(A)ANTHRACENE	<10	<10	<10	ug/L
BENZO(A)PYRENE	<10	<10	<10	ug/L
BENZO(B)FLUORANTHENE	<10	<10	<10	ug/L
BENZO(G H I)PERYLENE	<10	<10	<10	ug/L
BENZO(K)FLUORANTHENE	<10	<10	<10	ug/L
BERYLLIUM	<.001	<.001	<.001	mg/L

SD-140 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
BETA	10.37	31.9	<2	pCi/L
BIS(2-CHLOROETHOXY)METHANE	<10	<10	<10	ug/L
BIS(2-CHLOROETHYL)ETHER	<10	<10	<10	ug/L
BIS(2-CHLOROISOPROPYL)ETHER	<10	<10	<10	ug/L
BIS(2-ETHYLHEXYL)PHTHALATE	11.50	22	1	ug/L
BORON	0.0438	.061	.019	mg/L
BROMODICHLOROMETHANE	<5	<5	<5	ug/L
BROMOFORM	<5	<5	<5	ug/L
BROMOMETHANE	<10	<10	<10	ug/L
BUTYLBENZYLPHTHALATE	5.50	10	<1	ug/L
CADMIUM	<.003	<.003	<.003	mg/L
CALCIUM	117.83	170	67	mg/L
CARBON TETRACHLORIDE	<5	<5	<5	ug/L
CHEMICAL OXYGEN DEMAND (COD)	10.17	36	<5	mg/L
CHLORIDE	9.48	13.5	3.1	mg/L
CHLORINE TOTAL RESIDUAL WATER	<.1	<.1	<.1	mg/L
CHLOROBENZENE	<5	<5	<5	ug/L
CHLOROETHANE	<10	<10	<10	ug/L
CHLOROFORM	4.50	5	<2	ug/L
CHLOROMETHANE	<10	<10	<10	ug/L
CHROMIUM	<.01	<.01	<.01	mg/L
CHRYSENE	6.50	10	<3	ug/L
CIS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
COBALT	<.1	<.1	<.1	mg/L
CONDUCTIVITY	741.50	823	436	umho/cm
COPPER	<.004	<.004	<.004	mg/L
CYANIDE	0.0027	.005	<.002	mg/L
DI-N-BUTYLPHTHALATE	<10	<10	<10	ug/L
DI-N-OCTYLPHTHALATE	5.50	10	<1	ug/L
DIACETONE ALCOHOL	8.00	8	8	ug/L
DIBENZ(A H)ANTHRACENE	<10	<10	<10	ug/L
DIBROMOCHLOROMETHANE	<5	<5	<5	ug/L
DIETHYLPHTHALATE	<10	<10	<10	ug/L
DIMETHYLPHTHALATE	<10	<10	<10	ug/L
DISSOLVED OXYGEN	9.60	14	7.8	ppm
ETHYLBENZENE	<5	<5	<5	ug/L
FLUORANTHENE	<10	<10	<10	ug/L
FLUORENE	<10	<10	<10	ug/L
FLUORIDE	0.5333	1.1	<.1	mg/L
HARDNESS	408.50	498	217	mg/L
HEXACHLOROBENZENE	<10	<10	<10	ug/L
HEXACHLOROBUTADIENE	<10	<10	<10	ug/L
HEXACHLOROCYCLOPENTADIENE	<10	<10	<10	ug/L
HEXACHLOROETHANE	<10	<10	<10	ug/L
INDENO(1 2 3-CD)PYRENE	<10	<10	<10	ug/L
IRON	0.0823	.11	<.05	mg/L
ISOPHORONE	<10	<10	<10	ug/L
LEAD	<.05	<.05	<.05	mg/L

SD-140 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
LITHIUM	0.0070	.0097	<.004	mg/L
MAGNESIUM	28.17	34	15	mg/L
MANGANESE	0.1663	.22	.068	mg/L
MERCURY	<.0002	<.0002	<.0002	mg/L
METHYLENE CHLORIDE	<5	<5	<5	ug/L
MOLYBDENUM	<.01	<.01	<.01	mg/L
N-NITROSO-DI-N-PROPYLAMINE	<10	<10	<10	ug/L
N-NITROSODIMETHYLAMINE	<10	<10	<10	ug/L
N-NITROSODIPHENYLAMINE	<10	<10	<10	ug/L
NAPHTHALENE	<10	<10	<10	ug/L
NICKEL	<.05	<.05	<.05	mg/L
NIOBIUM	<.007	<.007	<.007	mg/L
NITRATE	1.95	4.5	<.5	mg/L
NITROBENZENE	<10	<10	<10	ug/L
OIL & GREASE	66.00	315	<2	mg/L
PCB (AROCLOR-1016)	<5	<5	<5	ug/L
PCB (AROCLOR-1221)	<5	<5	<5	ug/L
PCB (AROCLOR-1232)	<5	<5	<5	ug/L
PCB (AROCLOR-1242)	<5	<5	<5	ug/L
PCB (AROCLOR-1248)	<5	<5	<5	ug/L
PCB (AROCLOR-1254)	<10	<10	<10	ug/L
PCB (AROCLOR-1260)	<10	<10	<10	ug/L
PENTACHLOROPHENOL	<50	<50	<50	ug/L
PH	7.80	7.9	7.7	
PHENANTHRENE	145.00	280	<10	ug/L
PHENOL	<10	<10	<10	ug/L
PHOSPHORUS	<.2	<.2	<.2	mg/L
POTASSIUM	6.23	7.9	3.5	mg/L
PYRENE	<10	<10	<10	ug/L
SELENIUM	<0.0050	<.005	<.005	mg/L
SILICON	3.52	4.8	1.6	mg/L
SILVER	<.01	<.01	<.01	mg/L
SODIUM	12.13	36	2.6	mg/L
STRONTIUM	0.5183	.7	.33	mg/L
SULFATE	207.33	265	94	mg/L
TEMPERATURE	12.00	14	9	Deg. C
TETRACHLOROETHENE	5.00	9	<1	ug/L
THORIUM	<.2	<.2	<.2	mg/L
TITANIUM	0.0055	.012	<.003	mg/L
TOLUENE	4.33	5	<1	ug/L
TOTAL DISSOLVED SOLIDS	534.67	648	270	mg/L
TOTAL ORGANIC CARBON (TOC)	46.50	115	2	mg/L
TOTAL SUSPENDED SOLIDS	1.17	2	<1	mg/L
TRANS-1 2-DICHLOROETHENE	<5	<5	<5	ug/L
TRANS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
TRICHLOROETHENE	<5	<5	<5	ug/L
TURBIDITY	2.00	7	<1	NTU
URANIUM	0.0038	.007	.001	mg/L

SD-140 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
VANADIUM	<.5	<.5	<.5	mg/L
VINYL CHLORIDE	<10	<10	<10	ug/L
ZINC	0.0920	.13	.053	mg/L
ZIRCONIUM	<.005	<.005	<.005	mg/L

SD-142 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
1 1 1-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1 2 2-TETRACHLOROETHANE	<5	<5	<5	ug/L
1 1 2-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHENE	<5	<5	<5	ug/L
1 2 4-TRICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROETHANE	<5	<5	<5	ug/L
1 2-DICHLOROPROPANE	<5	<5	<5	ug/L
1 3-DICHLOROBENZENE	<10	<10	<10	ug/L
1 4-DICHLOROBENZENE	<10	<10	<10	ug/L
2 4 6-TRICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DIMETHYLPHENOL	<10	<10	<10	ug/L
2 4-DINITROPHENOL	<10	<10	<10	ug/L
2 4-DINITROTOLUENE	<10	<10	<10	ug/L
2 6-DINITROTOLUENE	<10	<10	<10	ug/L
2-CHLOROETHYLVINYL ETHER	<10	<10	<10	ug/L
2-CHLORONAPHTHALENE	<10	<10	<10	ug/L
2-CHLOROPHENOL	<10	<10	<10	ug/L
2-NITROPHENOL	<10	<10	<10	ug/L
3 3'-DICHLOROBENZIDINE	<20	<20	<20	ug/L
4 6-DINITRO-2-METHYLPHENOL	<50	<50	<50	ug/L
4-BROMOPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-CHLORO-3-METHYLPHENOL	<10	<10	<10	ug/L
4-CHLOROPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-NITROPHENOL	<50	<50	<50	ug/L
ACENAPHTHENE	<10	<10	<10	ug/L
ACENAPHTHYLENE	<10	<10	<10	ug/L
ALKALINITY	186.67	239	92	mg/L
ALPHA	7.83	27	<3	pCi/L
ALUMINUM	0.2980	.82	<.1	mg/L
AMMONIA	<0.2000	<.2	<.2	mg/L
ANTHRACENE	<10	<10	<10	ug/L
ARSENIC	<.005	<.005	<.005	mg/L
BARIUM	<.1	<.1	<.1	mg/L
BENZENE	<5	<5	<5	ug/L
BENZIDINE	<10	<10	<10	ug/L
BENZO(A)ANTHRACENE	<10	<10	<10	ug/L
BENZO(A)PYRENE	<10	<10	<10	ug/L
BENZO(B)FLUORANTHENE	<10	<10	<10	ug/L
BENZO(G H I)PERYLENE	<10	<10	<10	ug/L
BENZO(K)FLUORANTHENE	<10	<10	<10	ug/L
BERYLLIUM	<.001	<.001	<.001	mg/L
BETA	8.67	34	<2	pCi/L
BIS(2-CHLOROETHOXY)METHANE	<10	<10	<10	ug/L
BIS(2-CHLOROETHYL)ETHER	<10	<10	<10	ug/L
BIS(2-CHLOROISOPROPYL)ETHER	<10	<10	<10	ug/L

SD-142 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
BIS(2-ETHYLHEXYL)PHTHALATE	6.00	10	<2	ug/L
BORON	0.0704	.13	<.004	mg/L
BROMODICHLOROMETHANE	<5	<5	<5	ug/L
BROMOFORM	<5	<5	<5	ug/L
BROMOMETHANE	<10	<10	<10	ug/L
BUTYLBENZYLPHTHALATE	<10	<10	<10	ug/L
CADMIUM	<.003	<.003	<.003	mg/L
CALCIUM	128.00	180	60	mg/L
CARBON TETRACHLORIDE	<5	<5	<5	ug/L
CHEMICAL OXYGEN DEMAND (COD)	10.00	30	<5	mg/L
CHLORIDE	5.52	7.2	2.1	mg/L
CHLORINE TOTAL RESIDUAL WATER	<1	<1	<1	mg/L
CHLOROBENZENE	<5	<5	<5	ug/L
CHLOROETHANE	<10	<10	<10	ug/L
CHLOROFORM	4.60	5	<3	ug/L
CHLOROMETHANE	<10	<10	<10	ug/L
CHROMIUM	0.0116	.018	<.01	mg/L
CHRYSENE	<10	<10	<10	ug/L
CIS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
COBALT	<.1	<.1	<.1	mg/L
CONDUCTIVITY	873.33	1110	438	umho/cm
COPPER	0.0080	.025	<.004	mg/L
CYANIDE	<0.0020	<.002	<.002	mg/L
DI-N-BUTYLPHTHALATE	5.50	10	<1	ug/L
DI-N-OCTYLPHTHALATE	5.50	10	<1	ug/L
DIACETONE ALCOHOLZ	19.00	19	19	ug/L
DIBENZ(A H)ANTHRACENE	<10	<10	<10	ug/L
DIBROMOCHLOROMETHANE	<5	<5	<5	ug/L
DIETHYLPHTHALATE	<10	<10	<10	ug/L
DIMETHYLPHTHALATE	<10	<10	<10	ug/L
DISSOLVED OXYGEN	12.52	16	11.2	ppm
ETHYLBENZENE	<5	<5	<5	ug/L
FLUORANTHENE	<10	<10	<10	ug/L
FLUORENE	<10	<10	<10	ug/L
FLUORIDE	0.9333	1.2	.8	mg/L
HARDNESS	506.50	643	222	mg/L
HEXACHLOROBENZENE	<10	<10	<10	ug/L
HEXACHLOROBUTADIENE	<10	<10	<10	ug/L
HEXACHLOROCYCLOPENTADIENE	<10	<10	<10	ug/L
HEXACHLOROETHANE	<10	<10	<10	ug/L
INDENO(1 2 3-CD)PYRENE	<10	<10	<10	ug/L
IRON	0.3536	.68	.098	mg/L
ISOPHORONE	<10	<10	<10	ug/L
LEAD	<.05	<.05	<.05	mg/L
LITHIUM	0.0084	.012	<.004	mg/L
MAGNESIUM	38.00	53	17	mg/L
MANGANESE	0.0176	.024	<.01	mg/L
MERCURY	0.0002	.0003	<.0002	mg/L

SD-142 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
METHYLENE CHLORIDE	<5	<5	<5	ug/L
MOLYBDENUM	<.01	<.01	<.01	mg/L
N-NITROSO-DI-N-PROPYLAMINE	<10	<10	<10	ug/L
N-NITROSODIMETHYLAMINE	<10	<10	<10	ug/L
N-NITROSODIPHENYLAMINE	<10	<10	<10	ug/L
NAPHTHALENE	<10	<10	<10	ug/L
NICKEL	<.05	<.05	<.05	mg/L
NIOBIUM	<.007	<.007	<.007	mg/L
NITRATE	3.95	8.2	1.7	mg/L
NITROBENZENE	<10	<10	<10	ug/L
OIL & GREASE	2.33	4	<2	mg/L
PCB (AROCLOR-1016)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1221)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1232)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1242)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1248)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1254)	<1	<1	<1	ug/L
PCB (AROCLOR-1260)	<1	<1	<1	ug/L
PENTACHLOROPHENOL	<50	<50	<50	ug/L
PH	7.86	8	7.5	
PHENANTHRENE	<10	<10	<10	ug/L
PHENOL	<10	<10	<10	ug/L
PHOSPHORUS	<.2	<.2	<.2	mg/L
POTASSIUM	6.48	9.1	3.3	mg/L
PYRENE	<10	<10	<10	ug/L
SELENIUM	<0.0050	<.005	<.005	mg/L
SILICON	2.52	3.2	2.1	mg/L
SILVER	<.01	<.01	<.01	mg/L
SODIUM	4.62	6.7	1.6	mg/L
STRONTIUM	1.53	2	.64	mg/L
SULFATE	315.83	404	116	mg/L
TEMPERATURE	10.50	13	9	Deg. C
TETRACHLOROETHENE	<5	<5	<5	ug/L
THORIUM	<.2	<.2	<.2	mg/L
TITANIUM	0.0088	.023	<.003	mg/L
TOLUENE	<5	<5	<5	ug/L
TOTAL DISSOLVED SOLIDS	661.33	822	276	mg/L
TOTAL ORGANIC CARBON (TOC)	27.67	58	1	mg/L
TOTAL SUSPENDED SOLIDS	18.83	37	<1	mg/L
TRANS-1 2-DICHLOROETHENE	<5	<5	<5	ug/L
TRANS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
TRICHLOROETHENE	<5	<5	<5	ug/L
TURBIDITY	15.00	50	<1	NTU
UNKNOWN	48.00	48	48	ug/L
URANIUM	0.0057	.008	.002	mg/L
VANADIUM	<.5	<.5	<.5	mg/L
VINYL CHLORIDE	<10	<10	<10	ug/L
ZINC	0.1326	.21	.058	mg/L

SD-142 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
ZIRCONIUM	<.005	<.005	<.005	mg/L

SD-144 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
1 1 1-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1 2 2-TETRACHLOROETHANE	<5	<5	<5	ug/L
1 1 2-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHENE	<5	<5	<5	ug/L
1 2 4-TRICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROETHANE	<5	<5	<5	ug/L
1 2-DICHLOROPROPANE	<5	<5	<5	ug/L
1 3-DICHLOROBENZENE	<10	<10	<10	ug/L
1 4-DICHLOROBENZENE	<10	<10	<10	ug/L
2 4 6-TRICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DIMETHYLPHENOL	<10	<10	<10	ug/L
2 4-DINITROPHENOL	<10	<10	<10	ug/L
2 4-DINITROTOLUENE	<10	<10	<10	ug/L
2 6-DINITROTOLUENE	<10	<10	<10	ug/L
2-CHLOROETHYLVINYL ETHER	<10	<10	<10	ug/L
2-CHLORONAPHTHALENE	<10	<10	<10	ug/L
2-CHLOROPHENOL	<10	<10	<10	ug/L
2-NITROPHENOL	<10	<10	<10	ug/L
3 3'-DICHLOROBENZIDINE	<20	<20	<20	ug/L
4 6-DINITRO-2-METHYLPHENOL	<50	<50	<50	ug/L
4-BROMOPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-CHLORO-3-METHYLPHENOL	<10	<10	<10	ug/L
4-CHLOROPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-NITROPHENOL	<50	<50	<50	ug/L
ACENAPHTHENE	<10	<10	<10	ug/L
ACENAPHTHYLENE	<10	<10	<10	ug/L
ALKALINITY	57.00	64	46	mg/L
ALPHA	8.00	24	<2	pCi/L
ALUMINUM	0.1475	.2	<.11	mg/L
AMMONIA	<.2	<.2	<.2	mg/L
ANTHRACENE	<10	<10	<10	ug/L
ARSENIC	<.005	<.005	<.005	mg/L
BARIUM	<.2	<.2	<.2	mg/L
BENZENE	<5	<5	<5	ug/L
BENZIDINE	<10	<10	<10	ug/L
BENZO(A)ANTHRACENE	<10	<10	<10	ug/L
BENZO(A)PYRENE	<10	<10	<10	ug/L
BENZO(B)FLUORANTHENE	<10	<10	<10	ug/L
BENZO(G H I)PERYLENE	<10	<10	<10	ug/L
BENZO(K)FLUORANTHENE	<10	<10	<10	ug/L
BERYLLIUM	<.002	<.002	<.002	mg/L
BETA	8.68	26	<2.7	pCi/L
BIS(2-CHLOROETHOXY)METHANE	<10	<10	<10	ug/L
BIS(2-CHLOROETHYL)ETHER	<10	<10	<10	ug/L
BIS(2-CHLOROISOPROPYL)ETHER	<10	<10	<10	ug/L

SD-144 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
BIS(2-ETHYLHEXYL)PHTHALATE	5.50	10	<1	ug/L
BORON	0.0115	.027	<.004	mg/L
BROMODICHLOROMETHANE	<5	<5	<5	ug/L
BROMOFORM	<5	<5	<5	ug/L
BROMOMETHANE	<10	<10	<10	ug/L
BUTYLBENZYLPHTHALATE	<10	<10	<10	ug/L
CADMIUM	<.006	<.006	<.006	mg/L
CALCIUM	24.50	44	16	mg/L
CARBON TETRACHLORIDE	<5	<5	<5	ug/L
CHEMICAL OXYGEN DEMAND (COD)	5.50	7	<5	mg/L
CHLORIDE	1.27	1.5	1.1	mg/L
CHLORINE TOTAL RESIDUAL WATER	<.1	<.1	<.1	mg/L
CHLOROBENZENE	<5	<5	<5	ug/L
CHLOROETHANE	<10	<10	<10	ug/L
CHLOROFORM	4.25	5	<2	ug/L
CHLOROMETHANE	<10	<10	<10	ug/L
CHROMIUM	<.02	<.02	<.02	mg/L
CHRYSENE	<10	<10	<10	ug/L
CIS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
COBALT	<.2	<.2	<.2	mg/L
CONDUCTIVITY	142.50	176	116	umho/cm
COPPER	0.0054	.0084	<.004	mg/L
CYANIDE	<0.0020	<.002	<.002	mg/L
DI-N-BUTYLPHTHALATE	<10	<10	<10	ug/L
DI-N-OCTYLPHTHALATE	5.50	10	<1	ug/L
DIBENZ(A H)ANTHRACENE	<10	<10	<10	ug/L
DIBROMOCHLOROMETHANE	<5	<5	<5	ug/L
DIETHYLPHTHALATE	<10	<10	<10	ug/L
DIMETHYLPHTHALATE	<10	<10	<10	ug/L
DISSOLVED OXYGEN	11.90	17.8	9.8	ppm
ETHYLBENZENE	<5	<5	<5	ug/L
FLUORANTHENE	<10	<10	<10	ug/L
FLUORENE	<10	<10	<10	ug/L
FLUORIDE	0.1500	.2	.1	mg/L
HARDNESS	76.50	84	67	mg/L
HEXACHLOROBENZENE	<10	<10	<10	ug/L
HEXACHLOROBUTADIENE	<10	<10	<10	ug/L
HEXACHLOROCYCLOPENTADIENE	<10	<10	<10	ug/L
HEXACHLOROETHANE	<10	<10	<10	ug/L
INDENO(1 2 3-CD)PYRENE	<10	<10	<10	ug/L
IRON	0.1115	.17	.073	mg/L
ISOPHORONE	<10	<10	<10	ug/L
LEAD	<.1	<.1	<.1	mg/L
LITHIUM	<.008	<.008	<.008	mg/L
MAGNESIUM	5.08	10	2.7	mg/L
MANGANESE	<.02	<.02	<.02	mg/L
MERCURY	<.0002	<.0002	<.0002	mg/L
METHYLENE CHLORIDE	<5.00	<5	<5	ug/L

SD-144 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
MOLYBDENUM	<.02	<.02	<.02	mg/L
N-NITROSO-DI-N-PROPYLAMINE	<10	<10	<10	ug/L
N-NITROSODIMETHYLAMINE	<10	<10	<10	ug/L
N-NITROSODIPHENYLAMINE	<10	<10	<10	ug/L
NAPHTHALENE	<10	<10	<10	ug/L
NICKEL	<.1	<.1	<.1	mg/L
NIOBIUM	<.014	<.014	<.014	mg/L
NITRATE	<.5	<.5	<.5	mg/L
NITROBENZENE	<10	<10	<10	ug/L
OIL & GREASE	<2	<2	<2	mg/L
PCB (AROCLOR-1016)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1221)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1232)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1242)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1248)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1254)	<1	<1	<1	ug/L
PCB (AROCLOR-1260)	<1	<1	<1	ug/L
PENTACHLOROPHENOL	<50	<50	<50	ug/L
PH	7.80	8	7.6	
PHENANTHRENE	<10	<10	<10	ug/L
PHENOL	<10	<10	<10	ug/L
PHOSPHORUS	<.4	<.4	<.4	mg/L
POTASSIUM	2.83	8	<.6	mg/L
PYRENE	<10	<10	<10	ug/L
SELENIUM	<0.0050	<.005	<.005	mg/L
SILICON	5.07	6.5	3.6	mg/L
SILVER	<.02	<.02	<.02	mg/L
SODIUM	2.35	2.8	2	mg/L
STRONTIUM	0.0760	.16	.043	mg/L
SULFATE	16.25	25	11	mg/L
TEMPERATURE	9.68	14.2	5	Deg. C
TETRACHLOROETHENE	<5	<5	<5	ug/L
THORIUM	<.4	<.4	<.4	mg/L
TITANIUM	0.0049	.0084	<.003	mg/L
TOLUENE	4.00	5	<1	ug/L
TOTAL DISSOLVED SOLIDS	95.50	114	76	mg/L
TOTAL ORGANIC CARBON (TOC)	7.75	13	4	mg/L
TOTAL SUSPENDED SOLIDS	3.50	6	2	mg/L
TRANS-1 2-DICHLOROETHENE	<5	<5	<5	ug/L
TRANS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
TRICHLOROETHENE	<5	<5	<5	ug/L
TURBIDITY	10.25	17	5	NTU
URANIUM	0.0025	.006	.001	mg/L
VANADIUM	<1	<1	<1	mg/L
VINYL CHLORIDE	<10	<10	<10	ug/L
ZINC	0.1680	.23	.092	mg/L
ZIRCONIUM	<.01	<.01	<.01	mg/L

SD-150 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
1 1 1-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1 2 2-TETRACHLOROETHANE	<5	<5	<5	ug/L
1 1 2-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHENE	<5	<5	<5	ug/L
1 2 4-TRICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROETHANE	<5	<5	<5	ug/L
1 2-DICHLOROPROPANE	<5	<5	<5	ug/L
1 3-DICHLOROBENZENE	<10	<10	<10	ug/L
1 4-DICHLOROBENZENE	<10	<10	<10	ug/L
2 4 6-TRICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DIMETHYLPHENOL	<10	<10	<10	ug/L
2 4-DINITROPHENOL	<10	<10	<10	ug/L
2 4-DINITROTOLUENE	<10	<10	<10	ug/L
2 6-DINITROTOLUENE	<10	<10	<10	ug/L
2-CHLOROETHYLVINYL ETHER	<10	<10	<10	ug/L
2-CHLORONAPHTHALENE	<10	<10	<10	ug/L
2-CHLOROPHENOL	<10	<10	<10	ug/L
2-NITROPHENOL	<10	<10	<10	ug/L
3 3'-DICHLOROBENZIDINE	<20	<20	<20	ug/L
4 6-DINITRO-2-METHYLPHENOL	<50	<50	<50	ug/L
4-BROMOPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-CHLORO-3-METHYLPHENOL	<10	<10	<10	ug/L
4-CHLOROPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-NITROPHENOL	<50	<50	<50	ug/L
ACENAPHTHENE	<10	<10	<10	ug/L
ACENAPHTHYLENE	<10	<10	<10	ug/L
ALKALINITY	151.80	196	91	mg/L
ALPHA	10.96	30	<3	pCi/L
ALUMINUM	0.1300	.22	<.1	mg/L
AMMONIA	<.2	<.2	<.2	mg/L
ANTHRACENE	<10	<10	<10	ug/L
ARSENIC	<.005	<.005	<.005	mg/L
BARIUM	<.2	<.2	<.2	mg/L
BENZENE	<5	<5	<5	ug/L
BENZIDINE	<10	<10	<10	ug/L
BENZO(A)ANTHRACENE	<10	<10	<10	ug/L
BENZO(A)PYRENE	<10	<10	<10	ug/L
BENZO(B)FLUORANTHENE	<10	<10	<10	ug/L
BENZO(G H I)PERYLENE	<10	<10	<10	ug/L
BENZO(K)FLUORANTHENE	<10	<10	<10	ug/L
BERYLLIUM	<.002	<.002	<.002	mg/L
BETA	9.08	27	<3	pCi/L
BIS(2-CHLOROETHOXY)METHANE	<10	<10	<10	ug/L
BIS(2-CHLOROETHYL)ETHER	<10	<10	<10	ug/L
BIS(2-CHLOROISOPROPYL)ETHER	<10	<10	<10	ug/L

SD-150 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
BIS(2-ETHYLHEXYL)PHTHALATE	6.00	10	<2	ug/L
BORON	0.0192	.043	<.004	mg/L
BROMODICHLOROMETHANE	<5	<5	<5	ug/L
BROMOFORM	<5	<5	<5	ug/L
BROMOMETHANE	<10	<10	<10	ug/L
BUTYLBENZYLPHTHALATE	5.50	10	<1	ug/L
CADMIUM	0.0039	.006	<.003	mg/L
CALCIUM	56.00	76	33	mg/L
CARBON TETRACHLORIDE	<5	<5	<5	ug/L
CHEMICAL OXYGEN DEMAND (COD)	6.80	14	<5	mg/L
CHLORIDE	19.62	29	8.6	mg/L
CHLORINE TOTAL RESIDUAL WATER	<.1	<.1	<.1	mg/L
CHLOROBENZENE	<5	<5	<5	ug/L
CHLOROETHANE	<10	<10	<10	ug/L
CHLOROFORM	4.25	5	<2	ug/L
CHLOROMETHANE	<10	<10	<10	ug/L
CHROMIUM	<.02	<.02	<.02	mg/L
CHRYSENE	<10	<10	<10	ug/L
CIS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
COBALT	<.2	<.2	<.2	mg/L
CONDUCTIVITY	367.80	443	252	umho/cm
COPPER	0.0506	.077	.026	mg/L
CYANIDE	0.0022	.003	<.002	mg/L
DI-N-BUTYLPHTHALATE	5.50	10	<1	ug/L
DI-N-OCTYLPHTHALATE	5.50	10	<1	ug/L
DIBENZ(A H)ANTHRACENE	<10.00	<10	<10	ug/L
DIBROMOCHLOROMETHANE	<5	<5	<5	ug/L
DIETHYLPHTHALATE	<10	<10	<10	ug/L
DIMETHYLPHTHALATE	<10	<10	<10	ug/L
DISSOLVED OXYGEN	11.32	15.2	10	ppm
ETHYLBENZENE	<5	<5	<5	ug/L
FLUORANTHENE	<10	<10	<10	ug/L
FLUORENE	<10	<10	<10	ug/L
FLUORIDE	0.2200	.3	.1	mg/L
HARDNESS	176.60	196	114	mg/L
HEXACHLOROBENZENE	<10	<10	<10	ug/L
HEXACHLOROBUTADIENE	<10	<10	<10	ug/L
HEXACHLOROCYCLOPENTADIENE	<10	<10	<10	ug/L
HEXACHLOROETHANE	<10	<10	<10	ug/L
INDENO(1 2 3-CD)PYRENE	<10	<10	<10	ug/L
IRON	0.1322	.3	<.08	mg/L
ISOPHORONE	<10	<10	<10	ug/L
LEAD	<.1	<.1	<.1	mg/L
LITHIUM	<.008	<.008	<.008	mg/L
MAGNESIUM	9.06	10	6.1	mg/L
MANGANESE	0.0394	.06	.03	mg/L
MERCURY	<.0002	<.0002	<.0002	mg/L
METHYLENE CHLORIDE	<5	<5	<5	ug/L

SD-150 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
MOLYBDENUM	<.02	<.02	<.02	mg/L
N-NITROSO-DI-N-PROPYLAMINE	<10	<10	<10	ug/L
N-NITROSODIMETHYLAMINE	<10	<10	<10	ug/L
N-NITROSODIPHENYLAMINE	<10	<10	<10	ug/L
NAPHTHALENE	<10	<10	<10	ug/L
NICKEL	<.1	<.1	<.1	mg/L
NIOBIUM	<.014	<.014	<.014	mg/L
NITRATE	3.87	4.2	3.2	mg/L
NITROBENZENE	<10	<10	<10	ug/L
OIL & GREASE	<2.00	<2	<2	mg/L
PCB (AROCLOR-1016)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1221)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1232)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1242)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1248)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1254)	<1	<1	<1	ug/L
PCB (AROCLOR-1260)	<1	<1	<1	ug/L
PENTACHLOROPHENOL	<50	<50	<50	ug/L
PH	7.94	8.3	7.6	
PHENANTHRENE	<10	<10	<10	ug/L
PHENOL	<10	<10	<10	ug/L
PHOSPHORUS	<.4	<.4	<.4	mg/L
POTASSIUM	2.82	3.2	2.5	mg/L
PYRENE	<10	<10	<10	ug/L
SELENIUM	<0.0050	<.005	<.005	mg/L
SILICON	2.82	3.6	1.5	mg/L
SILVER	<.02	<.02	<.02	mg/L
SODIUM	10.02	14	5	mg/L
STRONTIUM	0.1820	.21	.12	mg/L
SULFATE	29.80	37	22	mg/L
TEMPERATURE	10.52	13.5	9	Deg. C
TETRACHLOROETHENE	<5	<5	<5	ug/L
THORIUM	<.4	<.4	<.4	mg/L
TITANIUM	0.0049	9.60000	<.003	mg/L
TOLUENE	4.00	5	<1	ug/L
TOTAL DISSOLVED SOLIDS	224.80	278	150	mg/L
TOTAL ORGANIC CARBON (TOC)	25.20	40	6	mg/L
TOTAL SUSPENDED SOLIDS	17.40	53	3	mg/L
TRANS-1 2-DICHLOROETHENE	<5	<5	<5	ug/L
TRANS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
TRICHLOROETHENE	<5	<5	<5	ug/L
TURBIDITY	4.80	8	1	NTU
URANIUM	0.0112	.017	.007	mg/L
VANADIUM	<1	<1	<1	mg/L
VINYL CHLORIDE	<10	<10	<10	ug/L
ZINC	0.0908	.12	.055	mg/L
ZIRCONIUM	<.01	<.01	<.01	mg/L

SD-160 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
1 1 1-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1 2 2-TETRACHLOROETHANE	<5	<5	<5	ug/L
1 1 2-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHENE	<5	<5	<5	ug/L
1 2-DICHLOROETHANE	<5	<5	<5	ug/L
1 2-DICHLOROPROPANE	<5	<5	<5	ug/L
2-CHLOROETHYLVINYL ETHER	<10	<10	<10	ug/L
ALKALINITY	60.00	60	60	mg/L
ALPHA	252.20	252.2	252.2	pCi/L
ALUMINUM	0.1171	.22	<.1	mg/L
AMMONIA	<.2	<.2	<.2	mg/L
ARSENIC	<.005	<.005	<.005	mg/L
BARIUM	<.1	<.1	<.1	mg/L
BENZENE	<5	<5	<5	ug/L
BERYLLIUM	<.001	<.001	<.001	mg/L
BETA	206.00	206	206	pCi/L
BORON	0.0078	.0078	.0078	mg/L
BROMODICHLOROMETHANE	<5	<5	<5	ug/L
BROMOFORM	<5	<5	<5	ug/L
BROMOMETHANE	<10	<10	<10	ug/L
CADMIUM	<.003	<.003	<.003	mg/L
CALCIUM	41.00	41	41	mg/L
CARBON TETRACHLORIDE	<5	<5	<5	ug/L
CHEMICAL OXYGEN DEMAND (COD)	34.00	34	34	mg/L
CHLORIDE	201.00	201	201	mg/L
CHLORINE TOTAL RESIDUAL WATER	<.1	<.1	<.1	mg/L
CHLOROBENZENE	<5	<5	<5	ug/L
CHLOROETHANE	<10	<10	<10	ug/L
CHLOROFORM	<5	<5	<5	ug/L
CHLOROMETHANE	<10	<10	<10	ug/L
CHROMIUM	<.01	<.01	<.01	mg/L
CIS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
COBALT	<.1	<.1	<.1	mg/L
CONDUCTIVITY	877.00	877	877	umho/cm
COPPER	0.0069	.0069	.0069	mg/L
CYANIDE	0.0020	.002	.002	mg/L
DIBROMOCHLOROMETHANE	<5	<5	<5	ug/L
DISSOLVED OXYGEN	10.50	10.5	10.5	ppm
ETHYLBENZENE	<5	<5	<5	ug/L
FLUORIDE	0.4000	.4	.4	mg/L
HARDNESS	134.00	134	134	mg/L
IRON	<.05	<.05	<.05	mg/L
LEAD	<.05	<.05	<.05	mg/L
LITHIUM	<.004	<.004	<.004	mg/L
MAGNESIUM	3.80	3.8	3.8	mg/L
MANGANESE	<.01	<.01	<.01	mg/L
MERCURY	<.0002	<.0002	<.0002	mg/L

SD-160 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
METHYLENE CHLORIDE	<5	<5	<5	ug/L
MOLYBDENUM	<.01	<.01	<.01	mg/L
NICKEL	<.05	<.05	<.05	mg/L
NIOBIUM	<.007	<.007	<.007	mg/L
NITRATE	<.5	<.5	<.5	mg/L
OIL & GREASE	<2	<2	<2	mg/L
PH	7.70	7.7	7.7	
PHOSPHORUS	<.2	<.2	<.2	mg/L
POTASSIUM	1.40	1.4	1.4	mg/L
SELENIUM	<.005	<.005	<.005	mg/L
SILICON	0.6200	.62	.62	mg/L
SILVER	<.01	<.01	<.01	mg/L
SODIUM	93.00	93	93	mg/L
STRONTIUM	0.0680	.068	.068	mg/L
SULFATE	9.60	9.6	9.6	mg/L
TEMPERATURE	6.00	6	6	Deg. C
TETRACHLOROETHENE	<5	<5	<5	ug/L
THORIUM	<.2	<.2	<.2	mg/L
TITANIUM	<.003	<.003	<.003	mg/L
TOLUENE	<5	<5	<5	ug/L
TOTAL DISSOLVED SOLIDS	414.00	414	414	mg/L
TOTAL ORGANIC CARBON (TOC)	6.00	6	6	mg/L
TOTAL SUSPENDED SOLIDS	1.00	1	1	mg/L
TRANS-1 2-DICHLOROETHENE	<5	<5	<5	ug/L
TRANS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
TRICHLOROETHENE	<5	<5	<5	ug/L
TURBIDITY	3.00	3	3	NTU
URANIUM	0.2430	.243	.243	mg/L
VANADIUM	<.5	<.5	<.5	mg/L
VINYL CHLORIDE	<10	<10	<10	ug/L
ZINC	<.02	<.02	<.02	mg/L
ZIRCONIUM	<.005	<.005	<.005	mg/L

SD-162 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
1 1 1-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1 2 2-TETRACHLOROETHANE	<5	<5	<5	ug/L
1 1 2-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHENE	<5	<5	<5	ug/L
1 2 4-TRICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROETHANE	<5	<5	<5	ug/L
1 2-DICHLOROPROPANE	<5	<5	<5	ug/L
1 3-DICHLOROBENZENE	<10	<10	<10	ug/L
1 4-DICHLOROBENZENE	<10	<10	<10	ug/L
2 4 6-TRICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DIMETHYLPHENOL	<10	<10	<10	ug/L
2 4-DINITROPHENOL	<10	<10	<10	ug/L
2 4-DINITROTOLUENE	<10	<10	<10	ug/L
2 6-DINITROTOLUENE	<10	<10	<10	ug/L
2-CHLOROETHYLVINYL ETHER	<10	<10	<10	ug/L
2-CHLORONAPHTHALENE	<10	<10	<10	ug/L
2-CHLOROPHENOL	<10	<10	<10	ug/L
2-NITROPHENOL	<10	<10	<10	ug/L
3 3'-DICHLOROBENZIDINE	<20	<20	<20	ug/L
4 6-DINITRO-2-METHYLPHENOL	<50	<50	<50	ug/L
4-BROMOPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-CHLORO-3-METHYLPHENOL	<10	<10	<10	ug/L
4-CHLOROPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-NITROPHENOL	<50	<50	<50	ug/L
ACENAPHTHENE	<10	<10	<10	ug/L
ACENAPHTHYLENE	<10	<10	<10	ug/L
ALKALINITY	38.00	43	33	mg/L
ALPHA	2.55	2.7	2.4	pCi/L
ALUMINUM	0.9650	1.5	.43	mg/L
AMMONIA	<.2	<.2	<.2	mg/L
ANTHRACENE	<10	<10	<10	ug/L
ARSENIC	<.005	<.005	<.005	mg/L
BARIUM	<.1	<.1	<.1	mg/L
BENZENE	<5	<5	<5	ug/L
BENZIDINE	<10	<10	<10	ug/L
BENZO(A)ANTHRACENE	<10	<10	<10	ug/L
BENZO(A)PYRENE	<10	<10	<10	ug/L
BENZO(B)FLUORANTHENE	<10	<10	<10	ug/L
BENZO(G H I)PERYLENE	<10	<10	<10	ug/L
BENZO(K)FLUORANTHENE	<10	<10	<10	ug/L
BERYLLIUM	<.001	<.001	<.001	mg/L
BETA	8.35	10.4	6.3	pCi/L
BIS(2-CHLOROETHOXY)METHANE	<10	<10	<10	ug/L
BIS(2-CHLOROETHYL)ETHER	<10	<10	<10	ug/L
BIS(2-CHLOROISOPROPYL)ETHER	<10	<10	<10	ug/L

SD-162 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
BIS(2-ETHYLHEXYL)PHTHALATE	6.50	10	<3	ug/L
BORON	0.0114	.015	.0078	mg/L
BROMODICHLOROMETHANE	<5	<5	<5	ug/L
BROMOFORM	<5	<5	<5	ug/L
BROMOMETHANE	<10	<10	<10	ug/L
BUTYLBENZYLPHTHALATE	7.00	10	<4	ug/L
CADMIUM	<.003	<.003	<.003	mg/L
CALCIUM	20.50	24	17	mg/L
CARBON TETRACHLORIDE	<5	<5	<5	ug/L
CHEMICAL OXYGEN DEMAND (COD)	18.00	31	<5	mg/L
CHLORIDE	<1	<1	<1	mg/L
CHLORINE TOTAL RESIDUAL WATER	<.1	<.1	<.1	mg/L
CHLOROBENZENE	<5	<5	<5	ug/L
CHLOROETHANE	<10	<10	<10	ug/L
CHLOROFORM	<5	<5	<5	ug/L
CHLOROMETHANE	<10	<10	<10	ug/L
CHROMIUM	<.01	<.01	<.01	mg/L
CHRYSENE	<10	<10	<10	ug/L
CIS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
COBALT	<.1	<.1	<.1	mg/L
CONDUCTIVITY	85.50	103	68	umho/cm
COPPER	0.0069	.0099	<.004	mg/L
CYANIDE	0.0025	.003	.002	mg/L
DI-N-BUTYLPHTHALATE	<10	<10	<10	ug/L
DI-N-OCTYLPHTHALATE	5.50	10	<1	ug/L
DIBENZ(A H)ANTHRACENE	<10	<10	<10	ug/L
DIBROMOCHLOROMETHANE	<5	<5	<5	ug/L
DIETHYLPHTHALATE	<10	<10	<10	ug/L
DIMETHYLPHTHALATE	<10	<10	<10	ug/L
DISSOLVED OXYGEN	10.00	10.5	9.5	ppm
ETHYLBENZENE	<5	<5	<5	ug/L
FLUORANTHENE	<10	<10	<10	ug/L
FLUORENE	<10	<10	<10	ug/L
FLUORIDE	0.3000	.3	.3	mg/L
HARDNESS	38.50	48	29	mg/L
HEXACHLOROBENZENE	<10	<10	<10	ug/L
HEXACHLOROBUTADIENE	<10	<10	<10	ug/L
HEXACHLOROCYCLOPENTADIENE	<10	<10	<10	ug/L
HEXACHLOROETHANE	<10	<10	<10	ug/L
INDENO(1 2 3-CD)PYRENE	<10	<10	<10	ug/L
IRON	0.8250	1.4	.25	mg/L
ISOPHORONE	<10	<10	<10	ug/L
LEAD	<.05	<.05	<.05	mg/L
LITHIUM	<.004	<.004	<.004	mg/L
MAGNESIUM	1.75	2.2	1.3	mg/L
MANGANESE	0.0420	.074	<.01	mg/L
MERCURY	<.0002	<.0002	<.0002	mg/L
METHYLENE CHLORIDE	<5	<5	<5	ug/L

SD-162 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
MOLYBDENUM	<.01	<.01	<.01	mg/L
N-NITROSO-DI-N-PROPYLAMINE	<10	<10	<10	ug/L
N-NITROSODIMETHYLAMINE	<10	<10	<10	ug/L
N-NITROSODIPHENYLAMINE	<10	<10	<10	ug/L
NAPHTHALENE	<10	<10	<10	ug/L
NICKEL	<.05	<.05	<.05	mg/L
NIOBIUM	<.007	<.007	<.007	mg/L
NITRATE	0.8950	.96	.83	mg/L
NITROBENZENE	<10	<10	<10	ug/L
OIL & GREASE	<2	<2	<2	mg/L
PCB (AROCLOR-1016)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1221)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1232)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1242)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1248)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1254)	<1	<1	<1	ug/L
PCB (AROCLOR-1260)	<1	<1	<1	ug/L
PENTACHLOROPHENOL	<50	<50	<50	ug/L
PH	8.30	8.7	7.9	
PHENANTHRENE	<10	<10	<10	ug/L
PHENOL	<10	<10	<10	ug/L
PHOSPHORUS	<.2	<.2	<.2	mg/L
POTASSIUM	1.67	2.4	.94	mg/L
PYRENE	<10	<10	<10	ug/L
SELENIUM	<0.0050	<.005	<.005	mg/L
SILICON	2.25	2.5	2	mg/L
SILVER	<.01	<.01	<.01	mg/L
SODIUM	0.3800	.51	.25	mg/L
STRONTIUM	0.0325	.043	.022	mg/L
SULFATE	6.60	9.2	4	mg/L
TEMPERATURE	12.00	17	7	Deg. C
TETRACHLOROETHENE	<5	<5	<5	ug/L
THORIUM	<.2	<.2	<.2	mg/L
TITANIUM	0.0350	.054	.016	mg/L
TOLUENE	<5	<5	<5	ug/L
TOTAL DISSOLVED SOLIDS	55.00	62	48	mg/L
TOTAL ORGANIC CARBON (T.OC)	13.50	19	8	mg/L
TOTAL SUSPENDED SOLIDS	10.50	19	2	mg/L
TRANS-1 2-DICHLOROETHENE	<5	<5	<5	ug/L
TRANS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
TRICHLOROETHENE	<5	<5	<5	ug/L
TURBIDITY	81.00	152	10	NTU
URANIUM	0.0040	.006	.002	mg/L
VANADIUM	<.5	<.5	<.5	mg/L
VINYL CHLORIDE	<10	<10	<10	ug/L
ZINC	0.0295	.039	<.02	mg/L
ZIRCONIUM	<.005	<.005	<.005	mg/L

SD-170 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
1 1 1-TRICHLOROETHANE	9.30	44	<5	ug/L
1 1 2 2-TETRACHLOROETHANE	<5	<5	<5	ug/L
1 1 2-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHANE	5.80	15	<3	ug/L
1 1-DICHLOROETHENE	6.30	18	<5	ug/L
1 2 4-TRICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROETHANE	<5	<5	<5	ug/L
1 2-DICHLOROPROPANE	<5	<5	<5	ug/L
1 3-DICHLOROBENZENE	<10	<10	<10	ug/L
1 4-DICHLOROBENZENE	<10	<10	<10	ug/L
2 4 6-TRICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DIMETHYLPHENOL	<10	<10	<10	ug/L
2 4-DINITROPHENOL	<10	<10	<10	ug/L
2 4-DINITROTOLUENE	<10	<10	<10	ug/L
2 6-DINITROTOLUENE	<10	<10	<10	ug/L
2-CHLOROETHYLVINYL ETHER	<10	<10	<10	ug/L
2-CHLORONAPHTHALENE	<10	<10	<10	ug/L
2-CHLOROPHENOL	<10	<10	<10	ug/L
2-NITROPHENOL	<10	<10	<10	ug/L
3 3'-DICHLOROBENZIDINE	<20	<20	<20	ug/L
4 6-DINITRO-2-METHYLPHENOL	<50	<50	<50	ug/L
4-BROMOPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-CHLORO-3-METHYLPHENOL	<10	<10	<10	ug/L
4-CHLOROPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-NITROPHENOL	<50	<50	<50	ug/L
ACENAPHTHENE	<10	<10	<10	ug/L
ACENAPHTHYLENE	<10	<10	<10	ug/L
ALKALINITY	117.80	164	71	mg/L
ALPHA	9.80	18.2	5.7	pCi/L
ALUMINUM	0.4456	2.9	<.1	mg/L
AMMONIA	<.2	<.2	<.2	mg/L
ANTHRACENE	<10	<10	<10	ug/L
ARSENIC	<0.0050	<.005	<.005	mg/L
BARIUM	0.0927	.1	<.034	mg/L
BENZENE	<5	<5	<5	ug/L
BENZIDINE	<10	<10	<10	ug/L
BENZO(A)ANTHRACENE	<10	<10	<10	ug/L
BENZO(A)PYRENE	<10	<10	<10	ug/L
BENZO(B)FLUORANTHENE	<10	<10	<10	ug/L
BENZO(G H I)PERYLENE	<10	<10	<10	ug/L
BENZO(K)FLUORANTHENE	<10	<10	<10	ug/L
BERYLLIUM	<.001	<.001	<.001	mg/L
BETA	52.11	94	20.8	pCi/L
BIS(2-CHLOROETHOXY)METHANE	<10	<10	<10	ug/L
BIS(2-CHLOROETHYL)ETHER	<10	<10	<10	ug/L
BIS(2-CHLOROISOPROPYL)ETHER	<10	<10	<10	ug/L

SD-170 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
BIS(2-ETHYLHEXYL)PHTHALATE	<10	<10	<10	ug/L
BORON	0.0180	.027	<.004	mg/L
BROMODICHLOROMETHANE	5.50	8	<5	ug/L
BROMOFORM	<5	<5	<5	ug/L
BROMOMETHANE	<10	<10	<10	ug/L
BUTYLBENZYLPHTHALATE	<10	<10	<10	ug/L
CADMIUM	<.003	<.003	<.003	mg/L
CALCIUM	39.00	51	28	mg/L
CARBON DISULFIDE	1.00	1	1	ug/L
CARBON TETRACHLORIDE	<5	<5	<5	ug/L
CHEMICAL OXYGEN DEMAND (COD)	6.20	11	<2.5	mg/L
CHLORIDE	26.74	54	15	mg/L
CHLORINE TOTAL RESIDUAL WATER	0.3300	.9	<.1	mg/L
CHLOROBENZENE	<5	<5	<5	ug/L
CHLOROETHANE	<10	<10	<10	ug/L
CHLOROFORM	24.10	53	5	ug/L
CHLOROMETHANE	<10	<10	<10	ug/L
CHROMIUM	0.0166	.032	<.01	mg/L
CHRYSENE	<10	<10	<10	ug/L
CIS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
COBALT	<.1	<.1	<.1	mg/L
CONDUCTIVITY	408.40	727	293	umho/cm
COPPER	0.0113	.038	<.004	mg/L
CYANIDE	0.0028	.008	<.002	mg/L
DI-N-BUTYLPHTHALATE	<10	<10	<10	ug/L
DI-N-OCTYLPHTHALATE	6.50	10	<1	ug/L
DIBENZ(A H)ANTHRACENE	<10	<10	<10	ug/L
DIBROMOCHLOROMETHANE	4.70	5	<2	ug/L
DIETHYLPHTHALATE	<10	<10	<10	ug/L
DIMETHYLPHTHALATE	<10	<10	<10	ug/L
DISSOLVED OXYGEN	9.30	19	6.3	ppm
ETHYLBENZENE	<5	<5	<5	ug/L
FLUORANTHENE	<10	<10	<10	ug/L
FLUORENE	<10	<10	<10	ug/L
FLUORIDE	0.1500	.3	<.1	mg/L
FREON 113	4.00	4	4	ug/L
HARDNESS	150.50	303	68	mg/L
HEXACHLOROBENZENE	<10	<10	<10	ug/L
HEXACHLOROBUTADIENE	<10	<10	<10	ug/L
HEXACHLOROCYCLOPENTADIENE	<10	<10	<10	ug/L
HEXACHLOROETHANE	<10	<10	<10	ug/L
INDENO(1 2 3-CD)PYRENE	<10	<10	<10	ug/L
IRON	0.1519	.49	<.05	mg/L
ISOPHORONE	<10	<10	<10	ug/L
LEAD	<.05	<.05	<.05	mg/L
LITHIUM	0.0045	.0062	<.004	mg/L
MAGNESIUM	8.83	11	4.8	mg/L
MANGANESE	0.0490	.11	.01	mg/L

SD-170 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
MERCURY	<.0002	<.0002	<.0002	mg/L
METHYLENE CHLORIDE	<5.00	<5	<5	ug/L
MOLYBDENUM	0.0126	.019	<.01	mg/L
N-NITROSO-DI-N-PROPYLAMINE	<10	<10	<10	ug/L
N-NITROSODIMETHYLAMINE	<10	<10	<10	ug/L
N-NITROSODIPHENYLAMINE	<10	<10	<10	ug/L
NAPHTHALENE	<10	<10	<10	ug/L
NICKEL	0.0463	.05	<.017	mg/L
NIOBIUM	0.0074	.011	<.007	mg/L
NITRATE	3.65	10	1.7	mg/L
NITROBENZENE	<10	<10	<10	ug/L
OIL & GREASE	<2.00	<2	<2	mg/L
PCB (AROCLOR-1016)	<1	<1	<1	ug/L
PCB (AROCLOR-1221)	<1	<1	<1	ug/L
PCB (AROCLOR-1232)	<1	<1	<1	ug/L
PCB (AROCLOR-1242)	<1	<1	<1	ug/L
PCB (AROCLOR-1248)	<1	<1	<1	ug/L
PCB (AROCLOR-1254)	<1	<1	<1	ug/L
PCB (AROCLOR-1260)	<1	<1	<1	ug/L
PENTACHLOROPHENOL	<50	<50	<50	ug/L
PH	7.92	8.3	7.6	
PHENANTHRENE	<10	<10	<10	ug/L
PHENOL	<10	<10	<10	ug/L
PHOSPHORUS	0.8433	4.1	<.2	mg/L
POTASSIUM	3.37	6.5	<.6	mg/L
PYRENE	<10	<10	<10	ug/L
SELENIUM	<0.0050	<.005	<.005	mg/L
SILICON	2.38	2.9	1.7	mg/L
SILVER	<.01	<.01	<.01	mg/L
SODIUM	23.56	53	8.6	mg/L
STRONTIUM	0.0889	.12	.063	mg/L
SUBSTITUTED HYDROCARBON	10.00	10	10	ug/L
SULFATE	52.00	103	31	mg/L
TEMPERATURE	18.77	23	8	Deg. C
TETRACHLOROETHENE	17.18	110	<5	ug/L
THORIUM	<.2	<.2	<.2	mg/L
TITANIUM	0.0052	.0079	<.003	mg/L
TOLUENE	4.60	5	<1	ug/L
TOTAL DISSOLVED SOLIDS	259.40	440	182	mg/L
TOTAL ORGANIC CARBON (TOC)	6.37	26	1.9	mg/L
TOTAL SUSPENDED SOLIDS	6.10	12	<1	mg/L
TRANS-1 2-DICHLOROETHENE	17.00	110	5	ug/L
TRANS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
TRICHLOROETHENE	54.70	330	13	ug/L
TURBIDITY	7.02	26	.6	NTU
UNKNOWN	11.50	15	8	ug/L
URANIUM	0.0117	.019	.004	mg/L
VANADIUM	<.5	<.5	<.5	mg/L

SD-170 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
VINYL CHLORIDE	<10	<10	<10	ug/L
ZINC	0.0320	.065	<.02	mg/L
ZIRCONIUM	<.005	<.005	<.005	mg/L

SD-180 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
1 1 1-TRICHLOROETHANE	50.33	170	12	ug/L
1 1 2 2-TETRACHLOROETHANE	<5	<5	<5	ug/L
1 1 2-TRICHLOROETHANE	4.73	5	<1	ug/L
1 1-DICHLOROETHANE	8.40	22	<5	ug/L
1 1-DICHLOROETHENE	4.93	6	<4	ug/L
1 2 4-TRICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROETHANE	4.73	5	<1	ug/L
1 2-DICHLOROPROPANE	<5	<5	<5	ug/L
1 3-DICHLOROBENZENE	<10	<10	<10	ug/L
1 4-DICHLOROBENZENE	<10	<10	<10	ug/L
2 4 6-TRICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DIMETHYLPHENOL	7.29	10	<1	ug/L
2 4-DINITROPHENOL	<25	<25	<25	ug/L
2 4-DINITROTOLUENE	<10	<10	<10	ug/L
2 6-DINITROTOLUENE	<10	<10	<10	ug/L
2-BUTANONE	11.50	12	11	ug/L
2-CHLOROETHYLVINYL ETHER	<10	<10	<10	ug/L
2-CHLORONAPHTHALENE	<10	<10	<10	ug/L
2-CHLOROPHENOL	<10	<10	<10	ug/L
2-METHYLNAPHTHALENE	1.00	1	1	ug/L
2-NITROPHENOL	<10	<10	<10	ug/L
3 3'-DICHLOROBENZIDINE	<20	<20	<20	ug/L
4 6-DINITRO-2-METHYLPHENOL	<50	<50	<50	ug/L
4-BROMOPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-CHLORO-3-METHYLPHENOL	<10	<10	<10	ug/L
4-CHLOROPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-NITROPHENOL	<50	<50	<50	ug/L
ACENAPHTHENE	<10	<10	<10	ug/L
ACENAPHTHYLENE	<10	<10	<10	ug/L
ACETONE	8.00	13	3	ug/L
ACETOPHENONE	1.00	1	1	ug/L
ALIPHATIC HYDROCARBONS	25.00	25	25	ug/L
ALKALINITY	140.25	170	61	mg/L
ALPHA	8.97	73.3	<2	pCi/L
ALUMINUM	0.9664	12	<.051	mg/L
AMMONIA	0.2167	.4	<.2	mg/L
ANTHRACENE	<10	<10	<10	ug/L
ARSENIC	<.005	<.005	<.005	mg/L
BARIUM	0.1147	.16	<.096	mg/L
BENZENE	4.53	5	<1	ug/L
BENZIDINE	<10	<10	<10	ug/L
BENZO(A)ANTHRACENE	<10	<10	<10	ug/L
BENZO(A)PYRENE	<10	<10	<10	ug/L
BENZO(B)FLUORANTHENE	<10	<10	<10	ug/L
BENZO(G H I)PERYLENE	<10	<10	<10	ug/L
BENZO(K)FLUORANTHENE	<10	<10	<10	ug/L

SD-180 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
BERYLLIUM	<.001	<.001	<.001	mg/L
BETA	9.03	60.4	<2	pCi/L
BHT	4.00	4	4	ug/L
BIS(2-CHLOROETHOXY)METHANE	<10	<10	<10	ug/L
BIS(2-CHLOROETHYL)ETHER	<10	<10	<10	ug/L
BIS(2-CHLOROISOPROPYL)ETHER	<10	<10	<10	ug/L
BIS(2-ETHYLHEXYL)PHTHALATE	5.54	10	<.8	ug/L
BORON	0.0293	.095	<.004	mg/L
BROMODICHLOROMETHANE	<5	<5	<5	ug/L
BROMOFORM	<5	<5	<5	ug/L
BROMOMETHANE	<10	<10	<10	ug/L
BUTYL CARBITOL	1.00	1	1	ug/L
BUTYLBENZYLPHTHALATE	3.27	10	<.2	ug/L
CADMIUM	<.003	<.003	<.003	mg/L
CALCIUM	50.58	64	36	mg/L
CARBON TETRACHLORIDE	<5	<5	<5	ug/L
CHEMICAL OXYGEN DEMAND (COD)	12.21	38	<2.5	mg/L
CHLORIDE	98.80	840	26	mg/L
CHLORINE TOTAL RESIDUAL WATER	0.1750	1	<.1	mg/L
CHLOROBENZENE	<5	<5	<5	ug/L
CHLOROETHANE	<10	<10	<10	ug/L
CHLOROFORM	5.00	12	<1	ug/L
CHLOROMETHANE	<10	<10	<10	ug/L
CHROMIUM	<.01	<.01	<.01	mg/L
CHRYSENE	<10	<10	<10	ug/L
CIS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
COBALT	<.1	<.1	<.1	mg/L
CONDUCTIVITY	685.33	3330	411	umho/cm
COPPER	0.0040	.014	<.004	mg/L
CYANIDE	0.0025	.005	<.002	mg/L
DI-N-BUTYLPHTHALATE	<10	<10	<10	ug/L
DI-N-OCTYLPHTHALATE	3.21	10	<.2	ug/L
DIBENZ(A H)ANTHRACENE	<10	<10	<10	ug/L
DIBROMOCHLOROMETHANE	<5	<5	<5	ug/L
DIETHYLPHTHALATE	7.29	10	<1	ug/L
DIMETHYLPHTHALATE	<10	<10	<10	ug/L
DISSOLVED OXYGEN	10.83	19.8	7	ppm
ETHYLBENZENE	<5	<5	<5	ug/L
FLUORANTHENE	<10	<10	<10	ug/L
FLUORENE	<10	<10	<10	ug/L
FLUORIDE	0.2250	1	<.1	mg/L
FREON 113	19.67	37	3	ug/L
FREON 123	10.67	16	7	ug/L
HARDNESS	180.75	212	111	mg/L
HEXACHLOROBENZENE	<10	<10	<10	ug/L
HEXACHLOROBUTADIENE	<10	<10	<10	ug/L
HEXACHLOROCYCLOPENTADIENE	<10	<10	<10	ug/L
HEXACHLOROETHANE	<10	<10	<10	ug/L

SD-180 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
INDENO(1 2 3-CD)PYRENE	<10	<10	<10	ug/L
IRON	1.17	7.4	.062	mg/L
ISOPHORONE	<10	<10	<10	ug/L
LEAD	<.05	<.05	<.05	mg/L
LITHIUM	0.0058	.0077	<.004	mg/L
MAGNESIUM	11.77	14	5.2	mg/L
MANGANESE	1.53	3.3	.17	mg/L
MERCURY	0.0003	.0005	<.0002	mg/L
METHYLENE CHLORIDE	5.20	10	<2	ug/L
MOLYBDENUM	0.0101	.011	<.01	mg/L
N-NITROSO-DI-N-PROPYLAMINE	<10	<10	<10	ug/L
N-NITROSODIMETHYLAMINE	<10	<10	<10	ug/L
N-NITROSODIPHENYLAMINE	<10	<10	<10	ug/L
NAPHTHALENE	7.29	10	<1	ug/L
NICKEL	<.05	<.05	<.05	mg/L
NIOBIUM	<.007	<.007	<.007	mg/L
NITRATE	1.27	1.7	<.5	mg/L
NITROBENZENE	<10	<10	<10	ug/L
OIL & GREASE	2.17	4	<2	mg/L
PALMITIC ACID	3.00	3	3	ug/L
PCB (AROCLOR-1016)	<5	<5	<5	ug/L
PCB (AROCLOR-1221)	<5	<5	<5	ug/L
PCB (AROCLOR-1232)	<5	<5	<5	ug/L
PCB (AROCLOR-1242)	<5	<5	<5	ug/L
PCB (AROCLOR-1248)	<5	<5	<5	ug/L
PCB (AROCLOR-1254)	<10	<10	<10	ug/L
PCB (AROCLOR-1260)	<10	<10	<10	ug/L
PENTACHLOROPHENOL	<50	<50	<50	ug/L
PH	8.11	8.8	7.6	
PHENANTHRENE	<10	<10	<10	ug/L
PHENOL	<10	<10	<10	ug/L
PHOSPHORUS	<.2	<.2	<.2	mg/L
POTASSIUM	2.67	4.5	1.3	mg/L
PROMETON	2.00	2	2	ug/L
PYRENE	<10	<10	<10	ug/L
SELENIUM	<0.0050	<.005	<.005	mg/L
SILICON	2.64	3.3	2.2	mg/L
SILVER	<.01	<.01	<.01	mg/L
SODIUM	69.74	690	9.9	mg/L
STRONTIUM	0.0917	.1	.072	mg/L
SUBSTITUTED DIPHENYL PHOSPHATE	105.50	200	11	ug/L
SULFATE	32.89	41	9.7	mg/L
TEMPERATURE	17.42	24	11	Deg. C
TETRACHLOROETHENE	4.67	5	<2	ug/L
THORIUM	<.2	<.2	<.2	mg/L
TITANIUM	0.0083	.056	<.003	mg/L
TOLUENE	4.53	5	<1	ug/L
TOTAL DISSOLVED SOLIDS	397.67	1830	214	mg/L

SD-180 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
TOTAL ORGANIC CARBON (TOC)	11.85	41	2.1	mg/L
TOTAL SUSPENDED SOLIDS	9.17	71	<1	mg/L
TRANS-1 2-DICHLOROETHENE	17.47	34	4	ug/L
TRANS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
TRICHLOROETHENE	49.60	100	9	ug/L
TURBIDITY	20.20	180	<.55	NTU
UNKNOWN	10.00	10	10	ug/L
UNKNOWN ALCOHOL	40.50	54	27	ug/L
UNKNOWN ALCOHOLS	130.00	130	130	ug/L
UNKNOWN ETHER	6.00	6	6	ug/L
UNKNOWNS	7.00	7	7	ug/L
URANIUM	0.0045	.012	<.001	mg/L
VANADIUM	<.5	<.5	<.5	mg/L
VINYL CHLORIDE	<10	<10	<10	ug/L
ZINC	0.0253	.086	<.011	mg/L
ZIRCONIUM	<.005	<.005	<.005	mg/L

SD-190 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
1 1 1-TRICHLOROETHANE	5.29	10	<1	ug/L
1 1 2 2-TETRACHLOROETHANE	<5	<5	<5	ug/L
1 1 2-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHANE	4.94	5	<4	ug/L
1 1-DICHLOROETHENE	<5	<5	<5	ug/L
1 2 4-TRICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROETHANE	<5	<5	<5	ug/L
1 2-DICHLOROPROPANE	<5	<5	<5	ug/L
1 3-DICHLOROBENZENE	<10	<10	<10	ug/L
1 4-DICHLOROBENZENE	<10	<10	<10	ug/L
2 4 6-TRICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DIMETHYLPHENOL	<10	<10	<10	ug/L
2 4-DINITROPHENOL	<10	<10	<10	ug/L
2 4-DINITROTOLUENE	<10	<10	<10	ug/L
2 6-DINITROTOLUENE	<10	<10	<10	ug/L
2-BUTANONE	13.00	13	13	ug/L
2-CHLOROETHYLVINYL ETHER	<10	<10	<10	ug/L
2-CHLORONAPHTHALENE	<10	<10	<10	ug/L
2-CHLOROPHENOL	<10	<10	<10	ug/L
2-NITROPHENOL	<10	<10	<10	ug/L
3 3'-DICHLOROBENZIDINE	<20	<20	<20	ug/L
4 6-DINITRO-2-METHYLPHENOL	<50	<50	<50	ug/L
4-BROMOPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-CHLORO-3-METHYLPHENOL	<10	<10	<10	ug/L
4-CHLOROPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-NITROPHENOL	<50	<50	<50	ug/L
ACENAPHTHENE	<10	<10	<10	ug/L
ACENAPHTHYLENE	<10	<10	<10	ug/L
ACETONE	12.00	12	12	ug/L
ALKALINITY	116.36	146	37	mg/L
ALKYL/ALKOXY COMPOUNDS	8.00	8	8	ug/L
ALPHA	12.76	61.6	<2	pCi/L
ALUMINUM	0.2306	1.3	<.02	mg/L
AMMONIA	0.2455	.4	<.2	mg/L
ANTHRACENE	<10	<10	<10	ug/L
ARSENIC	<0.0050	<.005	<.005	mg/L
BARIUM	0.0940	.1	<.034	mg/L
BENZENE	<5	<5	<5	ug/L
BENZIDINE	<10	<10	<10	ug/L
BENZO(A)ANTHRACENE	<10	<10	<10	ug/L
BENZO(A)PYRENE	<10	<10	<10	ug/L
BENZO(B)FLUORANTHENE	<10	<10	<10	ug/L
BENZO(G H I)PERYLENE	<10	<10	<10	ug/L
BENZO(K)FLUORANTHENE	<10	<10	<10	ug/L
BERYLLIUM	<.001	<.001	<.001	mg/L
BETA	16.44	61.9	<2	pCi/L

SD-190 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
BHT	30.50	39	22	ug/L
BIS(2-CHLOROETHOXY)METHANE	<10	<10	<10	ug/L
BIS(2-CHLOROETHYL)ETHER	<10	<10	<10	ug/L
BIS(2-CHLOROISOPROPYL)ETHER	<10	<10	<10	ug/L
BIS(2-ETHYLHEXYL)PHTHALATE	23.00	88	<2	ug/L
BORON	0.0361	.066	<.004	mg/L
BROMODICHLOROMETHANE	<5.00	<5	<5	ug/L
BROMOFORM	<5	<5	<5	ug/L
BROMOMETHANE	<10	<10	<10	ug/L
BUTYL CELLOSOLVE	6.00	6	6	ug/L
BUTYLBENZYLPHTHALATE	6.85	10	<.5	ug/L
CADMIUM	0.0030	.0034	<.003	mg/L
CALCIUM	45.45	94	23	mg/L
CARBON DISULFIDE	1.00	1	1	ug/L
CARBON TETRACHLORIDE	<5	<5	<5	ug/L
CHEMICAL OXYGEN DEMAND (COD)	11.82	21	<5	mg/L
CHLORIDE	63.21	355	9	mg/L
CHLORINE TOTAL RESIDUAL WATER	<0.1000	<.1	<.1	mg/L
CHLOROBENZENE	<5	<5	<5	ug/L
CHLOROETHANE	<10	<10	<10	ug/L
CHLOROFORM	5.24	12	<1	ug/L
CHLOROMETHANE	<10	<10	<10	ug/L
CHROMIUM	<.01	<.01	<.01	mg/L
CHRYSENE	<10	<10	<10	ug/L
CIS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
COBALT	<.1	<.1	<.1	mg/L
CONDUCTIVITY	531.82	1380	337	umho/cm
COPPER	0.0083	.014	<.004	mg/L
CYANIDE	0.0025	.006	<.001	mg/L
DI-N-BUTYLPHTHALATE	8.60	10	<1	ug/L
DI-N-OCTYLPHTHALATE	2.31	10	<.1	ug/L
DIACETONE ALCOHOL	11.75	13	10	ug/L
DIBENZ(A H)ANTHRACENE	<10	<10	<10	ug/L
DIBROMOCHLOROMETHANE	<5	<5	<5	ug/L
DICHLOROFLUOROMETHANE	21.00	21	21	ug/L
DIETHYLPHTHALATE	5.83	10	<.3	ug/L
DIMETHYLPHTHALATE	<10	<10	<10	ug/L
DISSOLVED OXYGEN	9.86	15.5	6.8	ppm
ETHYLBENZENE	<5	<5	<5	ug/L
FLUORANTHENE	<10	<10	<10	ug/L
FLUORENE	<10	<10	<10	ug/L
FLUORIDE	0.1727	.4	<.1	mg/L
FREON 113	1.00	1	1	ug/L
HARDNESS	164.55	285	70	mg/L
HEXACHLOROBENZENE	<10	<10	<10	ug/L
HEXACHLOROBUTADIENE	<10	<10	<10	ug/L
HEXACHLOROCYCLOPENTADIENE	<10	<10	<10	ug/L
HEXACHLOROETHANE	<10	<10	<10	ug/L

SD-190 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
INDENO(1 2 3-CD)PYRENE	<10	<10	<10	ug/L
IRON	0.4200	.74	.09	mg/L
ISOPHORONE	<10	<10	<10	ug/L
LEAD	<.05	<.05	<.05	mg/L
LITHIUM	0.0071	.01	<.004	mg/L
MAGNESIUM	10.99	16	2.9	mg/L
MANGANESE	0.1413	.26	.039	mg/L
MERCURY	0.0004	.0008	<.0002	mg/L
METHYLENE CHLORIDE	4.53	5	<1	ug/L
MOLYBDENUM	0.0105	.014	<.01	mg/L
N-NITROSO-DI-N-PROPYLAMINE	<10	<10	<10	ug/L
N-NITROSODIMETHYLAMINE	<10	<10	<10	ug/L
N-NITROSODIPHENYLAMINE	<10	<10	<10	ug/L
NAPHTHALENE	<10	<10	<10	ug/L
NICKEL	<.05	<.05	<.05	mg/L
NIOBIUM	0.0075	.012	<.007	mg/L
NITRATE	2.17	3.5	1.2	mg/L
NITROBENZENE	<10	<10	<10	ug/L
OIL & GREASE	2.13	3	<2	mg/L
PCB (AROCLOR-1016)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1221)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1232)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1242)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1248)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1254)	<1	<1	<1	ug/L
PCB (AROCLOR-1260)	<1	<1	<1	ug/L
PENTACHLOROPHENOL	<50	<50	<50	ug/L
PH	7.85	8.5	7	
PHENANTHRENE	<10	<10	<10	ug/L
PHENOL	<10	<10	<10	ug/L
PHOSPHORUS	0.2382	.36	<.2	mg/L
POTASSIUM	3.06	12	<.6	mg/L
PYRENE	<10	<10	<10	ug/L
SELENIUM	<0.0050	<.005	<.005	mg/L
SILICON	2.36	5.3	.88	mg/L
SILVER	<.01	<.01	<.01	mg/L
SODIUM	37.75	230	5.7	mg/L
STRONTIUM	0.1021	.13	.081	mg/L
SULFATE	45.84	194	5.7	mg/L
SULFUR	2.00	2	2	ug/L
TEMPERATURE	18.09	24	12	Deg. C
TETRACHLOROETHENE	4.65	5	<1	ug/L
THORIUM	<.2	<.2	<.2	mg/L
TITANIUM	0.0055	.012	<.003	mg/L
TOLUENE	4.12	6	<1	ug/L
TOTAL DISSOLVED SOLIDS	291.27	698	170	mg/L
TOTAL ORGANIC CARBON (TOC)	11.65	40	1.4	mg/L
TOTAL SUSPENDED SOLIDS	9.55	39	<1	mg/L

SD-190 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
TRANS-1 2-DICHLOROETHENE	17.41	39	<3	ug/L
TRANS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
TRICHLOROETHENE	5.29	11	<2	ug/L
TRICHLOROFLUOROMETHANE	1.00	1	1	ug/L
TURBIDITY	8.77	58	<1	NTU
UNKNOWNS	38.50	48	29	ug/L
URANIUM	0.0120	.048	<.001	mg/L
VANADIUM	<.5	<.5	<.5	mg/L
VINYL CHLORIDE	9.94	18	<5	ug/L
XYLENE (TOTAL)	1.00	1	1	ug/L
ZINC	0.0489	.09	.032	mg/L
ZIRCONIUM	<.005	<.005	<.005	mg/L

SD-194 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
1 1 1-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1 2 2-TETRACHLOROETHANE	<5	<5	<5	ug/L
1 1 2-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHENE	<5	<5	<5	ug/L
1 2 4-TRICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROETHANE	<5	<5	<5	ug/L
1 2-DICHLOROPROPANE	<5	<5	<5	ug/L
1 3-DICHLOROBENZENE	<10	<10	<10	ug/L
1 4-DICHLOROBENZENE	<10	<10	<10	ug/L
2 4 6-TRICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DIMETHYLPHENOL	<10	<10	<10	ug/L
2 4-DINITROPHENOL	<10	<10	<10	ug/L
2 4-DINITROTOLUENE	<10	<10	<10	ug/L
2 6-DINITROTOLUENE	<10	<10	<10	ug/L
2-CHLOROETHYLVINYL ETHER	<10	<10	<10	ug/L
2-CHLORONAPHTHALENE	<10	<10	<10	ug/L
2-CHLOROPHENOL	<10	<10	<10	ug/L
2-NITROPHENOL	<10	<10	<10	ug/L
3 3'-DICHLOROBENZIDINE	<20	<20	<20	ug/L
4 6-DINITRO-2-METHYLPHENOL	<50	<50	<50	ug/L
4-BROMOPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-CHLORO-3-METHYLPHENOL	<10	<10	<10	ug/L
4-CHLOROPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-NITROPHENOL	<50	<50	<50	ug/L
ACENAPHTHENE	<10	<10	<10	ug/L
ACENAPHTHYLENE	<10	<10	<10	ug/L
ALKALINITY	101.00	127	75	mg/L
ALPHA	362.50	673	52	pCi/L
ALUMINUM	3.20	5.8	.6	mg/L
AMMONIA	<.2	<.2	<.2	mg/L
ANTHRACENE	<10	<10	<10	ug/L
ARSENIC	0.0055	.006	<.005	mg/L
BARIUM	<.1	<.1	<.1	mg/L
BENZENE	<5	<5	<5	ug/L
BENZIDINE	<10	<10	<10	ug/L
BENZO(A)ANTHRACENE	<10	<10	<10	ug/L
BENZO(A)PYRENE	<10	<10	<10	ug/L
BENZO(B)FLUORANTHENE	<10	<10	<10	ug/L
BENZO(G H I)PERYLENE	<10	<10	<10	ug/L
BENZO(K)FLUORANTHENE	<10	<10	<10	ug/L
BERYLLIUM	<.001	<.001	<.001	mg/L
BETA	190.95	357	24.9	pCi/L
BIS(2-CHLOROETHOXY)METHANE	<10	<10	<10	ug/L
BIS(2-CHLOROETHYL)ETHER	<10	<10	<10	ug/L
BIS(2-CHLOROISOPROPYL)ETHER	<10	<10	<10	ug/L

SD-194 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
BIS(2-ETHYLHEXYL)PHTHALATE	<10	<10	<10	ug/L
BORON	0.0135	.023	<.004	mg/L
BROMODICHLOROMETHANE	<5	<5	<5	ug/L
BROMOFORM	<5	<5	<5	ug/L
BROMOMETHANE	<10	<10	<10	ug/L
BUTYLBENZYLPHTHALATE	5.50	10	<1	ug/L
CADMIUM	<.003	<.003	<.003	mg/L
CALCIUM	41.50	49	34	mg/L
CARBON TETRACHLORIDE	<5	<5	<5	ug/L
CHEMICAL OXYGEN DEMAND (COD)	14.00	14	14	mg/L
CHLORIDE	4.80	8.6	<1	mg/L
CHLORINE TOTAL RESIDUAL WATER	<.1	<.1	<.1	mg/L
CHLOROBENZENE	<5	<5	<5	ug/L
CHLOROETHANE	<10	<10	<10	ug/L
CHLOROFORM	<5	<5	<5	ug/L
CHLOROMETHANE	<10	<10	<10	ug/L
CHROMIUM	<.01	<.01	<.01	mg/L
CHRYSENE	<10	<10	<10	ug/L
CIS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
COBALT	<.1	<.1	<.1	mg/L
CONDUCTIVITY	308.00	428	188	umho/cm
COPPER	0.0105	.017	<.004	mg/L
CYANIDE	<0.0020	<.002	<.002	mg/L
DI-N-BUTYLPHTHALATE	<10	<10	<10	ug/L
DI-N-OCTYLPHTHALATE	5.50	10	<1	ug/L
DIBENZ(A H)ANTHRACENE	<10	<10	<10	ug/L
DIBROMOCHLOROMETHANE	<5	<5	<5	ug/L
DIETHYLPHTHALATE	<10	<10	<10	ug/L
DIMETHYLPHTHALATE	<10	<10	<10	ug/L
DISSOLVED OXYGEN	11.25	13	9.5	ppm
ETHYLBENZENE	<5	<5	<5	ug/L
FLUORANTHENE	<10	<10	<10	ug/L
FLUORENE	<10	<10	<10	ug/L
FLUORIDE	0.2500	.3	.2	mg/L
HARDNESS	167.00	242	92	mg/L
HEXACHLOROBENZENE	<10	<10	<10	ug/L
HEXACHLOROBUTADIENE	<10	<10	<10	ug/L
HEXACHLOROCYCLOPENTADIENE	<10	<10	<10	ug/L
HEXACHLOROETHANE	<10	<10	<10	ug/L
INDENO(1 2 3-CD)PYRENE	<10	<10	<10	ug/L
IRON	3.22	5.9	.53	mg/L
ISOPHORONE	<10	<10	<10	ug/L
LEAD	<.05	<.05	<.05	mg/L
LITHIUM	0.0068	9.60000	<.004	mg/L
MAGNESIUM	8.75	11	6.5	mg/L
MANGANESE	0.1455	.28	.011	mg/L
MERCURY	<.0002	<.0002	<.0002	mg/L
METHYLENE CHLORIDE	<5	<5	<5	ug/L

SD-194 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
MOLYBDENUM	<.01	<.01	<.01	mg/L
N-NITROSO-DI-N-PROPYLAMINE	<10	<10	<10	ug/L
N-NITROSODIMETHYLAMINE	<10	<10	<10	ug/L
N-NITROSODIPHENYLAMINE	<10	<10	<10	ug/L
NAPHTHALENE	<10	<10	<10	ug/L
NICKEL	<.05	<.05	<.05	mg/L
NIOBIUM	<.007	<.007	<.007	mg/L
NITRATE	1.45	1.5	1.4	mg/L
NITROBENZENE	<10	<10	<10	ug/L
OIL & GREASE	<2	<2	<2	mg/L
PCB (AROCLOR-1016)	<1	<1	<1	ug/L
PCB (AROCLOR-1221)	<1	<1	<1	ug/L
PCB (AROCLOR-1232)	<1	<1	<1	ug/L
PCB (AROCLOR-1242)	<1	<1	<1	ug/L
PCB (AROCLOR-1248)	<1	<1	<1	ug/L
PCB (AROCLOR-1254)	<1	<1	<1	ug/L
PCB (AROCLOR-1260)	<1	<1	<1	ug/L
PENTACHLOROPHENOL	<50	<50	<50	ug/L
PH	7.85	7.9	7.8	
PHENANTHRENE	<10	<10	<10	ug/L
PHENOL	<10	<10	<10	ug/L
PHOSPHORUS	<.2	<.2	<.2	mg/L
POTASSIUM	2.70	3.5	1.9	mg/L
PYRENE	<10	<10	<10	ug/L
SELENIUM	<0.0050	<.005	<.005	mg/L
SILICON	6.40	9.3	3.5	mg/L
SILVER	<.01	<.01	<.01	mg/L
SODIUM	2.59	4.2	.97	mg/L
STRONTIUM	0.0850	.11	.06	mg/L
SULFATE	55.50	93	18	mg/L
TEMPERATURE	13.70	15.4	12	Deg. C
TETRACHLOROETHENE	<5	<5	<5	ug/L
THORIUM	<.2	<.2	<.2	mg/L
TITANIUM	0.0610	.11	.012	mg/L
TOLUENE	<5	<5	<5	ug/L
TOTAL DISSOLVED SOLIDS	207.00	298	116	mg/L
TOTAL ORGANIC CARBON (TOC)	10.00	16	4	mg/L
TOTAL SUSPENDED SOLIDS	142.00	274	10	mg/L
TRANS-1 2-DICHLOROETHENE	<5	<5	<5	ug/L
TRANS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
TRICHLOROETHENE	<5	<5	<5	ug/L
TURBIDITY	95.50	180	<11	NTU
UNKNOWN	9.00	9	9	ug/L
URANIUM	0.6220	1.196	.048	mg/L
VANADIUM	<.5	<.5	<.5	mg/L
VINYL CHLORIDE	<10	<10	<10	ug/L
ZINC	0.0460	.049	.043	mg/L
ZIRCONIUM	<.005	<.005	<.005	mg/L

SD-200 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
1 1 1-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1 2 2-TETRACHLOROETHANE	<5	<5	<5	ug/L
1 1 2-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHENE	<5	<5	<5	ug/L
1 2 4-TRICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROETHANE	<5	<5	<5	ug/L
1 2-DICHLOROPROPANE	<5	<5	<5	ug/L
1 3-DICHLOROBENZENE	<10	<10	<10	ug/L
1 4-DICHLOROBENZENE	<10	<10	<10	ug/L
2 4 6-TRICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DIMETHYLPHENOL	<10	<10	<10	ug/L
2 4-DINITROPHENOL	<10	<10	<10	ug/L
2 4-DINITROTOLUENE	<10	<10	<10	ug/L
2 6-DINITROTOLUENE	<10	<10	<10	ug/L
2-CHLOROETHYLVINYL ETHER	<10	<10	<10	ug/L
2-CHLORONAPHTHALENE	<10	<10	<10	ug/L
2-CHLOROPHENOL	<10	<10	<10	ug/L
2-NITROPHENOL	<10	<10	<10	ug/L
3 3'-DICHLOROBENZIDINE	<20	<20	<20	ug/L
4 6-DINITRO-2-METHYLPHENOL	<50	<50	<50	ug/L
4-BROMOPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-CHLORO-3-METHYLPHENOL	<10	<10	<10	ug/L
4-CHLOROPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-NITROPHENOL	<50	<50	<50	ug/L
ACENAPHTHENE	<10	<10	<10	ug/L
ACENAPHTHYLENE	<10	<10	<10	ug/L
ALKALINITY	61.00	74	48	mg/L
ALPHA	26.05	26.1	26	pCi/L
ALUMINUM	0.2411	1.1	<.1	mg/L
AMMONIA	<.2	<.2	<.2	mg/L
ANTHRACENE	<10	<10	<10	ug/L
ARSENIC	<.005	<.005	<.005	mg/L
BARIUM	<.1	<.1	<.1	mg/L
BENZENE	<5	<5	<5	ug/L
BENZIDINE	<10	<10	<10	ug/L
BENZO(A)ANTHRACENE	<10	<10	<10	ug/L
BENZO(A)PYRENE	<10	<10	<10	ug/L
BENZO(B)FLUORANTHENE	<10	<10	<10	ug/L
BENZO(G H I)PERYLENE	<10	<10	<10	ug/L
BENZO(K)FLUORANTHENE	<10	<10	<10	ug/L
BERYLLIUM	<.001	<.001	<.001	mg/L
BETA	13.55	14.1	13	pCi/L
BIS(2-CHLOROETHOXY)METHANE	<10	<10	<10	ug/L
BIS(2-CHLOROETHYL)ETHER	<10	<10	<10	ug/L
BIS(2-CHLOROISOPROPYL)ETHER	<10	<10	<10	ug/L

SD-200 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
BIS(2-ETHYLHEXYL)PHTHALATE	6.50	10	<3	ug/L
BORON	0.0290	.046	.012	mg/L
BROMODICHLOROMETHANE	<5	<5	<5	ug/L
BROMOFORM	<5	<5	<5	ug/L
BROMOMETHANE	<10	<10	<10	ug/L
BUTYLBENZYLPHTHALATE	<10	<10	<10	ug/L
CADMIUM	<.003	<.003	<.003	mg/L
CALCIUM	20.00	28	12	mg/L
CARBON TETRACHLORIDE	<5	<5	<5	ug/L
CHEMICAL OXYGEN DEMAND (COD)	6.00	7	<5	mg/L
CHLORIDE	13.65	25	2.3	mg/L
CHLORINE TOTAL RESIDUAL WATER	<.1	<.1	<.1	mg/L
CHLOROBENZENE	<5	<5	<5	ug/L
CHLOROETHANE	<10	<10	<10	ug/L
CHLOROFORM	<5	<5	<5	ug/L
CHLOROMETHANE	<10	<10	<10	ug/L
CHROMIUM	<.01	<.01	<.01	mg/L
CHRYSENE	<10	<10	<10	ug/L
CIS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
COBALT	<.1	<.1	<.1	mg/L
CONDUCTIVITY	269.50	429	110	umho/cm
COPPER	0.0069	.0099	<.004	mg/L
CYANIDE	<.002	<.002	<.002	mg/L
DI-N-BUTYLPHTHALATE	<10	<10	<10	ug/L
DI-N-OCTYLPHTHALATE	5.50	10	<1	ug/L
DIBENZ(A H)ANTHRACENE	<10	<10	<10	ug/L
DIBROMOCHLOROMETHANE	<5	<5	<5	ug/L
DIETHYLPHTHALATE	<10	<10	<10	ug/L
DIMETHYLPHTHALATE	<10	<10	<10	ug/L
DISSOLVED OXYGEN	10.50	10.7	10.3	ppm
ETHYLBENZENE	<5	<5	<5	ug/L
FLUORANTHENE	<10	<10	<10	ug/L
FLUORENE	<10	<10	<10	ug/L
FLUORIDE	0.2500	.4	.1	mg/L
HARDNESS	83.00	118	48	mg/L
HEXACHLOROBENZENE	<10	<10	<10	ug/L
HEXACHLOROBUTADIENE	<10	<10	<10	ug/L
HEXACHLOROCYCLOPENTADIENE	<10	<10	<10	ug/L
HEXACHLOROETHANE	<10	<10	<10	ug/L
INDENO(1 2 3-CD)PYRENE	<10	<10	<10	ug/L
IRON	0.0950	.14	<.05	mg/L
ISOPHORONE	<10	<10	<10	ug/L
LEAD	<.05	<.05	<.05	mg/L
LITHIUM	<.004	<.004	<.004	mg/L
MAGNESIUM	3.30	4.8	1.8	mg/L
MANGANESE	0.0135	.017	<.01	mg/L
MERCURY	<.0002	<.0002	<.0002	mg/L
METHYLENE CHLORIDE	<5.00	<5	<5	ug/L

SD-200 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
MOLYBDENUM	<.01	<.01	<.01	mg/L
N-NITROSO-DI-N-PROPYLAMINE	<10	<10	<10	ug/L
N-NITROSODIMETHYLAMINE	<10	<10	<10	ug/L
N-NITROSODIPHENYLAMINE	<10	<10	<10	ug/L
NAPHTHALENE	<10	<10	<10	ug/L
NICKEL	<.05	<.05	<.05	mg/L
NIOBIUM	<.007	<.007	<.007	mg/L
NITRATE	3.75	6.3	1.2	mg/L
NITROBENZENE	<10	<10	<10	ug/L
OIL & GREASE	<2	<2	<2	mg/L
PCB (AROCLOR-1016)	<1	<1	<1	ug/L
PCB (AROCLOR-1221)	<1	<1	<1	ug/L
PCB (AROCLOR-1232)	<1	<1	<1	ug/L
PCB (AROCLOR-1242)	<1	<1	<1	ug/L
PCB (AROCLOR-1248)	<1	<1	<1	ug/L
PCB (AROCLOR-1254)	<1	<1	<1	ug/L
PCB (AROCLOR-1260)	<1	<1	<1	ug/L
PENTACHLOROPHENOL	<50	<50	<50	ug/L
PH	7.65	7.7	7.6	
PHENANTHRENE	<10	<10	<10	ug/L
PHENOL	<10	<10	<10	ug/L
PHOSPHORUS	<.2	<.2	<.2	mg/L
POTASSIUM	4.05	6.5	1.6	mg/L
PYRENE	<10	<10	<10	ug/L
SELENIUM	<0.0050	<.005	<.005	mg/L
SILICON	0.7950	1.1	.49	mg/L
SILVER	<.01	<.01	<.01	mg/L
SODIUM	4.85	8.4	1.3	mg/L
STRONTIUM	0.0415	.056	.027	mg/L
SULFATE	40.25	73	7.5	mg/L
TEMPERATURE	13.50	15	12	Deg. C
TETRACHLOROETHENE	<5	<5	<5	ug/L
THORIUM	<.2	<.2	<.2	mg/L
TITANIUM	0.0035	.0039	<.003	mg/L
TOLUENE	<5	<5	<5	ug/L
TOTAL DISSOLVED SOLIDS	129.00	188	70	mg/L
TOTAL ORGANIC CARBON (TOC)	18.50	26	11	mg/L
TOTAL SUSPENDED SOLIDS	2.50	3	2	mg/L
TRANS-1 2-DICHLOROETHENE	6.00	7	<5	ug/L
TRANS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
TRICHLOROETHENE	13.00	21	<5	ug/L
TURBIDITY	5.50	10	1	NTU
URANIUM	0.0200	.021	.019	mg/L
VANADIUM	<.5	<.5	<.5	mg/L
VINYL CHLORIDE	<10	<10	<10	ug/L
ZINC	0.0320	.04	.024	mg/L
ZIRCONIUM	<.005	<.005	<.005	mg/L

SD-210 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
1 1 1-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1 2 2-TETRACHLOROETHANE	<5	<5	<5	ug/L
1 1 2-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHENE	<5	<5	<5	ug/L
1 2 4-TRICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROETHANE	<5	<5	<5	ug/L
1 2-DICHLOROPROPANE	<5	<5	<5	ug/L
1 3-DICHLOROBENZENE	<10	<10	<10	ug/L
1 4-DICHLOROBENZENE	<10	<10	<10	ug/L
2 4 6-TRICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DIMETHYLPHENOL	<10	<10	<10	ug/L
2 4-DINITROPHENOL	<10	<10	<10	ug/L
2 4-DINITROTOLUENE	<10	<10	<10	ug/L
2 6-DINITROTOLUENE	<10	<10	<10	ug/L
2-CHLOROETHYLVINYL ETHER	<10	<10	<10	ug/L
2-CHLORONAPHTHALENE	<10	<10	<10	ug/L
2-CHLOROPHENOL	<10	<10	<10	ug/L
2-NITROPHENOL	<10	<10	<10	ug/L
3 3'-DICHLOROBENZIDINE	<20	<20	<20	ug/L
4 6-DINITRO-2-METHYLPHENOL	<50	<50	<50	ug/L
4-BROMOPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-CHLORO-3-METHYLPHENOL	<10	<10	<10	ug/L
4-CHLOROPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-NITROPHENOL	<50	<50	<50	ug/L
ACENAPHTHENE	<10	<10	<10	ug/L
ACENAPHTHYLENE	<10	<10	<10	ug/L
ALIPHATIC HYDROCARBON	14.00	14	14	ug/L
ALKALINITY	73.67	128	49	mg/L
ALPHA	2.18	4.1	<1	pCi/L
ALUMINUM	0.1085	.21	<.1	mg/L
AMMONIA	<.2	<.2	<.2	mg/L
ANTHRACENE	<10	<10	<10	ug/L
ARSENIC	<.005	<.005	<.005	mg/L
BARIUM	<.1	<.1	<.1	mg/L
BENZENE	<5	<5	<5	ug/L
BENZIDINE	<10	<10	<10	ug/L
BENZO(A)ANTHRACENE	<10	<10	<10	ug/L
BENZO(A)PYRENE	<10	<10	<10	ug/L
BENZO(B)FLUORANTHENE	<10	<10	<10	ug/L
BENZO(G H I)PERYLENE	<10	<10	<10	ug/L
BENZO(K)FLUORANTHENE	<10	<10	<10	ug/L
BERYLLIUM	<.001	<.001	<.001	mg/L
BETA	2.48	4.9	<2	pCi/L
BIS(2-CHLOROETHOXY)METHANE	<10	<10	<10	ug/L
BIS(2-CHLOROETHYL)ETHER	<10	<10	<10	ug/L

SD-210 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
BIS(2-CHLOROISOPROPYL)ETHER	<10	<10	<10	ug/L
BIS(2-ETHYLHEXYL)PHTHALATE	12.50	15	<10	ug/L
BORON	0.0065	.015	<.004	mg/L
BROMODICHLOROMETHANE	<5	<5	<5	ug/L
BROMOFORM	<5	<5	<5	ug/L
BROMOMETHANE	<10	<10	<10	ug/L
BUTYLBENZYLPHTHALATE	5.50	10	<1	ug/L
CADMIUM	<.003	<.003	<.003	mg/L
CALCIUM	20.17	28	13	mg/L
CARBON TETRACHLORIDE	<5	<5	<5	ug/L
CHEMICAL OXYGEN DEMAND (COD)	<5.00	<5	<5	mg/L
CHLORIDE	9.97	15.4	6.3	mg/L
CHLORINE TOTAL RESIDUAL WATER	<0.1000	<.1	<.1	mg/L
CHLOROBENZENE	<5	<5	<5	ug/L
CHLOROETHANE	<10	<10	<10	ug/L
CHLOROFORM	4.60	5	<3	ug/L
CHLOROMETHANE	<10	<10	<10	ug/L
CHROMIUM	<.01	<.01	<.01	mg/L
CHRYSENE	<10	<10	<10	ug/L
CIS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
COBALT	<.1	<.1	<.1	mg/L
CONDUCTIVITY	177.67	265	121	umho/cm
COPPER	0.0056	.0084	<.004	mg/L
CYANIDE	0.0023	.004	<.002	mg/L
DI-N-BUTYLPHTHALATE	<10	<10	<10	ug/L
DI-N-OCTYLPHTHALATE	1.00	1	1	ug/L
DIBENZ(A H)ANTHRACENE	<10	<10	<10	ug/L
DIBROMOCHLOROMETHANE	<5	<5	<5	ug/L
DIETHYLPHTHALATE	5.50	10	<1	ug/L
DIMETHYLPHTHALATE	<10	<10	<10	ug/L
DISSOLVED OXYGEN	10.18	11.2	7.7	ppm
ETHYLBENZENE	<5	<5	<5	ug/L
FLUORANTHENE	<10	<10	<10	ug/L
FLUORENE	<10	<10	<10	ug/L
FLUORIDE	0.1500	.3	<.1	mg/L
HARDNESS	82.17	128	60	mg/L
HEXACHLOROBENZENE	<10	<10	<10	ug/L
HEXACHLOROBUTADIENE	<10	<10	<10	ug/L
HEXACHLOROCYCLOPENTADIENE	<10	<10	<10	ug/L
HEXACHLOROETHANE	<10	<10	<10	ug/L
INDENO(1 2 3-CD)PYRENE	<10	<10	<10	ug/L
IRON	0.0938	.15	<.05	mg/L
ISOPHORONE	<10	<10	<10	ug/L
LEAD	<.05	<.05	<.05	mg/L
LITHIUM	<.004	<.004	<.004	mg/L
MAGNESIUM	5.98	9.1	3.1	mg/L
MANGANESE	<.01	<.01	<.01	mg/L
MERCURY	<.0002	<.0002	<.0002	mg/L

SD-210 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
METHYLENE CHLORIDE	6.20	11	<5	ug/L
MOLYBDENUM	<.01	<.01	<.01	mg/L
N-NITROSO-DI-N-PROPYLAMINE	<10	<10	<10	ug/L
N-NITROSODIMETHYLAMINE	<10	<10	<10	ug/L
N-NITROSODIPHENYLAMINE	<10	<10	<10	ug/L
NAPHTHALENE	<10	<10	<10	ug/L
NICKEL	<.05	<.05	<.05	mg/L
NIOBIUM	<.007	<.007	<.007	mg/L
NITRATE	0.6583	.94	<.2	mg/L
NITROBENZENE	<10	<10	<10	ug/L
OIL & GREASE	<2	<2	<2	mg/L
PCB (AROCLOR-1016)	<1	<1	<1	ug/L
PCB (AROCLOR-1221)	<1	<1	<1	ug/L
PCB (AROCLOR-1232)	<1	<1	<1	ug/L
PCB (AROCLOR-1242)	<1	<1	<1	ug/L
PCB (AROCLOR-1248)	<1	<1	<1	ug/L
PCB (AROCLOR-1254)	<1	<1	<1	ug/L
PCB (AROCLOR-1260)	<1	<1	<1	ug/L
PENTACHLOROPHENOL	<50	<50	<50	ug/L
PH	7.60	8.1	7	
PHENANTHRENE	<10	<10	<10	ug/L
PHENOL	<10	<10	<10	ug/L
PHOSPHORUS	<.2	<.2	<.2	mg/L
POTASSIUM	0.6133	.68	<.6	mg/L
PYRENE	<10	<10	<10	ug/L
SELENIUM	<0.0050	<.005	<.005	mg/L
SILICON	0.4183	.58	.23	mg/L
SILVER	<.01	<.01	<.01	mg/L
SODIUM	6.53	12	3	mg/L
STRONTIUM	0.0185	.027	.014	mg/L
SULFATE	11.35	16	7.3	mg/L
TEMPERATURE	9.38	11.5	7	Deg. C
TETRACHLOROETHENE	<5	<5	<5	ug/L
THORIUM	<.2	<.2	<.2	mg/L
TITANIUM	<.003	<.003	<.003	mg/L
TOLUENE	4.20	5	<1	ug/L
TOTAL DISSOLVED SOLIDS	103.00	158	14	mg/L
TOTAL ORGANIC CARBON (TOC)	7.00	13	2	mg/L
TOTAL SUSPENDED SOLIDS	1.67	4	<1	mg/L
TRANS-1 2-DICHLOROETHENE	<5	<5	<5	ug/L
TRANS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
TRICHLOROETHENE	<5	<5	<5	ug/L
TURBIDITY	1.50	3	1	NTU
URANIUM	0.0067	.022	.002	mg/L
VANADIUM	<.5	<.5	<.5	mg/L
VINYL CHLORIDE	<10	<10	<10	ug/L
ZINC	0.0513	.092	.024	mg/L
ZIRCONIUM	<.005	<.005	<.005	mg/L

SD-220 Analytical Pesults Summary

Parameter	Concentration Average	Maximun	Minimun	Units
ALUMINUM	0.1100	.14	<.1	mg/L
1 1 1-TRICHLOROETHANE	<5.00	<5	<5	ug/L

SD-230 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
1 1 2 2-TETRACHLOROETHANE	<5	<5	<5	ug/L
1 1 2-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHENE	<5	<5	<5	ug/L
1 2 4-TRICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROETHANE	<5	<5	<5	ug/L
1 2-DICHLOROPROPANE	<5	<5	<5	ug/L
1 3-DICHLOROBENZENE	<10	<10	<10	ug/L
1 4-DICHLOROBENZENE	<10	<10	<10	ug/L
2 4 6-TRICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DIMETHYLPHENOL	<10	<10	<10	ug/L
2 4-DINITROPHENOL	<10	<10	<10	ug/L
2 4-DINITROTOLUENE	<10	<10	<10	ug/L
2 6-DINITROTOLUENE	<10	<10	<10	ug/L
2-CHLOROETHYLVINYL ETHER	<10	<10	<10	ug/L
2-CHLORONAPHTHALENE	<10	<10	<10	ug/L
2-CHLOROPHENOL	<10	<10	<10	ug/L
2-NITROPHENOL	<10	<10	<10	ug/L
3 3'-DICHLOROBENZIDINE	<20	<20	<20	ug/L
4 6-DINITRO-2-METHYLPHENOL	<50	<50	<50	ug/L
4-BROMOPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-CHLORO-3-METHYLPHENOL	<10	<10	<10	ug/L
4-CHLOROPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-NITROPHENOL	<50	<50	<50	ug/L
ACENAPHTHENE	<10	<10	<10	ug/L
ACENAPHTHYLENE	<10	<10	<10	ug/L
ALKALINITY	50.25	71	27	mg/L
ALPHA	2.38	4.5	<1	pCi/L
ALUMINUM	0.1050	.12	<.1	mg/L
AMMONIA	0.2250	.3	<.2	mg/L
ANTHRACENE	<10	<10	<10	ug/L
ARSENIC	<.005	<.005	<.005	mg/L
BARIUM	<.1	<.1	<.1	mg/L
BENZENE	<5	<5	<5	ug/L
BENZIDINE	<10	<10	<10	ug/L
BENZO(A)ANTHRACENE	<10	<10	<10	ug/L
BENZO(A)PYRENE	<10	<10	<10	ug/L
BENZO(B)FLUORANTHENE	<10	<10	<10	ug/L
BENZO(G H I)PERYLENE	<10	<10	<10	ug/L
BENZO(K)FLUORANTHENE	<10	<10	<10	ug/L
BERYLLIUM	<.001	<.001	<.001	mg/L
BETA	3.00	6	<2	pCi/L
BIS(2-CHLOROETHOXY)METHANE	<10	<10	<10	ug/L
BIS(2-CHLOROETHYL)ETHER	<10	<10	<10	ug/L
BIS(2-CHLOROISOPROPYL)ETHER	<10	<10	<10	ug/L
BIS(2-ETHYLHEXYL)PHTHALATE	17.50	25	<10	ug/L

SD-230 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
BORON	0.0178	.041	<.004	mg/L
BROMODICHLOROMETHANE	<5	<5	<5	ug/L
BROMOFORM	<5	<5	<5	ug/L
BROMOMETHANE	<10	<10	<10	ug/L
BUTYLBENZYLPHTHALATE	5.50	10	<1	ug/L
CADMIUM	<.003	<.003	<.003	mg/L
CALCIUM	17.50	26	8	mg/L
CARBON TETRACHLORIDE	<5	<5	<5	ug/L
CHEMICAL OXYGEN DEMAND (COD)	9.00	14	<5	mg/L
CHLORIDE	13.75	24	2.4	mg/L
CHLORINE TOTAL RESIDUAL WATER	<1	<1	<1	mg/L
CHLOROBENZENE	<5	<5	<5	ug/L
CHLOROETHANE	<10	<10	<10	ug/L
CHLOROFORM	4.75	5	<4	ug/L
CHLOROMETHANE	<10	<10	<10	ug/L
CHROMIUM	<.01	<.01	<.01	mg/L
CHRYSENE	<10	<10	<10	ug/L
CIS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
COBALT	<.1	<.1	<.1	mg/L
CONDUCTIVITY	199.75	312	74	umho/cm
COPPER	0.0517	.097	.01	mg/L
CYANIDE	<0.0020	<.002	<.002	mg/L
DI-N-BUTYLPHTHALATE	<10	<10	<10	ug/L
DI-N-OCTYLPHTHALATE	1.00	1	1	ug/L
DIBENZ(A H)ANTHRACENE	<10	<10	<10	ug/L
DIBROMOCHLOROMETHANE	<5	<5	<5	ug/L
DIETHYLPHTHALATE	<10	<10	<10	ug/L
DIMETHYLPHTHALATE	<10	<10	<10	ug/L
DISSOLVED OXYGEN	11.95	15	10.7	ppm
ETHYLBENZENE	<5	<5	<5	ug/L
FLUORANTHENE	<10	<10	<10	ug/L
FLUORENE	<10	<10	<10	ug/L
FLUORIDE	0.3250	1	<.1	mg/L
HARDNESS	96.50	174	32	mg/L
HEXACHLOROBENZENE	<10	<10	<10	ug/L
HEXACHLOROBUTADIENE	<10	<10	<10	ug/L
HEXACHLOROCYCLOPENTADIENE	<10	<10	<10	ug/L
HEXACHLOROETHANE	<10	<10	<10	ug/L
INDENO(1 2 3-CD)PYRENE	<10	<10	<10	ug/L
IRON	0.2237	.44	.085	mg/L
ISOPHORONE	<10	<10	<10	ug/L
LEAD	<.05	<.05	<.05	mg/L
LITHIUM	<.004	<.004	<.004	mg/L
MAGNESIUM	4.28	6.8	1.8	mg/L
MANGANESE	0.0130	.021	<.01	mg/L
MERCURY	<.0002	<.0002	<.0002	mg/L
METHYLENE CHLORIDE	<5	<5	<5	ug/L
MOLYBDENUM	<.01	<.01	<.01	mg/L

SD-230 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
N-NITROSO-DI-N-PROPYLAMINE	<10	<10	<10	ug/L
N-NITROSODIMETHYLAMINE	<10	<10	<10	ug/L
N-NITROSODIPHENYLAMINE	<10	<10	<10	ug/L
NAPHTHALENE	<10	<10	<10	ug/L
NICKEL	<.05	<.05	<.05	mg/L
NIOBIUM	<.007	<.007	<.007	mg/L
NITRATE	1.20	1.5	.9	mg/L
NITROBENZENE	<10	<10	<10	ug/L
OIL & GREASE	<2	<2	<2	mg/L
PCB (AROCLOR-1016)	<1	<1	<1	ug/L
PCB (AROCLOR-1221)	<1	<1	<1	ug/L
PCB (AROCLOR-1232)	<1	<1	<1	ug/L
PCB (AROCLOR-1242)	<1	<1	<1	ug/L
PCB (AROCLOR-1248)	<1	<1	<1	ug/L
PCB (AROCLOR-1254)	<1	<1	<1	ug/L
PCB (AROCLOR-1260)	<1	<1	<1	ug/L
PENTACHLOROPHENOL	<50	<50	<50	ug/L
PH	7.63	8	7.4	
PHENANTHRENE	<10	<10	<10	ug/L
PHENOL	<10	<10	<10	ug/L
PHOSPHORUS	<.2	<.2	<.2	mg/L
POTASSIUM	1.23	2.2	<.6	mg/L
PYRENE	<10	<10	<10	ug/L
SELENIUM	<0.0050	<.005	<.005	mg/L
SILICON	0.7000	1.1	.25	mg/L
SILVER	<.01	<.01	<.01	mg/L
SODIUM	14.80	26	1.9	mg/L
STRONTIUM	0.0337	.058	.0078	mg/L
SULFATE	26.27	44	5.1	mg/L
TEMPERATURE	12.68	15.2	11.5	Deg. C
TETRACHLOROETHENE	<5	<5	<5	ug/L
THORIUM	<.2	<.2	<.2	mg/L
TITANIUM	<.003	<.003	<.003	mg/L
TOLUENE	4.00	5	<1	ug/L
TOTAL DISSOLVED SOLIDS	106.50	162	26	mg/L
TOTAL ORGANIC CARBON (TOC)	12.50	19	5	mg/L
TOTAL SUSPENDED SOLIDS	2.50	4	<1	mg/L
TRANS-1 2-DICHLOROETHENE	<5	<5	<5	ug/L
TRANS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
TRICHLOROETHENE	<5	<5	<5	ug/L
TURBIDITY	4.50	8	1	NTU
UNKNOWN	37.00	37	37	ug/L
URANIUM	0.0048	.006	.003	mg/L
VANADIUM	<.5	<.5	<.5	mg/L
VINYL CHLORIDE	<10	<10	<10	ug/L
ZINC	0.0905	.13	.033	mg/L
ZIRCONIUM	<.005	<.005	<.005	mg/L

SD-240 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
1 1 1-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1 2 2-TETRACHLOROETHANE	<5	<5	<5	ug/L
1 1 2-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHENE	<5	<5	<5	ug/L
1 2 4-TRICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROETHANE	<5	<5	<5	ug/L
1 2-DICHLOROPROPANE	<5	<5	<5	ug/L
1 3-DICHLOROBENZENE	<10	<10	<10	ug/L
1 4-DICHLOROBENZENE	<10	<10	<10	ug/L
2 4 6-TRICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DIMETHYLPHENOL	<10	<10	<10	ug/L
2 4-DINITROPHENOL	<10	<10	<10	ug/L
2 4-DINITROTOLUENE	<10	<10	<10	ug/L
2 6-DINITROTOLUENE	<10	<10	<10	ug/L
2-CHLOROETHYLVINYL ETHER	<10	<10	<10	ug/L
2-CHLORONAPHTHALENE	<10	<10	<10	ug/L
2-CHLOROPHENOL	<10	<10	<10	ug/L
2-NITROPHENOL	<10	<10	<10	ug/L
3 3'-DICHLOROBENZIDINE	<20	<20	<20	ug/L
4 6-DINITRO-2-METHYLPHENOL	<50	<50	<50	ug/L
4-BROMOPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-CHLORO-3-METHYLPHENOL	<10	<10	<10	ug/L
4-CHLOROPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-NITROPHENOL	<50	<50	<50	ug/L
ACENAPHTHENE	<10	<10	<10	ug/L
ACENAPHTHYLENE	<10	<10	<10	ug/L
ALKALINITY	31.00	35	27	mg/L
ALPHA	<2	<2	<2	pCi/L
ALUMINUM	<.1	<.1	<.1	mg/L
AMMONIA	<.2	<.2	<.2	mg/L
ANTHRACENE	<10	<10	<10	ug/L
ARSENIC	<.005	<.005	<.005	mg/L
BARIUM	<.1	<.1	<.1	mg/L
BENZENE	<5	<5	<5	ug/L
BENZIDINE	<10	<10	<10	ug/L
BENZO(A)ANTHRACENE	<10	<10	<10	ug/L
BENZO(A)PYRENE	<10	<10	<10	ug/L
BENZO(B)FLUORANTHENE	<10	<10	<10	ug/L
BENZO(G H I)PERYLENE	<10	<10	<10	ug/L
BENZO(K)FLUORANTHENE	<10	<10	<10	ug/L
BERYLLIUM	<.001	<.001	<.001	mg/L
BETA	<2	<2	<2	pCi/L
BIS(2-CHLOROETHOXY)METHANE	<10	<10	<10	ug/L
BIS(2-CHLOROETHYL)ETHER	<10	<10	<10	ug/L
BIS(2-CHLOROISOPROPYL)ETHER	<10	<10	<10	ug/L

SD-240 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
BIS(2-ETHYLHEXYL)PHTHALATE	6.50	10	<3	ug/L
BORON	0.0066	.0092	<.004	mg/L
BROMODICHLOROMETHANE	<5	<5	<5	ug/L
BROMOFORM	<5	<5	<5	ug/L
BROMOMETHANE	<10	<10	<10	ug/L
BUTYLBENZYLPHTHALATE	6.50	10	<3	ug/L
CADMIUM	<.003	<.003	<.003	mg/L
CALCIUM	9.70	10	9.4	mg/L
CARBON TETRACHLORIDE	<5	<5	<5	ug/L
CHEMICAL OXYGEN DEMAND (COD)	10.50	14	7	mg/L
CHLORIDE	2.60	2.7	2.5	mg/L
CHLORINE TOTAL RESIDUAL WATER	<.1	<.1	<.1	mg/L
CHLOROBENZENE	<5	<5	<5	ug/L
CHLOROETHANE	<10	<10	<10	ug/L
CHLOROFORM	<5	<5	<5	ug/L
CHLOROMETHANE	<10	<10	<10	ug/L
CHROMIUM	<.01	<.01	<.01	mg/L
CHRYSENE	<10	<10	<10	ug/L
CIS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
COBALT	<.1	<.1	<.1	mg/L
CONDUCTIVITY	82.00	88	76	umho/cm
COPPER	<.004	<.004	<.004	mg/L
CYANIDE	<.002	<.002	<.002	mg/L
DI-N-BUTYLPHTHALATE	<10	<10	<10	ug/L
DI-N-OCTYLPHTHALATE	1.00	1	1	ug/L
DIACETONE ALCOHOL	26.00	26	26	ug/L
DIBENZ(A H)ANTHRACENE	<10	<10	<10	ug/L
DIBROMOCHLOROMETHANE	<5	<5	<5	ug/L
DIETHYLPHTHALATE	<10	<10	<10	ug/L
DIMETHYLPHTHALATE	<10	<10	<10	ug/L
DISSOLVED OXYGEN	10.50	11	10	ppm
ETHYLBENZENE	<5	<5	<5	ug/L
FLUORANTHENE	<10	<10	<10	ug/L
FLUORENE	<10	<10	<10	ug/L
FLUORIDE	<0.1000	<.1	<.1	mg/L
HARDNESS	45.00	54	36	mg/L
HEXACHLOROBENZENE	<10	<10	<10	ug/L
HEXACHLOROBUTADIENE	<10	<10	<10	ug/L
HEXACHLOROCYCLOPENTADIENE	<10	<10	<10	ug/L
HEXACHLOROETHANE	<10	<10	<10	ug/L
INDENO(1 2 3-CD)PYRENE	<10	<10	<10	ug/L
IRON	0.1000	.15	<.05	mg/L
ISOPHORONE	<10	<10	<10	ug/L
LEAD	<.05	<.05	<.05	mg/L
LITHIUM	<.004	<.004	<.004	mg/L
MAGNESIUM	2.00	2.4	1.6	mg/L
MANGANESE	<.01	<.01	<.01	mg/L
MERCURY	<.0002	<.0002	<.0002	mg/L

SD-240 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
METHYLENE CHLORIDE	<5	<5	<5	ug/L
MOLYBDENUM	0.0120	.014	<.01	mg/L
N-NITROSO-DI-N-PROPYLAMINE	<10	<10	<10	ug/L
N-NITROSODIMETHYLAMINE	<10	<10	<10	ug/L
N-NITROSODIPHENYLAMINE	<10	<10	<10	ug/L
NAPHTHALENE	<10	<10	<10	ug/L
NICKEL	<.05	<.05	<.05	mg/L
NIOBIUM	<.007	<.007	<.007	mg/L
NITRATE	1.43	1.9	.96	mg/L
NITROBENZENE	<10	<10	<10	ug/L
OIL & GREASE	<2	<2	<2	mg/L
PCB (AROCLOR-1016)	<1	<1	<1	ug/L
PCB (AROCLOR-1221)	<1	<1	<1	ug/L
PCB (AROCLOR-1232)	<1	<1	<1	ug/L
PCB (AROCLOR-1242)	<1	<1	<1	ug/L
PCB (AROCLOR-1248)	<1	<1	<1	ug/L
PCB (AROCLOR-1254)	<1	<1	<1	ug/L
PCB (AROCLOR-1260)	<1	<1	<1	ug/L
PENTACHLOROPHENOL	<50	<50	<50	ug/L
PH	7.55	8.1	7	
PHENANTHRENE	<10	<10	<10	ug/L
PHENOL	<10	<10	<10	ug/L
PHOSPHORUS	<.2	<.2	<.2	mg/L
POTASSIUM	<.6	<.6	<.6	mg/L
PYRENE	<10	<10	<10	ug/L
SELENIUM	0.0055	.006	<.005	mg/L
SILICON	0.1800	.23	.13	mg/L
SILVER	<.01	<.01	<.01	mg/L
SODIUM	1.50	1.5	1.5	mg/L
STRONTIUM	0.0086	.01	.0072	mg/L
SULFATE	6.30	7.5	5.1	mg/L
TEMPERATURE	13.50	15	12	Deg. C
TETRACHLOROETHENE	<5	<5	<5	ug/L
THORIUM	<.2	<.2	<.2	mg/L
TITANIUM	<.003	<.003	<.003	mg/L
TOLUENE	<5	<5	<5	ug/L
TOTAL DISSOLVED SOLIDS	53.00	62	44	mg/L
TOTAL ORGANIC CARBON (TOC)	8.50	9	8	mg/L
TOTAL SUSPENDED SOLIDS	2.50	4	1	mg/L
TRANS-1 2-DICHLOROETHENE	<5	<5	<5	ug/L
TRANS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
TRICHLOROETHENE	<5	<5	<5	ug/L
TURBIDITY	4.50	8	1	NTU
URANIUM	0.0035	.004	.003	mg/L
VANADIUM	<.5	<.5	<.5	mg/L
VINYL CHLORIDE	<10	<10	<10	ug/L
XYLENE (TOTAL)	1.00	1	1	ug/L
ZINC	0.2050	.24	.17	mg/L

SD-240 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
ZIRCONIUM	<.005	<.005	<.005	mg/L

SD-280 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
1 1 1-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1 2 2-TETRACHLOROETHANE	<5	<5	<5	ug/L
1 1 2-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHENE	<5	<5	<5	ug/L
1 2 4-TRICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROETHANE	<5	<5	<5	ug/L
1 2-DICHLOROPROPANE	<5	<5	<5	ug/L
1 3-DICHLOROBENZENE	<10	<10	<10	ug/L
1 4-DICHLOROBENZENE	<10	<10	<10	ug/L
2 4 6-TRICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DIMETHYLPHENOL	<10	<10	<10	ug/L
2 4-DINITROPHENOL	<10	<10	<10	ug/L
2 4-DINITROTOLUENE	<10	<10	<10	ug/L
2 6-DINITROTOLUENE	<10	<10	<10	ug/L
2-BUTANONE	12.00	12	12	ug/L
2-CHLOROETHYLVINYL ETHER	<10	<10	<10	ug/L
2-CHLORONAPHTHALENE	<10	<10	<10	ug/L
2-CHLOROPHENOL	<10	<10	<10	ug/L
2-NITROPHENOL	<10	<10	<10	ug/L
3 3'-DICHLOROBENZIDINE	<20	<20	<20	ug/L
4 6-DINITRO-2-METHYLPHENOL	<50	<50	<50	ug/L
4-BROMOPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-CHLORO-3-METHYLPHENOL	<10	<10	<10	ug/L
4-CHLOROPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-NITROPHENOL	<50	<50	<50	ug/L
ACENAPHTHENE	<10	<10	<10	ug/L
ACENAPHTHYLENE	<10	<10	<10	ug/L
ACETOPHENONE	1.00	1	1	ug/L
ALKALINITY	62.00	62	62	mg/L
ALPHA	126.30	126.3	126.3	pCi/L
ALUMINUM	1.20	1.2	1.2	mg/L
AMMONIA	<.2	<.2	<.2	mg/L
ANTHRACENE	<10	<10	<10	ug/L
ARSENIC	<.005	<.005	<.005	mg/L
BARIUM	<.1	<.1	<.1	mg/L
BENZENE	<5	<5	<5	ug/L
BENZIDINE	<10	<10	<10	ug/L
BENZO(A)ANTHRACENE	<10	<10	<10	ug/L
BENZO(A)PYRENE	<10	<10	<10	ug/L
BENZO(B)FLUORANTHENE	<10	<10	<10	ug/L
BENZO(G H I)PERYLENE	<10	<10	<10	ug/L
BENZO(K)FLUORANTHENE	<10	<10	<10	ug/L
BENZYL ALCOHOL	1.00	1	1	ug/L
BERYLLIUM	<.001	<.001	<.001	mg/L
BETA	36.70	36.7	36.7	pCi/L

SD-280 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
BIS(2-CHLOROETHOXY)METHANE	<10	<10	<10	ug/L
BIS(2-CHLOROETHYL)ETHER	<10	<10	<10	ug/L
BIS(2-CHLOROISOPROPYL)ETHER	<10	<10	<10	ug/L
BIS(2-ETHYLHEXYL)PHTHALATE	2.00	2	2	ug/L
BORON	<.004	<.004	<.004	mg/L
BROMODICHLOROMETHANE	<5	<5	<5	ug/L
BROMOFORM	<5	<5	<5	ug/L
BROMOMETHANE	<10	<10	<10	ug/L
BUTYLBENZYLPHTHALATE	2.00	2	2	ug/L
CADMIUM	<.003	<.003	<.003	mg/L
CALCIUM	130.00	130	130	mg/L
CARBON TETRACHLORIDE	<5	<5	<5	ug/L
CHEMICAL OXYGEN DEMAND (COD)	97.00	97	97	mg/L
CHLORIDE	4800.00	4800	4800	mg/L
CHLORINE TOTAL RESIDUAL WATER	<.1	<.1	<.1	mg/L
CHLOROBENZENE	<5	<5	<5	ug/L
CHLOROETHANE	<10	<10	<10	ug/L
CHLOROFORM	<5	<5	<5	ug/L
CHLOROMETHANE	<10	<10	<10	ug/L
CHROMIUM	<.01	<.01	<.01	mg/L
CHRYSENE	<10	<10	<10	ug/L
CIS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
COBALT	<.1	<.1	<.1	mg/L
CONDUCTIVITY	1600.00	21600	21600	umho/cm
COPPER	0.0820	.082	.082	mg/L
CYANIDE	0.0050	.005	.005	mg/L
DI-N-BUTYLPHTHALATE	<10	<10	<10	ug/L
DI-N-OCTYLPHTHALATE	1.00	1	1	ug/L
DIACETONE ALCOHOL	4.00	4	4	ug/L
DIBENZ(A H)ANTHRACENE	<10	<10	<10	ug/L
DIBROMOCHLOROMETHANE	<5	<5	<5	ug/L
DIETHYLPHTHALATE	<10	<10	<10	ug/L
DIMETHYLPHTHALATE	<10	<10	<10	ug/L
DISSOLVED OXYGEN	10.00	10	10	ppm
ETHYLBENZENE	<5	<5	<5	ug/L
FLUORANTHENE	<10	<10	<10	ug/L
FLUORENE	<10	<10	<10	ug/L
FLUORIDE	0.5000	.5	.5	mg/L
HARDNESS	265.00	265	265	mg/L
HEXACHLOROBENZENE	<10	<10	<10	ug/L
HEXACHLOROBUTADIENE	<10	<10	<10	ug/L
HEXACHLOROCYCLOPENTADIENE	<10	<10	<10	ug/L
HEXACHLOROETHANE	<10	<10	<10	ug/L
INDENO(1 2 3-CD)PYRENE	<10	<10	<10	ug/L
IRON	1.80	1.8	1.8	mg/L
ISOPHORONE	<10	<10	<10	ug/L
LEAD	<.05	<.05	<.05	mg/L
LITHIUM	<.004	<.004	<.004	mg/L

SD-280 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
MAGNESIUM	8.70	8.7	8.7	mg/L
MANGANESE	0.1100	.11	.11	mg/L
MERCURY	<.0002	<.0002	<.0002	mg/L
METHYLENE CHLORIDE	<5	<5	<5	ug/L
MOLYBDENUM	<.01	<.01	<.01	mg/L
N-NITROSO-DI-N-PROPYLAMINE	<10	<10	<10	ug/L
N-NITROSODIMETHYLAMINE	<10	<10	<10	ug/L
N-NITROSODIPHENYLAMINE	<10	<10	<10	ug/L
NAPHTHALENE	<10	<10	<10	ug/L
NICKEL	<.05	<.05	<.05	mg/L
NIOBIUM	<.007	<.007	<.007	mg/L
NITRATE	<10	<10	<10	mg/L
NITROBENZENE	<10	<10	<10	ug/L
OIL & GREASE	2.00	2	2	mg/L
PCB (AROCLOR-1016)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1221)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1232)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1242)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1248)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1254)	<1	<1	<1	ug/L
PCB (AROCLOR-1260)	<1	<1	<1	ug/L
PENTACHLOROPHENOL	<50	<50	<50	ug/L
PH	7.70	7.7	7.7	
PHENANTHRENE	<10	<10	<10	ug/L
PHENOL	<10	<10	<10	ug/L
PHOSPHORUS	<.2	<.2	<.2	mg/L
POTASSIUM	2.80	2.8	2.8	mg/L
PROMETON	2.00	2	2	ug/L
PYRENE	<10	<10	<10	ug/L
SELENIUM	0.0050	.005	.005	mg/L
SILICON	2.40	2.4	2.4	mg/L
SILVER	<.01	<.01	<.01	mg/L
SODIUM	3600.00	3600	3600	mg/L
STRONTIUM	0.2600	.26	.26	mg/L
SULFATE	148.00	148	148	mg/L
TEMPERATURE	14.00	14	14	Deg. C
TETRACHLOROETHENE	<5	<5	<5	ug/L
THORIUM	<.2	<.2	<.2	mg/L
TITANIUM	0.0330	.033	.033	mg/L
TOLUENE	<5	<5	<5	ug/L
TOTAL DISSOLVED SOLIDS	9748.00	9748	9748	mg/L
TOTAL ORGANIC CARBON (TOC)	37.00	37	37	mg/L
TOTAL SUSPENDED SOLIDS	96.00	96	96	mg/L
TRANS-1 2-DICHLOROETHENE	<5	<5	<5	ug/L
TRANS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
TRICHLOROETHENE	<5	<5	<5	ug/L
TURBIDITY	180.00	180	180	NTU
UNKNOWNS	19.00	19	19	ug/L

SD-280 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
URANIUM	0.0300	.03	.03	mg/L
VANADIUM	<.5	<.5	<.5	mg/L
VINYL CHLORIDE	<10	<10	<10	ug/L
ZINC	0.1200	.12	.12	mg/L
ZIRCONIUM	<.005	<.005	<.005	mg/L

SD-294 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
1 1 1-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1 2 2-TETRACHLOROETHANE	<5	<5	<5	ug/L
1 1 2-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHENE	<5	<5	<5	ug/L
1 2 4-TRICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROETHANE	<5	<5	<5	ug/L
1 2-DICHLOROPROPANE	<5	<5	<5	ug/L
1 3-DICHLOROBENZENE	<10	<10	<10	ug/L
1 4-DICHLOROBENZENE	<10	<10	<10	ug/L
2 4 6-TRICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DIMETHYLPHENOL	<10	<10	<10	ug/L
2 4-DINITROPHENOL	<10	<10	<10	ug/L
2 4-DINITROTOLUENE	<10	<10	<10	ug/L
2 6-DINITROTOLUENE	<10	<10	<10	ug/L
2-CHLOROETHYLVINYL ETHER	<10	<10	<10	ug/L
2-CHLORONAPHTHALENE	<10	<10	<10	ug/L
2-CHLOROPHENOL	<10	<10	<10	ug/L
2-NITROPHENOL	<10	<10	<10	ug/L
3 3'-DICHLOROBENZIDINE	<20	<20	<20	ug/L
4 6-DINITRO-2-METHYLPHENOL	<50	<50	<50	ug/L
4-BROMOPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-CHLORO-3-METHYLPHENOL	<10	<10	<10	ug/L
4-CHLOROPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-NITROPHENOL	<50	<50	<50	ug/L
ACENAPHTHENE	<10	<10	<10	ug/L
ACENAPHTHYLENE	<10	<10	<10	ug/L
ALKALINITY	169.50	203	140	mg/L
ALPHA	35.75	45.3	16.1	pCi/L
ALUMINUM	0.4375	1.4	<.1	mg/L
AMMONIA	<.2	<.2	<.2	mg/L
ANTHRACENE	<10	<10	<10	ug/L
ARSENIC	0.0088	.02	<.005	mg/L
BARIUM	<.1	<.1	<.1	mg/L
BENZENE	<5	<5	<5	ug/L
BENZIDINE	<10	<10	<10	ug/L
BENZO(A)ANTHRACENE	<10	<10	<10	ug/L
BENZO(A)PYRENE	<10	<10	<10	ug/L
BENZO(B)FLUORANTHENE	<10	<10	<10	ug/L
BENZO(G H I)PERYLENE	<10	<10	<10	ug/L
BENZO(K)FLUORANTHENE	<10	<10	<10	ug/L
BERYLLIUM	<.001	<.001	<.001	mg/L
BETA	20.35	27.6	8.1	pCi/L
BHT	12.00	21	3	ug/L
BIS(2-CHLOROETHOXY)METHANE	<10	<10	<10	ug/L
BIS(2-CHLOROETHYL)ETHER	<10	<10	<10	ug/L

SD-294 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
BIS(2-CHLOROISOPROPYL)ETHER	<10	<10	<10	ug/L
BIS(2-ETHYLHEXYL)PHTHALATE	3.00	3	3	ug/L
BORON	0.0372	.072	.0049	mg/L
BROMODICHLOROMETHANE	<5	<5	<5	ug/L
BROMOFORM	<5	<5	<5	ug/L
BROMOMETHANE	<10	<10	<10	ug/L
BUTYLBENZYLPHTHALATE	1.00	1	1	ug/L
CADMIUM	<.003	<.003	<.003	mg/L
CALCIUM	65.00	84	42	mg/L
CARBON TETRACHLORIDE	<5	<5	<5	ug/L
CHEMICAL OXYGEN DEMAND (COD)	13.75	24	7	mg/L
CHLORIDE	53.85	196	4.8	mg/L
CHLORINE TOTAL RESIDUAL WATER	<.1	<.1	<.1	mg/L
CHLOROBENZENE	<5	<5	<5	ug/L
CHLOROETHANE	<10	<10	<10	ug/L
CHLOROFORM	5.25	6	<5	ug/L
CHLOROMETHANE	<10	<10	<10	ug/L
CHROMIUM	<.01	<.01	<.01	mg/L
CHRYSENE	<10	<10	<10	ug/L
CIS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
COBALT	<.1	<.1	<.1	mg/L
CONDUCTIVITY	518.00	952	360	umho/cm
COPPER	0.0089	.018	<.004	mg/L
CYANIDE	<0.0020	<.002	<.002	mg/L
DI-N-BUTYLPHTHALATE	<10	<10	<10	ug/L
DI-N-OCTYLPHTHALATE	5.50	10	<1	ug/L
DIACETONE ALCOHOL	6.50	8	5	ug/L
DIBENZ(A H)ANTHRACENE	<10	<10	<10	ug/L
DIBROMOCHLOROMETHANE	<5	<5	<5	ug/L
DIETHYLPHTHALATE	<10	<10	<10	ug/L
DIMETHYLPHTHALATE	<10	<10	<10	ug/L
DISSOLVED OXYGEN	9.75	10.4	9.4	ppm
ETHYLBENZENE	<5	<5	<5	ug/L
FLUORANTHENE	<10	<10	<10	ug/L
FLUORENE	<10	<10	<10	ug/L
FLUORIDE	0.3500	1	.1	mg/L
HARDNESS	176.00	220	80	mg/L
HEXACHLOROBENZENE	<10	<10	<10	ug/L
HEXACHLOROBUTADIENE	<10	<10	<10	ug/L
HEXACHLOROCYCLOPENTADIENE	<10	<10	<10	ug/L
HEXACHLOROETHANE	<10	<10	<10	ug/L
INDENO(1 2 3-CD)PYRENE	<10	<10	<10	ug/L
IRON	0.5450	1.7	.12	mg/L
ISOPHORONE	<10	<10	<10	ug/L
LEAD	<.05	<.05	<.05	mg/L
LITHIUM	0.0093	.012	.0077	mg/L
MAGNESIUM	9.98	11	8	mg/L
MANGANESE	0.0742	.2	.026	mg/L

SD-294 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
MERCURY	<.0002	<.0002	<.0002	mg/L
METHYLENE CHLORIDE	<5	<5	<5	ug/L
MOLYBDENUM	<.01	<.01	<.01	mg/L
N-NITROSO-DI-N-PROPYLAMINE	<10	<10	<10	ug/L
N-NITROSODIMETHYLAMINE	<10	<10	<10	ug/L
N-NITROSODIPHENYLAMINE	<10	<10	<10	ug/L
NAPHTHALENE	<10	<10	<10	ug/L
NICKEL	<.05	<.05	<.05	mg/L
NIOBIUM	<.007	<.007	<.007	mg/L
NITRATE	<.5	<.5	<.5	mg/L
NITROBENZENE	<10	<10	<10	ug/L
OIL & GREASE	<2	<2	<2	mg/L
PCB (AROCLOR-1016)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1221)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1232)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1242)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1248)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1254)	<1	<1	<1	ug/L
PCB (AROCLOR-1260)	<1	<1	<1	ug/L
PENTACHLOROPHENOL	<50	<50	<50	ug/L
PH	8.20	8.3	8.1	
PHENANTHRENE	<10	<10	<10	ug/L
PHENOL	<10	<10	<10	ug/L
PHOSPHORUS	<.2	<.2	<.2	mg/L
POTASSIUM	2.07	3.4	1	mg/L
PYRENE	<10	<10	<10	ug/L
SELENIUM	<0.0050	<.005	<.005	mg/L
SILICON	3.25	5.3	1.8	mg/L
SILVER	<.01	<.01	<.01	mg/L
SODIUM	28.95	98	4.9	mg/L
STRONTIUM	0.1575	.18	.12	mg/L
SUBSTITUTED DIPHENYL PHOSPHATE	4.00	4	4	ug/L
SULFATE	26.50	30	23	mg/L
TEMPERATURE	10.30	13.2	7	Deg. C
TETRACHLOROETHENE	<5	<5	<5	ug/L
THORIUM	<.2	<.2	<.2	mg/L
TITANIUM	0.0085	.024	<.003	mg/L
TOLUENE	<5	<5	<5	ug/L
TOTAL DISSOLVED SOLIDS	300.00	536	162	mg/L
TOTAL ORGANIC CARBON (TOC)	13.75	33	5	mg/L
TOTAL SUSPENDED SOLIDS	20.25	38	7	mg/L
TRANS-1 2-DICHLOROETHENE	<5	<5	<5	ug/L
TRANS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
TRICHLOROETHENE	<5	<5	<5	ug/L
TURBIDITY	12.50	24	3	NTU
UNKNOWN	5.50	6	5	ug/L
UNKNOWN ALKYL/ALKOXY COMPOUND	8.00	8	8	ug/L
URANIUM	0.1355	.364	.04	mg/L

SD-294 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
VANADIUM	<.5	<.5	<.5	mg/L
VINYL CHLORIDE	<10	<10	<10	ug/L
ZINC	0.0240	.036	<.02	mg/L
ZIRCONIUM	<.005	<.005	<.005	mg/L

SD-330 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
1 1 1-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1 2 2-TETRACHLOROETHANE	<5	<5	<5	ug/L
1 1 2-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHENE	<5	<5	<5	ug/L
1 2 4-TRICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROETHANE	<5	<5	<5	ug/L
1 2-DICHLOROPROPANE	<5	<5	<5	ug/L
1 3-DICHLOROBENZENE	<10	<10	<10	ug/L
1 4-DICHLOROBENZENE	<10	<10	<10	ug/L
2 4 6-TRICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DIMETHYLPHENOL	<10	<10	<10	ug/L
2 4-DINITROPHENOL	<10	<10	<10	ug/L
2 4-DINITROTOLUENE	<10	<10	<10	ug/L
2 6-DINITROTOLUENE	<10	<10	<10	ug/L
2-CHLOROETHYLVINYL ETHER	<10	<10	<10	ug/L
2-CHLORONAPHTHALENE	<10	<10	<10	ug/L
2-CHLOROPHENOL	<10	<10	<10	ug/L
2-NITROPHENOL	<10	<10	<10	ug/L
3 3'-DICHLOROBENZIDINE	<20	<20	<20	ug/L
4 6-DINITRO-2-METHYLPHENOL	<50	<50	<50	ug/L
4-BROMOPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-CHLORO-3-METHYLPHENOL	<10	<10	<10	ug/L
4-CHLOROPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-NITROPHENOL	<50	<50	<50	ug/L
ACENAPHTHENE	<10	<10	<10	ug/L
ACENAPHTHYLENE	<10	<10	<10	ug/L
ALKALINITY	58.33	80	46	mg/L
ALPHA	3.90	5.7	<2	pCi/L
ALUMINUM	0.1767	.33	<.1	mg/L
AMMONIA	<.2	<.2	<.2	mg/L
ANTHRACENE	<10	<10	<10	ug/L
ARSENIC	<.005	<.005	<.005	mg/L
BARIUM	<.1	<.1	<.1	mg/L
BENZENE	<5	<5	<5	ug/L
BENZIDINE	<10	<10	<10	ug/L
BENZO(A)ANTHRACENE	<10	<10	<10	ug/L
BENZO(A)PYRENE	<10	<10	<10	ug/L
BENZO(B)FLUORANTHENE	<10	<10	<10	ug/L
BENZO(G H I)PERYLENE	<10	<10	<10	ug/L
BENZO(K)FLUORANTHENE	<10	<10	<10	ug/L
BERYLLIUM	<.001	<.001	<.001	mg/L
BETA	5.83	7.4	4	pCi/L
BIS(2-CHLOROETHOXY)METHANE	<10	<10	<10	ug/L
BIS(2-CHLOROETHYL)ETHER	<10	<10	<10	ug/L
BIS(2-CHLOROISOPROPYL)ETHER	<10	<10	<10	ug/L

SD-330 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
BIS(2-ETHYLHEXYL)PHTHALATE	6.00	10	<2	ug/L
BORON	0.0086	.014	<.004	mg/L
BROMODICHLOROMETHANE	<5	<5	<5	ug/L
BROMOFORM	<5	<5	<5	ug/L
BROMOMETHANE	<10	<10	<10	ug/L
BUTYLBENZYLPHTHALATE	<10	<10	<10	ug/L
CADMIUM	<.003	<.003	<.003	mg/L
CALCIUM	19.00	29	14	mg/L
CARBON TETRACHLORIDE	<5	<5	<5	ug/L
CHEMICAL OXYGEN DEMAND (COD)	11.33	17	7	mg/L
CHLORIDE	2.73	6.2	<1	mg/L
CHLORINE TOTAL RESIDUAL WATER	<.1	<.1	<.1	mg/L
CHLOROBENZENE	<5	<5	<5	ug/L
CHLOROETHANE	<10	<10	<10	ug/L
CHLOROFORM	<5	<5	<5	ug/L
CHLOROMETHANE	<10	<10	<10	ug/L
CHROMIUM	<.01	<.01	<.01	mg/L
CHRYSENE	<10	<10	<10	ug/L
CIS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
COBALT	<.1	<.1	<.1	mg/L
CONDUCTIVITY	304.00	684	104	umho/cm
COPPER	0.0043	.0049	<.004	mg/L
CYANIDE	0.0027	.003	<.002	mg/L
DI-N-BUTYLPHTHALATE	<10	<10	<10	ug/L
DI-N-OCTYLPHTHALATE	5.50	10	<1	ug/L
DIACETONE ALCOHOL	3.00	3	3	ug/L
DIBENZ(A H)ANTHRACENE	<10	<10	<10	ug/L
DIBROMOCHLOROMETHANE	<5	<5	<5	ug/L
DIETHYLPHTHALATE	<10	<10	<10	ug/L
DIMETHYLPHTHALATE	<10	<10	<10	ug/L
DISSOLVED OXYGEN	12.10	12.8	11.7	ppm
ETHYLBENZENE	<5	<5	<5	ug/L
FLUORANTHENE	<10	<10	<10	ug/L
FLUORENE	<10	<10	<10	ug/L
FLUORIDE	<0.1000	<.1	<.1	mg/L
HARDNESS	76.00	116	48	mg/L
HEXACHLOROBENZENE	<10	<10	<10	ug/L
HEXACHLOROBUTADIENE	<10	<10	<10	ug/L
HEXACHLOROCYCLOPENTADIENE	<10	<10	<10	ug/L
HEXACHLOROETHANE	<10	<10	<10	ug/L
INDENO(1 2 3-CD)PYRENE	<10	<10	<10	ug/L
IRON	0.1033	.21	<.05	mg/L
ISOPHORONE	<10	<10	<10	ug/L
LEAD	<.05	<.05	<.05	mg/L
LITHIUM	0.0042	.0046	<.004	mg/L
MAGNESIUM	2.70	4.1	2	mg/L
MANGANESE	<.01	<.01	<.01	mg/L
MERCURY	<.0002	<.0002	<.0002	mg/L

SD-330 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
METHYLENE CHLORIDE	<5	<5	<5	ug/L
MOLYBDENUM	0.0117	.015	<.01	mg/L
N-NITROSO-DI-N-PROPYLAMINE	<10	<10	<10	ug/L
N-NITROSODIMETHYLAMINE	<10	<10	<10	ug/L
N-NITROSODIPHENYLAMINE	<10	<10	<10	ug/L
NAPHTHALENE	<10	<10	<10	ug/L
NICKEL	<.05	<.05	<.05	mg/L
NIOBIUM	<.007	<.007	<.007	mg/L
NITRATE	1.46	1.7	.97	mg/L
NITROBENZENE	<10	<10	<10	ug/L
OIL & GREASE	<2	<2	<2	mg/L
PCB (AROCLOR-1016)	<1	<1	<1	ug/L
PCB (AROCLOR-1221)	<1	<1	<1	ug/L
PCB (AROCLOR-1232)	<1	<1	<1	ug/L
PCB (AROCLOR-1242)	<1	<1	<1	ug/L
PCB (AROCLOR-1248)	<1	<1	<1	ug/L
PCB (AROCLOR-1254)	<1	<1	<1	ug/L
PCB (AROCLOR-1260)	<1	<1	<1	ug/L
PENTACHLOROPHENOL	<50	<50	<50	ug/L
PH	7.70	7.9	7.5	
PHENANTHRENE	<10	<10	<10	ug/L
PHENOL	<10	<10	<10	ug/L
PHOSPHORUS	<.2	<.2	<.2	mg/L
POTASSIUM	<.6	<.6	<.6	mg/L
PYRENE	<10	<10	<10	ug/L
SELENIUM	<0.0050	<.005	<.005	mg/L
SILICON	0.9433	1.5	.62	mg/L
SILVER	<.01	<.01	<.01	mg/L
SODIUM	1.89	4.4	.36	mg/L
STRONTIUM	0.0210	.032	.015	mg/L
SULFATE	7.53	8	7	mg/L
TEMPERATURE	12.33	14	11.5	Deg. C
TETRACHLOROETHENE	<5	<5	<5	ug/L
THORIUM	<.2	<.2	<.2	mg/L
TITANIUM	0.0038	.0055	<.003	mg/L
TOLUENE	<5	<5	<5	ug/L
TOTAL DISSOLVED SOLIDS	47.33	64	32	mg/L
TOTAL ORGANIC CARBON (TOC)	11.33	16	4	mg/L
TOTAL SUSPENDED SOLIDS	16.00	46	<1	mg/L
TRANS-1 2-DICHLOROETHENE	<5	<5	<5	ug/L
TRANS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
TRICHLOROETHENE	<5	<5	<5	ug/L
TURBIDITY	4.00	8	1	NTU
URANIUM	0.0063	.008	.005	mg/L
VANADIUM	<.5	<.5	<.5	mg/L
VINYL CHLORIDE	<10	<10	<10	ug/L
ZINC	0.2067	.22	.19	mg/L
ZIRCONIUM	<.005	<.005	<.005	mg/L

SD-340 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
1 1 1-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1 2 2-TETRACHLOROETHANE	<5	<5	<5	ug/L
1 1 2-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHENE	<5	<5	<5	ug/L
1 2 4-TRICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROETHANE	<5	<5	<5	ug/L
1 2-DICHLOROPROPANE	<5	<5	<5	ug/L
1 3-DICHLOROBENZENE	<10	<10	<10	ug/L
1 4-DICHLOROBENZENE	<10	<10	<10	ug/L
2 4 6-TRICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DIMETHYLPHENOL	<10	<10	<10	ug/L
2 4-DINITROPHENOL	<10	<10	<10	ug/L
2 4-DINITROTOLUENE	<10	<10	<10	ug/L
2 6-DINITROTOLUENE	<10	<10	<10	ug/L
2-CHLOROETHYLVINYL ETHER	<10	<10	<10	ug/L
2-CHLORONAPHTHALENE	<10	<10	<10	ug/L
2-CHLOROPHENOL	<10	<10	<10	ug/L
2-NITROPHENOL	<10	<10	<10	ug/L
3 3'-DICHLOROBENZIDINE	<20	<20	<20	ug/L
4 6-DINITRO-2-METHYLPHENOL	<50	<50	<50	ug/L
4-BROMOPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-CHLORO-3-METHYLPHENOL	<10	<10	<10	ug/L
4-CHLOROPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-NITROPHENOL	<50	<50	<50	ug/L
ACENAPHTHENE	<10	<10	<10	ug/L
ACENAPHTHYLENE	<10	<10	<10	ug/L
ALKALINITY	48.50	49	48	mg/L
ALPHA	3.20	4	2.4	pCi/L
ALUMINUM	<.1	<.1	<.1	mg/L
AMMONIA	<.2	<.2	<.2	mg/L
ANTHRACENE	<10	<10	<10	ug/L
ARSENIC	<.005	<.005	<.005	mg/L
BARIUM	<.1	<.1	<.1	mg/L
BENZENE	<5	<5	<5	ug/L
BENZIDINE	<10	<10	<10	ug/L
BENZO(A)ANTHRACENE	<10	<10	<10	ug/L
BENZO(A)PYRENE	<10	<10	<10	ug/L
BENZO(B)FLUORANTHENE	<10	<10	<10	ug/L
BENZO(G H I)PERYLENE	<10	<10	<10	ug/L
BENZO(K)FLUORANTHENE	<10	<10	<10	ug/L
BERYLLIUM	<.001	<.001	<.001	mg/L
BETA	3.50	5	<2	pCi/L
BIS(2-CHLOROETHOXY)METHANE	<10	<10	<10	ug/L
BIS(2-CHLOROETHYL)ETHER	<10	<10	<10	ug/L
BIS(2-CHLOROISOPROPYL)ETHER	<10	<10	<10	ug/L

SD-340 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
BIS(2-ETHYLHEXYL)PHTHALATE	7.50	10	<5	ug/L
BORON	0.0265	.049	<.004	mg/L
BROMODICHLOROMETHANE	<5	<5	<5	ug/L
BROMOFORM	<5	<5	<5	ug/L
BROMOMETHANE	<10	<10	<10	ug/L
BUTYLBENZYLPHTHALATE	<10	<10	<10	ug/L
CADMIUM	<.003	<.003	<.003	mg/L
CALCIUM	15.00	16	14	mg/L
CARBON TETRACHLORIDE	<5	<5	<5	ug/L
CHEMICAL OXYGEN DEMAND (COD)	7.50	10	<5	mg/L
CHLORIDE	4.10	6.1	2.1	mg/L
CHLORINE TOTAL RESIDUAL WATER	<.1	<.1	<.1	mg/L
CHLOROBENZENE	<5	<5	<5	ug/L
CHLOROETHANE	<10	<10	<10	ug/L
CHLOROFORM	<5	<5	<5	ug/L
CHLOROMETHANE	<10	<10	<10	ug/L
CHROMIUM	<.01	<.01	<.01	mg/L
CHRYSENE	<10	<10	<10	ug/L
CIS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
COBALT	<.1	<.1	<.1	mg/L
CONDUCTIVITY	128.50	139	118	umho/cm
COPPER	0.0046	.0051	<.004	mg/L
CYANIDE	0.0025	.003	.002	mg/L
DI-N-BUTYLPHTHALATE	<10	<10	<10	ug/L
DI-N-OCTYLPHTHALATE	5.50	10	<1	ug/L
DIBENZ(A H)ANTHRACENE	<10	<10	<10	ug/L
DIBROMOCHLOROMETHANE	<5	<5	<5	ug/L
DIETHYLPHTHALATE	<10	<10	<10	ug/L
DIMETHYLPHTHALATE	<10	<10	<10	ug/L
DISSOLVED OXYGEN	11.50	12	11	ppm
ETHYLBENZENE	<5	<5	<5	ug/L
FLUORANTHENE	<10	<10	<10	ug/L
FLUORENE	<10	<10	<10	ug/L
FLUORIDE	0.1500	.2	.1	mg/L
HARDNESS	60.50	67	54	mg/L
HEXACHLOROBENZENE	<10	<10	<10	ug/L
HEXACHLOROBUTADIENE	<10	<10	<10	ug/L
HEXACHLOROCYCLOPENTADIENE	<10	<10	<10	ug/L
HEXACHLOROETHANE	<10	<10	<10	ug/L
INDENO(1 2 3-CD)PYRENE	<10	<10	<10	ug/L
IRON	0.0605	.071	<.05	mg/L
ISOPHORONE	<10	<10	<10	ug/L
LEAD	<.05	<.05	<.05	mg/L
LITHIUM	<.004	<.004	<.004	mg/L
MAGNESIUM	3.10	3.2	3	mg/L
MANGANESE	0.0240	.033	.015	mg/L
MERCURY	<.0002	<.0002	<.0002	mg/L
METHYLENE CHLORIDE	<5.00	<5	<5	ug/L

SD-340 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
MOLYBDENUM	<.01	<.01	<.01	mg/L
N-NITROSO-DI-N-PROPYLAMINE	<10	<10	<10	ug/L
N-NITROSODIMETHYLAMINE	<10	<10	<10	ug/L
N-NITROSODIPHENYLAMINE	<10	<10	<10	ug/L
NAPHTHALENE	<10	<10	<10	ug/L
NICKEL	<.05	<.05	<.05	mg/L
NIOBIUM	<.007	<.007	<.007	mg/L
NITRATE	1.85	1.9	1.8	mg/L
NITROBENZENE	<10	<10	<10	ug/L
OIL & GREASE	<2	<2	<2	mg/L
PCB (AROCLOR-1016)	<1	<1	<1	ug/L
PCB (AROCLOR-1221)	<1	<1	<1	ug/L
PCB (AROCLOR-1232)	<1	<1	<1	ug/L
PCB (AROCLOR-1242)	<1	<1	<1	ug/L
PCB (AROCLOR-1248)	<1	<1	<1	ug/L
PCB (AROCLOR-1254)	<1	<1	<1	ug/L
PCB (AROCLOR-1260)	<1	<1	<1	ug/L
PENTACHLOROPHENOL	<50	<50	<50	ug/L
PH	7.90	8.2	7.6	
PHENANTHRENE	<10	<10	<10	ug/L
PHENOL	<10	<10	<10	ug/L
PHOSPHORUS	<.2	<.2	<.2	mg/L
POTASSIUM	<.6	<.6	<.6	mg/L
PYRENE	<10	<10	<10	ug/L
SELENIUM	<0.0050	<.005	<.005	mg/L
SILICON	0.5300	.61	.45	mg/L
SILVER	<.01	<.01	<.01	mg/L
SODIUM	3.00	4.4	1.6	mg/L
STRONTIUM	0.0155	.017	.014	mg/L
SULFATE	9.80	10.3	9.3	mg/L
TEMPERATURE	13.00	14	12	Deg. C
TETRACHLOROETHENE	<5	<5	<5	ug/L
THORIUM	<.2	<.2	<.2	mg/L
TITANIUM	<.003	<.003	<.003	mg/L
TOLUENE	<5	<5	<5	ug/L
TOTAL DISSOLVED SOLIDS	64.00	80	48	mg/L
TOTAL ORGANIC CARBON (TOC)	8.50	10	7	mg/L
TOTAL SUSPENDED SOLIDS	<1.00	<1	<1	mg/L
TRANS-1 2-DICHLOROETHENE	<5	<5	<5	ug/L
TRANS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
TRICHLOROETHENE	<5	<5	<5	ug/L
TURBIDITY	1.00	1	1	NTU
URANIUM	0.0060	.007	.005	mg/L
VANADIUM	<.5	<.5	<.5	mg/L
VINYL CHLORIDE	<10	<10	<10	ug/L
ZINC	0.4450	.49	.4	mg/L
ZIRCONIUM	<.005	<.005	<.005	mg/L

SD-362 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
1 1 1-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1 2 2-TETRACHLOROETHANE	<5	<5	<5	ug/L
1 1 2-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHENE	<5	<5	<5	ug/L
1 2 4-TRICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROETHANE	<5	<5	<5	ug/L
1 2-DICHLOROPROPANE	<5	<5	<5	ug/L
1 3-DICHLOROBENZENE	<10	<10	<10	ug/L
1 4-DICHLOROBENZENE	<10	<10	<10	ug/L
2 4 6-TRICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DIMETHYLPHENOL	<10	<10	<10	ug/L
2 4-DINITROPHENOL	<10	<10	<10	ug/L
2 4-DINITROTOLUENE	<10	<10	<10	ug/L
2 6-DINITROTOLUENE	<10	<10	<10	ug/L
2-BUTANONE	12.00	12	12	ug/L
2-CHLOROETHYLVINYL ETHER	<10	<10	<10	ug/L
2-CHLORONAPHTHALENE	<10	<10	<10	ug/L
2-CHLOROPHENOL	<10	<10	<10	ug/L
2-NITROPHENOL	<10	<10	<10	ug/L
3 3'-DICHLOROBENZIDINE	<20	<20	<20	ug/L
4 6-DINITRO-2-METHYLPHENOL	<50	<50	<50	ug/L
4-BROMOPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-CHLORO-3-METHYLPHENOL	<10	<10	<10	ug/L
4-CHLOROPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-NITROPHENOL	<50	<50	<50	ug/L
ACENAPHTHENE	<10	<10	<10	ug/L
ACENAPHTHYLENE	<10	<10	<10	ug/L
ALKALINITY	152.00	152	152	mg/L
ALPHA	126.40	126.4	126.4	pCi/L
ALUMINUM	<.1	<.1	<.1	mg/L
AMMONIA	<.2	<.2	<.2	mg/L
ANTHRACENE	<10	<10	<10	ug/L
ARSENIC	<.005	<.005	<.005	mg/L
BARIUM	<.1	<.1	<.1	mg/L
BENZENE	<5	<5	<5	ug/L
BENZIDINE	<10	<10	<10	ug/L
BENZO(A)ANTHRACENE	<10	<10	<10	ug/L
BENZO(A)PYRENE	<10	<10	<10	ug/L
BENZO(B)FLUORANTHENE	<10	<10	<10	ug/L
BENZO(G H I)PERYLENE	<10	<10	<10	ug/L
BENZO(K)FLUORANTHENE	<10	<10	<10	ug/L
BERYLLIUM	<.001	<.001	<.001	mg/L
BETA	140.70	140.7	140.7	pCi/L
BIS(2-CHLOROETHOXY)METHANE	<10	<10	<10	ug/L
BIS(2-CHLOROETHYL)ETHER	<10	<10	<10	ug/L

SD-362 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
BIS(2-CHLOROISOPROPYL)ETHER	<10	<10	<10	ug/L
BIS(2-ETHYLHEXYL)PHTHALATE	<10	<10	<10	ug/L
BORON	<.004	<.004	<.004	mg/L
BROMODICHLOROMETHANE	<5	<5	<5	ug/L
BROMOFORM	<5	<5	<5	ug/L
BROMOMETHANE	<10	<10	<10	ug/L
BUTYLBENZYLPHTHALATE	<10	<10	<10	ug/L
CADMIUM	<.003	<.003	<.003	mg/L
CALCIUM	41.00	41	41	mg/L
CARBON TETRACHLORIDE	<5	<5	<5	ug/L
CHEMICAL OXYGEN DEMAND (COD)	<5	<5	<5	mg/L
CHLORIDE	2.90	2.9	2.9	mg/L
CHLORINE TOTAL RESIDUAL WATER	<.1	<.1	<.1	mg/L
CHLOROBENZENE	<5	<5	<5	ug/L
CHLOROETHANE	<10	<10	<10	ug/L
CHLOROFORM	<5	<5	<5	ug/L
CHLOROMETHANE	<10	<10	<10	ug/L
CHROMIUM	<.01	<.01	<.01	mg/L
CHRYSENE	<10	<10	<10	ug/L
CIS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
COBALT	<.1	<.1	<.1	mg/L
CONDUCTIVITY	372.00	372	372	umho/cm
COPPER	<.004	<.004	<.004	mg/L
CYANIDE	<.002	<.002	<.002	mg/L
DI-N-BUTYLPHTHALATE	<10	<10	<10	ug/L
DI-N-OCTYLPHTHALATE	<10	<10	<10	ug/L
DIBENZ(A H)ANTHRACENE	<10	<10	<10	ug/L
DIBROMOCHLOROMETHANE	<5	<5	<5	ug/L
DIETHYLPHTHALATE	<10	<10	<10	ug/L
DIMETHYLPHTHALATE	<10	<10	<10	ug/L
DISSOLVED OXYGEN	8.10	8.1	8.1	ppm
ETHYLBENZENE	<5	<5	<5	ug/L
FLUORANTHENE	<10	<10	<10	ug/L
FLUORENE	<10	<10	<10	ug/L
FLUORIDE	1.10	1.1	1.1	mg/L
HARDNESS	180.00	180	180	mg/L
HEXACHLOROBENZENE	<10	<10	<10	ug/L
HEXACHLOROBUTADIENE	<10	<10	<10	ug/L
HEXACHLOROCYCLOPENTADIENE	<10	<10	<10	ug/L
HEXACHLOROETHANE	<10	<10	<10	ug/L
INDENO(1 2 3-CD)PYRENE	<10	<10	<10	ug/L
IRON	1.00	1	1	mg/L
ISOPHORONE	<10	<10	<10	ug/L
LEAD	<.05	<.05	<.05	mg/L
LITHIUM	<.004	<.004	<.004	mg/L
MAGNESIUM	15.00	15	15	mg/L
MANGANESE	0.3800	.38	.38	mg/L
MERCURY	<.0002	<.0002	<.0002	mg/L

SD-362 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
METHYLENE CHLORIDE	<5	<5	<5	ug/L
MOLYBDENUM	<.01	<.01	<.01	mg/L
N-NITROSO-DI-N-PROPYLAMINE	<10	<10	<10	ug/L
N-NITROSODIMETHYLAMINE	<10	<10	<10	ug/L
N-NITROSODIPHENYLAMINE	<10	<10	<10	ug/L
NAPHTHALENE	<10	<10	<10	ug/L
NICKEL	<.05	<.05	<.05	mg/L
NIOBIUM	<.007	<.007	<.007	mg/L
NITRATE	1.50	1.5	1.5	mg/L
NITROBENZENE	<10	<10	<10	ug/L
OIL & GREASE	<2	<2	<2	mg/L
PCB (AROCLOR-1016)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1221)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1232)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1242)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1248)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1254)	<1	<1	<1	ug/L
PCB (AROCLOR-1260)	<1	<1	<1	ug/L
PENTACHLOROPHENOL	<50	<50	<50	ug/L
PH	8.10	8.1	8.1	
PHENANTHRENE	<10	<10	<10	ug/L
PHENOL	<10	<10	<10	ug/L
PHOSPHORUS	<.2	<.2	<.2	mg/L
POTASSIUM	4.20	4.2	4.2	mg/L
PROMETON	2.00	2	2	ug/L
PYRENE	<10	<10	<10	ug/L
SELENIUM	0.0050	.005	.005	mg/L
SILICON	0.9000	.9	.9	mg/L
SILVER	<.01	<.01	<.01	mg/L
SODIUM	9.80	9.8	9.8	mg/L
STRONTIUM	0.0410	.041	.041	mg/L
SULFATE	43.00	43	43	mg/L
TEMPERATURE	6.00	6	6	Deg. C
TETRACHLOROETHENE	<5	<5	<5	ug/L
THORIUM	<.2	<.2	<.2	mg/L
TITANIUM	0.0051	.0051	.0051	mg/L
TOLUENE	<5	<5	<5	ug/L
TOTAL DISSOLVED SOLIDS	210.00	210	210	mg/L
TOTAL ORGANIC CARBON (TOC)	19.00	19	19	mg/L
TOTAL SUSPENDED SOLIDS	1.00	1	1	mg/L
TRANS-1 2-DICHLOROETHENE	<5	<5	<5	ug/L
TRANS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
TRICHLOROETHENE	<5	<5	<5	ug/L
TURBIDITY	9.00	9	9	NTU
UNKNOWNS	17.00	17	17	ug/L
URANIUM	0.1410	.141	.141	mg/L
VANADIUM	<.5	<.5	<.5	mg/L
VINYL CHLORIDE	<10	<10	<10	ug/L

SD-362 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
ZINC	0.0220	.022	.022	mg/L
ZIRCONIUM	<.005	<.005	<.005	mg/L

SD-380 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
1 1 1-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1 2 2-TETRACHLOROETHANE	<5	<5	<5	ug/L
1 1 2-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHENE	<5	<5	<5	ug/L
1 2 4-TRICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROETHANE	<5	<5	<5	ug/L
1 2-DICHLOROPROPANE	<5	<5	<5	ug/L
1 3-DICHLOROBENZENE	<10	<10	<10	ug/L
1 4-DICHLOROBENZENE	<10	<10	<10	ug/L
2 4 6-TRICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DIMETHYLPHENOL	<10	<10	<10	ug/L
2 4-DINITROPHENOL	<10	<10	<10	ug/L
2 4-DINITROTOLUENE	<10	<10	<10	ug/L
2 6-DINITROTOLUENE	<10	<10	<10	ug/L
2-BUTANONE	10.00	12	8	ug/L
2-CHLOROETHYLVINYL ETHER	<10	<10	<10	ug/L
2-CHLORONAPHTHALENE	<10	<10	<10	ug/L
2-CHLOROPHENOL	<10	<10	<10	ug/L
2-HEXANONE	<10	<10	<10	ug/L
2-NITROPHENOL	<10	<10	<10	ug/L
3 3'-DICHLOROBENZIDINE	<20	<20	<20	ug/L
4 6-DINITRO-2-METHYLPHENOL	<50	<50	<50	ug/L
4-BROMOPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-CHLORO-3-METHYLPHENOL	<10	<10	<10	ug/L
4-CHLOROPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-METHYL-2-PENTANONE	<10	<10	<10	ug/L
4-NITROPHENOL	<50	<50	<50	ug/L
ACENAPHTHENE	<10	<10	<10	ug/L
ACENAPHTHYLENE	<10	<10	<10	ug/L
ACETONE	14.00	14	14	ug/L
ALKALINITY	84.83	102	48	mg/L
ALPHA	13.48	26.9	7.6	pCi/L
ALUMINUM	<.1	<.1	<.1	mg/L
AMMONIA	0.2667	.5	<.2	mg/L
ANTHRACENE	<10	<10	<10	ug/L
ARSENIC	<.005	<.005	<.005	mg/L
BARIUM	<.1	<.1	<.1	mg/L
BENZENE	<5	<5	<5	ug/L
BENZIDINE	<10	<10	<10	ug/L
BENZO(A)ANTHRACENE	<10	<10	<10	ug/L
BENZO(A)PYRENE	<10	<10	<10	ug/L
BENZO(B)FLUORANTHENE	<10	<10	<10	ug/L
BENZO(G H I)PERYLENE	<10	<10	<10	ug/L
BENZO(K)FLUORANTHENE	<10	<10	<10	ug/L
BERYLLIUM	<.001	<.001	<.001	mg/L

SD-380 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
BETA	11.78	17.9	8.3	pCi/L
BIS(2-CHLOROETHOXY)METHANE	<10	<10	<10	ug/L
BIS(2-CHLOROETHYL)ETHER	<10	<10	<10	ug/L
BIS(2-CHLOROISOPROPYL)ETHER	<10	<10	<10	ug/L
BIS(2-ETHYLHEXYL)PHTHALATE	6.00	10	<2	ug/L
BORON	0.0127	.026	<.004	mg/L
BROMODICHLOROMETHANE	4.33	5	<1	ug/L
BROMOFORM	<5	<5	<5	ug/L
BROMOMETHANE	<10	<10	<10	ug/L
BUTYLBENZYLPHTHALATE	<10	<10	<10	ug/L
CADMIUM	<.003	<.003	<.003	mg/L
CALCIUM	25.83	32	13	mg/L
CARBON DISULFIDE	<5	<5	<5	ug/L
CARBON TETRACHLORIDE	<5	<5	<5	ug/L
CHEMICAL OXYGEN DEMAND (COD)	5.67	7	<5	mg/L
CHLORIDE	9.83	13.5	3.6	mg/L
CHLORINE TOTAL RESIDUAL WATER	<.1	<.1	<.1	mg/L
CHLOROBENZENE	<5	<5	<5	ug/L
CHLOROETHANE	<10	<10	<10	ug/L
CHLOROFORM	6.00	8	5	ug/L
CHLOROMETHANE	<10	<10	<10	ug/L
CHROMIUM	<.01	<.01	<.01	mg/L
CHRYSENE	<10	<10	<10	ug/L
CIS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
COBALT	<.1	<.1	<.1	mg/L
CONDUCTIVITY	257.50	342	126	umho/cm
COPPER	0.0080	.026	<.004	mg/L
CYANIDE	0.0027	.004	<.002	mg/L
DI-N-BUTYLPHTHALATE	<10	<10	<10	ug/L
DI-N-OCTYLPHTHALATE	1.00	1	1	ug/L
DIBENZ(A H)ANTHRACENE	<10	<10	<10	ug/L
DIBROMOCHLOROMETHANE	<5	<5	<5	ug/L
DIETHYLPHTHALATE	<10	<10	<10	ug/L
DIMETHYLPHTHALATE	<10	<10	<10	ug/L
DISSOLVED OXYGEN	10.18	12.2	8.3	ppm
ETHYLBENZENE	<5	<5	<5	ug/L
FLUORANTHENE	<10	<10	<10	ug/L
FLUORENE	<10	<10	<10	ug/L
FLUORIDE	0.1833	.3	.1	mg/L
HARDNESS	118.83	156	58	mg/L
HEXACHLOROBENZENE	<10	<10	<10	ug/L
HEXACHLOROBUTADIENE	<10	<10	<10	ug/L
HEXACHLOROCYCLOPENTADIENE	<10	<10	<10	ug/L
HEXACHLOROETHANE	<10	<10	<10	ug/L
INDENO(1 2 3-CD)PYRENE	<10	<10	<10	ug/L
IRON	0.0608	.099	<.05	mg/L
ISOPHORONE	<10	<10	<10	ug/L
LEAD	<.05	<.05	<.05	mg/L

SD-380 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
LITHIUM	<.004	<.004	<.004	mg/L
MAGNESIUM	7.02	9.4	2.4	mg/L
MANGANESE	0.0103	.012	<.01	mg/L
MERCURY	<.0002	<.0002	<.0002	mg/L
METHYLENE CHLORIDE	<5	<5	<5	ug/L
MOLYBDENUM	0.0103	.012	<.01	mg/L
N-NITROSO-DI-N-PROPYLAMINE	<10	<10	<10	ug/L
N-NITROSODIMETHYLAMINE	<10	<10	<10	ug/L
N-NITROSODIPHENYLAMINE	<10	<10	<10	ug/L
NAPHTHALENE	<10	<10	<10	ug/L
NICKEL	<.05	<.05	<.05	mg/L
NIOBIUM	0.0072	.0084	<.007	mg/L
NITRATE	1.43	1.9	.94	mg/L
NITROBENZENE	<10	<10	<10	ug/L
OIL & GREASE	<2	<2	<2	mg/L
PCB (AROCLOR-1016)	<1	<1	<1	ug/L
PCB (AROCLOR-1221)	<1	<1	<1	ug/L
PCB (AROCLOR-1232)	<1	<1	<1	ug/L
PCB (AROCLOR-1242)	<1	<1	<1	ug/L
PCB (AROCLOR-1248)	<1	<1	<1	ug/L
PCB (AROCLOR-1254)	<1	<1	<1	ug/L
PCB (AROCLOR-1260)	<1	<1	<1	ug/L
PENTACHLOROPHENOL	<50	<50	<50	ug/L
PH	8.15	8.4	7.5	
PHENANTHRENE	<10	<10	<10	ug/L
PHENOL	<10	<10	<10	ug/L
PHOSPHORUS	<.2	<.2	<.2	mg/L
POTASSIUM	1.94	4.5	<.6	mg/L
PYRENE	<10	<10	<10	ug/L
SELENIUM	0.0055	.008	<.005	mg/L
SILICON	1.09	1.7	.32	mg/L
SILVER	<.01	<.01	<.01	mg/L
SODIUM	14.45	23	2.8	mg/L
STRONTIUM	0.0557	.075	.017	mg/L
STYRENE	<5	<5	<5	ug/L
SULFATE	37.28	51	11.7	mg/L
TEMPERATURE	10.83	14	9	Deg. C
TETRACHLOROETHENE	<5	<5	<5	ug/L
THORIUM	<.2	<.2	<.2	mg/L
TITANIUM	0.0035	.0057	<.003	mg/L
TOLUENE	4.33	5	<1	ug/L
TOTAL DISSOLVED SOLIDS	166.00	196	116	mg/L
TOTAL ORGANIC CARBON (TOC)	5.50	7	4	mg/L
TOTAL SUSPENDED SOLIDS	3.17	10	<1	mg/L
TOTAL XYLENES	<5	<5	<5	ug/L
TRANS-1 2-DICHLOROETHENE	<5	<5	<5	ug/L
TRANS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
TRICHLOROETHENE	<5	<5	<5	ug/L

SD-380 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
TURBIDITY	<1.00	<1	<1	NTU
UNKNOWNS	12.00	12	12	ug/L
URANIUM	0.0205	.031	.015	mg/L
VANADIUM	<.5	<.5	<.5	mg/L
VINYL ACETATE	<10	<10	<10	ug/L
VINYL CHLORIDE	<10	<10	<10	ug/L
ZINC	0.0968	.17	.056	mg/L
ZIRCONIUM	<.005	<.005	<.005	mg/L

SD-410 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
1 1 1-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1 2 2-TETRACHLOROETHANE	<5	<5	<5	ug/L
1 1 2-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHENE	<5	<5	<5	ug/L
1 2 4-TRICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROETHANE	<5	<5	<5	ug/L
1 2-DICHLOROPROPANE	<5	<5	<5	ug/L
1 3-DICHLOROBENZENE	<10	<10	<10	ug/L
1 4-DICHLOROBENZENE	<10	<10	<10	ug/L
2 4 6-TRICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DIMETHYLPHENOL	<10	<10	<10	ug/L
2 4-DINITROPHENOL	<10	<10	<10	ug/L
2 4-DINITROTOLUENE	<10	<10	<10	ug/L
2 6-DINITROTOLUENE	<10	<10	<10	ug/L
2-CHLOROETHYLVINYL ETHER	<10	<10	<10	ug/L
2-CHLORONAPHTHALENE	<10	<10	<10	ug/L
2-CHLOROPHENOL	<10	<10	<10	ug/L
2-NITROPHENOL	<10	<10	<10	ug/L
3 3'-DICHLOROBENZIDINE	<20	<20	<20	ug/L
4 6-DINITRO-2-METHYLPHENOL	<50	<50	<50	ug/L
4-BROMOPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-CHLORO-3-METHYLPHENOL	<10	<10	<10	ug/L
4-CHLOROPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-NITROPHENOL	<50	<50	<50	ug/L
ACENAPHTHENE	<10	<10	<10	ug/L
ACENAPHTHYLENE	<10	<10	<10	ug/L
ALKALINITY	94.00	127	61	mg/L
ALPHA	<2	<2	<2	pCi/L
ALUMINUM	0.1150	.13	<.1	mg/L
AMMONIA	<.2	<.2	<.2	mg/L
ANTHRACENE	<10	<10	<10	ug/L
ARSENIC	0.0055	.006	<.005	mg/L
BARIUM	<.1	<.1	<.1	mg/L
BENZENE	<5	<5	<5	ug/L
BENZIDINE	<10	<10	<10	ug/L
BENZO(A)ANTHRACENE	<10	<10	<10	ug/L
BENZO(A)PYRENE	<10	<10	<10	ug/L
BENZO(B)FLUORANTHENE	<10	<10	<10	ug/L
BENZO(G H I)PERYLENE	<10	<10	<10	ug/L
BENZO(K)FLUORANTHENE	<10	<10	<10	ug/L
BERYLLIUM	<.001	<.001	<.001	mg/L
BETA	3.05	3.1	<3	pCi/L
BIS(2-CHLOROETHOXY)METHANE	<10	<10	<10	ug/L
BIS(2-CHLOROETHYL)ETHER	<10	<10	<10	ug/L
BIS(2-CHLOROISOPROPYL)ETHER	<10	<10	<10	ug/L

SD-410 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
BIS(2-ETHYLHEXYL)PHTHALATE	<10	<10	<10	ug/L
BORON	0.0305	.038	.023	mg/L
BROMODICHLOROMETHANE	<5	<5	<5	ug/L
BROMOFORM	<5	<5	<5	ug/L
BROMOMETHANE	<10	<10	<10	ug/L
BUTYLBENZYLPHTHALATE	<10	<10	<10	ug/L
CADMIUM	<.003	<.003	<.003	mg/L
CALCIUM	25.00	34	16	mg/L
CARBON TETRACHLORIDE	<5	<5	<5	ug/L
CHEMICAL OXYGEN DEMAND (COD)	40.00	46	34	mg/L
CHLORIDE	6.45	10.2	2.7	mg/L
CHLORINE TOTAL RESIDUAL WATER	<.1	<.1	<.1	mg/L
CHLOROBENZENE	<5	<5	<5	ug/L
CHLOROETHANE	<10	<10	<10	ug/L
CHLOROFORM	<5	<5	<5	ug/L
CHLOROMETHANE	<10	<10	<10	ug/L
CHROMIUM	<.01	<.01	<.01	mg/L
CHRYSENE	<10	<10	<10	ug/L
CIS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
COBALT	<.1	<.1	<.1	mg/L
CONDUCTIVITY	201.50	268	135	umho/cm
COPPER	0.0057	.0074	<.004	mg/L
CYANIDE	0.0030	.004	<.002	mg/L
DI-N-BUTYLPHTHALATE	<10	<10	<10	ug/L
DI-N-OCTYLPHTHALATE	<10	<10	<10	ug/L
DIBENZ(A H)ANTHRACENE	<10	<10	<10	ug/L
DIBROMOCHLOROMETHANE	<5	<5	<5	ug/L
DIETHYLPHTHALATE	<10	<10	<10	ug/L
DIMETHYLPHTHALATE	<10	<10	<10	ug/L
DISSOLVED OXYGEN	9.15	9.6	8.7	ppm
ETHYLBENZENE	<5	<5	<5	ug/L
FLUORANTHENE	<10	<10	<10	ug/L
FLUORENE	<10	<10	<10	ug/L
FLUORIDE	0.1500	.2	.1	mg/L
HARDNESS	71.00	84	58	mg/L
HEXACHLOROBENZENE	<10	<10	<10	ug/L
HEXACHLOROBUTADIENE	<10	<10	<10	ug/L
HEXACHLOROCYCLOPENTADIENE	<10	<10	<10	ug/L
HEXACHLOROETHANE	<10	<10	<10	ug/L
INDENO(1 2 3-CD)PYRENE	<10	<10	<10	ug/L
IRON	0.1640	.23	.098	mg/L
ISOPHORONE	<10	<10	<10	ug/L
LEAD	<.05	<.05	<.05	mg/L
LITHIUM	0.0041	.0042	<.004	mg/L
MAGNESIUM	5.00	7.1	2.9	mg/L
MANGANESE	0.0455	.081	<.01	mg/L
MERCURY	<.0002	<.0002	<.0002	mg/L
METHYLENE CHLORIDE	<5	<5	<5	ug/L

SD-410 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
MOLYBDENUM	<.01	<.01	<.01	mg/L
N-NITROSO-DI-N-PROPYLAMINE	<10	<10	<10	ug/L
N-NITROSODIMETHYLAMINE	<10	<10	<10	ug/L
N-NITROSODIPHENYLAMINE	<10	<10	<10	ug/L
NAPHTHALENE	<10	<10	<10	ug/L
NICKEL	<.05	<.05	<.05	mg/L
NIOBIUM	<.007	<.007	<.007	mg/L
NITRATE	<.5	<.5	<.5	mg/L
NITROBENZENE	<10	<10	<10	ug/L
OIL & GREASE	<2	<2	<2	mg/L
PCB (AROCLOR-1016)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1221)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1232)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1242)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1248)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1254)	<1	<1	<1	ug/L
PCB (AROCLOR-1260)	<1	<1	<1	ug/L
PENTACHLOROPHENOL	<50	<50	<50	ug/L
PH	7.70	7.9	7.5	
PHENANTHRENE	<10	<10	<10	ug/L
PHENOL	<10	<10	<10	ug/L
PHOSPHORUS	<.2	<.2	<.2	mg/L
POTASSIUM	2.75	3.9	1.6	mg/L
PYRENE	<10	<10	<10	ug/L
SELENIUM	<0.0050	<.005	<.005	mg/L
SILICON	1.45	1.6	1.3	mg/L
SILVER	<.01	<.01	<.01	mg/L
SODIUM	15.15	27	3.3	mg/L
STRONTIUM	0.0420	.069	.015	mg/L
SULFATE	7.30	10.3	4.3	mg/L
TEMPERATURE	13.50	14	13	Deg. C
TETRACHLOROETHENE	<5	<5	<5	ug/L
THORIUM	<.2	<.2	<.2	mg/L
TITANIUM	0.0038	.0046	<.003	mg/L
TOLUENE	<5	<5	<5	ug/L
TOTAL DISSOLVED SOLIDS	122.00	166	78	mg/L
TOTAL ORGANIC CARBON (TOC)	13.50	21	6	mg/L
TOTAL SUSPENDED SOLIDS	4.50	6	3	mg/L
TRANS-1 2-DICHLOROETHENE	<5	<5	<5	ug/L
TRANS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
TRICHLOROETHENE	<5	<5	<5	ug/L
TURBIDITY	5.50	7	4	NTU
UNKNOWNS	12.00	12	12	ug/L
URANIUM	0.0030	.004	.002	mg/L
VANADIUM	<.5	<.5	<.5	mg/L
VINYL CHLORIDE	<10	<10	<10	ug/L
ZINC	0.0785	.13	.027	mg/L
ZIRCONIUM	<.005	<.005	<.005	mg/L

SD-420 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
1 1 1-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1 2 2-TETRACHLOROETHANE	<5	<5	<5	ug/L
1 1 2-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHENE	<5	<5	<5	ug/L
1 2 4-TRICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROETHANE	<5	<5	<5	ug/L
1 2-DICHLOROPROPANE	<5	<5	<5	ug/L
1 3-DICHLOROBENZENE	<10	<10	<10	ug/L
1 4-DICHLOROBENZENE	<10	<10	<10	ug/L
2 4 6-TRICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DIMETHYLPHENOL	<10	<10	<10	ug/L
2 4-DINITROPHENOL	<10	<10	<10	ug/L
2 4-DINITROTOLUENE	<10	<10	<10	ug/L
2 6-DINITROTOLUENE	<10	<10	<10	ug/L
2-CHLOROETHYLVINYL ETHER	<10	<10	<10	ug/L
2-CHLORONAPHTHALENE	<10	<10	<10	ug/L
2-CHLOROPHENOL	<10	<10	<10	ug/L
2-NITROPHENOL	<10	<10	<10	ug/L
3 3'-DICHLOROBENZIDINE	<20	<20	<20	ug/L
4 6-DINITRO-2-METHYLPHENOL	<50	<50	<50	ug/L
4-BROMOPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-CHLORO-3-METHYLPHENOL	<10	<10	<10	ug/L
4-CHLOROPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-NITROPHENOL	<50	<50	<50	ug/L
ACENAPHTHENE	<10	<10	<10	ug/L
ACENAPHTHYLENE	<10	<10	<10	ug/L
ALIPHATIC HYDROCARBON	6.00	6	6	ug/L
ALKALINITY	60.00	69	51	mg/L
ALPHA	3.05	3.3	2.8	pCi/L
ALUMINUM	0.2300	.36	<.1	mg/L
AMMONIA	<.2	<.2	<.2	mg/L
ANTHRACENE	<10	<10	<10	ug/L
ARSENIC	<.005	<.005	<.005	mg/L
BARIUM	<.1	<.1	<.1	mg/L
BENZENE	<5	<5	<5	ug/L
BENZIDINE	<10	<10	<10	ug/L
BENZO(A)ANTHRACENE	<10	<10	<10	ug/L
BENZO(A)PYRENE	<10	<10	<10	ug/L
BENZO(B)FLUORANTHENE	<10	<10	<10	ug/L
BENZO(G H I)PERYLENE	<10	<10	<10	ug/L
BENZO(K)FLUORANTHENE	<10	<10	<10	ug/L
BERYLLIUM	<.001	<.001	<.001	mg/L
BETA	2.60	3	<2.2	pCi/L
BHT	26.00	26	26	ug/L
BIS(2-CHLOROETHOXY)METHANE	<10	<10	<10	ug/L

SD-420 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
BIS(2-CHLOROETHYL)ETHER	<10	<10	<10	ug/L
BIS(2-CHLOROISOPROPYL)ETHER	<10	<10	<10	ug/L
BIS(2-ETHYLHEXYL)PHTHALATE	<10	<10	<10	ug/L
BORON	0.0087	.012	.0054	mg/L
BROMODICHLOROMETHANE	<5	<5	<5	ug/L
BROMOFORM	<5	<5	<5	ug/L
BROMOMETHANE	<10	<10	<10	ug/L
BUTYLBENZYLPHTHALATE	6.00	10	<2	ug/L
CADMIUM	<.003	<.003	<.003	mg/L
CALCIUM	18.50	21	16	mg/L
CARBON TETRACHLORIDE	<5	<5	<5	ug/L
CHEMICAL OXYGEN DEMAND (COD)	18.50	20	17	mg/L
CHLORIDE	2.70	4.4	<1	mg/L
CHLORINE TOTAL RESIDUAL WATER	<.1	<.1	<.1	mg/L
CHLOROBENZENE	<5	<5	<5	ug/L
CHLOROETHANE	<10	<10	<10	ug/L
CHLOROFORM	<5	<5	<5	ug/L
CHLOROMETHANE	<10	<10	<10	ug/L
CHROMIUM	<.01	<.01	<.01	mg/L
CHRYSENE	<10	<10	<10	ug/L
CIS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
COBALT	<.1	<.1	<.1	mg/L
CONDUCTIVITY	141.00	181	101	umho/cm
COPPER	0.0085	.0094	.0076	mg/L
CYANIDE	0.0025	.003	<.002	mg/L
DI-N-BUTYLPHTHALATE	<10	<10	<10	ug/L
DI-N-OCTYLPHTHALATE	5.50	10	<1	ug/L
DIACETONE ALCOHOL	9.00	9	9	ug/L
DIBENZ(A H)ANTHRACENE	<10	<10	<10	ug/L
DIBROMOCHLOROMETHANE	<5	<5	<5	ug/L
DIETHYLPHTHALATE	5.50	10	<1	ug/L
DIMETHYLPHTHALATE	<10	<10	<10	ug/L
DISSOLVED OXYGEN	9.20	9.9	8.5	ppm
ETHYLBENZENE	<5	<5	<5	ug/L
FLUORANTHENE	<10	<10	<10	ug/L
FLUORENE	<10	<10	<10	ug/L
FLUORIDE	0.1500	.2	.1	mg/L
HARDNESS	62.00	72	52	mg/L
HEXACHLOROBENZENE	<10	<10	<10	ug/L
HEXACHLOROBUTADIENE	<10	<10	<10	ug/L
HEXACHLOROCYCLOPENTADIENE	<10	<10	<10	ug/L
HEXACHLOROETHANE	<10	<10	<10	ug/L
INDENO(1 2 3-CD)PYRENE	<10	<10	<10	ug/L
IRON	0.1775	.3	.055	mg/L
ISOPHORONE	<10	<10	<10	ug/L
LEAD	<.05	<.05	<.05	mg/L
LITHIUM	<.004	<.004	<.004	mg/L
MAGNESIUM	3.10	3.9	2.3	mg/L

SD-420 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
MANGANESE	0.0105	.011	<.01	mg/L
MERCURY	<.0002	<.0002	<.0002	mg/L
METHYLENE CHLORIDE	14.00	23	<5	ug/L
MOLYBDENUM	<.01	<.01	<.01	mg/L
N-NITROSO-DI-N-PROPYLAMINE	<10	<10	<10	ug/L
N-NITROSODIMETHYLAMINE	<10	<10	<10	ug/L
N-NITROSODIPHENYLAMINE	<10	<10	<10	ug/L
NAPHTHALENE	<10	<10	<10	ug/L
NICKEL	<.05	<.05	<.05	mg/L
NIOBIUM	<.007	<.007	<.007	mg/L
NITRATE	1.07	1.5	.63	mg/L
NITROBENZENE	<10	<10	<10	ug/L
OIL & GREASE	<2	<2	<2	mg/L
PCB (AROCLOR-1016)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1221)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1232)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1242)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1248)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1254)	<1	<1	<1	ug/L
PCB (AROCLOR-1260)	<1	<1	<1	ug/L
PENTACHLOROPHENOL	<50	<50	<50	ug/L
PH	7.75	7.9	7.6	
PHENANTHRENE	<10	<10	<10	ug/L
PHENOL	<10	<10	<10	ug/L
PHOSPHORUS	<.2	<.2	<.2	mg/L
POTASSIUM	0.6600	.72	<.6	mg/L
PYRENE	<10	<10	<10	ug/L
SELENIUM	<0.0050	<.005	<.005	mg/L
SILICON	1.06	1.6	.52	mg/L
SILVER	<.01	<.01	<.01	mg/L
SODIUM	3.89	7.4	.37	mg/L
STRONTIUM	0.0455	.06	.031	mg/L
SUBSTITUTED DIPHENYL PHOSPHATE	8.00	8	8	ug/L
SULFATE	8.50	12	5	mg/L
TEMPERATURE	15.50	16	15	Deg. C
TETRACHLOROETHENE	<5	<5	<5	ug/L
THORIUM	<.2	<.2	<.2	mg/L
TITANIUM	0.0065	.01	<.003	mg/L
TOLUENE	<5	<5	<5	ug/L
TOTAL DISSOLVED SOLIDS	88.00	106	70	mg/L
TOTAL ORGANIC CARBON (TOC)	10.50	14	7	mg/L
TOTAL SUSPENDED SOLIDS	<1.00	<1	<1	mg/L
TRANS-1 2-DICHLOROETHENE	<5	<5	<5	ug/L
TRANS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
TRICHLOROETHENE	<5	<5	<5	ug/L
TURBIDITY	6.00	9	3	NTU
UNKNOWN	5.00	5	5	ug/L
URANIUM	0.0090	.009	.009	mg/L

SD-420 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
VANADIUM	<.5	<.5	<.5	mg/L
VINYL CHLORIDE	<10	<10	<10	ug/L
ZINC	0.0235	.027	<.02	mg/L
ZIRCONIUM	<.005	<.005	<.005	mg/L

SD-430 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
1 1 1-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1 2 2-TETRACHLOROETHANE	<5	<5	<5	ug/L
1 1 2-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHENE	<5	<5	<5	ug/L
1 2 4-TRICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROETHANE	<5	<5	<5	ug/L
1 2-DICHLOROPROPANE	<5	<5	<5	ug/L
1 3-DICHLOROBENZENE	<10	<10	<10	ug/L
1 4-DICHLOROBENZENE	<10	<10	<10	ug/L
2 4 6-TRICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DIMETHYLPHENOL	<10	<10	<10	ug/L
2 4-DINITROPHENOL	<10	<10	<10	ug/L
2 4-DINITROTOLUENE	<10	<10	<10	ug/L
2 6-DINITROTOLUENE	<10	<10	<10	ug/L
2-CHLOROETHYLVINYL ETHER	<10	<10	<10	ug/L
2-CHLORONAPHTHALENE	<10	<10	<10	ug/L
2-CHLOROPHENOL	<10	<10	<10	ug/L
2-NITROPHENOL	<10	<10	<10	ug/L
3 3'-DICHLOROBENZIDINE	<20	<20	<20	ug/L
4 6-DINITRO-2-METHYLPHENOL	<50	<50	<50	ug/L
4-BROMOPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-CHLORO-3-METHYLPHENOL	<10	<10	<10	ug/L
4-CHLOROPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-NITROPHENOL	<50	<50	<50	ug/L
ACENAPHTHENE	<10	<10	<10	ug/L
ACENAPHTHYLENE	<10	<10	<10	ug/L
ALKALINITY	95.33	144	71	mg/L
ALPHA	2.62	5.7	<1	pCi/L
ALUMINUM	<.1	<.1	<.1	mg/L
AMMONIA	<0.2000	<.2	<.2	mg/L
ANTHRACENE	<10	<10	<10	ug/L
ARSENIC	<.005	<.005	<.005	mg/L
BARIUM	<.1	<.1	<.1	mg/L
BENZENE	<5	<5	<5	ug/L
BENZIDINE	<10	<10	<10	ug/L
BENZO(A)ANTHRACENE	<10	<10	<10	ug/L
BENZO(A)PYRENE	<10	<10	<10	ug/L
BENZO(B)FLUORANTHENE	<10	<10	<10	ug/L
BENZO(G H I)PERYLENE	<10	<10	<10	ug/L
BENZO(K)FLUORANTHENE	<10	<10	<10	ug/L
BERYLLIUM	<.001	<.001	<.001	mg/L
BETA	8.18	13.2	3.3	pCi/L
BIS(2-CHLOROETHOXY)METHANE	<10	<10	<10	ug/L
BIS(2-CHLOROETHYL)ETHER	<10	<10	<10	ug/L
BIS(2-CHLOROISOPROPYL)ETHER	<10	<10	<10	ug/L

SD-430 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
BIS(2-ETHYLHEXYL)PHTHALATE	120.00	230	<10	ug/L
BORON	0.0185	.037	<.004	mg/L
BROMODICHLOROMETHANE	4.83	5	<4	ug/L
BROMOFORM	<5	<5	<5	ug/L
BROMOMETHANE	<10	<10	<10	ug/L
BUTYLBENZYLPHTHALATE	<10	<10	<10	ug/L
CADMIUM	<.003	<.003	<.003	mg/L
CALCIUM	28.67	35	22	mg/L
CARBON DISULFIDE	1.00	1	1	ug/L
CARBON TETRACHLORIDE	<5	<5	<5	ug/L
CHEMICAL OXYGEN DEMAND (COD)	8.17	17	<5	mg/L
CHLORIDE	10.22	16.9	5.7	mg/L
CHLORINE TOTAL RESIDUAL WATER	0.1083	.15	<.1	mg/L
CHLOROBENZENE	<5	<5	<5	ug/L
CHLOROETHANE	<10	<10	<10	ug/L
CHLOROFORM	14.50	27	<5	ug/L
CHLOROMETHANE	<10	<10	<10	ug/L
CHROMIUM	<.01	<.01	<.01	mg/L
CHRYSENE	<10	<10	<10	ug/L
CIS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
COBALT	<.1	<.1	<.1	mg/L
CONDUCTIVITY	237.17	304	170	umho/cm
COPPER	0.0044	.0064	<.004	mg/L
CYANIDE	0.0025	.003	<.002	mg/L
DI-N-BUTYLPHTHALATE	<10	<10	<10	ug/L
DI-N-OCTYLPHTHALATE	6.00	10	<2	ug/L
DIACETONE ALCOHOL	6.00	6	6	ug/L
DIBENZ(A H)ANTHRACENE	<10	<10	<10	ug/L
DIBROMOCHLOROMETHANE	4.33	5	<1	ug/L
DIETHYLPHTHALATE	<10	<10	<10	ug/L
DIMETHYLPHTHALATE	<10	<10	<10	ug/L
DISSOLVED OXYGEN	10.83	19	6.6	ppm
ETHYLBENZENE	<5	<5	<5	ug/L
FLUORANTHENE	<10	<10	<10	ug/L
FLUORENE	<10	<10	<10	ug/L
FLUORIDE	0.1167	.2	.1	mg/L
HARDNESS	101.67	122	78	mg/L
HEXACHLOROBENZENE	<10	<10	<10	ug/L
HEXACHLOROBUTADIENE	<10	<10	<10	ug/L
HEXACHLOROCYCLOPENTADIENE	<10	<10	<10	ug/L
HEXACHLOROETHANE	<10	<10	<10	ug/L
INDENO(1 2 3-CD)PYRENE	<10	<10	<10	ug/L
IRON	0.0762	.11	<.05	mg/L
ISOPHORONE	<10	<10	<10	ug/L
LEAD	<.05	<.05	<.05	mg/L
LITHIUM	0.0041	.0044	<.004	mg/L
MAGNESIUM	7.10	9.1	3.9	mg/L
MANGANESE	0.0947	.18	.024	mg/L

SD-430 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
MERCURY	<.0002	<.0002	<.0002	mg/L
METHYLENE CHLORIDE	4.33	5	<1	ug/L
MOLYBDENUM	<.01	<.01	<.01	mg/L
N-NITROSO-DI-N-PROPYLAMINE	<10	<10	<10	ug/L
N-NITROSODIMETHYLAMINE	<10	<10	<10	ug/L
N-NITROSODIPHENYLAMINE	<10	<10	<10	ug/L
NAPHTHALENE	<10	<10	<10	ug/L
NICKEL	<.05	<.05	<.05	mg/L
NIOBIUM	<.007	<.007	<.007	mg/L
NITRATE	2.17	3.3	1.5	mg/L
NITROBENZENE	<10	<10	<10	ug/L
OIL & GREASE	<2	<2	<2	mg/L
PCB (AROCLOR-1016)	<1	<1	<1	ug/L
PCB (AROCLOR-1221)	<1	<1	<1	ug/L
PCB (AROCLOR-1232)	<1	<1	<1	ug/L
PCB (AROCLOR-1242)	<1	<1	<1	ug/L
PCB (AROCLOR-1248)	<1	<1	<1	ug/L
PCB (AROCLOR-1254)	<1	<1	<1	ug/L
PCB (AROCLOR-1260)	<1	<1	<1	ug/L
PENTACHLOROPHENOL	<50	<50	<50	ug/L
PH	7.88	8	7.7	
PHENANTHRENE	<10	<10	<10	ug/L
PHENOL	<10	<10	<10	ug/L
PHOSPHORUS	0.2067	.24	<.2	mg/L
POTASSIUM	1.73	3.1	<.6	mg/L
PROMETON	2.00	2	2	ug/L
PYRENE	<10	<10	<10	ug/L
SELENIUM	<0.0050	<.005	<.005	mg/L
SILICON	1.23	1.8	.63	mg/L
SILVER	<.01	<.01	<.01	mg/L
SODIUM	9.32	16	4.3	mg/L
STRONTIUM	0.0548	.075	.034	mg/L
SULFATE	24.73	31	11.4	mg/L
TEMPERATURE	11.42	13	9	Deg. C
TETRACHLOROETHENE	<5	<5	<5	ug/L
THORIUM	<.2	<.2	<.2	mg/L
TITANIUM	<.003	<.003	<.003	mg/L
TOLUENE	4.33	5	<1	ug/L
TOTAL DISSOLVED SOLIDS	161.67	254	106	mg/L
TOTAL ORGANIC CARBON (TOC)	11.00	22	3	mg/L
TOTAL SUSPENDED SOLIDS	2.67	7	<1	mg/L
TRANS-1 2-DICHLOROETHENE	<5	<5	<5	ug/L
TRANS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
TRICHLOROETHENE	4.50	5	<2	ug/L
TURBIDITY	1.83	3	1	NTU
URANIUM	0.0047	.006	.003	mg/L
VANADIUM	<.5	<.5	<.5	mg/L
VINYL CHLORIDE	<10	<10	<10	ug/L

SD-430 Analytical Results Summary

Parameter	Concentration			
	Average	Maximun	Minimun	Units
ZINC	0.0982	.18	.055	mg/L
ZIRCONIUM	<.005	<.005	<.005	mg/L

SD-440 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
1 1 1-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1 2 2-TETRACHLOROETHANE	<5	<5	<5	ug/L
1 1 2-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHENE	<5	<5	<5	ug/L
1 2 4-TRICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROETHANE	<5	<5	<5	ug/L
1 2-DICHLOROPROPANE	<5	<5	<5	ug/L
1 3-DICHLOROBENZENE	<10	<10	<10	ug/L
1 4-DICHLOROBENZENE	<10	<10	<10	ug/L
2 4 6-TRICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DIMETHYLPHENOL	<10	<10	<10	ug/L
2 4-DINITROPHENOL	<10	<10	<10	ug/L
2 4-DINITROTOLUENE	<10	<10	<10	ug/L
2 6-DINITROTOLUENE	<10	<10	<10	ug/L
2-CHLOROETHYLVINYL ETHER	<10	<10	<10	ug/L
2-CHLORONAPHTHALENE	<10	<10	<10	ug/L
2-CHLOROPHENOL	<10	<10	<10	ug/L
2-NITROPHENOL	<10	<10	<10	ug/L
3 3'-DICHLOROBENZIDINE	<20	<20	<20	ug/L
4 6-DINITRO-2-METHYLPHENOL	<50	<50	<50	ug/L
4-BROMOPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-CHLORO-3-METHYLPHENOL	<10	<10	<10	ug/L
4-CHLOROPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-NITROPHENOL	<50	<50	<50	ug/L
ACENAPHTHENE	<10	<10	<10	ug/L
ACENAPHTHYLENE	<10	<10	<10	ug/L
ALKALINITY	171.33	198	142	mg/L
ALPHA	3.00	4	<2	pCi/L
ALUMINUM	0.2333	.4	<.1	mg/L
AMMONIA	<.2	<.2	<.2	mg/L
ANTHRACENE	<10	<10	<10	ug/L
ARSENIC	<.005	<.005	<.005	mg/L
BARIUM	<.1	<.1	<.1	mg/L
BENZENE	<5	<5	<5	ug/L
BENZIDINE	<10	<10	<10	ug/L
BENZO(A)ANTHRACENE	<10	<10	<10	ug/L
BENZO(A)PYRENE	<10	<10	<10	ug/L
BENZO(B)FLUORANTHENE	<10	<10	<10	ug/L
BENZO(G H I)PERYLENE	<10	<10	<10	ug/L
BENZO(K)FLUORANTHENE	<10	<10	<10	ug/L
BERYLLIUM	<.001	<.001	<.001	mg/L
BETA	2.93	3	<2.8	pCi/L
BHT	5.00	5	5	ug/L
BIS(2-CHLOROETHOXY)METHANE	<10	<10	<10	ug/L
BIS(2-CHLOROETHYL)ETHER	<10	<10	<10	ug/L

SD-440 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
BIS(2-CHLOROISOPROPYL)ETHER	<10	<10	<10	ug/L
BIS(2-ETHYLHEXYL)PHTHALATE	32.00	61	3	ug/L
BORON	0.0733	.095	.059	mg/L
BROMODICHLOROMETHANE	<5	<5	<5	ug/L
BROMOFORM	<5	<5	<5	ug/L
BROMOMETHANE	<10	<10	<10	ug/L
BUTYLBENZYLPHTHALATE	5.50	10	<1	ug/L
CADMIUM	<.003	<.003	<.003	mg/L
CALCIUM	58.67	70	41	mg/L
CARBON TETRACHLORIDE	<5	<5	<5	ug/L
CHEMICAL OXYGEN DEMAND (COD)	9.00	14	<5	mg/L
CHLORIDE	14.30	18.5	12	mg/L
CHLORINE TOTAL RESIDUAL WATER	<.1	<.1	<.1	mg/L
CHLOROBENZENE	<5	<5	<5	ug/L
CHLOROETHANE	<10	<10	<10	ug/L
CHLOROFORM	4.33	5	<3	ug/L
CHLOROMETHANE	<10	<10	<10	ug/L
CHROMIUM	<.01	<.01	<.01	mg/L
CHRYSENE	<10	<10	<10	ug/L
CIS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
COBALT	<.1	<.1	<.1	mg/L
CONDUCTIVITY	392.67	434	337	umho/cm
COPPER	0.0062	.01	<.004	mg/L
CYANIDE	<.002	<.002	<.002	mg/L
DI-N-BUTYLPHTHALATE	<10	<10	<10	ug/L
DI-N-OCTYLPHTHALATE	1.50	2	1	ug/L
DIACETONE ALCOHOL	5.00	5	5	ug/L
DIBENZ(A H)ANTHRACENE	<10	<10	<10	ug/L
DIBROMOCHLOROMETHANE	<5	<5	<5	ug/L
DIETHYLPHTHALATE	<10	<10	<10	ug/L
DIMETHYLPHTHALATE	<10	<10	<10	ug/L
DISSOLVED OXYGEN	13.20	19.8	9.8	ppm
ETHYLBENZENE	<5	<5	<5	ug/L
FLUORANTHENE	<10	<10	<10	ug/L
FLUORENE	<10	<10	<10	ug/L
FLUORIDE	0.1333	.2	.1	mg/L
HARDNESS	141.00	162	107	mg/L
HEXACHLOROBENZENE	<10	<10	<10	ug/L
HEXACHLOROBUTADIENE	<10	<10	<10	ug/L
HEXACHLOROCYCLOPENTADIENE	<10	<10	<10	ug/L
HEXACHLOROETHANE	<10	<10	<10	ug/L
INDENO(1 2 3-CD)PYRENE	<10	<10	<10	ug/L
IRON	0.1950	.35	.065	mg/L
ISOPHORONE	<10	<10	<10	ug/L
LEAD	<.05	<.05	<.05	mg/L
LITHIUM	<.004	<.004	<.004	mg/L
MAGNESIUM	11.83	13	9.5	mg/L
MANGANESE	0.0203	.026	.015	mg/L

SD-440 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
MERCURY	<.0002	<.0002	<.0002	mg/L
METHYLENE CHLORIDE	<5	<5	<5	ug/L
MOLYBDENUM	<0.0100	<.01	<.01	mg/L
N-NITROSO-DI-N-PROPYLAMINE	<10	<10	<10	ug/L
N-NITROSODIMETHYLAMINE	<10	<10	<10	ug/L
N-NITROSODIPHENYLAMINE	<10	<10	<10	ug/L
NAPHTHALENE	<10	<10	<10	ug/L
NICKEL	<.05	<.05	<.05	mg/L
NIOBIUM	<.007	<.007	<.007	mg/L
NITRATE	0.8833	1.3	<.5	mg/L
NITROBENZENE	<10	<10	<10	ug/L
OIL & GREASE	<2	<2	<2	mg/L
PCB (AROCLOR-1016)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1221)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1232)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1242)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1248)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1254)	<1	<1	<1	ug/L
PCB (AROCLOR-1260)	<1	<1	<1	ug/L
PENTACHLOROPHENOL	<50	<50	<50	ug/L
PH	7.93	8.1	7.7	
PHENANTHRENE	<10	<10	<10	ug/L
PHENOL	<10	<10	<10	ug/L
PHOSPHORUS	<.2	<.2	<.2	mg/L
POTASSIUM	3.37	4.2	1.9	mg/L
PROMETON	4.00	4	4	ug/L
PYRENE	<10	<10	<10	ug/L
SELENIUM	<0.0050	<.005	<.005	mg/L
SILICON	1.87	2	1.7	mg/L
SILVER	<.01	<.01	<.01	mg/L
SODIUM	12.00	13	11	mg/L
STRONTIUM	0.0833	.096	.069	mg/L
SULFATE	36.00	44	28	mg/L
TEMPERATURE	11.43	12.3	11	Deg. C
TETRACHLOROETHENE	<5	<5	<5	ug/L
THORIUM	<.2	<.2	<.2	mg/L
TITANIUM	0.0085	.016	<.003	mg/L
TOLUENE	<5	<5	<5	ug/L
TOTAL DISSOLVED SOLIDS	230.67	310	160	mg/L
TOTAL ORGANIC CARBON (TOC)	23.33	50	4	mg/L
TOTAL SUSPENDED SOLIDS	6.67	10	<1	mg/L
TRANS-1 2-DICHLOROETHENE	<5	<5	<5	ug/L
TRANS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
TRICHLOROETHENE	<5	<5	<5	ug/L
TURBIDITY	10.33	18	3	NTU
UNKNOWN	6.00	6	6	ug/L
URANIUM	0.0060	.007	.005	mg/L
VANADIUM	<.5	<.5	<.5	mg/L

SD-440 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
VINYL CHLORIDE	<10	<10	<10	ug/L
ZINC	<0.0200	<.02	<.02	mg/L
ZIRCONIUM	<.005	<.005	<.005	mg/L

SD-500 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
1 1 1-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1 2 2-TETRACHLOROETHANE	<5	<5	<5	ug/L
1 1 2-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHENE	<5	<5	<5	ug/L
1 2 4-TRICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROETHANE	<5	<5	<5	ug/L
1 2-DICHLOROPROPANE	<5	<5	<5	ug/L
1 3-DICHLOROBENZENE	<10	<10	<10	ug/L
1 4-DICHLOROBENZENE	<10	<10	<10	ug/L
2 4 6-TRICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DIMETHYLPHENOL	<10	<10	<10	ug/L
2 4-DINITROPHENOL	<10	<10	<10	ug/L
2 4-DINITROTOLUENE	<10	<10	<10	ug/L
2 6-DINITROTOLUENE	<10	<10	<10	ug/L
2-CHLOROETHYLVINYL ETHER	<10	<10	<10	ug/L
2-CHLORONAPHTHALENE	<10	<10	<10	ug/L
2-CHLOROPHENOL	<10	<10	<10	ug/L
2-NITROPHENOL	<10	<10	<10	ug/L
3 3'-DICHLOROBENZIDINE	<20	<20	<20	ug/L
4 6-DINITRO-2-METHYLPHENOL	<50	<50	<50	ug/L
4-BROMOPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-CHLORO-3-METHYLPHENOL	<10	<10	<10	ug/L
4-CHLOROPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-NITROPHENOL	<50	<50	<50	ug/L
ACENAPHTHENE	<10	<10	<10	ug/L
ACENAPHTHYLENE	<10	<10	<10	ug/L
ALKALINITY	144.83	193	106	mg/L
ALPHA	2.40	4.3	<1	pCi/L
ALUMINUM	0.1067	.14	<.1	mg/L
AMMONIA	<.2	<.2	<.2	mg/L
ANTHRACENE	<10	<10	<10	ug/L
ARSENIC	<.005	<.005	<.005	mg/L
BARIUM	<.1	<.1	<.1	mg/L
BENZENE	<5	<5	<5	ug/L
BENZIDINE	<10	<10	<10	ug/L
BENZO(A)ANTHRACENE	<10	<10	<10	ug/L
BENZO(A)PYRENE	<10	<10	<10	ug/L
BENZO(B)FLUORANTHENE	<10	<10	<10	ug/L
BENZO(G H I)PERYLENE	<10	<10	<10	ug/L
BENZO(K)FLUORANTHENE	<10	<10	<10	ug/L
BERYLLIUM	<.001	<.001	<.001	mg/L
BETA	85.37	126.9	34.1	pCi/L
BIS(2-CHLOROETHOXY)METHANE	<10	<10	<10	ug/L
BIS(2-CHLOROETHYL)ETHER	<10	<10	<10	ug/L
BIS(2-CHLOROISOPROPYL)ETHER	<10	<10	<10	ug/L

SD-500 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
BIS(2-ETHYLHEXYL)PHTHALATE	<10	<10	<10	ug/L
BORON	0.0191	.025	.0047	mg/L
BROMODICHLOROMETHANE	5.67	7	<5	ug/L
BROMOFORM	<5	<5	<5	ug/L
BROMOMETHANE	<10	<10	<10	ug/L
BUTYLBENZYLPHTHALATE	<10	<10	<10	ug/L
CADMIUM	<.003	<.003	<.003	mg/L
CALCIUM	41.83	46	34	mg/L
CARBON TETRACHLORIDE	<5	<5	<5	ug/L
CHEMICAL OXYGEN DEMAND (COD)	6.50	10	<5	mg/L
CHLORIDE	18.93	21	16.2	mg/L
CHLORINATED HYDROCARBON	3.00	3	3	ug/L
CHLORINE TOTAL RESIDUAL WATER	0.3500	1.5	<.1	mg/L
CHLOROBENZENE	<5	<5	<5	ug/L
CHLOROETHANE	<10	<10	<10	ug/L
CHLOROFORM	16.00	23	9	ug/L
CHLOROMETHANE	<10	<10	<10	ug/L
CHROMIUM	<.01	<.01	<.01	mg/L
CHRYSENE	<10	<10	<10	ug/L
CIS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
COBALT	<.1	<.1	<.1	mg/L
CONDUCTIVITY	375.00	419	343	umho/cm
COPPER	0.0043	.006	<.004	mg/L
CYANIDE	0.0022	.003	<.002	mg/L
DI-N-BUTYLPHTHALATE	<10	<10	<10	ug/L
DI-N-OCTYLPHTHALATE	5.50	10	<1	ug/L
DIACETONE ALCOHOL	88.00	88	88	ug/L
DIBENZ(A H)ANTHRACENE	<10	<10	<10	ug/L
DIBROMOCHLOROMETHANE	<5.00	<5	<5	ug/L
DIETHYLPHTHALATE	<10	<10	<10	ug/L
DIMETHYLPHTHALATE	<10	<10	<10	ug/L
DISSOLVED OXYGEN	9.23	11.2	7	ppm
ETHYLBENZENE	<5	<5	<5	ug/L
FLUORANTHENE	<10	<10	<10	ug/L
FLUORENE	<10	<10	<10	ug/L
FLUORIDE	0.1500	.3	.1	mg/L
HARDNESS	161.67	186	131	mg/L
HEXACHLOROBENZENE	<10	<10	<10	ug/L
HEXACHLOROBUTADIENE	<10	<10	<10	ug/L
HEXACHLOROCYCLOPENTADIENE	<10	<10	<10	ug/L
HEXACHLOROETHANE	<10	<10	<10	ug/L
INDENO(1 2 3-CD)PYRENE	<10	<10	<10	ug/L
IRON	0.1100	.12	.1	mg/L
ISOPHORONE	<10	<10	<10	ug/L
LEAD	<.05	<.05	<.05	mg/L
LITHIUM	0.0041	.0045	<.004	mg/L
MAGNESIUM	9.97	11	8.2	mg/L
MANGANESE	0.0417	.057	.029	mg/L

SD-500 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
MERCURY	<.0002	<.0002	<.0002	mg/L
METHYLENE CHLORIDE	<5	<5	<5	ug/L
MOLYBDENUM	0.0103	.012	<.01	mg/L
N-NITROSO-DI-N-PROPYLAMINE	<10	<10	<10	ug/L
N-NITROSODIMETHYLAMINE	<10	<10	<10	ug/L
N-NITROSODIPHENYLAMINE	<10	<10	<10	ug/L
NAPHTHALENE	<10	<10	<10	ug/L
NICKEL	<.05	<.05	<.05	mg/L
NIOBIUM	0.0089	.015	<.007	mg/L
NITRATE	2.48	2.7	1.9	mg/L
NITROBENZENE	<10	<10	<10	ug/L
OIL & GREASE	<2.00	<2	<2	mg/L
PCB (AROCLOR-1016)	<1	<1	<1	ug/L
PCB (AROCLOR-1221)	<1	<1	<1	ug/L
PCB (AROCLOR-1232)	<1	<1	<1	ug/L
PCB (AROCLOR-1242)	<1	<1	<1	ug/L
PCB (AROCLOR-1248)	<1	<1	<1	ug/L
PCB (AROCLOR-1254)	<1	<1	<1	ug/L
PCB (AROCLOR-1260)	<1	<1	<1	ug/L
PENTACHLOROPHENOL	<50	<50	<50	ug/L
PH	7.85	8.1	7.7	
PHENANTHRENE	<10	<10	<10	ug/L
PHENOL	<10	<10	<10	ug/L
PHOSPHORUS	0.2100	.26	<.2	mg/L
POTASSIUM	2.57	5	1.2	mg/L
PYRENE	<10	<10	<10	ug/L
SELENIUM	<0.0050	<.005	<.005	mg/L
SILICON	2.15	2.7	1.6	mg/L
SILVER	<.01	<.01	<.01	mg/L
SODIUM	20.00	24	15	mg/L
STRONTIUM	0.0735	.082	.062	mg/L
SULFATE	44.50	53	38	mg/L
TEMPERATURE	12.00	14	11	Deg. C
TETRACHLOROETHENE	<5	<5	<5	ug/L
THORIUM	<.2	<.2	<.2	mg/L
TITANIUM	0.0043	.0091	<.003	mg/L
TOLUENE	<5	<5	<5	ug/L
TOTAL DISSOLVED SOLIDS	214.67	252	124	mg/L
TOTAL ORGANIC CARBON (TOC)	18.00	36	3	mg/L
TOTAL SUSPENDED SOLIDS	1.17	2	<1	mg/L
TRANS-1 2-DICHLOROETHENE	<5	<5	<5	ug/L
TRANS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
TRICHLOROETHENE	6.50	8	5	ug/L
TURBIDITY	2.33	9	<1	NTU
UNKNOWN	40.00	40	40	ug/L
URANIUM	0.0068	.023	.003	mg/L
VANADIUM	<.5	<.5	<.5	mg/L
VINYL CHLORIDE	<10	<10	<10	ug/L

SD-500 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
ZINC	0.0232	.034	<.02	mg/L
ZIRCONIUM	<.005	<.005	<.005	mg/L

SD-510 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
1 1 1-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1 2 2-TETRACHLOROETHANE	<5	<5	<5	ug/L
1 1 2-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHENE	<5	<5	<5	ug/L
1 2 4-TRICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROETHANE	<5	<5	<5	ug/L
1 2-DICHLOROPROPANE	<5	<5	<5	ug/L
1 3-DICHLOROBENZENE	<10	<10	<10	ug/L
1 4-DICHLOROBENZENE	<10	<10	<10	ug/L
2 4 6-TRICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DIMETHYLPHENOL	<10	<10	<10	ug/L
2 4-DINITROPHENOL	<10	<10	<10	ug/L
2 4-DINITROTOLUENE	<10	<10	<10	ug/L
2 6-DINITROTOLUENE	<10	<10	<10	ug/L
2-CHLOROETHYLVINYL ETHER	<10	<10	<10	ug/L
2-CHLORONAPHTHALENE	<10	<10	<10	ug/L
2-CHLOROPHENOL	<10	<10	<10	ug/L
2-NITROPHENOL	<10	<10	<10	ug/L
3 3'-DICHLOROBENZIDINE	<20	<20	<20	ug/L
4 6-DINITRO-2-METHYLPHENOL	<50	<50	<50	ug/L
4-BROMOPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-CHLORO-3-METHYLPHENOL	<10	<10	<10	ug/L
4-CHLOROPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-NITROPHENOL	<50	<50	<50	ug/L
ACENAPHTHENE	<10	<10	<10	ug/L
ACENAPHTHYLENE	<10	<10	<10	ug/L
ALKALINITY	59.50	70	49	mg/L
ALKYL/ALKOXY COMPOUND	9.00	9	9	ug/L
ALPHA	<3.00	<3	<3	pCi/L
ALUMINUM	<.1	<.1	<.1	mg/L
AMMONIA	<.2	<.2	<.2	mg/L
ANTHRACENE	<10	<10	<10	ug/L
ARSENIC	<.005	<.005	<.005	mg/L
BARIUM	<.1	<.1	<.1	mg/L
BENZENE	<5	<5	<5	ug/L
BENZIDINE	<10	<10	<10	ug/L
BENZO(A)ANTHRACENE	<10	<10	<10	ug/L
BENZO(A)PYRENE	<10	<10	<10	ug/L
BENZO(B)FLUORANTHENE	<10	<10	<10	ug/L
BENZO(G H I)PERYLENE	<10	<10	<10	ug/L
BENZO(K)FLUORANTHENE	<10	<10	<10	ug/L
BERYLLIUM	<.001	<.001	<.001	mg/L
BETA	<3	<3	<3	pCi/L
BIS(2-CHLOROETHOXY)METHANE	<10	<10	<10	ug/L
BIS(2-CHLOROETHYL)ETHER	<10	<10	<10	ug/L

SD-510 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
BIS(2-CHLOROISOPROPYL)ETHER	<10	<10	<10	ug/L
BIS(2-ETHYLHEXYL)PHTHALATE	<10	<10	<10	ug/L
BORON	0.0048	.0055	<.004	mg/L
BROMODICHLOROMETHANE	<5	<5	<5	ug/L
BROMOFORM	<5	<5	<5	ug/L
BROMOMETHANE	<10	<10	<10	ug/L
BUTYLBENZYLPHTHALATE	<10	<10	<10	ug/L
CADMIUM	<.003	<.003	<.003	mg/L
CALCIUM	20.50	24	17	mg/L
CARBON TETRACHLORIDE	<5	<5	<5	ug/L
CHEMICAL OXYGEN DEMAND (COD)	14.00	14	14	mg/L
CHLORIDE	4.45	5.9	3	mg/L
CHLORINE TOTAL RESIDUAL WATER	<.1	<.1	<.1	mg/L
CHLOROBENZENE	<5	<5	<5	ug/L
CHLOROETHANE	<10	<10	<10	ug/L
CHLOROFORM	<5	<5	<5	ug/L
CHLOROMETHANE	<10	<10	<10	ug/L
CHROMIUM	<.01	<.01	<.01	mg/L
CHRYSENE	<10	<10	<10	ug/L
CIS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
COBALT	<.1	<.1	<.1	mg/L
CONDUCTIVITY	140.50	144	137	umho/cm
COPPER	<.004	<.004	<.004	mg/L
CYANIDE	0.0025	.003	<.002	mg/L
DI-N-BUTYLPHTHALATE	<10	<10	<10	ug/L
DI-N-OCTYLPHTHALATE	<10	<10	<10	ug/L
DIACETONE ALCOHOL	20.00	20	20	ug/L
DIBENZ(A H)ANTHRACENE	<10	<10	<10	ug/L
DIBROMOCHLOROMETHANE	<5	<5	<5	ug/L
DIETHYLPHTHALATE	5.50	10	<1	ug/L
DIMETHYLPHTHALATE	<10	<10	<10	ug/L
DISSOLVED OXYGEN	10.75	10.8	10.7	ppm
ETHYLBENZENE	<5	<5	<5	ug/L
FLUORANTHENE	<10	<10	<10	ug/L
FLUORENE	<10	<10	<10	ug/L
FLUORIDE	0.1500	.2	<.1	mg/L
HARDNESS	61.50	69	54	mg/L
HEXACHLOROBENZENE	<10	<10	<10	ug/L
HEXACHLOROBUTADIENE	<10	<10	<10	ug/L
HEXACHLOROCYCLOPENTADIENE	<10	<10	<10	ug/L
HEXACHLOROETHANE	<10	<10	<10	ug/L
INDENO(1 2 3-CD)PYRENE	<10	<10	<10	ug/L
IRON	0.0710	.092	<.05	mg/L
ISOPHORONE	<10	<10	<10	ug/L
LEAD	<.05	<.05	<.05	mg/L
LITHIUM	<.004	<.004	<.004	mg/L
MAGNESIUM	1.35	1.5	1.2	mg/L
MANGANESE	<.01	<.01	<.01	mg/L

SD-510 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
MERCURY	<.0002	<.0002	<.0002	mg/L
METHYLENE CHLORIDE	<5	<5	<5	ug/L
MOLYBDENUM	<.01	<.01	<.01	mg/L
N-NITROSO-DI-N-PROPYLAMINE	<10	<10	<10	ug/L
N-NITROSODIMETHYLAMINE	<10	<10	<10	ug/L
N-NITROSODIPHENYLAMINE	<10	<10	<10	ug/L
NAPHTHALENE	<10	<10	<10	ug/L
NICKEL	<.05	<.05	<.05	mg/L
NIOBIUM	<.007	<.007	<.007	mg/L
NITRATE	3.65	6	1.3	mg/L
NITROBENZENE	<10	<10	<10	ug/L
OIL & GREASE	<2.00	<2	<2	mg/L
PCB (AROCLOR-1016)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1221)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1232)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1242)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1248)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1254)	<1	<1	<1	ug/L
PCB (AROCLOR-1260)	<1	<1	<1	ug/L
PENTACHLOROPHENOL	<50	<50	<50	ug/L
PH	7.70	7.7	7.7	
PHENANTHRENE	<10	<10	<10	ug/L
PHENOL	<10	<10	<10	ug/L
PHOSPHORUS	<.2	<.2	<.2	mg/L
POTASSIUM	<.6	<.6	<.6	mg/L
PYRENE	<10	<10	<10	ug/L
SELENIUM	<0.0050	<.005	<.005	mg/L
SILICON	0.3550	.54	.17	mg/L
SILVER	<.01	<.01	<.01	mg/L
SODIUM	4.35	5.2	3.5	mg/L
STRONTIUM	0.0180	.019	.017	mg/L
SULFATE	9.95	13	6.9	mg/L
TEMPERATURE	6.10	6.2	6	Deg. C
TETRACHLOROETHENE	<5	<5	<5	ug/L
THORIUM	<.2	<.2	<.2	mg/L
TITANIUM	0.0042	.0054	<.003	mg/L
TOLUENE	<5	<5	<5	ug/L
TOTAL DISSOLVED SOLIDS	78.00	78	78	mg/L
TOTAL ORGANIC CARBON (TOC)	10.50	14	7	mg/L
TOTAL SUSPENDED SOLIDS	2.00	3	<1	mg/L
TRANS-1 2-DICHLOROETHENE	<5	<5	<5	ug/L
TRANS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
TRICHLOROETHENE	<5	<5	<5	ug/L
TURBIDITY	3.00	5	<1	NTU
UNKNOWN	17.00	17	17	ug/L
URANIUM	0.0045	.006	.003	mg/L
VANADIUM	<.5	<.5	<.5	mg/L
VINYL CHLORIDE	<10	<10	<10	ug/L

SD-510 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
ZINC	0.0665	.085	.048	mg/L
ZIRCONIUM	<.005	<.005	<.005	mg/L

SD-540 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
1 1 1-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1 2 2-TETRACHLOROETHANE	<5	<5	<5	ug/L
1 1 2-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHENE	<5	<5	<5	ug/L
1 2 4-TRICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROETHANE	<5	<5	<5	ug/L
1 2-DICHLOROPROPANE	<5	<5	<5	ug/L
1 3-DICHLOROBENZENE	<10	<10	<10	ug/L
1 4-DICHLOROBENZENE	<10	<10	<10	ug/L
2 4 6-TRICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DIMETHYLPHENOL	<10	<10	<10	ug/L
2 4-DINITROPHENOL	<10	<10	<10	ug/L
2 4-DINITROTOLUENE	<10	<10	<10	ug/L
2 6-DINITROTOLUENE	<10	<10	<10	ug/L
2-CHLOROETHYLVINYL ETHER	<10	<10	<10	ug/L
2-CHLORONAPHTHALENE	<10	<10	<10	ug/L
2-CHLOROPHENOL	<10	<10	<10	ug/L
2-NITROPHENOL	<10	<10	<10	ug/L
3 3'-DICHLOROBENZIDINE	<20	<20	<20	ug/L
4 6-DINITRO-2-METHYLPHENOL	<50	<50	<50	ug/L
4-BROMOPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-CHLORO-3-METHYLPHENOL	<10	<10	<10	ug/L
4-CHLOROPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-NITROPHENOL	<50	<50	<50	ug/L
ACENAPHTHENE	<10	<10	<10	ug/L
ACENAPHTHYLENE	<10	<10	<10	ug/L
ALIPHATIC HYDROCARBON	8.00	8	8	ug/L
ALKALINITY	72.00	72	72	mg/L
ALPHA	<2	<2	<2	pCi/L
ALUMINUM	0.6900	.69	.69	mg/L
AMMONIA	<.2	<.2	<.2	mg/L
ANTHRACENE	<10	<10	<10	ug/L
ARSENIC	<.005	<.005	<.005	mg/L
BARIUM	<.1	<.1	<.1	mg/L
BENZENE	<5	<5	<5	ug/L
BENZIDINE	<10	<10	<10	ug/L
BENZO(A)ANTHRACENE	<10	<10	<10	ug/L
BENZO(A)PYRENE	<10	<10	<10	ug/L
BENZO(B)FLUORANTHENE	<10	<10	<10	ug/L
BENZO(G H I)PERYLENE	<10	<10	<10	ug/L
BENZO(K)FLUORANTHENE	<10	<10	<10	ug/L
BERYLLIUM	<.001	<.001	<.001	mg/L
BETA	6.60	6.6	6.6	pCi/L
BIS(2-CHLOROETHOXY)METHANE	<10	<10	<10	ug/L
BIS(2-CHLOROETHYL)ETHER	<10	<10	<10	ug/L

SD-540 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
BIS(2-CHLOROISOPROPYL)ETHER	<10	<10	<10	ug/L
BIS(2-ETHYLHEXYL)PHTHALATE	<10	<10	<10	ug/L
BORON	0.0270	.027	.027	mg/L
BROMODICHLOROMETHANE	<5	<5	<5	ug/L
BROMOFORM	<5	<5	<5	ug/L
BROMOMETHANE	<10	<10	<10	ug/L
BUTYLBENZYLPHTHALATE	<10	<10	<10	ug/L
CADMIUM	<.003	<.003	<.003	mg/L
CALCIUM	24.00	24	24	mg/L
CARBON TETRACHLORIDE	<5	<5	<5	ug/L
CHEMICAL OXYGEN DEMAND (COD)	59.00	59	59	mg/L
CHLORIDE	<1	<1	<1	mg/L
CHLORINE TOTAL RESIDUAL WATER	<.1	<.1	<.1	mg/L
CHLOROBENZENE	<5	<5	<5	ug/L
CHLOROETHANE	<10	<10	<10	ug/L
CHLOROFORM	5.00	5	5	ug/L
CHLOROMETHANE	<10	<10	<10	ug/L
CHROMIUM	<.01	<.01	<.01	mg/L
CHRYSENE	<10	<10	<10	ug/L
CIS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
COBALT	<.1	<.1	<.1	mg/L
CONDUCTIVITY	135.00	135	135	umho/cm
COPPER	<.004	<.004	<.004	mg/L
CYANIDE	0.0050	.005	.005	mg/L
DI-N-BUTYLPHTHALATE	<10	<10	<10	ug/L
DI-N-OCTYLPHTHALATE	<10	<10	<10	ug/L
DIACETONE ALCOHOL	5.00	5	5	ug/L
DIBENZ(A H)ANTHRACENE	<10	<10	<10	ug/L
DIBROMOCHLOROMETHANE	<5	<5	<5	ug/L
DIETHYLPHTHALATE	<10	<10	<10	ug/L
DIMETHYLPHTHALATE	<10	<10	<10	ug/L
DISSOLVED OXYGEN	11.20	11.2	11.2	ppm
ETHYLBENZENE	<5	<5	<5	ug/L
FLUORANTHENE	<10	<10	<10	ug/L
FLUORENE	<10	<10	<10	ug/L
FLUORIDE	0.1000	.1	.1	mg/L
HARDNESS	68.00	68	68	mg/L
HEXACHLOROBENZENE	<10	<10	<10	ug/L
HEXACHLOROBUTADIENE	<10	<10	<10	ug/L
HEXACHLOROCYCLOPENTADIENE	<10	<10	<10	ug/L
HEXACHLOROETHANE	<10	<10	<10	ug/L
INDENO(1 2 3-CD)PYRENE	<10	<10	<10	ug/L
IRON	0.5300	.53	.53	mg/L
ISOPHORONE	<10	<10	<10	ug/L
LEAD	<.05	<.05	<.05	mg/L
LITHIUM	<.004	<.004	<.004	mg/L
MAGNESIUM	3.30	3.3	3.3	mg/L
MANGANESE	0.0230	.023	.023	mg/L

SD-540 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
MERCURY	<.0002	<.0002	<.0002	mg/L
METHYLENE CHLORIDE	<5	<5	<5	ug/L
MOLYBDENUM	<.01	<.01	<.01	mg/L
N-NITROSO-DI-N-PROPYLAMINE	<10	<10	<10	ug/L
N-NITROSODIMETHYLAMINE	<10	<10	<10	ug/L
N-NITROSODIPHENYLAMINE	<10	<10	<10	ug/L
NAPHTHALENE	<10	<10	<10	ug/L
NICKEL	<.05	<.05	<.05	mg/L
NIOBIUM	<.007	<.007	<.007	mg/L
NITRATE	<.5	<.5	<.5	mg/L
NITROBENZENE	<10	<10	<10	ug/L
OIL & GREASE	<2	<2	<2	mg/L
PCB (AROCLOR-1016)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1221)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1232)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1242)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1248)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1254)	<1	<1	<1	ug/L
PCB (AROCLOR-1260)	<1	<1	<1	ug/L
PENTACHLOROPHENOL	<50	<50	<50	ug/L
PH	7.60	7.6	7.6	
PHENANTHRENE	<10	<10	<10	ug/L
PHENOL	<10	<10	<10	ug/L
PHOSPHORUS	<.2	<.2	<.2	mg/L
POTASSIUM	3.20	3.2	3.2	mg/L
PYRENE	<10	<10	<10	ug/L
SELENIUM	0.0050	.005	.005	mg/L
SILICON	2.20	2.2	2.2	mg/L
SILVER	<.01	<.01	<.01	mg/L
SODIUM	0.2500	.25	.25	mg/L
STRONTIUM	0.0310	.031	.031	mg/L
SULFATE	4.20	4.2	4.2	mg/L
TEMPERATURE	13.00	13	13	Deg. C
TETRACHLOROETHENE	<5	<5	<5	ug/L
THORIUM	<.2	<.2	<.2	mg/L
TITANIUM	0.0250	.025	.025	mg/L
TOLUENE	<5	<5	<5	ug/L
TOTAL DISSOLVED SOLIDS	98.00	98	98	mg/L
TOTAL ORGANIC CARBON (TOC)	26.00	26	26	mg/L
TOTAL SUSPENDED SOLIDS	27.00	27	27	mg/L
TRANS-1 2-DICHLOROETHENE	<5	<5	<5	ug/L
TRANS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
TRICHLOROETHENE	<5	<5	<5	ug/L
TURBIDITY	27.00	27	27	NTU
URANIUM	0.0020	.002	.002	mg/L
VANADIUM	<.5	<.5	<.5	mg/L
VINYL CHLORIDE	<10	<10	<10	ug/L
ZINC	<.02	<.02	<.02	mg/L

SD-540 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
ZIRCONIUM	<.005	<.005	<.005	mg/L

SD-550 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
1 1 1-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1 2 2-TETRACHLOROETHANE	<5	<5	<5	ug/L
1 1 2-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHENE	<5	<5	<5	ug/L
1 2 4-TRICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROETHANE	<5	<5	<5	ug/L
1 2-DICHLOROPROPANE	<5	<5	<5	ug/L
1 3-DICHLOROBENZENE	<10	<10	<10	ug/L
1 4-DICHLOROBENZENE	<10	<10	<10	ug/L
2 4 6-TRICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DIMETHYLPHENOL	<10	<10	<10	ug/L
2 4-DINITROPHENOL	<10	<10	<10	ug/L
2 4-DINITROTOLUENE	<10	<10	<10	ug/L
2 6-DINITROTOLUENE	<10	<10	<10	ug/L
2-CHLOROETHYLVINYL ETHER	<10	<10	<10	ug/L
2-CHLORONAPHTHALENE	<10	<10	<10	ug/L
2-CHLOROPHENOL	<10	<10	<10	ug/L
2-NITROPHENOL	<10	<10	<10	ug/L
3 3'-DICHLOROBENZIDINE	<20	<20	<20	ug/L
4 6-DINITRO-2-METHYLPHENOL	<50	<50	<50	ug/L
4-BROMOPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-CHLORO-3-METHYLPHENOL	<10	<10	<10	ug/L
4-CHLOROPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-NITROPHENOL	<50	<50	<50	ug/L
ACENAPHTHENE	<10	<10	<10	ug/L
ACENAPHTHYLENE	<10	<10	<10	ug/L
ALKALINITY	86.00	86	86	mg/L
ALPHA	11.20	11.2	11.2	pCi/L
ALUMINUM	0.4000	.4	.4	mg/L
AMMONIA	<.2	<.2	<.2	mg/L
ANTHRACENE	<10	<10	<10	ug/L
ARSENIC	<.005	<.005	<.005	mg/L
BARIUM	<.1	<.1	<.1	mg/L
BENZENE	<5	<5	<5	ug/L
BENZIDINE	<10	<10	<10	ug/L
BENZO(A)ANTHRACENE	<10	<10	<10	ug/L
BENZO(A)PYRENE	<10	<10	<10	ug/L
BENZO(B)FLUORANTHENE	<10	<10	<10	ug/L
BENZO(G H I)PERYLENE	<10	<10	<10	ug/L
BENZO(K)FLUORANTHENE	<10	<10	<10	ug/L
BERYLLIUM	<.001	<.001	<.001	mg/L
BETA	<2	<2	<2	pCi/L
BIS(2-CHLOROETHOXY)METHANE	<10	<10	<10	ug/L
BIS(2-CHLOROETHYL)ETHER	<10	<10	<10	ug/L
BIS(2-CHLOROISOPROPYL)ETHER	<10	<10	<10	ug/L

SD-550 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
BIS(2-ETHYLHEXYL)PHTHALATE	<10	<10	<10	ug/L
BORON	0.0410	.041	.041	mg/L
BROMODICHLOROMETHANE	<5	<5	<5	ug/L
BROMOFORM	<5	<5	<5	ug/L
BROMOMETHANE	<10	<10	<10	ug/L
BUTYLBENZYLPHTHALATE	<10	<10	<10	ug/L
CADMIUM	<.003	<.003	<.003	mg/L
CALCIUM	26.00	26	26	mg/L
CARBON TETRACHLORIDE	<5	<5	<5	ug/L
CHEMICAL OXYGEN DEMAND (COD)	46.00	46	46	mg/L
CHLORIDE	<1	<1	<1	mg/L
CHLORINE TOTAL RESIDUAL WATER	<.1	<.1	<.1	mg/L
CHLOROBENZENE	<5	<5	<5	ug/L
CHLOROETHANE	<10	<10	<10	ug/L
CHLOROFORM	<5	<5	<5	ug/L
CHLOROMETHANE	<10	<10	<10	ug/L
CHROMIUM	<.01	<.01	<.01	mg/L
CHRYSENE	<10	<10	<10	ug/L
CIS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
COBALT	<.1	<.1	<.1	mg/L
CONDUCTIVITY	173.00	173	173	umho/cm
COPPER	0.0100	.01	.01	mg/L
CYANIDE	0.0030	.003	.003	mg/L
DI-N-BUTYLPHTHALATE	<10	<10	<10	ug/L
DI-N-OCTYLPHTHALATE	<10	<10	<10	ug/L
DIACETONE ALCOHOL	3.00	3	3	ug/L
DIBENZ(A H)ANTHRACENE	<10	<10	<10	ug/L
DIBROMOCHLOROMETHANE	<5	<5	<5	ug/L
DIETHYLPHTHALATE	<10	<10	<10	ug/L
DIMETHYLPHTHALATE	<10	<10	<10	ug/L
DISSOLVED OXYGEN	9.80	9.8	9.8	ppm
ETHYLBENZENE	<5	<5	<5	ug/L
FLUORANTHENE	<10	<10	<10	ug/L
FLUORENE	<10	<10	<10	ug/L
FLUORIDE	0.2000	.2	.2	mg/L
HARDNESS	86.00	86	86	mg/L
HEXACHLOROBENZENE	<10	<10	<10	ug/L
HEXACHLOROBUTADIENE	<10	<10	<10	ug/L
HEXACHLOROCYCLOPENTADIENE	<10	<10	<10	ug/L
HEXACHLOROETHANE	<10	<10	<10	ug/L
INDENO(1 2 3-CD)PYRENE	<10	<10	<10	ug/L
IRON	0.3200	.32	.32	mg/L
ISOPHORONE	<10	<10	<10	ug/L
LEAD	<.05	<.05	<.05	mg/L
LITHIUM	<.004	<.004	<.004	mg/L
MAGNESIUM	3.70	3.7	3.7	mg/L
MANGANESE	0.0180	.018	.018	mg/L
MERCURY	<.0002	<.0002	<.0002	mg/L

SD-550 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
METHYLENE CHLORIDE	<5	<5	<5	ug/L
MOLYBDENUM	0.0130	.013	.013	mg/L
N-NITROSO-DI-N-PROPYLAMINE	<10	<10	<10	ug/L
N-NITROSODIMETHYLAMINE	<10	<10	<10	ug/L
N-NITROSODIPHENYLAMINE	<10	<10	<10	ug/L
NAPHTHALENE	<10	<10	<10	ug/L
NICKEL	<.05	<.05	<.05	mg/L
NIOBIUM	<.007	<.007	<.007	mg/L
NITRATE	<.5	<.5	<.5	mg/L
NITROBENZENE	<10	<10	<10	ug/L
OIL & GREASE	<2	<2	<2	mg/L
PCB (AROCLOR-1016)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1221)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1232)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1242)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1248)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1254)	<1	<1	<1	ug/L
PCB (AROCLOR-1260)	<1	<1	<1	ug/L
PENTACHLOROPHENOL	<50	<50	<50	ug/L
PH	7.40	7.4	7.4	
PHENANTHRENE	<10	<10	<10	ug/L
PHENOL	<10	<10	<10	ug/L
PHOSPHORUS	<.2	<.2	<.2	mg/L
POTASSIUM	3.50	3.5	3.5	mg/L
PYRENE	<10	<10	<10	ug/L
SELENIUM	0.0050	.005	.005	mg/L
SILICON	1.80	1.8	1.8	mg/L
SILVER	<.01	<.01	<.01	mg/L
SODIUM	0.3000	.3	.3	mg/L
STRONTIUM	0.0340	.034	.034	mg/L
SULFATE	4.20	4.2	4.2	mg/L
TEMPERATURE	13.00	13	13	Deg. C
TETRACHLOROETHENE	<5	<5	<5	ug/L
THORIUM	<.2	<.2	<.2	mg/L
TITANIUM	0.0160	.016	.016	mg/L
TOLUENE	<5	<5	<5	ug/L
TOTAL DISSOLVED SOLIDS	104.00	104	104	mg/L
TOTAL ORGANIC CARBON (TOC)	18.00	18	18	mg/L
TOTAL SUSPENDED SOLIDS	18.00	18	18	mg/L
TRANS-1 2-DICHLOROETHENE	<5	<5	<5	ug/L
TRANS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
TRICHLOROETHENE	<5	<5	<5	ug/L
TURBIDITY	29.00	29	29	NTU
URANIUM	<.001	<.001	<.001	mg/L
VANADIUM	<.5	<.5	<.5	mg/L
VINYL CHLORIDE	<10	<10	<10	ug/L
ZINC	<.02	<.02	<.02	mg/L
ZIRCONIUM	0.0066	.0066	.0066	mg/L

SD-560 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
1 1 1-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1 2 2-TETRACHLOROETHANE	<5	<5	<5	ug/L
1 1 2-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHENE	<5	<5	<5	ug/L
1 2 4-TRICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROETHANE	<5	<5	<5	ug/L
1 2-DICHLOROPROPANE	<5	<5	<5	ug/L
1 3-DICHLOROBENZENE	<10	<10	<10	ug/L
1 4-DICHLOROBENZENE	<10	<10	<10	ug/L
2 4 6-TRICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DIMETHYLPHENOL	<10	<10	<10	ug/L
2 4-DINITROPHENOL	<10	<10	<10	ug/L
2 4-DINITROTOLUENE	<10	<10	<10	ug/L
2 6-DINITROTOLUENE	<10	<10	<10	ug/L
2-BUTANONE	13.00	13	13	ug/L
2-CHLOROETHYLVINYL ETHER	<10	<10	<10	ug/L
2-CHLORONAPHTHALENE	<10	<10	<10	ug/L
2-CHLOROPHENOL	<10	<10	<10	ug/L
2-NITROPHENOL	<10	<10	<10	ug/L
3 3'-DICHLOROBENZIDINE	<20	<20	<20	ug/L
4 6-DINITRO-2-METHYLPHENOL	<50	<50	<50	ug/L
4-BROMOPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-CHLORO-3-METHYLPHENOL	<10	<10	<10	ug/L
4-CHLOROPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-NITROPHENOL	<50	<50	<50	ug/L
ACENAPHTHENE	<10	<10	<10	ug/L
ACENAPHTHYLENE	<10	<10	<10	ug/L
ACETONE	11.00	11	11	ug/L
ALKALINITY	56.00	56	56	mg/L
ALPHA	2.60	2.6	2.6	pCi/L
ALUMINUM	0.1300	.13	.13	mg/L
AMMONIA	<.2	<.2	<.2	mg/L
ANTHRACENE	<10	<10	<10	ug/L
ARSENIC	<.005	<.005	<.005	mg/L
BARIUM	<.1	<.1	<.1	mg/L
BENZENE	<5	<5	<5	ug/L
BENZIDINE	<10	<10	<10	ug/L
BENZO(A)ANTHRACENE	<10	<10	<10	ug/L
BENZO(A)PYRENE	<10	<10	<10	ug/L
BENZO(B)FLUORANTHENE	<10	<10	<10	ug/L
BENZO(G H I)PERYLENE	<10	<10	<10	ug/L
BENZO(K)FLUORANTHENE	<10	<10	<10	ug/L
BERYLLIUM	<.001	<.001	<.001	mg/L
BETA	5.50	5.5	5.5	pCi/L
BIS(2-CHLOROETHOXY)METHANE	<10	<10	<10	ug/L

SD-560 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
BIS(2-CHLOROETHYL)ETHER	<10	<10	<10	ug/L
BIS(2-CHLOROISOPROPYL)ETHER	<10	<10	<10	ug/L
BIS(2-ETHYLHEXYL)PHTHALATE	3.00	3	3	ug/L
BORON	<.004	<.004	<.004	mg/L
BROMODICHLOROMETHANE	<5	<5	<5	ug/L
BROMOFORM	<5	<5	<5	ug/L
BROMOMETHANE	<10	<10	<10	ug/L
BUTYLBENZYLPHTHALATE	3.00	3	3	ug/L
CADMIUM	<.003	<.003	<.003	mg/L
CALCIUM	20.00	20	20	mg/L
CARBON TETRACHLORIDE	<5	<5	<5	ug/L
CHEMICAL OXYGEN DEMAND (COD)	27.00	27	27	mg/L
CHLORIDE	7.60	7.6	7.6	mg/L
CHLORINE TOTAL RESIDUAL WATER	<.1	<.1	<.1	mg/L
CHLOROBENZENE	<5	<5	<5	ug/L
CHLOROETHANE	<10	<10	<10	ug/L
CHLOROFORM	1.00	1	1	ug/L
CHLOROMETHANE	<10	<10	<10	ug/L
CHROMIUM	<.01	<.01	<.01	mg/L
CHRYSENE	<10	<10	<10	ug/L
CIS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
COBALT	<.1	<.1	<.1	mg/L
CONDUCTIVITY	285.00	285	285	umho/cm
COPPER	<.004	<.004	<.004	mg/L
CYANIDE	<.002	<.002	<.002	mg/L
DI-N-BUTYLPHTHALATE	<10	<10	<10	ug/L
DI-N-OCTYLPHTHALATE	1.00	1	1	ug/L
DIBENZ(A H)ANTHRACENE	<10	<10	<10	ug/L
DIBROMOCHLOROMETHANE	<5	<5	<5	ug/L
DIETHYLPHTHALATE	<10	<10	<10	ug/L
DIMETHYLPHTHALATE	<10	<10	<10	ug/L
DISSOLVED OXYGEN	9.80	9.8	9.8	ppm
ETHYLBENZENE	<5	<5	<5	ug/L
FLUORANTHENE	<10	<10	<10	ug/L
FLUORENE	<10	<10	<10	ug/L
FLUORIDE	0.3000	.3	.3	mg/L
HARDNESS	68.00	68	68	mg/L
HEXACHLOROBENZENE	<10	<10	<10	ug/L
HEXACHLOROBUTADIENE	<10	<10	<10	ug/L
HEXACHLOROCYCLOPENTADIENE	<10	<10	<10	ug/L
HEXACHLOROETHANE	<10	<10	<10	ug/L
INDENO(1 2 3-CD)PYRENE	<10	<10	<10	ug/L
IRON	0.2500	.25	.25	mg/L
ISOPHORONE	<10	<10	<10	ug/L
LEAD	<.05	<.05	<.05	mg/L
LITHIUM	<.004	<.004	<.004	mg/L
MAGNESIUM	4.30	4.3	4.3	mg/L
MANGANESE	0.1000	.1	.1	mg/L

SD-560 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
MERCURY	<.0002	<.0002	<.0002	mg/L
METHYLENE CHLORIDE	<5	<5	<5	ug/L
MOLYBDENUM	<.01	<.01	<.01	mg/L
N-NITROSO-DI-N-PROPYLAMINE	<10	<10	<10	ug/L
N-NITROSODIMETHYLAMINE	<10	<10	<10	ug/L
N-NITROSODIPHENYLAMINE	<10	<10	<10	ug/L
NAPHTHALENE	<10	<10	<10	ug/L
NICKEL	<.05	<.05	<.05	mg/L
NIOBIUM	0.0085	8.50000	8.50000	mg/L
NITRATE	2.30	2.3	2.3	mg/L
NITROBENZENE	<10	<10	<10	ug/L
OIL & GREASE	<2	<2	<2	mg/L
PCB (AROCLOR-1016)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1221)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1232)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1242)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1248)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1254)	<1	<1	<1	ug/L
PCB (AROCLOR-1260)	<1	<1	<1	ug/L
PENTACHLOROPHENOL	<50	<50	<50	ug/L
PH	7.70	7.7	7.7	
PHENANTHRENE	<10	<10	<10	ug/L
PHENOL	<10	<10	<10	ug/L
PHOSPHORUS	<.2	<.2	<.2	mg/L
POTASSIUM	1.70	1.7	1.7	mg/L
PYRENE	<10	<10	<10	ug/L
SELENIUM	0.0050	.005	.005	mg/L
SILICON	1.10	1.1	1.1	mg/L
SILVER	<.01	<.01	<.01	mg/L
SODIUM	32.00	32	32	mg/L
STRONTIUM	0.0330	.033	.033	mg/L
SULFATE	57.00	57	57	mg/L
TEMPERATURE	13.00	13	13	Deg. C
TETRACHLOROETHENE	<5	<5	<5	ug/L
THORIUM	<.2	<.2	<.2	mg/L
TITANIUM	0.0051	.0051	.0051	mg/L
TOLUENE	<5	<5	<5	ug/L
TOTAL DISSOLVED SOLIDS	170.00	170	170	mg/L
TOTAL ORGANIC CARBON (TOC)	39.00	39	39	mg/L
TOTAL SUSPENDED SOLIDS	8.00	8	8	mg/L
TRANS-1 2-DICHLOROETHENE	<5	<5	<5	ug/L
TRANS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
TRICHLOROETHENE	<5	<5	<5	ug/L
TURBIDITY	16.00	16	16	NTU
UNKNOWNS	18.00	18	18	ug/L
URANIUM	0.0030	.003	.003	mg/L
VANADIUM	<.5	<.5	<.5	mg/L
VINYL CHLORIDE	<10	<10	<10	ug/L

SD-560 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
ZINC	0.0760	.076	.076	mg/L
ZIRCONIUM	<.005	<.005	<.005	mg/L

SD-570 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
1 1 1-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1 2 2-TETRACHLOROETHANE	<5	<5	<5	ug/L
1 1 2-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHENE	<5	<5	<5	ug/L
1 2 4-TRICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROETHANE	<5	<5	<5	ug/L
1 2-DICHLOROPROPANE	<5	<5	<5	ug/L
1 3-DICHLOROBENZENE	<10	<10	<10	ug/L
1 4-DICHLOROBENZENE	<10	<10	<10	ug/L
2 4 6-TRICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DIMETHYLPHENOL	<10	<10	<10	ug/L
2 4-DINITROPHENOL	<10	<10	<10	ug/L
2 4-DINITROTOLUENE	<10	<10	<10	ug/L
2 6-DINITROTOLUENE	<10	<10	<10	ug/L
2-CHLOROETHYLVINYL ETHER	<10	<10	<10	ug/L
2-CHLORONAPHTHALENE	<10	<10	<10	ug/L
2-CHLOROPHENOL	<10	<10	<10	ug/L
2-NITROPHENOL	<10	<10	<10	ug/L
3 3'-DICHLOROBENZIDINE	<20	<20	<20	ug/L
4 6-DINITRO-2-METHYLPHENOL	<50	<50	<50	ug/L
4-BROMOPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-CHLORO-3-METHYLPHENOL	<10	<10	<10	ug/L
4-CHLOROPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-NITROPHENOL	<50	<50	<50	ug/L
ACENAPHTHENE	<10	<10	<10	ug/L
ACENAPHTHYLENE	<10	<10	<10	ug/L
ALKALINITY	104.00	104	104	mg/L
ALPHA	11.30	11.3	11.3	pCi/L
ALUMINUM	0.2800	.28	.28	mg/L
AMMONIA	<.2	<.2	<.2	mg/L
ANTHRACENE	<10	<10	<10	ug/L
ARSENIC	0.0050	.005	.005	mg/L
BARIUM	<.1	<.1	<.1	mg/L
BENZENE	<5	<5	<5	ug/L
BENZIDINE	<10	<10	<10	ug/L
BENZO(A)ANTHRACENE	<10	<10	<10	ug/L
BENZO(A)PYRENE	<10	<10	<10	ug/L
BENZO(B)FLUORANTHENE	<10	<10	<10	ug/L
BENZO(G H I)PERYLENE	<10	<10	<10	ug/L
BENZO(K)FLUORANTHENE	<10	<10	<10	ug/L
BERYLLIUM	<.001	<.001	<.001	mg/L
BETA	28.00	28	28	pCi/L
BIS(2-CHLOROETHOXY)METHANE	<10	<10	<10	ug/L
BIS(2-CHLOROETHYL)ETHER	<10	<10	<10	ug/L
BIS(2-CHLOROISOPROPYL)ETHER	<10	<10	<10	ug/L

SD-570 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
BIS(2-ETHYLHEXYL)PHTHALATE	<10	<10	<10	ug/L
BORON	0.0210	.021	.021	mg/L
BROMODICHLOROMETHANE	<5	<5	<5	ug/L
BROMOFORM	<5	<5	<5	ug/L
BROMOMETHANE	<10	<10	<10	ug/L
BUTYLBENZYLPHTHALATE	<10	<10	<10	ug/L
CADMIUM	<.003	<.003	<.003	mg/L
CALCIUM	36.00	36	36	mg/L
CARBON TETRACHLORIDE	<5	<5	<5	ug/L
CHEMICAL OXYGEN DEMAND (COD)	17.00	17	17	mg/L
CHLORIDE	<1	<1	<1	mg/L
CHLORINE TOTAL RESIDUAL WATER	<.1	<.1	<.1	mg/L
CHLOROBENZENE	<5	<5	<5	ug/L
CHLOROETHANE	<10	<10	<10	ug/L
CHLOROFORM	<5	<5	<5	ug/L
CHLOROMETHANE	<10	<10	<10	ug/L
CHROMIUM	<.01	<.01	<.01	mg/L
CHRYSENE	<10	<10	<10	ug/L
CIS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
COBALT	<.1	<.1	<.1	mg/L
CONDUCTIVITY	237.00	237	237	umho/cm
COPPER	0.0075	.0075	.0075	mg/L
CYANIDE	0.0030	.003	.003	mg/L
DI-N-BUTYLPHTHALATE	<10	<10	<10	ug/L
DI-N-OCTYLPHTHALATE	<10	<10	<10	ug/L
DIBENZ(A H)ANTHRACENE	<10	<10	<10	ug/L
DIBROMOCHLOROMETHANE	<5	<5	<5	ug/L
DIETHYLPHTHALATE	<10	<10	<10	ug/L
DIMETHYLPHTHALATE	<10	<10	<10	ug/L
DISSOLVED OXYGEN	11.80	11.8	11.8	ppm
ETHYLBENZENE	<5	<5	<5	ug/L
FLUORANTHENE	<10	<10	<10	ug/L
FLUORENE	<10	<10	<10	ug/L
FLUORIDE	0.1000	.1	.1	mg/L
HARDNESS	118.00	118	118	mg/L
HEXACHLOROBENZENE	<10	<10	<10	ug/L
HEXACHLOROBUTADIENE	<10	<10	<10	ug/L
HEXACHLOROCYCLOPENTADIENE	<10	<10	<10	ug/L
HEXACHLOROETHANE	<10	<10	<10	ug/L
INDENO(1 2 3-CD)PYRENE	<10	<10	<10	ug/L
IRON	0.2100	.21	.21	mg/L
ISOPHORONE	<10	<10	<10	ug/L
LEAD	<.05	<.05	<.05	mg/L
LITHIUM	<.004	<.004	<.004	mg/L
MAGNESIUM	4.30	4.3	4.3	mg/L
MANGANESE	0.0140	.014	.014	mg/L
MERCURY	<.0002	<.0002	<.0002	mg/L
METHYLENE CHLORIDE	<5	<5	<5	ug/L

SD-570 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
MOLYBDENUM	<.01	<.01	<.01	mg/L
N-NITROSO-DI-N-PROPYLAMINE	<10	<10	<10	ug/L
N-NITROSODIMETHYLAMINE	<10	<10	<10	ug/L
N-NITROSODIPHENYLAMINE	<10	<10	<10	ug/L
NAPHTHALENE	<10	<10	<10	ug/L
NICKEL	<.05	<.05	<.05	mg/L
NIOBIUM	<.007	<.007	<.007	mg/L
NITRATE	<.5	<.5	<.5	mg/L
NITROBENZENE	<10	<10	<10	ug/L
OIL & GREASE	<2	<2	<2	mg/L
PCB (AROCLOR-1016)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1221)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1232)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1242)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1248)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1254)	<1	<1	<1	ug/L
PCB (AROCLOR-1260)	<1	<1	<1	ug/L
PENTACHLOROPHENOL	<50	<50	<50	ug/L
PH	7.80	7.8	7.8	
PHENANTHRENE	<10	<10	<10	ug/L
PHENOL	<10	<10	<10	ug/L
PHOSPHORUS	<.2	<.2	<.2	mg/L
POTASSIUM	3.30	3.3	3.3	mg/L
PYRENE	<10	<10	<10	ug/L
SELENIUM	0.0050	.005	.005	mg/L
SILICON	1.90	1.9	1.9	mg/L
SILVER	<.01	<.01	<.01	mg/L
SODIUM	1.40	1.4	1.4	mg/L
STRONTIUM	0.0610	.061	.061	mg/L
SULFATE	16.00	16	16	mg/L
TEMPERATURE	12.00	12	12	Deg. C
TETRACHLOROETHENE	<5	<5	<5	ug/L
THORIUM	<.2	<.2	<.2	mg/L
TITANIUM	0.0120	.012	.012	mg/L
TOLUENE	<5	<5	<5	ug/L
TOTAL DISSOLVED SOLIDS	112.00	112	112	mg/L
TOTAL ORGANIC CARBON (TOC)	13.00	13	13	mg/L
TOTAL SUSPENDED SOLIDS	8.00	8	8	mg/L
TRANS-1 2-DICHLOROETHENE	<5	<5	<5	ug/L
TRANS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
TRICHLOROETHENE	<5	<5	<5	ug/L
TURBIDITY	18.00	18	18	NTU
UNKNOWN	11.00	11	11	ug/L
URANIUM	0.0040	.004	.004	mg/L
VANADIUM	<.5	<.5	<.5	mg/L
VINYL CHLORIDE	<10	<10	<10	ug/L
ZINC	0.0230	.023	.023	mg/L
ZIRCONIUM	<.005	<.005	<.005	mg/L

SD-590 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
1 1 1-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1 2 2-TETRACHLOROETHANE	<5	<5	<5	ug/L
1 1 2-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHENE	<5	<5	<5	ug/L
1 2 4-TRICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROETHANE	<5	<5	<5	ug/L
1 2-DICHLOROPROPANE	<5	<5	<5	ug/L
1 3-DICHLOROBENZENE	<10	<10	<10	ug/L
1 4-DICHLOROBENZENE	<10	<10	<10	ug/L
2 4 6-TRICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DIMETHYLPHENOL	<10	<10	<10	ug/L
2 4-DINITROPHENOL	<10	<10	<10	ug/L
2 4-DINITROTOLUENE	<10	<10	<10	ug/L
2 6-DINITROTOLUENE	<10	<10	<10	ug/L
2-CHLOROETHYLVINYL ETHER	<10	<10	<10	ug/L
2-CHLORONAPHTHALENE	<10	<10	<10	ug/L
2-CHLOROPHENOL	<10	<10	<10	ug/L
2-NITROPHENOL	<10	<10	<10	ug/L
3 3'-DICHLOROBENZIDINE	<20	<20	<20	ug/L
4 6-DINITRO-2-METHYLPHENOL	<50	<50	<50	ug/L
4-BROMOPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-CHLORO-3-METHYLPHENOL	<10	<10	<10	ug/L
4-CHLOROPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-NITROPHENOL	<50	<50	<50	ug/L
ACENAPHTHENE	<10	<10	<10	ug/L
ACENAPHTHYLENE	<10	<10	<10	ug/L
ALKALINITY	130.00	130	130	mg/L
ALPHA	4.80	4.8	4.8	pCi/L
ALUMINUM	0.4600	.46	.46	mg/L
AMMONIA	0.2000	.2	.2	mg/L
ANTHRACENE	<10	<10	<10	ug/L
ARSENIC	<.005	<.005	<.005	mg/L
BARIUM	<.1	<.1	<.1	mg/L
BENZENE	<5	<5	<5	ug/L
BENZIDINE	<10	<10	<10	ug/L
BENZO(A)ANTHRACENE	<10	<10	<10	ug/L
BENZO(A)PYRENE	<10	<10	<10	ug/L
BENZO(B)FLUORANTHENE	<10	<10	<10	ug/L
BENZO(G H I)PERYLENE	<10	<10	<10	ug/L
BENZO(K)FLUORANTHENE	<10	<10	<10	ug/L
BERYLLIUM	<.001	<.001	<.001	mg/L
BETA	19.00	19	19	pCi/L
BIS(2-CHLOROETHOXY)METHANE	<10	<10	<10	ug/L
BIS(2-CHLOROETHYL)ETHER	<10	<10	<10	ug/L
BIS(2-CHLOROISOPROPYL)ETHER	<10	<10	<10	ug/L

SD-590 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
BIS(2-ETHYLHEXYL)PHTHALATE	<10	<10	<10	ug/L
BORON	0.0200	.02	.02	mg/L
BROMODICHLOROMETHANE	<5	<5	<5	ug/L
BROMOFORM	<5	<5	<5	ug/L
BROMOMETHANE	<10	<10	<10	ug/L
BUTYLBENZYLPHTHALATE	<10	<10	<10	ug/L
CADMIUM	<.003	<.003	<.003	mg/L
CALCIUM	39.00	39	39	mg/L
CARBON TETRACHLORIDE	<5	<5	<5	ug/L
CHEMICAL OXYGEN DEMAND (COD)	64.00	64	64	mg/L
CHLORIDE	1.60	1.6	1.6	mg/L
CHLORINE TOTAL RESIDUAL WATER	<.1	<.1	<.1	mg/L
CHLOROBENZENE	<5	<5	<5	ug/L
CHLOROETHANE	<10	<10	<10	ug/L
CHLOROFORM	<5	<5	<5	ug/L
CHLOROMETHANE	<10	<10	<10	ug/L
CHROMIUM	<.01	<.01	<.01	mg/L
CHRYSENE	<10	<10	<10	ug/L
CIS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
COBALT	<.1	<.1	<.1	mg/L
CONDUCTIVITY	250.00	250	250	umho/cm
COPPER	0.0066	.0066	.0066	mg/L
CYANIDE	0.0030	.003	.003	mg/L
DI-N-BUTYLPHTHALATE	<10	<10	<10	ug/L
DI-N-OCTYLPHTHALATE	<10	<10	<10	ug/L
DIACETONE ALCOHOL	1.00	1	1	ug/L
DIBENZ(A H)ANTHRACENE	<10	<10	<10	ug/L
DIBROMOCHLOROMETHANE	<5	<5	<5	ug/L
DIETHYLPHTHALATE	<10	<10	<10	ug/L
DIMETHYLPHTHALATE	<10	<10	<10	ug/L
DISSOLVED OXYGEN	11.20	11.2	11.2	ppm
ETHYLBENZENE	<5	<5	<5	ug/L
FLUORANTHENE	<10	<10	<10	ug/L
FLUORENE	<10	<10	<10	ug/L
FLUORIDE	0.1000	.1	.1	mg/L
HARDNESS	132.00	132	132	mg/L
HEXACHLOROBENZENE	<10	<10	<10	ug/L
HEXACHLOROBUTADIENE	<10	<10	<10	ug/L
HEXACHLOROCYCLOPENTADIENE	<10	<10	<10	ug/L
HEXACHLOROETHANE	<10	<10	<10	ug/L
INDENO(1 2 3-CD)PYRENE	<10	<10	<10	ug/L
IRON	0.4000	.4	.4	mg/L
ISOPHORONE	<10	<10	<10	ug/L
LEAD	<.05	<.05	<.05	mg/L
LITHIUM	<.004	<.004	<.004	mg/L
MAGNESIUM	4.50	4.5	4.5	mg/L
MANGANESE	0.0140	.014	.014	mg/L
MERCURY	<.0002	<.0002	<.0002	mg/L

SD-590 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
METHYLENE CHLORIDE	<5	<5	<5	ug/L
MOLYBDENUM	<.01	<.01	<.01	mg/L
N-NITROSO-DI-N-PROPYLAMINE	<10	<10	<10	ug/L
N-NITROSODIMETHYLAMINE	<10	<10	<10	ug/L
N-NITROSODIPHENYLAMINE	<10	<10	<10	ug/L
NAPHTHALENE	<10	<10	<10	ug/L
NICKEL	<.05	<.05	<.05	mg/L
NIOBIUM	<.007	<.007	<.007	mg/L
NITRATE	<.5	<.5	<.5	mg/L
NITROBENZENE	<10	<10	<10	ug/L
OIL & GREASE	<2	<2	<2	mg/L
PCB (AROCLOR-1016)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1221)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1232)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1242)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1248)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1254)	<1	<1	<1	ug/L
PCB (AROCLOR-1260)	<1	<1	<1	ug/L
PENTACHLOROPHENOL	<50	<50	<50	ug/L
PH	8.00	8	8	
PHENANTHRENE	<10	<10	<10	ug/L
PHENOL	<10	<10	<10	ug/L
PHOSPHORUS	<.2	<.2	<.2	mg/L
POTASSIUM	6.70	6.7	6.7	mg/L
PYRENE	<10	<10	<10	ug/L
SELENIUM	0.0050	.005	.005	mg/L
SILICON	4.40	4.4	4.4	mg/L
SILVER	<.01	<.01	<.01	mg/L
SODIUM	0.2100	.21	.21	mg/L
STRONTIUM	0.0480	.048	.048	mg/L
SULFATE	4.30	4.3	4.3	mg/L
TEMPERATURE	11.00	11	11	Deg. C
TETRACHLOROETHENE	<5	<5	<5	ug/L
THORIUM	<.2	<.2	<.2	mg/L
TITANIUM	0.0200	.02	.02	mg/L
TOLUENE	<5	<5	<5	ug/L
TOTAL DISSOLVED SOLIDS	162.00	162	162	mg/L
TOTAL ORGANIC CARBON (TOC)	25.00	25	25	mg/L
TOTAL SUSPENDED SOLIDS	28.00	28	28	mg/L
TRANS-1 2-DICHLOROETHENE	<5	<5	<5	ug/L
TRANS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
TRICHLOROETHENE	<5	<5	<5	ug/L
TURBIDITY	33.00	33	33	NTU
URANIUM	0.0040	.004	.004	mg/L
VANADIUM	<.5	<.5	<.5	mg/L
VINYL CHLORIDE	<10	<10	<10	ug/L
ZINC	<.02	<.02	<.02	mg/L
ZIRCONIUM	<.005	<.005	<.005	mg/L

SD-610 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
1 1 1-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1 2 2-TETRACHLOROETHANE	<5	<5	<5	ug/L
1 1 2-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHENE	<5	<5	<5	ug/L
1 2 4-TRICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROETHANE	<5	<5	<5	ug/L
1 2-DICHLOROPROPANE	<5	<5	<5	ug/L
1 3-DICHLOROBENZENE	<10	<10	<10	ug/L
1 4-DICHLOROBENZENE	<10	<10	<10	ug/L
2 4 6-TRICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DIMETHYLPHENOL	<10	<10	<10	ug/L
2 4-DINITROPHENOL	<10	<10	<10	ug/L
2 4-DINITROTOLUENE	<10	<10	<10	ug/L
2 6-DINITROTOLUENE	<10	<10	<10	ug/L
2-CHLOROETHYLVINYL ETHER	<10	<10	<10	ug/L
2-CHLORONAPHTHALENE	<10	<10	<10	ug/L
2-CHLOROPHENOL	<10	<10	<10	ug/L
2-NITROPHENOL	<10	<10	<10	ug/L
3 3'-DICHLOROBENZIDINE	<20	<20	<20	ug/L
4 6-DINITRO-2-METHYLPHENOL	<50	<50	<50	ug/L
4-BROMOPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-CHLORO-3-METHYLPHENOL	<10	<10	<10	ug/L
4-CHLOROPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-NITROPHENOL	<50	<50	<50	ug/L
ACENAPHTHENE	<10	<10	<10	ug/L
ACENAPHTHYLENE	<10	<10	<10	ug/L
ALIPHATIC HYDROCARBON	6.00	6	6	ug/L
ALKALINITY	40.00	40	40	mg/L
ALPHA	<1	<1	<1	pCi/L
ALUMINUM	<.1	<.1	<.1	mg/L
AMMONIA	<.2	<.2	<.2	mg/L
ANTHRACENE	<10	<10	<10	ug/L
ARSENIC	<.005	<.005	<.005	mg/L
BARIUM	<.1	<.1	<.1	mg/L
BENZENE	<5	<5	<5	ug/L
BENZIDINE	<10	<10	<10	ug/L
BENZO(A)ANTHRACENE	<10	<10	<10	ug/L
BENZO(A)PYRENE	<10	<10	<10	ug/L
BENZO(B)FLUORANTHENE	<10	<10	<10	ug/L
BENZO(G H I)PERYLENE	<10	<10	<10	ug/L
BENZO(K)FLUORANTHENE	<10	<10	<10	ug/L
BERYLLIUM	<.001	<.001	<.001	mg/L
BETA	3.20	3.2	3.2	pCi/L
BIS(2-CHLOROETHOXY)METHANE	<10	<10	<10	ug/L
BIS(2-CHLOROETHYL)ETHER	<10	<10	<10	ug/L

SD-610 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
BIS(2-CHLOROISOPROPYL)ETHER	<10	<10	<10	ug/L
BIS(2-ETHYLHEXYL)PHTHALATE	<10	<10	<10	ug/L
BORON	0.0087	.0087	.0087	mg/L
BROMODICHLOROMETHANE	<5	<5	<5	ug/L
BROMOFORM	<5	<5	<5	ug/L
BROMOMETHANE	<10	<10	<10	ug/L
BUTYLBENZYLPHTHALATE	<10	<10	<10	ug/L
CADMIUM	<.003	<.003	<.003	mg/L
CALCIUM	13.00	13	13	mg/L
CARBON TETRACHLORIDE	<5	<5	<5	ug/L
CHEMICAL OXYGEN DEMAND (COD)	17.00	17	17	mg/L
CHLORIDE	<1	<1	<1	mg/L
CHLORINE TOTAL RESIDUAL WATER	<.1	<.1	<.1	mg/L
CHLOROBENZENE	<5	<5	<5	ug/L
CHLOROETHANE	<10	<10	<10	ug/L
CHLOROFORM	<5	<5	<5	ug/L
CHLOROMETHANE	<10	<10	<10	ug/L
CHROMIUM	<.01	<.01	<.01	mg/L
CHRYSENE	<10	<10	<10	ug/L
CIS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
COBALT	<.1	<.1	<.1	mg/L
CONDUCTIVITY	93.00	93	93	umho/cm
COPPER	0.0047	.0047	.0047	mg/L
CYANIDE	0.0020	.002	.002	mg/L
DI-N-BUTYLPHTHALATE	<10	<10	<10	ug/L
DI-N-OCTYLPHTHALATE	<10	<10	<10	ug/L
DIACETONE ALCOHOL	3.00	3	3	ug/L
DIBENZ(A H)ANTHRACENE	<10	<10	<10	ug/L
DIBROMOCHLOROMETHANE	<5	<5	<5	ug/L
DIETHYLPHTHALATE	<10	<10	<10	ug/L
DIMETHYLPHTHALATE	<10	<10	<10	ug/L
DISSOLVED OXYGEN	11.50	11.5	11.5	ppm
ETHYLBENZENE	<5	<5	<5	ug/L
FLUORANTHENE	<10	<10	<10	ug/L
FLUORENE	<10	<10	<10	ug/L
FLUORIDE	0.1000	.1	.1	mg/L
HARDNESS	44.00	44	44	mg/L
HEXACHLOROBENZENE	<10	<10	<10	ug/L
HEXACHLOROBUTADIENE	<10	<10	<10	ug/L
HEXACHLOROCYCLOPENTADIENE	<10	<10	<10	ug/L
HEXACHLOROETHANE	<10	<10	<10	ug/L
INDENO(1 2 3-CD)PYRENE	<10	<10	<10	ug/L
IRON	0.0810	.081	.081	mg/L
ISOPHORONE	<10	<10	<10	ug/L
LEAD	<.05	<.05	<.05	mg/L
LITHIUM	<.004	<.004	<.004	mg/L
MAGNESIUM	0.9000	.9	.9	mg/L
MANGANESE	<.01	<.01	<.01	mg/L

SD-610 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
MERCURY	<.0002	<.0002	<.0002	mg/L
METHYLENE CHLORIDE	<5	<5	<5	ug/L
MOLYBDENUM	<.01	<.01	<.01	mg/L
N-NITROSO-DI-N-PROPYLAMINE	<10	<10	<10	ug/L
N-NITROSODIMETHYLAMINE	<10	<10	<10	ug/L
N-NITROSODIPHENYLAMINE	<10	<10	<10	ug/L
NAPHTHALENE	<10	<10	<10	ug/L
NICKEL	<.05	<.05	<.05	mg/L
NIOBIUM	<.007	<.007	<.007	mg/L
NITRATE	1.70	1.7	1.7	mg/L
NITROBENZENE	<10	<10	<10	ug/L
OIL & GREASE	5.00	5	5	mg/L
PCB (AROCLOR-1016)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1221)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1232)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1242)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1248)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1254)	<1	<1	<1	ug/L
PCB (AROCLOR-1260)	<1	<1	<1	ug/L
PENTACHLOROPHENOL	<50	<50	<50	ug/L
PH	7.60	7.6	7.6	
PHENANTHRENE	<10	<10	<10	ug/L
PHENOL	<10	<10	<10	ug/L
PHOSPHORUS	<.2	<.2	<.2	mg/L
POTASSIUM	1.40	1.4	1.4	mg/L
PYRENE	<10	<10	<10	ug/L
SELENIUM	0.0050	.005	.005	mg/L
SILICON	0.3600	.36	.36	mg/L
SILVER	<.01	<.01	<.01	mg/L
SODIUM	0.5900	.59	.59	mg/L
STRONTIUM	0.0100	.01	.01	mg/L
SULFATE	3.40	3.4	3.4	mg/L
TEMPERATURE	16.00	16	16	Deg. C
TETRACHLOROETHENE	<5	<5	<5	ug/L
THORIUM	<.2	<.2	<.2	mg/L
TITANIUM	<.003	<.003	<.003	mg/L
TOLUENE	<5	<5	<5	ug/L
TOTAL DISSOLVED SOLIDS	44.00	44	44	mg/L
TOTAL ORGANIC CARBON (TOC)	8.00	8	8	mg/L
TOTAL SUSPENDED SOLIDS	<1	<1	<1	mg/L
TRANS-1 2-DICHLOROETHENE	<5	<5	<5	ug/L
TRANS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
TRICHLOROETHENE	<5	<5	<5	ug/L
TURBIDITY	6.00	6	6	NTU
URANIUM	0.0020	.002	.002	mg/L
VANADIUM	<.5	<.5	<.5	mg/L
VINYL CHLORIDE	<10	<10	<10	ug/L
ZINC	0.0380	.038	.038	mg/L

SD-610 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
ZIRCONIUM	<.005	<.005	<.005	mg/L

SD-630 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
1 1 1-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1 2 2-TETRACHLOROETHANE	<5	<5	<5	ug/L
1 1 2-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHENE	<5	<5	<5	ug/L
1 2 4-TRICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROETHANE	<5	<5	<5	ug/L
1 2-DICHLOROPROPANE	<5	<5	<5	ug/L
1 3-DICHLOROBENZENE	<10	<10	<10	ug/L
1 4-DICHLOROBENZENE	<10	<10	<10	ug/L
2 4 6-TRICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DIMETHYLPHENOL	<10	<10	<10	ug/L
2 4-DINITROPHENOL	<10	<10	<10	ug/L
2 4-DINITROTOLUENE	<10	<10	<10	ug/L
2 6-DINITROTOLUENE	<10	<10	<10	ug/L
2-CHLOROETHYLVINYL ETHER	<10	<10	<10	ug/L
2-CHLORONAPHTHALENE	<10	<10	<10	ug/L
2-CHLOROPHENOL	<10	<10	<10	ug/L
2-NITROPHENOL	<10	<10	<10	ug/L
3 3'-DICHLOROBENZIDINE	<20	<20	<20	ug/L
4 6-DINITRO-2-METHYLPHENOL	<50	<50	<50	ug/L
4-BROMOPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-CHLORO-3-METHYLPHENOL	<10	<10	<10	ug/L
4-CHLOROPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-NITROPHENOL	<50	<50	<50	ug/L
ACENAPHTHENE	<10	<10	<10	ug/L
ACENAPHTHYLENE	<10	<10	<10	ug/L
ALKALINITY	80.00	80	80	mg/L
ALPHA	1.40	1.4	1.4	pCi/L
ALUMINUM	0.2000	.2	.2	mg/L
AMMONIA	<.2	<.2	<.2	mg/L
ANTHRACENE	<10	<10	<10	ug/L
ARSENIC	0.0060	.006	.006	mg/L
BARIUM	<.1	<.1	<.1	mg/L
BENZENE	<5	<5	<5	ug/L
BENZIDINE	<10	<10	<10	ug/L
BENZO(A)ANTHRACENE	<10	<10	<10	ug/L
BENZO(A)PYRENE	<10	<10	<10	ug/L
BENZO(B)FLUORANTHENE	<10	<10	<10	ug/L
BENZO(G H I)PERYLENE	<10	<10	<10	ug/L
BENZO(K)FLUORANTHENE	<10	<10	<10	ug/L
BERYLLIUM	<.001	<.001	<.001	mg/L
BETA	4.20	4.2	4.2	pCi/L
BIS(2-CHLOROETHOXY)METHANE	<10	<10	<10	ug/L
BIS(2-CHLOROETHYL)ETHER	<10	<10	<10	ug/L
BIS(2-CHLOROISOPROPYL)ETHER	<10	<10	<10	ug/L

SD-630 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
BIS(2-ETHYLHEXYL)PHTHALATE	<10	<10	<10	ug/L
BORON	0.0250	.025	.025	mg/L
BROMODICHLOROMETHANE	<5	<5	<5	ug/L
BROMOFORM	<5	<5	<5	ug/L
BROMOMETHANE	<10	<10	<10	ug/L
BUTYLBENZYLPHTHALATE	<10	<10	<10	ug/L
CADMIUM	<.003	<.003	<.003	mg/L
CALCIUM	27.00	27	27	mg/L
CARBON TETRACHLORIDE	<5	<5	<5	ug/L
CHEMICAL OXYGEN DEMAND (COD)	24.00	24	24	mg/L
CHLORIDE	1.30	1.3	1.3	mg/L
CHLORINE TOTAL RESIDUAL WATER	<.1	<.1	<.1	mg/L
CHLOROBENZENE	<5	<5	<5	ug/L
CHLOROETHANE	<10	<10	<10	ug/L
CHLOROFORM	<5	<5	<5	ug/L
CHLOROMETHANE	<10	<10	<10	ug/L
CHROMIUM	<.01	<.01	<.01	mg/L
CHRYSENE	<10	<10	<10	ug/L
CIS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
COBALT	<.1	<.1	<.1	mg/L
CONDUCTIVITY	202.00	202	202	umho/cm
COPPER	0.0086	.0086	.0086	mg/L
CYANIDE	0.0030	.003	.003	mg/L
DI-N-BUTYLPHTHALATE	<10	<10	<10	ug/L
DI-N-OCTYLPHTHALATE	<10	<10	<10	ug/L
DIBENZ(A H)ANTHRACENE	<10	<10	<10	ug/L
DIBROMOCHLOROMETHANE	<5	<5	<5	ug/L
DIETHYLPHTHALATE	<10	<10	<10	ug/L
DIMETHYLPHTHALATE	<10	<10	<10	ug/L
DISSOLVED OXYGEN	12.00	12	12	ppm
ETHYLBENZENE	<5	<5	<5	ug/L
FLUORANTHENE	<10	<10	<10	ug/L
FLUORENE	<10	<10	<10	ug/L
FLUORIDE	0.1000	.1	.1	mg/L
HARDNESS	88.00	88	88	mg/L
HEXACHLOROBENZENE	<10	<10	<10	ug/L
HEXACHLOROBUTADIENE	<10	<10	<10	ug/L
HEXACHLOROCYCLOPENTADIENE	<10	<10	<10	ug/L
HEXACHLOROETHANE	<10	<10	<10	ug/L
INDENO(1 2 3-CD)PYRENE	<10	<10	<10	ug/L
IRON	0.1600	.16	.16	mg/L
ISOPHORONE	<10	<10	<10	ug/L
LEAD	<.05	<.05	<.05	mg/L
LITHIUM	<.004	<.004	<.004	mg/L
MAGNESIUM	3.80	3.8	3.8	mg/L
MANGANESE	<.01	<.01	<.01	mg/L
MERCURY	<.0002	<.0002	<.0002	mg/L
METHYLENE CHLORIDE	<5	<5	<5	ug/L

SD-630 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
MOLYBDENUM	<.01	<.01	<.01	mg/L
N-NITROSO-DI-N-PROPYLAMINE	<10	<10	<10	ug/L
N-NITROSODIMETHYLAMINE	<10	<10	<10	ug/L
N-NITROSODIPHENYLAMINE	<10	<10	<10	ug/L
NAPHTHALENE	<10	<10	<10	ug/L
NICKEL	<.05	<.05	<.05	mg/L
NIOBIUM	<.007	<.007	<.007	mg/L
NITRATE	<.5	<.5	<.5	mg/L
NITROBENZENE	<10	<10	<10	ug/L
OIL & GREASE	<2	<2	<2	mg/L
PCB (AROCLOR-1016)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1221)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1232)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1242)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1248)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1254)	<1	<1	<1	ug/L
PCB (AROCLOR-1260)	<1	<1	<1	ug/L
PENTACHLOROPHENOL	<50	<50	<50	ug/L
PH	8.00	8	8	
PHENANTHRENE	<10	<10	<10	ug/L
PHENOL	<10	<10	<10	ug/L
PHOSPHORUS	<.2	<.2	<.2	mg/L
POTASSIUM	3.40	3.4	3.4	mg/L
PYRENE	<10	<10	<10	ug/L
SELENIUM	0.0050	.005	.005	mg/L
SILICON	1.80	1.8	1.8	mg/L
SILVER	<.01	<.01	<.01	mg/L
SODIUM	3.30	3.3	3.3	mg/L
STRONTIUM	0.0470	.047	.047	mg/L
SULFATE	14.00	14	14	mg/L
TEMPERATURE	12.00	12	12	Deg. C
TETRACHLOROETHENE	<5	<5	<5	ug/L
THORIUM	<.2	<.2	<.2	mg/L
TITANIUM	0.0043	.0043	.0043	mg/L
TOLUENE	<5	<5	<5	ug/L
TOTAL DISSOLVED SOLIDS	108.00	108	108	mg/L
TOTAL ORGANIC CARBON (TOC)	17.00	17	17	mg/L
TOTAL SUSPENDED SOLIDS	1.00	1	1	mg/L
TRANS-1 2-DICHLOROETHENE	<5	<5	<5	ug/L
TRANS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
TRICHLOROETHENE	<5	<5	<5	ug/L
TURBIDITY	15.00	15	15	NTU
URANIUM	0.0030	.003	.003	mg/L
VANADIUM	<.5	<.5	<.5	mg/L
VINYL CHLORIDE	<10	<10	<10	ug/L
ZINC	0.0200	.02	.02	mg/L
ZIRCONIUM	<.005	<.005	<.005	mg/L

SD-690 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
1 1 1-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1 2 2-TETRACHLOROETHANE	<5	<5	<5	ug/L
1 1 2-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHENE	<5	<5	<5	ug/L
1 2 4-TRICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROETHANE	<5	<5	<5	ug/L
1 2-DICHLOROPROPANE	<5	<5	<5	ug/L
1 3-DICHLOROBENZENE	<10	<10	<10	ug/L
1 4-DICHLOROBENZENE	<10	<10	<10	ug/L
2 4 6-TRICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DIMETHYLPHENOL	<10	<10	<10	ug/L
2 4-DINITROPHENOL	<10	<10	<10	ug/L
2 4-DINITROTOLUENE	<10	<10	<10	ug/L
2 6-DINITROTOLUENE	<10	<10	<10	ug/L
2-CHLOROETHYLVINYL ETHER	<10	<10	<10	ug/L
2-CHLORONAPHTHALENE	<10	<10	<10	ug/L
2-CHLOROPHENOL	<10	<10	<10	ug/L
2-NITROPHENOL	<10	<10	<10	ug/L
3 3'-DICHLOROBENZIDINE	<20	<20	<20	ug/L
4 6-DINITRO-2-METHYLPHENOL	<50	<50	<50	ug/L
4-BROMOPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-CHLORO-3-METHYLPHENOL	<10	<10	<10	ug/L
4-CHLOROPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-NITROPHENOL	<50	<50	<50	ug/L
ACENAPHTHENE	<10	<10	<10	ug/L
ACENAPHTHYLENE	<10	<10	<10	ug/L
ALKALINITY	77.00	140	30	mg/L
ALPHA	2.65	4	<1	pCi/L
ALUMINUM	<0.1000	<.1	<.1	mg/L
AMMONIA	<0.2000	<.2	<.2	mg/L
ANTHRACENE	<10	<10	<10	ug/L
ARSENIC	<.005	<.005	<.005	mg/L
BARIUM	<.1	<.1	<.1	mg/L
BENZENE	<5	<5	<5	ug/L
BENZIDINE	<10	<10	<10	ug/L
BENZO(A)ANTHRACENE	<10	<10	<10	ug/L
BENZO(A)PYRENE	<10	<10	<10	ug/L
BENZO(B)FLUORANTHENE	<10	<10	<10	ug/L
BENZO(G H I)PERYLENE	<10	<10	<10	ug/L
BENZO(K)FLUORANTHENE	<10	<10	<10	ug/L
BERYLLIUM	<.001	<.001	<.001	mg/L
BETA	3.47	5.2	<2	pCi/L
BHT	3.00	3	3	ug/L
BIS(2-CHLOROETHOXY)METHANE	<10	<10	<10	ug/L
BIS(2-CHLOROETHYL)ETHER	<10	<10	<10	ug/L

SD-690 Analytical Results Summary

Parameter	Concentration Average	Maximum	Minimum	Units
BIS(2-CHLOROISOPROPYL)ETHER	<10	<10	<10	ug/L
BIS(2-ETHYLHEXYL)PHTHALATE	<10	<10	<10	ug/L
BORON	0.0078	.016	<.004	mg/L
BROMODICHLOROMETHANE	<5	<5	<5	ug/L
BROMOFORM	<5	<5	<5	ug/L
BROMOMETHANE	<10	<10	<10	ug/L
BUTYLBENZYLPHTHALATE	<10	<10	<10	ug/L
CADMIUM	<.003	<.003	<.003	mg/L
CALCIUM	20.33	28	13	mg/L
CARBON TETRACHLORIDE	<5	<5	<5	ug/L
CHEMICAL OXYGEN DEMAND (COD)	10.33	17	<5	mg/L
CHLORIDE	4.85	9.9	1.1	mg/L
CHLORINE TOTAL RESIDUAL WATER	<0.1000	<.1	<.1	mg/L
CHLOROBENZENE	<5	<5	<5	ug/L
CHLOROETHANE	<10	<10	<10	ug/L
CHLOROFORM	<5.00	<5	<5	ug/L
CHLOROMETHANE	<10	<10	<10	ug/L
CHROMIUM	<0.0100	<.01	<.01	mg/L
CHRYSENE	<10	<10	<10	ug/L
CIS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
COBALT	<.1	<.1	<.1	mg/L
CONDUCTIVITY	244.17	388	109	umho/cm
COPPER	0.0111	.026	<.004	mg/L
CYANIDE	0.0028	.004	<.002	mg/L
DI-N-BUTYLPHTHALATE	<10	<10	<10	ug/L
DI-N-OCTYLPHTHALATE	<10	<10	<10	ug/L
DIACETONE ALCOHOL	3.00	3	3	ug/L
DIBENZ(A H)ANTHRACENE	<10	<10	<10	ug/L
DIBROMOCHLOROMETHANE	<5	<5	<5	ug/L
DIETHYLPHTHALATE	5.50	10	<1	ug/L
DIMETHYLPHTHALATE	<10	<10	<10	ug/L
DISSOLVED OXYGEN	10.27	12	8.4	ppm
ETHYLBENZENE	<5	<5	<5	ug/L
FLUORANTHENE	<10	<10	<10	ug/L
FLUORENE	<10	<10	<10	ug/L
FLUORIDE	<0.1000	<.1	<.1	mg/L
HARDNESS	102.67	176	56	mg/L
HEXACHLOROBENZENE	<10	<10	<10	ug/L
HEXACHLOROBUTADIENE	<10	<10	<10	ug/L
HEXACHLOROCYCLOPENTADIENE	<10	<10	<10	ug/L
HEXACHLOROETHANE	<10	<10	<10	ug/L
INDENO(1 2 3-CD)PYRENE	<10	<10	<10	ug/L
IRON	0.0885	.17	<.05	mg/L
ISOPHORONE	<10	<10	<10	ug/L
LEAD	<.05	<.05	<.05	mg/L
LITHIUM	<.004	<.004	<.004	mg/L
MAGNESIUM	4.78	8.1	1.4	mg/L
MANGANESE	0.0120	.016	<.01	mg/L

SD-690 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
MERCURY	<.0002	<.0002	<.0002	mg/L
METHYLENE CHLORIDE	<5	<5	<5	ug/L
MOLYBDENUM	<.01	<.01	<.01	mg/L
N-NITROSO-DI-N-PROPYLAMINE	<10	<10	<10	ug/L
N-NITROSODIMETHYLAMINE	<10	<10	<10	ug/L
N-NITROSODIPHENYLAMINE	<10	<10	<10	ug/L
NAPHTHALENE	<10	<10	<10	ug/L
NICKEL	<.05	<.05	<.05	mg/L
NIOBIUM	<.007	<.007	<.007	mg/L
NITRATE	2.64	6.1	.52	mg/L
NITROBENZENE	<10	<10	<10	ug/L
OIL & GREASE	<2	<2	<2	mg/L
PCB (AROCLOR-1016)	<1	<1	<1	ug/L
PCB (AROCLOR-1221)	<1	<1	<1	ug/L
PCB (AROCLOR-1232)	<1	<1	<1	ug/L
PCB (AROCLOR-1242)	<1	<1	<1	ug/L
PCB (AROCLOR-1248)	<1	<1	<1	ug/L
PCB (AROCLOR-1254)	<1	<1	<1	ug/L
PCB (AROCLOR-1260)	<1	<1	<1	ug/L
PENTACHLOROPHENOL	<50	<50	<50	ug/L
PH	8.05	8.9	7.6	
PHENANTHRENE	<10	<10	<10	ug/L
PHENOL	<10	<10	<10	ug/L
PHOSPHORUS	<.2	<.2	<.2	mg/L
POTASSIUM	1.34	4.4	<.6	mg/L
PYRENE	<10	<10	<10	ug/L
SELENIUM	<0.0050	<.005	<.005	mg/L
SILICON	0.8633	1.7	<.03	mg/L
SILVER	<.01	<.01	<.01	mg/L
SODIUM	18.42	39	2.4	mg/L
STRONTIUM	0.0375	.076	.011	mg/L
SUBSTITUTED DIPHENYL PHOSPHATE	13.00	13	13	ug/L
SULFATE	33.83	74	12	mg/L
TEMPERATURE	9.57	10.6	7.2	Deg. C
TETRACHLOROETHENE	<5	<5	<5	ug/L
THORIUM	<.2	<.2	<.2	mg/L
TITANIUM	<.003	<.003	<.003	mg/L
TOLUENE	<5	<5	<5	ug/L
TOTAL DISSOLVED SOLIDS	144.33	266	28	mg/L
TOTAL ORGANIC CARBON (TOC)	9.33	20	3	mg/L
TOTAL SUSPENDED SOLIDS	8.83	37	<1	mg/L
TRANS-1 2-DICHLOROETHENE	<5	<5	<5	ug/L
TRANS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
TRICHLOROETHENE	<5	<5	<5	ug/L
TURBIDITY	2.67	4	1	NTU
UNKNOWN ALKYL/ALKOXY COMPOUND	6.00	6	6	ug/L
URANIUM	0.0050	.007	.003	mg/L
VANADIUM	<.5	<.5	<.5	mg/L

SD-690 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
VINYL CHLORIDE	<10	<10	<10	ug/L
ZINC	0.0267	.036	<.02	mg/L
ZIRCONIUM	<.005	<.005	<.005	mg/L

SD-694 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
1 1 1-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1 2 2-TETRACHLOROETHANE	<5	<5	<5	ug/L
1 1 2-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHENE	<5	<5	<5	ug/L
1 2 4-TRICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROETHANE	<5	<5	<5	ug/L
1 2-DICHLOROPROPANE	<5	<5	<5	ug/L
1 3-DICHLOROBENZENE	<10	<10	<10	ug/L
1 4-DICHLOROBENZENE	<10	<10	<10	ug/L
2 4 6-TRICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DIMETHYLPHENOL	<10	<10	<10	ug/L
2 4-DINITROPHENOL	<10	<10	<10	ug/L
2 4-DINITROTOLUENE	<10	<10	<10	ug/L
2 6-DINITROTOLUENE	<10	<10	<10	ug/L
2-CHLOROETHYLVINYL ETHER	<10	<10	<10	ug/L
2-CHLORONAPHTHALENE	<10	<10	<10	ug/L
2-CHLOROPHENOL	<10	<10	<10	ug/L
2-NITROPHENOL	<10	<10	<10	ug/L
3 3'-DICHLOROBENZIDINE	<20	<20	<20	ug/L
4 6-DINITRO-2-METHYLPHENOL	<50	<50	<50	ug/L
4-BROMOPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-CHLORO-3-METHYLPHENOL	<10	<10	<10	ug/L
4-CHLOROPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-NITROPHENOL	<50	<50	<50	ug/L
ACENAPHTHENE	<10	<10	<10	ug/L
ACENAPHTHYLENE	<10	<10	<10	ug/L
ALKALINITY	139.00	139	139	mg/L
ALPHA	9.60	9.6	9.6	pCi/L
AMMONIA	<.2	<.2	<.2	mg/L
ANTHRACENE	<10	<10	<10	ug/L
ARSENIC	<.005	<.005	<.005	mg/L
BENZENE	<5	<5	<5	ug/L
BENZIDINE	<10	<10	<10	ug/L
BENZO(A)ANTHRACENE	<10	<10	<10	ug/L
BENZO(A)PYRENE	<10	<10	<10	ug/L
BENZO(B)FLUORANTHENE	<10	<10	<10	ug/L
BENZO(G H I)PERYLENE	<10	<10	<10	ug/L
BENZO(K)FLUORANTHENE	<10	<10	<10	ug/L
BETA	12.00	12	12	pCi/L
BIS(2-CHLOROETHOXY)METHANE	<10	<10	<10	ug/L
BIS(2-CHLOROETHYL)ETHER	<10	<10	<10	ug/L
BIS(2-CHLOROISOPROPYL)ETHER	<10	<10	<10	ug/L
BIS(2-ETHYLHEXYL)PHTHALATE	<10	<10	<10	ug/L
BROMODICHLOROMETHANE	<5	<5	<5	ug/L
BROMOFORM	<5	<5	<5	ug/L

SD-694 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
BROMOMETHANE	<10	<10	<10	ug/L
BUTYLBENZYLPHTHALATE	<10	<10	<10	ug/L
CARBON TETRACHLORIDE	<5	<5	<5	ug/L
CHEMICAL OXYGEN DEMAND (COD)	54.00	54	54	mg/L
CHLORIDE	1.80	1.8	1.8	mg/L
CHLORINE TOTAL RESIDUAL WATER	<.1	<.1	<.1	mg/L
CHLOROBENZENE	<5	<5	<5	ug/L
CHLOROETHANE	<10	<10	<10	ug/L
CHLOROFORM	<5	<5	<5	ug/L
CHLOROMETHANE	<10	<10	<10	ug/L
CHRYSENE	<10	<10	<10	ug/L
CIS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
CONDUCTIVITY	285.00	285	285	umho/cm
CYANIDE	0.0030	.003	.003	mg/L
DI-N-BUTYLPHTHALATE	<10	<10	<10	ug/L
DI-N-OCTYLPHTHALATE	<10	<10	<10	ug/L
DIBENZ(A H)ANTHRACENE	<10	<10	<10	ug/L
DIBROMOCHLOROMETHANE	<5	<5	<5	ug/L
DIETHYLPHTHALATE	<10	<10	<10	ug/L
DIMETHYLPHTHALATE	<10	<10	<10	ug/L
DISSOLVED OXYGEN	13.20	13.2	13.2	ppm
ETHYLBENZENE	<5	<5	<5	ug/L
FLUORANTHENE	<10	<10	<10	ug/L
FLUORENE	<10	<10	<10	ug/L
FLUORIDE	0.1000	.1	.1	mg/L
HARDNESS	147.00	147	147	mg/L
HEXACHLOROBENZENE	<10	<10	<10	ug/L
HEXACHLOROBUTADIENE	<10	<10	<10	ug/L
HEXACHLOROCYCLOPENTADIENE	<10	<10	<10	ug/L
HEXACHLOROETHANE	<10	<10	<10	ug/L
INDENO(1 2 3-CD)PYRENE	<10	<10	<10	ug/L
ISOPHORONE	<10	<10	<10	ug/L
MERCURY	<.0002	<.0002	<.0002	mg/L
METHYLENE CHLORIDE	<5	<5	<5	ug/L
N-NITROSO-DI-N-PROPYLAMINE	<10	<10	<10	ug/L
N-NITROSODIMETHYLAMINE	<10	<10	<10	ug/L
N-NITROSODIPHENYLAMINE	<10	<10	<10	ug/L
NAPHTHALENE	<10	<10	<10	ug/L
NITRATE	<.5	<.5	<.5	mg/L
NITROBENZENE	<10	<10	<10	ug/L
OIL & GREASE	<2	<2	<2	mg/L
PCB (AROCLOR-1016)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1221)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1232)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1242)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1248)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1254)	<1	<1	<1	ug/L
PCB (AROCLOR-1260)	<1	<1	<1	ug/L

SD-694 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
PENTACHLOROPHENOL	<50	<50	<50	ug/L
PH	7.90	7.9	7.9	
PHENANTHRENE	<10	<10	<10	ug/L
PHENOL	<10	<10	<10	ug/L
PYRENE	<10	<10	<10	ug/L
SELENIUM	0.0050	.005	.005	mg/L
SULFATE	8.20	8.2	8.2	mg/L
TEMPERATURE	11.00	11	11	Deg. C
TETRACHLOROETHENE	<5	<5	<5	ug/L
TOLUENE	<5	<5	<5	ug/L
TOTAL DISSOLVED SOLIDS	196.00	196	196	mg/L
TOTAL ORGANIC CARBON (TOC)	30.00	30	30	mg/L
TOTAL SUSPENDED SOLIDS	20.00	20	20	mg/L
TRANS-1 2-DICHLOROETHENE	<5	<5	<5	ug/L
TRANS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
TRICHLOROETHENE	<5	<5	<5	ug/L
TURBIDITY	100.00	100	100	NTU
URANIUM	<.001	<.001	<.001	mg/L
VINYL CHLORIDE	<10	<10	<10	ug/L

SD-700 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
1 1 1-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1 2 2-TETRACHLOROETHANE	<5	<5	<5	ug/L
1 1 2-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHENE	<5	<5	<5	ug/L
1 2 4-TRICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROETHANE	<5	<5	<5	ug/L
1 2-DICHLOROPROPANE	<5	<5	<5	ug/L
1 3-DICHLOROBENZENE	<10	<10	<10	ug/L
1 4-DICHLOROBENZENE	<10	<10	<10	ug/L
2 4 6-TRICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DIMETHYLPHENOL	<10	<10	<10	ug/L
2 4-DINITROPHENOL	<10	<10	<10	ug/L
2 4-DINITROTOLUENE	<10	<10	<10	ug/L
2 6-DINITROTOLUENE	<10	<10	<10	ug/L
2-CHLOROETHYLVINYL ETHER	<10	<10	<10	ug/L
2-CHLORONAPHTHALENE	<10	<10	<10	ug/L
2-CHLOROPHENOL	<10	<10	<10	ug/L
2-NITROPHENOL	<10	<10	<10	ug/L
3 3'-DICHLOROBENZIDINE	<20	<20	<20	ug/L
4 6-DINITRO-2-METHYLPHENOL	<50	<50	<50	ug/L
4-BROMOPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-CHLORO-3-METHYLPHENOL	<10	<10	<10	ug/L
4-CHLOROPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-NITROPHENOL	<50	<50	<50	ug/L
ACENAPHTHENE	<10	<10	<10	ug/L
ACENAPHTHYLENE	<10	<10	<10	ug/L
ALKALINITY	129.67	180	90	mg/L
ALPHA	1.82	3.3	<1	pCi/L
ALUMINUM	0.1650	.32	<.1	mg/L
AMMONIA	<.2	<.2	<.2	mg/L
ANTHRACENE	<10	<10	<10	ug/L
ARSENIC	<.005	<.005	<.005	mg/L
BARIUM	<.1	<.1	<.1	mg/L
BENZENE	<5	<5	<5	ug/L
BENZIDINE	<10	<10	<10	ug/L
BENZO(A)ANTHRACENE	<10	<10	<10	ug/L
BENZO(A)PYRENE	<10	<10	<10	ug/L
BENZO(B)FLUORANTHENE	<10	<10	<10	ug/L
BENZO(G H I)PERYLENE	<10	<10	<10	ug/L
BENZO(K)FLUORANTHENE	<10	<10	<10	ug/L
BERYLLIUM	<.001	<.001	<.001	mg/L
BETA	4.78	8	<2	pCi/L
BHT	3.00	3	3	ug/L
BIS(2-CHLOROETHOXY)METHANE	<10	<10	<10	ug/L
BIS(2-CHLOROETHYL)ETHER	<10	<10	<10	ug/L

SD-700 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
BIS(2-CHLOROISOPROPYL)ETHER	<10	<10	<10	ug/L
BIS(2-ETHYLHEXYL)PHTHALATE	<10	<10	<10	ug/L
BORON	0.0142	.028	<.004	mg/L
BROMODICHLOROMETHANE	<5.00	<5	<5	ug/L
BROMOFORM	<5	<5	<5	ug/L
BROMOMETHANE	<10	<10	<10	ug/L
BUTYLBENZYLPHTHALATE	5.50	10	<1	ug/L
CADMIUM	<.003	<.003	<.003	mg/L
CALCIUM	43.00	71	27	mg/L
CARBON TETRACHLORIDE	<5	<5	<5	ug/L
CHEMICAL OXYGEN DEMAND (COD)	13.50	27	6	mg/L
CHLORIDE	15.20	18.5	11	mg/L
CHLORINE TOTAL RESIDUAL WATER	0.1500	.4	<.1	mg/L
CHLOROBENZENE	<5	<5	<5	ug/L
CHLOROETHANE	<10	<10	<10	ug/L
CHLOROFORM	15.50	19	10	ug/L
CHLOROMETHANE	<10	<10	<10	ug/L
CHROMIUM	<.01	<.01	<.01	mg/L
CHRYSENE	<10	<10	<10	ug/L
CIS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
COBALT	<.1	<.1	<.1	mg/L
CONDUCTIVITY	502.83	607	428	umho/cm
COPPER	0.0070	.016	<.004	mg/L
CYANIDE	0.0048	.009	<.002	mg/L
DI-N-BUTYLPHTHALATE	<10	<10	<10	ug/L
DI-N-OCTYLPHTHALATE	<10	<10	<10	ug/L
DIACETONE ALCOHOL	3.00	3	3	ug/L
DIBENZ(A H)ANTHRACENE	<10	<10	<10	ug/L
DIBROMOCHLOROMETHANE	<5	<5	<5	ug/L
DIETHYLPHTHALATE	<10	<10	<10	ug/L
DIMETHYLPHTHALATE	<10	<10	<10	ug/L
DISSOLVED OXYGEN	9.68	11.5	6.2	ppm
ETHYLBENZENE	<5	<5	<5	ug/L
FLUORANTHENE	<10	<10	<10	ug/L
FLUORENE	<10	<10	<10	ug/L
FLUORIDE	0.1200	.2	.1	mg/L
HARDNESS	155.00	202	118	mg/L
HEXACHLOROBENZENE	<10	<10	<10	ug/L
HEXACHLOROBUTADIENE	<10	<10	<10	ug/L
HEXACHLOROCYCLOPENTADIENE	<10	<10	<10	ug/L
HEXACHLOROETHANE	<10	<10	<10	ug/L
INDENO(1 2 3-CD)PYRENE	<10	<10	<10	ug/L
IRON	0.2233	.52	.08	mg/L
ISOPHORONE	<10	<10	<10	ug/L
LEAD	<.05	<.05	<.05	mg/L
LITHIUM	0.0047	.0067	<.004	mg/L
MAGNESIUM	9.40	11	6.5	mg/L
MANGANESE	0.0343	.095	.015	mg/L

SD-700 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
MERCURY	0.0002	.0004	<.0002	mg/L
METHYLENE CHLORIDE	<5	<5	<5	ug/L
MOLYBDENUM	0.0105	.013	<.01	mg/L
N-NITROSO-DI-N-PROPYLAMINE	<10	<10	<10	ug/L
N-NITROSODIMETHYLAMINE	<10	<10	<10	ug/L
N-NITROSODIPHENYLAMINE	<10	<10	<10	ug/L
NAPHTHALENE	<10	<10	<10	ug/L
NICKEL	<.05	<.05	<.05	mg/L
NIOBIUM	<.007	<.007	<.007	mg/L
NITRATE	2.32	3.5	1.7	mg/L
NITROBENZENE	<10	<10	<10	ug/L
OIL & GREASE	<2	<2	<2	mg/L
PCB (AROCLOR-1016)	<1	<1	<1	ug/L
PCB (AROCLOR-1221)	<1	<1	<1	ug/L
PCB (AROCLOR-1232)	<1	<1	<1	ug/L
PCB (AROCLOR-1242)	<1	<1	<1	ug/L
PCB (AROCLOR-1248)	<1	<1	<1	ug/L
PCB (AROCLOR-1254)	<1	<1	<1	ug/L
PCB (AROCLOR-1260)	<1	<1	<1	ug/L
PENTACHLOROPHENOL	<50	<50	<50	ug/L
PH	8.70	9.3	7.9	
PHENANTHRENE	<10	<10	<10	ug/L
PHENOL	<10	<10	<10	ug/L
PHOSPHORUS	0.2133	.28	<.2	mg/L
POTASSIUM	3.67	4.7	2.3	mg/L
PYRENE	<10	<10	<10	ug/L
SELENIUM	<0.0050	<.005	<.005	mg/L
SILICON	1.79	2.3	.83	mg/L
SILVER	<.01	<.01	<.01	mg/L
SODIUM	49.33	68	31	mg/L
STRONTIUM	0.0682	.075	.055	mg/L
SUBSTITUTED DIPHENYL PHOSPHATE	6.00	6	6	ug/L
SULFATE	106.67	126	81	mg/L
TEMPERATURE	10.52	12	7.4	Deg. C
TETRACHLOROETHENE	<5	<5	<5	ug/L
THORIUM	<.2	<.2	<.2	mg/L
TITANIUM	0.0048	.012	<.003	mg/L
TOLUENE	<5	<5	<5	ug/L
TOTAL DISSOLVED SOLIDS	328.33	448	194	mg/L
TOTAL ORGANIC CARBON (TOC)	8.17	13	5	mg/L
TOTAL SUSPENDED SOLIDS	12.50	57	<1	mg/L
TRANS-1 2-DICHLOROETHENE	<5	<5	<5	ug/L
TRANS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
TRICHLOROETHENE	<5	<5	<5	ug/L
TURBIDITY	4.00	6	2	NTU
URANIUM	0.0052	.007	.002	mg/L
VANADIUM	<.5	<.5	<.5	mg/L
VINYL CHLORIDE	<10	<10	<10	ug/L

SD-700 Analytical Results Summary

Parameter	Concentration			
	Average	Maximun	Minimun	Units
ZINC	0.0292	.052	<.02	mg/L
ZIRCONIUM	<.005	<.005	<.005	mg/L

SD-710 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
1 1 1-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1 2 2-TETRACHLOROETHANE	<5	<5	<5	ug/L
1 1 2-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHENE	<5	<5	<5	ug/L
1 2 4-TRICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROETHANE	<5	<5	<5	ug/L
1 2-DICHLOROPROPANE	<5	<5	<5	ug/L
1 3-DICHLOROBENZENE	<10	<10	<10	ug/L
1 4-DICHLOROBENZENE	<10	<10	<10	ug/L
2 4 6-TRICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DIMETHYLPHENOL	<10	<10	<10	ug/L
2 4-DINITROPHENOL	<10	<10	<10	ug/L
2 4-DINITROTOLUENE	<10	<10	<10	ug/L
2 6-DINITROTOLUENE	<10	<10	<10	ug/L
2-CHLOROETHYLVINYL ETHER	<10	<10	<10	ug/L
2-CHLORONAPHTHALENE	<10	<10	<10	ug/L
2-CHLOROPHENOL	<10	<10	<10	ug/L
2-NITROPHENOL	<10	<10	<10	ug/L
3 3'-DICHLOROBENZIDINE	<20	<20	<20	ug/L
4 6-DINITRO-2-METHYLPHENOL	<50	<50	<50	ug/L
4-BROMOPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-CHLORO-3-METHYLPHENOL	<10	<10	<10	ug/L
4-CHLOROPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-NITROPHENOL	<50	<50	<50	ug/L
ACENAPHTHENE	<10	<10	<10	ug/L
ACENAPHTHYLENE	<10	<10	<10	ug/L
ALKALINITY	63.00	65	61	mg/L
ALPHA	<2.00	<2	<2	pCi/L
ALUMINUM	0.1800	.26	<.1	mg/L
AMMONIA	<.2	<.2	<.2	mg/L
ANTHRACENE	<10	<10	<10	ug/L
ARSENIC	<.005	<.005	<.005	mg/L
BARIUM	<.1	<.1	<.1	mg/L
BENZENE	<5	<5	<5	ug/L
BENZIDINE	<10	<10	<10	ug/L
BENZO(A)ANTHRACENE	<10	<10	<10	ug/L
BENZO(A)PYRENE	<10	<10	<10	ug/L
BENZO(B)FLUORANTHENE	<10	<10	<10	ug/L
BENZO(G H I)PERYLENE	<10	<10	<10	ug/L
BENZO(K)FLUORANTHENE	<10	<10	<10	ug/L
BERYLLIUM	<.001	<.001	<.001	mg/L
BETA	2.30	2.6	<2	pCi/L
BHT	8.00	8	8	ug/L
BIS(2-CHLOROETHOXY)METHANE	<10	<10	<10	ug/L
BIS(2-CHLOROETHYL)ETHER	<10	<10	<10	ug/L

SD-710 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
BIS(2-CHLOROISOPROPYL)ETHER	<10	<10	<10	ug/L
BIS(2-ETHYLHEXYL)PHTHALATE	6.00	10	<2	ug/L
BORON	0.0115	.019	.0041	mg/L
BROMODICHLOROMETHANE	<5	<5	<5	ug/L
BROMOFORM	<5	<5	<5	ug/L
BROMOMETHANE	<10	<10	<10	ug/L
BUTYLBENZYLPHTHALATE	5.50	10	<1	ug/L
CADMIUM	<.003	<.003	<.003	mg/L
CALCIUM	23.00	23	23	mg/L
CARBON TETRACHLORIDE	<5	<5	<5	ug/L
CHEMICAL OXYGEN DEMAND (COD)	12.00	14	10	mg/L
CHLORIDE	6.10	8.8	3.4	mg/L
CHLORINE TOTAL RESIDUAL WATER	<.1	<.1	<.1	mg/L
CHLOROBENZENE	<5	<5	<5	ug/L
CHLOROETHANE	<10	<10	<10	ug/L
CHLOROFORM	<5	<5	<5	ug/L
CHLOROMETHANE	<10	<10	<10	ug/L
CHROMIUM	<.01	<.01	<.01	mg/L
CHRYSENE	<10	<10	<10	ug/L
CIS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
COBALT	<.1	<.1	<.1	mg/L
CONDUCTIVITY	211.00	234	188	umho/cm
COPPER	<.004	<.004	<.004	mg/L
CYANIDE	0.0025	.003	<.002	mg/L
DI-N-BUTYLPHTHALATE	<10	<10	<10	ug/L
DI-N-OCTYLPHTHALATE	<10	<10	<10	ug/L
DIACETONE ALCOHOL	7.00	7	7	ug/L
DIBENZ(A H)ANTHRACENE	<10	<10	<10	ug/L
DIBROMOCHLOROMETHANE	<5	<5	<5	ug/L
DIETHYLPHTHALATE	1.00	1	1	ug/L
DIMETHYLPHTHALATE	<10	<10	<10	ug/L
DISSOLVED OXYGEN	9.90	10	9.8	ppm
ETHYLBENZENE	<5	<5	<5	ug/L
FLUORANTHENE	<10	<10	<10	ug/L
FLUORENE	<10	<10	<10	ug/L
FLUORIDE	0.2000	.3	.1	mg/L
HARDNESS	93.00	110	76	mg/L
HEXACHLOROBENZENE	<10	<10	<10	ug/L
HEXACHLOROBUTADIENE	<10	<10	<10	ug/L
HEXACHLOROCYCLOPENTADIENE	<10	<10	<10	ug/L
HEXACHLOROETHANE	<10	<10	<10	ug/L
INDENO(1 2 3-CD)PYRENE	<10	<10	<10	ug/L
IRON	0.2585	.43	.087	mg/L
ISOPHORONE	<10	<10	<10	ug/L
LEAD	<.05	<.05	<.05	mg/L
LITHIUM	<.004	<.004	<.004	mg/L
MAGNESIUM	3.70	4.3	3.1	mg/L
MANGANESE	<.01	<.01	<.01	mg/L

SD-710 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
MERCURY	<.0002	<.0002	<.0002	mg/L
METHYLENE CHLORIDE	<5	<5	<5	ug/L
MOLYBDENUM	<.01	<.01	<.01	mg/L
N-NITROSO-DI-N-PROPYLAMINE	<10	<10	<10	ug/L
N-NITROSODIMETHYLAMINE	<10	<10	<10	ug/L
N-NITROSODIPHENYLAMINE	<10	<10	<10	ug/L
NAPHTHALENE	<10	<10	<10	ug/L
NICKEL	<.05	<.05	<.05	mg/L
NIOBIUM	<.007	<.007	<.007	mg/L
NITRATE	2.80	4.1	1.5	mg/L
NITROBENZENE	<10	<10	<10	ug/L
OIL & GREASE	<2	<2	<2	mg/L
PCB (AROCLOR-1016)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1221)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1232)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1242)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1248)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1254)	<1	<1	<1	ug/L
PCB (AROCLOR-1260)	<1	<1	<1	ug/L
PENTACHLOROPHENOL	<50	<50	<50	ug/L
PH	7.85	8	7.7	
PHENANTHRENE	<10	<10	<10	ug/L
PHENOL	<10	<10	<10	ug/L
PHOSPHORUS	<.2	<.2	<.2	mg/L
POTASSIUM	0.7100	.82	<.6	mg/L
PROMETON	1.00	1	1	ug/L
PYRENE	<10	<10	<10	ug/L
SELENIUM	<0.0050	<.005	<.005	mg/L
SILICON	0.7000	.98	.42	mg/L
SILVER	<.01	<.01	<.01	mg/L
SODIUM	4.45	5.1	3.8	mg/L
STRONTIUM	0.0730	.086	.06	mg/L
SUBSTITUTED DIPHENYL PHOSPHATE	14.00	14	14	ug/L
SULFATE	18.00	22	14	mg/L
TEMPERATURE	13.00	15	11	Deg. C
TETRACHLOROETHENE	<5	<5	<5	ug/L
THORIUM	<.2	<.2	<.2	mg/L
TITANIUM	<.003	<.003	<.003	mg/L
TOLUENE	<5	<5	<5	ug/L
TOTAL DISSOLVED SOLIDS	91.00	108	74	mg/L
TOTAL ORGANIC CARBON (TOC)	13.00	14	12	mg/L
TOTAL SUSPENDED SOLIDS	7.50	11	4	mg/L
TRANS-1 2-DICHLOROETHENE	<5	<5	<5	ug/L
TRANS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
TRICHLOROETHENE	<5	<5	<5	ug/L
TURBIDITY	11.00	19	3	NTU
URANIUM	0.0025	.003	.002	mg/L
VANADIUM	<.5	<.5	<.5	mg/L

SD-710 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
VINYL CHLORIDE	<10	<10	<10	ug/L
ZINC	0.0355	.043	.028	mg/L
ZIRCONIUM	<.005	<.005	<.005	mg/L

SD-712 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
1 1 1-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1 2 2-TETRACHLOROETHANE	<5	<5	<5	ug/L
1 1 2-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHENE	<5	<5	<5	ug/L
1 2 4-TRICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROETHANE	<5	<5	<5	ug/L
1 2-DICHLOROPROPANE	<5	<5	<5	ug/L
1 3-DICHLOROBENZENE	<10	<10	<10	ug/L
1 4-DICHLOROBENZENE	<10	<10	<10	ug/L
2 4 6-TRICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DIMETHYLPHENOL	<10	<10	<10	ug/L
2 4-DINITROPHENOL	<10	<10	<10	ug/L
2 4-DINITROTOLUENE	<10	<10	<10	ug/L
2 6-DINITROTOLUENE	<10	<10	<10	ug/L
2-CHLOROETHYLVINYL ETHER	<10	<10	<10	ug/L
2-CHLORONAPHTHALENE	<10	<10	<10	ug/L
2-CHLOROPHENOL	<10	<10	<10	ug/L
2-NITROPHENOL	<10	<10	<10	ug/L
3 3'-DICHLOROBENZIDINE	<20	<20	<20	ug/L
4 6-DINITRO-2-METHYLPHENOL	<50	<50	<50	ug/L
4-BROMOPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-CHLORO-3-METHYLPHENOL	<10	<10	<10	ug/L
4-CHLOROPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-NITROPHENOL	<50	<50	<50	ug/L
ACENAPHTHENE	<10	<10	<10	ug/L
ACENAPHTHYLENE	<10	<10	<10	ug/L
ALKALINITY	60.00	70	50	mg/L
ALPHA	2.80	3.6	<2	pCi/L
ALUMINUM	0.1700	.21	.13	mg/L
AMMONIA	<.2	<.2	<.2	mg/L
ANTHRACENE	<10	<10	<10	ug/L
ARSENIC	<.005	<.005	<.005	mg/L
BARIUM	<.1	<.1	<.1	mg/L
BENZENE	<5	<5	<5	ug/L
BENZIDINE	<10	<10	<10	ug/L
BENZO(A)ANTHRACENE	<10	<10	<10	ug/L
BENZO(A)PYRENE	<10	<10	<10	ug/L
BENZO(B)FLUORANTHENE	<10	<10	<10	ug/L
BENZO(G H I)PERYLENE	<10	<10	<10	ug/L
BENZO(K)FLUORANTHENE	<10	<10	<10	ug/L
BERYLLIUM	<.001	<.001	<.001	mg/L
BETA	7.80	11.4	4.2	pCi/L
BHT	6.00	6	6	ug/L
BIS(2-CHLOROETHOXY)METHANE	<10	<10	<10	ug/L
BIS(2-CHLOROETHYL)ETHER	<10	<10	<10	ug/L

SD-712 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
BIS(2-CHLOROISOPROPYL)ETHER	<10	<10	<10	ug/L
BIS(2-ETHYLHEXYL)PHTHALATE	5.50	10	<1	ug/L
BORON	<.004	<.004	<.004	mg/L
BROMODICHLOROMETHANE	<5	<5	<5	ug/L
BROMOFORM	<5	<5	<5	ug/L
BROMOMETHANE	<10	<10	<10	ug/L
BUTYLBENZYLPHTHALATE	1.50	2	1	ug/L
CADMIUM	<.003	<.003	<.003	mg/L
CALCIUM	20.00	24	16	mg/L
CARBON TETRACHLORIDE	<5	<5	<5	ug/L
CHEMICAL OXYGEN DEMAND (COD)	13.50	20	7	mg/L
CHLORIDE	1.70	2.4	<1	mg/L
CHLORINE TOTAL RESIDUAL WATER	<.1	<.1	<.1	mg/L
CHLOROBENZENE	<5	<5	<5	ug/L
CHLOROETHANE	<10	<10	<10	ug/L
CHLOROFORM	<5	<5	<5	ug/L
CHLOROMETHANE	<10	<10	<10	ug/L
CHROMIUM	<.01	<.01	<.01	mg/L
CHRYSENE	<10	<10	<10	ug/L
CIS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
COBALT	<.1	<.1	<.1	mg/L
CONDUCTIVITY	183.50	243	124	umho/cm
COPPER	0.0049	.0058	<.004	mg/L
CYANIDE	0.0025	.003	<.002	mg/L
DI-N-BUTYLPHTHALATE	<10	<10	<10	ug/L
DI-N-OCTYLPHTHALATE	5.50	10	<1	ug/L
DIACETONE ALCOHOL	7.50	8	7	ug/L
DIBENZ(A H)ANTHRACENE	<10	<10	<10	ug/L
DIBROMOCHLOROMETHANE	<5	<5	<5	ug/L
DIETHYLPHTHALATE	<10	<10	<10	ug/L
DIMETHYLPHTHALATE	<10	<10	<10	ug/L
DISSOLVED OXYGEN	10.30	11.2	9.4	ppm
ETHYLBENZENE	<5	<5	<5	ug/L
FLUORANTHENE	<10	<10	<10	ug/L
FLUORENE	<10	<10	<10	ug/L
FLUORIDE	0.2000	.3	.1	mg/L
HARDNESS	54.00	56	52	mg/L
HEXACHLOROBENZENE	<10	<10	<10	ug/L
HEXACHLOROBUTADIENE	<10	<10	<10	ug/L
HEXACHLOROCYCLOPENTADIENE	<10	<10	<10	ug/L
HEXACHLOROETHANE	<10	<10	<10	ug/L
INDENO(1 2 3-CD)PYRENE	<10	<10	<10	ug/L
IRON	0.3750	.42	.33	mg/L
ISOPHORONE	<10	<10	<10	ug/L
LEAD	<.05	<.05	<.05	mg/L
LITHIUM	0.0041	.0041	<.004	mg/L
MAGNESIUM	3.40	4.1	2.7	mg/L
MANGANESE	<.01	<.01	<.01	mg/L

SD-712 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
MERCURY	<.0002	<.0002	<.0002	mg/L
METHYLENE CHLORIDE	<5	<5	<5	ug/L
MOLYBDENUM	<.01	<.01	<.01	mg/L
N-NITROSO-DI-N-PROPYLAMINE	<10	<10	<10	ug/L
N-NITROSODIMETHYLAMINE	<10	<10	<10	ug/L
N-NITROSODIPHENYLAMINE	<10	<10	<10	ug/L
NAPHTHALENE	<10	<10	<10	ug/L
NICKEL	<.05	<.05	<.05	mg/L
NIOBIUM	<.007	<.007	<.007	mg/L
NITRATE	1.73	2.5	.96	mg/L
NITROBENZENE	<10	<10	<10	ug/L
OIL & GREASE	<2	<2	<2	mg/L
PCB (AROCLOR-1016)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1221)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1232)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1242)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1248)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1254)	<1	<1	<1	ug/L
PCB (AROCLOR-1260)	<1	<1	<1	ug/L
PENTACHLOROPHENOL	<50	<50	<50	ug/L
PH	7.85	8.1	7.6	
PHENANTHRENE	<10	<10	<10	ug/L
PHENOL	<10	<10	<10	ug/L
PHOSPHORUS	<.2	<.2	<.2	mg/L
POTASSIUM	5.25	6.4	4.1	mg/L
PYRENE	<10	<10	<10	ug/L
SELENIUM	<0.0050	<.005	<.005	mg/L
SILICON	0.5820	1.1	.064	mg/L
SILVER	<.01	<.01	<.01	mg/L
SODIUM	1.00	1.4	.61	mg/L
STRONTIUM	0.0850	.11	.06	mg/L
SULFATE	15.20	21.8	8.6	mg/L
TEMPERATURE	13.50	14	13	Deg. C
TETRACHLOROETHENE	<5	<5	<5	ug/L
THORIUM	<.2	<.2	<.2	mg/L
TITANIUM	0.0040	.005	<.003	mg/L
TOLUENE	<5	<5	<5	ug/L
TOTAL DISSOLVED SOLIDS	69.00	80	58	mg/L
TOTAL ORGANIC CARBON (TOC)	16.50	19	14	mg/L
TOTAL SUSPENDED SOLIDS	6.50	12	<1	mg/L
TRANS-1 2-DICHLOROETHENE	<5	<5	<5	ug/L
TRANS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
TRICHLOROETHENE	<5	<5	<5	ug/L
TURBIDITY	4.00	6	2	NTU
UNKNOWN ALKYL/ALKOXY COMPOUND	9.00	9	9	ug/L
URANIUM	0.0090	.016	.002	mg/L
VANADIUM	<.5	<.5	<.5	mg/L
VINYL CHLORIDE	<10	<10	<10	ug/L

SD-712 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
ZINC	0.0430	.046	.04	mg/L
ZIRCONIUM	<.005	<.005	<.005	mg/L

SD-724 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
1 1 1-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1 2 2-TETRACHLOROETHANE	<5	<5	<5	ug/L
1 1 2-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHENE	<5	<5	<5	ug/L
1 2 4-TRICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROETHANE	<5	<5	<5	ug/L
1 2-DICHLOROPROPANE	<5	<5	<5	ug/L
1 3-DICHLOROBENZENE	<10	<10	<10	ug/L
1 4-DICHLOROBENZENE	<10	<10	<10	ug/L
2 4 6-TRICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DIMETHYLPHENOL	<10	<10	<10	ug/L
2 4-DINITROPHENOL	<10	<10	<10	ug/L
2 4-DINITROTOLUENE	<10	<10	<10	ug/L
2 6-DINITROTOLUENE	<10	<10	<10	ug/L
2-CHLOROETHYLVINYL ETHER	<10	<10	<10	ug/L
2-CHLORONAPHTHALENE	<10	<10	<10	ug/L
2-CHLOROPHENOL	<10	<10	<10	ug/L
2-NITROPHENOL	<10	<10	<10	ug/L
3 3'-DICHLOROBENZIDINE	<20	<20	<20	ug/L
4 6-DINITRO-2-METHYLPHENOL	<50	<50	<50	ug/L
4-BROMOPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-CHLORO-3-METHYLPHENOL	<10	<10	<10	ug/L
4-CHLOROPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-NITROPHENOL	<50	<50	<50	ug/L
ACENAPHTHENE	<10	<10	<10	ug/L
ACENAPHTHYLENE	<10	<10	<10	ug/L
ALIPHATIC HYDROCARBONS	13.00	13	13	ug/L
ALKALINITY	124.00	140	108	mg/L
ALPHA	313.15	340	286.3	pCi/L
ALUMINUM	0.6400	.83	.45	mg/L
AMMONIA	<.2	<.2	<.2	mg/L
ANTHRACENE	<10	<10	<10	ug/L
ARSENIC	<.005	<.005	<.005	mg/L
BARIUM	<.1	<.1	<.1	mg/L
BENZENE	<5	<5	<5	ug/L
BENZIDINE	<10	<10	<10	ug/L
BENZO(A)ANTHRACENE	<10	<10	<10	ug/L
BENZO(A)PYRENE	<10	<10	<10	ug/L
BENZO(B)FLUORANTHENE	<10	<10	<10	ug/L
BENZO(G H I)PERYLENE	<10	<10	<10	ug/L
BENZO(K)FLUORANTHENE	<10	<10	<10	ug/L
BERYLLIUM	<.001	<.001	<.001	mg/L
BETA	338.55	377.1	300	pCi/L
BHT	18.00	25	11	ug/L
BIS(2-CHLOROETHOXY)METHANE	<10	<10	<10	ug/L

SD-724 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
BIS(2-CHLOROETHYL)ETHER	<10	<10	<10	ug/L
BIS(2-CHLOROISOPROPYL)ETHER	<10	<10	<10	ug/L
BIS(2-ETHYLHEXYL)PHTHALATE	6.50	7	6	ug/L
BORON	0.0780	.098	.058	mg/L
BROMODICHLOROMETHANE	<5	<5	<5	ug/L
BROMOFORM	<5	<5	<5	ug/L
BROMOMETHANE	<10	<10	<10	ug/L
BUTYLBENZYLPHTHALATE	5.50	10	<1	ug/L
CADMIUM	<.003	<.003	<.003	mg/L
CALCIUM	44.00	45	43	mg/L
CARBON TETRACHLORIDE	<5	<5	<5	ug/L
CHEMICAL OXYGEN DEMAND (COD)	20.50	24	17	mg/L
CHLORIDE	1.10	1.2	<1	mg/L
CHLORINE TOTAL RESIDUAL WATER	<.1	<.1	<.1	mg/L
CHLOROBENZENE	<5	<5	<5	ug/L
CHLOROETHANE	<10	<10	<10	ug/L
CHLOROFORM	<5	<5	<5	ug/L
CHLOROMETHANE	<10	<10	<10	ug/L
CHROMIUM	<.01	<.01	<.01	mg/L
CHRYSENE	<10	<10	<10	ug/L
CIS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
COBALT	<.1	<.1	<.1	mg/L
CONDUCTIVITY	276.00	280	272	umho/cm
COPPER	<.004	<.004	<.004	mg/L
CYANIDE	<.002	<.002	<.002	mg/L
DI-N-BUTYLPHTHALATE	5.50	10	<1	ug/L
DI-N-OCTYLPHTHALATE	1.00	1	1	ug/L
DIACETONE ALCOHOL	16.50	23	10	ug/L
DIBENZ(A H)ANTHRACENE	<10	<10	<10	ug/L
DIBROMOCHLOROMETHANE	<5	<5	<5	ug/L
DIETHYLPHTHALATE	5.50	10	<1	ug/L
DIMETHYLPHTHALATE	<10	<10	<10	ug/L
DISSOLVED OXYGEN	10.35	12	8.7	ppm
ETHYLBENZENE	<5	<5	<5	ug/L
FLUORANTHENE	<10	<10	<10	ug/L
FLUORENE	<10	<10	<10	ug/L
FLUORIDE	0.4500	.6	.3	mg/L
HARDNESS	156.50	166	147	mg/L
HEXACHLOROBENZENE	<10	<10	<10	ug/L
HEXACHLOROBUTADIENE	<10	<10	<10	ug/L
HEXACHLOROCYCLOPENTADIENE	<10	<10	<10	ug/L
HEXACHLOROETHANE	<10	<10	<10	ug/L
INDENO(1 2 3-CD)PYRENE	<10	<10	<10	ug/L
IRON	0.4450	.56	.33	mg/L
ISOPHORONE	<10	<10	<10	ug/L
LEAD	<.05	<.05	<.05	mg/L
LITHIUM	0.0065	.0089	<.004	mg/L
MAGNESIUM	7.00	7.8	6.2	mg/L

SD-724 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
MANGANESE	0.0150	.017	.013	mg/L
MERCURY	<.0002	<.0002	<.0002	mg/L
METHYLENE CHLORIDE	<5.00	<5	<5	ug/L
MOLYBDENUM	0.0200	.023	.017	mg/L
N-NITROSO-DI-N-PROPYLAMINE	<10	<10	<10	ug/L
N-NITROSODIMETHYLAMINE	<10	<10	<10	ug/L
N-NITROSODIPHENYLAMINE	<10	<10	<10	ug/L
NAPHTHALENE	<10	<10	<10	ug/L
NICKEL	<.05	<.05	<.05	mg/L
NIOBIUM	0.0108	.013	8.50000	mg/L
NITRATE	<.5	<.5	<.5	mg/L
NITROBENZENE	<10	<10	<10	ug/L
OIL & GREASE	<2	<2	<2	mg/L
PCB (AROCLOR-1016)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1221)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1232)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1242)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1248)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1254)	<1	<1	<1	ug/L
PCB (AROCLOR-1260)	<1	<1	<1	ug/L
PENTACHLOROPHENOL	<50	<50	<50	ug/L
PH	8.05	8.1	8	
PHENANTHRENE	<10	<10	<10	ug/L
PHENOL	<10	<10	<10	ug/L
PHOSPHORUS	<.2	<.2	<.2	mg/L
POTASSIUM	1.55	1.8	1.3	mg/L
PYRENE	<10	<10	<10	ug/L
SELENIUM	<0.0050	<.005	<.005	mg/L
SILICON	1.95	2.1	1.8	mg/L
SILVER	<.01	<.01	<.01	mg/L
SODIUM	1.35	1.5	1.2	mg/L
STRONTIUM	0.0915	.096	.087	mg/L
SUBSTITUTED DIPHENYL PHOSPHATE	9.00	9	9	ug/L
SUBSTITUTED HEXANEDIOATE ESTER	6.00	6	6	ug/L
SUBSTITUTED PHOSPHATE ESTER	4.00	4	4	ug/L
SULFATE	31.50	38	25	mg/L
SULFUR	1.00	1	1	ug/L
TEMPERATURE	14.00	17	11	Deg. C
TETRACHLOROETHENE	<5	<5	<5	ug/L
THORIUM	<.2	<.2	<.2	mg/L
TITANIUM	0.0113	.014	.0086	mg/L
TOLUENE	<5	<5	<5	ug/L
TOTAL DISSOLVED SOLIDS	162.00	194	130	mg/L
TOTAL ORGANIC CARBON (TOC)	13.00	16	10	mg/L
TOTAL SUSPENDED SOLIDS	8.50	11	6	mg/L
TRANS-1 2-DICHLOROETHENE	<5	<5	<5	ug/L
TRANS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
TRICHLOROETHENE	<5	<5	<5	ug/L

SD-724 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
TURBIDITY	20.50	28	13	NTU
UNKNOWN ALKYL/ALKOXY COMPOUND	6.00	6	6	ug/L
UNKNOWNS	24.50	33	16	ug/L
URANIUM	0.4455	.547	.344	mg/L
VANADIUM	<.5	<.5	<.5	mg/L
VINYL CHLORIDE	<10	<10	<10	ug/L
ZINC	0.0205	.021	<.02	mg/L
ZIRCONIUM	0.0057	.0064	<.005	mg/L

SD-750 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
1 1 1-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1 2 2-TETRACHLOROETHANE	<5	<5	<5	ug/L
1 1 2-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHENE	<5	<5	<5	ug/L
1 2 4-TRICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROETHANE	<5	<5	<5	ug/L
1 2-DICHLOROPROPANE	<5	<5	<5	ug/L
1 3-DICHLOROBENZENE	<10	<10	<10	ug/L
1 4-DICHLOROBENZENE	<10	<10	<10	ug/L
2 4 6-TRICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DIMETHYLPHENOL	<10	<10	<10	ug/L
2 4-DINITROPHENOL	<10	<10	<10	ug/L
2 4-DINITROTOLUENE	<10	<10	<10	ug/L
2 6-DINITROTOLUENE	<10	<10	<10	ug/L
2-CHLOROETHYLVINYL ETHER	<10	<10	<10	ug/L
2-CHLORONAPHTHALENE	<10	<10	<10	ug/L
2-CHLOROPHENOL	<10	<10	<10	ug/L
2-NITROPHENOL	<10	<10	<10	ug/L
3 3'-DICHLOROBENZIDINE	<20	<20	<20	ug/L
4 6-DINITRO-2-METHYLPHENOL	<50	<50	<50	ug/L
4-BROMOPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-CHLORO-3-METHYLPHENOL	<10	<10	<10	ug/L
4-CHLOROPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-NITROPHENOL	<50	<50	<50	ug/L
ACENAPHTHENE	<10	<10	<10	ug/L
ACENAPHTHYLENE	<10	<10	<10	ug/L
ALKALINITY	74.00	74	74	mg/L
ALPHA	290.00	290	290	pCi/L
ALUMINUM	1.70	1.7	1.7	mg/L
AMMONIA	<.2	<.2	<.2	mg/L
ANTHRACENE	<10	<10	<10	ug/L
ARSENIC	<.005	<.005	<.005	mg/L
BARIUM	<.1	<.1	<.1	mg/L
BENZENE	<5	<5	<5	ug/L
BENZIDINE	<10	<10	<10	ug/L
BENZO(A)ANTHRACENE	<10	<10	<10	ug/L
BENZO(A)PYRENE	<10	<10	<10	ug/L
BENZO(B)FLUORANTHENE	<10	<10	<10	ug/L
BENZO(G H I)PERYLENE	<10	<10	<10	ug/L
BENZO(K)FLUORANTHENE	<10	<10	<10	ug/L
BERYLLIUM	<.001	<.001	<.001	mg/L
BETA	360.00	360	360	pCi/L
BIS(2-CHLOROETHOXY)METHANE	<10	<10	<10	ug/L
BIS(2-CHLOROETHYL)ETHER	<10	<10	<10	ug/L
BIS(2-CHLOROISOPROPYL)ETHER	<10	<10	<10	ug/L

SD-750 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
BIS(2-ETHYLHEXYL)PHTHALATE	<10	<10	<10	ug/L
BORON	0.0340	.034	.034	mg/L
BROMODICHLOROMETHANE	<5	<5	<5	ug/L
BROMOFORM	<5	<5	<5	ug/L
BROMOMETHANE	<10	<10	<10	ug/L
BUTYLBENZYLPHTHALATE	<10	<10	<10	ug/L
CADMIUM	<.003	<.003	<.003	mg/L
CALCIUM	26.00	26	26	mg/L
CARBON TETRACHLORIDE	<5	<5	<5	ug/L
CHEMICAL OXYGEN DEMAND (COD)	27.00	27	27	mg/L
CHLORIDE	1.70	1.7	1.7	mg/L
CHLORINE TOTAL RESIDUAL WATER	<.1	<.1	<.1	mg/L
CHLOROBENZENE	<5	<5	<5	ug/L
CHLOROETHANE	<10	<10	<10	ug/L
CHLOROFORM	<5	<5	<5	ug/L
CHLOROMETHANE	<10	<10	<10	ug/L
CHROMIUM	<.01	<.01	<.01	mg/L
CHRYSENE	<10	<10	<10	ug/L
CIS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
COBALT	<.1	<.1	<.1	mg/L
CONDUCTIVITY	176.00	176	176	umho/cm
COPPER	0.0530	.053	.053	mg/L
CYANIDE	<.002	<.002	<.002	mg/L
DI-N-BUTYLPHTHALATE	<10	<10	<10	ug/L
DI-N-OCTYLPHTHALATE	<10	<10	<10	ug/L
DIBENZ(A H)ANTHRACENE	<10	<10	<10	ug/L
DIBROMOCHLOROMETHANE	<5	<5	<5	ug/L
DIETHYLPHTHALATE	<10	<10	<10	ug/L
DIMETHYLPHTHALATE	<10	<10	<10	ug/L
DISSOLVED OXYGEN	8.50	8.5	8.5	ppm
ETHYLBENZENE	<5	<5	<5	ug/L
FLUORANTHENE	<10	<10	<10	ug/L
FLUORENE	<10	<10	<10	ug/L
FLUORIDE	0.9000	.9	.9	mg/L
HARDNESS	82.00	82	82	mg/L
HEXACHLOROBENZENE	<10	<10	<10	ug/L
HEXACHLOROBUTADIENE	<10	<10	<10	ug/L
HEXACHLOROCYCLOPENTADIENE	<10	<10	<10	ug/L
HEXACHLOROETHANE	<10	<10	<10	ug/L
INDENO(1 2 3-CD)PYRENE	<10	<10	<10	ug/L
IRON	1.40	1.4	1.4	mg/L
ISOPHORONE	<10	<10	<10	ug/L
LEAD	<.05	<.05	<.05	mg/L
LITHIUM	<.004	<.004	<.004	mg/L
MAGNESIUM	3.00	3	3	mg/L
MANGANESE	0.0210	.021	.021	mg/L
MERCURY	<.0002	<.0002	<.0002	mg/L
METHYLENE CHLORIDE	<5	<5	<5	ug/L

SD-750 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
MOLYBDENUM	0.0160	.016	.016	mg/L
N-NITROSO-DI-N-PROPYLAMINE	<10	<10	<10	ug/L
N-NITROSODIMETHYLAMINE	<10	<10	<10	ug/L
N-NITROSODIPHENYLAMINE	<10	<10	<10	ug/L
NAPHTHALENE	<10	<10	<10	ug/L
NICKEL	<.05	<.05	<.05	mg/L
NIOBIUM	<.007	<.007	<.007	mg/L
NITRATE	<.5	<.5	<.5	mg/L
NITROBENZENE	<10	<10	<10	ug/L
OIL & GREASE	<2	<2	<2	mg/L
PCB (AROCLOR-1016)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1221)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1232)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1242)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1248)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1254)	<1	<1	<1	ug/L
PCB (AROCLOR-1260)	<1	<1	<1	ug/L
PENTACHLOROPHENOL	<50	<50	<50	ug/L
PH	7.70	7.7	7.7	
PHENANTHRENE	<10	<10	<10	ug/L
PHENOL	<10	<10	<10	ug/L
PHOSPHORUS	<.2	<.2	<.2	mg/L
POTASSIUM	0.6900	.69	.69	mg/L
PYRENE	<10	<10	<10	ug/L
SELENIUM	0.0050	.005	.005	mg/L
SILICON	3.20	3.2	3.2	mg/L
SILVER	<.01	<.01	<.01	mg/L
SODIUM	1.90	1.9	1.9	mg/L
STRONTIUM	0.0370	.037	.037	mg/L
SULFATE	10.00	10	10	mg/L
TEMPERATURE	18.00	18	18	Deg. C
TETRACHLOROETHENE	<5	<5	<5	ug/L
THORIUM	<.2	<.2	<.2	mg/L
TITANIUM	0.0290	.029	.029	mg/L
TOLUENE	<5	<5	<5	ug/L
TOTAL DISSOLVED SOLIDS	112.00	112	112	mg/L
TOTAL ORGANIC CARBON (TOC)	11.00	11	11	mg/L
TOTAL SUSPENDED SOLIDS	11.00	11	11	mg/L
TRANS-1 2-DICHLOROETHENE	<5	<5	<5	ug/L
TRANS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
TRICHLOROETHENE	<5	<5	<5	ug/L
TURBIDITY	85.00	85	85	NTU
URANIUM	0.3240	.324	.324	mg/L
VANADIUM	<.5	<.5	<.5	mg/L
VINYL CHLORIDE	<10	<10	<10	ug/L
ZINC	0.0920	.092	.092	mg/L
ZIRCONIUM	<.005	<.005	<.005	mg/L

SD-780 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
1 1 1-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1 2 2-TETRACHLOROETHANE	<5	<5	<5	ug/L
1 1 2-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHENE	<5	<5	<5	ug/L
1 2 4-TRICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROETHANE	<5	<5	<5	ug/L
1 2-DICHLOROPROPANE	<5	<5	<5	ug/L
1 3-DICHLOROBENZENE	<10	<10	<10	ug/L
1 4-DICHLOROBENZENE	<10	<10	<10	ug/L
2 4 6-TRICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DIMETHYLPHENOL	<10	<10	<10	ug/L
2 4-DINITROPHENOL	<10	<10	<10	ug/L
2 4-DINITROTOLUENE	<10	<10	<10	ug/L
2 6-DINITROTOLUENE	<10	<10	<10	ug/L
2-CHLOROETHYLVINYL ETHER	<10	<10	<10	ug/L
2-CHLORONAPHTHALENE	<10	<10	<10	ug/L
2-CHLOROPHENOL	<10	<10	<10	ug/L
2-NITROPHENOL	<10	<10	<10	ug/L
3 3'-DICHLOROBENZIDINE	<20	<20	<20	ug/L
4 6-DINITRO-2-METHYLPHENOL	<50	<50	<50	ug/L
4-BROMOPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-CHLORO-3-METHYLPHENOL	<10	<10	<10	ug/L
4-CHLOROPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-NITROPHENOL	<50	<50	<50	ug/L
ACENAPHTHENE	<10	<10	<10	ug/L
ACENAPHTHYLENE	<10	<10	<10	ug/L
ALIPHATIC HYDROCARBONS	72.00	72	72	ug/L
ALKALINITY	121.00	121	121	mg/L
ALPHA	22.30	22.3	22.3	pCi/L
ALUMINUM	<.1	<.1	<.1	mg/L
AMMONIA	0.3000	.3	.3	mg/L
ANTHRACENE	<10	<10	<10	ug/L
ARSENIC	<.005	<.005	<.005	mg/L
BARIUM	<.1	<.1	<.1	mg/L
BENZENE	<5	<5	<5	ug/L
BENZIDINE	<10	<10	<10	ug/L
BENZO(A)ANTHRACENE	<10	<10	<10	ug/L
BENZO(A)PYRENE	<10	<10	<10	ug/L
BENZO(B)FLUORANTHENE	<10	<10	<10	ug/L
BENZO(G H I)PERYLENE	<10	<10	<10	ug/L
BENZO(K)FLUORANTHENE	<10	<10	<10	ug/L
BERYLLIUM	<.001	<.001	<.001	mg/L
BETA	21.90	21.9	21.9	pCi/L
BHT	21.00	21	21	ug/L
BIS(2-CHLOROETHOXY)METHANE	<10	<10	<10	ug/L

SD-780 Analytical Results Summary

Parameter	Concentration Average	Maximum	Minimum	Units
BIS(2-CHLOROETHYL)ETHER	<10	<10	<10	ug/L
BIS(2-CHLOROISOPROPYL)ETHER	<10	<10	<10	ug/L
BIS(2-ETHYLHEXYL)PHTHALATE	12.00	12	12	ug/L
BORON	0.0800	.08	.08	mg/L
BROMODICHLOROMETHANE	<5	<5	<5	ug/L
BROMOFORM	<5	<5	<5	ug/L
BROMOMETHANE	<10	<10	<10	ug/L
BUTYLBENZYLPHTHALATE	1.00	1	1	ug/L
CADMIUM	<.003	<.003	<.003	mg/L
CALCIUM	42.00	42	42	mg/L
CARBON TETRACHLORIDE	<5	<5	<5	ug/L
CHEMICAL OXYGEN DEMAND (COD)	7.00	7	7	mg/L
CHLORIDE	2.70	2.7	2.7	mg/L
CHLORINE TOTAL RESIDUAL WATER	<.1	<.1	<.1	mg/L
CHLOROBENZENE	<5	<5	<5	ug/L
CHLOROETHANE	<10	<10	<10	ug/L
CHLOROFORM	<5	<5	<5	ug/L
CHLOROMETHANE	<10	<10	<10	ug/L
CHROMIUM	<.01	<.01	<.01	mg/L
CHRYSENE	<10	<10	<10	ug/L
CIS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
COBALT	<.1	<.1	<.1	mg/L
CONDUCTIVITY	264.00	264	264	umho/cm
COPPER	<.004	<.004	<.004	mg/L
CYANIDE	<.002	<.002	<.002	mg/L
DI-N-BUTYLPHTHALATE	<10	<10	<10	ug/L
DI-N-OCTYLPHTHALATE	1.00	1	1	ug/L
DIACETONE ALCOHOL	6.00	6	6	ug/L
DIBENZ(A H)ANTHRACENE	<10	<10	<10	ug/L
DIBROMOCHLOROMETHANE	<5	<5	<5	ug/L
DIETHYLPHTHALATE	<10	<10	<10	ug/L
DIMETHYLPHTHALATE	<10	<10	<10	ug/L
DISSOLVED OXYGEN	10.00	10	10	ppm
ETHYLBENZENE	<5	<5	<5	ug/L
FLUORANTHENE	<10	<10	<10	ug/L
FLUORENE	<10	<10	<10	ug/L
FLUORIDE	0.2000	.2	.2	mg/L
HARDNESS	147.00	147	147	mg/L
HEXACHLOROBENZENE	<10	<10	<10	ug/L
HEXACHLOROBUTADIENE	<10	<10	<10	ug/L
HEXACHLOROCYCLOPENTADIENE	<10	<10	<10	ug/L
HEXACHLOROETHANE	<10	<10	<10	ug/L
INDENO(1 2 3-CD)PYRENE	<10	<10	<10	ug/L
IRON	0.1700	.17	.17	mg/L
ISOPHORONE	<10	<10	<10	ug/L
LEAD	<.05	<.05	<.05	mg/L
LITHIUM	0.0060	.006	.006	mg/L
MAGNESIUM	6.30	6.3	6.3	mg/L

SD-780 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
MANGANESE	<.01	<.01	<.01	mg/L
MERCURY	<.0002	<.0002	<.0002	mg/L
METHYLENE CHLORIDE	<5	<5	<5	ug/L
MOLYBDENUM	0.0140	.014	.014	mg/L
N-NITROSO-DI-N-PROPYLAMINE	<10	<10	<10	ug/L
N-NITROSODIMETHYLAMINE	<10	<10	<10	ug/L
N-NITROSODIPHENYLAMINE	<10	<10	<10	ug/L
NAPHTHALENE	<10	<10	<10	ug/L
NICKEL	<.05	<.05	<.05	mg/L
NIOBIUM	<.007	<.007	<.007	mg/L
NITRATE	2.70	2.7	2.7	mg/L
NITROBENZENE	<10	<10	<10	ug/L
OIL & GREASE	<2	<2	<2	mg/L
PCB (AROCLOR-1016)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1221)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1232)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1242)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1248)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1254)	<1	<1	<1	ug/L
PCB (AROCLOR-1260)	<1	<1	<1	ug/L
PENTACHLOROPHENOL	<50	<50	<50	ug/L
PH	7.80	7.8	7.8	
PHENANTHRENE	<10	<10	<10	ug/L
PHENOL	<10	<10	<10	ug/L
PHOSPHORUS	<.2	<.2	<.2	mg/L
POTASSIUM	1.20	1.2	1.2	mg/L
PYRENE	<10	<10	<10	ug/L
SELENIUM	0.0050	.005	.005	mg/L
SILICON	1.80	1.8	1.8	mg/L
SILVER	<.01	<.01	<.01	mg/L
SODIUM	2.00	2	2	mg/L
STRONTIUM	0.0720	.072	.072	mg/L
SULFATE	20.00	20	20	mg/L
TEMPERATURE	13.00	13	13	Deg. C
TETRACHLOROETHENE	<5	<5	<5	ug/L
THORIUM	<.2	<.2	<.2	mg/L
TITANIUM	0.0046	.0046	.0046	mg/L
TOLUENE	<5	<5	<5	ug/L
TOTAL DISSOLVED SOLIDS	170.00	170	170	mg/L
TOTAL ORGANIC CARBON (TOC)	6.00	6	6	mg/L
TOTAL SUSPENDED SOLIDS	<1	<1	<1	mg/L
TRANS-1 2-DICHLOROETHENE	<5	<5	<5	ug/L
TRANS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
TRICHLOROETHENE	<5	<5	<5	ug/L
TURBIDITY	3.00	3	3	NTU
UNKNOWNS	65.00	65	65	ug/L
URANIUM	0.0190	.019	.019	mg/L
VANADIUM	<.5	<.5	<.5	mg/L

SD-780 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
VINYL CHLORIDE	<10	<10	<10	ug/L
ZINC	<.02	<.02	<.02	mg/L
ZIRCONIUM	<.005	<.005	<.005	mg/L

SD-830 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
1 1 1-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1 2 2-TETRACHLOROETHANE	<5	<5	<5	ug/L
1 1 2-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHENE	<5	<5	<5	ug/L
1 2 4-TRICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROETHANE	<5	<5	<5	ug/L
1 2-DICHLOROPROPANE	<5	<5	<5	ug/L
1 3-DICHLOROBENZENE	<10	<10	<10	ug/L
1 4-DICHLOROBENZENE	<10	<10	<10	ug/L
2 4 6-TRICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DIMETHYLPHENOL	<10	<10	<10	ug/L
2 4-DINITROPHENOL	<10	<10	<10	ug/L
2 4-DINITROTOLUENE	<10	<10	<10	ug/L
2 6-DINITROTOLUENE	<10	<10	<10	ug/L
2-CHLOROETHYLVINYL ETHER	<10	<10	<10	ug/L
2-CHLORONAPHTHALENE	<10	<10	<10	ug/L
2-CHLOROPHENOL	<10	<10	<10	ug/L
2-NITROPHENOL	<10	<10	<10	ug/L
3 3'-DICHLOROBENZIDINE	<20	<20	<20	ug/L
4 6-DINITRO-2-METHYLPHENOL	<50	<50	<50	ug/L
4-BROMOPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-CHLORO-3-METHYLPHENOL	<10	<10	<10	ug/L
4-CHLOROPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-NITROPHENOL	<50	<50	<50	ug/L
ACENAPHTHENE	<10	<10	<10	ug/L
ACENAPHTHYLENE	<10	<10	<10	ug/L
ALKALINITY	143.20	165	130	mg/L
ALPHA	13.26	20.4	<2	pCi/L
ALUMINUM	<.1	<.1	<.1	mg/L
AMMONIA	<0.2000	<.2	<.2	mg/L
ANTHRACENE	<10	<10	<10	ug/L
ARSENIC	<.005	<.005	<.005	mg/L
BARIUM	<.1	<.1	<.1	mg/L
BENZENE	<5	<5	<5	ug/L
BENZIDINE	<10	<10	<10	ug/L
BENZO(A)ANTHRACENE	<10	<10	<10	ug/L
BENZO(A)PYRENE	<10	<10	<10	ug/L
BENZO(B)FLUORANTHENE	<10	<10	<10	ug/L
BENZO(G H I)PERYLENE	<10	<10	<10	ug/L
BENZO(K)FLUORANTHENE	<10	<10	<10	ug/L
BERYLLIUM	<.001	<.001	<.001	mg/L
BETA	11.82	21.4	<2	pCi/L
BIS(2-CHLOROETHOXY)METHANE	<10	<10	<10	ug/L
BIS(2-CHLOROETHYL)ETHER	<10	<10	<10	ug/L
BIS(2-CHLOROISOPROPYL)ETHER	<10	<10	<10	ug/L

SD-830 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
BIS(2-ETHYLHEXYL)PHTHALATE	<10	<10	<10	ug/L
BORON	0.0444	.071	<.004	mg/L
BROMODICHLOROMETHANE	<5.00	<5	<5	ug/L
BROMOFORM	<5	<5	<5	ug/L
BROMOMETHANE	<10	<10	<10	ug/L
BUTYLBENZYLPHTHALATE	<10	<10	<10	ug/L
CADMIUM	<.003	<.003	<.003	mg/L
CALCIUM	47.60	51	44	mg/L
CARBON TETRACHLORIDE	<5	<5	<5	ug/L
CHEMICAL OXYGEN DEMAND (COD)	5.40	7	<5	mg/L
CHLORIDE	5.50	8	3.3	mg/L
CHLORINE TOTAL RESIDUAL WATER	<.1	<.1	<.1	mg/L
CHLOROBENZENE	<5	<5	<5	ug/L
CHLOROETHANE	<10	<10	<10	ug/L
CHLOROFORM	10.60	14	7	ug/L
CHLOROMETHANE	<10	<10	<10	ug/L
CHROMIUM	<.01	<.01	<.01	mg/L
CHRYSENE	<10	<10	<10	ug/L
CIS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
COBALT	<.1	<.1	<.1	mg/L
CONDUCTIVITY	334.00	366	300	umho/cm
COPPER	0.0072	.015	<.004	mg/L
CYANIDE	0.0026	.004	<.002	mg/L
DI-N-BUTYLPHTHALATE	<10	<10	<10	ug/L
DI-N-OCTYLPHTHALATE	5.50	10	<1	ug/L
DIACETONE ALCOHOL	11.00	11	11	ug/L
DIBENZ(A H)ANTHRACENE	<10	<10	<10	ug/L
DIBROMOCHLOROMETHANE	<5	<5	<5	ug/L
DIETHYLPHTHALATE	<10	<10	<10	ug/L
DIMETHYLPHTHALATE	<10	<10	<10	ug/L
DISSOLVED OXYGEN	10.02	11.8	8.3	ppm
ETHYLBENZENE	<5	<5	<5	ug/L
FLUORANTHENE	<10	<10	<10	ug/L
FLUORENE	<10	<10	<10	ug/L
FLUORIDE	0.1200	.2	.1	mg/L
HARDNESS	185.20	222	156	mg/L
HEXACHLOROBENZENE	<10	<10	<10	ug/L
HEXACHLOROBUTADIENE	<10	<10	<10	ug/L
HEXACHLOROCYCLOPENTADIENE	<10	<10	<10	ug/L
HEXACHLOROETHANE	<10	<10	<10	ug/L
INDENO(1 2 3-CD)PYRENE	<10	<10	<10	ug/L
IRON	0.2720	.57	.17	mg/L
ISOPHORONE	<10	<10	<10	ug/L
LEAD	<.05	<.05	<.05	mg/L
LITHIUM	0.0064	.011	<.004	mg/L
MAGNESIUM	10.24	12	7.9	mg/L
MANGANESE	0.4280	1	.14	mg/L
MERCURY	0.0002	.0004	<.0002	mg/L

SD-830 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
METHYLENE CHLORIDE	244.00	1200	<5	ug/L
MOLYBDENUM	0.0116	.018	<.01	mg/L
N-NITROSO-DI-N-PROPYLAMINE	<10	<10	<10	ug/L
N-NITROSODIMETHYLAMINE	<10	<10	<10	ug/L
N-NITROSODIPHENYLAMINE	<10	<10	<10	ug/L
NAPHTHALENE	<10	<10	<10	ug/L
NICKEL	<.05	<.05	<.05	mg/L
NIOBIUM	0.0076	.01	<.007	mg/L
NITRATE	2.30	3.1	1.9	mg/L
NITROBENZENE	<10	<10	<10	ug/L
OIL & GREASE	<2	<2	<2	mg/L
PCB (AROCLOR-1016)	<1	<1	<1	ug/L
PCB (AROCLOR-1221)	<1	<1	<1	ug/L
PCB (AROCLOR-1232)	<1	<1	<1	ug/L
PCB (AROCLOR-1242)	<1	<1	<1	ug/L
PCB (AROCLOR-1248)	<1	<1	<1	ug/L
PCB (AROCLOR-1254)	<1	<1	<1	ug/L
PCB (AROCLOR-1260)	<1	<1	<1	ug/L
PENTACHLOROPHENOL	<50	<50	<50	ug/L
PH	7.70	8.1	7.5	
PHENANTHRENE	<10	<10	<10	ug/L
PHENOL	<10	<10	<10	ug/L
PHOSPHORUS	<.2	<.2	<.2	mg/L
POTASSIUM	1.92	3.4	1.5	mg/L
PROMETON	1.00	1	1	ug/L
PYRENE	<10	<10	<10	ug/L
SELENIUM	<0.0050	<.005	<.005	mg/L
SILICON	1.76	2	1.6	mg/L
SILVER	<.01	<.01	<.01	mg/L
SODIUM	3.94	5.6	2.4	mg/L
STRONTIUM	0.0900	.098	.078	mg/L
SULFATE	40.80	52	27	mg/L
TEMPERATURE	11.90	15	9	Deg. C
TETRACHLOROETHENE	<5	<5	<5	ug/L
THORIUM	<.2	<.2	<.2	mg/L
TITANIUM	<.003	<.003	<.003	mg/L
TOLUENE	<5	<5	<5	ug/L
TOTAL DISSOLVED SOLIDS	207.60	238	184	mg/L
TOTAL ORGANIC CARBON (TOC)	21.00	40	7	mg/L
TOTAL SUSPENDED SOLIDS	3.60	7	<1	mg/L
TRANS-1 2-DICHLOROETHENE	5.80	7	<5	ug/L
TRANS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
TRICHLOROETHENE	16.60	22	13	ug/L
TURBIDITY	3.40	11	1	NTU
UNKNOWN	24.00	24	24	ug/L
URANIUM	0.0182	.027	.007	mg/L
VANADIUM	<.5	<.5	<.5	mg/L
VINYL CHLORIDE	<10	<10	<10	ug/L

SD-830 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
ZINC	<.02	<.02	<.02	mg/L
ZIRCONIUM	<.005	<.005	<.005	mg/L

SD-850 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
1 1 1-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1 2 2-TETRACHLOROETHANE	<5	<5	<5	ug/L
1 1 2-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHENE	<5	<5	<5	ug/L
1 2 4-TRICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROETHANE	<5	<5	<5	ug/L
1 2-DICHLOROPROPANE	<5	<5	<5	ug/L
1 3-DICHLOROBENZENE	<10	<10	<10	ug/L
1 4-DICHLOROBENZENE	<10	<10	<10	ug/L
2 4 6-TRICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DIMETHYLPHENOL	<10	<10	<10	ug/L
2 4-DINITROPHENOL	<10	<10	<10	ug/L
2 4-DINITROTOLUENE	<10	<10	<10	ug/L
2 6-DINITROTOLUENE	<10	<10	<10	ug/L
2-CHLOROETHYLVINYL ETHER	<10	<10	<10	ug/L
2-CHLORONAPHTHALENE	<10	<10	<10	ug/L
2-CHLOROPHENOL	<10	<10	<10	ug/L
2-NITROPHENOL	<10	<10	<10	ug/L
3 3'-DICHLOROBENZIDINE	<20	<20	<20	ug/L
4 6-DINITRO-2-METHYLPHENOL	<50	<50	<50	ug/L
4-BROMOPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-CHLORO-3-METHYLPHENOL	<10	<10	<10	ug/L
4-CHLOROPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-NITROPHENOL	<50	<50	<50	ug/L
ACENAPHTHENE	<10	<10	<10	ug/L
ACENAPHTHYLENE	<10	<10	<10	ug/L
ALKALINITY	230.00	257	203	mg/L
ALPHA	8.00	10.9	5.1	pCi/L
ALUMINUM	0.1700	.24	<.1	mg/L
AMMONIA	<.2	<.2	<.2	mg/L
ANTHRACENE	<10	<10	<10	ug/L
ARSENIC	<.005	<.005	<.005	mg/L
BARIUM	<.1	<.1	<.1	mg/L
BENZENE	<5	<5	<5	ug/L
BENZIDINE	<10	<10	<10	ug/L
BENZO(A)ANTHRACENE	<10	<10	<10	ug/L
BENZO(A)PYRENE	<10	<10	<10	ug/L
BENZO(B)FLUORANTHENE	<10	<10	<10	ug/L
BENZO(G H I)PERYLENE	<10	<10	<10	ug/L
BENZO(K)FLUORANTHENE	<10	<10	<10	ug/L
BERYLLIUM	<.001	<.001	<.001	mg/L
BETA	3.65	4.3	<3	pCi/L
BHT	33.00	52	14	ug/L
BIS(2-CHLOROETHOXY)METHANE	<10	<10	<10	ug/L
BIS(2-CHLOROETHYL)ETHER	<10	<10	<10	ug/L

SD-850 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
BIS(2-CHLOROISOPROPYL)ETHER	<10	<10	<10	ug/L
BIS(2-ETHYLHEXYL)PHTHALATE	7.50	12	3	ug/L
BORON	0.0395	.045	.034	mg/L
BROMODICHLOROMETHANE	<5	<5	<5	ug/L
BROMOFORM	<5	<5	<5	ug/L
BROMOMETHANE	<10	<10	<10	ug/L
BUTYLBENZYLPHTHALATE	5.50	10	<1	ug/L
CADMIUM	<.003	<.003	<.003	mg/L
CALCIUM	85.00	87	83	mg/L
CARBON TETRACHLORIDE	<5	<5	<5	ug/L
CHEMICAL OXYGEN DEMAND (COD)	17.00	20	14	mg/L
CHLORIDE	<1	<1	<1	mg/L
CHLORINE TOTAL RESIDUAL WATER	<.1	<.1	<.1	mg/L
CHLOROBENZENE	<5	<5	<5	ug/L
CHLOROETHANE	<10	<10	<10	ug/L
CHLOROFORM	<5	<5	<5	ug/L
CHLOROMETHANE	<10	<10	<10	ug/L
CHROMIUM	<.01	<.01	<.01	mg/L
CHRYSENE	<10	<10	<10	ug/L
CIS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
COBALT	<.1	<.1	<.1	mg/L
CONDUCTIVITY	469.00	496	442	umho/cm
COPPER	<.004	<.004	<.004	mg/L
CYANIDE	<0.0020	<.002	<.002	mg/L
DI-N-BUTYLPHTHALATE	<10	<10	<10	ug/L
DI-N-OCTYLPHTHALATE	1.00	1	1	ug/L
DIACETONE ALCOHOL	14.00	18	10	ug/L
DIBENZ(A H)ANTHRACENE	<10	<10	<10	ug/L
DIBROMOCHLOROMETHANE	<5	<5	<5	ug/L
DIETHYLPHTHALATE	<10	<10	<10	ug/L
DIMETHYLPHTHALATE	<10	<10	<10	ug/L
DISSOLVED OXYGEN	10.40	10.5	10.3	ppm
ETHYLBENZENE	<5	<5	<5	ug/L
FLUORANTHENE	<10	<10	<10	ug/L
FLUORENE	<10	<10	<10	ug/L
FLUORIDE	0.1500	.2	.1	mg/L
HARDNESS	279.00	302	256	mg/L
HEXACHLOROBENZENE	<10	<10	<10	ug/L
HEXACHLOROBUTADIENE	<10	<10	<10	ug/L
HEXACHLOROCYCLOPENTADIENE	<10	<10	<10	ug/L
HEXACHLOROETHANE	<10	<10	<10	ug/L
INDENO(1 2 3-CD)PYRENE	<10	<10	<10	ug/L
IRON	0.2100	.37	<.05	mg/L
ISOPHORONE	<10	<10	<10	ug/L
LEAD	<.05	<.05	<.05	mg/L
LITHIUM	<.004	<.004	<.004	mg/L
MAGNESIUM	14.00	14	14	mg/L
MANGANESE	0.0445	.079	<.01	mg/L

SD-850 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
MERCURY	0.0003	.0003	<.0002	mg/L
METHYLENE CHLORIDE	<5	<5	<5	ug/L
MOLYBDENUM	<.01	<.01	<.01	mg/L
N-NITROSO-DI-N-PROPYLAMINE	<10	<10	<10	ug/L
N-NITROSODIMETHYLAMINE	<10	<10	<10	ug/L
N-NITROSODIPHENYLAMINE	<10	<10	<10	ug/L
NAPHTHALENE	<10	<10	<10	ug/L
NICKEL	<.05	<.05	<.05	mg/L
NIOBIUM	<.007	<.007	<.007	mg/L
NITRATE	1.20	1.9	<.5	mg/L
NITROBENZENE	<10	<10	<10	ug/L
OIL & GREASE	<2	<2	<2	mg/L
PCB (AROCLOR-1016)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1221)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1232)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1242)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1248)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1254)	<1	<1	<1	ug/L
PCB (AROCLOR-1260)	<1	<1	<1	ug/L
PENTACHLOROPHENOL	<50	<50	<50	ug/L
PH	8.10	8.2	8	
PHENANTHRENE	<10	<10	<10	ug/L
PHENOL	<10	<10	<10	ug/L
PHOSPHORUS	<.2	<.2	<.2	mg/L
POTASSIUM	1.60	2.1	1.1	mg/L
PYRENE	<10	<10	<10	ug/L
SELENIUM	<0.0050	<.005	<.005	mg/L
SILICON	2.70	2.8	2.6	mg/L
SILVER	<.01	<.01	<.01	mg/L
SODIUM	1.10	1.2	1	mg/L
STRONTIUM	0.1500	.17	.13	mg/L
SUBSTITUTED DIPHENYL PHOSPHATE	14.00	14	14	ug/L
SULFATE	52.50	57	48	mg/L
TEMPERATURE	12.00	13	11	Deg. C
TETRACHLOROETHENE	<5	<5	<5	ug/L
THORIUM	<.2	<.2	<.2	mg/L
TITANIUM	0.0049	.0069	<.003	mg/L
TOLUENE	<5	<5	<5	ug/L
TOTAL DISSOLVED SOLIDS	289.00	290	288	mg/L
TOTAL ORGANIC CARBON (TOC)	31.00	55	7	mg/L
TOTAL SUSPENDED SOLIDS	5.50	10	<1	mg/L
TRANS-1 2-DICHLOROETHENE	<5	<5	<5	ug/L
TRANS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
TRICHLOROETHENE	<5	<5	<5	ug/L
TURBIDITY	5.50	10	<1	NTU
UNKNOWN ALKYL/ALKOXY COMPOUND	7.00	7	7	ug/L
UNKNOWNS	19.00	19	19	ug/L
URANIUM	0.0930	.167	.019	mg/L

SD-850 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
VANADIUM	<.5	<.5	<.5	mg/L
VINYL CHLORIDE	<10	<10	<10	ug/L
ZINC	<.02	<.02	<.02	mg/L
ZIRCONIUM	<.005	<.005	<.005	mg/L

SD-880 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
1 1 1-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1 2 2-TETRACHLOROETHANE	<5	<5	<5	ug/L
1 1 2-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHENE	<5	<5	<5	ug/L
1 2 4-TRICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROBENZENE	<10	<10	<10	ug/L
1. 2-DICHLOROETHANE	<5	<5	<5	ug/L
1 2-DICHLOROPROPANE	<5	<5	<5	ug/L
1 3-DICHLOROBENZENE	<10	<10	<10	ug/L
1 4-DICHLOROBENZENE	<10	<10	<10	ug/L
2 4 6-TRICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DIMETHYLPHENOL	<10	<10	<10	ug/L
2 4-DINITROPHENOL	<10	<10	<10	ug/L
2 4-DINITROTOLUENE	<10	<10	<10	ug/L
2 6-DINITROTOLUENE	<10	<10	<10	ug/L
2-CHLOROETHYLVINYL ETHER	<10	<10	<10	ug/L
2-CHLORONAPHTHALENE	<10	<10	<10	ug/L
2-CHLOROPHENOL	<10	<10	<10	ug/L
2-NITROPHENOL	<10	<10	<10	ug/L
3 3'-DICHLOROBENZIDINE	<20	<20	<20	ug/L
4 6-DINITRO-2-METHYLPHENOL	<50	<50	<50	ug/L
4-BROMOPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-CHLORO-3-METHYLPHENOL	<10	<10	<10	ug/L
4-CHLOROPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-NITROPHENOL	<50	<50	<50	ug/L
ACENAPHTHENE	<10	<10	<10	ug/L
ACENAPHTHYLENE	<10	<10	<10	ug/L
ALKALINITY	132.00	160	104	mg/L
ALPHA	4.40	6.7	2.1	pCi/L
ALUMINUM	<.1	<.1	<.1	mg/L
AMMONIA	<.2	<.2	<.2	mg/L
ANTHRACENE	<10	<10	<10	ug/L
ARSENIC	<.005	<.005	<.005	mg/L
BARIUM	<.1	<.1	<.1	mg/L
BENZENE	<5	<5	<5	ug/L
BENZIDINE	<10	<10	<10	ug/L
BENZO(A)ANTHRACENE	<10	<10	<10	ug/L
BENZO(A)PYRENE	<10	<10	<10	ug/L
BENZO(B)FLUORANTHENE	<10	<10	<10	ug/L
BENZO(G H I)PERYLENE	<10	<10	<10	ug/L
BENZO(K)FLUORANTHENE	<10	<10	<10	ug/L
BERYLLIUM	<.001	<.001	<.001	mg/L
BETA	5.35	8.7	<2	pCi/L
BHT	10.00	10	10	ug/L
BIS(2-CHLOROETHOXY)METHANE	<10	<10	<10	ug/L
BIS(2-CHLOROETHYL)ETHER	<10	<10	<10	ug/L

SD-880 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
BIS(2-CHLOROISOPROPYL)ETHER	<10	<10	<10	ug/L
BIS(2-ETHYLHEXYL)PHTHALATE	8.00	10	<6	ug/L
BORON	0.0475	.05	.045	mg/L
BROMODICHLOROMETHANE	<5	<5	<5	ug/L
BROMOFORM	<5	<5	<5	ug/L
BROMOMETHANE	<10	<10	<10	ug/L
BUTYLBENZYLPHTHALATE	1.00	1	1	ug/L
CADMIUM	<.003	<.003	<.003	mg/L
CALCIUM	54.50	59	50	mg/L
CARBON TETRACHLORIDE	<5	<5	<5	ug/L
CHEMICAL OXYGEN DEMAND (COD)	6.00	7	<5	mg/L
CHLORIDE	2.15	2.2	2.1	mg/L
CHLORINE TOTAL RESIDUAL WATER	<.1	<.1	<.1	mg/L
CHLOROBENZENE	<5	<5	<5	ug/L
CHLOROETHANE	<10	<10	<10	ug/L
CHLOROFORM	<5	<5	<5	ug/L
CHLOROMETHANE	<10	<10	<10	ug/L
CHROMIUM	<.01	<.01	<.01	mg/L
CHRYSENE	<10	<10	<10	ug/L
CIS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
COBALT	<.1	<.1	<.1	mg/L
CONDUCTIVITY	365.50	391	340	umho/cm
COPPER	<.004	<.004	<.004	mg/L
CYANIDE	<0.0020	<.002	<.002	mg/L
DI-N-BUTYLPHTHALATE	<10	<10	<10	ug/L
DI-N-OCTYLPHTHALATE	5.50	10	<1	ug/L
DIACETONE ALCOHOL	13.00	13	13	ug/L
DIBENZ(A H)ANTHRACENE	<10	<10	<10	ug/L
DIBROMOCHLOROMETHANE	<5	<5	<5	ug/L
DIETHYLPHTHALATE	6.00	10	<2	ug/L
DIMETHYLPHTHALATE	<10	<10	<10	ug/L
DISSOLVED OXYGEN	11.60	11.8	11.4	ppm
ETHYLBENZENE	<5	<5	<5	ug/L
FLUORANTHENE	<10	<10	<10	ug/L
FLUORENE	<10	<10	<10	ug/L
FLUORIDE	0.1500	.2	.1	mg/L
HARDNESS	305.00	426	184	mg/L
HEXACHLOROBENZENE	<10	<10	<10	ug/L
HEXACHLOROBUTADIENE	<10	<10	<10	ug/L
HEXACHLOROCYCLOPENTADIENE	<10	<10	<10	ug/L
HEXACHLOROETHANE	<10	<10	<10	ug/L
INDENO(1 2 3-CD)PYRENE	<10	<10	<10	ug/L
IRON	0.0655	.081	<.05	mg/L
ISOPHORONE	<10	<10	<10	ug/L
LEAD	<.05	<.05	<.05	mg/L
LITHIUM	<.004	<.004	<.004	mg/L
MAGNESIUM	9.35	10	8.7	mg/L
MANGANESE	0.0275	.035	.02	mg/L

SD-880 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
MERCURY	<.0002	<.0002	<.0002	mg/L
METHYLENE CHLORIDE	<5	<5	<5	ug/L
MOLYBDENUM	0.0115	.013	<.01	mg/L
N-NITROSO-DI-N-PROPYLAMINE	<10	<10	<10	ug/L
N-NITROSODIMETHYLAMINE	<10	<10	<10	ug/L
N-NITROSODIPHENYLAMINE	<10	<10	<10	ug/L
NAPHTHALENE	<10	<10	<10	ug/L
NICKEL	<.05	<.05	<.05	mg/L
NIOBIUM	<.007	<.007	<.007	mg/L
NITRATE	1.49	2.3	.67	mg/L
NITROBENZENE	<10	<10	<10	ug/L
OIL & GREASE	<2	<2	<2	mg/L
PCB (AROCLOR-1016)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1221)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1232)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1242)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1248)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1254)	<1	<1	<1	ug/L
PCB (AROCLOR-1260)	<1	<1	<1	ug/L
PENTACHLOROPHENOL	<50	<50	<50	ug/L
PH	7.75	7.8	7.7	
PHENANTHRENE	<10	<10	<10	ug/L
PHENOL	<10	<10	<10	ug/L
PHOSPHORUS	<.2	<.2	<.2	mg/L
POTASSIUM	2.00	2.6	1.4	mg/L
PROMETON	1.00	1	1	ug/L
PYRENE	<10	<10	<10	ug/L
SELENIUM	<0.0050	<.005	<.005	mg/L
SILICON	2.40	2.6	2.2	mg/L
SILVER	<.01	<.01	<.01	mg/L
SODIUM	1.75	1.8	1.7	mg/L
STRONTIUM	0.0880	.1	.076	mg/L
SUBSTITUTED DIPHENYL PHOSPHATE	6.00	6	6	ug/L
SULFATE	68.00	73	63	mg/L
TEMPERATURE	11.50	13	10	Deg. C
TETRACHLOROETHENE	<5	<5	<5	ug/L
THORIUM	<.2	<.2	<.2	mg/L
TITANIUM	0.0036	.0041	<.003	mg/L
TOLUENE	<5	<5	<5	ug/L
TOTAL DISSOLVED SOLIDS	222.00	238	206	mg/L
TOTAL ORGANIC CARBON (TOC)	21.00	35	7	mg/L
TOTAL SUSPENDED SOLIDS	<1.00	<1	<1	mg/L
TRANS-1 2-DICHLOROETHENE	<5	<5	<5	ug/L
TRANS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
TRICHLOROETHENE	<5	<5	<5	ug/L
TURBIDITY	1.00	1	1	NTU
UNKNOWN ALKYL/ALKOXY COMPOUNDS	7.00	7	7	ug/L
UNKNOWNS	11.00	11	11	ug/L

SD-880 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
URANIUM	0.0045	.005	.004	mg/L
VANADIUM	<.5	<.5	<.5	mg/L
VINYL CHLORIDE	<10	<10	<10	ug/L
ZINC	0.0230	.026	<.02	mg/L
ZIRCONIUM	<.005	<.005	<.005	mg/L

SD-890 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
1 1 1-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1 2 2-TETRACHLOROETHANE	<5	<5	<5	ug/L
1 1 2-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHENE	<5	<5	<5	ug/L
1 2 4-TRICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROETHANE	<5	<5	<5	ug/L
1 2-DICHLOROPROPANE	<5	<5	<5	ug/L
1 3-DICHLOROBENZENE	<10	<10	<10	ug/L
1 4-DICHLOROBENZENE	<10	<10	<10	ug/L
2 4 6-TRICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DIMETHYLPHENOL	<10	<10	<10	ug/L
2 4-DINITROPHENOL	<10	<10	<10	ug/L
2 4-DINITROTOLUENE	<10	<10	<10	ug/L
2 6-DINITROTOLUENE	<10	<10	<10	ug/L
2-CHLOROETHYLVINYL ETHER	<10	<10	<10	ug/L
2-CHLORONAPHTHALENE	<10	<10	<10	ug/L
2-CHLOROPHENOL	<10	<10	<10	ug/L
2-NITROPHENOL	<10	<10	<10	ug/L
3 3'-DICHLOROBENZIDINE	<20	<20	<20	ug/L
4 6-DINITRO-2-METHYLPHENOL	<50	<50	<50	ug/L
4-BROMOPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-CHLORO-3-METHYLPHENOL	<10	<10	<10	ug/L
4-CHLOROPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-NITROPHENOL	<50	<50	<50	ug/L
ACENAPHTHENE	<10	<10	<10	ug/L
ACENAPHTHYLENE	<10	<10	<10	ug/L
ALKALINITY	230.00	230	230	mg/L
ALPHA	3.70	3.7	3.7	pCi/L
ALUMINUM	<.1	<.1	<.1	mg/L
AMMONIA	<.2	<.2	<.2	mg/L
ANTHRACENE	<10	<10	<10	ug/L
ARSENIC	<.005	<.005	<.005	mg/L
BARIUM	<.1	<.1	<.1	mg/L
BENZENE	<5	<5	<5	ug/L
BENZIDINE	<10	<10	<10	ug/L
BENZO(A)ANTHRACENE	<10	<10	<10	ug/L
BENZO(A)PYRENE	<10	<10	<10	ug/L
BENZO(B)FLUORANTHENE	<10	<10	<10	ug/L
BENZO(G H I)PERYLENE	<10	<10	<10	ug/L
BENZO(K)FLUORANTHENE	<10	<10	<10	ug/L
BERYLLIUM	<.001	<.001	<.001	mg/L
BETA	2.50	2.5	2.5	pCi/L
BHT	5.00	5	5	ug/L
BIS(2-CHLOROETHOXY)METHANE	<10	<10	<10	ug/L
BIS(2-CHLOROETHYL)ETHER	<10	<10	<10	ug/L

SD-890 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
BIS(2-CHLOROISOPROPYL)ETHER	<10	<10	<10	ug/L
BIS(2-ETHYLHEXYL)PHTHALATE	4.00	4	4	ug/L
BORON	0.0730	.073	.073	mg/L
BROMODICHLOROMETHANE	<5	<5	<5	ug/L
BROMOFORM	<5	<5	<5	ug/L
BROMOMETHANE	<10	<10	<10	ug/L
BUTYLBENZYLPHTHALATE	<10	<10	<10	ug/L
CADMIUM	<.003	<.003	<.003	mg/L
CALCIUM	110.00	110	110	mg/L
CARBON TETRACHLORIDE	<5	<5	<5	ug/L
CHEMICAL OXYGEN DEMAND (COD)	<5	<5	<5	mg/L
CHLORIDE	1.80	1.8	1.8	mg/L
CHLORINE TOTAL RESIDUAL WATER	<.1	<.1	<.1	mg/L
CHLOROBENZENE	<5	<5	<5	ug/L
CHLOROETHANE	<10	<10	<10	ug/L
CHLOROFORM	<5	<5	<5	ug/L
CHLOROMETHANE	<10	<10	<10	ug/L
CHROMIUM	<.01	<.01	<.01	mg/L
CHRYSENE	<10	<10	<10	ug/L
CIS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
COBALT	<.1	<.1	<.1	mg/L
CONDUCTIVITY	172.00	172	172	umho/cm
COPPER	<.004	<.004	<.004	mg/L
CYANIDE	0.0040	.004	.004	mg/L
DI-N-BUTYLPHTHALATE	<10	<10	<10	ug/L
DI-N-OCTYLPHTHALATE	<10	<10	<10	ug/L
DIACETONE ALCOHOL	11.00	11	11	ug/L
DIBENZ(A H)ANTHRACENE	<10	<10	<10	ug/L
DIBROMOCHLOROMETHANE	<5	<5	<5	ug/L
DIETHYLPHTHALATE	<10	<10	<10	ug/L
DIMETHYLPHTHALATE	<10	<10	<10	ug/L
DISSOLVED OXYGEN	10.50	10.5	10.5	ppm
ETHYLBENZENE	<5	<5	<5	ug/L
FLUORANTHENE	<10	<10	<10	ug/L
FLUORENE	<10	<10	<10	ug/L
FLUORIDE	0.1000	.1	.1	mg/L
HARDNESS	100.00	100	100	mg/L
HEXACHLOROBENZENE	<10	<10	<10	ug/L
HEXACHLOROBUTADIENE	<10	<10	<10	ug/L
HEXACHLOROCYCLOPENTADIENE	<10	<10	<10	ug/L
HEXACHLOROETHANE	<10	<10	<10	ug/L
INDENO(1 2 3-CD)PYRENE	<10	<10	<10	ug/L
IRON	0.8600	.86	.86	mg/L
ISOPHORONE	<10	<10	<10	ug/L
LEAD	<.05	<.05	<.05	mg/L
LITHIUM	<.004	<.004	<.004	mg/L
MAGNESIUM	23.00	23	23	mg/L
MANGANESE	0.3200	.32	.32	mg/L

SD-890 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
MERCURY	<.0002	<.0002	<.0002	mg/L
METHYLENE CHLORIDE	<5	<5	<5	ug/L
MOLYBDENUM	<.01	<.01	<.01	mg/L
N-NITROSO-DI-N-PROPYLAMINE	<10	<10	<10	ug/L
N-NITROSODIMETHYLAMINE	<10	<10	<10	ug/L
N-NITROSODIPHENYLAMINE	<10	<10	<10	ug/L
NAPHTHALENE	<10	<10	<10	ug/L
NICKEL	<.05	<.05	<.05	mg/L
NIOBIUM	<.007	<.007	<.007	mg/L
NITRATE	8.70	8.7	8.7	mg/L
NITROBENZENE	<10	<10	<10	ug/L
OIL & GREASE	<2	<2	<2	mg/L
PCB (AROCLOR-1016)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1221)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1232)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1242)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1248)	<.5	<.5	<.5	ug/L
PCB (AROCLOR-1254)	<1	<1	<1	ug/L
PCB (AROCLOR-1260)	<1	<1	<1	ug/L
PENTACHLOROPHENOL	<50	<50	<50	ug/L
PH	7.50	7.5	7.5	
PHENANTHRENE	<10	<10	<10	ug/L
PHENOL	<10	<10	<10	ug/L
PHOSPHORUS	<.2	<.2	<.2	mg/L
POTASSIUM	1.20	1.2	1.2	mg/L
PROMETON	2.00	2	2	ug/L
PYRENE	<10	<10	<10	ug/L
SELENIUM	0.0050	.005	.005	mg/L
SILICON	2.10	2.1	2.1	mg/L
SILVER	<.01	<.01	<.01	mg/L
SODIUM	1.60	1.6	1.6	mg/L
STRONTIUM	0.1700	.17	.17	mg/L
SULFATE	171.00	171	171	mg/L
TEMPERATURE	10.00	10	10	Deg. C
TETRACHLOROETHENE	<5	<5	<5	ug/L
THORIUM	<.2	<.2	<.2	mg/L
TITANIUM	<.003	<.003	<.003	mg/L
TOLUENE	<5	<5	<5	ug/L
TOTAL DISSOLVED SOLIDS	420.00	420	420	mg/L
TOTAL ORGANIC CARBON (TOC)	40.00	40	40	mg/L
TOTAL SUSPENDED SOLIDS	1.00	1	1	mg/L
TRANS-1 2-DICHLOROETHENE	<5	<5	<5	ug/L
TRANS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
TRICHLOROETHENE	<5	<5	<5	ug/L
TURBIDITY	3.00	3	3	NTU
URANIUM	0.0050	.005	.005	mg/L
VANADIUM	<.5	<.5	<.5	mg/L
VINYL CHLORIDE	<10	<10	<10	ug/L

SD-890 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
ZINC	<.02	<.02	<.02	mg/L
ZIRCONIUM	<.005	<.005	<.005	mg/L

SD-992 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
1 1 1-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1 2 2-TETRACHLOROETHANE	<5	<5	<5	ug/L
1 1 2-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHENE	<5	<5	<5	ug/L
1 2 4-TRICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROETHANE	<5	<5	<5	ug/L
1 2-DICHLOROPROPANE	<5	<5	<5	ug/L
1 3-DICHLOROBENZENE	<10	<10	<10	ug/L
1 4-DICHLOROBENZENE	<10	<10	<10	ug/L
2 4 6-TRICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DIMETHYLPHENOL	<10	<10	<10	ug/L
2 4-DINITROPHENOL	<10	<10	<10	ug/L
2 4-DINITROTOLUENE	<10	<10	<10	ug/L
2 6-DINITROTOLUENE	<10	<10	<10	ug/L
2-CHLOROETHYLVINYL ETHER	<10	<10	<10	ug/L
2-CHLORONAPHTHALENE	<10	<10	<10	ug/L
2-CHLOROPHENOL	<10	<10	<10	ug/L
2-NITROPHENOL	<10	<10	<10	ug/L
3 3'-DICHLOROBENZIDINE	<20	<20	<20	ug/L
4 6-DINITRO-2-METHYLPHENOL	<50	<50	<50	ug/L
4-BROMOPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-CHLORO-3-METHYLPHENOL	<10	<10	<10	ug/L
4-CHLOROPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-NITROPHENOL	<50	<50	<50	ug/L
ACENAPHTHENE	<10	<10	<10	ug/L
ACENAPHTHYLENE	<10	<10	<10	ug/L
ALKALINITY	<1	<1	<1	mg/L
ALPHA	9.00	13	5	pCi/L
ALUMINUM	40.50	44	37	mg/L
AMMONIA	0.2500	.3	<.2	mg/L
ANTHRACENE	<10	<10	<10	ug/L
ARSENIC	0.0460	.055	.037	mg/L
BARIUM	<.1	<.1	<.1	mg/L
BENZENE	<5	<5	<5	ug/L
BENZIDINE	<10	<10	<10	ug/L
BENZO(A)ANTHRACENE	<10	<10	<10	ug/L
BENZO(A)PYRENE	<10	<10	<10	ug/L
BENZO(B)FLUORANTHENE	<10	<10	<10	ug/L
BENZO(G H I)PERYLENE	<10	<10	<10	ug/L
BENZO(K)FLUORANTHENE	<10	<10	<10	ug/L
BERYLLIUM	0.0053	.0055	.005	mg/L
BETA	12.50	13	12	pCi/L
BIS(2-CHLOROETHOXY)METHANE	<10	<10	<10	ug/L
BIS(2-CHLOROETHYL)ETHER	<10	<10	<10	ug/L
BIS(2-CHLOROISOPROPYL)ETHER	<10	<10	<10	ug/L

SD-992 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
BIS(2-ETHYLHEXYL)PHTHALATE	<10	<10	<10	ug/L
BORON	0.5650	.64	.49	mg/L
BROMODICHLOROMETHANE	<5	<5	<5	ug/L
BROMOFORM	<5	<5	<5	ug/L
BROMOMETHANE	<10	<10	<10	ug/L
BUTYLBENZYLPHTHALATE	<10	<10	<10	ug/L
CADMIUM	<.003	<.003	<.003	mg/L
CALCIUM	120.00	130	110	mg/L
CARBON TETRACHLORIDE	<5	<5	<5	ug/L
CHEMICAL OXYGEN DEMAND (COD)	5.50	6	<5	mg/L
CHLORIDE	<10	<10	<10	mg/L
CHLORINE TOTAL RESIDUAL WATER	0.6000	.7	.5	mg/L
CHLOROBENZENE	<5	<5	<5	ug/L
CHLOROETHANE	<10	<10	<10	ug/L
CHLOROFORM	<5	<5	<5	ug/L
CHLOROMETHANE	<10	<10	<10	ug/L
CHROMIUM	0.0135	.017	<.01	mg/L
CHRYSENE	<10	<10	<10	ug/L
CIS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
COBALT	<.1	<.1	<.1	mg/L
CONDUCTIVITY	1845.00	2060	1630	umho/cm
COPPER	0.0285	.043	.014	mg/L
CYANIDE	0.0025	.003	<.002	mg/L
DI-N-BUTYLPHTHALATE	<10	<10	<10	ug/L
DI-N-OCTYLPHTHALATE	<10	<10	<10	ug/L
DIACETONE ALCOHOL	2.00	2	2	ug/L
DIBENZ(A H)ANTHRACENE	<10	<10	<10	ug/L
DIBROMOCHLOROMETHANE	<5	<5	<5	ug/L
DIETHYLPHTHALATE	<10	<10	<10	ug/L
DIMETHYLPHTHALATE	<10	<10	<10	ug/L
DISSOLVED OXYGEN	17.60	20	15.2	ppm
ETHYLBENZENE	<5	<5	<5	ug/L
FLUORANTHENE	<10	<10	<10	ug/L
FLUORENE	<10	<10	<10	ug/L
FLUORIDE	0.1500	.2	.1	mg/L
HARDNESS	347.50	363	332	mg/L
HEXACHLOROBENZENE	<10	<10	<10	ug/L
HEXACHLOROBUTADIENE	<10	<10	<10	ug/L
HEXACHLOROCYCLOPENTADIENE	<10	<10	<10	ug/L
HEXACHLOROETHANE	<10	<10	<10	ug/L
INDENO(1 2 3-CD)PYRENE	<10	<10	<10	ug/L
IRON	82.00	86	78	mg/L
ISOPHORONE	<10	<10	<10	ug/L
LEAD	<.05	<.05	<.05	mg/L
LITHIUM	0.1100	.12	.1	mg/L
MAGNESIUM	13.50	15	12	mg/L
MANGANESE	4.05	4.4	3.7	mg/L
MERCURY	0.0003	.0003	<.0002	mg/L

SD-992 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
METHYLENE CHLORIDE	<5	<5	<5	ug/L
MOLYBDENUM	<.01	<.01	<.01	mg/L
N-NITROSO-DI-N-PROPYLAMINE	<10	<10	<10	ug/L
N-NITROSODIMETHYLAMINE	<10	<10	<10	ug/L
N-NITROSODIPHENYLAMINE	<10	<10	<10	ug/L
NAPHTHALENE	<10	<10	<10	ug/L
NICKEL	0.0590	.063	.055	mg/L
NIOBIUM	0.0076	.0082	<.007	mg/L
NITRATE	<10	<10	<10	mg/L
NITROBENZENE	<10	<10	<10	ug/L
OIL & GREASE	<2	<2	<2	mg/L
PCB (AROCLOR-1016)	<1	<1	<1	ug/L
PCB (AROCLOR-1221)	<1	<1	<1	ug/L
PCB (AROCLOR-1232)	<1	<1	<1	ug/L
PCB (AROCLOR-1242)	<1	<1	<1	ug/L
PCB (AROCLOR-1248)	<1	<1	<1	ug/L
PCB (AROCLOR-1254)	<1	<1	<1	ug/L
PCB (AROCLOR-1260)	<1	<1	<1	ug/L
PENTACHLOROPHENOL	<50	<50	<50	ug/L
PH	2.55	2.6	2.5	
PHENANTHRENE	<10	<10	<10	ug/L
PHENOL	<10	<10	<10	ug/L
PHOSPHORUS	<.2	<.2	<.2	mg/L
POTASSIUM	7.50	8.4	6.6	mg/L
PYRENE	<10	<10	<10	ug/L
SELENIUM	<0.0050	<.005	<.005	mg/L
SILICON	21.00	22	20	mg/L
SILVER	<.01	<.01	<.01	mg/L
SODIUM	2.75	2.9	2.6	mg/L
STRONTIUM	1.40	1.5	1.3	mg/L
SULFATE	1080.50	1280	881	mg/L
TEMPERATURE	9.10	10	8.2	Deg. C
TETRACHLOROETHENE	<5	<5	<5	ug/L
THORIUM	<.2	<.2	<.2	mg/L
TITANIUM	0.0670	.07	.064	mg/L
TOLUENE	<5	<5	<5	ug/L
TOTAL DISSOLVED SOLIDS	1284.00	1320	1248	mg/L
TOTAL ORGANIC CARBON (TOC)	7.50	10	5	mg/L
TOTAL SUSPENDED SOLIDS	76.00	112	40	mg/L
TRANS-1 2-DICHLOROETHENE	<5	<5	<5	ug/L
TRANS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
TRICHLOROETHENE	<5	<5	<5	ug/L
TURBIDITY	49.50	82	17	NTU
UNKNOWNS	7.00	7	7	ug/L
URANIUM	0.0075	.009	.006	mg/L
VANADIUM	<.5	<.5	<.5	mg/L
VINYL CHLORIDE	<10	<10	<10	ug/L
ZINC	0.1055	.12	.091	mg/L

SD-992 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
ZIRCONIUM	<.005	<.005	<.005	mg/L

SD-994 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
1 1 1-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1 2 2-TETRACHLOROETHANE	<5	<5	<5	ug/L
1 1 2-TRICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHANE	<5	<5	<5	ug/L
1 1-DICHLOROETHENE	<5	<5	<5	ug/L
1 2 4-TRICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROBENZENE	<10	<10	<10	ug/L
1 2-DICHLOROETHANE	<5	<5	<5	ug/L
1 2-DICHLOROPROPANE	<5	<5	<5	ug/L
1 3-DICHLOROBENZENE	<10	<10	<10	ug/L
1 4-DICHLOROBENZENE	<10	<10	<10	ug/L
2 4 6-TRICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DICHLOROPHENOL	<10	<10	<10	ug/L
2 4-DIMETHYLPHENOL	<10	<10	<10	ug/L
2 4-DINITROPHENOL	<10	<10	<10	ug/L
2 4-DINITROTOLUENE	<10	<10	<10	ug/L
2 6-DINITROTOLUENE	<10	<10	<10	ug/L
2-BUTANONE	10.00	10	10	ug/L
2-CHLOROETHYLVINYL ETHER	<10	<10	<10	ug/L
2-CHLORONAPHTHALENE	<10	<10	<10	ug/L
2-CHLOROPHENOL	<10	<10	<10	ug/L
2-NITROPHENOL	<10	<10	<10	ug/L
3 3'-DICHLOROBENZIDINE	<20	<20	<20	ug/L
4 6-DINITRO-2-METHYLPHENOL	<50	<50	<50	ug/L
4-BROMOPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-CHLORO-3-METHYLPHENOL	<10	<10	<10	ug/L
4-CHLOROPHENYL-PHENYLETHER	<10	<10	<10	ug/L
4-NITROPHENOL	<50	<50	<50	ug/L
ACENAPHTHENE	<10	<10	<10	ug/L
ACENAPHTHYLENE	<10	<10	<10	ug/L
ALKALINITY	128.00	128	128	mg/L
ALPHA	<1	<1	<1	pCi/L
ALUMINUM	<.1	<.1	<.1	mg/L
AMMONIA	<.2	<.2	<.2	mg/L
ANTHRACENE	<10	<10	<10	ug/L
ARSENIC	<.005	<.005	<.005	mg/L
BARIUM	<.1	<.1	<.1	mg/L
BENZENE	<5	<5	<5	ug/L
BENZIDINE	<10	<10	<10	ug/L
BENZO(A)ANTHRACENE	<10	<10	<10	ug/L
BENZO(A)PYRENE	<10	<10	<10	ug/L
BENZO(B)FLUORANTHENE	<10	<10	<10	ug/L
BENZO(G H I)PERYLENE	<10	<10	<10	ug/L
BENZO(K)FLUORANTHENE	<10	<10	<10	ug/L
BERYLLIUM	<.001	<.001	<.001	mg/L
BETA	3.50	5	2	pCi/L
BIS(2-CHLOROETHOXY)METHANE	<10	<10	<10	ug/L
BIS(2-CHLOROETHYL)ETHER	<10	<10	<10	ug/L

SD-994 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
BIS(2-CHLOROISOPROPYL)ETHER	<10	<10	<10	ug/L
BIS(2-ETHYLHEXYL)PHTHALATE	2.50	3	2	ug/L
BORON	0.0775	.093	.062	mg/L
BROMODICHLOROMETHANE	<5	<5	<5	ug/L
BROMOFORM	<5	<5	<5	ug/L
BROMOMETHANE	<10	<10	<10	ug/L
BUTYL CARBITOL	990.00	990	990	ug/L
BUTYLBENZYLPHTHALATE	<10	<10	<10	ug/L
CADMIUM	<.003	<.003	<.003	mg/L
CALCIUM	70.00	71	69	mg/L
CARBON TETRACHLORIDE	<5	<5	<5	ug/L
CHEMICAL OXYGEN DEMAND (COD)	<5	<5	<5	mg/L
CHLORIDE	<1	<1	<1	mg/L
CHLORINE TOTAL RESIDUAL WATER	<.1	<.1	<.1	mg/L
CHLOROBENZENE	<5	<5	<5	ug/L
CHLOROETHANE	<10	<10	<10	ug/L
CHLOROFORM	4.00	5	<3	ug/L
CHLOROMETHANE	<10	<10	<10	ug/L
CHROMIUM	<.01	<.01	<.01	mg/L
CHRYSENE	<10	<10	<10	ug/L
CIS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
COBALT	<.1	<.1	<.1	mg/L
CONDUCTIVITY	449.50	459	440	umho/cm
COPPER	0.0140	.024	<.004	mg/L
CYANIDE	<0.0020	<.002	<.002	mg/L
DI-N-BUTYLPHTHALATE	<10	<10	<10	ug/L
DI-N-OCTYLPHTHALATE	<10	<10	<10	ug/L
DIACETONE ALCOHOL	11.00	11	11	ug/L
DIBENZ(A H)ANTHRACENE	<10	<10	<10	ug/L
DIBROMOCHLOROMETHANE	<5	<5	<5	ug/L
DIETHYLPHTHALATE	<10	<10	<10	ug/L
DIMETHYLPHTHALATE	<10	<10	<10	ug/L
DISSOLVED OXYGEN	13.40	14.3	12.5	ppm
ETHYLBENZENE	<5	<5	<5	ug/L
FLUORANTHENE	<10	<10	<10	ug/L
FLUORENE	<10	<10	<10	ug/L
FLUORIDE	0.2000	.3	.1	mg/L
HARDNESS	254.50	261	248	mg/L
HEXACHLOROBENZENE	<10	<10	<10	ug/L
HEXACHLOROBUTADIENE	<10	<10	<10	ug/L
HEXACHLOROCYCLOPENTADIENE	<10	<10	<10	ug/L
HEXACHLOROETHANE	<10	<10	<10	ug/L
INDENO(1 2 3-CD)PYRENE	<10	<10	<10	ug/L
IRON	0.1950	.34	<.05	mg/L
ISOPHORONE	<10	<10	<10	ug/L
LEAD	<.05	<.05	<.05	mg/L
LITHIUM	<.004	<.004	<.004	mg/L
MAGNESIUM	14.50	16	13	mg/L

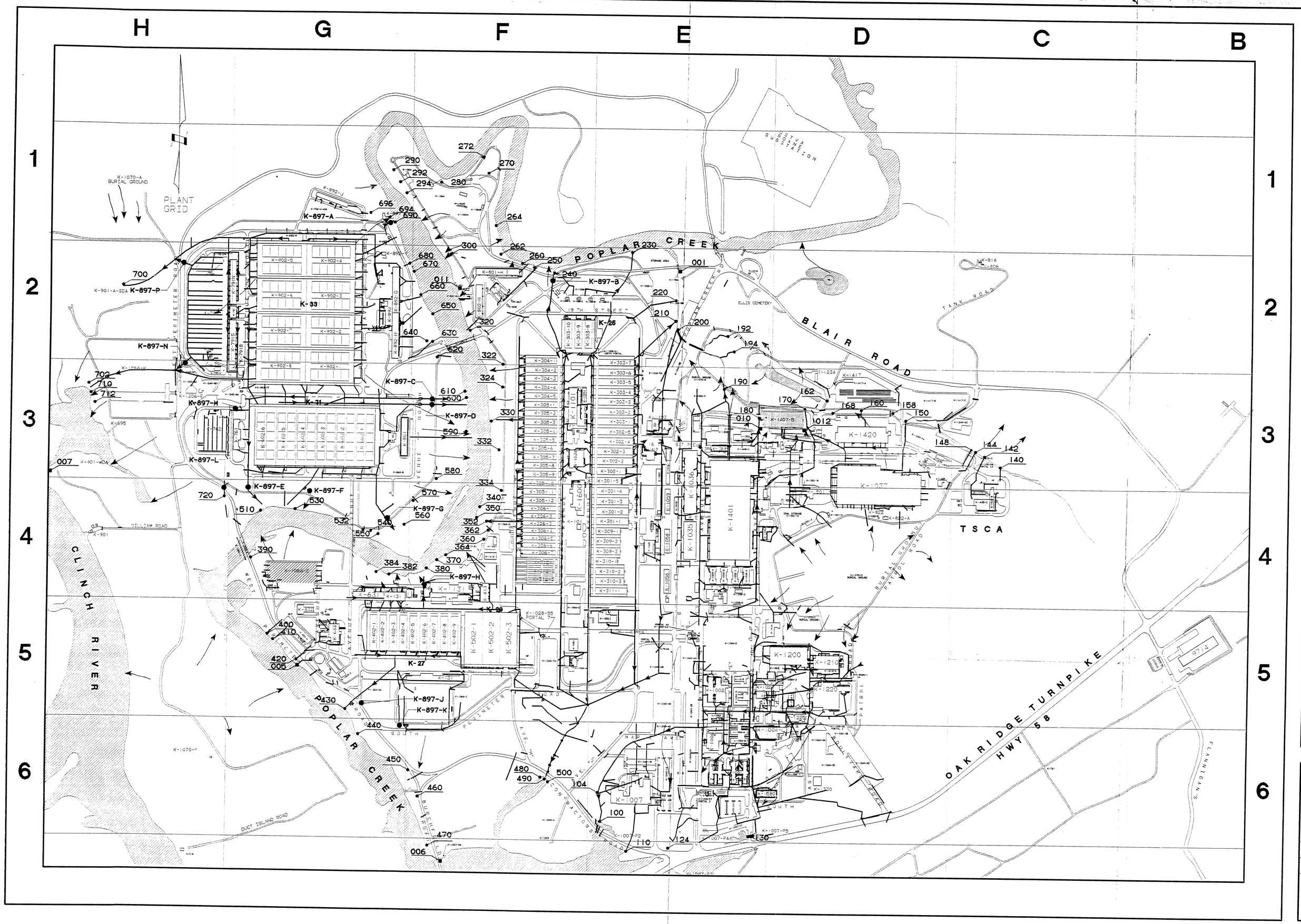
SD-994 Analytical Results Summary

Parameter	Concentration Average	Maximun	Minimun	Units
MANGANESE	<.01	<.01	<.01	mg/L
MERCURY	<.0002	<.0002	<.0002	mg/L
METHYLENE CHLORIDE	<5	<5	<5	ug/L
MOLYBDENUM	<0.0100	<.01	<.01	mg/L
N-NITROSO-DI-N-PROPYLAMINE	<10	<10	<10	ug/L
N-NITROSODIMETHYLAMINE	<10	<10	<10	ug/L
N-NITROSODIPHENYLAMINE	<10	<10	<10	ug/L
NAPHTHALENE	<10	<10	<10	ug/L
NICKEL	<.05	<.05	<.05	mg/L
NIOBIUM	0.0090	.011	<.007	mg/L
NITRATE	<1	<1	<1	mg/L
NITROBENZENE	<10	<10	<10	ug/L
OIL & GREASE	<2	<2	<2	mg/L
PCB (AROCLOR-1016)	<1	<1	<1	ug/L
PCB (AROCLOR-1221)	<1	<1	<1	ug/L
PCB (AROCLOR-1232)	<1	<1	<1	ug/L
PCB (AROCLOR-1242)	<1	<1	<1	ug/L
PCB (AROCLOR-1248)	<1	<1	<1	ug/L
PCB (AROCLOR-1254)	<1	<1	<1	ug/L
PCB (AROCLOR-1260)	<1	<1	<1	ug/L
PENTACHLOROPHENOL	<50	<50	<50	ug/L
PH	7.95	8	7.9	
PHENANTHRENE	<10	<10	<10	ug/L
PHENOL	<10	<10	<10	ug/L
PHOSPHORUS	<.2	<.2	<.2	mg/L
POTASSIUM	2.35	2.4	2.3	mg/L
PROMETON	1.00	1	1	ug/L
PYRENE	<10	<10	<10	ug/L
SELENIUM	<0.0050	<.005	<.005	mg/L
SILICON	3.40	3.7	3.1	mg/L
SILVER	<.01	<.01	<.01	mg/L
SODIUM	0.8050	.88	.73	mg/L
STRONTIUM	0.2550	.26	.25	mg/L
SULFATE	127.00	129	125	mg/L
TEMPERATURE	10.25	12.5	8	Deg. C
TETRACHLOROETHENE	<5	<5	<5	ug/L
THORIUM	<.2	<.2	<.2	mg/L
TITANIUM	<.003	<.003	<.003	mg/L
TOLUENE	3.00	5	<1	ug/L
TOTAL DISSOLVED SOLIDS	309.00	314	304	mg/L
TOTAL ORGANIC CARBON (TOC)	9.50	15	4	mg/L
TOTAL SUSPENDED SOLIDS	<1.00	<1	<1	g/L
TRANS-1 2-DICHLOROETHENE	<5	<5	<5	ug/L
TRANS-1 3-DICHLOROPROPENE	<5	<5	<5	ug/L
TRICHLOROETHENE	<5	<5	<5	ug/L
TURBIDITY	<1	<1	<1	NTU
UNKNOWN ALCOHOLS	75.00	75	75	ug/L
URANIUM	0.0045	.005	.004	mg/L

SD-994 Analytical Results Summary

Parameter	Concentration Average	Maximum	Minimum	Units
VANADIUM	<.5	<.5	<.5	mg/L
VINYL CHLORIDE	<10	<10	<10	ug/L
ZINC	<.02	<.02	<.02	mg/L
ZIRCONIUM	<.005	<.005	<.005	ug/L

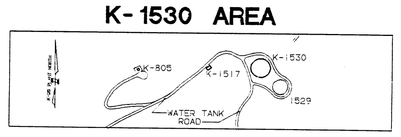
K-25 SITE STORM DRAIN SURVEY



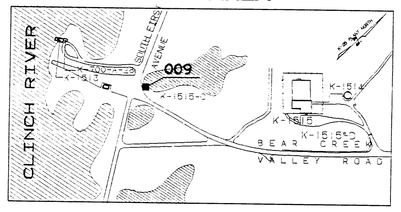
LEGEND:

- STORM DRAIN LINES
- 990 — STORM DRAIN DISCHARGE POINT
- 990 — NPDES OUTFALLS
- SURFACE WATER RUN OFF FLOW PATH
- OIL CONTAINMENT PITS

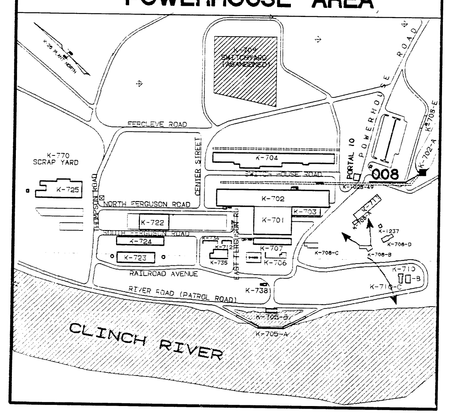
K-1530 AREA



K-1515 AREA



POWERHOUSE AREA



MARTIN MARIETTA ENERGY SYSTEMS, INC.

DOE FIELD OFFICES OAK RIDGE, TENNESSEE • PADUCAH, KENTUCKY

K-25 SITE STORM DRAIN LINES
DISCHARGE POINTS AND
RUN OFF FLOW PATHS

PES/200/081991	(REV 0)
PREPARED BY PES GEODATA GROUP	8/19/91

SCALE 0 400 800 1600 FEET — THE GRID AND COORDINATES AS SHOWN REPRESENT THE K-25 PLANT GRID SYSTEM — NORTH / PLANT GRID

#535

ORNL Information - Tab G Water Resources

1. Surface Water Usage G.1

Approximately 4 MGD from DOE Filtration Plant (Potable and Process Supply Water)

Approximately 0.0016 MGD (Spring water for Aquatic Ecology Aquaria)

2. Volume of all Lakes Etc. G.3

See attachment 1.

3. All Discharges From Onsite Operations to Surface Waters G.7

1986 Annual Environmental Surveillance Report contains ORNL information on pp. 137-143, 155, 161-164, 223-235

1987: (Volume 2) pp. 75-133

1988: (Volume 2) pp. 61-62, 83-105

1989: (Volume 2) pp. 66-67, 100-118

1990: (Volume 2) pp. 70-71, 102-120

4. Non-Planned Discharges for Last Five Years, Including Overflows G.9

See Atachment 2.

G.3

SURFACE IMPOUNDMENT LISTING (FERC INFO REQUEST)

Oak Ridge National Laboratory

			Ac-ft
Melton Valley Impoundments HFIR Pond 7905 (Emergency Use Only)	7905 = 240K gal	1	0.74
HFIR/REDC Impoundments 7906, 7907, 7908 (Out of Service)	7906 = 500K gal 7907 = 50K gal 7908 50K gal	3	1.84 a.
SWSA 5 Impoundment (Out of Service)	(7835) = 432,401 gal	1	1.33 a
Emergency Retention Basin (East of SWSA 6) (Status?)	(7821) = 1.5×10^7 gal	1	46.03
? Well Drilling Steam Cleaning Impoundments	3 impoundments, estimated 400 K gal total	3	1.23
White Oak Lake/Dam	34,330,309 gal (1979 estimate)	1	105.3
Old Hydrofracture Pond (Out of Service ?)	(7852A) = 100K gal	1	0.31
? Pools Behind White Oak Creek and Melton Branch Weirs (?)	est. 125 K gal each	2, If Pertinent)	0.77
?? Bethel Valley Impoundments Swan Pond (Main Entrance)	est.	1	
3513 Waste Basin (Out of Service)	1,880,000 gal	1	5.77 a-
3524 Equalization Basin (Emergency Use Only?)	1×10^6 gal	1	3.07 a-
190 Ponds (Emergency Use Only)	2 ponds, 300,000 gal total	2	0.92 a-
Sewage Treatment Plant Lagoons	2 ponds, 2×10^6 gal total	2	6.14 a-
Coal Yard Runoff Treatment Facility Lagoons	300 K gal total	2	0.92 a-
? Pool Behind 7500 Bridge Weir (If Pertinent)	estimated 100 K gal	1	0.31 a-
		23	

7.481 gal / ft^3

acre-foot = $\frac{gal}{325850}$

SPILL LOG - 1987

	Date	Location	Type of Material	Quantity
to creek	1/2/87	4500S Basement	Ethylene glycol and water	about 85 gallons of 25% solution
	1/5/87	North side of Building 3003	Ethylene glycol and water	270 gallons of 60% solution
	1/7/87	East Parking Lot	Gasoline	1 pint
	1/9/87	4501 Room BG75	Low-level radioactive mixed waste	approx. 5 gallons
	1/9/87	WC-10	Hydraulic Oil	1 quart
into creek	1/16/87	Building 4500N	Sewer Water	Estimated 50 gallons
	1/20/87	7000 Area, Gate 20B	Gasoline	1 pint
	1/20/87	South West Gate	Ethylene Glycol and Water	2 gallons
	1/22/87	Building 4508 Room 265	Lithium Chloride	1 lb
	1/27/87	Bldg. 1506, Room 118	Mercury	1 oz
	2/9/87	Building 4509	Oil	1 quart
into creek	2/11/87	Melton Branch	Well drilling water	400 gallons
	2/12/87	Bethel Valley Road	Gasoline	1 gallon
	2/12/87	Bethel Valley Road	Oil	1 pint
	2/12/87	Bethel Valley Road	Ethylene Glycol	1 gallon
	2/26/87	1st Street	Oil	1 gallon
	3/2/87	Building 7916	Calgon 144	1 pint
into creek	3/4/87	West end of Building 4509W	Ethylene glycol and water	2,000 gallons
	3/6/87	7500 Bridge	Kerosene	1 Gallon

SPILL LOG - 1987

Date	Location	Type of Material	Quantity
3/12/87	SWSA 6, Water quality well #834	Hydraulic fluid	Less than 5 gallons
3/12/87	Building 7831	Sewage	20 gallons
3/16/87	South of Building 4508	Transformer Oil	1/2 pint
3/19/87	Building 3500	Mercury	2 ounces
Into creek 3/20/87	5th Creek	Floor Cleaning Solution	Amount Unknown
3/23/87	Building 2000	Hydraulic Oil	3 gallons
Into creek 3/27/87	Building 4501	Ethylene glycol and water	165 gallons/20%
Into creek 3/27/87	4500N Basement	Chilled Water (ethylene glycol-water)	Estimated 25-100 gallons/20%
3/30/87	4500S Shop, Room W-1	Chilled Water (ethylene glycol-water)	About 5 gallons/20%
Into creek 3/31/87	4500N Basement	Chilled Water ethylene glycol-water)	5 gallons/20%
4/8/87	4500S, S119	NO_2 - Gas Cylinder	Less than $2m^3$ at STP
4/10/87	Dumpster, south side Building 2525	Oil	Less than 1 gallon
4/13/87	Building 5505	Mercury	Several ounces
4/13/87	7000 Area	Type H Toner	2 gallons
4/14/87	Central Avenue	Oil	1 quart
4/15/87	South Parking Lot Area	Hydraulic Fluid	2 gallons
4/15/87	Building 4500N F-25	Mercury	Trace amounts
4/16/87	Building 2519	Asbestos	Trace amounts
4/22/87	Building 7001	Hydrogen peroxide	1/2 gallon

SPILL LOG - 1987

Date	Location	Type of Material	Quantity
4/28/87	Building 3508/ 3517	Radioactive water	Unknown
some into lake 4/29/87	Melton Hill Lake at Ramsey Drive	Oil	1 quart
some into creek, rest gnd. 4/29/87	Building 3038	Hydrochloric (muriatic acid)	6 gallons
in creek 5/7/87	Building 3038	Potable Water	Several hundred gallons
5/11/87	Building 7001	Benzene	1 gallon
in creek 5/12/87	Tower Shielding Facility/Melton Branch	Potable Water	5,000 gallons
5/12/87	7900 (HFIR)	Leaking Nitric Acid (HNO_3) valve	1500 gallons
5/20/87	Building 4500S	Diesel Fuel	2 gallons
5/23/87	Melton Valley Drive	Ethylene Glycol and Water	1 gallon
in creek 5/26/87	Old Shale Fracture	Potable Water	1000 gallons
small amount in creek 5/28/87	Building 4500N	Raw Sewage	100 gallons
6/4/87	Building 6000	Oil	5 gallons
6/5/87	East Parking Lot	Gasoline	1 gallon
6/10/87	Building 7601	Nitric acid	50 mL
6/11/87	Building 1503	Herbicide (2,4-D and Roundup)	2 gallons
6/20/87	East Parking Lot	Hydraulic oil	1 pint
into creek 7/1/87	Building 4509	Ethylene Glycol	30 gallons
7/8/87	Bldg. 7018	Motor oil	Approximately 1 quart
7/16/87	East Parking Lot	Gasoline	Amount unknown
in creek 7/19/87	Building 3024	Asbestos + water	Amount unknown

SPILL LOG - 1987

Date	Location	Type of Material	Quantity
7/22/87	East Parking Lot	Motor oil	1/2 pint
7/22/87	Building 7001	Paint	1 gallon
7/26/87	Highway 95	Diesel Fuel	2 gallons
in creek 7/29/87	East of Building 2016	Potable Water	400 gallons
8/1/87	6000 Area	Ammonia Gas	unknown
8/4/87	Building 3544	Dilute Sulfiric Acid Solution - pH 5.3	200 gallons
8/7/87	Building 4500N	Ethylene Glycol	1000 gallons
8/11/87	Building 3504 -	Mercury	10 mL
8/18/87	Southside Drive	Ethylene Glycol and Water Soluble Oil	3 gallons
8/26/87	Building 3003	Ethylene Glycol and Water	3 gallons 50% Solution
8/27/87	Lagoon Road	Motor oil	2 to 3 gallons
8/27/87	Building 3500	Mercury	1 to 3 ounces
8/31/87	Building 3001	Gasoline	1 quart
9/1/87	Building 3037	Light Ballast Oil	1/2 pint
9/1/87	Highway 95	Diesel Fuel	1 pint
9/1/87	Highway 95	Motor oil	1/2 gallon
9/3/87	Building 3019	Oil	1 gallon
9/4/87	West Portal (Trailer)	Hydrogen	unknown
9/4/87	Builidng 3080	Asbestos	unknown
9/16/87	West Portal (Trailer)	Hydrogen	unknown
9/18/87	Building 7013	Caustic Soda	1 pint
9/24/87	Builidng 7001	N-methyl-2-pyrrolidon	2 gallons
10/2/87	6003 Parking Lot	Hydraulic oil	1/2 gallon

SPILL LOG - 1987

	Date	Location	Type of Material	Quantity
into creek	10/6/87	7000 Area	Raw sewage	Unknown
	10/9/87	Bldg. 7002	Diesel fuel	1/2 gallon
	10/15/87	Bldg. 3544	Sulfuric acid	1/2 gallon
	10/22/87	Bldg 4500S R111	Hcl in Nitrogen (gas)	Unknown
	11/6/87	Bldg. 4501	Mercury	10-15 mL
	11/6/87	3rd. Street	Concrete	Unknown
	11/20/87	Bldg. 3505	Ethylene Glycol	2 gallons
sheen on creek	12/1/87	White Oak Creek	Oil	Unknown
in creek	12/8/87	Bldg. 4500S	Mortar mix	Unknown
	12/11/87	Contractors Landfill	Hydraulic fluid	3 gallons
in creek	12/17/87	Bldg. 5000	Ethylene Glycol	10 gallons
in creek	12/28/87	White Oak Creek	Transmission fluid	1 pint

WAA:5410:aw

ORNL

G.9

Spill List - 1988

	Date	Location	Type of Material	Quantity
into Creek	1/6/88	Building 3028	Potable water	20 gallons
	1/12/88	Melton Valley Access Road	Concrete	1 yard
	1/14/88	Overflow Parking Lot	Diesel fuel	2 gallons
	1/15/88	HFIR Oil Storage Shed	Oil	1 quart
	1/20/88	HFIR	Sewer water	Unknown
into Creek	1/28/88	Building 3025	Hydraulic Oil	2 gallons
into Creek	1/28/88	Bldg. 5505	Potable H_2O	Unknown
	2/1/88	West of Building 3544	Hydraulic oil	1 pint
	2/5/88	Building 7900	Hydraulic Oil	1 pint
	2/5/88	Building 7900	Hydraulic oil	3 gallons
	2/5/88	Building 7602	Hydraulic oil	1 gallon
	2/10/88	7000 Area	Hydraulic oil	4 gallons
	2/12/88	Building 7005	Lead (Airborne)	Unknown
	2/16/88	Building 7863	Concrete densifier	1 gallon
into Creek	2/16/88	Building 4500N	Potable water	100 gallons
	2/17/88	Building 4500S	Mercury	4 oz.
into Creek	2/18/88	Building 7920	Ethylene Glycol and water	4 gallons
	2/22/88	Building 3518	Steam Plant Regeneration water	Unknown
	2/26/88	Building 1503	Oil	1 pint
into Creek	2/27/88	HFIR	Sewage water	Unknown
into Creek	3/10/88	Building 4509	Ethylene Glycol and water	30 gallons
	3/21/88	Building 7900	Oil	1/2 pint

	Date	Location	Type of Material	Quantity
	3/23/88	West End of ORNL	Sulfuric Acid	5 gallons
	3/24/88	Building 7001	Mineral Oil	1 pint
into Creek	3/24/88	Fifth Creek	Wash water from mortar mix	100 gallons
	3/25/88	Building 4512	PCB Oil	Small amount
	3/28/88	Building 2011	Potable water	100 gallons
	4/5/88	Building 1000 Parking Lot	Gasoline	1 quart
	4/23/88	SWSA 6	Hydraulic Oil	2 quarts
into Creek	4/23/88	Building 3029	Ethylene Glycol and water	5 gallons
into Creek	4/29/88	Building 4500N	Raw Sewage	75 gallons
	5/3/88	Bethel Valley Road	Ethylene Glycol and water	1 gallon
possibly into Creek	5/6/88	Hazardous Waste Storage Area	Potable water	10,000 gallons
	5/9/88	Building 1505	Organic Mixture	1 gallon
to Creek	5/13/88	Building 3544	Water and Sodium Hydorxide	50 gallons
	5/15/88	Building 4508	Ethylene Glycol and Water	2 gallons
	5/16/88	Between Bldgs. 4500S & 4508	Mercury	10 grams
	5/17/88	Building 3042	Oil	1 gallon
into Creek	5/20/88	Building 4500N	Sanitary Water	Unknown
	5/23/88	Building 3085	Oil	1 gallon
	5/24/88	Building 3095	Mercury	10 grams
	5/26/88	Building 7710	Der-kel	2 gallons

Date	Location	Type of Material	Quantity
6/2/88	7000 Area	Anhydrous Ammonia	Small Amount
6/2/88	Bldg. 4500N	Sanitary Sewer	Unknown volume
6/7/88	Bldg. 4509	Sodium Hypochlorite solution	10 gallons
6/8/88	Bldg. 7503	Mixed organics	2 gallons
6/8/88	Bldg. 7710	Hydraulic oil	2 quarts
6/9/88	Bldg. 4501	Mercury	15 mL
6/9/88	Bldg. 3544	Radioactive Process Water	100 gallons
6/13/88	7000 Area	Gasoline	1 quart
6/15/88	Bldg. 4500S	Potable water	9,000 gallons
6/15/88	7000 Area	Gasoline	20 gallons
6/22/88	Bldg. 4500S Dock	Photographic Fixer Solution	3 quarts
6/23/88	Bldg. 3042	Cutting oil	1 quart
6/24/88	Bldg. 7001	Aquasol (xylene)	1 gallon
6/30/88	Bldg. 4500S	Kodak Bleach-Fix - Replenisher solution	1 gallon
7/1/88	Bldg. 4500N	Ethylene Glycol and Water	10 gallons
7/7/88	NRWTP	Hydraulic Oil	1/2 gallon
7/7/88	Bldg. 4500S F-262	Light Ballast Oil	1/2 pint
7/13/88	Bldg. 4500N	Ethylene Glycol and water	3 gallons
7/18/88	Bldg. 1505 Room 331	Mercury	Small amount

Date	Location	Type of Material	Quantity
7/18/88	Bldg. 7001	Perchloric Acid	1 gallon
7/26/88	Bldg. 7001	High Solids Epoxy Coating	1 pint
7/28/88	Bldg. 2000	HCl gas	Small amount
7/29/88	SWSA 6	Gasoline	1 quart
8/1/88	North of 3513 pond	Hydraulic oil	2 quarts
8/2/88	West of Bldg. 4508	Radioactive process waste	100 gallons
8/2/88	Bldg. 4501	Fluorine gas	unknown
8/3/88	North of Bldg. 3003	Potable water	100 gallons
8/3/88	Bldg. 4500S	Soluble cutting oil	3 gallons
8/4/88	Bldg. 4500N	Ethylene glycol and water	3 gallons
8/5/88	Bldg. 4500N, Rm. B26	Light gallast oil	1/2 pint
8/5/88	Highway 95	Foundation tar	5 gallons
into Creek 8/9/88	First Creek	Penetrating oil	1 gallon
8/10/88	Bldg. 3125	Diesel fuel	40 gallons
into Creek 8/11/88	Bldg. 5500	Ethylene glycol and water (20%)	1/2 gallon
8/12/88	Bldg. 7012	Trim soil oil	10 gallons
8/13/88	Bldg. 2643	Chlorine gas	Unknown
8/14/88	Bldg. 3544	Sulfuric acid	10 milliliters
8/17/88	Bldg. 3038	Radioactive contaminated oil	1 pint
8/17/88	Bldg. 3010	Oil	1/2 pint

	Date	Location	Type of Material	Quantity
	8/18/88	Bldg. 4501 attic	Ethylene glycol and water (15%)	1/2 pint
	8/19/88	Bldg. 4509	Ethylene glycol and water (15%)	3 quarts
	8/20/88	Bldg. 3544	Sulfuric acid	10 milliliters
	8/21/88	Bldg. 5505	190 process water	100 gallons
	8/24/88	Bldg. 7567	Mercury	2 milliliters
	8/26/88	Bldg. 4512	Mercury	3 milliliters
	8/30/88	Bldg. 4512	Mercury	1 pound
	8/30/88	Bldg. 2000	Barium oxide	1 pound
	9/7/88	Bldg. 7860	Ethylene glycol & water (50%)	2 gallons
into Creek	9/7/88	Fifth Creek	Concrete	4 gallons
	9/7/88	West of Bldg. 4508	Potable water	20 gallons
	9/9/88	6000 area	Diesel fuel	1 quart
	9/9/88	Bldg. 3544	Process waste water	75 gallons
	9/9/88	SWSA 4	Hydraulic oil	1 quart
	9/9/88	7000 area	Paint	1 gallon
	9/20/88	SWSA 6	Gasoline	3 gallons
	9/22/88	South of Bldg. 5500	Epoxy	1 gallon
into Creek	9/26/88	Bldg. 3080	Potable water	amount unknown
	9/29/88	Bldg. 4500N	Hydraulic oil	3 quarts
	10/6/88	Central Ave. & and 4th Street	Oil	1 quart
into Creek	10/6/88	Bldg. 2010	Potable water	9000 gallons

Date	Location	Type of Material	Quantity
10/12/88	SWSA 6, tumulus pad	Hydraulic oil	1 gallon
10/21/88	Bldg. 4508	Nitric acid	1 gallon
10/24/88	7000 area	Diesel fuel	1 pint
10/24/88	Bldg. 7002	Cleaning fluid	1 gallon
10/25/88	Bldg. 4508	Potable water	2000 gallons
10/27/88	Bldg. 3026	Hydraulic oil	2 quarts
into creek 10/27/88	Sixth and White Oak Avenue	Potable water	2500 gallons
10/27/88	Between Bldgs. 4500N and 4501	Process water	1000 gallons
10/31/88	Bldg. 3025	Asbestos	1.5 linear feet
11/7/88	4515, Lab 212	Oil	One-half pint
11/18/88	Sixth St. at White Oak Ave.	Oil	1 pint
11/22/88	Bldg. 7877	Oil	5 gallons
11/22/88	Bldg. 7069	Gasoline	1 quart
12/6/88	Bldg. 2519	Hydraulic oil	10 gallons
12/15/88	Bldg. 2567	Oil	1 gallon
12/15/88	Between Bldgs. 4500N and 4501	Hydraulic oil	1 quart
12/22/88	Bldg. 3034	Oil	1 gallon
12/29/88	Bldg. 2519	Oil	Unknown

SPILL LIST - 1989

Date	Location	Type of Material	Quantity
01/03/89	Bldg. 7507W	Tritium contaminated soil	
01/03/89	Third St. at White Oak Ave.	Oil	1 quart
01/04/89	Fifth Street	Gasoline	2 quarts
01/06/89	South of Bldg. 5505	Oil-based paint and mineral spirits	1 gallon
01/11/89	Bldg. 7069	Oil	1 quart
01/20/89	7000 area	Acid	1 pint
01/23/89	0800 area	Estron 245	2 gallons
02/01/89	Bldg. 1505	Mercury	1 mL
02/03/89	Bldg. 4509	Ethylene glycol and water	3 gallons
into stream 02/08/89	South of Bldg. 5500	Concrete and water	20 gallons
02/09/89	East parking lot	Gasoline	1 quart
02/09/89	7600 area	Diesel fuel	1 quart
02/17/89	Coal yard	Hydraulic oil	20 gallons
02/22/89	Bldg. 4500S	Etchant #9 (acid)	1 gallon
03/13/89	White Oak Avenue	Coal yard runoff sludge	2 yards
03/17/89	Bldg. 7069	Gasoline	20 gallons
03/24/89	West end of SWSA 4	Coal tar emulsion sealer	25 gallons
04/05/89	Bldg. 4500N	U-Con refrigerant (gas)	unknown
04/06/89	Bldg. 4505	Mercury	1 mL
into stream 04/07/89	Bldg. 5500	Ethylene glycol	300 gallon
04/10/89	Bldg. 4509	Ethylene glycol and water	20 gallon
04/12/89	Bldg. 7002	Hydraulic oil	1 gallon
04/13/89	Bldg. 4500S	Photo fixer	1 quart

SPILL LIST - 1989
(continued)

Date	Location	Type of Material	Quantity
04/17/89	Bldg. 3003	Refrigeration oil	3.5 gallon
04/18/89	Recontour site	Diesel fuel	3 gallons
04/19/89	Bldg. 3544	Process water	250 gallon
04/21/89	Bldg. 3544	Sodium chloride solution	unknown
04/26/89	Bldg. 3038	Mercury	2 mL
04/28/89	Bldg. 7654	Scintillation fluid	one-half pint
05/02/89	Bldg. 7506	Kerosene	10 gallon
05/09/89	Bldg. 4508	Mercury	2 mL
05/10/89	Bldg. 7001	Oil	10 gallon
05/11/89	Bldg. 2000	Oil	10 gallon
05/15/89	Bldg. 4500S	Kodak developer system cleaner	one-half gallon
05/18/89	Bldg. 3125	Diesel fuel	one-half gallon
05/30/89	Central Avenue	Diesel fuel	1 pint
05/30/89	Bldg. 3012	Coal tar	5 gallon
05/30/89	Bldg. 3012	Sodium silicate	5 lb
06/01/89	Melton Valley Access Road	Cement (dry)	846 lb
06/06/89	Bldg. 3012	Mercury	4 oz
06/09/89	Bldg. 7002	oil	"visible sheen"
06/14/89	Bldg. 7806 NW	Hydraulic oil	1 quart
06/15/89	Bldg. 7005	Hydraulic oil	2 gallons
06/21/89	Bldg. 7035	Asphalt roofing tar	1 gallon
06/24/89	Bldg. 3500	Ethylene glycol and water	1500 gallon
06/24/89	Bldg. 7002	Hydraulic oil	1 quart

SPILL LIST - 1989
(continued)

Date	Location	Type of Material	Quantity
06/30/89	Bldg. 7860	Diesel fuel	5 gallons
07/05/89	Bldg. 4505	Ethylene glycol	1/2 gallon
07/10/89	Bldg. 1000 Parking Lot	Ethylene glycol & water(50%)	1/2 pint
07/14/89	Bldg. 7069	Gasoline	1 quart
07/17/89	Bldg. 3017	Mercury	20 mL
07/18/89	Bldg. 4501	Mercury	2 oz.
07/20/89	Sewage Treatment Plant	Chlorine gas	Unknown (small)
07/20/89	Bldg. 3500	Mercury	1 mL
07/21/89	Bldg. 7653	Phenol	1 gallon
07/24/89	Bldg. 5500	Ethylene glycol & water (10%)	3620 gallon
07/26/89	Bldg. 4509	Ethylene glycol & water (10%)	15 gallon
07/28/89	Bldg. 3503	Ethylene glycol & water	13 gallon
08/04/89	Bldg. 7002	Sulfuric acid	1 pint
08/07/89	Bldg. 3544	Radioactive, process water	5 gallons
08/08/89	Bldg. 3095	Mercury	2 mL
08/15/89	Bldg. 4500S	Organics	1 gallon
08/17/89	East of Bldg. 1504	Gasoline	8 gallons
08/21/89	Bldg. 2011	Mercury	30 mL
08/21/89	Bldg. 4500S	Paint	1 quart
08/22/89	Bldg. 7503	Power steering fluid	1/2 pint
08/22/89	Recontour Site	Diesel fuel	5 gallons
08/26/89	West Parking Lot	Gasoline	12 gallons
08/27/89	White Oak Avenue	Diesel fuel	1 gallon

SPILL LIST - 1989
(continued)

	Date	Location	Type of Material	Quantity
✓	08/27/89	First Street	Hydraulic oil	5 gallons
	08/30/89	Third Street	Diesel fuel	1 gallon
	08/31/89	Bldg. 4500N	Ethylene glycol & water	8 gallons
	09/22/89	Bldg. 7903	Oil	1 gallon
	10/06/89	Bldg. 7001	Delimer	3 - 5 oz
	10/23/89	Bldg. 1504	Oil	1 gallon
	10/29/89	Bldg. 6000	Ethylene glycol & water (50%)	1 gallon
	11/03/89	Bldg. 2013	Ethylene glycol & water (50%)	1/2 pint
	11/05/89	Bldg. 7069	Gasoline	1/2 gallon
	11/06/89	Bldg. 4505	Phenylhydrazine	200 mL
	11/07/89	Bechtel FOF	Chlorine bleach	1 gallon
	11/08/89	Bldg. 4500S	Hydraulic fluid	1/2 pint
	11/17/89	Bldg. 4500S	Acetylene	small amount
into Creek	11/19/89	Bldg. 7900	Sanitary waste	150 gallons
	11/20/89	Bldg. 4500N	Mercury	50 mL
	11/20/89	Bldg. 4509	Ethylene glycol & water (50%)	1 quart
	11/22/89	Bldg. 7069	Gasoline	1/2 gallon
	12/04/89	7000 Area	Diesel fuel	1 gallon
	12/05/89	Bldg. 3119	Sulfuric acid	1 gallon
	12/11/89	Bldg. 2519	Diesel fuel	1 gallon
into Creek	12/11/89	Bldg. 4500S	Floor wax	1 gallon
	12/12/89	Bldg. 4500S	Photographic fixer	1 pint
✓	12/15/89	Bldg. 7069	Gasoline	25 gallons

SPILL REPORT

Date	Location	Type of Material	Quantity
01/02/90	Bldg. 7001	Vacuum pump oil	1 gallon
01/03/90	East Parking Lot	Ethylene glycol & water (50%)	2 gallons
01/05/90	Bldg. 4500N	Diesel fuel	1 gallon
01/05/90	Bldg. 7002	Hydraulic oil	1 gallon
01/05/90	Bldg. 4500N	Transmission oil	1 gallon
01/09/90	Bldg. 7002	Diesel fuel	1/2 gallon
01/10/90	Bldg. 7910	Acetylene	small amount
01/11/90	Bldg. 7900 southwest corner	Diesel fuel	5 gallons **
01/11/90	0800 Area [illegible]	Diesel fuel	5 gallons **
01/11/90	0800 Area	Hydraulic oil	1 quart
01/11/90	0800 Area	Motor oil	1 pint
01/12/90	Bldg. 7002	Hydraulic oil	1/2 gallon
01/15/90	Bldg. 4509	Ethylene glycol & water (11%)	30 gallons
01/17/90	First Street	Concrete	1 gallon
01/18/90	Bldg. 4509	Ethylene glycol & water (10%)	2 gallons
01/18/90	7000 Area	Hydraulic oil	3 gallons **
01/18/90	Bldg. 7040	Liquid oxygen	small amount
01/22/90	Bldg. 4500N	Photographic solution	2 gallons
01/22/90	Bldg. 1506	Mercury	2 mL
01/23/90	Bldg. 7841	Radioactive material	unknown
01/23/90	1000 Parking Lot	Ethylene glycol & water (50%)	2 gallons
01/25/90	Bldg. 2643	Chlorine gas	small amount
01/25/90	Bldg. 7040	Hydrogen	small amount
01/31/90	Steam cleaning pad	Hydraulic oil	1/2 gallon

SPILL REPORT

Date	Location	Type of Material	Quantity
02/05/90	Bldg. 3125	Diesel fuel	1 pint
02/07/90	Bldg. 2018	Hydraulic oil	3 gallons
02/07/90	Bldg. 3608	Sulfuric acid	2 gallons
02/08/90	SWSA 6	Diesel fuel	1 gallon
02/14/90	Bldg. 2069	Hydraulic oil	2 gallon
into Creek? 02/16/90	Bldg. 2013	Styrene	1/2 gallon
02/23/90	Bldg. 7001	Paint	1 quart
02/27/90	Bldg. 2010	Ethylene glycol & water (50%)	1/2 pint
03/05/90	Bldg. 7018	Hydraulic oil	1/4 pint
03/06/90	Bldg. 4501	Ammonium carbonate	1/2 gallon
03/08/90	Bldg. 4501	Mercury	20 oz.
03/14/90	Bldg. 4500S	Radioactive material	Unknown
03/20/90	Bldg. 7069	Hydraulic oil	5 gallons
03/21/90	Bldg. 6000	Sanitary sewer water	270 gallons
03/28/90	SWSA 5	Hydraulic oil	1 pint
04/03/90	Bldg. 4501	Mercury	4 oz.
04/03/90	Bldg. 3003	Gas (95% Helium, 5% fluorine)	Unknown
04/05/90	Bldg. 6000	Motor oil	1/2 pint
04/05/90	Bldg. 6000	Sanitary sewer water	300 gallons
04/17/90	Bldg. 7900	Ethylene glycol	1 pint
04/18/90	Bldg. 4515	Nitric acid & ethyl alcohol	1 pint
04/19/90	Bldg. 1505	Mercury	4 oz.
04/19/90	Bldg. 7000	Hydraulic oil	1 quart
04/24/90	Bldg. 3544	Radioactive process water	20 gallons

SPILL REPORT

Date	Location	Type of Material	Quantity
04/25/90	Bldg. 7500	Hydraulic oil	1 pint
05/10/90	Coal Pile Treatment Fac.	Diatomaceous Earth	35 lbs.
05/14/90	BNI Field Oper.	Gasoline	<1 gal.
into Creek 05/16/90	Bldg. 7920	Chilled Water	<55 gal.
05/21/90	BNI Field Oper.	Rinse Water	2 gal.
05/22/90	Bldg. 1505	Mercury	2 oz.
05/25/90	Recontour Site NW, Bldg. 1000	Hydraulic Fluid	1 qt.
05/31/90	Bldg. 4500NB	Chilled Water	<1 gal.
05/29/90	Bldg. 4500S	Chilled Water	unknown
into Creek 05/31/90	Bldg. 4509	Chilled Water	200 gal.
05/31/90	Bldg. 4500S	Unknown White Powder	1 lb.
06/06/90	RUST Area (7500)	Oil	5 gal.
06/06/90	Melton Branch	Dead Crayfish and Salamanders	2 each
06/06/90	7000 Area	Hydraulic Oil	7 gal.
06/06/90	SWSA 6	Oil	2 gal.
06/07/90	IWMF Construction Site, SWSA 6	Hydraulic Fluid	1/2 pint
06/07/90	SWSA 6	Hydraulic Fluid	1/2 pint
06/07/90	4500N Basement	Hydraulic Fluid	1.5 gal.
into Creek 06/12/90	7000 Area	Fly Ash and Water	25 gal.
06/13/90	Bldg. 3010	Demineralized water	unknown
into Creek 06/15/90	Bldg. 3544	Treated Process Water	Several hundred gal.
06/19/90	Bldg. 4500N, A21	Mercury	Small amount

SPILL REPORT

Date	Location	Type of Material	Quantity
06/25/90	Bldg. 3026C, 2nd flr.	Mercury	2 oz.
06/25/90	Bldg. 1505, Lab 367	Mercury	1 oz.
into creek (partial bypass) 06/26/90	ORNL Sewage Treatment Plant	Incompletely Treated Sewage	unknown
06/28/90	East Parking Lot	Ethylene Glycol & Water (50%)	1 gal.
06/29/90	Bldg. 7002	Hydraulic Oil	1 pint
07/02/90	South of NRWTP	Natural Gas	unknown
07/11/90	Bldg. 2519	Sulfuric Acid (20%) RQ = 1000 lb	20 gal. ** no spill [illegible]
07/17/90	Bldg. 2567	Diesel Fuel	1 gal.
07/18/90	SWSA 4	Hydraulic Fluid	1 pint
7/19/90	Lagoon Road	Ethylene Glycol & Water (50%)	1 quart
into Creek 7/20/90	Bethel Valley Road	Ethylene Glycol & Water (50%)	2 gal.
7/20/90	Bethel Valley Road	Motor Oil	1 quart
7/20/90	Bldg. 5510	Power Steering Fluid	1 pint
into Creek 7/23/90	3rd Street	Sanitary Sewer Water	unknown
7/24/90	Bldg. 4500S	Photographic Fixer	2 gal. [illegible]
7/25/90	Bldg. 2013	Oil	1 quart
7/25/90	Bldg. 4500S [illegible]	Radioactive Material	unknown
into Creek 7/25/90	Bldg. 4500S	Process Wastewater into excavation leaking LLW line was uncovered	1500 gal. **
into Creek 7/26/90	Bldg. 4500N	Potable Water	900 gal.
some into Creek 7/30/90	Bldg. 4508	Ethylene Glycol & Water (8%)	2000 gal.
7/31/90	Bldg. 5510	Hydraulic Oil	1/2 pint
8/02/90	Bldg. 7653	Mixture of organics	1/2 pint
8/02/90	Bethel Valley Road	Ethylene Glycol & Water (50%)	2 gallons
8/09/90	Bldg. 4500S	Radioactive material in excavation — now leaking LLW line	Unknown

SPILL REPORT

Date	Location	Type of Material	Quantity
8/16/90	Bldg. 3525	Ethylene Glycol & Water (50%)	30 gallons
8/18/90	Bldg. 3012	Hydraulic oil	1 pint
8/22/90	Bldg. 1505	Mercury	1/4 oz.
8/24/90	SWSA 6	Hydraulic oil	5 gallons
8/27/90	Bldg. 1505	Mercury	4 oz.
9/03/90	Bldg. 4501	Waste oil	20 gallons
9/04/90	Bldg. 7002	Transmission Fluid	1 pint
9/04/90	Bldg. 7002	Oil	1 quart
9/05/90	HFIR Access Road	Oil	1 pint
9/05/90	HFIR Access Road	Oil	1/2 gallon
9/07/90	Bldg. 6010	Dodecane & Carbon tetachloride	4 oz.
9/11/90	Bldg. 2519	Sulfuric Acid (50%)	10 gallons
9/13/90	Bldg. 4500S	Hydraulic oil	1 gallon
9/14/90	Bldg. 7900	Ethylene Glycol & Water	1 gallon
9/18/90	Bldg. 1505	Oil	1 pint
9/18/90	3513 pond	Hydraulic oil	1/2 gallon
9/19/90	Bldg. 4500S	Coldprime	2 oz.
9/19/90	White Wing Scrapyard	Hydraulic Oil	1 quart
9/20/90	Bldg. 7830	Oil	1/2 gallon
9/21/90	Bldg. 7503	Oil	4 oz.
9/28/90	Bldg. 2547	Oil	1 quart
9/28/90	Bldg. 4500S	Diesel fuel	1 gallon

SPILL REPORT

Date	Location	Type of Material	Quantity
10/1/90	Bldg. 7901	PCB Oil (53-68 ppm)	few drops
10/9/90	7000 Area	Rainwater with copper (12,000 ppm)	30 gallons.
10/13/90	Bldg. 4500N	Hydraulic oil	1 pint
10/20/90	Bldg. 6012	Hydraulic oil	1 quart
10/24/90	Bldg. 7002	Parts cleaning fluid	2 quarts
10/24/90	Bldg. 4500S	Mercury	1 oz.
10/24/90	Bldg. 2013	Solder flux	2 oz.
10/25/90	Bldg. 3550	Mercury	10 oz.
Into Creek 10/28/90	Bldg. 2519	Diesel fuel	1 quart
10/29/90	Bldg. 5000	Ethylene Glycol & Water (5%)	100 gallons
10/30/90	Bldg. 2013	Mercury	2 oz.
10/30/90	Haz. Waste Truck	Carbon disulfide	100 ml.
10/31/90	East of Coal Yard	Oil	1 pint
10/31/90	Bldg. 3544	Hydraulic oil	1/4 pint
11/5/90	SWSA 6	Hydraulic oil	1 quart
11/13/90	TSF	Transformer Oil (PCB) (<50 ppm)	Unknown
11/14/90	Bldg. 4500N	Ethylene Glycol & Water	1/2 pint
12/10/90	East of Bldg. 7025	Diesel Fuel	1/2 gallon
12/12/90	Bldg. 6556	Raw Sewage	100 gallons

During 1990, ORNL had a total of 135 spills or releases of various types of materials (Figs. and), compared with 109 for 1986, 92 for 1987, 119 for 1988, and 91 for 1989. ORNL has defined a spill as any material outside of its containment vessel. A spill is not necessarily a release to the environmental; it may be to the floor, a laboratory bench, or a secondary containment structure. Emphasis is placed on spill reporting and investigation to prevent any environmental releases. Members of the ORNL Office of Environmental Compliance and Documentation investigated each spill or release to determine the environmental impact, to provide input for reducing any harmful effects, and to assist with cleanup efforts. Cleanup activities were conducted by staff members of the ORNL Hazardous Waste Operations Group. All cleanup materials were disposed of according to ORNL procedures.

ORNL reports all spills via the electronic mail system to various levels of ORNL management as soon as possible after the spill; updates are provided as necessary. This reporting system has resulted in an increased awareness of spills by ORNL staff members. Additional reporting, if required, is done under ORNL Occurrence Reporting System as required by DOE Order 5000.3A, *Occurrence Reporting and Processing of Operations Information.*

As in previous years, many of the spills involved petroleum products. Efforts to enhance spill prevention, especially of petroleum products, included training for more than 900 ORNL Plant and Equipment Division personnel and increased monitoring of construction activities and storage areas where these types of spills often occur. The monitoring and site assessment activities, conducted by Field Interface Staff, also provided an opportunity to detect and prevent other potential environmental problems. Of the 135 spills, 74 were less than a gallon in quantity, and 4 were greater than 500 gallons.

G.9

SPILL REPORTS - 1991

Date	Location	Type of Material	Quantity	Event Type	Occurrence Report. No.
01/15/91	Bldg. 5500	Ethylene Glycol & Water	3 gallons	Loggable	
01/16/91	Bldg. 5507	Ethylene Glycol & Water (1%)	2500 gallons	Loggable	
01/18/91	Lagoon Road	Ethylene Glycol & Water (50%)	1/2 gallon	Loggable	
01/27/91	Bldg. 7904	Raw Sewage	10 gallons	Loggable	
02/01/91	Highway 95	Diesel fuel	1 gallon	———	
02/05/91	6500 Area	Raw sewage	400 gallons	Loggable	
02/14/91	Bldg. 1505	Mercury	28 grams	Loggable	
02/16/91	Bldg. 4500S	Ethylene Glycol & Water (1%)	2700 gallons	Off-Normal	
02/21/91	Bldg. 1505	Mercury	112 grams	Loggable	
02/22/91	Bldg. 7606	Mercury	224 grams	Loggable	
02/28/91	Bldg. 4500S	Mercury	112 grams	Off-Normal	
02/28/91	Bldg. 7901	Ethylene Glycol & Water (50%)	1 quart	Loggable	
03/05/91	SWSA 5	Raw Sewage	Unknown	Loggable	
03/06/91	SWSA 6	Ethylene Glycol & Water (50%)	1 gallon	Loggable	
03/08/91	Bldg. 4500S	Mercury	112 grams	Loggable	
03/21/91	6556 area	Diesel fuel	2 gallons	Loggable	
03/22/91	Bldg. 7001	Used oil	15 gallons	Loggable	
03/24/91	Bldg. 7603	Diesel fuel	3 gallons	Loggable	
03/25/91	Bldg. 4508	Mixed Acids	1 quart	Loggable	
creek 03/28/91	Bldg. 7920	Ethylene Glycol & Water (30%)	400 gallons	Off-Normal	
creek? 04/01/91	Bldg. 1505	Dye (suspected)	Unknown ~1 gal.	Loggable	
04/01/91	SWSA 6	Hydraulic Oil	2 gallons	Nonroutine	
04/04/91	Bldg. 3026C	Mercury	28 grams	Loggable	
04/09/91	Nursery Road	Oil	1 quart	Loggable	
04/10/91	Bldg. 4500S	Oil	1 gallon	Loggable	
04/11/91	Bethel Valley Church	Kerosene	1 gallon	Loggable	
04/16/91	Bldg. 7934	Photographic Waste	1 quart	Loggable	
04/18/91	Bldg. 2013	Ethylene Glycol & Water (50%)	1 quart	Loggable	
04/18/91	SWSA 6	Power Steering Oil	1 pint	Loggable	

October 3, 1991

Date	Location	Type of Material	Quantity	Event Type	Occurrence Report. No.
04/25/91	6000 Area	Raw sewage	400 gallons	Loggable	
04/25/91		Sulfuric Acid	1 pint	Loggable	
05/02/91	Bldg. 7652	Oxidizers	1/2 gallon	Off-Normal	ORO--MMES-X10WSTEMRA-1991-1002
05/03/91	DOSAR	Hydraulic Oil	1/2 gallon	Loggable	
05/03/91	Bldg. 4505	Mercury	56 grams	Loggable	
05/07/91	Portal 20-B	Ethylene Glycol & Water (50%)	1 gallon	Loggable	
05/07.91	Bldg. 3500	Mercury	28 grams	Loggable	
05/08/91	Bldg. 3003	Ethylene Glycol & Water (50%)	100 gallons	Non-Routine	
05/14/91	Bldg. 1504	Mercury	28 grams	Loggable	
05/15/91	7000 Area	Hydraulic Oil	4 gallons	Loggable	
05/16/91	7000 Area	Diesel Fuel	1/2 gallon	Loggable	
05/22/91	Bldg. 3037	Wax water	2 gallons	Off-Normal	ORO--MMES-X10PLEQUIP-1991-1006
05/22/91	Bldg. 7001	Paint Sprayer wash water	2 gallons	Off-Normal	ORO--MMES-X10PLEQUIP-1991-1007
05/22/91	Bldg. 3504	Mercury	56 grams	Loggable	
05/24/91	Bethel Valley Road		Motor Oil	7 gallons	Loggable
05/26/91	Bldg. 7900	Ethylene Glycol & Water (50%)	20 gallons	Non-Routine	
05/30/91	Bldg. 6556	Waste Water	1 quart	Loggable	
06/10/91	Bldg. 4500N	Ethylene Glycol & Water (0.6%)	20 gallons	Loggable	
06/14/91	Bldg. 3074	Mercury	224 grams	Off-normal	ORO--MMES-X10CHEMTEC-1991-1007
06/27/91	Bldg. 7500	Ethylene Glycol & Water (50%)	1 gallon	Loggable	
06/28/91	North of White Oak Creek	Power Steering Fluic	1 pint	Loggable	

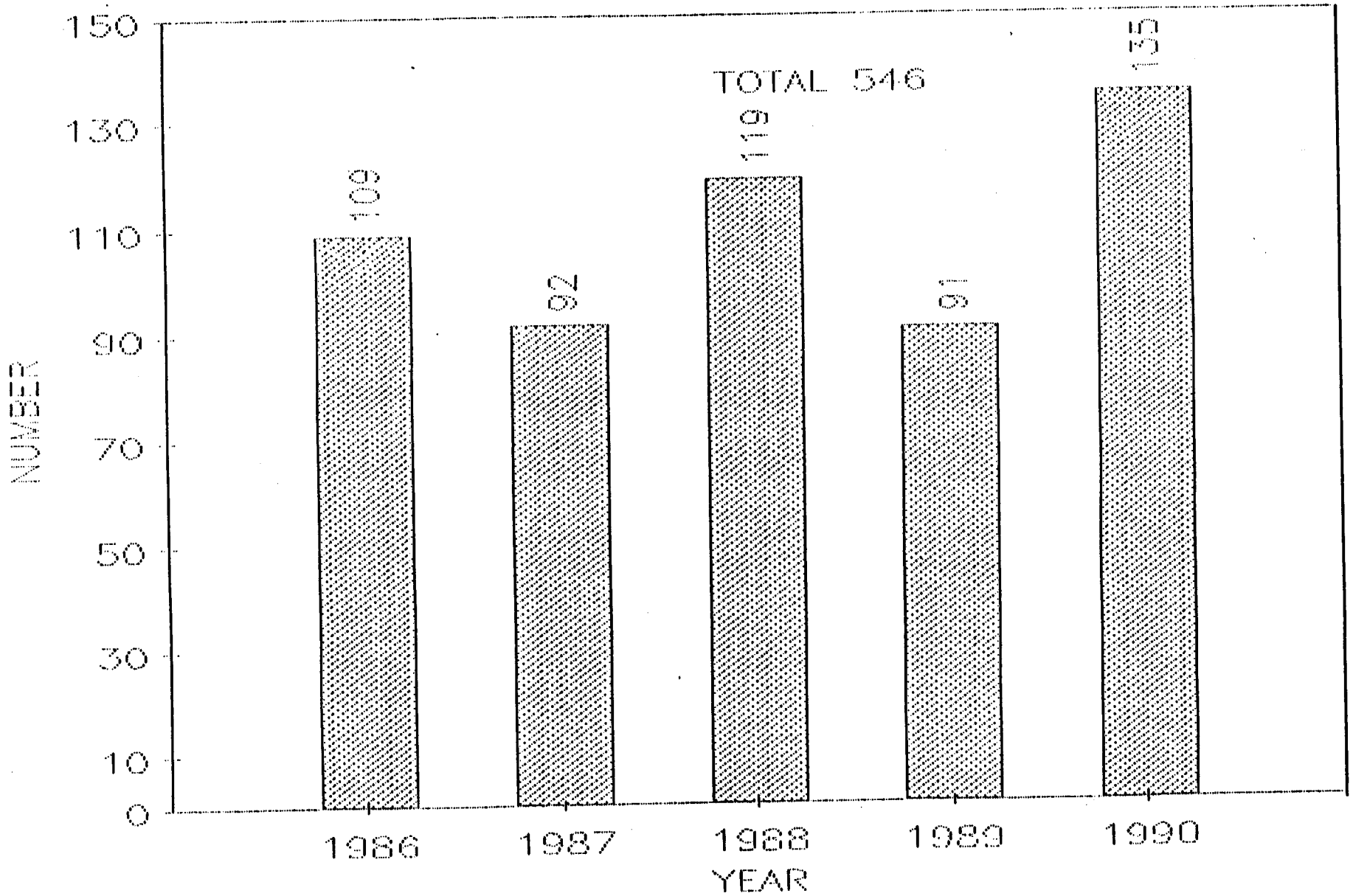
October 3, 1991

Date	Location	Type of Material	Quantity	Event Type	Occurrence Report. No.
07/03/91	Bldg. 2013	Ethylene Glycol & Water (50%)	1 quart	Loggable	
07/03/91	Bldg. 4509	Potable Water	1000 gallons	Off-normal	ORO--MMES-X10PLEQUIP-1991-1013
07/10/91	Bldg. 3019	Hydraulic Oil	1.5 quarts	Loggable	
07/12/91	Bldg. 4500N	Mercury	28 grams	Loggable	
07/12/91	Bldg. 7017	Hydraulic Oil	1 pint	Loggable	
07/13/91	Bldg. 3544	Caustic (50%)	2.5 gallons	Loggable	
07/15/91	Bldg. 7012	Ethylene Glycol & Water (50%)	2 gallons	Loggable	
07/15/91	Bldg. 4508	Map/Wax water	5 gallons	Loggable	
07/18/91	Bldg. 4500S	Water/Oil	3 gallons	Loggable	
07/24/91	Bldg. 7012	Ethylene Glycol & Water (50%)	1/2 gallon	Loggable	
07/25/91	Bldg. 3130	Mercury	47 grams	Loggable	
07/26/91	Bldg. 7069	Gasoline	2 gallons	Loggable	
07/26/91	East Parking Lot	Ethylene Glycol & Water (50%)	1/2 pint	Loggable	
08/12/91	Bldg. 7603	Diesel, Fuel	1/2 pint	Loggable	
08/15/91	East Parking Lot	Ethylene Glycol & Water (50%)	1 gallon	Loggable	
08/14/91	Bldg. 7022	Propane	Small Amt.	Loggable	
08/16/91	Bldg. 3017	Merucyr	9 grams	Loggable	
08/23/91	Bldg. 2519	Hydraulic Oil	1/2 glalon	Loggable	
08/23/91	3039 Stack	Sulfuric Acid	1/2 pint	Loggable	
08/26/91	Bldg. 3019	Tap water & Asphalt Cuttings	1/2 gallon	Loggable	
08/28/91	Bldg. 7010 to Bldg. 3505	Motor oil	1 gallon	Loggable	
In reek 08/28/91	Bldg. 4501	Concrete Cutting Water	1 gallon	Unusual Occ.	ORO--MMES-X10PLANT-1991-1006
08/29/91	Bldg. 7002	Oil	1 quart	Loggable	
In reek 08/29/91	Bldg. 7007	Potable Water	1500 gallons	Unusual Occ.	ORO--MMES-X10PLANT-1991-1006
08/29/91	Bldg. 7002	Vehicle Wash Water	500 gallons	Loggable	
08/30/91	Bldg. 3544	Sulfuric Acid (50%)	1 pint	Loggable	

October 3, 1991

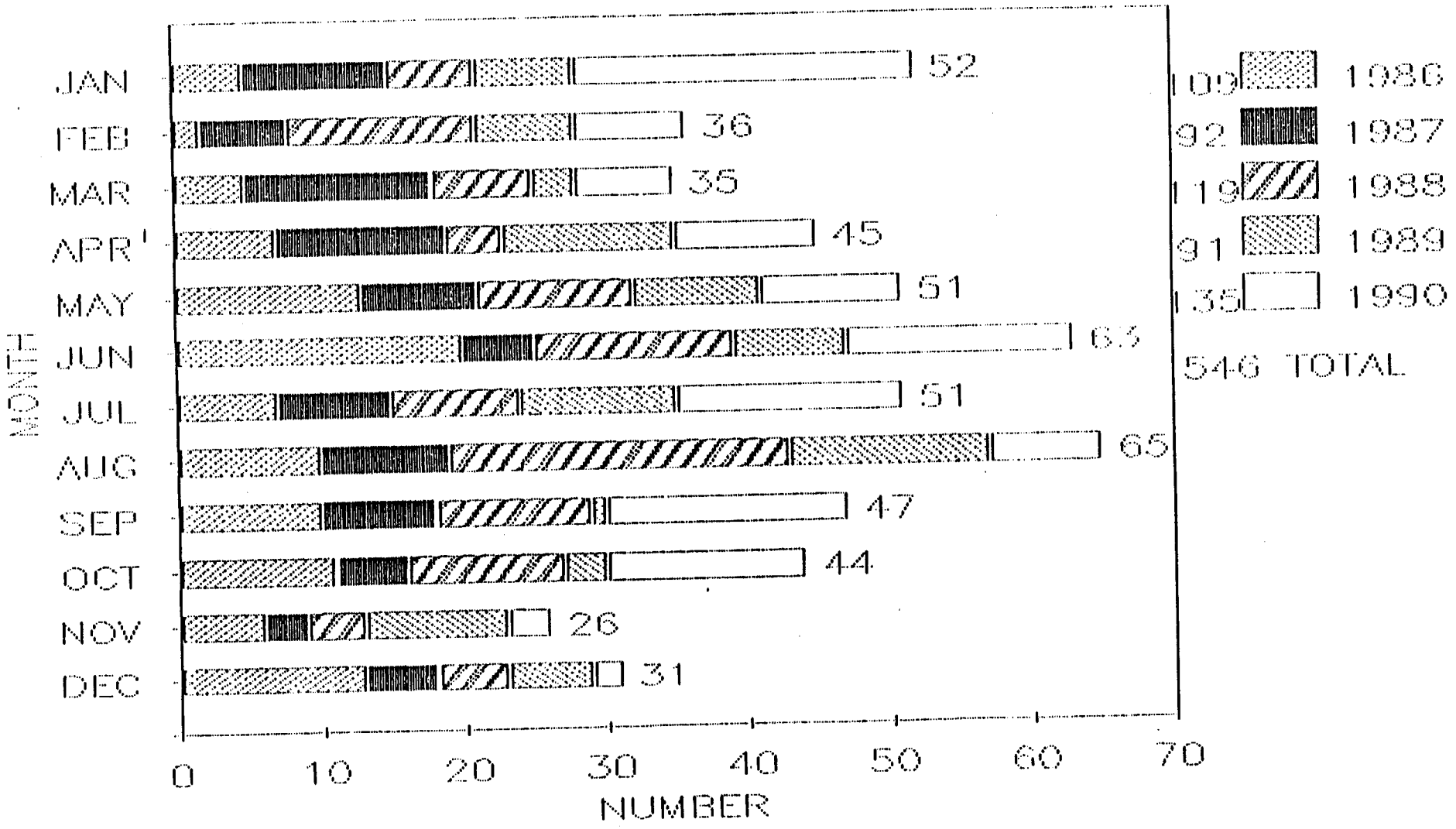
Date	Location	Type of Material	Quantity	Event Type	Occurrence Report. No.
09/03/91	Bldg. 7651	Hydraulic Oil	1 quart	Loggable	
09/05/91	Bldg. 2525	Ethylene Glycol & Water (50%)	1/2 gallon	"	
09/05/91	Bldg. 4500N	Ethylene glycol & Water (0.4%)	1 quart	"	
09/06/91	Vehicle 6714	Unknown	1 quart	"	
09/06/91	Bldg. 4500S	Motor Oil	1/2 pint	"	
09/09/91	Bldg. 4500N	Hydraulic Oil	3 gallons	"	
09/09/91	Bldg. 3019	Brake Fluid	1 pint	"	
09/11/91	Bldg. 2013	Hydraulic Oil	1/2 pint	"	
09/11/91	Bldg. 3025E	Potable Water	13,440 gallons		
09/12/91	Bldg. 7041	Tranformer Oil (<50 ppm, PCB)	2.5 gallons	"	
09/11/91	WOC Embayment	Motor Oil	Few drops	unusual	
09/17/91	Bldg. 4500N	Gasoline	2 oz.	Loggable	
09/18/91	Bldg. 4501	Nautrual Gas	Unknown	"	
09/23/91	SWSA 5	Oil	1 pint	"	
09/23/91	Bldg. 3502	Asbestos Containing Paint Chips	120 sq. ft.	"	
09/25/91	Rogers Quarry	Gasline Sludge with Water	1/2 pint	"	
09/25/91	Bldg. 3504	Bentonite	1200 pounds	"	
09/26/91	Bldg. 3026C	Process Water	800 gallons		
09/26/91	Bldg. 3525	Hydraulic Oil	1/2 pint		

ORNL SPILL SUMMARY 1986 - 1990



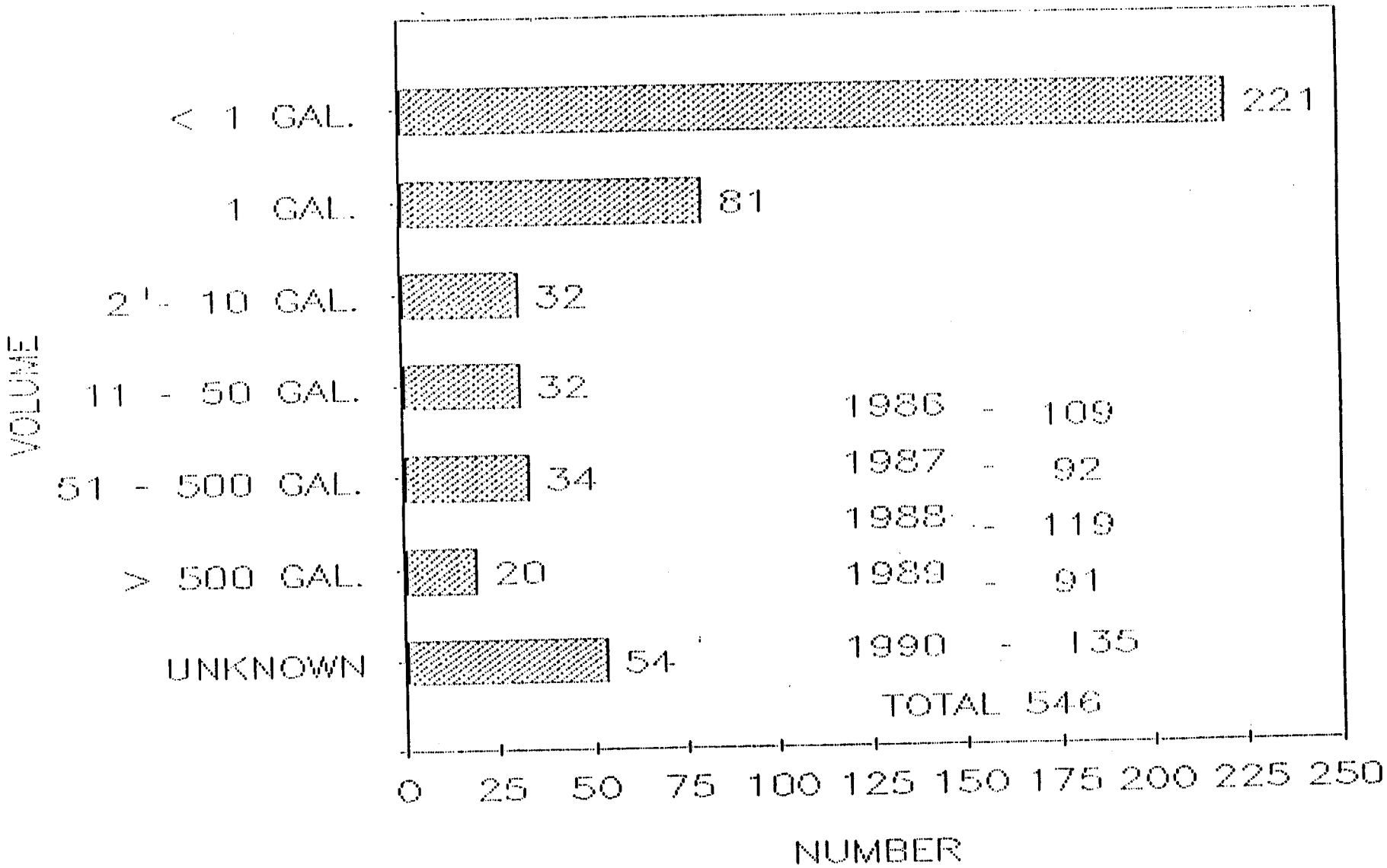
SPILL57

ORNL SPILL SUMMARY
1986 - 1990
MONTHLY FREQUENCY



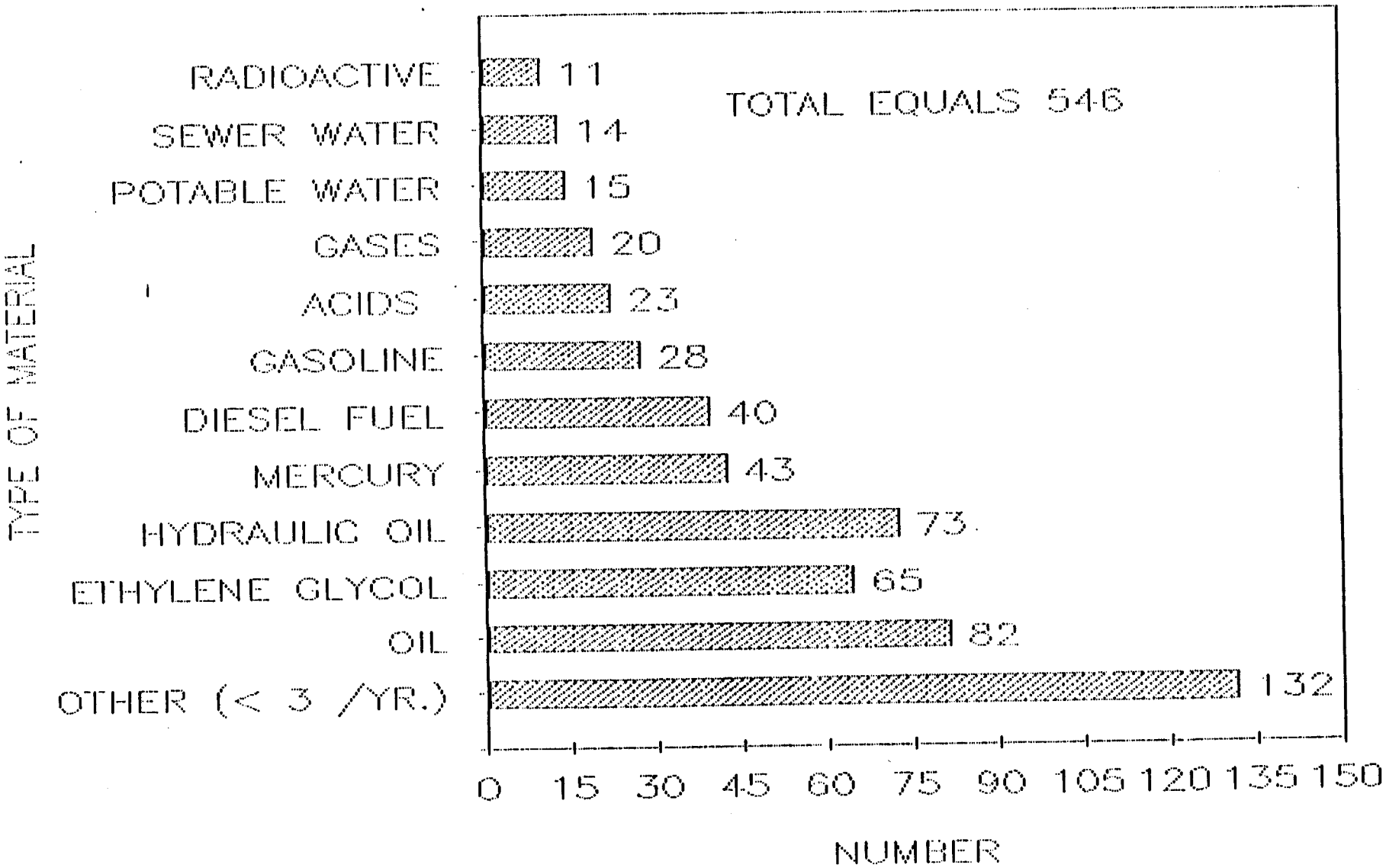
SPILL 50

ORNL SPILL SUMMARY 1986 - 1990
VOLUME FREQUENCY



SPILL 54

ORNL SPILL SUMMARY 1986-1990
MATERIAL FREQUENCY



SPILL52

ORNL

Spill Reports for Spills that Reached Creek

G.9

ID: 87/1-1

DATE: 1/2/87, 1920 hr

LOCATION: 4500S Basement

TYPE OF SPILL: Ethylene glycol and water - about 85 gallons of 25% solution

---

DESCRIPTION: During repair of chilled water system equipment, a by-pass pump failed to re-start causing an open 55-gallon drum to overflow onto the floor. Approximately 85 gallons of 25% glycol-water mix went to a floor drain, then to a building sump, and was then pumped to White Oak Creek.

ACTION: Problem with the pump was corrected. Nearby floor drain was plugged temporarily in case another overflow occurred. Absorbent was used to clean up floor around drum and drain. Samples were taken on 1/2/87 and 1/3/87 from the sump and several locations along White Oak Creek at White Oak Dam for glycol analysis. Concentrations ranged from <3 ppm in WOC at 5th Creek to 21 ppm at the flume. None was detected in the White Oak Dam sample taken at 1530 hr on 1/3/87.

CSDVA
X1, J.G.ROGERS[JGR], P.S.ROHWER[ROH], D.C.PARZYCK[DCP]
Cc: W.A.ALEXANDER[BAA], H.M.BRAUNSTEIN[HEB], J.D.STORY[DJS], F.J.HOMAN[FJH],
C
LASHER[EKI], E.H.KRIEG[EZK], J.H.SWANKS[JQS], V.L.TURNER[TLV], T.P.PERRY[TPP],
T.H.ROW[THR], G.W.OLIPHANT[GWQ], D.M.WALLS[WMD], GARRETT at INFVAX,
J.T.KITCHING
S[KTJ], B.L.MORGAN[BXM], D.K.JENNINGS[DKJ], K.G.EDGEMON[KGE],
J.B.MURPHY[JMU]
Subject: Spill

Date: 1/16/87 - 1200 hr
Location Building 4500N
Type of Spill Sewer water - estimated 50 gallons
Description A stopped up sanitary sewer line caused sewer water to over flow from a sewer manhole to a storm drain which flows to White Oak Creek

Action Water samples were taken from White Oak Creek to determine the levels of BOD, ammonia, fecal coliform, and metals. Steam Plant staff have stopped the water flow and are in the process of pumping the system and repairing the problem. DEM staff will continue to follow this process.

DATE: UPDATE 3/5/87 - 1600 hr
LOCATION: West end of Building 4509W
TYPE OF SPILL: Ethylene glycol
DESCRIPTION: At 1650 hr DEM technicians found and reported what appeared to be an ethylene glycol-water solution flowing into White Oak Creek through a 16" concrete pipe near the west end of the new 4509W cooling tower addition; the flow rate was approximately 500 mL per minute.
ACTION: The LSS was notified; P&E was called in by the LSS. Samples were taken from the pipe and at several locations downstream in White Oak Creek. The flow from the pipe to White Oak Creek was stopped by sand bagging the effluent end of the pipe, and a small pump was installed to pump the solution from the pipe to an empty 55-gallon drum. P&E personnel closed the valves that controlled flow to the new HTML facility; it is believed that one of the pipes to that facility is leaking.
UPDATE: The pumping operation has recovered 90 gallons of

ethylene glycol solution and no further solution has reached White Oak Creek. No biological impact on the stream has been observed. Work has started on uncovering cooling lines to locate the source of the problem, but no leaks have been found. Efforts to locate the leak will continue. Sample results are not yet available. Additional updates will be provided.

Inspected by: W. A. Alexander

T.H.ROW[THR], G.W.OLIPHANT[GWQ], D.M.WALLS[WMD], GARRETT at OAX,
J.T.KITCHINGS[K
TJ], B.L.MORGAN[BXM], D.K.JENNINGS[DKJ], K.G.EDGEMON[KGE], J.B.MURPHY[JMU]
Subject: ORNL Spill

SUBJECT:	ORNL SPILL REPORT
ID:	87/3-8
DATE:	3/20/87 - 2320 hr.
LOCATION:	5th Creek
TYPE OF SPILL:	Floor Cleaning Solution - Amount Unknown
DESCRIPTION:	ORNL janitors were cleaning floors in Building 3500 and apparently poured the cleaning solution down a floor and/or storm drain. The material ran into 5th Creek and caused the pH of the Creek to rise to 9.5 for eleven minutes.
ACTION:	E. M. Robinson, the Environmental Protection Officer for the I&C Division, contacted the foreman of the janitor staff, advised him of proper disposal procedures, and asked him to make sure that, in the future, cleaning solutions were not put down drains.

WAA:357Y:aw

C:\FILE2\SPILLS\SPILL87 Doc 1 Pg 53 Ln 5.68" Pos 1"

ID: 87/3-9
DATE: 3/27/87 - 0830 hr. - UPDATED 3/30/87
LOCATION: East Bank of 5th Creek, south of Central Avenue
TYPE OF SPILL: Ethylene glycol and water
DESCRIPTION: A Department of Environmental Management technician discovered green-tinted water draining from pipe #363 into Fifth Creek.

ACTION: A sample of the colored water was taken and analyzed for ethylene glycol; the water contained 4,780 ppm ethylene glycol. P&E personnel were notified and immediately began the process of locating and repairing the leaks. Problems were found and corrected in a sticking automatic air vent and in two valves in Building 4501 . The chilled water system was repaired and the system is back in service.

UPDATE: 3/30/87
It is estimated that approximately 165 gallons of 20% ethylene glycol solution was lost into Fifth Creek during this leak. No problems have been observed in Fifth Creek or White Oak Creek aquatic life.

JDS:358Y:aw

URPHY[JMU]
Subject: ORNL Spill

SUBJECT:	ORNL SPILL REPORT
ID:	87/3-12
DATE:	3/31/87 - 2000 hr.
LOCATION:	4500N Basement
TYPE OF SPILL:	Chilled Water (ethylene glycol-water), less than 5 gallons
DESCRIPTION:	A chilled water line cracked near a flange, allowing about 20 gallons of chilled water to leak from the cooling system onto the floor. It is estimated that less than 5 gallons went down a floor drain and to White Oak Creek.
ACTION:	P & E personnel discovered this leak and responded by valving off the leaking section, stopping up floor drains, vacuuming up spilled liquid, and collecting the small amount that continued to leak from the line. Water samples were taken by DEM from the sump and from several locations in White Oak Creek and are to be checked for ethylene glycol.

JDS:361Y:aw

Subject: ORNL Spill

SUBJECT:	ORNL SPILL REPORT
ID:	87/3-10
DATE:	3/27/87 - 1915 hr.
LOCATION:	4500N Basement
TYPE OF SPILL:	Chilled Water (ethylene glycol-water), estimated 25-100 gallons
DESCRIPTION:	Approximately 25-100 gallons of 20% ethylene glycol-water solution was lost from the 4500 North chilled water system when a crack developed in the housing of a large pump.
ACTION:	P & E personnel valved off the leaking pump section of the system, set up a collection system to collect the coolant that continued to leak out, and began cleanup of the solution covering a rather large floor area. Nearby floor drains were temporarily plugged to minimize the amount of coolant reaching White Oak Creek via these drains. An inspection of White Oak Creek on 3/28/87 revealed no ill effects on aquatic life.

JDS:360Y:aw

C:\FILE2\SPILLS\SPILL87 Doc 1 Pg 56 Ln 7.3" Pos 1"

DATE: 4/29/87
LOCATION: Melton Hill Lake at Ramsey Drive
TYPE OF SPILL: Oil - 1 quart
DESCRIPTION: DEM staff reported an oily spot in the road at Melton Hill Lake and Ramsey Drive. Further investigation revealed that oil was also on the side of the road in the grass and gravel. Also while on site, the lake level began to rise and a very small oil sheen was observed on the water next to the area in question. Additional investigation determined that the ORNL Fire Department conducted an annual pump draft at this location on Monday, April 27, 1987. Oil is used as part of the prime for the pump. According to ORNL Fire Department staff, the oil is usually contained. In this case, something out of the orginary must have taken place. Fire Department staff involved with this activity are on their scheduled days off and will be back to work on Friday, May 1, 1987. The oil is over a 5 foot square area and was spread by the discharge of water.

ACTION: The clean-up of the oil contaminated grass and gravel started at 12:30, April 29, 1987. The material removed will be disposed of as oil contaminated waste.

DATE: 4/29/87 1345 hr
LOCATION: West of Building 3038
TYPE OF SPILL: Hydrochloric (Muriatic Acid) - 6 gallons
DESCRIPTION: An Operations Division staff member (David Drake) noted that ORNL workers were in the process of using Hydrochloric (muriatic) acid to score a section of concrete to reduce a slipping hazard. The area was uphill from a storm drain. Drake recognized a problem and responded with appropriate calls to get assistance. Responding to the incident were LLS (Vanover), DEM, Waste Operations Group, and Plant and Equipment Division staff. First responders located some clay absorbent (Drake knew where a supply was) and built a dike around the storm drain to prevent the bulk of the material from reaching 5th Creek. Only about a gallon of an acid water mixture reached the storm drain. The pH in 5th Creek went from 8.2 to 7.9 for approximately 20 minutes.
ACTION: After the dike was built around the storm drain, K. G. Edgemon's staff provided a basic material to neutralize the acid and the material was removed from the concrete. Quick action by David Drake, and team work by the first responders, prevented this incident from having a major pH impact on 5th Creek. The workers and suprvision present were made aware of the nature of

the environmental insult and potential. According to Frank Kolski and Henry Tuck of the Plant and Equipment staff, it has been a past practice to use muriatic acid for this type of work (however, this type work has not been done in a long time). Kolski and Tuck also stated that future procedures will reflect that a mechanical means will have to be used for this type work.

Subject: ORNL Spill Report

SUBJECT:	ORNL SPILL REPORT
ID:	87/5-13
DATE:	5/7/87 0930 hr
LOCATION:	Building 3038
TYPE OF SPILL:	Potable Water - Several hundred gallons
DESCRIPTION:	Responded to a call to investigate a potable water line broken during excavation activities between Building 3038 and Central Avenue. Several hundred gallons of water flowing into Fifth Creek.
ACTION:	Efforts are under way to repair the line. Other work in the area indicated no radioactive contamination, but a sample was taken for gross beta analysis and the reading determination was 0.4 Bq/l. The pH of the water was 7.0 and the chlorine in White Oak Creek was 0.3 ppm, and below our NPDES permit level.

WAA:374:lb

Date: 12 May 1987 1557-EDT

From: P.S.ROHWER[ROH]

C:\FILE2\SPILLS\SPILL87 Doc 1 Pg 70 Ln 1" Pos 1"

Subject: Spills

SUBJECT: ORNL SPILL REPORT
ID: 87/5-3
DATE: 5/12/87 0930 hr
LOCATION: Tower Shielding Facility/Melton Branch
TYPE OF SPILL: Potable Water - 5,000 gallons
DESCRIPTION: Chemical operators reported to the LSS a discoloration of the Melton Branch water at 0210 hours. The source of the discoloration was found to be a broken 4" potable water line about 100 yards below the TSF Reservoir. The break appears to have been caused by excavation (road) work in the area.
ACTION: The pump in Building 7500 was shut down and valved out. The LSS office did a trend of the Melton Branch pH, DO, and beta gamma readings and could not determine any changes due to the release of this water to the creek. According to Jim Mathis (P&E Division), repair efforts are underway and are being conducted by Rust Engineering.

WAA:375:aw

Date: 14 May 1987 0750-EDT
From: P.S.ROHWER[ROH]
C:\FILE2\SPILLS\SPILL87 Doc 1 Pg 71 Ln 9.82" Pos 1"

T.P.PERRY[TPP], T.H.ROW[THR], G.W.OLIPHANT[GWQ], D.M.WALLS[WMD], GARRETT at OAX,
J.T.KITCHINGS[KTJ], B.L.MORGAN[BXM], D.K.JENNINGS[DKJ], K.G.EDGEMON[KGE], J.B.M
PHY[JMU]
Subject: Spill

SUBJECT:	ORNL SPILL REPORT
ID:	87/5-7
DATE:	5/26/87 1300 hr
LOCATION:	Old Shale Fracture Site
TYPE OF SPILL:	Potable water - Estimated 1000 gallons
DESCRIPTION:	Workers for Highland Drilling Company were clearing an area for the placement of a water tank when they broke a 2" potable water line. Any runoff from this site would go to White Oak Creek.
ACTION:	Highland Drilling Company will repair the broken water line.

WAA:380:aw

Date: 29 May 1987 1438-EDT
From: P.S.ROHWER[ROH]
C:\FILE2\SPILLS\SPILL87 Doc 1 Pg 74 Ln 9.46" Pos 1"

J.T.KITCHINGS[KTJ], B.L.MORGAN[BXM], D.K.JENNINGS[DKJ], K.G.EDGEMON[KGE], J.B.M
URPHY[JMU]
Subject: Spill

SUBJECT:	ORNL SPILL REPORT
ID:	87/5-8
DATE:	5/28/87 1500 hr
LOCATION:	4500N
TYPE OF SPILL:	Raw Sewage - 100 gallons
DESCRIPTION:	A sewer man hole located on the south side of Building 4500N overflowed with sewage due to a plugged line. The water ran on the ground and a small amount reached a storm drain that goes into White Oak Creek.
ACTION:	All bathrooms in the area were immediately closed to prevent additional water from getting into the environment. Repair efforts on the line are underway. Staff members of the Environmental Monitoring and Compliance Department (formerly DEM) collected fecal coliform samples above and below the point of discharge for the affected storm drain.

WAA:381Y:aw

SUBJECT: ORNL SPILL REPORT

ID: 87/7-1

DATE: 7/1/87

LOCATION: 4509, east end

TYPE OF SPILL: Ethylene glycol, less than 30 gallons

DESCRIPTION: About 1850 hrs, a surge tank vent line was found leaking chilled water onto the floor of Building 4509. Little, if any, chilled water is believed to have gone down the floor drains to White Oak Creek because the floor drains were plugged immediately after the leak was discovered.

ACTION TAKEN: The vent line was valved off, floor drains were plugged, and samples were taken from several locations along White Oak Creek to check for the presence of ethylene glycol. Approximately 20 - 25 gallons of chilled water was cleaned up off the floor and contained.

JDS:388Y:aw
C:\FILE2\SPILLS\SPILL87 Doc 1 Pg 82 Ln 5.14" Pos 1"

DATE: 7/21/87

LOCATION: Building 3024

TYPE OF SPILL: Asbestos

DESCRIPTION: On July 18 and 19, 1987, the Luke Green Asbestos Removal Company removed asbestos from pipes in Building 3024 as part of the project for the Demolition of Building 3024. During the removal activities, asbestos (mixed with water) flowed under a door and outside (they washed the inside floor with water) the building. That water mixed with asbestos went into a storm drain. The amount of asbestos entering the storm drain is unknown.

ACTION: This problem was discovered late in the afternoon on 7/20/87. The Contractor was brought out to the Laboratory and was asked to clean up the material outside. This was accomplished by 2200 hrs. At approximately 1900 hrs, water samples were taken on White Oak Creek at the 7500 Bridge, White Oak Creek Weir, and at the discharge of White Oak Dam. Also a sample was taken at the discharge of the affected storm drain. Sample results will be available on 7/22/87. Visual inspection at 0900 hrs on 7/22/87, indicated satisfactory cleanup of the area outside of Building 3024 contaminated with asbestos during this spill. According to the Industrial Hygiene staff, the contractor still has much cleanup work to do inside Building 3024.

COMMENTS: These types of incidents have made several members of the Environmental Compliance and Health Protection Division wonder (again) just how much risk we are taking by doing this kind of operation on off shifts when full staff and support organizations are not on-site.

SUBJECT: ORNL Spill Report

ID: 87/7-11

DATE: 7/29/87 - 1600 hr

LOCATION: East of Building 2016

TYPE OF SPILL: Potable water - 400 gallons

DESCRIPTION: An 8" water line was reported to be leaking water to the surface. The water was being discharged into a storm drain.

ACTION: The section of line with the leak was isolated to stop the flow of water and the line will be repaired.

WAA:399:aw

Date: 03 Aug 1987 1310-EDT
From: P.S.ROHWER[ROH]
To: AEBISCHR at OAX, R.S.WILTSHIRE[ZSW], W.D.ADAMS[XWA], T.A.BOWERS[ATB],
C:\FILE2\SPILLS\SPILL87 Doc 1 Pg 91 Ln 9.28" Pos 1"

DATE: 10/6/87 - about 1045 hr

LOCATION: Near northwest corner of Building 7040

TYPE OF SPILL: Raw sewage, unknown quantity

DESCRIPTION: Personnel on a P&E grass-cutting crew discovered sanitary sewer manhole #702 overflowing near the northwest corner of Building 7040. The overflowing water was flowing across the ground surface to a small stream nearby which empties into White Oak Creek.

ACTION: The LSS was notified by P&E, and EMC responded to a call from the LSS. P&E personnel began working to rig a temporary by-pass around the overflowing manhole, and EMC personnel collected fecal coliform samples from the small stream nearby and from White Oak Creek. After the by-pass is set up, the necessary repairs will be made in the clogged section of the sewer line.

JDS:421:aw
C:\FILE2\SPILLS\SPILL87

ID: 87/12-1

DATE: 12/4/87 1650 hrs

LOCATION: White Oak Creek, outfall #314, just south of Bldg. 6010

TYPE OF SPILL: Oil - type and amount unknown

DESCRIPTION: Environmental Monitoring and Compliance (EMC) personnel responded to a call from the LSS regarding an oil sheen on the surface of White Oak Creek just south of Building 6010. Investigation revealed that oil was entering the creek through storm drain pipe #314.

ACTION Operations Division personnel rigged an oil boom across the creek a few yards downstream from pipe #314, and EMC personnel collected water samples from the creek. A search was initiated to try to locate the source of the oil sheen, but before it could be located, the oil flow stopped.

JDS:429:aw

C:\FILE2\SPILLS\SPILL87 Doc 1 Pg 120 Ln 3.88" Pos 1"

DATE: 12/8/87

LOCATION: Bldg. 4500S, E Corridor Loading Dock

TYPE OF SPILL: Mortar Mix and Gypsum Plaster

DESCRIPTION: A doorway is being installed into Room B-155. The cleanup of the equipment used to mix concrete and gypsum was

accomplished by washing the waste residue with a water hose onto the loading dock and parking area. The runoff of the waste material and rinse water ran into the storm drain which flows to White Oak Creek. The incomplete washing of the area left a white residue on the dock and parking area.

ACTION

The supervisor of the job was notified of the situation. The area was washed with more water to remove the residue from the area surfaces.

The materials are not of an extreme hazardous nature to the health of personnel; however, if this practice is continued in a haphazard manner, the volume of material could become a hazard to the aquatic life in White Oak Creek by changing the pH of the water. The increase in silt in quantity could also be hazardous to aquatic life.

Until a better method of control for disposal of these types of material can be determined, it is requested that the waste material be collected in a container, allowed to dry, and disposed of as building material solid waste.

The tools and other equipment used with these materials can be rinsed as usual after the solid material is removed as stated above and then using copious amounts of water to give as much dilution as possible to eliminate any environmental effects.

ID: 87/12-4

DATE: 12/17/87 - 1530 hrs

LOCATION: 5500 Building, East Equipment Room

TYPE OF SPILL: Ethylene glycol, approximately 10 gallons

DESCRIPTION: Jerry Young, P&E Division, reported to Environmental Monitoring and Compliance that during the repair of a cooling system pump seal about 10 gallons of 20% ethylene glycol-water mixture leaked to a floor drain which drains to White Oak Creek.

ACTION Approximately 55 gallons of the glycol mixture was contained and recovered, preventing it from reaching a floor drain.

JDS:432:aw

Date: 28 Dec 1987 1520-EST
C:\FILE2\SPILLS\SPILL87

Doc 1 Pg 123 Ln 4.96" Pos 1"

ID: 87/12-1

DATE: 12/28/87 0900 hrs

LOCATION: White Oak Creek, outfall #314, just south of Bldg. 6010

TYPE OF SPILL: Transmission Fluid, less than 1 pint

DESCRIPTION: During follow-up visual monitoring of this location following the oil sheen problem reported on 12/4/87, Environmental Monitoring and Compliance (EMC) personnel found an oil sheen entering White Oak Creek through pipe #314 again today.

ACTION EMC personnel tracked the sheen to a private vehicle parked in the lot south of Building 6003; the vehicle was leaking transmission fluid which was being washed by rainfall to a nearby storm drain catch basin. Waste Operations personnel placed an oil diaper under the leak to absorb the fluid. EMC personnel contacted the owner of the vehicle who said he would have the leak repaired. EMC will continue to visually monitor this location for oil..

DATE: 1/6/88 1500 hrs

LOCATION: Bldg. 3028

TYPE OF SPILL: Water, about 20 gallons

DESCRIPTION: A sprinkler head blew off in the 3028 sprinkler system, allowing approximately 20 gallons of water to leak to the floor, run under a door to the outside where it then went down a storm drain which drains to Fifth Creek. Because of the location of the leak, there existed a potential for the water to pick-up radioactive contamination before leaving the building.

ACTION The sprinkler system was valved out to stop the water leak and to allow for repair of the sprinkler head. Absorbent clay was used to build a dike around the storm drain to minimize the amount of water draining to the creek, and sand bags were delivered for additional diking in the event the water contained any radioactive contamination. Samples of the water checked by the Health Physics representative showed no contamination in the water, and it was allowed to continue draining into the storm drain system.

A:\SPILL88

Doc 1 Pg 1 Ln 5.5" Pos 1"

SUBJECT: ORNL Spill Report

ID: 88/1-6

DATE: 1/28/88

LOCATION: Building 5505

TYPE OF SPILL: Potable Water - Amount Unknown

DESCRIPTION: A leak in a potable water line has been identified near Building 5505. Some of the water is leaking into White Oak Creek.

The chlorine level of the leak was .49 ppm while the water in White Oak Creek was less than .1 ppm.

ACTION: Repairs to the line will start on 1/29/88. ORNL maintenance has been asked to take necessary steps to minimize the disturbance of sediments in White Oak Creek.

WAA:442:aw

A:\SPILL88

Doc 1 Pg 6 Ln 6.04" Pos 1"

ID: 88/1-7

DATE: 1/28/88 0900 hr

LOCATION: White Oak Creek at pipe #304 (located southeast of Building 3544)

TYPE OF SPILL: Oil Sheen (hydraulic fluid, about 1 pint trapped by oil boom)

DESCRIPTION: Fred Taylor and Wayne Parsons of the Environmental Monitoring and Compliance Department (EMC) discovered an oil sheen entering White Oak Creek through pipe #304 southeast of Building 3544.

ACTION: The LSS was notified and Hazardous Waste Operations personnel were called to place an oil boom across White Oak Creek a few yards downstream from pipe #304. Information supplied by Swan Breeding of Operations Division led EMC to check the elevator pit in Building 3025, where puddles of hydraulic fluid were found; the building sump was located in this pit, and it also contained hydraulic fluid. The sump pump in this sump routinely pumps to the storm drain system which drains to White Oak Creek, as do other building sumps. Hazardous Waste Operations personnel pumped this sump out, recovering about 2 gallons of hydraulic fluid and about 40 gallons of water. Plant and Equipment Division (P&E) personnel used absorbent clay to absorb the puddles of hydraulic fluid on the floor of the elevator pit, and oil diapers were used to clean up the sump itself. A sample of building drain water going into the sump was collected and will be analyzed for oil and grease to see if that water source was contributing to the hydraulic fluid found in the sump.

The elevator was put back in service, and the pit will be checked frequently by P&E personnel for hydraulic leaks. Hazardous Waste Operations personnel will dispose of the absorbent clay used in the cleanup as well as the fluid pumped from the sump, after it is checked for PCB contamination.

EMC will visually monitor pipe #304 effluent to ensure that action taken in the 3025 elevator pit has eliminated the oil sheen at pipe #304 on White Oak Creek.

SUBJECT: ORNL Spill Report

ID: 88/2-13

DATE: 2/27/88 - 0800 hrs

LOCATION: HFIR Septic Tank area

TYPE OF SPILL: Sewage water, unknown volume

DESCRIPTION: At about 0800 hours, steam plant personnel checking the HFIR septic tank system found the tank overflowing to a storm drain and then to Melton Branch.

ACTION: The LSS was notified and efforts were immediately begun to reduce the volume of water in the sewage tank; steam plant personnel took samples of the water entering the septic tank as well as the overflow water going to the storm drain. These samples contained no chlorine and only background levels of radioactivity. Environmental Monitoring and Compliance personnel responded to a call from the LSS and assisted steam plant personnel in trying to locate the source of the increased water flow in the sewage system.

The LSS had area buildings checked for running water, and one faucet was found open in building 7930; however it is not likely that this faucet could account for the volume of water that created the overflow problem. Three tanker loads of sewage water (about 3000 gallons per load) were hauled to the sewage treatment plant during this incident; normally, it is not necessary to haul any sewage from HFIR on weekends.

Before the source of unusual flow could be located, the flow returned to about normal. EM&C checked construction sites and open excavations in the HFIR area, but no water problems were found.

Comments: The increased flow in the sewage system is believed to have started between 0000 and 0800 hours on 2/27/88 and returned to normal about 1400 hours. There was a power outage in the 7900 area from about 0700 hours

to about 1400 hours due to electrical work being conducted in the area.

JDS:458:aw

Subject: Spill

SUBJECT:	ORNL Spill Report
[illegible]:	88/2-7
DATE:	2/16/88
LOCATION:	Between Building 4500N and Building 4501
TYPE OF SPILL:	Potable Water
DESCRIPTION:	A break in a potable water line between Building 4500N and Building 4501 caused about 100 gallons of potable water to go into the storm drain. No significant impact is expected from the chlorine content of the water.
ACTION:	The break in the line was isolated and will be repaired.

WAA:451:sm

A:\SPILL88

Doc 1 Pg 15 Ln 5.14" Pos 1"

DATE: 2/18/88

LOCATION: Building 7920

TYPE OF SPILL: Ethylene Glycol and Water Mixture, about 4 gallons

DESCRIPTION: Environmental Monitoring and Compliance personnel responded to a call from Building 7920 personnel who reported that while a private contractor was installing new tubing in the chilled water system, a small valve was accidentally broken off, allowing approximately 12 gallons of chilled water (about 20% ethylene glycol) to leak to the floor. Approximately 4 gallons went down a floor drain (and to the storm drain system) before the leak was stopped and the drain blocked; the remainder was recovered.

ACTION: A new valve was installed, the floor drain was blocked, and the chilled water on the floor was vacuumed up. The LSS was notified. No environmental problems are anticipated as a result of this spill.

JDS:455:sm
A:\SPILL88

Doc 1 Pg 17 Ln 7.48" Pos 1"

DATE: 3/10/88 - 1488 hr

LOCATION: Building 4509

TYPE OF SPILL: Ethylene Glycol and water mixture - 30 gallons

DESCRIPTION: Workers for D. F. Shoffner Mech. Contractors, Inc. were attempting to remove a valve when the pressure side of the 1/2 inch line broke and an estimated 30 gallons of ethylene glycol and water mixture spilled onto the concrete floor.

ACTION: Fast action by ORNL Plant and Equipment Division staff prevented greater damage. They valved off the line and used duck seal to plug off the floor drains. Only a small amount of the mixture got into the floor drains and thus into White Oak Creek. Shoffner's workers were advised to use a wet vacuum to remove the mixture from the floor and it may be returned to the system. They were also advised that it would be prudent to take the pressure off the next valve to be replaced to prevent this type of spill in the future.

A:\SPILL88

Doc 1 Pg 25 Ln 6.04" Pos 1"

SUBJECT: ORNL Spill Report

ID: 88/3-7

DATE: 3/24/88, 1430 hrs

LOCATION: Fifth Creek

TYPE OF SPILL: Wash water from mortar mixer

DESCRIPTION: Waste Operations Control Center (WOCC) reported to Environmental Monitoring and Compliance (EMC) that the pH in Fifth Creek had risen to slightly above 9. Investigation by personnel from Operations Division and EMC revealed that a private contractor working on the Office Building for Efficiency and Renewable Research had started to clean up waste materials from the bricking activities. During this cleanup, accumulated waste water, which contained waste mortar mix, sand, and sediments was drained to a storm drain and then to Fifth Creek. The existing straw around the storm drain did not effectively prevent the solids from entering the storm drain.

ACTION: EMC personnel discussed this incident with the Construction Engineer for the project and the contractor; additional straw bales were set up near the

storm drain so that water draining from the site would be more effectively filtered. The work involving the use of mortar is completed. EMC also requested that the contractor place bales of straw around the other storm drain catch basin in this new construction area to minimize the amount of sediment going to the storm drains during the landscaping of this site.

JDS:475:aw

DATE: 4/23/88

LOCATION: Building 3029

TYPE OF SPILL: Ethylene Glycol and water - 5 gallons

DESCRIPTION: A broken coolant hose was found on the 3029 emergency generator. Most of the coolant went into a nearby storm drain before it could be blocked off.

ACTION: Waste Operations staff used clay absorbent to remove the remaining solution and the generator was repaired and placed back in service

WAA:482:aw

Date: 29 Apr 1988 1612-EDT

From: P.S.ROHWER[ROH]
To: ADAMSWD at ENGVAX, AEBISCHR at OAX, W.A.ALEXANDER[BAA], L.D.BATES[DEE], BOW
A:\SPILL88 Doc 1 Pg 42 Ln 1.18" Pos 1"

SUBJECT: ORNL Spill Report

ID: 88/4-4

DATE: 4/29/88

LOCATION: Building 4500N

TYPE OF SPILL: Raw Sewage - 75 gallons

DESCRIPTION: A plugged sewer line caused sewer water to back up a manhole and run onto the ground. The water had a path to a storm drain and about 75 gallons of the material went into White Oak Creek.

ACTION: A tank truck was brought in to pump the sewer water and to stop the flow to the creek. Efforts are underway to unplug the line. Environmental Sampling personnel are collecting fecal coliform samples from White Oak Creek.

WAA:483:aw

A:\SPILL88

Doc 1 Pg 42 Ln 8.92" Pos 1"

DATE: 5/6/88

LOCATION: Hazardous Waste Storage Area

TYPE OF SPILL: Potable Water - 10,000 gallons

DESCRIPTION: During an excavation for a new road, a contractor ruptured an 8" potable water line. The water ran into the upper portion of the Melton Branch drainage area. This is not expected to affect the chlorine content of Melton Branch.

ACTION: The break in the line was isolated so that repairs can be made. The Hazardous Waste Storage Buildings still have water for fire protection. Repairs will be started on Monday, May 9, 1988.

WAA:486:aw

Date: 09 May 1988 1529-EDT
From: P.S.ROHWER[ROH]
A:\SPILL88

Doc 1 Pg 44 Ln 9.82" Pos 1"

SUBJECT: ORNL Spill Report

ID: 88/5-4

DATE: 5/13/88

LOCATION: Building 3544

TYPE OF SPILL: Water and Sodium Hydroxide (5% solution) - 50 gallons

DESCRIPTION: During a scrubber tank filling operation, the tank overflowed and spilled an estimated 50 gallons of a 5 percent solution of sodium hydroxide. The bulk of the material spilled onto the floor and drained to the

building sump from which it recycled to the process system. A small amount of the sodium hydroxide solution spilled into an exhaust system and was transported to the roof. A fine mist from the air exhaust fan fell on the protective hard hats and coveralls being worn by two employees working in the area. The LSS was notified of the spill and representatives from Environmental Monitoring and Compliance, Radiation Protection, and Operations were involved in the followup. Surveys of the workers for radioactive contamination were negative. As a precaution, the workers were instructed to shower and change clothes although no significant exposure occurred. The sodium hydroxide solution which reached the roof entered a roof drain and joined other water enroute to White Oak Creek. There was no measurable impact on the pH of White Oak Creek.

ACTION: In addition to the above described action, the spilled material will be cleaned up for proper disposal.

DATE: 5/20/88

LOCATION: Sanitary sewer manhole 174, between Wing 4 and Wing 5, 4500N

TYPE OF SPILL: Sanitary sewer water, unknown volume

DESCRIPTION: Wayne Parsons of Environmental Monitoring and Compliance (EMC) found and reported sanitary sewer manhole 174 overflowing and draining to a nearby storm drain.

ACTION: The LSS was notified and the restrooms on Wing 5, 4500N, were closed to reduce the water flow coming from the manhole. P&E personnel were notified and they will make the necessary repairs on the sewer line. By 1300 hrs, flow from the manhole to the storm drain had stopped; however, since it is not know how long the manhole had been overflowing, no estimate of the volume lost could be made. Samples were collected from White Oak Creek for fecal coliform analysis.

JDS:0492:aw
A:\SPILL88

Doc 1 Pg 50 Ln 8.92" Pos 1"

ID: 88/6-2

DATE: 6/2/88

LOCATION: Sanitary sewer manhole 174, between Wing 4 and Wing 5, 4500N

TYPE OF SPILL: Sanitary sewer water, unknown volume

DESCRIPTION: The LSS reported to Environmental Monitoring and Compliance (EMC) staff that the sanitary sewer manhole between Wings 4 and 5 of 4500N was overflowing, and the overflow was draining to a nearby storm drain.

ACTION: The LSS notified Plant and Equipment (P&E) personnel who responded, and about one hour after the overflow was reported to P&E, personnel had cleared the line sufficiently to stop the overflow. Efforts to completely clear the line continued into the early afternoon.

The problem at this manhole has been a recurring one during recent months (recent previous overflows occurred on 4/29/88 and 5/20/88). However, samples taken from White Oak Creek during the overflow incidents have shown no fecal coliform levels that violate our NPDES permit (i.e., fecal coliform concentrations were below permissible daily maximum and monthly average values).

P&E has initiated an action to have this troublesome stretch of sewer pipe lined. It is believed that this action will solve the chronic clogging problem now being experienced.

DATE: 8/9/88

LOCATION: First Creek

TYPE OF SPILL: Zyglo penetrating oil - 1 gallon

DESCRIPTION: Workers in Building 2024 washed out a vat used to dip metal parts into a solution of penetrating oil and flourience dye. The material was released to the building drains and went through the 2000 area storm drain and into First Creek.

ACTION: The material was first found in the storm drain behind Building 2010 and was reported by members of the Environmental Sampling Group. Members of the Field

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Interface Group and the Waste Operating Group located the source of the material. Samples were collected for oil and grease analysis and the person in charge of the NPDES program was notified of the situation. Advice will be provided to the operators of this process on the proper way to handle this operation in the future.

Report Filed by: W. A. Alexander Phone: 4-8770
A:\SPILL88 Doc 1 Pg 95 Ln 2.26" Pos 1"

DATE: 8/11/88

LOCATION: Northwest corner of Building 5500

TYPE OF SPILL: Ethylene glycol and water (chilled water), 20% solution leaking approximately 1 quart per hour for unknown time period

DESCRIPTION: Plant and Equipment (P&E) staff notified Environmental Monitoring and Compliance (EMC) staff that a chilled water leak had been discovered dripping into a storm drain catch basin near the northwest corner of Building 5500.

ACTION: P&E staff plastic-bagged the end of the drain pipe from which the chilled water was dripping so movement of the chilled water to White Oak Creek was stopped. This was a temporary measure which P&E plans to replace with a small pump set-up which will pump the leaking chilled water to a

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drum while they search for the source of the leak. It is not known where the chilled water is entering the small (approx 4") drain pipe.

A:\SPILL88 Doc 1 Pg 98 Ln 6.58" Pos 1"

DATE: 9/7/88

LOCATION: Fifth Creek

TYPE OF SPILL: Small Amount of Concrete

DESCRIPTION: A contractor, pouring concrete on the steam line upgrade job, spilled a small amount of concrete into Fifth Creek. The pH monitor on Fifth Creek went to high alert with a high of 8.4.

ACTION: The pH was monitored downstream, and no increases were noted. Prior to this event, the contractor had been made aware of the problems with concrete in our streams, and this point has been reemphasized.

COMMENT:

DATE: 9/26/88

LOCATION: Building 3080

TYPE OF SPILL: Potable Water - 1 gallon _

DESCRIPTION: A potable water leak was discovered by Plant and Equipment staff. The leak is on the west side of Building 3080 with a leak rate of about 1 gal. per 5 min. The water is going into a nearby storm drain. The chlorine content of the water is not expected to have any significant effects on the water quality of Fifth Creek.

ACTION: The water leak will be repaired as soon as excavation plans are made.

Report Filed by: W. A. Alexander Phone: 4-8770

A:\SPILL88 Doc 1 Pg 125 Ln 9.28" Pos 1"

DATE: 10/6/88, 1530 hours

LOCATION: East side of Building 2010 (Cafeteria)

TYPE OF SPILL: Potable water, estimated 100 to 200 gallons per minute for about 45 minutes

DESCRIPTION: A broken valve on a potable water line resulted in a flow of an estimated 100 to 200 gallons of water per minute; the water went to a storm drain and then to White Oak Creek.

ACTION: Plant and Equipment personnel notified Environmental Monitoring and Compliance staff and valved the damaged line off. Repair work is underway. The Laboratory Shift Supervisor was notified. No detrimental effects are anticipated.

Report Filed by: J. D. Story Phone: 4-8769

A:\SPILL88 Doc 1 Pg 129 Ln 9.1" Pos 1"

DATE: 10/27/88, 1100 hours

LOCATION: Corner of Sixth and White Oak Avenues

TYPE OF SPILL: Potable water - 2500 gallons

DESCRIPTION: A potable waterline was ruptured during an excavation associated with the steam system upgrade. The trench in which the line was located rapidly filled with water.

ACTION: The water in the trench was sampled for radioactive contamination by a Health Physics representative and was determined to be uncontaminated. Since the line was an active feed to Building 5500 and could not be immediately shut off, it was decided by the Environmental Monitoring Group to begin pumping the water in the trench along the curb of White Oak Avenue toward a storm drain located approximately 150 feet away. Pumping of the trench continued until the line was closed approximately two hours after being ruptured. Repairs to the line are under way.

Date: 2/8/89

Location: South of Building 5500, North Side of Southside Drive

Type of Spill: Concrete and Rainwater mix -

Description: Industrial Contractors, Inc., was pouring concrete along Southside Drive. Concrete was poured from the "Rogers" truck into a previously excavated hole containing approximately 6-8 inches of rainwater. The hole filled with concrete, forcing the rainwater out, into the street, into a nearby storm drain, and then into White Oak Creek. The pH at the flume on White Oak Creek went to just above 10.

Action: Construction engineer John Eschuck was notified and in turn notified the Industrial Contractors, Inc., superintendent on the project, who assured all concerned that the incident would not be repeated.

Straw bales were placed over all storm drain inlets and catch basins in the immediate area.

Date: 4/7/89, 0830 hours

Location: South side of Building 5500

Type of Spill: Chilled water containing about 300 gallons of ethylene glycol

Description: A leak in a chilled water line resulted in the loss of chilled water containing about 300 gallons of ethylene glycol.

Action: The portion of the chilled water system believed to be leaking was valved off, and efforts were initiated to recover as much of the leaked chilled water as possible. Plant and Equipment Division personnel have begun excavation of the pipelines believed to be leaking. An unknown amount of the leaked chilled water drained to White Oak Creek.

Water samples are being collected from White Oak Creek downstream of the spill site for ethylene glycol analysis. No significant environmental impact is expected to result from this spill.

DATE: 6-24-89, 1800 HOURS

LOCATION: BUILDING 3500 BASEMENT

TYPE OF SPILL: CHILLED WATER (ETHYLENE GLYCOL), ABOUT 1500 GALLONS LOST FROM THE SYSTEM, BUT LESS THAN 135 GALLONS WENT TO WHITE OAK CREEK

DESCRIPTION: TWO FAILURES IN THE PIPING OF THE COMPUTER COOLING SYSTEM IN BUILDING 3500 RESULTED IN THE LOSS OF APPROXIMATELY 1500 GALLONS OF CHILLED WATER TO THE BASEMENT FLOOR AND BUILDING SUMP; THE
CHILLED WATER CONTAINED ABOUT 12% ETHYLENE GLYCOL.

ACTION: PLANT AND EQUIPMENT DIVISION (P&E) PERSONNEL WHO WERE WORKING IN THE AREA AT THE TIME OF THE BREAK NOTIFIED THE LABORATORY SHIFT SUPERINTENDENTS' OFFICE (LSS), VALVED OFF THE COOLING SYSTEM, PLUGGED THE FLOOR DRAIN, AND DISABLED THE BUILDING SUMP PUMP WHICH PERIODICALLY PUMPS TO THE STORM DRAIN SYSTEM.

HAZARDOUS WASTE OPERATIONS GROUP (HWOG) AND ENVIRONMENTAL MONITORING
AND COMPLIANCE (EMC) PERSONNEL RESPONDED TO THE LSS'S CALL TO ASSIST P&E STAFF WHO WERE ALREADY ON THE SCENE AND WHO HAD DONE AN

Date: 7/24/89

Location: Building 5500

Type of Spill: Ethylene glycol and-water - 3620 gallons (10% solution)

Description: A leak in a 6-inch chilled water line was discovered at 6:30 p.m. on July 24. The ethylene glycol and water surfaced in the street at Sixth Avenue and White Oak Avenue and ran down the street, into the storm drain, and into White Oak Creek.

Action: The flow in the 6-inch line was turned off, and sandbags were placed around the storm drain to stop the flow into the creek. About 500 gallons of the material were recovered using a pump and drums. Samples for analysis were taken in White Oak Creek, and it will be monitored for any effects. Repairs were made to the break in the line.

ID: 89/11-7

Date: 11/19/89

Location: Building 7900

Type of Spill: Sanitary waste - 150 gallons

Description: Sanitary wastewater overflowed the pumping system for the 7900 area, and about 150 gallons of sanitary water flowed into a storm drain that goes to Melton Branch. It is not known how much actually reached Melton Branch.

Action: The overflow was diverted and the flow to the storm drain stopped. Samples for fecal coliform were collected to

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determine the impact on Melton Branch.

Report Filed by: W. A. Alexander Phone: 4-8770

WAA:es

A:\SPILL89 Doc 1 Pg 78 Ln 2.08" Pos 1"

ID: 89/12/4

Date: 12/11/89, 1345 hours

Location: Southside Drive, south of 4500S

Type of Spill: Floor wax/water mixture, one gallon

Description: A mixture of floor wax and water was discovered in a curb drain on Southside Drive. The source of the mixture is not known, but a small amount did reach a storm drain which drains to White Oak Creek.

Action: Members of the Hazardous Waste Operations Group used absorbent clay to absorb the remaining wax/water mixture and disposed of it as waste. The Laboratory Shift Superintendents' Office was notified.

Report Filed by: S. C. Wells Phone: 4-8771

SCW:es

A:\SPILL89 Doc 1 Pg 84 Ln 2.62" Pos 1"

DATE: 2-16-90, 1645 and 1900 hours

LOCATION: Storm drain manhole near southwest corner of Building 2013

TYPE OF SPILL: Styrene, estimated 1/2 gallon

DESCRIPTION: During the lining of a storm drain pipe by Insituform (private contractor), the liner ruptured twice, releasing approximately 1/2 gallon (total) of liquid styrene to the storm drain system.

ACTION: The construction engineer notified Environmental Monitoring and Compliance and the Laboratory Shift Superintendent's Office; Industrial Hygiene personnel were already on site taking measurements when the first rupture occurred. The faulty liner was removed, and during this part of the operation, much of the styrene was recovered for proper disposal. Some of the styrene was recovered later where the storm drain empties into First Creek. The contractor and construction engineering are investigating the liner failure.

REPORT FILED BY: J. D. Story PHONE: 4-8769

ID: 90/5-09

DATE: 5/31/90, 1125 hours

LOCATION: 4509

TYPE OF SPILL: Chilled Water (approximately 6% ethylene glycol/water mixture), estmated 200 gallons.

DESCRIPTION: Maintenance was performed on a chiller in 4509, and during the refilling of this part of the chilled water system, a drain valve was inadvertently left open, allowing approximately 200 gallons of chilled water to drain to a floor drain which drains to White Oak Creek.

ACTION: The Laboratory Shift Superintendents' Office notified the Office of Environmental Compliance and Documentation (ECD) that White Oak Creek looked green at Building 4515. Investigation by ECD and Plant & Equipment (P&E) personnel led to the discovery of the open drain valve in Building 4509. The valve was immediately closed by P&E personnel, and the input to the drainage system was stopped.

Due to the size of the spill, no samples were taken in the creek, and no adverse effects are anticipated as a result of this spill. However, Environmental Sciences Division personnel will be examining the creek for adverse biological effects as a precautionary measure.

ORNL RECOMMENDATION: Notification of this spill should be made to Natalie Harris, Tennessee Department of Health and Environment Knoxville, (615) 594-6444. No other notification is required nor warranted.

REPORT FILED BY: J. D. Story PHONE: 4-8769

DATE:	5/16/90, 1230 hours
LOCATION:	Building 7920
TYPE OF SPILL:	Chilled Water (3.5 to 4.0% ethylene glycol/water mixture), less than 55 gallons.
DESCRIPTION:	ORNL employees discovered a faulty pressure relief valve in the chilled water system at Building 7920 had leaked something less than 55 gallons of chilled water to a drain which is reported to be part of the storm drain system.
ACTION:	The leak to the drain was stopped and the system has been shut down for repairs. The faulty valve will be either removed from the system completely or repaired and re-piped to drain into a 55-gallon drum. The Office of Environmental Compliance and Documentation, and the Laboratory Shift Superintendents Office were notified. Verification will be made as to the ultimate disposition of the ethylene glycol.

DATE: 06/12/90

LOCATION: 7000 area

TYPE OF SPILL: Fly Ash and water - 25 gallons

DESCRIPTION: A truck used to haul Fly Ash had filled with rain water and a mixture of rain water and a small amount of Fly Ash spilled onto the roadway. About 1 gallon of this material reached a storm drain. This should not have an effect on White Oak Creek.

ACTION: Since there was not sufficient material to recover, the area will be washed with water. This action will clear the roadway and would not cause damage to the environment. Appropriate staff will be advised to wash trucks after Fly Ash is hauled to prevent problem from recurring in the future.

ADDTIONAL NOTIFICATION REQUIREMENT: This is a loggable event and no further notification is required nor warranted.

REPORT FILED BY: W. A. Alexander PHONE: 4-8770
C:\FILE2\SPILLS\SPILL90 Doc 1 Pg 60 Ln 5.86" Pos 1"

DATE:	6/15/90 (Revised 6/21/90)
LOCATION:	Building 3544
TYPE OF SPILL:	Treated Process Water - Several hundred gallons
DESCRIPTION:	Process water which had been through the Process Waste Treatment Plant going to an environmental monitoring station leaked from a small sample line onto a graveled area. Some of the material reached a storm drain.
ACTION:	The affected area was surveyed by Radiation Protection Staff and no radioactive contamination was found. The line break was repaired. No clean-up activities were conducted. The Laboratory Shift Superintendent's Office was notified.
ADDITIONAL NOTIFICATION REQUIREMENT:	This is a loggable event and no further reporting is required or warranted.
REPORT FILED BY:	W. A. Alexander PHONE: 4-8770

C:\FILE2\SPILLS\SPILL90

Doc 1 Pg 63 Ln 5.32" Pos 1"

SUBJECT: ORNL Spill Report

ID#: 90/6-12

DATE: 6/26/90, approximately 0530 hours

LOCATION: ORNL Sewage Treatment Plant, 2643 Area

DESCRIPTION: While backwashing a filter system at the Sewage Treatment Plant, Plant & Equipment personnel observed a "burp" in the sewage in the clarifier; this sent incompletely treated sewage to the effluent weir and then to the contact chamber where chlorine treatment takes place. The bulk of the material floated and was trapped in the contact chamber by baffles, but a small amount of particulates suspended below the surface probably was discharged to White Oak Creek.

ACTION: As soon as the problem was observed, P&E personnel closed a bypass valve which stopped flow of this material to the contact chamber. The Laboratory Shift Superintendents' Office was notified and P&E personnel skimmed the floating material from the surface of the water in the contact chamber. Fecal coliform samples were taken in White Oak Creek near the STP discharge point and at 7500 bridge.

ADDITIONAL NOTIFICATION REQUIREMENT: Verbal notification of the Tennessee Department of Health and Environment (TDHE) is required within 24 hours if the release represents a threat to health and environment. Present indicaitons are that this incident does not represent a threat to either health or the environment, but analysis of the samples will be conducted to verify this assumption. A written non-compliance report will be prepared and submitted to TDHE. No further notification is required or warranted.

DATE: 7/20/90, 0018 hours

LOCATION: Bethel Valley Road at Main Entrance to ORNL

TYPE OF SPILL: Vehicle anti-freeze, (50% ethylene glycol and water), approximately 2 gallons.

DESCRIPTION: A private vehicle being chased by the Oak Ridge Police wrecked at the main entrance to ORNL, rupturing its cooling system and leaking approximately 2 gallons of coolant to a nearby drainage which flows to White Oak Creek.

ACTION: The Laboratory Shift Superintendent reported this

spill to the Office of Environmental Compliance and Documentation. Recovery of the coolant was not feasible, but due to the small amount of ethylene glycol involved, no adverse effects on White Oak Creek are anticipated. No samples were taken.

ADDITIONAL NOTIFICATION REQUIREMENT: Notification of this incident should be made to Natalie Harris, Tennessee Department of Health and Environment, Knoxville (615) 594-6444. No other notification is required.

REPORT FILED BY: J. D. Story PHONE: 4-8769

SUBJECT: ORNL Spill Report Update

ID: 90/7-07, UPDATE

Plant and Equipment Division (P&E) personnel restored some flow to the clogged sewer line by 1600 hours on 7/23/90, stopping the overflow that was coming form the sanitory sewer manhole and eliminating the concern for this flow reaching a storm drain via the ground surface. P&E personnel are continuing their efforts to clear the clogged sewer line and return it to norman-flow-condition.

Although no surface flow reached a storm drain catch basin downslope from the overflowing sanitary sewer manhole, suspicious-looking water flowing into the catch basin through an underground strom drain pipe was sampled: analysis showed a high fecal coliform count.

The high fecal coliform count is believed to be the result of sanitary sewer water backing up in the manhole and leaking out through a small crack in the wall, then draining into the nearby storm drain pipe. Efforts by P&E personnel have returned the sewer line flow to near-normal, stopping the leakage to the storm drain pipe and eliminating the visual evidence of sewage contamination in the storm drain catch basin. However, while the sewage was backed up in the manhole, sewage-contaminated water leaked to the storm drain pipe at a rate of less than 1 gallon per minute for an undetermined time period (believed to be on the order of a few hours).

Sampling of the storm drain water continues in order to verify that the sewage contamination has been stopped.

ADDITIONAL NOTIFICATION REQUIREMENT: Notification of this incident should be made to Natalie Harris, Tennessee Department of Health Environment, Knoxville, (615) 594-6444. No other notification is required.

DATE: 7/25/90, 1140 hours

LOCATION: Between 4500N & 4500S

TYPE OF SPILL: Process Waste Water, unknown volume

DESCRIPTION: While excavating, a private contractor ruptured a Process Waste System drain line, allowing process waste water to spill into the excavation; the contractor pumped this water by mistake to a nearby storm drain catch basin for about 24 hours at highly variable flow rates (estimated to be from less than 1 gallon per minute to a few gallons per minute). The storm drain system drains to White Oak Creek.

ACTION: As soon as Office of Environmental Compliance and Documentation staff discovered this problem, the contractor was instructed to move his discharge hose from the storm drain catch basin to a nearby Process Waste System manhole, and the contractor's employees complied immediately. This returned the water to the Process Waste System through which water is carried to an appropriate treatment facility.

ADDITIONAL NOTIFICATION REQUIREMENT: Notification of this incident should be made to Natalie Harris, Tennessee Department of Health and Environment, Knoxville, (615) 594-6444. No other notification is required.

DATE:	7/26/90, 1345 hours
LOCATION:	East side of 4500N, Medical Wing
TYPE OF SPILL:	Potable water, about 900 gallons
DESCRIPTION:	A malfunctioning outside water faucett allowed potable water to be released to the lawn where it then drained to the street and a storm drain catch basin.
ACTION:	The Laboratory Shift Superintendent notified the Office of Environmental Compliance and Documentation and Plant and Equipment Division (P&E). P&E personnel valved off the faucet, and Sampling Group personnel from the Office of Environmental and Health Protection tested the water at the storm drain for chlorine and found none. No adverse impact on White Oak Creek is anticipated.
ADDITIONAL NOTIFICATION REQUIREMENT:	This is a loggable event and no further reporting is required.

DATE: 7/30/90, 1200 hours

LOCATION: Building 4508

TYPE OF SPILL: Ethylene Glycol and Water (8%)

DESCRIPTION: Apparently while a sub-contractor was back-filling the ditch associated with the construction of the new chilled water line, an existing chilled water line broke and spilled an estimated 2,000 gallons of this mixture into the construction ditch. When the worker went to lunch at 1200hrs, there was no evidence of a leak, but when Owen Hale, the construction engineer, checked the site at 1215hrs he noted green water in the ditch and took positive action by shutting down an existing pump being used to pump ground water into the storm system. It is estimated that only about 60 gallons was pumped into the storm drain which goes into White Oak Creek. As the ditch filled however, the spilled mixture found a path to White Oak Creek, with an unknown amount - estimated at 250 gallons getting to White Oak Creek. For a total of 310 gallons of the mixture or 25 gallons of Ethylene Glycol that went to White Oak Creek.

ACTION: The chilled water line was shut off and actions are underway to remove the mixture from the ditch. Repairs will be made to the broken line. The Laboratory Shift Superintendents' Office was notified.

ADDITIONAL NOTIFICATION REQUIREMENT: Notification of this incident should be made to Natalie Harris, Tennessee Department of Health and Environment, Knoxville (615) 594-6444. No other notification is required.

DATE: October 28, 1990, 1620 hours

LOCATION: Southeast corner of building 2519

TYPE OF SPILL: Number 2 heating oil, estimated one cup to one quart

DESCRIPTION: An expandable plug in an abandoned drain line was suspected of leaking and when an ORNL employee tried to tighten it, the plug came out, allowing about one cup to one quart of heating oil to escape to the storm drain system.

ACTION: The Plant & Equipment (P&E) Division employee who discovered the problem reported it to the Laboratory Shift Superintendent who arranged for oil booms to be placed on the storm drain ditch downstream from the

spill and on White Oak Creek at 7500 Bridge. The LSS notified Environmental Compliance and Documentation staff who responded to the site. The small amount of oil was trapped by the booms.

Additional Reporting Requirements:

This event was categorized as an Unusual Occurrence and was reported as such. The Tennessee Department of Health and Environment was notified, and no further reporting is required.

DATE: 03/28/91

LOCATION: 7920

TYPE OF SPILL: Ethylene Glycol and Water; estimated 406 gallons of 30% solution

DESCRIPTION: During startup of an air conditioning system in 7920, leaks were discovered in many of the coils of the A-C units. These leaks allowed an estimated 122 gallons of ethylene glycol (about 406 gallons of 30% solution) to drain through a floor drain to the storm drain system. This system drains to Melton Branch.

ACTION: The Laboratory Shift Superintendent (LSS) was notified, and he called the Office of Environmental Compliance and Documentation (OEC&D). The LSS notified the Tennessee Department of Conservation, formerly the Tennessee Department of Health and Environment of the incident. Recovery of the bulk of the spill was not practical, but about 80 gallons of the fluid was contained in the space housing the A-C unit. this was recovered for re-use or proper disposal.

ADDITIONAL REPORTING REQUIREMENTS: This incident was reported as an off-normal occurrence, and the required follow-up reports will be made by Chemical Technology Division personnel.

REPORT FILED BY: J. D. Story PHONE: 4-8769

DATE: 04/01/91

LOCATION: West end of 1505

TYPE OF SPILL: Dye (suspected), amount unknown

DESCRIPTION: An employee reported red-colored water dripping out of the compactor truck used to empty dumpsters into.

ACTION: The LSS was notified, and LSS personnel notified the OEC&D. Investigation of the incident did not reveal the source, but it is believed that the colored water resulted from rainwater mixing with red dye that had apparently been put into a dumpster. A small volume (perhaps a gallon) is believed to have gone into a storm drain catch basin, but no deleterious effects are anticipated in the northwest tributary where the storm drain system empties.

ADDITIONAL REPORTING REQUIRED: This was considered a loggable event and no further reporting is required.

REPORT FILED BY: J. D. Story PHONE: 4-8769

ID: 91/05-10

DATE: 5/22/91

LOCATION: Bldg. 3037

TYPE OF SPILL: Wax water - 2 gallons

DESCRIPTION: An ORNL employee poured about 2 gallons of wax water into a storm drain which discharged to Fifth Creek. This discharge to Fifth Creek had not been previously identified.

ACTION: The employee was instructed to place future waste mop and wax water into the sanitary drains. Also, efforts are under way to make sure this informations is communicated to others.

ADDITIONAL NOTIFICATION REQUIREMENTS: This was reported as a non-permitted discharge and was classified a non-routine occurrence.

REPORT FILED BY: W. A. Alexander PHONE: 4-8770

C:\FILE2\SPILLS\SPILL91 Doc 1 Pg 41 Ln 5.32" Pos 1"

ID: 91/05-11

DATE: 5/22/91

LOCATION: Bldg. 7001

TYPE OF SPILL: Paint sprayer wash water

DESCRIPTION: An ORNL employee discharged paint sprayer wash water into a storm drain which goes to White Oak Creek.

ACTION: The employee was instructed that this was not the approved method of disposal and efforts are under way to make sure others are aware of the importance of not discharging material into the storm drains.

ADDITIONAL NOTIFICATION

REQUIREMENT: This was reported as a non-permitted discharge and was classified a non-routine occurrence.

REPORT FILED BY: W. A. Alexander PHONE: 4-8770

C:\FILE2\SPILLS\SPILL91 Doc 1 Pg 42 Ln 1.72" Pos 1"

ID: 91/08-06

DATE: August 29, 1991

LOCATION: Bldg. 7007

TYPE OF SPILL: Potable water, 1500 gallons

DESCRIPTION: A leak in a potable water line caused approximately 1500 gallons of water to flow in to a nearby storm drain. The chlorine content of the water entering the storm drain was 0.3 ppm.

ACTION: The LSS Office was notified, and the water line was taken out of service until repairs could be made.

ADDITIONAL NOTIFICATION REQUIREMENT: This was a Category II Occurrence (ORO--MMES-X10BOPLANT-1991-1006), and was reported to the TDEC by phone.

REPORT FILED BY: W. A. Alexander PHONE: 4-8770

C:\FILE2\SPILLS\SPILL91 Doc 1 Pg 50 Ln 5.86" Pos 1"

DATE: August 28, 1991

LOCATION: SOUTH SIDE OF CENTRAL AVENUE, NORTH OF 4501

TYPE OF SPILL: MIXTURE OF WATER AND CONCRETE DUST, ABOUT 1 GALLON

DESCRIPTION: WHILE SAWING CONCRETE IN PREPARATION FOR EXCAVATION WORK, A PRIVATE CONTRACTOR'S CREW ALLOWED SOME OF THE COOLING AND WASH WATER TO GO DOWN A STORM DRAIN CATCH BASI N.

ACTION: WHEN OFFICE OF ENVIRONMENTAL COMPLIANCE AND DOCUMENTATION PERSONNEL POINTED OUT THE PROBLEM TO THE CREW, THEY IMMEDIATELY STOPPED THEIR WORK;

STRAW BALES WERE USED TO PROTECT STORM DRAINS ON SUBSEQUENT CONCRETE SAWING EFFORTS. ALTHOUGH ONLY A SMALL AMOUNT OF WATER-CONCRETE DUST MIX WENT INTO THE STORM DRAIN CATCH BASIN, IT WAS ASSUMED THAT SOME OF THE MIX EVENTUALLY REACHED WHITE OAK CREEK. THE LABORATORY SHIFT SUPERINTENDENT WAS NOTIFIED.

ADDITIONAL REPORTING REQUIREMENTS: THIS WAS CONSIDERED AN UNPERMITTED DISCHARGE AND WAS CATEGORIZED AS AN UNUSUAL OCCURRENCE, CATEGORY 2.

REPORT FILED BY: J. D. STORY PHONE: 4-8769

DATE: September 11, 1991

LOCATION: WHITE OAK CREEK EMBAYMENT SEDIMENT CONTROL PROJECT

TYPE OF SPILL: MOTOR OIL, FEW DROPS

DESCRIPTION: THE DIESEL HAMMER BEING USED TO DRIVE PILINGS AT THE WHITE OAK CREEK EMBAYMENT LOST A FEW DROPS OF

OIL TO THE SURFACE OF WHITE OAK CREEK, CAUSING SOME SMALL PATCHES OF SHEEN TO FORM.

ACTION: THE OIL SHEEN WAS REPORTED BY THE CONSTRUCTION ENGINEER TO THE LABORATORY SHIFT SUPERINTENDENT, AND THE OCCURRENCE REPORTING PROCEDURE WAS INITIATED. RECOVERY OF THE SHEEN WAS NOT FEASIBLE, BUT OIL BOOMS HAD ALREADY BEEN PLACED ACROSS THE MOUTH OF WHITE OAK CREEK BOTH UPSTREAM AND DOWNSTREAM FROM THE CONSTRUCTION PROJECT AS A PRECAUTIONARY MEASURE.

ADDITIONAL REPORTING REQUIREMENTS: THIS EVENT WAS REPORTED AS A CATEGORY 2 UNUSUAL OCCURRENCE AND NOTIFICATIONS WERE MADE TO THE NATIONAL EMERGENCY RESPONSE CENTER, TDEC, AND EPA.

REPORT FILED BY: J. D. STORY PHONE: 4-8769

ID: 91/09-17

DATE: SEPTEMBER 26, 1991

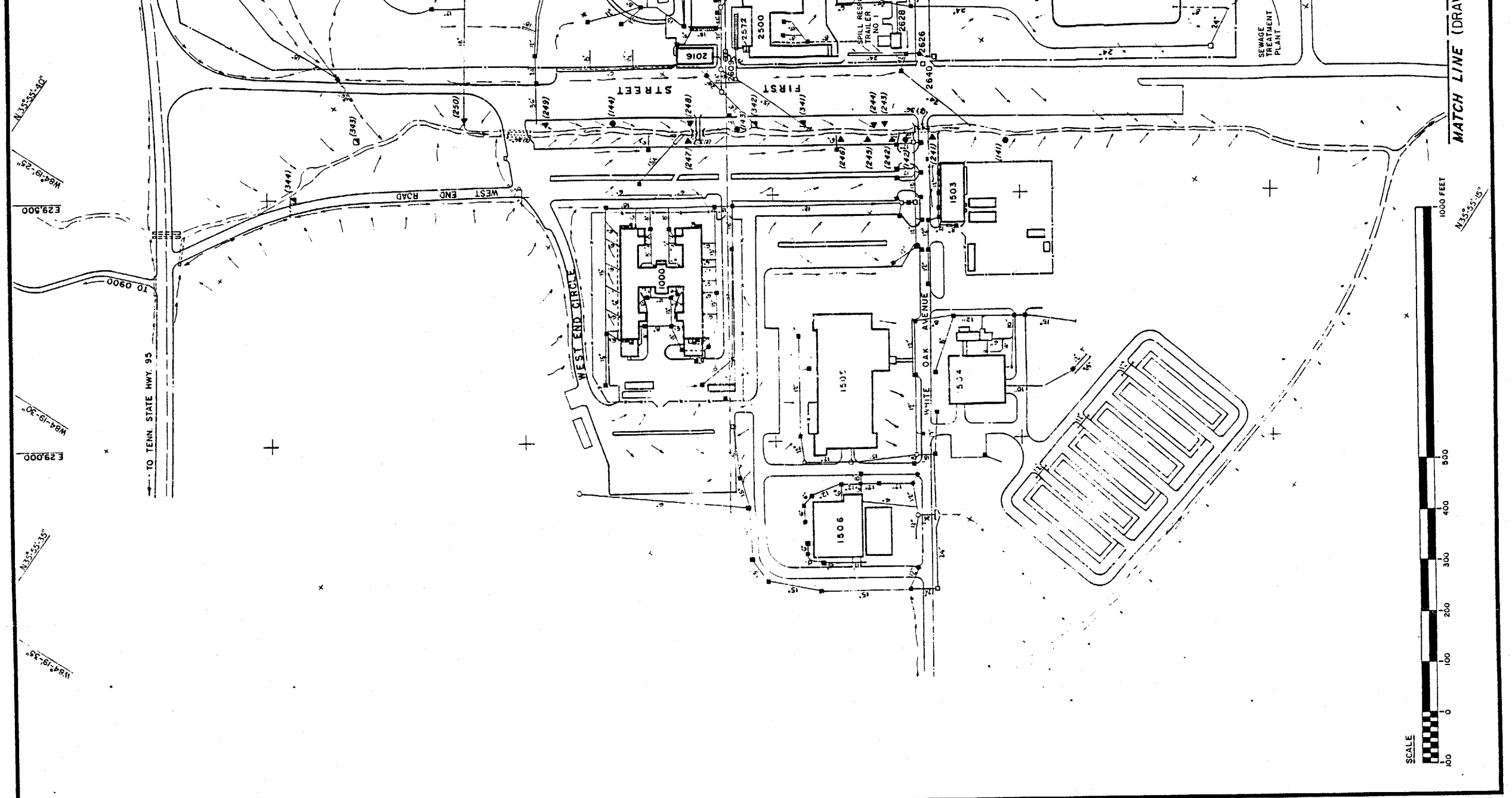
LOCATION: BUILDING 3026-C

TYPE OF SPILL: PROCESS WATER, VOLUME UNKNOWN BUT THOUGHT TO BE SEVERAL HUNDRED GALLONS.

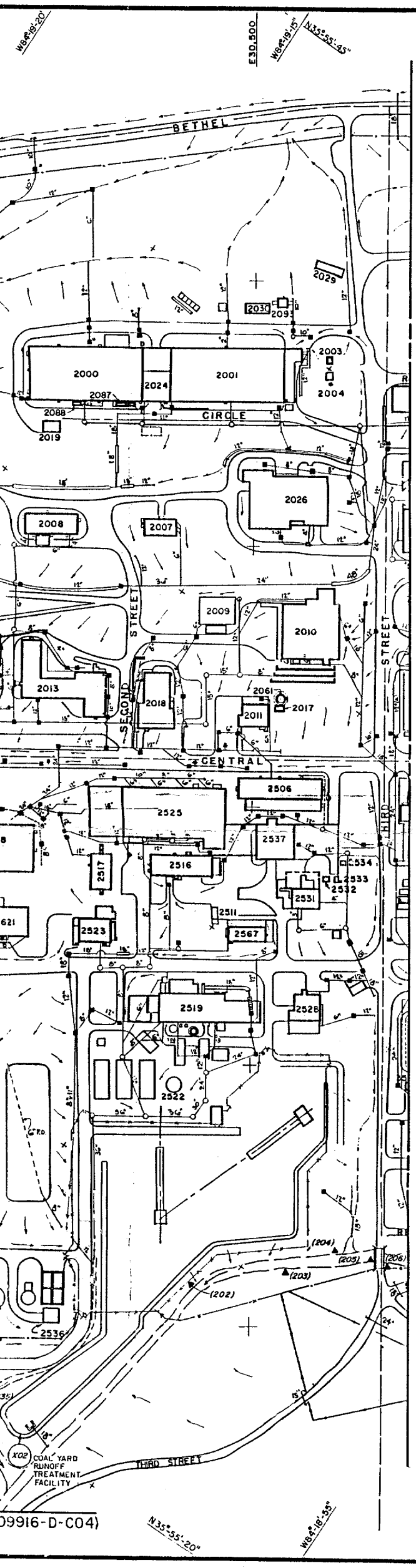
DESCRIPTION: A FAILURE IN A PROCESS WATER SUPPLY LINE RESULTED IN THE LOSS OF SEVERAL HUNDRED GALLONS (ESTIMATED) OF WATER TO THE GROUND BENEATH BLDG. 3026-C. THE WATER MIXED WITH DIRT BENEATH THE BLDG. AND FLOWED TO A STORM DRAIN CATCH BASIN ON THE NORTH EDGE OF CENTRAL AVENUE.

ACTION: THE WATER LEAK WAS REPORTED TO THE LSS WHO THEN NOTIFIED APPROPRIATE PERSONNEL FOR RESPONSE. IN ADDITION TO MONITORING ON SITE, CARRIED OUT BY RADIATION PROTECTION PERSONNEL, SAMPLES OF THE WATER WERE ANALYZED BY THE TRU LAB FOR RADIOACTIVITY, BUT NO ELEVATED LEVELS WERE FOUND. STRAW BALES WERE PLACED AROUND THE STORM DRAIN CATCH BASIN TO MINIMIZE THE AMOUNT OF SEDIMENT GOING INTO THE STORM DRAIN SYSTEM. THE LEAKING SYSTEM WAS VALVED OUT TO STOP THE LEAK AND TO ALLOW REPAIRS TO BE MADE.

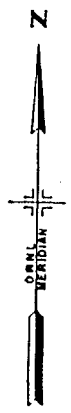
ADDITIONAL REPORTING REQUIREMENTS: DUE TO THE FACT THAT THIS CHLORINATED, SEDIMENT-LADEN WATER GOING TO A STORM DRAIN VIOLATED ORNL'S NPDES PERMIT, THIS EVENT WAS CATEGORIZED AS AN UNUSUAL OCCURRENCE, AND THE NECESSARY REPORTS WERE MADE.



STARTING DATE: 2-12-90	DATE LAST REV.: 8-27-90	INITIATOR: M. HIGGINS	DRAWING NO.: 409916-E-C03
DRAWN BY: re pitts	DRAWN BY: re pitts △	PROJ. MGR.: M. HIGGINS	PROJ. NO.: 409916



MATCH LINE (DRAWING NO. 409916-E-C02)



NOTE

Outfalls at ORNL are classified into three categories.

CATEGORY I - Storm Drains
CATEGORY II - Roof Drains, Parking Lot Drains, Storage Area Drains, Spill Area Drains, Once-Through Cooling Water, Cooling Tower Blowdown and Condensate
CATEGORY III - Process and/or Lab Drains

LEGEND

- CATCH BASIN ACTIVE
- CATCH BASIN COVERED
- JUNCTION BOX JUNCTION
- CULVERT OR STORM DRAIN
- PERFORATED DRAIN
- DITCH, SWALE
- DRAIN TROUGH
- HALF ROUND TILE
- F.D. - FRENCH DRAIN
- (A) - ABANDONED
- U.P. - UTILITY PIT
- OUTFALL, CATEGORY I (SEE NOTE)
- OUTFALL, CATEGORY II (SEE NOTE)
- OUTFALL, CATEGORY III (SEE NOTE)
- (X11) NPDES MONITORING POINTS

FIGURE 2

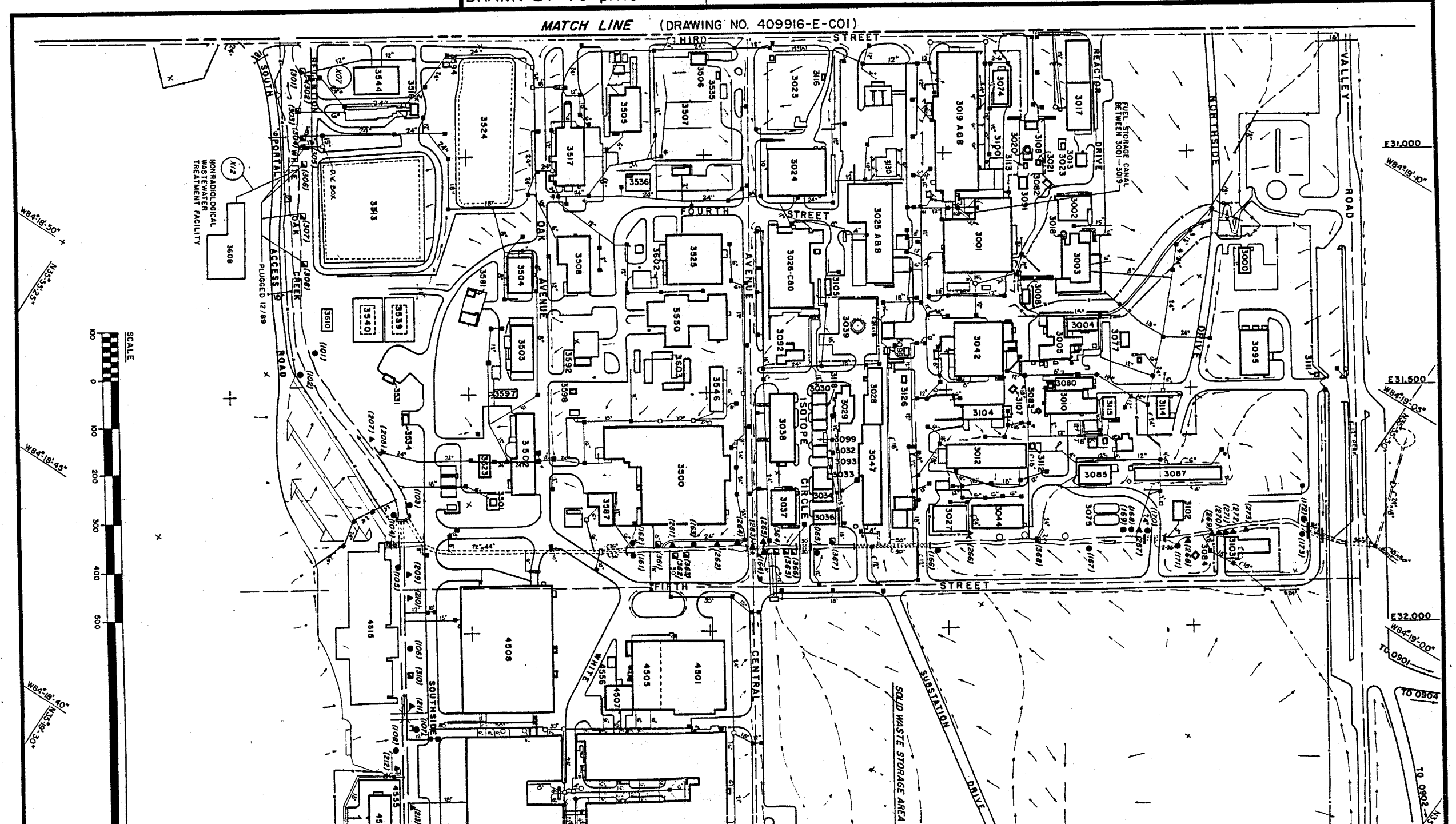
ORNL DRAINAGE 1000 AND 2000 AREAS

SOURCE: PLANNING MAP, ORNL, BETHEL VALLEY STORM DRAINAGE (Rev. 9-1-82)

(REVISIONS BY IT CORPORATION 2-12-90)

4

STARTING DATE: 2-12-90	DATE LAST REV.: 8-27-90	INITIATOR: M. HIGGINS	DRAWING NO.: 409916-E-C02
DRAWN BY: re pitts	DRAWN BY: re pitts △	PROJ. MGR.: M. HIGGINS	PROJ. NO.: 409916 INTERNATIONAL TECHNOLOGY CORPORATION



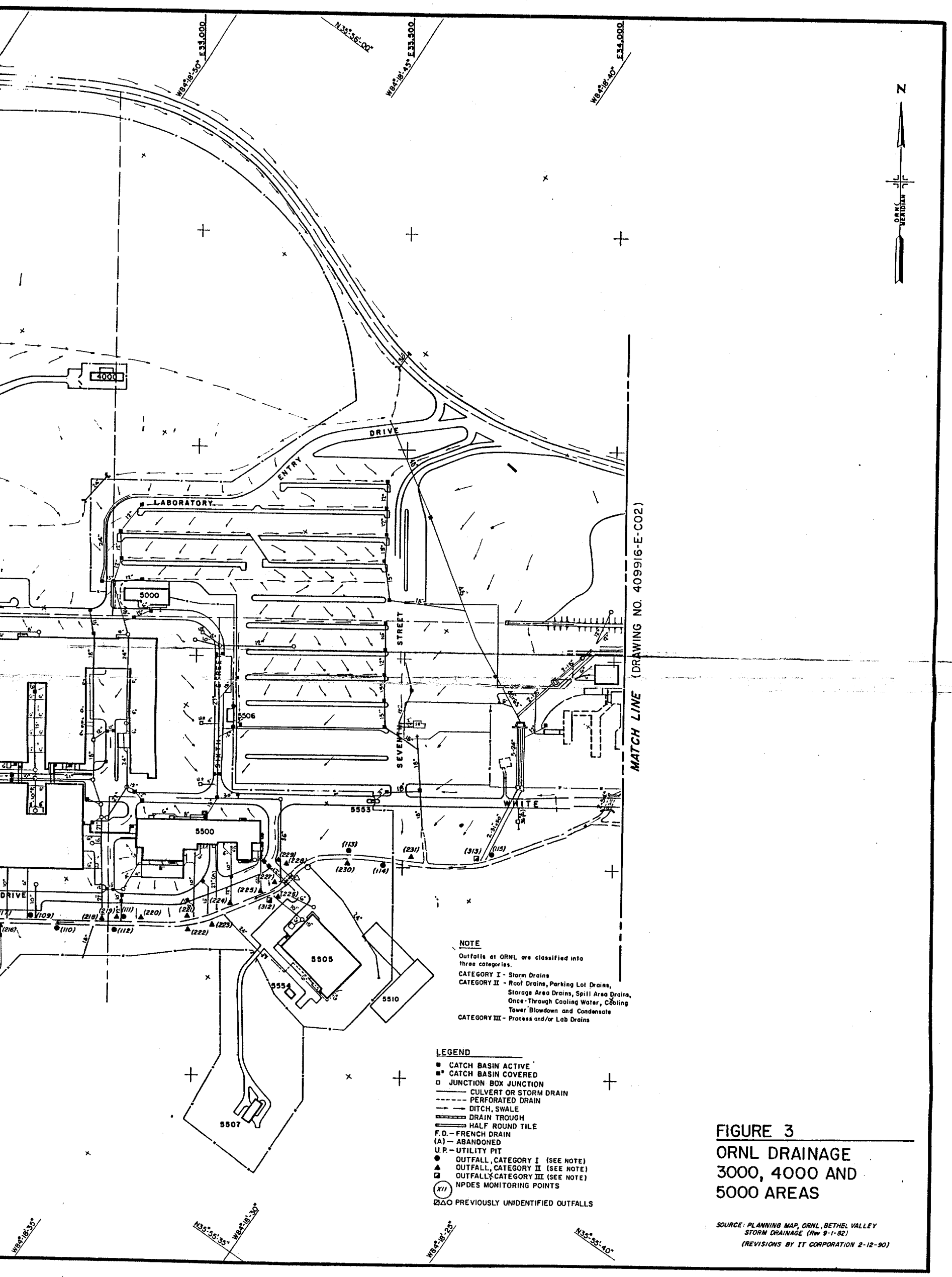


FIGURE 3
ORNL DRAINAGE 3000, 4000 AND 5000 AREAS

SOURCE: PLANNING MAP, ORNL, BETHEL VALLEY STORM DRAINAGE (Rev 9-1-82)
(REVISIONS BY IT CORPORATION 2-12-90)

STARTING DATE: 2-12-90	DATE LAST REV.: 8-27-90	INITIATOR: M. HIGGINS	DRAWING NO.: 409916-E-C01
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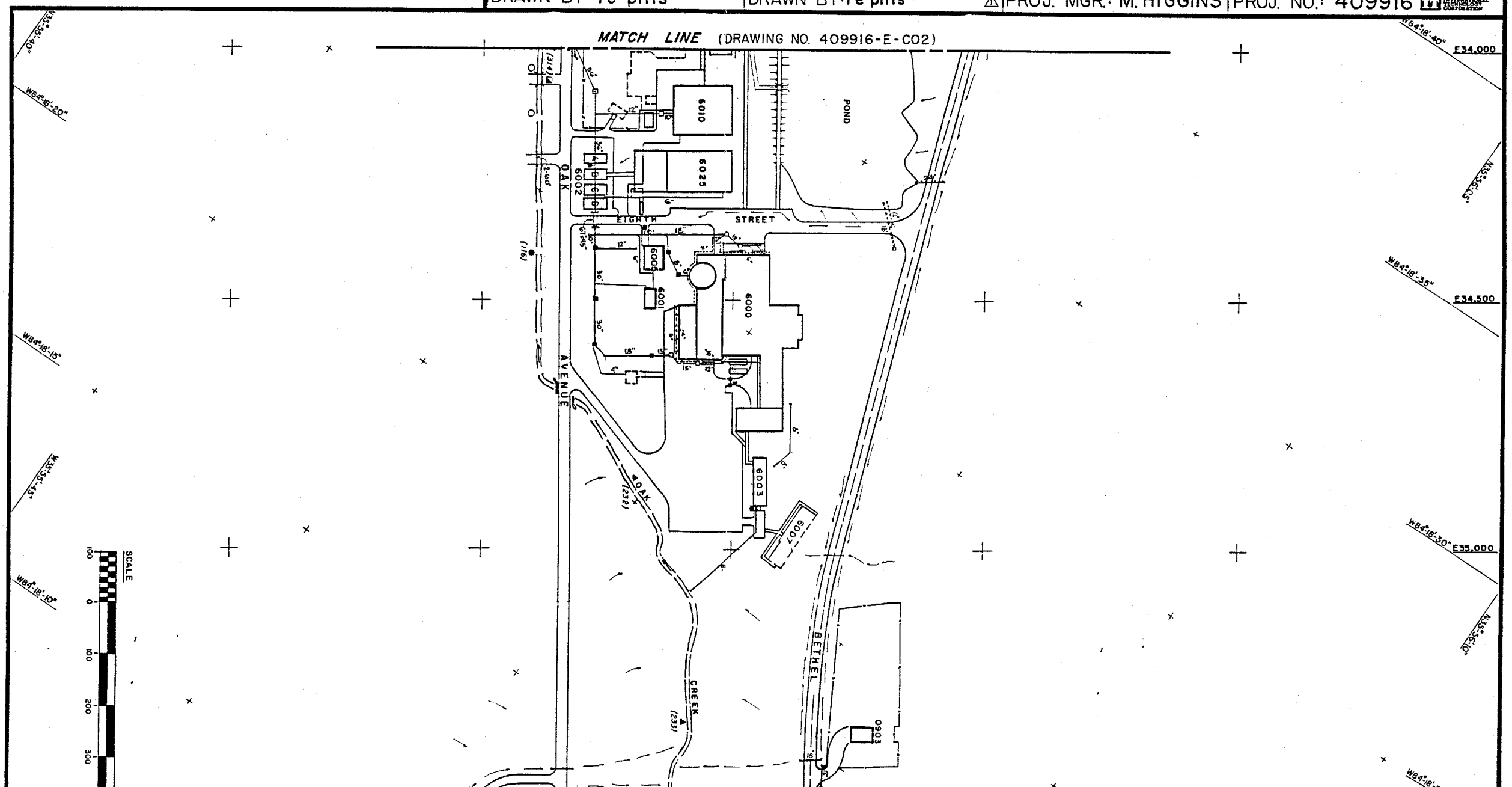


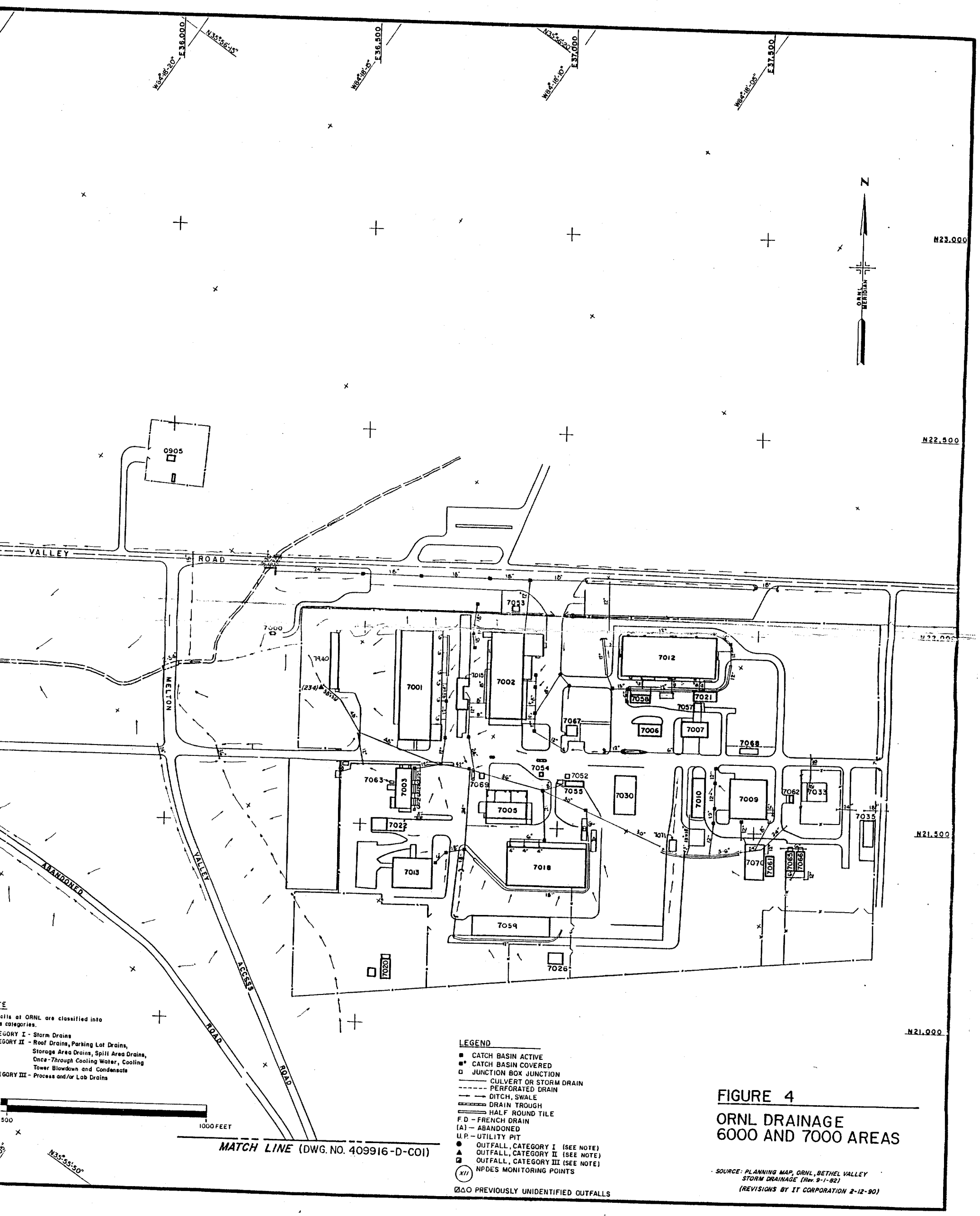


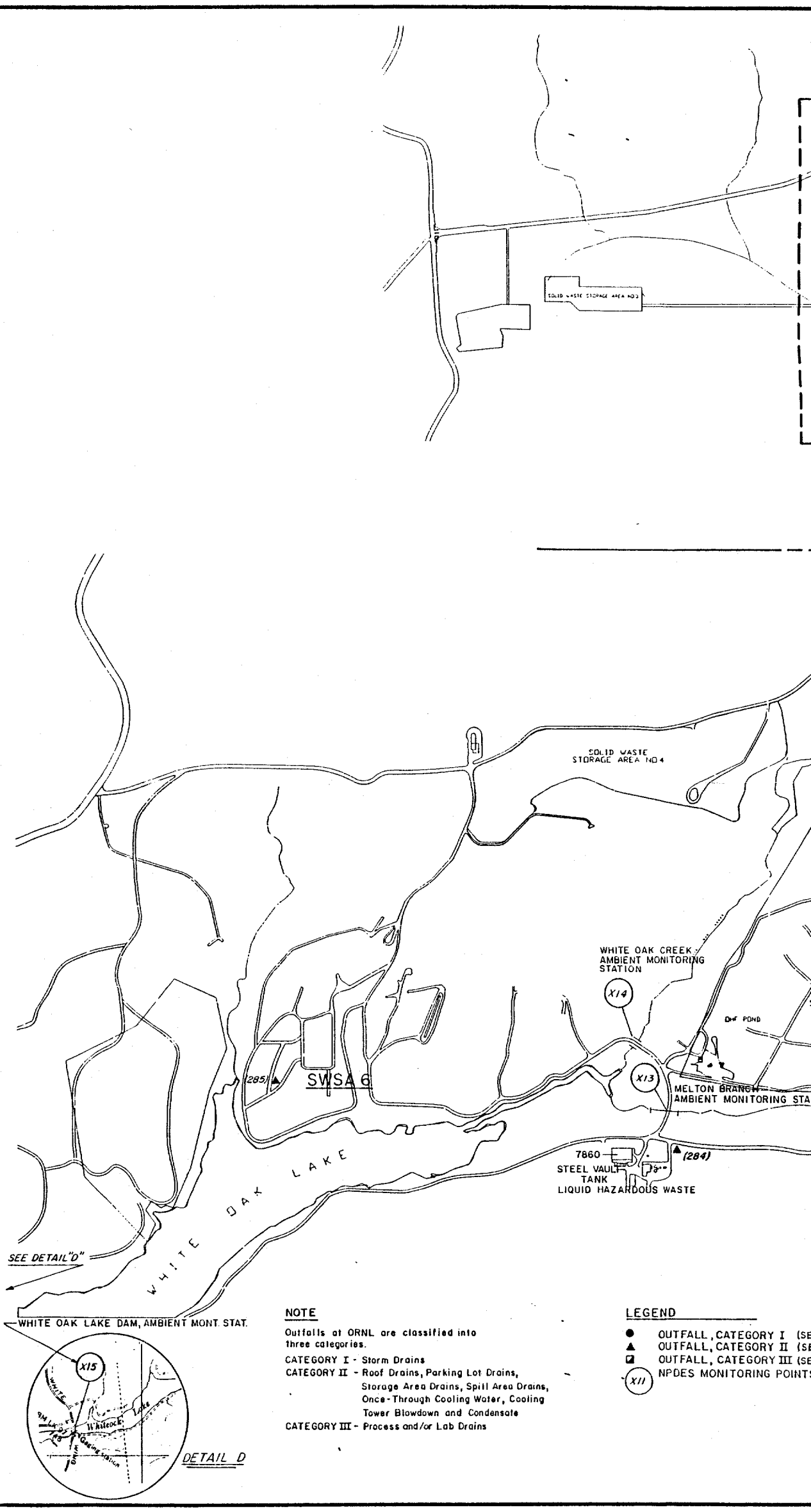
FIGURE 4

ORNL DRAINAGE
6000 AND 7000 AREAS

SOURCE: PLANNING MAP, ORNL, BETHEL VALLEY STORM DRAINAGE (Rev. 9-1-82)
(REVISIONS BY IT CORPORATION 2-12-90)

STARTING DATE: 2-12-90	DATE LAST REV.:	INITIATOR: M. HIGGINS	DRAWING NO.: 409916-D-C04
DRAWN BY: re pitts	DRAWN BY:	PROJ. MGR.: M. HIGGINS	PROJ. NO.: 409916

INTERNATIONAL TECHNOLOGY CORPORATION



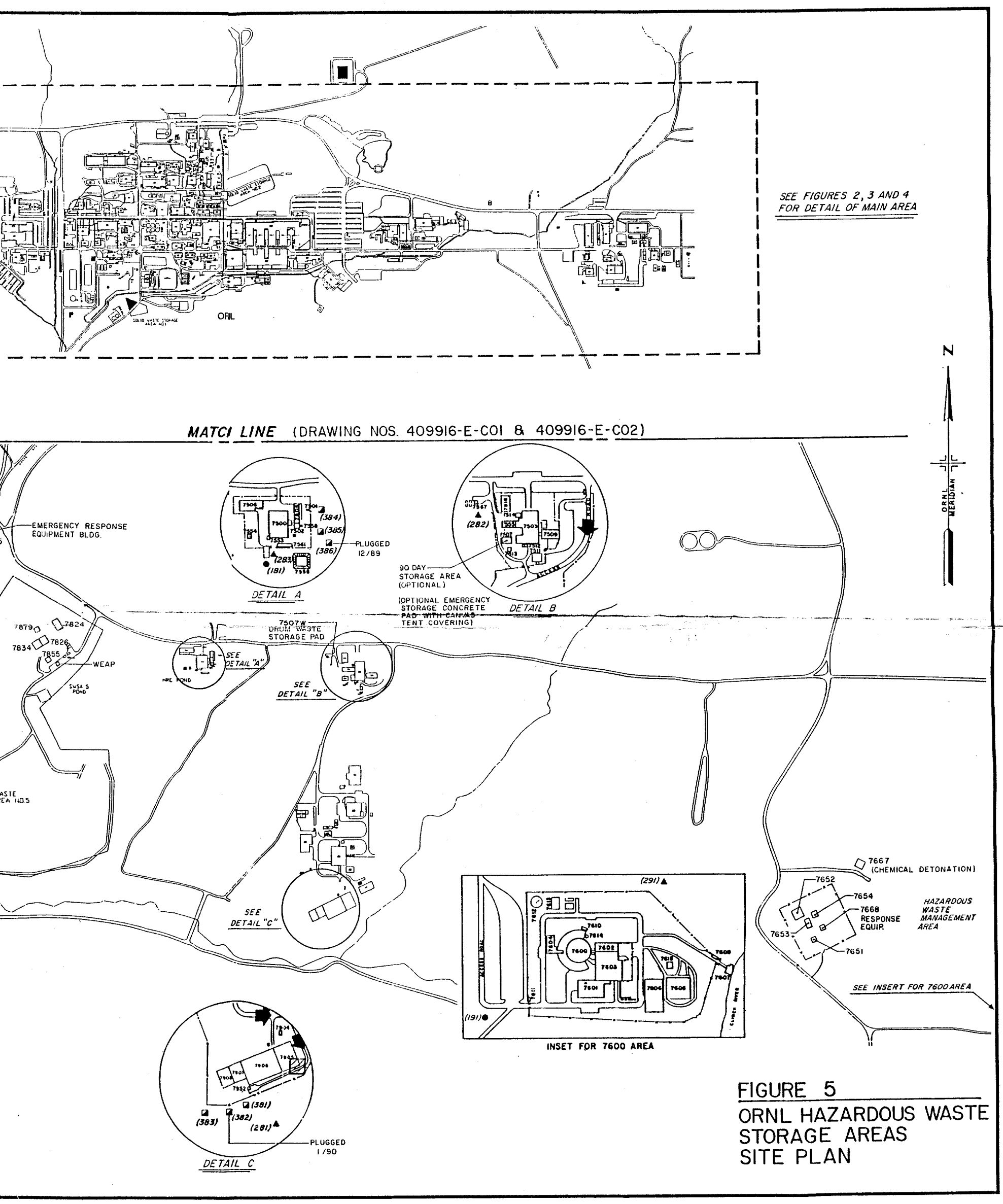


FIGURE 5

ORNL HAZARDOUS WASTE STORAGE AREAS SITE PLAN

UCN-7721B (2 1-86) MLB 2/4/93

OAK RIDGE Y-12 PLANT INFORMATION CONTROL FORM

DOCUMENT DESCRIPTION (Completed By Requesting Division)

Document No.	Author's Telephone No.	Acct. No.	Date of Request
MS/ChR-M00153/K-25	6-8475		

Unclassified Title: Y-12 Plant Water Resources

Author(s) Suzanne Sandberg

TYPE: ☐ Formal Report ☐ Informal Report ☐ Progress/Status Report ☐ Co-Op Report ☐ Thesis/Term Paper

☐ Oral Presentation (identify meeting, sponsor, location, date):

☐ Journal Article (Identify Journal):

☒ Other (Specify): ChemRisk Request

Document will be published in proceedings ☐ No ☐ Yes

Document will be distributed at meeting ☐ No ☐ Yes

Document has patent or invention significance ☐ No ☐ Yes (Identify)

Document has been previously released ☐ No ☐ Yes (Reference)

DIVISION REVIEW AND APPROVAL (Completed By Requesting Division)

TECHNICAL CLASSIFICATION REVIEW (Divisional Classification Representative)

Title(s): U Abstract:

DOCUMENT: Level U (4 drawings are UCNI) Category

J. D. Smith — Signature; 2-4-93 — Date

DOCUMENT REQUEST APPROVED (Division or Department)

Suzanne Sandberg — Signature; 2/3/93 — Date

Signature Date

THE REMAINDER OF THIS FORM TO BE COMPLETED BY THE TECHNICAL INFORMATION OFFICE

DISTRIBUTION

☐ Internal Distribution

☐ External Distribution

TID-4500 Category _____ or _____ Copies to OSTI

ANNOUNCED IN: ERA Atomindex (Available from NTIS)

M-3679 Category

ANNOUNCE IN: ☐ AWDR (Available from OSTI) ☐ ANCR

Distribution:	UCN-7721B	DOE F-1332.15	Document
Y-12 Central Files	Y-12 RC	Y-12 RC	Y-12 RC
TIO File			
Suzanne Sandberg			

Distribution Remarks: ChemRisk (Cleared for Public Release - Unclassified drawings only)

APPROVAL AND RELEASE

Date Received	Date Initiated
2-3-93	2-3-93

☒ CLASSIFICATIONS:

Title(s): U Abstract —

DOCUMENT: (4 DRAWINGS UCNI)

Level U Category —

Weapons Data — Sigma —

R. Baylor Jr — Y-12 Classification Office; 2/4/93 — Date

☐ Editor Date

☒ Waived/MLB Patent Office Date

☐ Other Date

☐ Other Date

APPROVED FOR: ☐ Declassification ☐ Release subject to use of the following admonitory markings and conditions:

☐ Disclaimer ☐ Copyright ☐ Patent Caution ☐ Other

Technical Information Office — Date 2/4/93

Conditions/Remarks:

Y-12 PLANT WATER RESOURCES

1. The Y-12 Plant draws surface water from the Clinch River at the rate of 90,000 gpd of raw water and 5.7 mgd of water through the water treatment plant as potable water. This totals out to approximately 5.8 mgd from the Clinch River. G. 1 G. 2

2. The volume of Y-12 Plant lakes, reservoirs, and retention ponds is approximately 2,188 acre feet. Lake Reality is 20 acre-feet, Kerr Hollow Quarry is 21 acre-feet and Rogers Quarry is 2147 acre-feet. G. 3 G. 4

3. Y-12 Plant onsite operations discharge waters to the East Fork Poplar Creek (EFPC) and in very small amounts to Bear Creek. Attached is a listing of all Y-12 Plant outfalls discharging to the EFPC and one (#304) discharging to Bear Creek. In addition, outfalls B-01 and B-02 have been added to Bear Creek. This listing indicates the outfall category on the existing NPDES permit as well as the proposed outfall categories on the pending new permit application submitted to TDEC on November 23, 1989. Also attached are block plans showing the locations of all of the EFPC outfall. Additional information on these discharges may be obtained from the annual Environmental Surveilance of the DOE Oak Ridge Reservation & Surrounding Environment, volume II for each of the previous 5 years. The information on Y-12 discharges is located as follows: G. 7 G. 8

Year	Page numbers
1986	158, 159, 181-220
1987	42-74
1988	59, 64-82
1989	64, 71-88
1990	68, 75-91

The information contained on these pages is a summation of all samples taken for the year at each creek outfall sampled during the year.

4. Attached is a copy of the information contained on the Y-12 Plant Spill Database. This listing contains all reportable spills from 01/06/88 through 10/31/91. Additional information is included from the Y-12 Plant SPCC listing all reportable spills for the years 1986 and 1987. G. 9 G. 10

5. Stormwater data collection was completed 11/12/91 and a report is being prepared. A copy of the initial report will be forwarded as soon as it is available. G. 9 G. 10

Y-12 Plant

G.7
G.8

East Fork Poplar Creek NPDES Outfalls

Outfall	Existing Category	New Category & Description	
1	I	I	Precipitation Runoff
2	III	II	Still Under Investigation
3	I	I	Precipitation Runoff
4		Misc.	
5		Eliminated Due to NHP Closure	
6	I	I	Precipitation Runoff
7	I	I	Precipitation Runoff
8		Misc.	
9	I	I	Precipitation Runoff
10		Misc.	
11	I	I	Precipitation Runoff
12	I	I	Precipitation Runoff
13	II	II	Still Under Investigation
14		Misc.	
15	I	I	Precipitation Runoff
16	II	II	Steam Condensate and Precipitation Runoff
17	I	I	Groundwater Spring
18	I	I	Precipitation Runoff
19	I	I	Precipitation Runoff
20	II	II	Steam Condensate and Precipitation Runoff
21		Misc.	
22		Misc.	
23	II	II	Steam Condensate
24	II	Plugged	
25	II	II	Steam Condensate
26	II	Eliminated	
27	II	To Be Eliminated	
28	II	To Be Eliminated	
29	II	To Be Eliminated	
30	II	Tag Only	
31	I	II	Steam Condensate and Precipitation Runoff
32	I	I	Precipitation Runoff
33		Misc.	
34		Misc.	
35	II	II	Still Under Investigation
36		Misc.	
37		Tag Only	
38		Tag Only	
39		Misc.	
40	II	II	Still Under Investigation
41	I	I	Precipitation Runoff
42		Misc.	
43	II	I	Precipitation Runoff
44	I	I	Precipitation Runoff
45	I	I	Precipitation Runoff
46	II	II	Steam Condensate and Precipitation Runoff
47		Misc.	
48		Misc.	
49		Misc.	

existing

50		Misc.	
51		Misc.	
52		Misc.	
53	II	II	Stm Cond. and Noncontact Cooling Water
54	II	II	Noncontact C.W. and Precip. Runoff
55		Misc.	
56		Misc.	
57	I	I	Precipitation Runoff
58	II	II	Steam Condensate
59	II	Tag Only	
60	II	II	Steam Condensate
61		Plugged	
62	I	I	Precipitation Runoff
63		Misc.	
64		Misc.	
65		Misc.	
66	II	II	Steam Condensate
67		Misc.	
68	II	II	Steam Condensate
69	II	II	Noncontact Cooling Water
70		Tag Only	
71	III	Misc.	
72		Misc.	
73	II	II	Noncontact Cooling Water
74	II	II	Stm Cond. and Noncontact Cooling Water
75	II	II	Stm Cond. and Noncontact Cooling Water
76	II	II	Stm Cond. and Noncontact Cooling Water
77	II	II	Stm Cond. and Noncontact Cooling Water
78	II	II	Stm Cond. and Noncontact Cooling Water
79	II	II	Stm Cond. and Noncontact Cooling Water
80	II	II	Stm Cond. and Noncontact Cooling Water
81	II	II	Stm Cond. and Noncontact Cooling Water
82		Misc.	
83		Misc.	
84	II	I	Precipitation Runoff
85		Misc.	
86	I	I	Precipitation Runoff
87	II	I	Precipitation Runoff
88		Misc.	
89		Misc.	
90		Misc.	
91		Misc.	
92	II	II	Still Under Investigation
93	II	II	Still Under Investigation
94	II	II	Still Under Investigation
95	II	II	Still Under Investigation
96	II	II	Steam Condensate and AC Condensate
97		Misc.	
98	II	I	Precipitation Runoff
99		Misc.	
100	II	I	Precipitation Runoff
101	I	I	Precipitation Runoff
102	I	I	Precipitation Runoff
103		Misc.	

	existing	now	
104		Misc.	
105		Misc.	
106		Misc.	
107		Misc.	
108	I	~~Misc.~~ I	
109		Misc.	
110		Misc.	
111	II	I	Precipitation Runoff
112	II	I	Precipitation Runoff
113		Misc.	
114		Misc.	
115	II	II	Still Under Investigation
116		Misc.	
117	II	II	Steam Condensate
118	II	Eliminated	
119	II	II	Still Under Investigation
120	II	Tag Only	
121		Misc.	
123	II	II	Still Under Investigation
124	II	Tag Only	
125		Misc.	
126		Eliminated	
127	I	Tag Only	
128		Misc.	
129		Tag Only	
130		Tag Only	
131	II	I	Precipitation Runoff
132		Misc.	
133	II	II	Steam Condensate
134	I	I	Precipitation Runoff
135	III	II	Still Under Investigation
136	I	Eliminated	
137	II	I	Precipitation Runoff
138	I	I	Precipitation Runoff
139		Eliminated	
140	I	Eliminated	
141		misc	
142		Misc.	
143		Does Not Exist	
144	II	II	Still Under Investigation
145	I	Eliminated	
146	I	Eliminated	
147	III	II	Still Under Investigation
148		Does Not Exist	
149	I	I	Precipitation Runoff
150	III	II	Still Under Investigation
151	I	Eliminated	
152	I	I	Precipitation Runoff
153	I	Eliminated	
154		I	Precipitation Runoff
155	I	I	Precipitation Runoff
156	I	I	Precipitation Runoff
157	III	II	Still Under Investigation
158		misc.	

159	I	I	Precipitation Runoff
160	III	II	Still Under Investigation
161	I	I	Precipitation Runoff
162	III	Eliminated in PIDAS	
163	III	II	Still Under Investigation
164	I	Eliminated	
165		Eliminated	
166	III	Eliminated	
167		Eliminated	
168	III	Eliminated	
169	III	II	Still Under Investigation
170	I	II	Effluent from SPWTF and Precip. Runoff
171	II	II	Roof Drain from 9720-5
172	II	II	Roof Drain from 9720-5
173	II	II	Roof Drain from 9720-5
174	II	II	Roof Drain from 9720-5
175	II	II	Roof Drain from 9720-5
176		II	Roof Drain from 9720-5
177	I	I	Precipitation Runoff
178	I	I	Precipitation Runoff
179	I	I	Precipitation Runoff
180	I	I	Precipitation Runoff
181	III	II	Still Under Investigation
182	I	I	Precipitation Runoff
183	I	I	Precipitation Runoff
184	I	I	Precipitation Runoff
185	II	II	Steam Condensate and Precipitation Runoff
186	I	I	Precipitation Runoff
187		misc	
188	II	II	~~Still Under Investigation~~ Abandoned, no longer an outfa
189		misc.	
190		misc.	
191	III	II	Still Under Investigation
192	III	II	Still Under Investigation
193	I	I	Precipitation Runoff
194	I	I	Precipitation Runoff
195	I	I	Precipitation Runoff
196	I	I	Precipitation Runoff
197	I	I	Precipitation Runoff
198	I	I	Precipitation Runoff Plus Unknowns
199	I	I	Under Trailer 9983-82
200	I	I	Precipitation Runoff
201	II	II	Still Under Investigation
202	I	I	Precipitation Runoff
203	II	Eliminated	
204	II	I	Precipitation Runoff
205	I	I	Precipitation Runoff
206	I	I	Precipitation Runoff
207	I	I	Precipitation Runoff
208	I	II	Steam Condensate and Precipitation Runoff
209	I	Eliminated	
210	II	Tag Only	
211		Tag Only	
212	II	I	Precipitation Runoff

		NOW	
213	II	Tag Only	
214	II	Tag Only	
215	I	I	Precipitation Runoff
216	II	To Be Eliminated	
217	II	To Be Eliminated	
218	II	Tag Only	
219	II	To Be Eliminated	
220	II	Tag Only	
221	I	I	Precipitation Runoff
222		Misc - Dry	
223	I	I	Precipitation Runoff
224	I	I	Precipitation Runoff
225		I	Precipitation Runoff
226	II	Tag Only	
227		Tag Only	
228	I	I	Precipitation Runoff
229	I	Eliminated Under Trailer 9983-83	
230	I	Eliminated	
231	I	I	Precipitation Runoff
232	I	Eliminated	
233	I	I	Precipitation Runoff
234	I	I	Precipitation Runoff
235	I	I	Precipitation Runoff
236	I	I	Precipitation Runoff
237	I	I	Precipitation Runoff
238	II	II	Roof Drain from 9720-26
239	II	II	Roof Drain from 9720-26
240	II	II	Roof Drain from 9720-26
241	II	II	Roof Drain from 9720-26
242		Misc.	~~Still~~ Under Investigation — No Flow
243	II	II	Floor Drain 9720-5, Needs Investigation
244	II	II	Floor Drain 9720-5, Needs Investigation
245	II	II	Floor Drain 9720-5, Needs Investigation
246	II	II	Floor Drain 9720-5, Needs Investigation
247	I	I	Still Under Investigation
248	I		Does Not Exist
? - 249		I	Precipitation Runoff

To Be Plugg

Outfall	Existing Category	New Category & Description
301	Kerr Hollow Quarry	Ambient Monitoring Station
302	Rogers Quarry	Ambient Monitoring Station
303	New Hope Pond	Closed
304	Bear Creek	Bear Creek
305	Oil Retention Pond 1	Closed
306	Oil Retention Pond 2	Closed
307	West Borrow Area	Ambient Monitoring Station
308	East Borrow Area	Ambient Monitoring Station
309	Industrial Waste Landfill #4	Ambient Monitoring Station
310	Sanitary Landfill #2 (405)	Ambient Monitoring Station

Existing Outfall		New Outfall
401	9204-4 Dye Penetrant	518
402	9204-2 Steam Condensate from Lithium Process	
403	9818 Nitric Acid Still	Eliminated
404	9201-5N X-Ray	513
405	Sanitary Landfill #2 Leachate Pond	310
406	9201-1 Plasma Torch Burn Table	Eliminated
407	9201-4 ECM Sink Rinses, room 11	Eliminated
408	9202 Catch Basin	
409	9201-5 Dye Penetrant Shower Rinse	519
410	9201-5 Dye Penetrant Sink Rinse	Eliminated
411	9204-2E X-Ray	514
412	9204-4 X-Ray, rm 001B, east X-Omat	515
413	9204-4 X-Ray, rm 001B, west X-Omat	516
414	9981 X-Ray	517
415	9201-5 X-Ray	Eliminated
416	9204-4 X-Ray, hand developer	Eliminated
417	9201-4 ECM Sink Rinses, room 21	Eliminated
418	9201-3 X-Ray	Eliminated
419	9737 Plating Shop Rinse Water	Eliminated
420	9980 X-Ray	Eliminated
421	Circuit Board Rinse Water	Eliminated
422	Circuit Board Rinse Water	Eliminated

Treatment Facilities

501	Central Pollution Control Facility
502	West End Treatment Facility
503	Steam Plant Wastewater Treatment Facility
504	Plating Rinsewater Treatment Facility
505	ORNL Biology Wastewater Treatment Facility (Never Constructed)
506	9204-3 ORNL Oil Water Separator
507	S-3 Ponds Liquid Treatment Facility (Eliminated)
508	Mobile Wastewater Treatment Facility
510	Waste Coolant Treatment Facility
511	Electrodialysis Reversal Unit (EDR) (New Outfall)
512	Groundwater Treatment Facility (New Outfall)
513	9201-5N X-Ray (Used to be 404)
514	9204-2E X-Ray (Used to be 411)
515	9204-4 X-Ray, rm 001B, east X-Omat (Used to be 412)
516	9204-4 X-Ray, rm 001B, west X-Omat (Used to be 413)
517	9981 X-Ray (Used to be 414)
518	9204-4 Dye Penetrant (Used to be 401)
519	9201-5 Dye Penetrant Shower Rinse (Used to be 409)

Cooling Towers & Steam Plant Fly Ash Sluice Water

Outfall	Building Number
602	Cooling Tower 9409-2
604	Cooling Tower 9409-4
606	Cooling Tower 9409-6
610	Cooling Tower 9409-10
612	Cooling Tower 9409-12
613	Cooling Tower 9409-13
615	Cooling Tower 9409-15
616	Cooling Tower 9409-16
617	Cooling Tower 9409-17
618	Cooling Towers 9409-18/31
619	Cooling Tower 9409-19
620	Cooling Tower 9409-20
622	Cooling Tower 9409-22
623	Steam Plant Fly Ash Sluice Water
624	Cooling Tower 9409-24
626	Cooling Tower 9409-26
628	Cooling Towers 9409-28/29
630	Cooling Tower 9409-30
632	Cooling Tower 9409-32
633	Cooling Tower 9409-33
634	Cooling Tower 9409-23

Miscellaneous Sources

Outfall	Description
702	9201-2 Demineralilzer (Eliminated)
703	9731 Demineralilzer (Eliminated)
704	9204-1 Vapor Blaster
705	East Chestnut Ridge Disposal Basin (Closed)
709	9766 Kreonite B&W Film Proc.
710	9766 B&W Line Film Proc.
711	9766 Royal Print Proc.
712	9731 Color Paper Proc.
713	9731 Color Film Proc.
714	9706-2 Kodak RP X-Omat Proc. Model No. M6AW
715	9739 Kodamatic 125 Proc.
716	9215 Kodak Dektomatic 65 Paper Proc.
717	9204-2E Kodak X-Omat model XK
718	9981 X-Omat
719	9980/81 Film Processor
720	9995 Film Processor
721	9995 X-Ray Diffractor
722	9204-2E Ultrasonic Testing Gage 0202
723	9204-2E Ultrasonic Testing Gage 0203
724	9204-2E Ultrasonic Testing Gage 0204
725	9204-2E Ultrasonic Test Tank
726	9204-2E Ultrasonic Testing Universal Gage
727	9204-4 Ultrasonic Testing Gage 66
728	9204-4 Ultrasonic Testing Gage 67
729	9204-4 2 Ultrasonic Testing Lab Scanners
730	9204-4 Density Tester
731	9204-4 Density Tester
732	9980 Density Tester
733	9981 Density Tester
734	9203 MIDAS Ultrasonic Tank
735	9203 Weld Gage Bubbler
736	9203 Weld Gage Tank
737	9203 Micro Scanner Tank
738	9203 WADAS Bubbler
739	9203 WADAS Tank

G.9
G.10

Y-12 Plant
Reportable Spills

Date	Time	Location	Incident	Material	Quantity	Violation
10/31/91	AM1000	EFPC OF67	RELEASE, EXCON	OILY SHEEN		BWR, DMR
10/24/91	PM1213	EFPC N/SP	RELEASE, EXCON	OILY SHEEN		BWR, DMR
10/23/91	AM825	EFPC N/SP	RELEASE, EXCON	OILY SHEEN		BWR, DMR
10/22/91	AM925	EFPC N/SP	RELEASE, EXCON	OILY SHEEN		BWR, DMR
10/22/91	AM925	EFPC OF67	RELEASE, EXCON	OILY SHEEN		BWR, DMR
10/22/91	AM925	EFPC OF109	RELEASE	FOAM		NPDES
10/18/91	AM850	EFPC OF67	RELEASE, EXCON	OILY SHEEN		BWR, DMR
10/15/91	PM125	EFPC N/SP	RELEASE, EXCON	OILY SHEEN		BWR, DMR
10/15/91	PM125	EFPC OF67	RELEASE, EXCON	OILY SHEEN		BWR, DMR
10/14/91	AM930	EFPC N/SP	RELEASE, EXCON	FOAM		NPDES
10/14/91	PM230	9769	SPILL	HAZARDOUS WASTE	100 GALS	CERCLA
10/03/91	PM255	EFPC OF67	RELEASE, EXCON	OILY SHEEN		BWR, DMR
10/02/91	AM830	EFPC N/SP	RELEASE, EXCON	OILY SHEEN,WHT PRTCL		BWR, DMR
10/01/91	PM230	EFPC N/SP	RELEASE	OILY SHEEN		CWA, NPDES, BWR,
10/01/91	AM947	EFPC N/SP	RELEASE, EXCON	OILY SHEEN,WHT PRTCL		BWR, DMR
10/01/91	AM947	EFPC OF67	RELEASE, EXCON	OILY SHEEN		BWR, DMR
09/30/91	PM215	EFPC N/SP	RELEASE, EXCON	OILY SHEEN,WHT PRTCL		BWR, DMR
09/30/91	PM215	EFPC OF67	RELEASE, EXCON	OILY SHEEN		BWR, DMR
09/30/91	AM915	EFPC OF14	RELEASE	FOAM		NPDES, DMR
09/30/91	AM915	EFPC OF67	RELEASE, EXCON	OILY SHEEN		BWR, DMR
09/26/91	AM900	EFPC OF67	RELEASE, EXCON	OILY SHEEN		BWR, DMR
09/25/91	PM300	EFPC OF128	RELEASE	FOAM		NPDES, DMR
09/25/91	AM1008	EFPC OF67	RELEASE, EXCON	OILY SHEEN, MUD		BWR, DMR
09/25/91	AM1008	EFPC OF14	RELEASE	SOAPY SUDS		NPDES, DMR
09/23/91	AM1030	EFPC OF67	RELEASE, EXCON	OILY SHEEN		BWR, DMR
09/20/91	AM930	EFPC OF67	RELEASE, EXCON	OILY SHEEN		BWR, DMR
09/19/91	AM830	EFPC OF 67	RELEASE EXCON	OILY SHEEN		BWR, DMR
09/13/91	AM900	EFPC N/SP	RELEASE, EXCON	OILY SHEEN,WHT PRTCL		BWR, DMR
09/13/91	AM900	EFPC OF67	RELEASE, EXCON	OILY SHEEN		BWR, DMR
09/12/91	PM130	9204-4	SPILL	COPPER SULFATE SOL	~100 gals	CERCLA
09/12/91	AM943	EFPC OF67	RELEASE, EXCON	OILY SHEEN		BWR, DMR
09/11/91	AM1110	EFPC N/SP	RELEASE, EXCON	OILY SHEEN,WHT PRTCL		BWR, DMR
09/11/91	AM1110	EFPC OF67	RELEASE, EXCON	OILY SHEEN		BWR, DMR
09/06/91	PM105	EFPC OF67	RELEASE, EXCON	OILY SHEEN		BWR, DMR
09/06/91	PM1240	N 9201-5	EXCON	MERCURY	13 lbs	CERCLA
09/05/91	AM830	EFPC OF67	RELEASE, EXCON	OILY SHEEN		BWR, DMR
09/05/91	AM830	EFPC OF109	RELEASE	FOAM		NPDES, DMR
09/05/91	AM830	EFPC N/SP	RELEASE, EXCON	OILY SHEEN		BWR, DMR
09/04/91	PM1230	EFPC OF67	RELEASE, EXCON	OILY SHEEN		BWR, DMR
09/03/91	AM930	EFPC OF67	RELEASE, EXCON	OILY SHEEN		BWR, DMR
08/28/91	AM834	EFPC N/SP	RELEASE, EXCON	OILY SHEEN		BWR, DMR
08/27/91	AM830	EFPC OF67	RELEASE, EXCON	OILY SHEEN		BWR, DMR
08/26/91	AM805	EFPC OF67	RELEASE, EXCON	OILY SHEEN		BWR, DMR
08/26/91	AM805	EFPC N/SP	RELEASE, EXCON	OILY SHEEN,WHT PRTCL		BWR, DMR
08/23/91	PM305	EFPC N/SP	RELEASE, EXCON	OILY SHEEN,WHT PRTCL		BWR, DMR
08/22/91	PM145	EFPC OF71	RELEASE	FOAM		NPDES, DMR
08/21/91	AM750	EFPC OF67	RELEASE, EXCON	OILY SHEEN		BWR, DMR
08/19/91	AM907	EFPC OF67	RELEASE, EXCON	OILY SHEEN		BWR, DMR
08/16/91	AM850	EFPC N/SP	RELEASE, EXCON	OILY SHEEN		BWR, DMR
08/16/91	PM330	EFPC N/SP	RELEASE, EXCON	OILY SHEEN		BWR, DMR
08/16/91	PM330	EFPC OF67	RELEASE, EXCON	OILY SHEEN		BWR, DMR
08/14/91	AM945	EFPC N/SP	RELEASE, EXCON	OILY SHEEN		BWR, DMR
08/14/91	AM945	EFPC OF67	RELEASE, EXCON	OILY SHEEN		BWR, DMR
08/09/91	AM948	EFPC OF67	RELEASE, EXCON	OILY SHEEN		BWR, DMR
08/08/91	AM845	DIVR CHAN	RELEASE	OILY SHEEN		BWR, DMR
08/08/91	AM845	EFPC OF55	RELEASE, EXCON	OILY SHEEN		BWR, DMR
08/08/91	AM845	EFPC N/SP	RELEASE, EXCON	OILY SHEEN		BWR, DMR
08/08/91	AM845	EFPC OF67	RELEASE, EXCON	OILY SHEEN		BWR, DMR
08/07/91	AM830	EFPC N/SP	RELEASE, EXCON	OILY SHEEN		BWR, DMR

Date	Time	Location	Incident	Material	Quantity	Violation
08/07/91	AM830	EFPC OF67	RELEASE, EXCON	OILY SHEEN		BWR, DMR
08/07/91	AM850	EFPC OF55	RELEASE	OILY SHEEN		CWA, NPDES, BWR
08/06/91	AM830	EFPC N/SP	RELEASE, EXCON	OILY SHEEN,WHT PRTCL		BWR, DMR
08/01/91	AM	EFPC OF67	RELEASE, EXCON	OILY SHEEN		BWR, DMR
07/31/91	PM225	EFPC N/SP	RELEASE, EXCON	OILY SHEEN		BWR, DMR
07/31/91	AM820	EFPC OF67	RELEASE, EXCON	OILY SHEEN		BWR, DMR
07/30/91	AM1047	EFPC OF67	RELEASE, EXCON	OILY SHEEN		CWA, NPDES, BWR
07/23/91	AM1032	EFPC N/SP	RELEASE, EXCON	OILY SHEEN,WHT PRTCL		BWR, DMR
07/22/91	AM950	EFPC OF55	RELEASE	OILY SHEEN		CWA, NPDES, BWR
07/17/91	AM820	EFPC 9767	RELEASE, EXCON	OILY SHEEN		BWR, DMR
07/17/91	AM820	EFPC OF71	RELEASE	FOAM		NPDES, DMR
07/11/91	AM945	EFPC N/SP	RELEASE, EXCON	OILY SHEEN,WHT PRTCL		BWR, DMR
06/21/91	1700	OD-9 WASTE OIL/SOLVENT STORAGE FACILITY	SPILL	RCRA LISTED WASTE (F-006)	10 POUNDS	CERCLA
05/23/91	1110	WEST END LAYDOWN YARD	RELEASE	PROPANE	100 POUNDS	CERCLA
05/20/91	0800	NPDES OUTFALL 34	RELEASE	OIL	<1 GALLON	CWA
02/18/91	0835	BUILDING 9418-4	SPILL	Z-OIL (14 PPM PCB)	15 GALLONS	CWA
01/24/91	1800	STEAM PLANT	RELEASE	BOTTOM ASH CONTAINING AS, P, NA, AND CL	UNKNOWN	CERCLA
01/19/91	0926	KERR HOLLOW QUARRY	RELEASE	OIL	<1 GAL	CWA
12/31/90		UEFPC (N/S PIPES)	RELEASE	OIL (CREATED A SHEEN ON UEFPC)	<1 ML	***
12/28/90		UEFPC (N/S PIPES)	RELEASE	OIL (CREATED A SHEEN ON UEFPC)	<1 ML	***
12/27/90		UEFPC (N/S PIPES)	RELEASE	OIL (CREATED A SHEEN ON UEFPC)	<1 ML	***
12/26/90		UEFPC (N/S PIPES)	RELEASE	OIL (CREATED A SHEEN ON UEFPC)	<1 ML	***
12/21/90		UEFPC (N/S PIPES)	RELEASE	OIL (CREATED A SHEEN ON UEFPC)	<1 ML	***
12/20/90		UEFPC (N/S PIPES)	RELEASE	OIL (CREATED A SHEEN ON UEFPC)	<1 ML	***
12/19/90		UEFPC (N/S PIPES)	RELEASE	OIL (CREATED A SHEEN ON UEFPC)	<1 ML	***
12/18/90		UEFPC (N/S PIPES)	RELEASE	OIL (CREATED A SHEEN ON UEFPC)	<1 ML	***
12/17/90		UEFPC (N/S PIPES)	RELEASE	OIL (CREATED A SHEEN ON UEFPC)	<1 ML	***
12/14/90		UEFPC (N/S PIPES)	RELEASE	OIL (CREATED A SHEEN ON UEFPC)	<1 ML	***
12/13/90		UEFPC (N/S PIPES)	RELEASE	OIL (CREATED A SHEEN ON UEFPC)	<1 ML	***
12/12/90		UEFPC (N/S PIPES)	RELEASE	OIL (CREATED A SHEEN ON UEFPC)	<1 ML	***
12/11/90		UEFPC (N/S PIPES)	RELEASE	OIL (CREATED A SHEEN ON UEFPC)	<1 ML	***
12/10/90		UEFPC (N/S PIPES)	RELEASE	OIL (CREATED A SHEEN ON UEFPC)	<1 ML	***
12/07/90		UEFPC (N/S PIPES)	RELEASE	OIL (CREATED A SHEEN ON UEFPC)	<1 ML	***
11/28/90	1455	SOUTH OF BUILDING 9204-3	SPILL	MINERAL OIL FROM TRANSFORMER (<10 PPM PCB)	<2 GAL	CWA
11/16/90	1215	WEST OF BUILDING 9720-6	SPILL	HYDRAULIC OIL	16 OUNCES	CWA
11/15/90	1110	UEFPC (NORTH/SOUTH PIPES)	RELEASE	OIL (CREATED A SHEEN ON UEFPC)	<1 ML	CWA
11/14/90	1650	UEFPC (NORTH/SOUTH PIPES)	RELEASE	OIL (CREATED A SHEEN ON UEFPC)	<1 ML	CWA
11/12/90	1520	UEFPC (NORTH/SOUTH PIPES)	RELEASE	OIL (CREATED A SHEEN ON UEFPC)	<1 ML	CWA
11/09/90	1425	UEFPC (NORTH/SOUTH PIPES)	RELEASE	OIL (CREATED A SHEEN ON UEFPC)	<1 ML	CWA
11/01/90	1800	SOIL PILE ON NEAR WEST PATROL ROAD	RELEASE	MERCURY	200-300 LBS	CERCLA
10/10/90	1130	UEFPC (NORTH/SOUTH PIPES)	RELEASE	OIL (CREATED A SHEEN ON UEFPC)	<1 ML	CWA
10/04/90	1945	KERR HOLLOW QUARRY	SPILL	HYDRAULIC OIL	5 GAL	CWA
10/04/90	1250	NE OF BUILDING 9720-6	SPILL	HYDRAULIC OIL	3 GAL	CWA
10/02/90	1430	KERR HOLLOW QUARRY	SPILL	HYDRAULIC OIL	5.5 GAL	CWA
09/25/90	1350	KERR HOLLOW QUARRY	SPILL	HYDRAULIC OIL	15 GAL	CWA
09/10/90	1615	UEFPC (NORTH/SOUTH PIPES)	RELEASE	OIL (CREATED A SHEEN ON UEFPC)	<1 GAL	CWA
09/05/90	1940	UEFPC (NORTH/SOUTH PIPES)	RELEASE	OIL (CREATED A SHEEN ON UEFPC)	<1 GAL	CWA
08/24/90	1500	SOUTHEAST CORNER OF BUILDING 9201-4	EXISTING	MERCURY	2.2 POUNDS	CERCLA
08/14/90	1500	SE CORNER OF BUILDING 9201-5	PROCESS	MERCURY	89.6 POUNDS	CERCLA
08/07/90	1400	SOUTH OF BUILDING 9103	SPILL	RAW SEWAGE	80-100 GAL	CWA
08/07/90	1400	SOUTH OF 9103	SPILL	RAW SEWAGE	80-100 GAL	CWA
07/24/90	1445	UEFPC	RELEASE	FOAM	<5 LBS.	CWA
07/20/90	630	S.E. CORNER OF 9201-2	SPILL	DEMINERALIZED WATER	1500-2000 GAL.	CWA
06/28/90	1015	UEFPC	RELEASE	UNKNOWN - CREATED AN OILY	<1 GAL.	CWA

Date	Time	Location	Incident	Material	Quantity	Violation
				SHEEN		
06/14/90	1400	UEFPC	RELEASE	FOAM	<5 LBS.	CWA
06/13/90	1730	UEFPC	RELEASE	FOAM	<5 LBS.	CWA
06/08/90	1130	UEFPC	RELEASE	FOAM	~5 LBS.	CWA
05/31/90	30	S. OF 9201-5	SPILL	URANIUM CONTAMINATED WATER (ABRASIVE SAW COOLANT)	250 GAL.	CWA
05/26/90	1245	UEFPC	RELEASE	FOAM	~5 LBS.	CWA
05/25/90	1030	UEFPC	RELEASE	FOAM	~5 LBS.	CWA
05/24/90	1320	OUTFALL 501 AT CPCF	RELEASE	FOAM	~5 LBS.	CWA
05/23/90	1400	OUTFALL 83 ON UEFPC	RELEASE	UNKNOWN - CREATED AN OIL SHEEN	SHEEN	CWA
05/17/90	1045	BLDG. 9201-4	SPILL	ASBESTOS	3 LBS.	CERCLA
05/04/90	1700	OUTFALL 67 ON UEFPC	RELEASE	GASOLINE (SUSPECTED)	SHEEN	CWA
03/20/90	1740	UEFPC	UNKNOWN	OIL (SHEEN)	UNKNOWN	CWA
02/15/90	1210	N. OF 9401-3 STEAM PLANT	RELEASE	BOILER BLOW DOWN WATER (POSSIBLY H2SO4 ALSO)	~450 GAL.	CWA
02/09/90	1200	UEFPC, OUTFALL 60	SPILL	OIL	UNKNOWN	CWA
01/24/90	1445	9754-2 (EAST GASOLINE STATION)	SPILL	DIESEL FUEL	UNKNOWN	CWA
12/24/89	1245	BETWEEN 9204-1 AND 9204-3	SPILL	RAW SEWAGE	~100-300 GAL	CWA
12/07/89	1000	UEFPC, OUTFALL 48	RELEASE	UNKNOWN; MILKY WHITE LIQUID	UNKNOWN	CWA
10/13/89	1315	SW CORNER OF 9204-4	SPILL	HYDRAULIC OIL	8 OZ	CWA
09/16/89	800	UEFPC, OUTFALL 67	RELEASE	UNKNOWN - OILY DISCHARGE	UNKNOWN	CWA
09/15/89	1230	9204-4	SPILL	BRINE (30% METHANOL, 70% WATER)	100 GAL	CWA
09/13/89	800	NORTH OF 9720-5	SPILL	RAW SEWAGE	50 GAL	CWA
08/29/89	1230	UEFPC - OUTFALLS 47 & 48	SPILL	MINERAL OIL (65 PPM PCB)	~10 GAL	CWA
08/22/89	1000	N. OF 9204-4	SPILL	GASOLINE	UNKNOWN	CWA
08/03/89	1315	BEAR CREEK BURIAL GROUNDS	SPILL	URANIUM CHIPS AND COOLANT (WATER AND TRIMSOL)	200-300 LBS	CERCLA
07/31/89	1600	BUILDING 9720-5 AREA	SPILL	RAW SEWAGE	3000 GAL	CWA
06/10/89	830	STORM SEWER BOX W. OF 9754-2 GAS STATION	RELEASE	GASOLINE	UNKNOWN	CWA
06/09/89	1030	STORM SEWER BOX W. OF 9754-2 GAS STATION	RELEASE	GASOLINE AND DIESEL FUEL	UNKNOWN	CWA
05/23/89	900	UEFPC, OUTFALL 135	RELEASE	UNKNOWN	UNKNOWN	CWA
05/16/89	1430	INTERIM DRUM STORAGE YARD S. OF 9720-33	SPILL	CHROMIC ACID	~20 GAL	CERCLA
04/13/89	1430	UEFPC, OUTFALL 14	RELEASE	UNKNOWN	~50 GAL	CWA
04/10/89	945	NE CORNER OF 9616-17 (WETF) EXCAVATION	SPILL	RAW SEWAGE	UNKNOWN	CWA
03/03/89	1600	NEW HOPE POND	SPILL	HYDRAULIC OIL	3.75 GAL	CWA
02/27/89	1530	EAST SIDE OF 9215	SPILL	DIESEL FUEL	<1 PINT	CWA
02/02/89	855	UEFPC	RELEASE	UNKNOWN - CREATED AN OIL SHEEN	UNKNOWN	CWA
01/26/89	1055	9201-5 WEST MACHINE SHOP	SPILL	3% TRIMSOL COOLANT MIXTURE WITH 97% WATER	3-4 OZ	CWA
01/20/89	1320	UEFPC OUTFALL 34	RELEASE	UNKNOWN - CREATED FOAM ON WATER	UNKNOWN	CWA
01/18/89	1530	UEFPC AT N/S PIPES	RELEASE	BLACK PARTICULATES, PROBABLY COAL DUST OR FLY ASH	UNKNOWN	CWA
12/29/88	850	UEFPC AT N/S PIPES	RELEASE	GREEN FLUID (SUSPECTED TO BE DYE PENETRANT)	UNKNOWN	CWA
12/22/88	900	UEFPC AT N/S PIPES	RELEASE	GREEN FLUID (SUSPECTED TO BE DYE PENETRANT)	50 GAL	CWA
12/08/88	1040	UEFPC	RELEASE	UNKNOWN	UNKNOWN	CWA
11/23/88	0	BEAR CREEK BURIAL GROUNDS	SPILL	OIL (>50 PPM PCB)	5 GAL	CWA
10/22/88	130	9401-3	SPILL	ACIDIC SOLUTION	75 GAL	CWA
09/28/88	1440	OUTSIDE 9201-1	RELEASE	RED LATEX PAINT	UNKNOWN	CWA
09/08/88	1615	9201-5N	SPILL	SEWAGE	75 GAL	CWA
08/04/88	1500	EFPC 9204-1	SPILL	DISCOLORATION (WHITE SOLIDS)	UNKNOWN	CWA
07/05/88	815	UEFPC (N/S PIPES)	RELEASE	WHITE DISCOLORATION	UNKNOWN	CWA

Date	Time	Location	Incident	Material	Quantity	Violation
07/05/88	545	9204-2	SPILL	BRINE (30-40% METHANOL)	500 GAL	CWA
06/24/88	1010	9201-1 SOUTH MANHOLE NEAR OUTFALL 109	SPILL	SEWAGE	2700 GAL	CWA
06/02/88	1230	9620-2	SPILL	Z-OIL (10-15 PPM PCB)	440 GAL	CWA
05/18/88	1630	NEW HOPE POND	RELEASE	FOAM	VISIBLE AMT.	CWA
05/16/88	430	9404-18	SPILL	WASTEWATER FROM STEAM PLANT SUMP	~50 GAL	CWA
04/22/88	1325	9201-2 SOUTH OF OUTFALL 47	RELEASE	DISCOLORED WASH WATER	UNKNOWN	CWA
04/22/88	845	9720-2 EAST SIDE PAD	SPILL	TETRACHLOROETHYLENE	40 GAL	CERCLA
04/21/88	1030	WTF WEST END TANK STORAGE AREA	SPILL	MERCURY	153 LBS	CERCLA
04/12/88	730	UEFPC (SOUTH OF 9720-6)	SPILL	OIL	4 GAL	CWA
04/11/88	15	UEFPC (OUTFALL 21)	RELEASE	UNKNOWN	UNKNOWN	CWA
04/11/88	1610	UEFPC (OUTFALL 67)	SPILL	OIL	SHEEN	CWA
03/17/88	800	UEFPC (N/S PIPES)	SPILL	SHREDDED PAPER	SEVERAL LBS	CWA
03/17/88	1330	WEST OF 9616-7	SPILL	MERCURY	~85 LB	CERCLA
03/11/88	1800	9201-5 NORTH	SPILL	SEWAGE	800 GAL	CWA
03/02/88	1100	9201-5	SPILL	BRINE (30% METHANOL SOLUTION)	~5,830 GAL	CERCLA
02/17/88	1325	9202 EAST	SPILL	SEWAGE	<10 GAL	CWA
01/26/88	1115	9204-3 SOUTH	SPILL	Z-OIL	~300 GAL	CWA

EXCON - Existing Condition recurring, source unknown
BWR - bi-weekly report to DOE (now monthly)
DMR - Discharge Monitoring Report

TABLE 4.1

DESCRIPTIONS OF REPORTABLE SPILLS AT Y-12,

JANUARY 1987 - OCTOBER 1990

Date	Material Released	Quantity	Cause	Controls/Countermeasures
1/24/87	Oil	10 gals	Mechanical leak	Sorball spread and drain diked.
2/2/87	Unknown (orange discharge from outfall)	Unknown	Unknown	Sampling did not identify source.
2/6/87	Oil	Sheen	Unknown	Sheen dissipated. Oil skimmer at pond was operable.
2/10/87	Unknown (white discharge from outfall)	Unknown	Unknown	Slug dissipated.
2/20/87	Oil	5 gals	Unknown	Boom positioned east of outfall 434. Diapers were placed on the water surface. Oil removed.
3/5/87	Muddy Water	Several hundred gals	Operator, unauthorized discharge	Water pumped through straw bales. BMP practices implemented. Employee instructed on proper procedure.
3/6/87	Sanitary Sewage	45 gals	Mechanical, pipe constriction	Storm drain blocked off. Material vacuumed up and discharged to sanitary sewer.
3/27/87	Hydrocarbon Oil Vapors	Detectable	Unknown	Underground tank emptied and assessment begun.
4/13/87	Oil	Sheen	Unknown	Boom set up on East Fork Poplar Creek.
4/21/87	Mercury	2.5 lbs	Operator, improper handling	Mercury was vacuumed up for recovery. Employee instructed on proper procedure.
4/30/87	Oil w/PCBs 10 ppm	10 gals	Mechanical, hose failure	Boom positioned at creek with absorbent diapers. Material in sump absorbed with Sorball. Equipment repaired. Hose repaired.

TABLE 4.1. (continued)

Date	Material Released	Quantity	Cause	Controls/Countermeasures
5/4/87	Sewage	75 gals	Mechanical, line failure	Pumps were shutdown at lift station. Sewage was pumped around Post 8 to downstream manhole.
5/6/87	Concrete	1,500 lbs	Mechanical, form failure	None.
6/1/87	Oil	<1 gal	Mechanical, seal failure	Sorball spread. Equipment repaired. Plate will be fabricated to place over drain.
6/5/87	Coal fine Slurry	200 gals	Operator, unauthorized discharge	Coal pile runoff controlled and treated by the Steam Plant Wastewater Treatment Facility. Employee instructed on proper procedure.
6/8/87	Unknown (reddish-brown discharge from outfall)	Unknown	Unknown	Source not identified.
6/10/87	Dye	Unknown	Unknown	Source not identified. Samples taken.
6/17/87	Styrene Resin	Unknown	Resin from storm sewer lining	Material contained by boom. Diverted to oil skimmer pond. Storm Sewer Rehabilitation Project completed. BMPs implemented during remainder of project.
6/24/87	Oil	5 qts	Mechanical/Operator	Equipment moved. Training of construction engineers was initiated.
6/25/87	Coal Fines	Unknown	Unknown	Coal fines controlled by Steam Plant Wastewater Treatment Facility.
7/24/87	Suspected Dye	Unknown	Unknown	Source not identified.
9/10/87	Water	Unknown	Operator, heavy equipment accident	Material contained in creek and New Hope Pond. Waterline repaired. Employee instructed on proper procedure.
10/1/87	Coal fines Slurry	Several hundred gals	Operator, unauthorized drainage	Settled in New Hope Pond. Steam Plant Wastewater Treatment Facility constructed.

TABLE 4.1. (continued)

Date	Material Released	Quantity	Cause	Controls/Countermeasures
11/10/87	Oil	Sheen	Unknown	Source not identified. Believed to be parking lot runoff.
11/11/87	Oil w/PCBs 16 ppm	>2 gals	Mechanical, level indicator failure	Material cleaned-up and placed into DOT 17C drum. Drain plugged, sump filled, indicator repaired.
12/1/87	BeO-contaminated Mopwater	<1 gal	Improper spill prevention and control	Employee instructed on proper procedures.

TABLE 4-1 (continued)

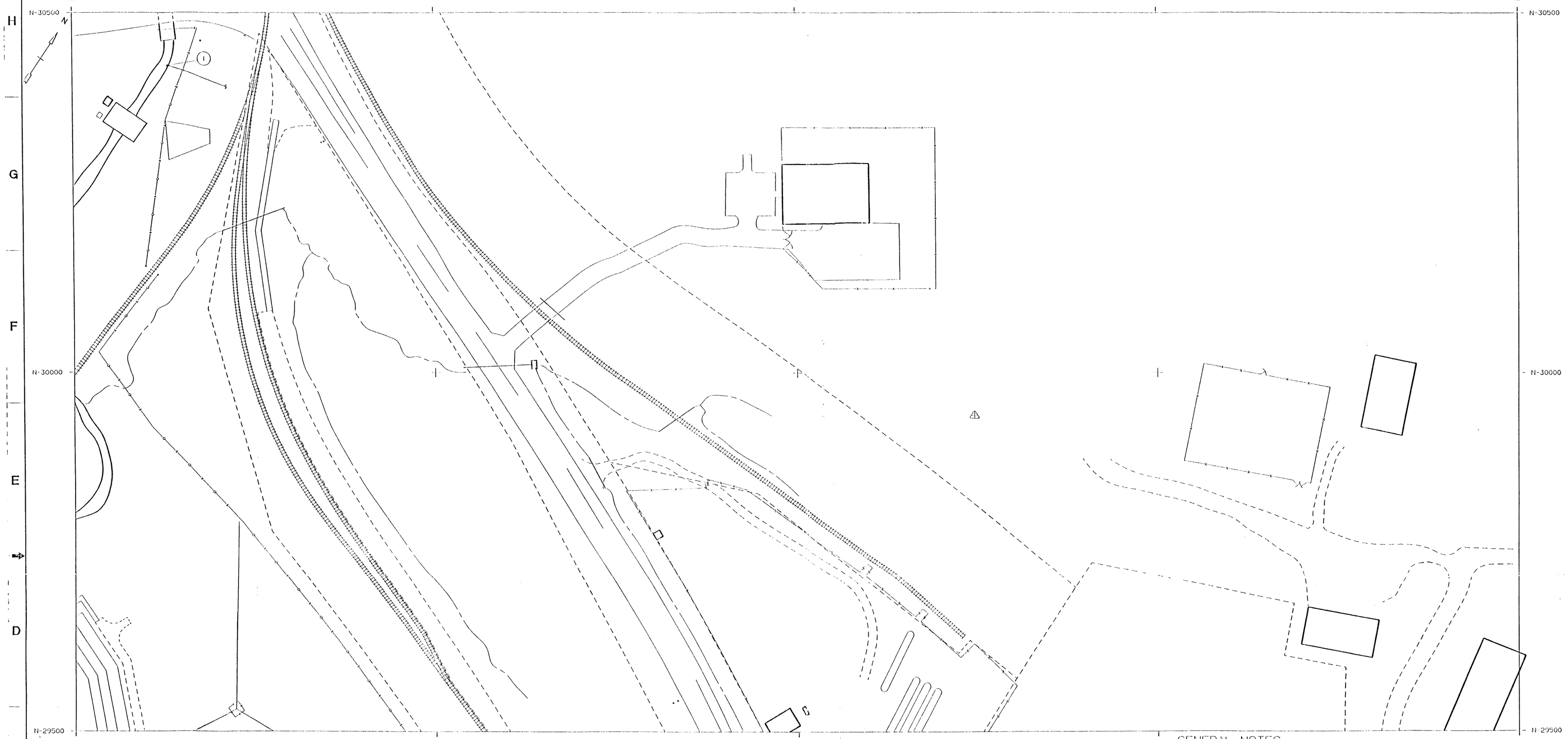
Date	Material Released	Quantity	Cause		Controls/Countermeasures
1/21/86	Mopwater BeO, Ur.	15 - 20 gal.	Operator.	Improper position of hose.	Vacuumed liquid; shoveled up sludge; washed area down and pumped wash water to tanker; cleaned oil catch basin.
1/22/86	Flyash	1,500 gal.	Operator.	Uncontrolled discharge.	Washed down. Procedures changed.
1/31/86	Oil	1 gal.	Unknown.		Used oil absorbent pads and small containers to remove the collected scum and oil.
2/19/86	Oil	1 gal.	Operator.	Open valve.	Used bucket to catch leak, mechanical plug to shut off pipe, and closed valve from exchange. Contaminated soil was removed for disposal.
2/21/86	Oil	20 - 30 gal.	Operator.	Tank Overflow.	Oil containment boom and oil pads used on East Fork Poplar Creek. Put waste in bags. Vacuumed oil in dike into drums. Dike repaired.
2/27/86	Water	7,000 gal.	Operator.	Tank Overflow.	Straw bales were placed around storm sewer to reduce sediment loading to creek. BMPs implemented.
4/2/86	Water	500 gal.	Operator.	Unauthorized discharge.	Straw will be used to filter water pumped from construction dikes prior to discharging to the storm sewer.
4/9/86	Soap Suds	Trace.	Unknown.		Source not determined.
4/11/86	Water	250 gal.	Operator.	Unauthorized discharge.	Straw will be used to filter in water discharged from construction areas.
4/24/86	Muddy Water	150 gal.	Operator.	Unauthorized discharge.	Construction discharge. Stopped and BMP measures instituted.
5/1/86	Calcium Carbonate	Unknown.	Operator.	Unauthorized discharge.	None.
5/6/86	Calcium Carbonate	Unknown.	Operator.	Unauthorized discharge.	None.
5/7/86	Dike Water	<10 gal./hr.	Unknown.	Branch is on the dike.	Dike repaired. Sample analysis requested.

TABLE 4-1 (continued)

Date	Material Released	Quantity	Cause	Controls/Countermeasures
5/11/86	Water	2,500 gal.	Mechanical. Pipe Failure	Pipe isolated. Pipe system repaired. Plant program to replace old lines.
5/21/86	Degreaser	2 gal.	Operator. Improperly installed packing.	Spread Sorball. Placed sandbags at drain openings. Swept material up. Placed waste in container. Procedure changed for securing containers.
5/23/86	Sanitary Sewage	500 - 1,000 gal.	Operator. Improperly installed drain pipe.	Diverted flow. Disinfected areas with 10 ppm Chlorine. Observed no visible solids. Regrouted and cleaned line.
6/11/86	Water	2,000 gal.	Operator. Engineering approving excavation permit.	Valve was shut off and water entered storm drain. Evacuation Permit Program.
6/11/86	Water	250 gal.	Operator. Unauthorized discharge.	Amount of water used was minimized. Straw bales used.
6/23/86	Calcium Carbonate	Unknown	Operator. Unauthorized discharge.	None.
6/26/88	Muddy Water	Unknown	Unknown.	Source not determined.
6/27/86	Muddy Water	Unknown	Operator. Unauthorized discharge.	Water pumped through straw bales. BMP practices implemented.
7/3/86	Unknown	Unknown Slug	Unknown.	Source not determined. Samples taken.
7/22/86	Hydraulic Oil	10 gal.	Mechanical. Pump Seal Failure.	Spread Sorball, swept up. Training of contractor personnel. Blocking drain prior to work.
7/30/86	Rinse Water	500 gal.	Operator. Open Valve (Fail to use procedure).	Reinforced use of operating procedure.
8/15/86	Oil	Unknown Sheen	Unknown, source unidentified.	Oil absorbent pads placed at outfall. Drainage lines have been traced.

TABLE 4-1 (continued)

Date	Material Released	Quantity	Cause	Controls/Countermeasures
8/25/86	Muddy Water	Unknown	Operator. Unauthorized discharge.	Change in operating procedure.
9/26/86	Sulfuric Acid	100 gal.	Mechanical/Operator Error. Valve failure.	Lime applied to neutralize. Sandbags and plastic placed around sewer. Floor drains routed to Steam Plant Wastewater Treatment Facility. Changed operating procedure.
9/30/86	Dye	3 ounces	Operator. Unauthorized discharge.	Dye use is administratively controlled. Training included.
10/6/86	Sewage	430 gal.	Operator. Backfilling gravel into sewer.	Blockage removed promptly. Overflow partially collected. Vacuumed with wet vac.
10/21/86	Water	300 gal.	Operator. Unauthorized discharge.	Constructed washdown pad with sump to collect wash water.
10/27/86	Sodium Hydroxide	525 gal.	Mechanical. Broken valve.	Sodium hydroxide on floor neutralized with acid. Flushed with water. Polytank collars repaired. Installed drip pan.
12/16/86	Oil	3/4 gal.	Mechanical. Engine failure.	Rust spread Sorball on ground and shoveled material up. Removed grating from sump and and cleaned sludge from area. Training - do not place equipment over drains.
12/17/86	Foam	Unknown	Process. Excess of detergent.	Decontamination pad and holding tank constructed.
12/22/86	Water	20,000 gal.	Incorrect design drainage.	Broken water line repaired. System valved off. Excavation Permit Program.



• INDICATES FLOW IN GPM INFORMATION PROVIDED BY MM-ES.

EFPC OUTFALL DESCRIPTION										
O.F. NO.	SIZE DIA	MATL	FLOW GPM	ELEV.	CATEGORY		DIST NOTE 2	NOTE 3	NOTE 4	REMARKS
1	36"	RCP	0	-7'-0	I		32'	800	S	DRAIN E. SIDE OF SCARBOROUGH RD

229 FENCE

OUTFALL MATERIAL LEGEND

STORM DRAINS — SD
CATCH BASINS
CURB INLETS
JUNCTION BOXES
FLOW DIRECTION
ABANDONED LINE
CAST IRON PIPE — CI
CONCRETE PIPE — C
CORRUGATED METAL PIPE — CMP
GALVANIZED METAL PIPE — GL
REINFORCED CONCRETE PIPE — RCP
STEEL PIPE — ST
TERRA-COTTA TILE — TC
TRENCH DRAIN W/ GRATING — TR
VITRIFIED CLAY TILE — VC
STAINLESS STEEL — SS
ROCK LINED TRENCH — RT
EARTHEN TRENCH — ET

RELATED DRAWINGS

P2E900018A002
P2E900018A003
P2E900018A004
P2E900018A005
P2E900018A006
P2E900018A007
P2E900018A008
P2E900018A009
P2E900018A010

B2	A2	AA-2
B3	A3	AA-3
B4	A4	AA-4

KEY PLAN

GENERAL NOTES

1. ALL OUTFALLS EXCEPT NO.1 ARE DIMENSIONED IN LINEAR FEET FROM THE PRECEEDING DOWN STREAM OUTFALL. OUTFALL NO.1 SHALL BE CONSIDERED THE KEY OUTFALL FOR DETERMINING THE LOCATION OF ALL UPSTREAM OUTFALLS. OUTFALL NO.1 IS LOCATED 32'-0" SOUTH OF THE SOUTH FACE FROM THE CONCRETE BRIDGE WHICH CONDUCTS EAST FORK POPLAR CREEK (EFPC) BENEATH BEAR CREEK ROAD AT THE N.E. END OF THE Y-12 PLANT AREA.
2. ITEMS IN THIS AREA OF THE OUTFALL DESCRIPTION COLUMN DESIGNATE AN OUTFALL OR OTHER FEATURE THAT IS EAST OF THE ADJACENT OUTFALL BEING SURVEYED. ADJACENT OUTFALLS LISTED IN THIS COLUMN MAY APPEAR IN THE BLOCK PLAN OF ONE OR MORE RELATED DRAWINGS.
3. EAST FORK POPLAR CREEK SHALL BE CONSIDERED TO FLOW FROM WEST TO EAST FOR SURVEY PURPOSES. ALL OUTFALLS ON THE LEFT SIDE IN THE DIRECTION OF FLOW SHALL BE NORTH OUTFALLS. ALL OUTFALLS ON THE RIGHT SIDE IN THE DIRECTION OF FLOW SHALL BE SOUTH OUTFALLS.
4. ELEVATIONS PROVIDED ARE FOR DETERMINING THE LOCATION OF THE OUTFALL BELOW SURFACE GRADE ADJACENT TO THE OUTFALL LOCATION. ELEVATIONS ARE GIVEN TO TOP OF PIPE OR TO THE BOTTOM OF TRENCH OR CHANNEL. ELEVATIONS ARE NOT PROVIDED FOR SURFACE GRATING DRAINS FLOWING INTO EAST FORK POPLAR CREEK.
5. PREVIOUSLY SURVEYED OUTFALLS AND NPDES PERMITED OUTFALLS ARE DESIGNATED AS OUTFALLS 1 THRU 309.
6. ALL OUTFALLS ARE PROVIDED WITH AN APPROXIMATE FLOW IN GALLON PER MINUTE OBSERVED AS THE SURVEY WAS CONDUCTED. ANNUAL RAINFALL WAS APPROXIMATELY FIVE INCHES ABOVE NORMAL FOR THE LOCAL AREA AS OF JUNE 9, 1989.
7. PORTIONS OF EAST FORK POPLAR CREEK ARE CONTAINED IN UNDERGROUND PIPING WHICH DECREASE IN DIAMETER AT THE WEST END OF THE Y-12 PLANT. THE ACTUAL ROUTE OF EFPC IS DETERMINED TO BE THE LARGEST DIAMETER UNDERGROUND PIPE WITH SUBSTAINED FLOW. ALL SMALLER DIAMETER PIPING EMPTYING INTO THE LARGE DIAMETER PIPING AT MANHOLES, CATCH BASINS, OR BY DIRECT CONNECTION ARE LISTED AS OUTFALLS.
8. PIPE SIZES IN OUTFALL DISCRIPTION CHART HAVE BEEN FIELD VERIFIED AND DO NOT NECESSARILY AGREE WITH PIPE SIZES ON BLOCK PLAN.

LOCKWOOD GREENE
Planners/Engineers/Architects/Managers
Oak Ridge, Tennessee
JOB NO 59330 01

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CHANGE CONTROL SYSTEM
ENGINEERING PROCEDURE

REV				DESCRIPTION	A E	AG BY	GH CK	SECT	DEPT	DATE	PE	REQ	DATE	TOPES	DATE	DOE	DATE	CA	EC	LE	EM	JE	M	PD	SE	PMD
A				ISSUED FOR 90% REVIEW																						

REVISION OF ISSUE PURPOSE — REVISION APPROVALS — SQUAD CHECK

TOLERANCES UNLESS OTHERWISE SPECIFIED
FRACTIONS
XX DECIMALS
XXX DECIMALS
ANGLES
FINISH
LOCKWOOD GREENE ENG. A.E.
APPR CS.
DATE

DES	AL GREGORY	6/30/89
DRW	STEVE BAYLESS	7/3/89
CHK	G.C. HUGHES	07/21/89
SECT		
DEPT & PLANT		
PE		
LR		
PJ		
REQ		

DRAWING APPROVALS — DATE

MARTIN MARIETTA ENERGY SYSTEMS, INC.
operated for the DEPARTMENT OF ENERGY under U.S. GOVERNMENT contract DE-AC-05-84OR21400
Oak Ridge, Tennessee • Paducah, Kentucky

Y-12 OUTFALL SURVEY
EAST FORK POPLAR CREEK
BLOCK PLAN AA-3

OUTFALL SURVEY, EFPC, AA-3

I S	48 P	49 D	50 T	PLANT Y-12	BLDG AREA	FL 0101	SHEET 0	OF 0	TYPE P CLASS U
SCALE 1"=50'				ID S06113	P2E900018A001				REV A

NUMBER OF MODELS IN THIS DRAWING= 5

#535

• INDICATES FLOW IN GPM INFORMATION PROVIDED BY MM ES.

OUTFALL DESCRIPTION										
O.F. NO.	SIZE DIA	MATL	FLOW GPM	ELEV.	CATEGORY		DIST	NOTE 2	NOTE 3	REMARKS
7	36"	RCP	0	+3'-0"	I		210'	S EDGE 2ND ST	S	SURFACE DRAIN 3' ABOVE CHANNEL

OUTFALL MATERIAL LEGEND

STORM DRAINS	SD
CATCH BASINS	
CURB INLETS	
JUNCTION BOXES	
FLOW DIRECTION	
ABANDONED LINE	
CAST IRON PIPE	CI
CONCRETE PIPE	C
CORRUGATED METAL PIPE	CMP
GALVANIZED METAL PIPE	GL
REINFORCED CONCRETE PIPE	RCP
STEEL PIPE	ST
TERRA-COTTA TILE	TC
TRENCH DRAIN /W GRATING	TR
VITRIFIED CLAY TILE	VC
STAINLESS STEEL	SS
ROCK LINED TRENCH	RT
EARTHEN TRENCH	ET

RELATED DRAWINGS

P2E900018A001
P2E900018A003
P2E900018A004
P2E900018A005
P2E900018A006
P2E900018A007
P2E900018A008
P2E900018A009
P2E900018A010

B3	A3	AA-3
B4	A4	AA-4
B5	A5	AA-5

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2. ITEMS IN THIS AREA OF THE OUTFALL DESCRIPTION COLUMN DESIGNATE AN OUTFALL OR OTHER FEATURE THAT IS EAST OF THE ADJACENT OUTFALL BEING SURVEYED. ADJACENT OUTFALLS LISTED IN THIS COLUMN MAY APPEAR IN THE BLOCK PLAN OF ONE OR MORE RELATED DRAWINGS.
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LOCKWOOD GREENE
Planners/Engineers/Architects/Managers
Oak Ridge, Tennessee
JOB NO 39330 01

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THIS DOCUMENT CONTROLLED BY
CHANGE CONTROL SYSTEM _____
ENGINEERING PROCEDURE _____

REV	CHG			REVISION OF ISSUE PURPOSE	AE	AG BY	GCH CHK	SECT	DEPT	DATE	PE	REQ	DATE	ENGES	DATE	DOE	DATE
A				ISSUED FOR 90% REVIEW													

REVISION OF ISSUE PURPOSE — REVISION APPROVALS

	CA	EC	EE	EM	IE	M	PD	SE	XAD
SQUAD CHECK									

TOLERANCES UNLESS OTHERWISE SPECIFIED
FRACTIONS ±
XX DECIMALS ±
XXX DECIMALS ±
ANGLES ±
FINISH
LOCKWOOD GREENE ENG.
A E
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DES	AL GREGORY	6/30/89
DRW	STEVE DAYLESS	7/3/89
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SECT		
DEPT & PLANT		
PE		
CR		
PJ		
REQ		

DRAWING APPROVALS — DATE

MARTIN MARIETTA ENERGY SYSTEMS, INC.
operated for the DEPARTMENT OF ENERGY under U.S. GOVERNMENT contract DE-AC-05-84OR21400
Oak Ridge, Tennessee • Paducah, Kentucky

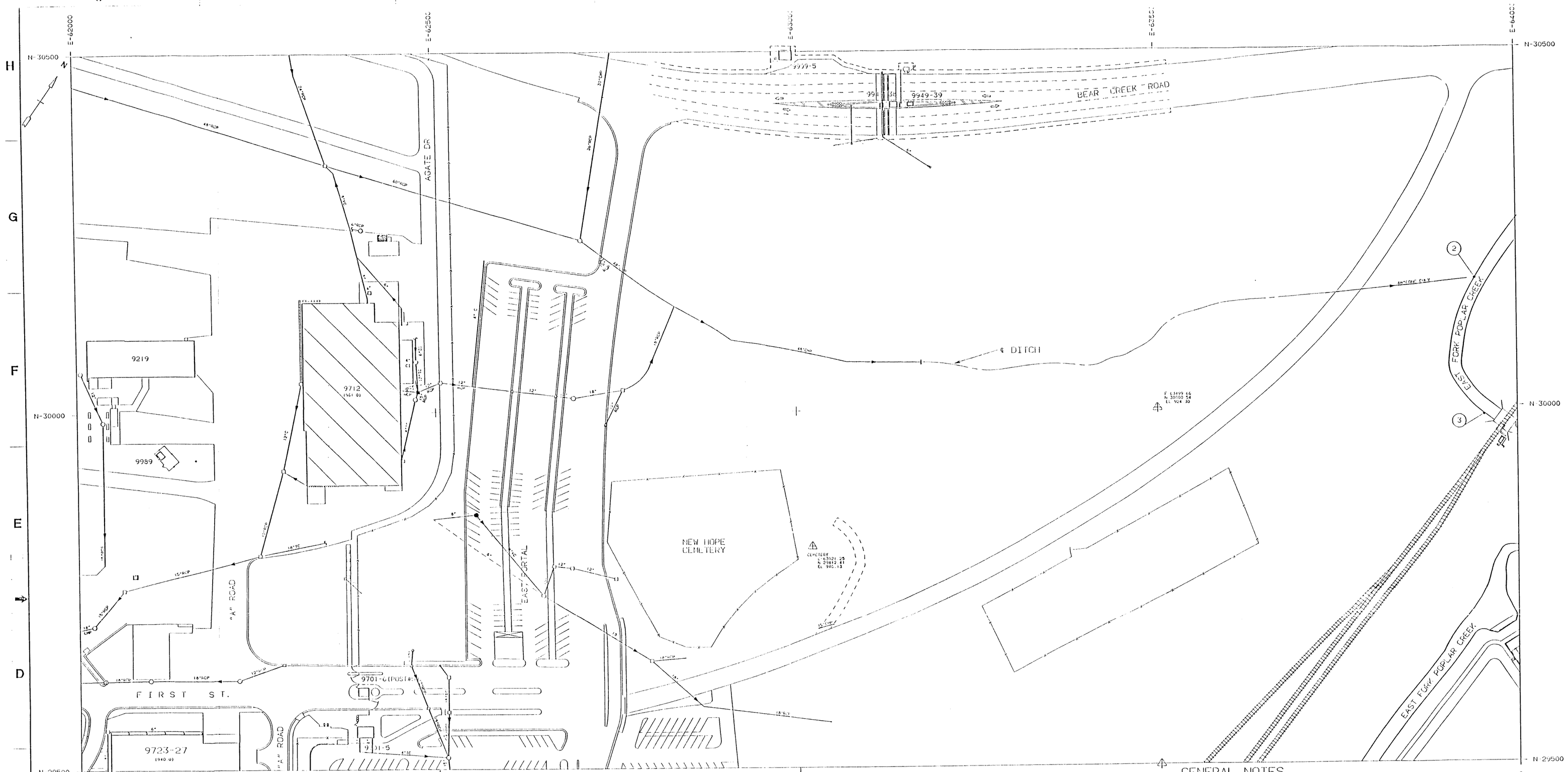
Y-12 OUTFALL SURVEY
EAST FORK POPLAR CREEK
BLOCK PLAN AA-4

OUTFALL SURVEY, EFPC, AA-4

I 3	48 P	49 D	50 T	PLANT Y-12	BLDG AREA	FL 0101	SHEET 0	OF 0	TYPE P CLASS U
SCALE 1"=50'				ID S06113	P2E900018A002				REV A

NUMBER OF MODELS IN THIS DRAWING= 5

#535



• INDICATES FLOW IN GPM INFORMATION PROVIDED BY MM-ES.

OUTFALL DESCRIPTION									
O.F. NO.	SIZE DIA	MATL	FLOW GPM	ELEV.	CATEGORY	DIST	NOTE 2	NOTE 3	REMARKS
2	48"	RCP	110	-5'-0"	III	-	286' FROM #1 OUTFALL	N	-
3	7'	-	1	-10-0"	I	-	236' FROM #2 OUTFALL	N	ADJACENT TO R.R TRACK

C2	B2	A2
C3	B3	A3
C4	B4	A4

KEY PLAN

OUTFALL MATERIAL LEGEND

STORM DRAINS — SD
CATCH BASINS
CURB INLETS
JUNCTION BOXES
FLOW DIRECTION
ABANDONED LINE
CAST IRON PIPE — CI
CONCRETE PIPE — C
CORRUGATED METAL PIPE — CMP
GALVANIZED METAL PIPE — GL
REINFORCED CONCRETE PIPE — RCP
STEEL PIPE — ST
TERRA-COTTA TILE — TC
TRENCH DRAIN /W GRATING — TR
VITRIFIED CLAY TILE — VC
STAINLESS STEEL — SS
ROCK LINED TRENCH — RT
EARTHEN TRENCH — ET

RELATED DRAWINGS

P2E900018A001
P2E900018A002
P2E900018A004
P2E900018A005
P2E900018A006
P2E900018A007
P2E900018A008
P2E900018A009
P2E900018A010

GENERAL NOTES

1. ALL OUTFALLS EXCEPT NO.1 ARE DIMENSIONED IN LINEAR FEET FROM THE PRECEEDING DOWN-STREAM OUTFALL. OUTFALL NO.1 SHALL BE CONSIDERED THE KEY OUTFALL FOR DETERMINING THE LOCATION OF ALL UPSTREAM OUTFALLS. OUTFALL NO.1 IS LOCATED 32'-0" SOUTH OF THE SOUTH FACE FROM THE CONCRETE BRIDGE WHICH CONNECTS EAST FORK POPLAR CREEK (EFPC) BENEATH BEAR CREEK ROAD AT THE N.E. END OF THE Y-12 PLANT AREA.
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6. ALL OUTFALLS ARE PROVIDED WITH AN APPROXIMATE FLOW IN GALLON PER MINUTE OBSERVED AS THE SURVEY WAS CONDUCTED. ANNUAL RAINFALL WAS APPROXIMATELY FIVE INCHES ABOVE NORMAL FOR THE LOCAL AREA AS OF JUNE 9,1989.
7. PORTIONS OF EAST FORK POPLAR CREEK ARE CONTAINED IN UNDERGROUND PIPING WHICH DECREASE IN DIAMETER AT THE WEST END OF THE Y-12 PLANT. THE ACTUAL ROUTE OF EFPC IS DETERMINED TO BE THE LARGEST DIAMETER UNDERGROUND PIPE WITH SUBSTAINED FLOW. ALL SMALLER DIAMETER PIPING EMPTYING INTO THE LARGE DIAMETER PIPING AT MANHOLES, CATCH BASINS, OR BY DIRECT CONNECTION ARE LISTED AS OUTFALLS.
8. PIPE SIZES IN OUTFALL DISCRIPTION CHART HAVE BEEN FIELD VERIFIED AND DO NOT NECESSARILY AGREE WITH PIPE SIZES ON BLOCK PLAN.

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REV	DATE	DRAWN	CHECKED	APPROVED	DESCRIPTION	A/E	AG OF	GCH LOC	SECT
A	6/19/89	SGB	GCH	GCH	ISSUED FOR 90% REVIEW				

REVISION OR ISSUE PURPOSE

DEPT	DATE	PE	REQ	DATE	PROJ ENG	DATE	DOE	DATE

REVISION APPROVALS

CA	EC	LE	EM	IE	M	PD	SL	AND

QUAD CHECK

TOLERANCES UNLESS OTHERWISE SPECIFIED
FRACTIONS
XX DECIMALS
XXX DECIMALS
ANGLES
FINISH
LOCKWOOD GREENE ENG.
A/E
NOTES
LOCK

		DATE
DES	AL GREGORY	6/30/89
DRW	STEVE BAYLESS	7/3/89
CHK	G.C.HUGHES	07/21/89
SECT		
DEPT & PLANT		
PE		
CR		
PJ		
REQ		

DRAWING APPROVALS

LOCKWOOD GREENE
Planners/Engineers/Architects/Managers
Oak Ridge, Tennessee
JOB NO 59330 01

MARTIN MARIETTA ENERGY SYSTEMS, INC.
operated for the DEPARTMENT OF ENERGY under U.S. GOVERNMENT contract DE-AC 05 84OR21400
Oak Ridge, Tennessee • Paducah, Kentucky

Y-12 OUTFALL SURVEY
EAST FORK POPLAR CREEK
BLOCK PLAN A-3

OUTFALL SURVEY, EFPC, A-3

I 3	38 P	49 D	50 I	PLANT Y-12	BLDG AREA	FL 0101	SHEET 0	OF 0	TYPE P
SCALE 1"=50'				ID 506113	P2E900018A003				CLASS U REV A

NUMBER OF MODELS IN THIS DRAWING=

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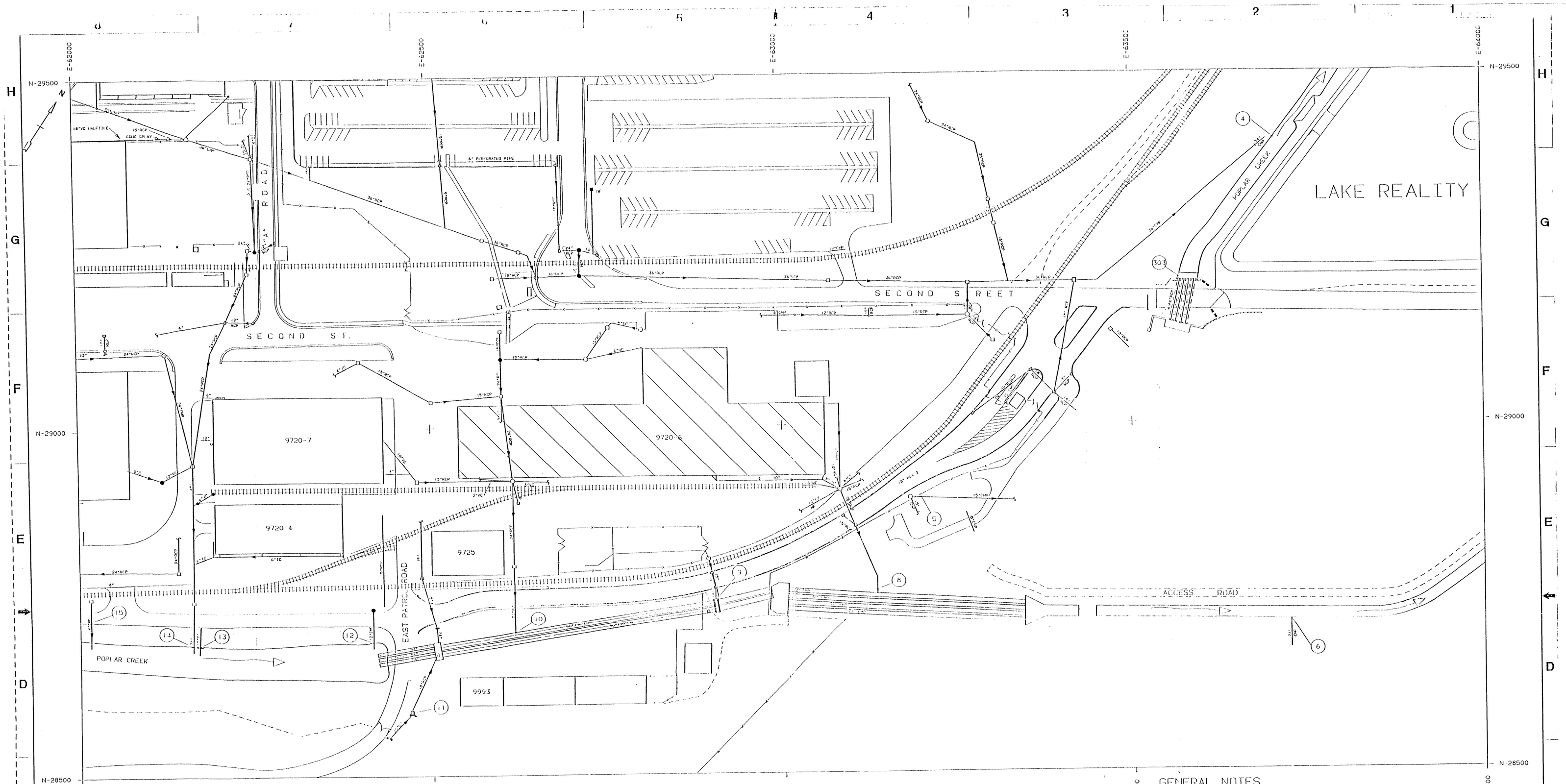
#535



• INDICATES FLOW IN GPM INFORMATION PROVIDED BY MM-ES

OUTFALL DESCRIPTION										
O.F. NO.	SIZE DIA	MATL	FLOW GPM	ELEV.		CATEGORY	DIST	NOTE 2	NOTE 3	REMARKS
4	48"	CMP	0	GRADE			669'	3	N	1ST OUTFALL N.E. SECOND STREET
303	60"	RCP	1	2'-0"			554'	4	(	TILES UNDER SECOND STREET
6	24"	CMP	0	1'-0"	I		470'	7	S	EAST OF OUTFALL 8
8	36"	C	20	5'-0"			591'	6	N	STORM DRAIN S.E. CORNER 9720-6
9	18"	RCP	6	-2'-0"	I		273'	8	N	75'-0" FROM ADJACENT FENCE
10	24"	RCP	10	-3'-0"			295'	9	N	SURFACE DRAIN S.E. COR. 9725
11	16"	RCP	0	-3'-0"	I		144'	10	S	CATCH BASIN (SEE DWG NOTE 2)
12	12"	CMP	0	-4'-6	I		60'	11	N	2' W. OF WALKWAY OVER EFPC
13	8"	ST	0	-2'-0"	II		247'	12	N	TO 72" CMP BELOW GRADE
14	36"	RCP	10	-4'-0"			8'	13	N	
15	6"	CMP	0	-3'-4"	I		145'	14	N	S.E. COR. BLDG. 9720-8
5	15"	CMP	0	-			-	-	-	ABANDONED

OUTFALL MATERIAL LEGEND

- STORM DRAINS
- CATCH BASINS
- CURB INLETS
- JUNCTION BOXES
- FLOW DIRECTION
- ABANDONED LINE
- CAST IRON PIPE — CI
- CONCRETE PIPE — C
- CORRUGATED METAL PIPE — CMP
- GALVANIZED METAL PIPE — GL
- REINFORCED CONCRETE PIPE — RCP
- STEEL PIPE — ST
- TERRA-COTTA TILE — TC
- TRENCH DRAIN W/ GRATING — TR
- VITRIFIED CLAY TILE — VC
- STAINLESS STEEL — SS
- ROCK LINED TRENCH — RT
- EARTHEN TRENCH — ET

RELATED DRAWINGS

P2E900018A001
P2E900018A002
P2E900018A003
P2E900018A005
P2E900018A006
P2E900018A007
P2E900018A008
P2E900018A009
P2E900018A010

C2	B2	A2	AA2
C3	B3	A3	AA3
C4	B4	A4	AA4

KEY PLAN

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LOCKWOOD GREENE
Planners/Engineers/Architects/Managers
Oak Ridge, Tennessee
JOB NO. 69330 01

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THIS DOCUMENT CONTROLLED BY CHANGE CONTROL SYSTEM _____
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REV					ISSUED FOR 90% REVIEW DESCRIPTION	A.E.	AG BY	LLN CHK	SECT	DEPT	DATE	PE	REG	DATE	PE-ES	DATE	ENG	DATE
A																		

REVISION OR ISSUE PURPOSE — REVISION APPROVALS

	CA	EC	EE	EM	TE	M	PD	SE	XAD	DATE
SIGNAD CHECK										

TOLERANCES UNLESS OTHERWISE SPECIFIED
FRACTIONS
XX DECIMALS
XXX DECIMALS
ANGLES
FINISH
LOCKWOOD GREENE ENG. & C.
MFG
DATE

DES	AL GREGORY	6/30/89
DRW	STEVE BAYLESS	7/31/89
CHK	G C HUGHES	7/89
SECT		
DEPT & PLANT		
PE		
CA		
PJ		
REG		

DATE — DRAWING APPROVALS

MARTIN MARIETTA ENERGY SYSTEMS, INC.
operated for the DEPARTMENT OF ENERGY under U.S. GOVERNMENT contract DE AC 05-84OR21400
Oak Ridge, Tennessee • Paducah, Kentucky

Y-12 OUTFALL SURVEY
EAST FORK POPLAR CREEK
BLOCK PLAN A-4

OUTFALL SURVEY, EFPC, A-4

SCALE	TO	PLANT	BLDG AREA	FL	SHEET	OF	TYPE	CLASS
1"=50'	1 48 49 50 / 3 P U	Y 12	S06113	0101	0	0	P	U

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NUMBER OF MODELS IN THIS DRAWING = 5

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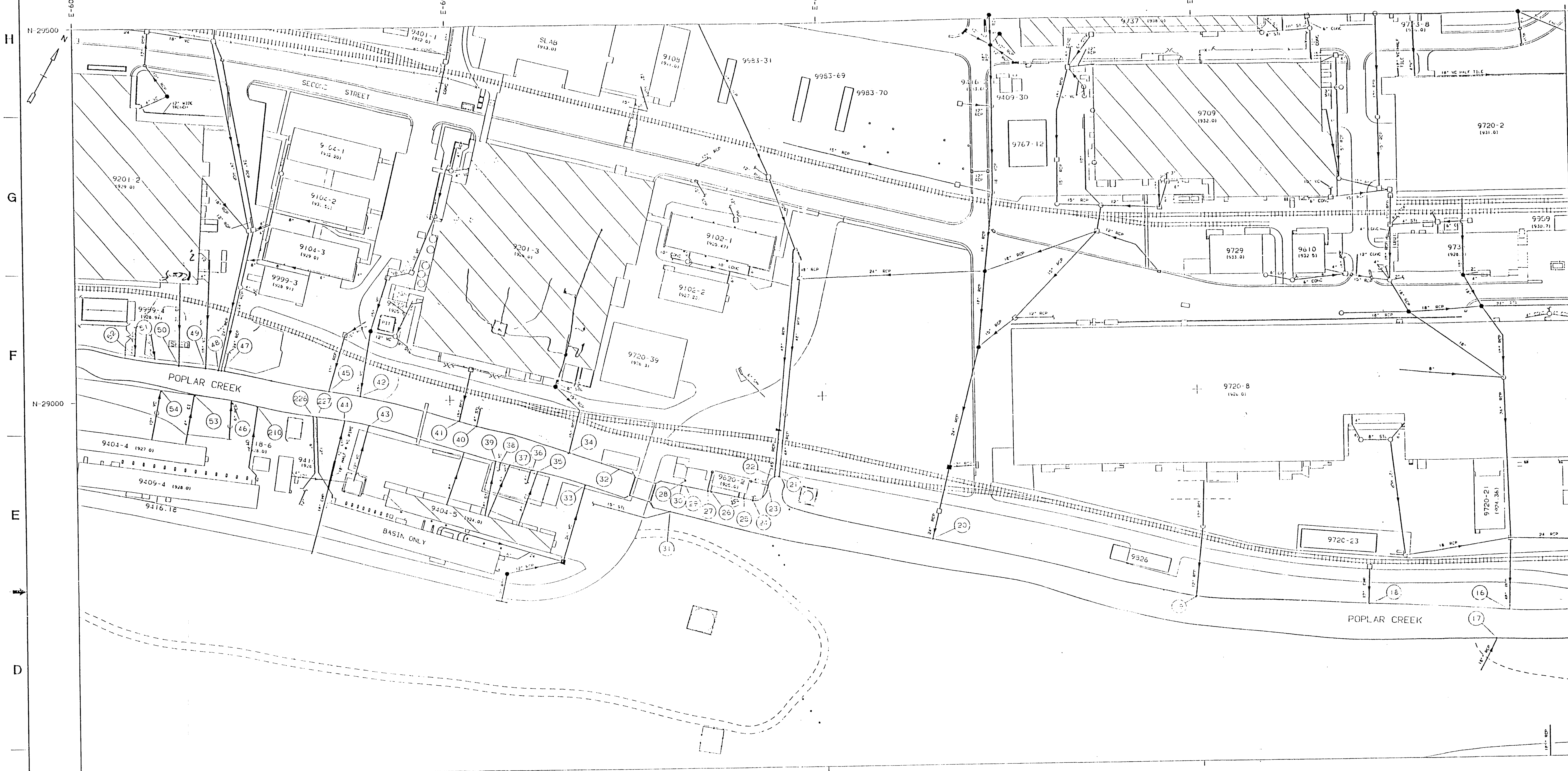

• INDICATES FLOW IN GPM INFORMATION PROVIDED BY MM-ES.

OUTFALL DESCRIPTION									
O.F. NO.	SIZE DIA	MATL	FLOW GPM	ELEV.	CATEGORY	DIST	NOTE 2	NOTE 3	REMARKS
16	48"	RCP	0	-5'-0	II	105'	15	N	SOUTH OF BLDG. 9720-21
17	18"	RCP	15	-8'-0	I	8'	16	S	NATURAL SPRING
18	12"	CMP	2	-3'-0	I	180'	17	N	SOUTH OF BLDG. 9720-23
19	12"	RCP	1	-3'-0	I	231'	18	N	20" S.E. OF BLDG. 9826
20	24"	RCP	4	-5'-0	II	360'	19	N	WEST OF BLDG. 9826
21•	48"	RCP	547	-4'-0		224'	20	N	EAST OF BLDG 9620-2
22	8"	RCP	0	-4'-0		7'	21	N	EAST OF BLDG 9620-2
23	4"	TC	0	GRADE	II	6'	22	N	EAST OF BLDG 9620-2
24	4"	ST	5	-3'-0	II	17'	23	N	CAPPED S.E. OF BLDG. 9620-2
25	3/4"	ST	0	GRADE	II	12'	24	N	STEAM STA. S.E. OF BLDG 9620-2
26	3/4"	ST	0	GRADE	II	45'	25	N	BLOW DOWN S.W. OF BLDG 9620-2
27	4"	TC	0	-1'-0	II	4'	26	N	S.W. OF BLDG 9620-2
29	1"	GL	0	GRADE	II	30'	27	N	FLOW FROM BENEATH SLAB
T30		-	-	-	II	5'	-	N	TAG ONLY, NO OUTFALL
28	1"	ST	0	-1'-0	II	3'	T30	N	ADJACENT TO OUTFALL 29 & 30
31	16"	ST	0	-5'-0	I	-	27	S	SOUTH SIDE OF EFPC
32	18"	RCP	0	GRADE	I	31'	31	N	87' FROM OUTFALL 28
33	36"	TC	5	-2'-0		33'	32	S	WEST OF BRIDGE
34	15"	CI	60	-7'-0		33'	33	N	S.E. OF BLDG 9201-3
35	8"	ST	2	-4'-0	II	34'	34	S	NORTH OF TRANSFORMER PIT
36	6"	ST	0	-3'-0		10'	35	S	
T37	6"	-	-	-		27'	36	S	TAG ONLY, NO OUTFALL

OUTFALL DESCRIPTION									
O.F. NO.	SIZE DIA	MATL	FLOW GPM	ELEV.	CATEGORY	DIST	NOTE 2	NOTE 3	REMARKS
T38	4"	-	0	-		16'	-	S	TAG ONLY, NO OUTFALL
39	8"	ST	0	-5'-0		7'	T38	S	NORTH OF BLDG 9404-5
40	4"	-	0	-4'-0	II	46'	39	N	SOUTH OF BLDG. 9201-3
41	15"	RCP	0	-2'-0	I	23'	40	N	SOUTH OF BLDG. 9201-3
43	6"	TC	0	-4'-0	II	65'	41	S	66' WEST OF WALK BRIDGE
42	15"	TC	15	-7'-0		23'	43	N	S.W. CORNER OF BLDG. 9201-3
44	12"	C	0	-1'-0	I	14'	42	S	SOUTH SIDE OF EFPC
45	15"	C	0	-4'-0	I	29'	44	N	S.W. CORNER OF BLDG. 9201-3
T227	12"	C	0	-		12'	45	S	TAG ONLY, NO OUTFALL
T226	6"	-	0	-	II	11'	T227	S	TAG ONLY, NO OUTFALL
T210	6"	-	0	-	II	77'	T226	S	TAG ONLY, NO OUTFALL
46	6"	T.C.	0	-4'-0"		133'	45	S	N.E. OF BLDG. 9404-4
47	24"	RCP	140	-7'-0"		25'	46	N	S.E. CORNER OF BLDG. 9201-2
48	24"	RCP	50	-7'-0"		4'	47	N	PARALLEL TO OUTFALL LINE 47
49	15"	T.C.	100	-6'-0"		7'	48	N	S.E. CORNER OF BLDG. 9201-2
53	4"	ST.	0	-3'-0"		10'	49	S	NORTH OF BLDG. 9404-4
50	3"	C.I.	0	-4'-0"		36'	49	N	SOUTH OF BLDG. 9201-2
54	12"	T.C.	20	-4'-0"		46'	53	S	NORTH OF BLDG. 9404-4
51	15"	RCP	40	-7'-0"		13'	54	N	SOUTH OF BLDG. 9201-2
52	10"	ST.	0	-3'-0"		29'	51	N	SOUTH OF BLDG. 9201-2

OUTFALL MATERIAL LEGEND

STORM DRAINS ——— SD ———
CATCH BASINS
CURB INLETS
JUNCTION BOXES
FLOW DIRECTION
ABANDONED LINE
CAST IRON PIPE - - - CI
CONCRETE PIPE - - - C
CORRUGATED METAL PIPE - - - CMP
GALVANIZED METAL PIPE - - - GL
REINFORCED CONCRETE PIPE - - - RCP
STEEL PIPE - - - ST
TERRA-COTTA TILE - - - TC
TRENCH DRAIN W GRATING - - - TR
VITRIFIED CLAY TILE - - - VC
STAINLESS STEEL - - - SS
ROCK LINED TRENCH - - - RT
EARTHEN TRENCH - - - ET

RELATED DRAWINGS

P2E900018A001
P2E900018A002
P2E900018A003
P2E900018A004
P2E900018A006
P2E900018A007
P2E900018A008
P2E900018A009
P2E900018A010

C2	B2	A2
C3	B3	A3
C4	B4	A4

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LOCKWOOD GREE[NE]
Planners/Engineers/Architects/Man[agers]
Oak Ridge, Tennessee

MARTIN MARIETTA ENERGY SYSTE[MS]
operated for the DEPARTMENT OF ENERGY under U.S. GOVERNMENT contract DE-AC-0[5]...

AL GREGORY 6/30/89
STEVE BAYLESS 7/3/89
CA ENSLEY

Y-12 OUTFALL SURVEY EAST FORK POPLAR CRE[EK] BLOCK PLAN B-4

OUTFALL SURVEY, EFPC, B-...

SCALE 1"=50'

P2E900018A005

A | ISSUED FOR BOY REVIEW

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NUMBER OF MODELS IN THIS D...

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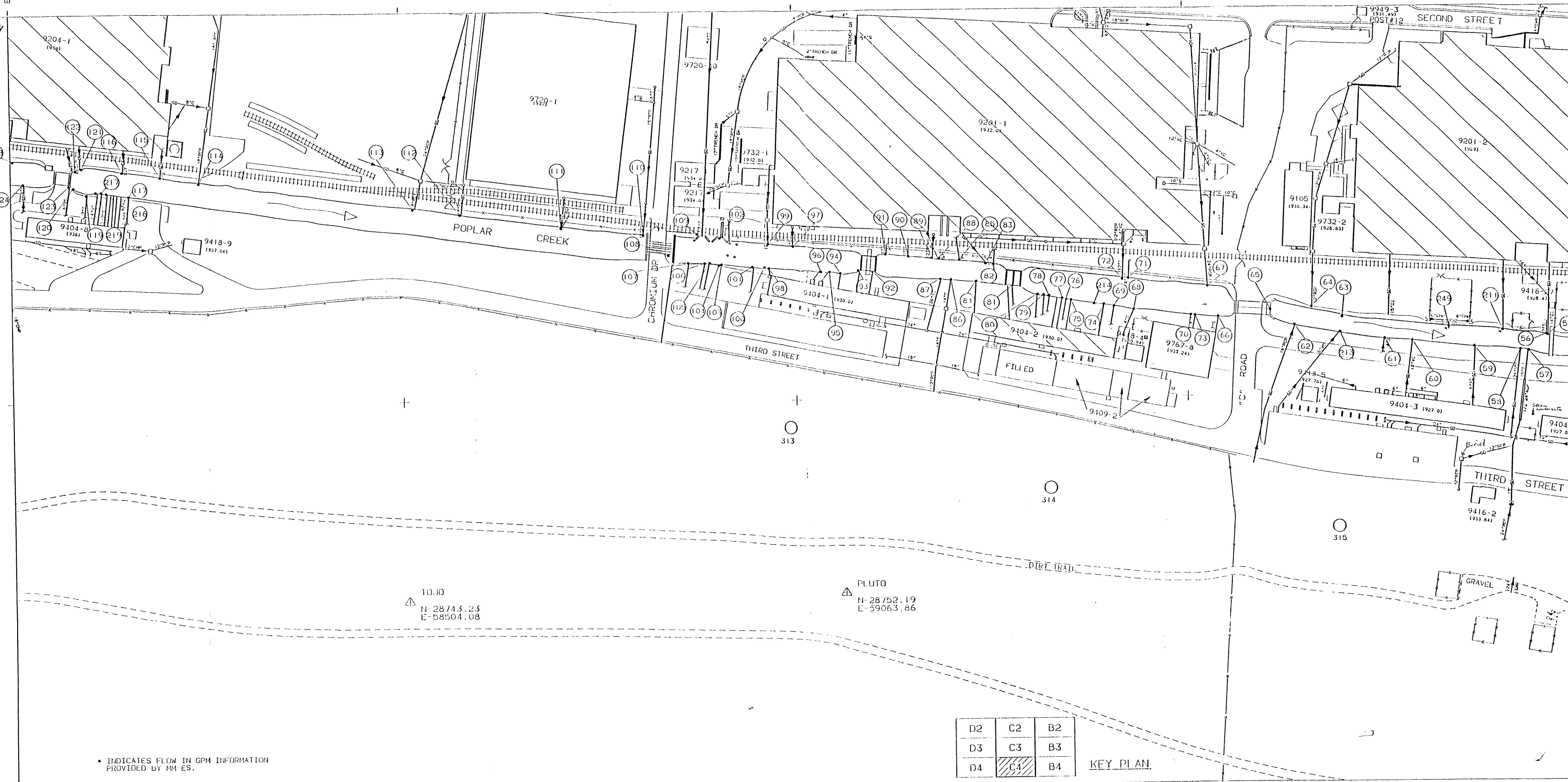

D2	C2	B2
D3	C3	B3
D4	C4	B4

KEY PLAN

• INDICATES FLOW IN GPM INFORMATION PROVIDED BY MM ES.

O.F. NO.	SIZE DIA	MATL	FLOW GPM	ELEV.	CATEGORY	DIST	NOTE 2	NOTE 3	REMARKS
55	15"	CI	100	-6'-0		115'	52	N	SOUTH OF BLDG 9416-27
56	2"	ST	0	-2'-6		0	55	N	2'-6" ABOVE OUTFALL 55
57	10"	ST	0	-1'-2	I	23'	56	S	NORTH OF BLDG 9404-4
58	36"	TC	10	-3'-0	II	9'	57	S	NORTH OF BLDG 9404-4
T211	-	-	-	-		-	-	N	TAG ONLY, NO OUTFALL
59	-	-	-	-	II	63'	58	S	NORTH OF BLDG 9404-3
249	4"	GL	0	-2'-6		41'	59	N	TRANSFORMER PIT DRAIN SOUTH 9201-2
60	12"	TC	1	-4'-0	II	43'	249	S	NORTH OF BLDG 9404-3
61	4"	ST	0	-2'-0		34'	60	S	PLUGGED OFF NORTH OF BLDG 9404-3
T213	-	-	-	-	II	-	-	S	TAG ONLY NO OUTFALL
63	12"	TC	5	-5'-0		67'	61	N	S.W.CORNER OF BLDG 9201-2
64	12"	RCP	0	-6'-0		34'	63	N	SOUTH OF BLDG 9732-2
62	18"	RCP	0	-3'-0	I	16'	64	S	NORTH OF BLDG 9418-5
65	3"	C	0	-0'		44'	62	S	FACE OF BRIDGE SURFACE DRAIN-"C"ROAD
66	3"	ST	0	-1'-6	II	13'	65	S	N.E. CORNER OF BLDG 9767-8
67	24"	RCP	50	-6'-0		15'	66	N	S.E. CORNER BLDG 9201-1
73	4"	ST	2	-3'-0	II	14'	67	S	NORTH OF BLDG 9767-8
T70	-	-	-	-		-	-	S	TAG ONLY NO OUTFALL
68	4"	ST	0	-3'-0	II	76'	73	S	NORTH OF BLDG 9418-4
69	4"	ST	0	GRADE	II	10'	68	S	NORTH OF BLDG 9418-4
71	12"	CI	50	-2'-0	III	10'	69	N	SOUTH OF BLDG 9201-1
72	1"	ST	0	GRADE		5'	71	N	1" LINE BELOW CREEK S BLDG 9201
74	2"	ST	0	-2'-0	II	2'	72	S	NORTH OF BLDG 9404-2
T214	-	-	-	-	II	-	-	S	NO OUTFALL
75	8"	TC	0	-5'-0	II	54'	74	S	NORTH OF BLDG 9404-2
76	6"	VC	0	-4'-0	II	12'	75	S	NORTH OF BLDG 9404-2
77	6"	VC	0	-4'-0	II	8'	76	S	NORTH OF BLDG 9404-2
78	6"	VC	0	-4'-0	II	10'	77	S	NORTH OF BLDG 9404-2
79	6"	VC	0	-3'-0	II	7'	78	S	NORTH OF BLDG 9404-2
80	6"	VC	0	-3'-0	II	10'	79	S	NORTH OF BLDG 9404-2
81	6"	VC	0	-4'-0	II	39'	80	S	CENTER ROAD UNDER BRIDGE
82	4"	CI	0	-6'-0		19'	81	N	SOUTH OF BLDG 9201-1
83	15"	VC	5	-6'-0		6'	82	N	SOUTH OF BLDG 9201-1
84	6"	ST	0	-1'-6	II	15'	83	S	NORTH OF BLDG 9404-2
85	4"	ST	0	-2'-0		23'	84	N	SOUTH OF BLDG 9201-1

O.F. NO.	SIZE DIA	MATL	FLOW GPM	ELEV.	CATEGORY	DIST	NOTE 2	NOTE 3	REMARKS
86	15"	CI	0	-1'-0	I	6'	85	S	N.E. CORNER OF BLDG 9404-1
87	36"	VC	0	-1'-0	II	10'	86	S	N.E. CORNER OF BLDG 9404-1
88	8"	CI	5	-4'-0		8'	87	N	SOUTH OF BLDG 9201-1
89	12"	RCP	0	-2'-0		6'	88	N	SOUTH OF BLDG 9201-1
90	4"	ST	0	-3'-0		29'	89	N	SOUTH OF BLDG 9201-1
91	4"	CI	0	-7'-0		30'	90	N	SOUTH OF BLDG 9201-1
92	6"	VC	0	-2'-0	II	18'	91	S	3'-6" TO CENTER OF WALKWAY
93	6"	VC	0	-3'-0	II	19'	92	S	NORTH OF BLDG 9404-1
94	6"	VC	0	-3'-0	II	26'	93	S	NORTH OF BLDG 9404-1
95	6"	VC	0	-2'-0	II	11'	94	S	NORTH OF BLDG 9404-1
96	8"	VC	0	-4'-0	II	10'	95	S	NORTH OF BLDG 9404-1
97	4"	ST	0	-3'-0		47'	96	N	SOUTH OF BLDG 9201-1
98	6"	VC	0	-2'-0	II	26'	97	S	SOUTH OF BLDG 9201-1
100	6"	ST	0	-6'-0	II	6'	98	S	N.W. OF BLDG 9404-1
99	12"	CI	20	-7'-0		1'	100	N	S.W. OF BLDG 9201-1
101	6"	VC	0	-2'-0	I	17'	99	S	N.W. OF BLDG 9404-1
103	3"	ST	0	-5'-0		39'	101	S	WEST OF BLDG 9404-1
104	6"	VC	0	-5'-0		8'	103	S	WEST OF BLDG 9404-1
102	6X3	ST	0	-5'-0	I	0	104	N	PLATE OVER OUTFALL, S BLDG 9217
105	6"	ST	0	-4'-0		13'	102	S	EAST OF CHROMIUM DRIVE
106	4"	ST	0	-4'-0		4'	105	S	EAST OF CHROMIUM DRIVE
109•	48"	RCP	334	-3'-0		6'	106	N	OPENING HAS STEEL BARS, SOUTH BLDG 9217
107	4"	ST	0	-4'-0		14'	109	S	EAST OF CHROMIUM DRIVE
108	16"	RCP	0	-3'-0	I	21'	107	S	EAST OF CHROMIUM DRIVE
110	15"	RCP	0	-3'-0		9'	108	N	STEPS, CHROMIUM DRIVE
111	12"	RCP	0	-1'-0	II	108'	110	N	SOUTH OF BLDG 9720-1
112	18"	RCP	0	-1'-0	II	129'	111	N	SOUTHWEST OF BLDG 9720-1
113	18"	RCP	20	-2'-0		61'	112	N	SOUTHWEST OF BLDG 9720-1

O.F. NO.	SIZE DIA	MATL	FLOW GPM	ELEV.	CATEGORY	DIST	NOTE 2	NOTE 3	REMARKS
114	15"	RCP	0	-6'-0		283'	113	N	SOUTHEAST OF BLDG 9204-1
115	4"	SS	0	-2'-0	II	52'	114	N	SOUTHEAST CORNER BLDG 9204-1
117	2"	ST	1	-3'-0	II	41'	115	S	NORTH OF BLDG 9404-8
216	6"	VC	0	-4'-0	II	7'	117	S	NORTH OF BLDG 9404-8
116	4"	SS	0	-1'-0		1'	216	N	SOUTH OF BLDG 9204-1
217	6"	VC	0	-4'-0	II	6'	116	S	NORTH OF BLDG 9404-8
219	8"	VC	0	-4'-0	II	8'	217	S	NORTH OF BLDG 9404-8
119	2"	GL	0	-2'-0	II	4'	219	S	NORTH OF BLDG 9404-8
T120	-	-	-	-		-	-	S	TAG ONLY, NO OUTFALL
121	6"	CMP	0	-1'-0		36'	119	N	SOUTH OF BLDG 9204-1
122	6"	CI	10	-3'-0	II	10'	121	N	SOUTH OF BLDG 9204-1
123	6"	VC	0	-3'-0	II	10'	122	S	SOUTH OF BLDG 9204-1
T124	-	-	-	-		-	-	S	TAG ONLY, NO OUTFALL
128	4"	ST	0	-7'-0		69'	123	N	SOUTH OF BLDG 9204-1

OUTFALL MATERIAL LEGEND

STORM DRAINS ——SD——
CATCH BASINS
CURB INLETS
JUNCTION BOXES
FLOW DIRECTION
ABANDONED LINE
CAST IRON PIPE - - - CI
CONCRETE PIPE - - - C
CORRUGATED METAL PIPE - - - CMP
GALVANIZED METAL PIPE - - - GL
REINFORCED CONCRETE PIPE - - - RCP
STEEL PIPE - - - ST
TERRA-COTTA TILE - - - TC
TRENCH DRAIN /W GRATING - - - TR
VITRIFIED CLAY TILE - - - VC
STAINLESS STEEL - - - SS
ROCK LINED TRENCH - - - RT
EARTHEN TRENCH - - - ET

RELATED DRAWINGS

P2E900018A001
P2E900018A002
P2E900018A003
P2E900018A004
P2E900018A005
P2E900018A007
P2E900018A008
P2E900018A009
P2E900018A010

GENERAL NOTES

1. ALL OUTFALLS EXCEPT NO.1 ARE DIMENSIONED IN LINEAR FEET FROM THE PRECEEDING DOWN STREAM OUTFALL. OUTFALL NO.1 SHALL BE CONSIDERED THE KEY OUTFALL FOR DETERMINING THE LOCATION OF ALL UPSTREAM OUTFALLS. OUTFALL NO.1 IS LOCATED 32'-0" SOUTH OF THE SOUTH FACE FROM THE CONCRETE BRIDGE WHICH CONDUCTS EAST FORK POPLAR CREEK (EFPC) BENEATH BEAR CREEK ROAD AT THE N.E. END OF THE Y-12 PLANT AREA.
2. ITEMS IN THIS AREA OF THE OUTFALL DESCRIPTION COLUMN DESIGNATE AN OUTFALL OR OTHER FEATURE THAT IS EAST OF THE ADJACENT OUTFALL BEING SURVEYED. ADJACENT OUTFALLS LISTED IN THIS COLUMN MAY APPEAR IN THE BLOCK PLAN OF ONE OR MORE RELATED DRAWINGS.
3. EAST FORK POPLAR CREEK SHALL BE CONSIDERED TO FLOW FROM WEST TO EAST FOR SURVEY PURPOSES. ALL OUTFALLS ON THE LEFT SIDE IN THE DIRECTION OF FLOW SHALL BE NORTH OUTFALLS. ALL OUTFALLS ON THE RIGHT SIDE IN THE DIRECTION OF FLOW SHALL BE SOUTH OUTFALLS.
4. ELEVATIONS PROVIDED ARE FOR DETERMINING THE LOCATION OF THE OUTFALL BELOW SURFACE GRADE ADJACENT TO THE OUTFALL LOCATION. ELEVATIONS ARE GIVEN TO TOP OF PIPE OR TO THE BOTTOM OF TRENCH OR CHANNEL. ELEVATIONS ARE NOT PROVIDED FOR SURFACE GRATING DRAINS FLOWING INTO EAST FORK POPLAR CREEK.
5. PREVIOUSLY SURVEYED OUTFALLS AND NPDES PERMITTED OUTFALLS ARE DESIGNATED AS OUTFALLS 1 THRU 309.
6. ALL OUTFALLS ARE PROVIDED WITH AN APPROXIMATE FLOW IN GALLON PER MINUTE OBSERVED AS THE SURVEY WAS CONDUCTED. ANNUAL RAINFALL WAS APPROXIMATELY FIVE INCHES ABOVE NORMAL FOR THE LOCAL AREA AS OF JUNE 9,1989.
7. PORTIONS OF EAST FORK POPLAR CREEK ARE CONTAINED IN UNDERGROUND PIPING WHICH DECREASE IN DIAMETER AT THE WEST END OF THE Y-12 PLANT. THE ACTUAL ROUTE OF EFPC IS DETERMINED TO BE THE LARGEST DIAMETER UNDERGROUND PIPE WITH SUBSTAINED FLOW. ALL SMALLER DIAMETER PIPING EMPTYING INTO THE LARGE DIAMETER PIPING AT MANHOLES, CATCH BASINS, OR BY DIRECT CONNECTION ARE LISTED AS OUTFALLS.
8. PIPE SIZES IN OUTFALL DISCRIPTION CHART HAVE BEEN FIELD VERIFIED AND DO NOT NECESSARILY AGREE WITH PIPE SIZES ON BLOCK PLAN.

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Y-12 OUTFALL SURVEY
EAST FORK POPLAR CREEK
BLOCK PLAN C-4

OUTFALL SURVEY, EFPC, C-4

1	48	49	50	PLANT	BLDG	FL	SHEET	OF	TYPE
3	P	D	T	Y-12	AREA	0101	0	0	P

SCALE 1" = 50' — ID S06113 — P2E900018A006 — CLASS U — REV A

NUMBER OF MODELS IN THIS DRAWING= 5

P2E900018A006

#535