CAVALCADE CONTAMINANT SURVEY

APPENDIX II

Laboratory Analytical Data

~~HEALTH AND SAFETY/SAMPLING AND~~

~~ANALYTICAL PLAN FOR THE~~

CAVALCADE YARD SITE

CAMP DRESSER & McKEE INC.
IN ASSOCIATION WITH
McCLELLAND ENGINEERS, INC.
JULY 11, 1983

1012171

008

000247

000247

PREPARED FOR:

METROPOLITAN TRANSIT AUTHORITY OF HARRIS COUNTY

HOUSTON, TEXAS

SUBMITTED BY:

HOUSTON TRANSIT CONSULTANTS

AND

CAMP DRESSER & MCKEE INC.

CAVALCADE CONTAMINANT SURVEY

JULY 11, 1983

000248

This report is a working document for internal use by MTA. The content of this report has not received final approval by the MTA Board of Directors and therefore the opinions, findings, and conclusions expressed in this report should not be construed as final information without the consent of and verification by MTA.

000249

CDM
environmental engineers scientists, planners & management consultants

CAMP DRESSER & McKEE INC
One Center Plaza
Boston Massachusetts 02108
617 742 5151

HTC Job No. 417
Work Area: 39
MTA Work Order No. 04-03-T006

Appendix II
July 11, 1983

Houston Transit Consultants
2000 West Loop South
Sixth Floor
Houston, Texas 77027

Attention: Mr. Donald Stankovsky

000250

Cavalcade Contaminant Survey
Health and Safety/Sampling and Analytical Plan
METRO-Stage One, Regional Rail System
Houston, Texas

Submitted here is Appendix II of our three-volume report, for the Cavalcade Contaminant Survey performed for the proposed METRO-Stage One, Regional Rail System (RRS). This draft report includes both Phase 1 and partial Phase 2 work as outlined by our proposals dated respectively, January 27, 1983 and May 23, 1983. This project was performed in accordance with your Contract/Work Authorization Numbers 0B001-01-012 dated April 29, 1983 and with McClellend Engineers, Inc.

Appendix II, Health and Safety/Sampling and Analytical Plan, includes the health and safety procedures that were used during our field work. The protocols used during the field sampling are also documented.

We appreciate the opportunity to be of service to you on the first two phases of this project and look forward to finalizing our work associated with this important project.

Sincerely,

CAMP DRESSER & McKEE INC.

David F. Doyle

David F. Doyle, P.E.
Vice President

Copies Submitted - 5

CAVALCADE CONTAMINANT SURVEY

APPENDIX II

HEALTH AND SAFETY/SAMPLING AND ANALYTICAL PLAN

METRO-STAGE ONE, REGIONAL RAIL SYSTEM

HOUSTON, TEXAS

* * *

Report

to

Houston Transit Consultants

Houston, Texas

* * *

by

CAMP DRESSER & McKEE INC.
Environmental Consultants
Boston, Massachusetts
in association with
McCLELLAND ENGINEERS, INC.
Geotechnical Consultants
Houston, Texas

July 11, 1983

000251

TABLE OF CONTENTS

1.0	Preface
2.0	Introduction
3.0	Laboratory Analytical Data
4.0	Laboratory Quality Assurance/Quality Control (QA/QC) Information
5.0	Sampling Information Log Sheets

000252

1. Preface

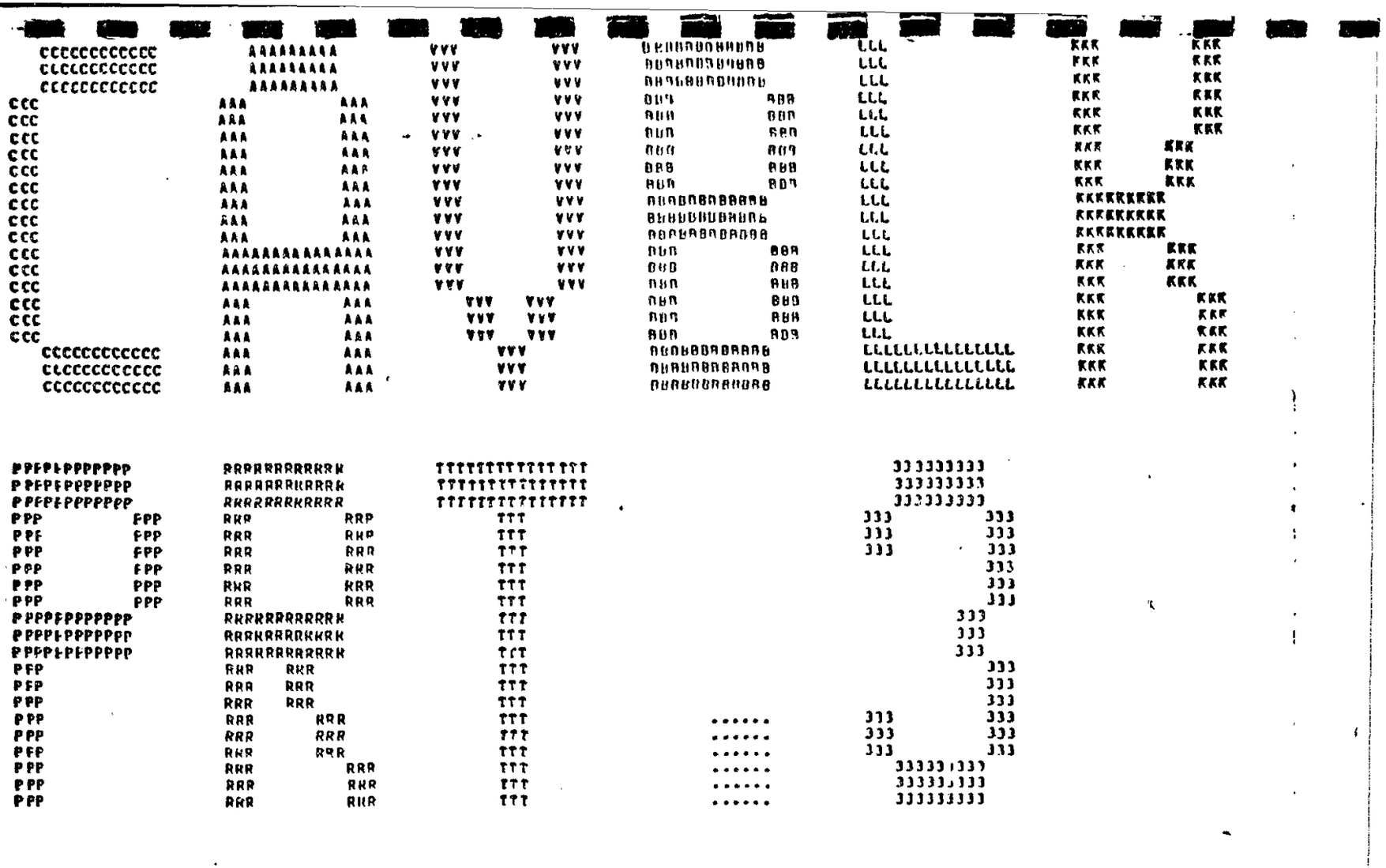
The Cavalcade Contaminant Survey was undertaken by the project team of Camp Dresser & McKee Inc. (CDM) and McClelland Engineers, Inc. (MEI). Camp Dresser & McKee provided technical and environmental services throughout both phases of the project. McClelland Engineers served as the geotechnical consultant and project administrator. This report is presented in three separate volumes: Volume I - Engineering Report, Appendix I - Health and Safety/Sampling and Analytical Plan, and Appendix II - Analytical Data. The key members of the project team are listed below.

MEMBER	ORGANIZATION	FUNCTION
David Doyle	CDM - Boston	Project Manager
Donald Muldoon	CDM - Boston	Project Chemist
Michael Noggle	MEI - Houston	Project Administrator
William Tobin	MEI - Houston	Project Engineer
Jeffrey Gram	CDM - Boston	Field Scientist
Paul Williams	CDM - Boston	Field Scientist
Robert Brandes	CDM - Austin	Regulatory Liaison
Robert Kier	CDM - Austin	Project Geologist

This study was conducted in cooperation with the Houston Transit Consultants (HTC) who provided information on the Cavalcade Yard and Shop facilities. Our principal contacts within HTC on this study include Dr. Cheng Ku and Mr. Don Stankovsky.

2. Intoduction

Appendix II contains a summary of all the analytical data collected during the field investigations at the Cavalcade Yard site. This appendix also contains a descrip tion of the quality assurance/quality control (QA/QC) measured used by both the MEAD COMPUCHEM and CDM-Boston laboratories and the sampling log information sheets for a sampling location at the Cavalcade Yard site. This appendix is designed to provide technical information to support the Cavalcade Yard Contamination Study Report. Information contained in this report was collected during both Phase I and Phase II.



```
*START* JOB CAVBLK REQ #1523 FOR WQDATA.328    DATE  7-JUL-93 14:40:49 MONITOR: CAMP DRESSER & MCKEE COMPUTER SERVICES, TOPS- *START
FILE DC:<WQDATA.328>CAVBLK.PRT.3, CREATED:  7-JUL-83  8:38:23, PRINTED:  7-JUL-93 14:40:52
JOB PARAMETERS: REQUEST CREATED: 7-JUL-83 14:07:00   PAGE LIMIT:474   FORMS:NORMAL  ACCOUNT:1063-1-PI-GRAD-28
FILE PARAMETERS: COPY: 1 OF 2   SPACING:SINGLE   FILE FORMAT:FORT   PRINT MODE:ASCII
```


000255

3.0 LABORATORY ANALYTICAL DATA

000256

	OW-01	OW-02	OW-03	OW-04	OW-05
	FEB-08-1983	FEB-09-1983	FEB-08-1983	FEB-08-1983	FEB-08-1983
SAMPLER:	MEAD	MEAD	MEAD	MEAD	MEAD
SAMPLE NO.:	OW0105	OW0204	OW0303	OW0401	OW0502
SAMPLE SOURCE:	OW	OW	OW	OW	OW

VOLATILE ORGANICS UNITS: PPB

ACROLEIN	ND	ND	ND	ND	ND
ACRYLONITRILE	ND	ND	ND	ND	ND
BENZENE	ND	21.	63.	18.	ND
BIS(CHLOROMETHYL) ETHER	ND	ND	ND	ND	ND
BROMOFORM	ND	ND	ND	ND	ND
CARBON TETRACHLORIDE	ND	ND	ND	ND	ND
CHLOROBENZENE	ND	ND	ND	ND	ND
CHLORODIBROMOMETHANE	ND	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND	ND
2-CHLOROETHYL VINYL ETHER	ND	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND	ND
DICHLOROBROMOMETHANE	ND	ND	ND	ND	ND
DICHLORODIFLUOROMETHANE	ND	ND	ND	ND	ND
1,1-DICHLOROETHANE	ND	ND	ND	ND	ND
1,2-DICHLOROETHANE	ND	ND	ND	ND	ND
1,1-DICHLOROETHYLENE	ND	ND	ND	ND	ND
1,2-DICHLOROPROPANE	ND	ND	ND	ND	ND
CIS-1,3-DICHLOROPROPYLENE	ND	ND	ND	ND	ND
TRANS-1,3-DICHLOROPROPYLENE	ND	ND	ND	ND	ND
ETHYLBENZENE	ND	58.	68.	17.	ND
BROMOMETHANE	ND	ND	ND	ND	ND
CHLOROMETHANE	ND	ND	ND	ND	ND
METHYLENE CHLORIDE	ND	ND	ND	ND	ND
1,1,2,2-TETRACHLOROETHANE	ND	ND	ND	ND	ND
TETRACHLOROETHYLENE	ND	ND	ND	ND	ND
TOLUENE	ND	110.	130.	38.	ND
1,2-TRANS-DICHLOROETHYLENE	ND	ND	ND	ND	ND
1,1,1-TRICHLOROETHANE	ND	ND	ND	ND	ND
1,1,2-TRICHLOROETHANE	ND	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND	ND	ND
TRICHLOROFLUOROMETHANE	ND	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND	ND

WATER/SOIL QUALITY DATA

ALL RESULTS FOR THIS PAGE ARE FOR LOCATION OW-06

	FEB-08-1983	MAY-11-1983	MAY-11-1983	MAY-26-1983
SAMPLER:	MEAD	CUM	CUM	CUM
SAMPLE NO.:	OW0603	OW0611	OW0619	OW0601
SAMPLE SOURCE:	OW	OW	OW	OW

VOLATILE ORGANICS UNITS: PPB

ACROLEIN	ND	ND	ND	ND
ACRYLONITRILE	ND	ND	ND	ND
BENZENE	74.	ND	ND	ND
BIS(CHLOROMETHYL) ETHER	ND	ND	ND	ND
BROMOFORM	ND	ND	ND	ND
CARBON TETRACHLORIDE	ND	ND	ND	ND
CHLOROBENZENE	ND	ND	ND	ND
CHLORODIBROMOMETHANE	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND
2-CHLOROETHYL VINYL ETHER	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND
DICHLOROBROMOMETHANE	ND	ND	ND	ND
DICHLORODIFLUOROMETHANE	ND	ND	ND	ND
1,1-DICHLOROETHANE	ND	ND	ND	ND
1,2-DICHLOROETHANE	ND	ND	ND	ND
1,1-DICHLOROETHYLENE	ND	ND	ND	ND
1,2-DICHLOROPROPANE	ND	ND	ND	ND
CIS-1,3-DICHLOROPROPYLENE	ND	ND	ND	ND
TRANS-1,3-DICHLOROPROPYLENE	ND	ND	ND	ND
ETHYLBENZENE	72.	ND	ND	ND
BROMOMETHANE	ND	ND	ND	ND
CHLOROMETHANE	ND	ND	ND	ND
METHYLENE CHLORIDE	ND	ND	ND	ND
1,1,2,2-TETRACHLOROETHANE	ND	ND	ND	ND
TETRACHLOROETHYLENE	ND	ND	ND	ND
TOLUENE	150.	ND	ND	49.
1,2-TRANS-DICHLOROETHYLENE	ND	ND	ND	ND
1,1,1-TRICHLOROETHANE	ND	ND	ND	ND
1,1,2-TRICHLOROETHANE	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND	ND
TRICHLOROFLUOROMETHANE	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND

	FEB-23-1983	[redacted]	[redacted]	[redacted]
SAMPLER:	HEAD	HEAD	HEAD	HEAD
SAMPLE NO.:	PW0101	PW0202	PW0303	PW0404
SAMPLE SOURCE:	PW	PW	PW	PW

VOLATILE ORGANICS UNITS: PPB.

ACROLEIN	ND	ND	ND	ND
ACRYLONITRILE	ND	ND	ND	ND
BENZENE	ND	ND	ND	ND
BIS(CHLOROMETHYL) ETHER	ND	ND	ND	ND
BROMOFORM	ND	ND	ND	ND
CARBON TETRACHLORIDE	ND	ND	ND	ND
CHLOROBENZENE	ND	ND	ND	ND
CHLORODIBROMOMETHANE	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND
2-CHLOROETHYL VINYL ETHER	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND
DICHLOROBROMOMETHANE	ND	ND	ND	ND
DICHLORODIFLUOROMETHANE	ND	ND	ND	ND
1,1-DICHLOROETHANE	ND	ND	ND	ND
1,2-DICHLOROETHANE	ND	ND	ND	ND
1,1-DICHLOROETHYLENE	ND	ND	ND	ND
1,2-DICHLOROPROPANE	ND	ND	ND	ND
CIS-1,3-DICHLOROPROPYLENE	ND	ND	ND	ND
TRANS-1,3-DICHLOROPROPYLENE	ND	ND	ND	ND
ETHYLBENZENE	ND	ND	ND	ND
BROMOMETHANE	ND	ND	ND	ND
CHLOROMETHANE	ND	ND	ND	ND
METHYLENE CHLORIDE	ND	ND	ND	ND
1,1,2,2-TETRACHLOROETHANE	ND	ND	ND	ND
TETRACHLOROETHYLENE	ND	ND	ND	ND
TOLUENE	ND	ND	ND	ND
1,2-TRANS-DICHLOROETHYLENE	ND	ND	ND	ND
1,1,1-TRICHLOROETHANE	ND	ND	ND	ND
1,1,2-TRICHLOROETHANE	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND	ND
TRICHLOROFLUOROMETHANE	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND

000259

	SD-01	SD-02
	FEB-02-1983	FEB-01-1983
SAMPLER:	HEAD	HEAD
SAMPLE NO.:	SD0108	SD0207
SAMPLE SOURCE:	SD	SD

VOLATILE ORGANICS UNITS: PPB

ACROLEIN	ND	ND
ACRYLONITRILE	ND	ND
BENZENE	ND	ND
BIS(CHLOROMETHYL) ETHER	ND	ND
BROMOFORM	ND	ND
CARBON TETRACHLORIDE	ND	ND
CHLOROBENZENE	ND	ND
CHLORODIBROMOMETHANE	ND	ND
CHLOROETHANE	ND	ND
2-CHLOROETHYL VINYL ETHER	ND	ND
CHLOROFORM	ND	ND
DICHLOROBROMOMETHANE	ND	ND
DICHLORODIFLUOROMETHANE	ND	ND
1,1-DICHLOROETHANE	ND	ND
1,2-DICHLOROETHANE	ND	ND
1,1-DICHLOROETHYLENE	ND	ND
1,2-DICHLOROPROPANE	ND	ND
CIS-1,3-DICHLOROPROPYLENE	ND	ND
TRANS-1,3-DICHLOROPROPYLENE	ND	ND
ETHYLBENZENE	ND	ND
BROMOMETHANE	ND	ND
CHLOROMETHANE	ND	ND
METHYLENE CHLORIDE	100.	46.
1,1,2,2-TETRACHLOROETHANE	ND	ND
TETRACHLOROETHYLENE	ND	ND
TOLUENE	ND	ND
1,2-TRANS-DICHLOROETHYLENE	ND	ND
1,1,1-TRICHLOROETHANE	ND	ND
1,1,2-TRICHLOROETHANE	ND	ND
TRICHLOROETHYLENE	ND	ND
TRICHLOROFLUOROMETHANE	ND	ND
VINYL CHLORIDE	ND	ND

WATER/SOIL QUALITY DATA

	SD-03	SD-04	SD-05
	FEB-02-1983	FEB-02-1983	FEB-01-1983
SAMPLER:	HEAD	HEAD	HEAD
SAMPLE NO.:	SD0310	SD0411	SD0506
SAMPLE SOURCE:	SD	SD	SD

VOLATILE ORGANICS UNITS: PPB

ACROLEIN	ND	ND	ND
ACRYLONITRILE	ND	ND	ND
BENZENE	ND	ND	ND
BIS(CHLOROMETHYL) ETHER	ND	ND	ND
BROMOFORM	ND	ND	ND
CARBON TETRACHLORIDE	ND	ND	ND
CHLOROBENZENE	ND	ND	ND
CHLORODIBROMOMETHANE	ND	ND	ND
CHLOROETHANE	ND	ND	ND
2-CHLOROETHYL VINYL ETHER	ND	ND	ND
CHLOROFORM	ND	ND	ND
DICHLOROBROMOMETHANE	ND	ND	ND
DICHLORODIFLUOROMETHANE	ND	ND	ND
1,1-DICHLOROETHANE	ND	ND	ND
1,2-DICHLOROETHANE	ND	ND	ND
1,1-DICHLOROETHYLENE	ND	ND	ND
1,2-DICHLOROPROPANE	ND	ND	ND
CIS-1,3-DICHLOROPROPYLENE	ND	ND	ND
TRANS-1,3-DICHLOROPROPYLENE	ND	ND	ND
ETHYLBENZENE	ND	ND	ND
BROMOMETHANE	ND	ND	ND
CHLOROMETHANE	ND	ND	ND
METHYLENE CHLORIDE	83.	110.	39.
1,1,2,2-TETRACHLOROETHANE	ND	ND	ND
TETRACHLOROETHYLENE	ND	ND	ND
TOLUENE	ND	ND	ND
1,2-TRANS-DICHLOROETHYLENE	ND	ND	ND
1,1,1-TRICHLOROETHANE	ND	ND	ND
1,1,2-TRICHLOROETHANE	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND
TRICHLOROFLUOROMETHANE	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND

**** DRAFT **** CRAVALCADE YARD SITE **** DRAFT **** JUL-07-1983 08:39

WATER/SOIL QUALITY DATA

	SL-01	SL-02	SL-03	SL-03	SL-03
	FEB-01-1983	FEB-01-1983	FEB-03-1983	FEB-03-1983	FEB-03-1983
SAMPLER:	MEAD	MEAD	MEAD	MEAD	MEAD
SAMPLE NO.:	SL0101	SL0202	SL0302	SL0303	SL0301
SAMPLE SOURCE:	SL	SL	SL	SL	SL
VOLATILE ORGANICS UNITS: PPB					
ACROLEIN	ND	ND	ND	ND	ND
ACRYLONITRILE	ND	ND	ND	ND	ND
BENZENE	ND	ND	ND	ND	ND
BIS(CHLOROMETHYL) ETHER	ND	ND	ND	ND	ND
BROMOFORM	ND	ND	ND	ND	ND
CARBON TETRACHLORIDE	ND	ND	ND	ND	ND
CHLOROBENZENE	ND	ND	ND	ND	ND
CHLORODIBROMOMETHANE	ND	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND	ND
2-CHLOROETHYL VINYL ETHER	ND	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND	ND
DICHLOROBROMOMETHANE	ND	ND	ND	ND	ND
DICHLORODIFLUOROMETHANE	ND	ND	ND	ND	ND
1,1-DICHLOROETHANE	ND	ND	ND	ND	ND
1,2-DICHLOROETHANE	ND	ND	ND	ND	ND
1,1-DICHLOROETHYLENE	ND	ND	ND	ND	ND
1,2-DICHLOROPROPANE	ND	ND	ND	ND	ND
CIS-1,3-DICHLOROPROPYLENE	ND	ND	ND	ND	ND
TRANS-1,3-DICHLOROPROPYLENE	ND	ND	ND	ND	ND
ETHYLBENZENE	ND	ND	ND	ND	ND
BROMOMETHANE	ND	ND	ND	ND	ND
CHLOROMETHANE	ND	ND	ND	ND	ND
METHYLENE CHLORIDE	59.	39.	40.	33.	59.
1,1,2,2-TETRACHLOROETHANE	ND	ND	ND	ND	ND
TETRACHLOROETHYLENE	ND	ND	ND	ND	ND
TOLUENE	ND	ND	ND	ND	ND
1,2-TRANS-DICHLOROETHYLENE	ND	ND	ND	ND	ND
1,1,1-TRICHLOROETHANE	ND	ND	ND	ND	ND
1,1,2-TRICHLOROETHANE	ND	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND	ND	ND
TRICHLOROFLUOROMETHANE	ND	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND	ND

WATER/SOIL QUALITY DATA

ALL RESULTS FOR THIS PAGE ARE FOR LOCATION SL-04

	FEB-04-1983	FEB-04-1983	FEB-04-1983	FEB-04-1983
SAMPLER:	MEAD	MEAD	MEAD	MEAD
SAMPLE NO.:	SL0403	SL0404	SL0402	SL0401
SAMPLE SOURCE:	SL	SL	SL	SL
VOLATILE ORGANICS UNITS: PPB				
ACROLEIN	ND	ND	ND	ND
ACRYLONITRILE	ND	ND	ND	ND
BENZENE	ND	ND	ND	ND
BIS(CHLOROMETHYL) ETHER	ND	ND	ND	ND
BROMOFORM	ND	ND	ND	ND
CARBON TETRACHLORIDE	ND	ND	ND	ND
CHLOROBENZENE	ND	ND	ND	ND
CHLORODIBROMOMETHANE	ND	ND	ND	ND
CHLOROETHANE	ND	ND	ND	ND
2-CHLOROETHYL VINYL ETHER	ND	ND	ND	ND
CHLOROFORM	ND	ND	ND	ND
DICHLOROBROMOMETHANE	ND	ND	ND	ND
DICHLORODIFLUOROMETHANE	ND	ND	ND	ND
1,1-DICHLOROETHANE	ND	ND	ND	ND
1,2-DICHLOROETHANE	ND	ND	ND	ND
1,1-DICHLOROETHYLENE	ND	ND	ND	ND
1,2-DICHLOROPROPANE	ND	ND	ND	ND
CIS-1,3-DICHLOROPROPYLENE	ND	ND	ND	ND
TRANS-1,3-DICHLOROPROPYLENE	ND	ND	ND	ND
ETHYLBENZENE	10.	ND	98.	160.
BROMOMETHANE	ND	ND	ND	ND
CHLOROMETHANE	ND	ND	ND	ND
METHYLENE CHLORIDE	73.	ND	52.	ND
1,1,2,2-TETRACHLOROETHANE	ND	ND	ND	ND
TETRACHLOROETHYLENE	ND	ND	ND	ND
TOLUENE	ND	ND	31.	23.
1,2-TRANS-DICHLOROETHYLENE	ND	ND	ND	ND
1,1,1-TRICHLOROETHANE	ND	ND	ND	ND
1,1,2-TRICHLOROETHANE	ND	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND	ND
TRICHLOROFLUOROMETHANE	ND	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND	ND

WATER/SOIL QUALITY DATA

ALL RESULTS FOR THIS PAGE ARE FOR LOCATION SL-05

	FEB-02-1983	FEB-02-1983	FEB-02-1983
SAMPLER:	HEAD	HEAD	HEAD
SAMPLE NO.:	SL0501	SL0502	SL0503
SAMPLE SOURCE:	SL	SL	SL

VOLATILE ORGANICS UNITS: PPB

ACROLEIN	ND	ND	ND
ACRYLONITRILE	ND	ND	ND
BENZENE	ND	ND	ND
BIS(CHLOROMETHYL) ETHER	ND	ND	ND
BROMOFORM	ND	ND	ND
CARBON TETRACHLORIDE	ND	ND	ND
CHLOROBENZENE	ND	ND	ND
CHLORODIBROMOMETHANE	ND	ND	ND
CHLOROETHANE	ND	ND	ND
2-CHLOROETHYL VINYL ETHER	ND	ND	ND
CHLOROFORM	ND	ND	ND
DICHLOROBROMOMETHANE	ND	ND	ND
DICHLORODIFLUOROMETHANE	ND	ND	ND
1,1-DICHLOROETHANE	ND	ND	ND
1,2-DICHLOROETHANE	ND	ND	ND
1,1-DICHLOROETHYLENE	ND	ND	ND
1,2-DICHLOROPROPANE	ND	ND	ND
CIS-1,3-DICHLOROPROPYLENE	ND	ND	ND
TRANS-1,3-DICHLOROPROPYLENE	ND	ND	ND
ETHYLBENZENE	ND	ND	ND
BROMOMETHANE	ND	ND	ND
CHLOROMETHANE	ND	ND	ND
METHYLENE CHLORIDE	18.	47.	21.
1,1,2,2-TETRACHLOROETHANE	ND	ND	ND
TETRACHLOROETHYLENE	ND	ND	ND
TOLUENE	ND	ND	ND
1,2-TRANS-DICHLOROETHYLENE	ND	ND	ND
1,1,1-TRICHLOROETHANE	ND	ND	ND
1,1,2-TRICHLOROETHANE	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND
TRICHLOROFLUOROMETHANE	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND

NOTE -- INFO. FOR LOCATION SL-05 IS CONTINUED ON NEXT PAGE.

WATER/SOIL [illegible]

ALL RESULTS FOR THIS PAGE ARE FOR LOCATION SL-05

	FEB-02-1983	FEB-02-1983	FEB-02-1983
SAMPLER:	MEAD	MEAD	MEAD
SAMPLE NO.:	SL0501	SL0504	SL0505
SAMPLE SOURCE:	SL	SL	SL

VOLATILE ORGANICS UNITS: PPB

ACROLEIN	ND	ND	ND
ACRYLONITRILE	ND	ND	ND
BENZENE	ND	ND	ND
BIS(CHLOROMETHYL) ETHER	ND	ND	ND
BROMOFORM	ND	ND	ND
CARBON TETRACHLORIDE	ND	ND	ND
CHLOROBENZENE	ND	ND	ND
CHLORODIBROMOMETHANE	ND	ND	ND
CHLOROETHANE	ND	ND	ND
2-CHLOROETHYL VINYL ETHER	ND	ND	ND
CHLOROFORM	ND	ND	ND
DICHLOROBROMOMETHANE	ND	ND	ND
DICHLORODIFLUOROMETHANE	ND	ND	ND
1,1-DICHLOROETHANE	ND	ND	ND
1,2-DICHLOROETHANE	ND	ND	ND
1,1-DICHLOROETHYLENE	ND	ND	ND
1,2-DICHLOROPROPANE	ND	ND	ND
CIS-1,3-DICHLOROPROPYLENE	ND	ND	ND
TRANS-1,3-DICHLOROPROPYLENE	ND	ND	ND
ETHYLBENZENE	ND	ND	ND
BROMOMETHANE	ND	ND	ND
CHLOROMETHANE	ND	ND	ND
METHYLENE CHLORIDE	18.	28.	41.
1,1,2,2-TETRACHLOROETHANE	ND	ND	ND
TETRACHLOROETHYLENE	ND	ND	ND
TOLUENE	ND	ND	ND
1,2-TRANS-DICHLOROETHYLENE	ND	ND	ND
1,1,1-TRICHLOROETHANE	ND	ND	ND
1,1,2-TRICHLOROETHANE	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND
TRICHLOROFLUOROMETHANE	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND

000265

CAVALCADE YARD SITE

JUL-07-1983
08:38

**** DRAFT **** **** DRAFT ****

WATER/SOIL QUALITY DATA

	SL-06	SL-06	SL-07
	FEB-01-1983	FEB-01-1983	FEB-01-1983
SAMPLER:	MEAD	MEAD	MEAD
SAMPLE NO.:	SL0605	SL0604	SL0703
SAMPLE SOURCE:	SL	SL	SL

VOLATILE ORGANICS UNITS: PPB

ACROLEIN	ND	ND	ND
ACRYLONITRILE	ND	ND	ND
BENZENE	ND	ND	ND
BIS(CHLOROMETHYL) ETHER	ND	ND	ND
BROMOFORM	ND	ND	ND
CARBON TETRACHLORIDE	ND	ND	ND
CHLOROBENZENE	ND	ND	ND
CHLORODIBROMOMETHANE	ND	ND	ND
CHLOROETHANE	ND	ND	ND
2-CHLOROETHYL VINYL ETHER	ND	ND	ND
CHLOROFORM	ND	ND	ND
DICHLOROBROMOMETHANE	ND	ND	ND
DICHLORODIFLUOROMETHANE	ND	ND	ND
1,1-DICHLOROETHANE	ND	ND	ND
1,2-DICHLOROETHANE	ND	ND	ND
1,1-DICHLOROETHYLENE	ND	ND	ND
1,2-DICHLOROPROPANE	ND	ND	ND
CIS-1,3-DICHLOROPROPYLENE	ND	ND	ND
TRANS-1,3-DICHLOROPROPYLENE	ND	ND	ND
ETHYLBENZENE	ND	ND	20.
BROMOMETHANE	ND	ND	ND
CHLOROMETHANE	ND	ND	ND
METHYLENE CHLORIDE	33.	29.	28.
1,1,2,2-TETRACHLOROETHANE	ND	ND	ND
TETRACHLOROETHYLENE	ND	ND	ND
TOLUENE	ND	ND	ND
1,2-TRANS-DICHLOROETHYLENE	ND	ND	ND
1,1,1-TRICHLOROETHANE	ND	ND	ND
1,1,2-TRICHLOROETHANE	ND	ND	ND
TRICHLOROETHYLENE	ND	ND	ND
TRICHLOROFLUOROMETHANE	ND	ND	ND
VINYL CHLORIDE	ND	ND	ND

000266

**** DRAFT **** DRAFT

WATER/SOIL QUALITY DATA

	SW-01	SW-02
	FEB-02-1983	FEB-02-1983
SAMPLER:	HEAD	HEAD
SAMPLE NO.:	SW0112	SW0212
SAMPLE SOURCE:	SW	SW

VOLATILE ORGANICS UNITS: PPB

ACROLEIN	ND	ND
ACRYLONITRILE	ND	ND
BENZENE	ND	ND
BIS(CHLOROMETHYL) ETHER	ND	ND
BROMOFORM	ND	ND
CARBON TETRACHLORIDE	ND	ND
CHLOROBENZENE	ND	ND
CHLORODIBROMOMETHANE	ND	ND
CHLOROETHANE	ND	ND
2-CHLOROETHYL VINYL ETHER	ND	ND
CHLOROFORM	ND	ND
DICHLOROBROMOMETHANE	ND	ND
DICHLORODIFLUOROMETHANE	ND	ND
1,1-DICHLOROETHANE	ND	ND
1,2-DICHLOROETHANE	ND	ND
1,1-DICHLOROETHYLENE	ND	ND
1,2-DICHLOROPROPANE	ND	ND
CIS-1,3-DICHLOROPROPYLENE	ND	ND
TRANS-1,3-DICHLOROPROPYLENE	ND	ND
ETHYLBENZENE	ND	ND
BROMOMETHANE	ND	ND
CHLOROMETHANE	ND	ND
METHYLENE CHLORIDE	ND	ND
1,1,2,2-TETRACHLOROETHANE	ND	ND
TETRACHLOROETHYLENE	ND	ND
TOLUENE	ND	ND
1,2-TRANS-DICHLOROETHYLENE	ND	ND
1,1,1-TRICHLOROETHANE	ND	ND
1,1,2-TRICHLOROETHANE	ND	ND
TRICHLOROETHYLENE	ND	ND
TRICHLOROFLUOROMETHANE	ND	ND
VINYL CHLORIDE	ND	ND

000267

WATER/SOIL QUALITY DATA

	OW-01	OW-02	OW-03	OW-04	OW-05
	FEB-08-1983	FEB-09-1983	FEB-08-1983	FEB-08-1983	FEB-08-1983
SAMPLER:	MEAD	MEAD	MEAD	MEAD	MEAD
SAMPLE NO.:	010105	010204	010303	010401	010502
SAMPLE SOURCE:	OW	OW	OW	OW	OW

ACIDS UNITS: PPB

2-CHLOROPHENOL	ND	ND	ND	ND	ND
2,4-DICHLOROPHENOL	ND	ND	ND	ND	ND
2,4-DIMETHYLPHENOL	ND	680.	210.	1000.	ND
4,6-DINITRO-O-CRESOL	ND	ND	ND	ND	ND
2,4-DINITROPHENOL	ND	ND	ND	ND	ND
2-NITROPHENOL	ND	ND	ND	ND	ND
4-NITROPHENOL	ND	ND	ND	ND	ND
P-CHLORO-M-CRESOL	ND	ND	ND	ND	ND
PENTACHLOROPHENOL	ND	66.	ND	ND	ND
PHENOL	ND	59.	ND	790.	ND
2,4,6-TRICHLOROPHENOL	ND	ND	ND	ND	ND

000268

WATER/SOIL QUALITY DATA

ALL RESULTS FOR THIS PAGE ARE FOR LOCATION OW-06

	FEB-08-1983	MAY-11-1983	MAY-11-1983	MAY-26-1983
SAMPLER:	HEAD	CDM	CDM	CDM
SAMPLE NO.:	OW0603	OW0611	OW0619	OW0601
SAMPLE SOURCE:	OW	OW	OW	OW

ACIDS UNITS: PPB

2-CHLOROPHENOL	--	ND	--	ND
2,4-DICHLOROPHENOL	--	ND	--	ND
2,4-DIMETHYLPHENOL	--	ND	--	ND
4,6-DINITRO-O-CRESOL	--	ND	--	ND
2,4-DINITROPHENOL	--	ND	--	ND
2-NITROPHENOL	--	ND	--	ND
4-NITROPHENOL	--	ND	--	ND
P-CHLORO-M-CRESOL	--	ND	--	ND
PENTACHLOROPHENOL	--	ND	--	ND
PHENOL	--	ND	--	ND
2,4,6-TRICHLOROPHENOL	--	ND	--	ND

WATER/SOIL QUALITY DATA

	PW-01	PW-02	PW-03	PW-04
	FEB-23-1983	FEB-23-1983	FEB-23-1983	FEB-23-1983
SAMPLER:	MEAD	MEAD	MEAD	MEAD
SAMPLE NO.:	PW0101	PW0202	PW0303	PW0404
SAMPLE SOURCE:	PW	PW	PW	PW

ACIDS UNITS: PPB

2-CHLOROPHENOL	ND	ND	ND	ND
2,4-DICHLOROPHENOL	ND	ND	ND	ND
2,4-DIMETHYLPHENOL	ND	ND	ND	ND
4,6-DINITRO-O-CRESOL	ND	ND	ND	ND
2,4-DINITROPHENOL	ND	ND	ND	ND
2-NITROPHENOL	ND	ND	ND	ND
4-NITROPHENOL	ND	ND	ND	ND
P-CHLORO-M-CRESOL	ND	ND	ND	ND
PENTACHLOROPHENOL	ND	ND	ND	ND
PHENOL	ND	ND	ND	ND
2,4,6-TRICHLOROPHENOL	ND	ND	ND	ND

WATER/SOIL QUALITY DATA

	SD-01	SD-02
	FEB-02-1983	FEB-01-1983
SAMPLER:	MEAD	MEAD
SAMPLE NO.:	SD0108	SD0207
SAMPLE SOURCE:	SD	SD

ACIDS UNITS: PPB

2-CHLOROPHENOL	ND	ND
2,4-DICHLOROPHENOL	ND	ND
2,4-DIMETHYLPHENOL	ND	ND
4,6-DINITRO-O-CRESOL	ND	ND
2,4-DINITROPHENOL	ND	ND
2-NITROPHENOL	ND	ND
4-NITROPHENOL	ND	ND
P-CHLORO-M-CRESOL	ND	ND
PENTACHLOROPHENOL	ND	ND
PHENOL	ND	ND
2,4,6-TRICHLOROPHENOL	ND	ND

WATER/SOIL QUALITY DATA

	SD-03	SD-04	SD-05
SAMPLED:	FEB-02-1983	FEB-02-1983	FEB-01-1983
SAMPLE NO.:	HEAD	HEAD	HEAD
SAMPLE SOURCE:	SD0310	SD0411	SD0506
	SD	SD	SD
ACIDS UNITS: PPB			
2-CHLOROPHENOL	ND	ND	ND
2,4-DICHLOROPHENOL	ND	ND	ND
2,4-DIMETHYLPHENOL	ND	ND	ND
4,6-DINITRO-O-CRESOL	ND	ND	ND
2,4-DINITROPHENOL	ND	ND	ND
2-NITROPHENOL	ND	ND	ND
4-NITROPHENOL	ND	ND	ND
P-CHLORO-M-CRESOL	ND	ND	ND
PENTACHLOROPHENOL	ND	ND	ND
PHENOL	ND	ND	ND
2,4,6-TRICHLOROPHENOL	ND	ND	ND

**** DRAFT **** DRAFT ****

WATER/SOIL QUALITY DATA

	SL-01	SL-02	SL-03	SL-03	SL-03
	FEB-01-1983	FEB-01-1983	FEB-03-1983	FEB-03-1983	FEB-03-1983
SAMPLER:	MEAD	MEAD	MEAD	MEAD	MEAD
SAMPLE NO.:	SL0101	SL0202	SL0302	SL0303	SL0301
SAMPLE SOURCE:	SL	SL	SL	SL	SL
ACIDS UNITS: PPB					
2-CHLOROPHENOL	ND	ND	ND	ND	ND
2,4-DICHLOROPHENOL	ND	ND	ND	ND	ND
2,4-DIMETHYLPHENOL	ND	ND	ND	ND	ND
4,6-DINITRO-O-CRESOL	ND	ND	ND	ND	ND
2,4-DINITROPHENOL	ND	ND	ND	ND	ND
2-NITROPHENOL	ND	ND	ND	ND	ND
4-NITROPHENOL	ND	ND	ND	ND	ND
P-CHLORO-M-CRESOL	ND	ND	ND	ND	ND
PENTACHLOROPHENOL	ND	ND	ND	ND	ND
PHENOL	ND	ND	ND	ND	ND
2,4,6-TRICHLOROPHENOL	ND	ND	ND	ND	ND

ALL RESULTS FOR THIS PAGE ARE FOR LOCATION SL-04

	FEB-04-1983	FEB-04-1983	FEB-04-1983	FEB-04-1983
SAMPLER:	HEAD	HEAD	HEAD	HEAD
SAMPLE NO.:	SL0403	SL0404	SL0402	SL0401
SAMPLE SOURCE:	SL	SL	SL	SL
ACIDS UNITS: PPB				
2-CHLOROPHENOL	ND	ND	ND	ND
2,4-DICHLOROPHENOL	ND	ND	ND	ND
2,4-DIMETHYLPHENOL	1000.	ND	ND	ND
4,6-DINITRO-O-CRESOL	ND	ND	ND	ND
2,4-DINITROPHENOL	ND	ND	ND	ND
2-NITROPHENOL	ND	ND	ND	ND
4-NITROPHENOL	ND	ND	ND	ND
P-CHLORO-M-CRESOL	ND	ND	ND	ND
PENTACHLOROPHENOL	ND	ND	ND	ND
PHENOL	ND	ND	ND	ND
2,4,6-TRICHLOROPHENOL	ND	ND	ND	ND

**** DRAFT ****

WATER/SOIL QUALITY DATA

ALL RESULTS FOR THIS PAGE ARE FOR LOCATION SL-05

	FEB-02-1983	FEB-02-1983	FEB-02-1983
SAMPLER:	HEAD	HEAD	HEAD
SAMPLE NO.:	SL0501	SL0502	SL0503
SAMPLE SOURCE:	SL	SL	SL
ACIDS UNITS: PPB			
2-CHLOROPHENOL	ND	--	ND
2,4-DICHLOROPHENOL	ND	--	ND
2,4-DIMETHYLPHENOL	ND	--	ND
4,6-DINITRO-O-CRESOL	ND	--	ND
2,4-DINITROPHENOL	ND	--	ND
2-NITROPHENOL	ND	--	ND
4-NITROPHENOL	ND	--	ND
P-CHLORO-M-CRESOL	ND	--	ND
PENTACHLOROPHENOL	ND	--	ND
PHENOL	ND	--	ND
2,4,6-TRICHLOROPHENOL	ND	--	ND

NOTE -- INFO. FOR LOCATION SL-05 IS CONTINUED ON NEXT PAGE.

WATER/SOIL [redacted] A

ALL RESULTS FOR THIS PAGE ARE FOR LOCATION SL-05

SAMPLER:	HEAD	HEAD	HEAD
SAMPLE NO.:	SL0501	SL0504	SL0505
SAMPLE SOURCE:	SL	SL	SL
	FEB-02-1983	FEB-02-1983	FEB-02-1983

ACIDS UNITS: PPB

2-CHLOROPHENOL	ND	ND	ND
2,4-DICHLOROPHENOL	ND	ND	ND
2,4-DIMETHYLPHENOL	ND	ND	ND
4,6-DINITRO-O-CRESOL	ND	ND	ND
2,4-DINITROPHENOL	ND	ND	ND
2-NITROPHENOL	ND	ND	ND
4-NITROPHENOL	ND	ND	ND
P-CHLORO-M-CRESOL	ND	ND	ND
PENTACHLOROPHENOL	ND	ND	ND
PHENOL	ND	ND	ND
2,4,6-TRICHLOROPHENOL	ND	ND	ND

WATER/SOIL QUALITY DATA

	SL-06	SL-06	SL-07
	FEB-01-1983	FEB-01-1983	FEB-01-1983
SAMPLER:	MEAD	MEAD	MEAD
SAMPLE NO.:	SL0605	SL0604	SL0703
SAMPLE SOURCE:	SL	SL	SL

ACIDS UNITS: PPB

2-CHLOROPHENOL	ND	ND	ND
2,4-DICHLOROPHENOL	ND	ND	ND
2,4-DIMETHYLPHENOL	ND	ND	ND
4,6-DINITRO-O-CRESOL	ND	ND	ND
2,4-DINITROPHENOL	ND	ND	ND
2-NITROPHENOL	ND	ND	ND
4-NITROPHENOL	ND	ND	ND
P-CHLORO-M-CRESOL	ND	ND	ND
PENTACHLOROPHENOL	ND	ND	720.
PHENOL	ND	ND	ND
2,4,6-TRICHLOROPHENOL	ND	ND	ND

000277

**** DRAFT **** **** DRAFT ****

WATER/SOIL QUALITY DATA

	SW-01	SW-02
	FEB-02-1983	FEB-02-1983
SAMPLER:	HEAD	HEAD
SAMPLE NO.:	SW0112	SW0212
SAMPLE SOURCE:	SW	SW

ACIDS UNITS: PPB

2-CHLOROPHENOL	ND	ND
2,4-DICHLOROPHENOL	ND	ND
2,4-DIMETHYLPHENOL	ND	ND
4,6-DINITRO-O-CRESOL	ND	ND
2,4-DINITROPHENOL	ND	ND
2-NITROPHENOL	ND	ND
4-NITROPHENOL	ND	ND
P-CHLORO-M-CRESOL	ND	ND
PENTACHLOROPHENOL	ND	ND
PHENOL	ND	ND
2,4,6-TRICHLOROPHENOL	ND	ND

	OW-01	OW-02	OW-03	OW-04	OW-05
SAMPLED:	FEB-08-1983	FEB-08-1983	FEB-08-1983	FEB-08-1983	FEB-08-1983
	HEAD	HEAD	HEAD	HEAD	HEAD
SAMPLE NO.:	OW0105	OW0204	OW0303	OW0401	OW0502
SAMPLE SOURCE:	OW	OW	OW	OW	OW
BASE NEUTRALS UNITS: PPB					
ACENAPHTHENE	49.	380.	450.	250.	ND
ACENAPHTHYLENE	17.	30.	ND	13.	ND
ANTHRACENE	ND	ND	96.	94.	ND
BENZIDINE	ND	ND	ND	ND	ND
BENZO(A)ANTHRACENE	ND	ND	ND	ND	ND
BENZO(A)PYRENE	ND	29.	ND	ND	ND
3,4-BENZOFLUORANTHENE	ND	ND	ND	ND	ND
BENZO(G,H,I)PERYLENE	ND	ND	ND	ND	ND
BENZO(K)FLUORANTHENE	ND	ND	ND	ND	ND
BIS(2-CHLOROETHOXY)METHANE	ND	ND	ND	ND	ND
BIS(2-CHLOROETHYL) ETHER	ND	ND	ND	ND	ND
BIS(2-CHLOROISOPROPYL) ETHER	ND	ND	ND	ND	ND
BIS(2-ETHYLHEXYL) PHTHALATE	ND	17.	ND	ND	25.
4-BROMOPHENYL PHENYL ETHER	ND	ND	ND	ND	ND
BUTYL BENZYL PHTHALATE	ND	17.	20.	ND	ND
2-CHLORONAPHTHALENE	ND	ND	ND	ND	ND
4-CHLOROPHENYL PHENYL ETHER	ND	ND	ND	ND	ND
CHRYSENE	ND	ND	ND	ND	ND
DIBENZO(A,H)ANTHRACENE	ND	ND	ND	ND	ND
1,2-DICHLOROBENZENE	ND	ND	ND	ND	ND
1,3-DICHLOROBENZENE	ND	ND	ND	ND	ND
1,4-DICHLOROBENZENE	ND	ND	ND	ND	ND
3,3'-DICHLOROBENZIDINE	ND	ND	ND	ND	ND
DIETHYL PHTHALATE	ND	ND	ND	ND	ND
DIMETHYL PHTHALATE	ND	ND	ND	ND	ND
DI-N-BUTYL PHTHALATE	ND	34.	ND	ND	ND
2,4-DINITROTOLUENE	ND	ND	ND	ND	ND
2,6-DINITROTOLUENE	ND	ND	ND	ND	ND
DI-N-OCTYL PHTHALATE	ND	ND	ND	ND	ND
1,2-DIPHENYLHYDRAZINE	ND	ND	ND	ND	ND
FLUORANTHENE	23.	34.	ND	ND	ND
FLUORENE	73.	300.	260.	100.	ND
HEXACHLOROBENZENE	ND	ND	ND	ND	ND
HEXACHLOROBUTADIENE	ND	ND	ND	ND	ND
HEXACHLOROCYCLOPENTADIENE	ND	ND	ND	ND	ND
HEXACHLOROETHANE	ND	ND	ND	ND	ND
INDENO(1,2,3-C,D)PYRENE	ND	ND	ND	ND	ND
ISOPHORONE	ND	ND	ND	ND	ND
NAPHTHALENE	670.	17000.	770.	7300.	ND
NITROBENZENE	ND	ND	ND	ND	ND
N-NITROSODIMETHYLAMINE	ND	ND	ND	ND	ND
N-NITROSODI-N-PROPYLAMINE	ND	ND	ND	ND	ND
N-NITROSODIPHENYLAMINE	ND	ND	ND	ND	ND
PHENANTHRENE	160.	240.	180.	150.	11.
PYRENE	17.	27.	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND	ND

000279

**** DRAFT ****

WATER/SOIL QUALITY DATA

ALL RESULTS FOR THIS PAGE ARE FOR LOCATION OW-06

	FEB-08-1983	MAY-11-1983	MAY-11-1983	MAY-26-1983
SAMPLER:	MEAD	CDM	CDM	CDM
SAMPLE NO.:	OW0603	OW0611	OW0619	OW0601
SAMPLE SOURCE:	OW	OW	OW	OW

BASE NEUTRALS UNITS: PPB

ACENAPHTHENE	--	ND	ND	ND
ACENAPHTHYLENE	--	ND	ND	ND
ANTHRACENE	--	ND	ND	ND
BENZIDINE	--	ND	ND	ND
BENZO(A)ANTHRACENE	--	ND	ND	ND
BENZO(A)PYRENE	--	ND	ND	ND
3,4-BENZOFLUORANTHENE	--	ND	ND	ND
BENZO(G,H,I)PERYLENE	--	ND	ND	ND
BENZO(K)FLUORANTHENE	--	ND	ND	ND
BIS(2-CHLOROETHOXY)METHANE	--	ND	ND	ND
BIS(2-CHLOROETHYL) ETHER	--	ND	ND	ND
BIS(2-CHLOROISOPROPYL) ETHER	--	ND	ND	ND
BIS(2-ETHYLHEXYL) PHTHALATE	--	ND	ND	ND
4-BROMOPHENYL PHENYL ETHER	--	ND	ND	ND
BUTYL BENZYL PHTHALATE	--	ND	ND	ND
2-CHLORONAPHTHALENE	--	ND	ND	ND
4-CHLOROPHENYL PHENYL ETHER	--	ND	ND	ND
CHRYSENE	--	ND	ND	ND
DIBENZO(A,H)ANTHRACENE	--	ND	ND	ND
1,2-DICHLOROBENZENE	--	ND	ND	ND
1,3-DICHLOROBENZENE	--	ND	ND	ND
1,4-DICHLOROBENZENE	--	ND	ND	ND
3,3'-DICHLOROBENZIDINE	--	ND	ND	ND
DIETHYL PHTHALATE	--	ND	ND	ND
DIMETHYL PHTHALATE	--	ND	ND	ND
DI-N-BUTYL PHTHALATE	--	ND	ND	ND
2,4-DINITROTOLUENE	--	ND	ND	ND
2,6-DINITROTOLUENE	--	ND	ND	ND
DI-N-OCTYL PHTHALATE	--	ND	ND	ND
1,2-DIPHENYLHYDRAZINE	--	ND	ND	ND
FLUORANTHENE	--	ND	ND	ND
FLUORENE	--	ND	ND	ND
HEXACHLOROBENZENE	--	ND	ND	ND
HEXACHLOROBUTADIENE	--	ND	ND	ND
HEXACHLOROCYCLOPENTADIENE	--	ND	ND	ND
HEXACHLOROETHANE	--	ND	ND	ND
INDENO(1,2,3-C,D)PYRENE	--	ND	ND	ND
ISOPHORONE	--	ND	ND	ND
NAPHTHALENE	--	ND	ND	ND
NITROBENZENE	--	ND	ND	ND
N-NITROSODIMETHYLAMINE	--	ND	ND	ND
N-NITROSODI-N-PROPYLAMINE	--	ND	ND	ND
N-NITROSODIPHENYLAMINE	--	ND	ND	ND
PHENANTHRENE	--	ND	ND	ND
PYRENE	--	ND	ND	ND
1,2,4-TRICHLOROBENZENE	--	ND	ND	ND

000280

WATER/SOIL QUALITY DATA

	PW-01	PW-02	PW-03	PW-04
	FEB-23-1983	FEB-23-1983	FEB-23-1983	FEB-23-1983
SAMPLER:	MEAD	MEAD	MEAD	MEAD
SAMPLE NO.:	PW0101	PW0202	PW0303	PW0404
SAMPLE SOURCE:	PW	PW	PW	PW
BASE NEUTRALS UNITS: PPB				
ACENAPHTHENE	ND	ND	ND	ND
ACENAPHTHYLENE	ND	ND	ND	ND
ANTHRACENE	ND	ND	ND	ND
BENZIDINE	ND	ND	ND	ND
BENZO(A)ANTHRACENE	ND	ND	ND	ND
BENZO(A)PYRENE	ND	ND	ND	ND
3,4-BENZOFLUORANTHENE	ND	ND	ND	ND
BENZO(G,H,I)PERYLENE	ND	ND	ND	ND
BENZO(K)FLUORANTHENE	ND	ND	ND	ND
BIS(2-CHLOROETHOXY)METHANE	ND	ND	ND	ND
BIS(2-CHLOROETHYL) ETHER	ND	ND	ND	ND
BIS(2-CHLOROISOPROPYL) ETHER	ND	ND	ND	ND
BIS(2-ETHYLHEXYL) PHTHALATE	ND	ND	ND	ND
4-BROMOPHENYL PHENYL ETHER	ND	ND	ND	ND
BUTYL BENZYL PHTHALATE	ND	ND	ND	ND
2-CHLORONAPHTHALENE	ND	ND	ND	ND
4-CHLOROPHENYL PHENYL ETHER	ND	ND	ND	ND
CHRYSENE	ND	ND	ND	ND
DIBENZO(A,H)ANTHRACENE	ND	ND	ND	ND
1,2-DICHLOROBENZENE	ND	ND	ND	ND
1,3-DICHLOROBENZENE	ND	ND	ND	ND
1,4-DICHLOROBENZENE	ND	ND	ND	ND
3,3'-DICHLOROBENZIDINE	ND	ND	ND	ND
DIETHYL PHTHALATE	ND	ND	ND	ND
DIMETHYL PHTHALATE	ND	ND	ND	ND
DI-N-BUTYL PHTHALATE	ND	ND	ND	ND
2,4-DINITROTOLUENE	ND	ND	ND	ND
2,6-DINITROTOLUENE	ND	ND	ND	ND
DI-N-OCTYL PHTHALATE	ND	ND	ND	ND
1,2-DIPHENYLHYDRAZINE	ND	ND	ND	ND
FLUORANTHENE	ND	ND	ND	ND
FLUORENE	ND	ND	ND	ND
HEXACHLOROBENZENE	ND	ND	ND	ND
HEXACHLOROBUTADIENE	ND	ND	ND	ND
HEXACHLOROCYCLOPENTADIENE	ND	ND	ND	ND
HEXACHLOROETHANE	ND	ND	ND	ND
INDENO(1,2,3-C,D)PYRENE	ND	ND	ND	ND
ISOPHORONE	ND	ND	ND	ND
NAPHTHALENE	ND	ND	ND	ND
NITROBENZENE	ND	ND	ND	ND
N-NITROSODIMETHYLAMINE	ND	ND	ND	ND
N-NITROSODI-N-PROPYLAMINE	ND	ND	ND	ND
N-NITROSODIPHENYLAMINE	ND	ND	ND	ND
PHENANTHRENE	ND	ND	ND	ND
PYRENE	ND	ND	ND	ND
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND

	SD-01	SD-02
	FEB-02-1983	FEB-01-1983
SAMPLER:	MEAD	MEAD
SAMPLE NO.:	S00100	S00207
SAMPLE SOURCE:	SD	SD

BASE NEUTRALS UNITS: PPB

ACENAPHTHENE	ND	ND
ACENAPHTHYLENE	ND	ND
ANTHRACENE	240.	4700.
BENZIDINE	ND	ND
BENZO(A)ANTHRACENE	550.	440.
BENZO(A)PYRENE	500.	250.
3,4-BENZOFLUORANTHENE	1100.	890.
BENZO(G,H,I)PERYLENE	430.	ND
BENZO(K)FLUORANTHENE	1100.	890.
BIS(2-CHLOROETHOXY)METHANE	ND	ND
BIS(2-CHLOROETHYL) ETHER	ND	ND
BIS(2-CHLOROISOPROPYL) ETHER	ND	ND
BIS(2-ETHYLHEXYL) PHTHALATE	210.	ND
4-BROMOPHENYL PHENYL ETHER	ND	ND
BUTYL BENZYL PHTHALATE	ND	ND
2-CHLORONAPHTHALENE	ND	ND
4-CHLOROPHENYL PHENYL ETHER	ND	ND
CHRYSENE	550.	530.
DIBENZO(A,H)ANTHRACENE	ND	ND
1,2-DICHLOROBENZENE	ND	ND
1,3-DICHLOROBENZENE	ND	ND
1,4-DICHLOROBENZENE	ND	ND
3,3'-DICHLOROBENZIDINE	ND	ND
DIETHYL PHTHALATE	ND	ND
DIMETHYL PHTHALATE	ND	ND
DI-N-BUTYL PHTHALATE	ND	ND
2,4-DINITROTOLUENE	ND	ND
2,6-DINITROTOLUENE	ND	ND
DI-N-OCTYL PHTHALATE	ND	ND
1,2-DIPHENYLHYDRAZINE	ND	ND
FLUORANTHENE	1100.	750.
FLUORENE	ND	360.
HEXACHLOROBENZENE	ND	ND
HEXACHLOROBUTADIENE	ND	ND
HEXACHLOROCYCLOPENTADIENE	ND	ND
HEXACHLOROETHANE	ND	ND
INDENO(1,2,3-C,D)PYRENE	320.	ND
ISOPHORONE	ND	ND
NAPHTHALENE	ND	ND
NITROBENZENE	ND	ND
N-NITROSODIMETHYLAMINE	ND	ND
N-NITROSODI-N-PROPYLAMINE	ND	ND
N-NITROSODIPHENYLAMINE	ND	ND
PHENANTHRENE	650.	ND
PYRENE	850.	690.
1,2,4-TRICHLOROBENZENE	ND	ND

A.

000282

WATER/SOIL QUALITY DATA

	SD-03	SD-04	SD-05
	FEB-02-1983	FEB-02-1983	FEB-01-1983
SAMPLER:	HEAD	HEAD	HEAD
SAMPLE NO.:	SD0310	SD0411	SD0506
SAMPLE SOURCE:	SD	SD	SD

BASE NEUTRALS UNITS: PPB

ACENAPHTHENE	ND	580.	ND
ACENAPHTHYLENE	ND	ND	ND
ANTHRACENE	1600.	2100.	ND
BENZIDINE	ND	ND	ND
BENZO(A)ANTHRACENE	620.	19000.	ND
BENZO(A)PYRENE	600.	5400.	ND
3,4-BENZOFLUORANTHENE	1300.	4800.	ND
BENZO(G,H,I)PERYLENE	520.	ND	ND
BENZO(K)FLUORANTHENE	1300.	2900.	ND
BIS(2-CHLOROETHOXY)METHANE	ND	ND	ND
BIS(2-CHLOROETHYL) ETHER	ND	ND	ND
BIS(2-CHLOROISOPROPYL) ETHER	ND	ND	ND
BIS(2-ETHYLHEXYL) PHTHALATE	ND	ND	ND
4-BROMOPHENYL PHENYL ETHER	ND	ND	ND
BUTYL BENZYL PHTHALATE	ND	ND	ND
2-CHLORONAPHTHALENE	ND	ND	ND
4-CHLOROPHENYL PHENYL ETHER	ND	ND	ND
CHRYSENE	680.	14000.	ND
DIBENZO(A,H)ANTHRACENE	ND	ND	ND
1,2-DICHLOROBENZENE	ND	ND	ND
1,3-DICHLOROBENZENE	ND	ND	ND
1,4-DICHLOROBENZENE	ND	ND	ND
3,3'-DICHLOROBENZIDINE	ND	ND	ND
DIETHYL PHTHALATE	ND	ND	ND
DIMETHYL PHTHALATE	ND	ND	ND
DI-N-BUTYL PHTHALATE	ND	ND	ND
2,4-DINITROTOLUENE	ND	ND	ND
2,6-DINITROTOLUENE	ND	ND	ND
DI-N-OCTYL PHTHALATE	ND	ND	ND
1,2-DIPHENYLHYDRAZINE	ND	ND	ND
FLUORANTHENE	1200.	25000.	320.
FLUORENE	ND	520.	ND
HEXACHLOROBENZENE	ND	ND	ND
HEXACHLOROBUTADIENE	ND	ND	ND
HEXACHLOROCYCLOPENTADIENE	ND	ND	ND
HEXACHLOROETHANE	ND	ND	ND
INDENO(1,2,3-C,D)PYRENE	600.	ND	ND
ISOPHORONE	ND	ND	ND
NAPHTHALENE	ND	ND	ND
NITROBENZENE	ND	ND	ND
N-NITROSODIMETHYLAMINE	ND	ND	ND
N-NITROSODI-N-PROPYLAMINE	ND	ND	ND
N-NITROSODIPHENYLAMINE	ND	ND	ND
PHENANTHRENE	860.	14000.	ND
PYRENE	1100.	22000.	260.
1,2,4-TRICHLOROBENZENE	ND	ND	ND

000283

WATER/SOIL QUALITY DATA

	SL-01	SL-02	SL-03	SL-03	SL-03
	FEB-01-1983	FEB-01-1983	FEB-03-1983	FEB-03-1983	FEB-03-1983
SAMPLER:	MEAD	MEAD	MEAD	MEAD	MEAD
SAMPLE NO.:	SL0101	SL0202	SL0302	SL0303	SL0301
SAMPLE SOURCE:	SL	SL	SL	SL	SL
BASE NEUTRALS UNITS: PPB					
ACENAPHTHENE	ND	ND	ND	ND	780.
ACENAPHTHYLENE	ND	ND	280.	ND	2400.
ANTHRACENE	ND	ND	1000.	ND	12000.
BENZIDINE	ND	ND	ND	ND	ND
BENZO(A)ANTHRACENE	200.	ND	5600.	ND	32000.
BENZO(A)PYRENE	ND	ND	2000.	ND	21000.
3,4-BENZOFLUORANTHENE	260.	ND	6800.	ND	46000.
BENZO(G,H,I)PERYLENE	ND	ND	1600.	ND	7200.
BENZO(K)FLUORANTHENE	260.	ND	6800.	ND	46000.
BIS(2-CHLOROETHOXY)METHANE	ND	ND	ND	ND	ND
BIS(2-CHLOROETHYL) ETHER	ND	ND	ND	ND	ND
BIS(2-CHLOROISOPROPYL) ETHER	ND	ND	ND	ND	ND
BIS(2-ETHYLHEXYL) PHTHALATE	ND	ND	ND	ND	ND
4-BROMOPHENYL PHENYL ETHER	ND	ND	ND	ND	ND
BUTYL BENZYL PHTHALATE	ND	ND	ND	ND	ND
2-CHLORONAPHTHALENE	ND	ND	ND	ND	ND
4-CHLOROPHENYL PHENYL ETHER	ND	ND	ND	ND	ND
CHRYSENE	200.	ND	4600.	ND	42000.
DIBENZO(A,H)ANTHRACENE	ND	ND	ND	ND	ND
1,2-DICHLOROBENZENE	ND	ND	ND	ND	ND
1,3-DICHLOROBENZENE	ND	ND	ND	ND	ND
1,4-DICHLOROBENZENE	ND	ND	ND	ND	ND
3,3'-DICHLOROBENZIDINE	ND	ND	ND	ND	ND
DIETHYL PHTHALATE	ND	ND	ND	ND	ND
DIMETHYL PHTHALATE	ND	ND	ND	ND	ND
DI-N-BUTYL PHTHALATE	ND	ND	ND	ND	ND
2,4-DINITROTOLUENE	ND	ND	ND	ND	ND
2,6-DINITROTOLUENE	ND	ND	ND	ND	ND
DI-N-OCTYL PHTHALATE	ND	11.	ND	ND	ND
1,2-DIPHENYLHYDRAZINE	ND	ND	ND	ND	ND
FLUORANTHENE	ND	ND	24000.	ND	120000.
FLUORENE	ND	ND	ND	ND	980.
HEXACHLOROBENZENE	ND	ND	ND	ND	ND
HEXACHLOROBUTADIENE	ND	ND	ND	ND	ND
HEXACHLOROCYCLOPENTADIENE	ND	ND	ND	ND	ND
HEXACHLOROETHANE	ND	ND	ND	ND	ND
INDENO(1,2,3-C,D)PYRENE	ND	ND	1800.	ND	7200.
ISOPHORONE	ND	ND	ND	ND	ND
NAPHTHALENE	ND	ND	ND	ND	1000.
NITROBENZENE	ND	ND	ND	ND	ND
N-NITROSODIMETHYLAMINE	ND	ND	ND	ND	ND
N-NITROSODI-N-PROPYLAMINE	ND	ND	ND	ND	ND
N-NITROSODIPHENYLAMINE	ND	ND	ND	ND	ND
PHENANTHRENE	ND	ND	5800.	ND	20000.
PYRENE	10.	ND	20000.	ND	110000.
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND	ND

WATER/SOIL QUALITY DATA

ALL RESULTS FOR THIS PAGE ARE FOR LOCATION SL-04

	FEB-04-1983	FEB-04-1983	FEB-04-1983	FEB-04-1983
SAMPLER:	MEAD	MEAD	MEAD	MEAD
SAMPLE NO.:	SL0403	SL0404	SL0402	SL0401
SAMPLE SOURCE:	SL	SL	SL	SL

BASE NEUTRALS UNITS: PPB

ACENAPHTHENE	80000.	510.	360000.	100000.
ACENAPHTHYLENE	3200.	ND	ND	3000.
ANTHRACENE	48000.	590.	520000.	240000.
BENZIDINE	ND	ND	ND	ND
BENZO(A)ANTHRACENE	28000.	320.	27000.	17000.
BENZO(A)PYRENE	32000.	460.	7600.	4600.
3,4-BENZOFLUORANTHENE	7200.	340.	16000.	10000.
BENZO(G,H,I)PERYLENE	2200.	ND	ND	ND
BENZO(K)FLUORANTHENE	7200.	340.	16000.	10000.
BIS(2-CHLOROETHOXY)METHANE	ND	ND	ND	ND
BIS(2-CHLOROETHYL) ETHER	ND	ND	ND	ND
BIS(2-CHLOROISOPROPYL) ETHER	ND	ND	ND	ND
BIS(2-ETHYLHEXYL) PHTHALATE	ND	ND	ND	ND
4-BROMOPHENYL PHENYL ETHER	ND	ND	ND	ND
BUTYL BENZYL PHTHALATE	ND	ND	ND	ND
2-CHLORONAPHTHALENE	ND	ND	ND	ND
4-CHLOROPHENYL PHENYL ETHER	ND	ND	ND	ND
CHRYSENE	36000.	320.	20000.	11000.
DIBENZO(A,H)ANTHRACENE	5000.	ND	ND	ND
1,2-DICHLOROBENZENE	ND	ND	ND	ND
1,3-DICHLOROBENZENE	ND	ND	ND	ND
1,4-DICHLOROBENZENE	ND	ND	ND	ND
3,3'-DICHLOROBENZIDINE	ND	ND	ND	ND
DIETHYL PHTHALATE	ND	ND	ND	ND
DIMETHYL PHTHALATE	ND	ND	ND	ND
DI-N-BUTYL PHTHALATE	ND	ND	ND	ND
2,4-DINITROTOLUENE	ND	ND	ND	ND
2,6-DINITROTOLUENE	ND	ND	ND	ND
DI-N-OCTYL PHTHALATE	ND	ND	ND	ND
1,2-DIPHENYLHYDRAZINE	ND	ND	ND	ND
FLUORANTHENE	120000.	2000.	440000.	260000.
FLUORENE	64000.	340.	110000.	80000.
HEXACHLOROBENZENE	ND	ND	ND	ND
HEXACHLOROBUTADIENE	ND	ND	ND	ND
HEXACHLOROCYCLOPENTADIENE	ND	ND	ND	ND
HEXACHLOROETHANE	ND	ND	ND	ND
INDENO(1,2,3-C,D)PYRENE	2200.	ND	ND	ND
ISOPHORONE	ND	ND	ND	ND
NAPHTHALENE	200000.	ND	640000.	340000.
NITROBENZENE	ND	ND	ND	ND
N-NITROSODIMETHYLAMINE	ND	ND	ND	ND
N-NITROSODI-N-PROPYLAMINE	ND	ND	ND	ND
N-NITROSODIPHENYLAMINE	ND	ND	ND	ND
PHENANTHRENE	180000.	4400.	1100000.	240000.
PYRENE	88000.	1400.	280000.	170000.
1,2,4-TRICHLOROBENZENE	ND	ND	ND	ND

000285

WATER/SOIL QUALITY DATA

ALL RESULTS FOR THIS PAGE ARE FOR LOCATION SL-05

	FEB-02-1983	FEB-02-1983	FEB-02-1983
SAMPLER:	HEAD	HEAD	HEAD
SAMPLE NO.:	SL0501	SL0502	SL0503
SAMPLE SOURCE:	SL	SL	SL

BASE NEUTRALS UNITS: PPB

ACENAPHTHENE	ND	--	ND
ACENAPHTHYLENE	ND	--	ND
ANTHRACENE	5000.	--	ND
BENZIDINE	ND	--	ND
BENZO(A)ANTHRACENE	17000.	--	ND
BENZO(A)PYRENE	11000.	--	ND
3,4-BENZOFLUORANTHENE	25000.	--	240.
BENZO(G,H,I)PERYLENE	ND	--	ND
BENZO(K)FLUORANTHENE	25000.	--	240.
BIS(2-CHLOROETHOXY)METHANE	ND	--	ND
BIS(2-CHLOROETHYL) ETHER	ND	--	ND
BIS(2-CHLOROISOPROPYL) ETHER	ND	--	ND
BIS(2-ETHYLHEXYL) PHTHALATE	310.	--	ND
4-BROMOPHENYL PHENYL ETHER	ND	--	ND
BUTYL BENZYL PHTHALATE	ND	--	ND
2-CHLORONAPHTHALENE	ND	--	ND
4-CHLOROPHENYL PHENYL ETHER	ND	--	ND
CHRYSENE	17000.	--	ND
DIBENZO(A,H)ANTHRACENE	1000.	--	ND
1,2-DICHLOROBENZENE	ND	--	ND
1,3-DICHLOROBENZENE	ND	--	ND
1,4-DICHLOROBENZENE	ND	--	ND
3,3'-DICHLOROBENZIDINE	ND	--	ND
DIETHYL PHTHALATE	ND	--	ND
DIMETHYL PHTHALATE	ND	--	ND
DI-N-BUTYL PHTHALATE	400.	--	ND
2,4-DINITROTOLUENE	ND	--	ND
2,6-DINITROTOLUENE	ND	--	ND
DI-N-OCTYL PHTHALATE	420.	--	ND
1,2-DIPHENYLHYDRAZINE	ND	--	ND
FLUORANTHENE	9300.	--	ND
FLUORENE	240.	--	ND
HEXACHLOROBENZENE	ND	--	ND
HEXACHLOROBUTADIENE	ND	--	ND
HEXACHLOROCYCLOPENTADIENE	ND	--	ND
HEXACHLOROETHANE	ND	--	ND
INDENO(1,2,3-C,D)PYRENE	ND	--	ND
ISOPHORONE	ND	--	ND
NAPHTHALENE	ND	--	ND
NITROBENZENE	ND	--	ND
N-NITROSODIMETHYLAMINE	ND	--	ND
N-NITROSODI-N-PROPYLAMINE	ND	--	ND
N-NITROSODIPHENYLAMINE	ND	--	ND
PHENANTHRENE	ND	--	ND
PYRENE	ND	--	ND
1,2,4-TRICHLOROBENZENE	110000.	--	ND

000286

ALL RESULTS FOR THIS PAGE ARE FOR LOCATION SL-05

	FEB-02-1983	FEB-02-1983	FEB-02-1983
SAMPLER:	HEAD	HEAD	HEAD
SAMPLE NO.:	SL0501	SL0504	SL0505
SAMPLE SOURCE:	SL	SL	SL

BASE NEUTRALS UNITS: PPB

ACENAPHTHENE	ND	22000.	ND
ACENAPHTHYLENE	ND	360.	ND
ANTHRACENE	5000.	ND	ND
BENZIDINE	ND	ND	ND
BENZO(A)ANTHRACENE	17000.	2400.	ND
BENZO(A)PYRENE	11000.	ND	ND
3,4-BENZOFLUORANTHENE	25000.	2200.	ND
BENZO(G,H,I)PERYLENE	ND	ND	ND
BENZO(K)FLUORANTHENE	25000.	2200.	ND
BIS(2-CHLOROETHOXY)METHANE	ND	ND	ND
BIS(2-CHLOROETHYL) ETHER	ND	ND	ND
BIS(2-CHLOROISOPROPYL) ETHER	ND	ND	ND
BIS(2-ETHYLHEXYL) PHTHALATE	310.	ND	ND
4-BROMOPHENYL PHENYL ETHER	ND	ND	ND
BUTYL BENZYL PHTHALATE	ND	ND	ND
2-CHLORONAPHTHALENE	ND	ND	ND
4-CHLOROPHENYL PHENYL ETHER	ND	ND	ND
CHRYSENE	17000.	1700.	ND
DIBENZO(A,H)ANTHRACENE	1000.	ND	ND
1,2-DICHLOROBENZENE	ND	ND	ND
1,3-DICHLOROBENZENE	ND	ND	ND
1,4-DICHLOROBENZENE	ND	ND	ND
3,3'-DICHLOROBENZIDINE	ND	ND	ND
DIETHYL PHTHALATE	ND	ND	ND
DIMETHYL PHTHALATE	ND	ND	ND
DI-N-BUTYL PHTHALATE	400.	14000.	ND
2,4-DINITROTOLUENE	ND	ND	ND
2,6-DINITROTOLUENE	ND	ND	ND
DI-N-OCTYL PHTHALATE	420.	ND	ND
1,2-DIPHENYLHYDRAZINE	ND	ND	ND
FLUORANTHENE	9300.	24000.	ND
FLUORENE	240.	18000.	ND
HEXACHLOROBENZENE	ND	ND	ND
HEXACHLOROBUTADIENE	ND	ND	ND
HEXACHLOROCYCLOPENTADIENE	ND	ND	ND
HEXACHLOROETHANE	ND	ND	ND
INDENO(1,2,3-C,D)PYRENE	ND	ND	ND
ISOPHORONE	ND	ND	ND
NAPHTHALENE	ND	30000.	ND
NITROBENZENE	ND	ND	ND
N-NITROSODIMETHYLAMINE	ND	ND	ND
N-NITROSODI-N-PROPYLAMINE	ND	ND	ND
N-NITROSODIPHENYLAMINE	ND	ND	ND
PHENANTHRENE	ND	54000.	ND
PYRENE	ND	18000.	ND
1,2,4-TRICHLOROBENZENE	110000.	ND	ND

000287

WATER/SOIL QUALITY DATA

	SL-06	SL-06	SL-07
	FEB-01-1983	FEB-01-1983	FEB-01-1983
SAMPLER:	MEAD	MEAD	MEAD
SAMPLE NO.:	SL0605	SL0604	SL0703
SAMPLE SOURCE:	SL	SL	SL

BASE NEUTRALS UNITS: PPB

ACENAPHTHENE	ND	17000.	16000.
ACENAPHTHYLENE	ND	ND	ND
ANTHRACENE	ND	ND	ND
BENZIDINE	ND	ND	ND
BENZO(A)ANTHRACENE	ND	4000.	8600.
BENZO(A)PYRENE	ND	ND	2200.
3,4-BENZOFLUORANTHENE	ND	ND	8600.
BENZO(G,H,I)PERYLENE	ND	ND	ND
BENZO(K)FLUORANTHENE	ND	ND	8600.
BIS(2-CHLOROETHOXY)METHANE	ND	ND	ND
BIS(2-CHLOROETHYL) ETHER	ND	ND	ND
BIS(2-CHLOROISOPROPYL) ETHER	ND	ND	ND
BIS(2-ETHYLHEXYL) PHTHALATE	ND	ND	ND
4-BROMOPHENYL PHENYL ETHER	ND	ND	ND
BUTYL BENZYL PHTHALATE	ND	ND	ND
2-CHLORONAPHTHALENE	ND	ND	ND
4-CHLOROPHENYL PHENYL ETHER	ND	ND	ND
CHRYSENE	ND	ND	7800.
DIBENZO(A,H)ANTHRACENE	ND	ND	ND
1,2-DICHLOROBENZENE	ND	ND	ND
1,3-DICHLOROBENZENE	ND	ND	ND
1,4-DICHLOROBENZENE	ND	ND	ND
3,3'-DICHLOROBENZIDINE	ND	ND	ND
DIETHYL PHTHALATE	ND	ND	ND
DIMETHYL PHTHALATE	ND	ND	ND
DI-N-BUTYL PHTHALATE	ND	ND	ND
2,4-DINITROTOLUENE	ND	ND	ND
2,6-DINITROTOLUENE	ND	ND	ND
DI-N-OCTYL PHTHALATE	ND	ND	ND
1,2-DIPHENYLHYDRAZINE	ND	ND	ND
FLUORANTHENE	ND	40000.	130000.
FLUORENE	ND	17000.	16000.
HEXACHLOROBENZENE	ND	ND	ND
HEXACHLOROBUTADIENE	ND	ND	ND
HEXACHLOROCYCLOPENTADIENE	ND	ND	ND
HEXACHLOROETHANE	ND	ND	ND
INDENO(1,2,3-C,D)PYRENE	ND	ND	ND
ISOPHORONE	ND	ND	ND
NAPHTHALENE	ND	27000.	33000.
NITROBENZENE	ND	ND	ND
N-NITROSODIMETHYLAMINE	ND	ND	ND
N-NITROSODI-N-PROPYLAMINE	ND	ND	ND
N-NITROSODIPHENYLAMINE	ND	ND	ND
PHENANTHRENE	ND	56000.	54000.
PYRENE	ND	23000.	44000.
1,2,4-TRICHLOROBENZENE	ND	ND	ND

000288

WATER/SOIL QUALITY DATA

	SW-01	SW-02
	FEB-02-1983	FEB-02-1983
SAMPLER:	MEAD	MEAD
SAMPLE NO.:	SW0112	SW0212
SAMPLE SOURCE:	SW	SW

BASE NEUTRALS UNITS: PPB

ACENAPHTHENE	ND	ND
ACENAPHTHYLENE	ND	ND
ANTHRACENE	ND	ND
BENZIDINE	ND	ND
BENZO(A)ANTHRACENE	ND	10.
BENZO(A)PYRENE	ND	10.
3,4-BENZOFLUORANTHENE	ND	21.
BENZO(G,H,I)PERYLENE	ND	ND
BENZO(K)FLUORANTHENE	ND	21.
BIS(2-CHLOROETHOXY)METHANE	ND	ND
BIS(2-CHLOROETHYL) ETHER	ND	ND
BIS(2-CHLOROISOPROPYL) ETHER	ND	ND
BIS(2-ETHYLHEXYL) PHTHALATE	ND	ND
4-BROMOPHENYL PHENYL ETHER	ND	ND
BUTYL BENZYL PHTHALATE	ND	ND
2-CHLORONAPHTHALENE	ND	ND
4-CHLOROPHENYL PHENYL ETHER	ND	ND
CHRYSENE	ND	12.
DIBENZO(A,H)ANTHRACENE	ND	ND
1,2-DICHLOROBENZENE	ND	ND
1,3-DICHLOROBENZENE	ND	ND
1,4-DICHLOROBENZENE	ND	ND
3,3'-DICHLOROBENZIDINE	ND	ND
DIETHYL PHTHALATE	ND	ND
DIMETHYL PHTHALATE	ND	ND
DI-N-BUTYL PHTHALATE	ND	16.
2,4-DINITROTOLUENE	ND	ND
2,6-DINITROTOLUENE	ND	ND
DI-N-OCTYL PHTHALATE	ND	ND
1,2-DIPHENYLHYDRAZINE	ND	ND
FLUORANTHENE	ND	17.
FLUORENE	ND	ND
HEXACHLOROBENZENE	ND	ND
HEXACHLOROBUTADIENE	ND	ND
HEXACHLOROCYCLOPENTADIENE	ND	ND
HEXACHLOROETHANE	ND	ND
INDENO(1,2,3-C,D)PYRENE	ND	ND
ISOPHORONE	ND	ND
NAPHTHALENE	ND	ND
NITROBENZENE	ND	ND
N-NITROSODIMETHYLAMINE	ND	ND
N-NITROSODI-N-PROPYLAMINE	ND	ND
N-NITROSODIPHENYLAMINE	ND	ND
PHENANTHRENE	ND	ND
PYRENE	ND	14.
1,2,4-TRICHLOROBENZENE	ND	ND

000289

WATER/SOIL QUALITY DATA

	DW-01	DW-02	DW-03	DW-04	DW-05
	FEB-08-1983	FEB-08-1983	FEB-08-1983	FEB-08-1983	FEB-08-1983
SAMPLER:	MEAD	MEAD	MEAD	MEAD	MEAD
SAMPLE NO.:	DW0105	DW0204	DW0303	DW0401	DW0502
SAMPLE SOURCE:	DW	DW	DW	DW	DW
PESTICIDES, PCB'S & DIOXINS UNITS:PPB					
ALDRIN	ND	ND	ND	ND	ND
ALPHA-BHC	ND	ND	ND	ND	ND
BETA-BHC	ND	ND	ND	ND	ND
GAMMA-BHC	ND	ND	ND	ND	ND
DELTA-BHC	ND	ND	ND	ND	ND
CHLORDANE	ND	ND	ND	ND	ND
4,4'-DDT	ND	ND	ND	ND	ND
4,4'-DDE	ND	ND	ND	ND	ND
4,4'-DDD	ND	ND	ND	ND	ND
DIELDRIN	ND	ND	ND	ND	ND
ALPHA-ENDOSULFAN	ND	ND	ND	ND	ND
BETA-ENDOSULFAN	ND	ND	ND	ND	ND
ENDOSULFAN SULFATE	ND	ND	ND	ND	ND
ENDRIN	ND	ND	ND	ND	ND
ENDRIN ALDEHYDE	ND	ND	ND	ND	ND
HEPTACHLOR	ND	ND	ND	ND	ND
HEPTACHLOR EPOXIDE	ND	ND	ND	ND	ND
PCB-1242	ND	ND	ND	ND	ND
PCB-1254	ND	ND	ND	ND	ND
PCB-1221	ND	ND	ND	ND	ND
PCB-1232	ND	ND	ND	ND	ND
PCB-1248	ND	ND	ND	ND	ND
PCB-1260	ND	ND	ND	ND	ND
PCB-1016	ND	ND	ND	ND	ND
TOXAPHENE	ND	ND	ND	ND	ND
TETRACHLORODIBENZO-P-DIOXIN	ND	ND	ND	ND	--

ALL RESULTS FOR THIS PAGE ARE FOR LOCATION 06-06

	FEB-08-1983	MAY-11-1983	MAY-11-1983	MAY-26-1983
SAMPLER:	MEAD	CDM	CDM	CDM
SAMPLE NO.:	0H0603	0H0611	0H0619	0H0601
SAMPLE SOURCE:	OW	OW	OW	OW
PESTICIDES, PCB'S & DIOXINS UNITS:PPB				
ALDRIN	--	ND	ND	ND
ALPHA-BHC	--	ND	ND	ND
BETA-BHC	--	ND	ND	ND
GAMMA-BHC	--	ND	ND	ND
DELTA-BHC	--	ND	ND	ND
CHLORDANE	--	ND	ND	ND
4,4'-DDT	--	ND	ND	ND
4,4'-DDE	--	ND	ND	ND
4,4'-DDD	--	ND	ND	ND
DIELDRIN	--	ND	ND	ND
ALPHA-ENDOSULFAN	--	ND	ND	ND
BETA-ENDOSULFAN	--	ND	ND	ND
ENDOSULFAN SULFATE	--	ND	ND	ND
ENDRIN	--	ND	ND	ND
ENDRIN ALDEHYDE	--	ND	ND	ND
HEPTACHLOR	--	ND	ND	ND
HEPTACHLOR EPOXIDE	--	ND	ND	ND
PCB-1242	--	ND	ND	ND
PCB-1254	--	ND	ND	ND
PCB-1221	--	ND	ND	ND
PCB-1232	--	ND	ND	ND
PCB-1248	--	ND	ND	ND
PCB-1260	--	ND	ND	ND
PCB-1016	--	ND	ND	ND
TOXAPHENE	--	ND	ND	ND
TETRACHLORODIBENZO-P-DIOXIN	--	--	--	--

000291

	PW-01	PW-02	PW-03	PW-04
	FEB-23-1983	FEB-23-1983	FEB-23-1983	FEB-23-1983
SAMPLER:	MEAD	MEAD	MEAD	MEAD
SAMPLE NO.:	PW0101	PW0202	PW0303	PW0404
SAMPLE SOURCE:	PW	PW	PW	PW

PESTICIDES, PCB'S & DIOXINS UNITS:PPB

ALDRIN	ND	ND	ND	ND
ALPHA-BHC	ND	ND	ND	ND
BETA-BHC	ND	ND	ND	ND
GAMMA-BHC	ND	ND	ND	ND
DELTA-BHC	ND	ND	ND	ND
CHLORDANE	ND	ND	ND	ND
4,4'-DDT	ND	ND	ND	ND
4,4'-DDE	ND	ND	ND	ND
4,4'-DDD	ND	ND	ND	ND
DIELDRIN	ND	ND	ND	ND
ALPHA-ENDOSULFAN	ND	ND	ND	ND
BETA-ENDOSULFAN	ND	ND	ND	ND
ENDOSULFAN SULFATE	ND	ND	ND	ND
ENDRIN	ND	ND	ND	ND
ENDRIN ALDEHYDE	ND	ND	ND	ND
HEPTACHLOR	ND	ND	ND	ND
HEPTACHLOR EPOXIDE	ND	ND	ND	ND
PCB-1242	ND	ND	ND	ND
PCB-1254	ND	ND	ND	ND
PCB-1221	ND	ND	ND	ND
PCB-1232	ND	ND	ND	ND
PCB-1248	ND	ND	ND	ND
PCB-1260	ND	ND	ND	ND
PCB-1016	ND	ND	ND	ND
TOXAPHENE	ND	ND	ND	ND
TETRACHLORODIBENZO-P-DIOXIN	--	--	--	--

000292

WATER/SOIL QUALITY DATA

	SD-01	SD-02
	FEB-02-1993	FEB-01-1993
SAMPLER:	MEAD	MEAD
SAMPLE NO.:	SD0109	SD0207
SAMPLE SOURCE:	SD	SD

PESTICIDES, PCB'S & DIOXINS UNITS:PPB

ALDRIN	ND	ND
ALPHA-BHC	ND	ND
BETA-BHC	ND	ND
GAMMA-BHC	ND	ND
DELTA-BHC	ND	ND
CHLORDANE	ND	ND
4,4'-DDT	ND	ND
4,4'-DDE	ND	ND
4,4'-DDD	ND	ND
DIELDRIN	ND	ND
ALPHA-ENDOSULFAN	ND	ND
BETA-ENDOSULFAN	ND	ND
ENDOSULFAN SULFATE	ND	ND
ENDRIN	ND	ND
ENDRIN ALDEHYDE	ND	ND
HEPTACHLOR	ND	ND
HEPTACHLOR EPOXIDE	ND	ND
PCB-1242	ND	ND
PCB-1254	ND	ND
PCB-1221	ND	ND
PCB-1232	ND	ND
PCB-1248	ND	ND
PCB-1260	ND	ND
PCB-1016	ND	ND
TOXAPHENE	ND	ND
TETRACHLORODIBENZO-P-DIOXIN	ND	ND

WATER/SOIL QUALITY DATA

	SD-03	SD-04	SD-05
	FEB-02-1983	FEB-02-1983	FEB-01-1983
SAMPLER:	MEAD	MEAD	MEAD
SAMPLE NO.:	SD0310	SD0411	SD0506
SAMPLE SOURCE:	SD	SD	SD
PESTICIDES, PCB'S & DIOXINS UNITS:PPB			
ALDRIN	ND	ND	ND
ALPHA-BHC	ND	ND	ND
BETA-BHC	ND	ND	ND
GAMMA-BHC	ND	ND	ND
DELTA-BHC	ND	ND	ND
CHLORDANE	ND	ND	ND
4,4'-DDT	ND	ND	ND
4,4'-DDE	ND	ND	ND
4,4'-DDD	ND	ND	ND
DIELDRIN	ND	ND	ND
ALPHA-ENDOSULFAN	ND	ND	ND
BETA-ENDOSULFAN	ND	ND	ND
ENDOSULFAN SULFATE	ND	ND	ND
ENDRIN	ND	ND	ND
ENDRIN ALDEHYDE	ND	ND	ND
HEPTACHLOR	ND	ND	ND
HEPTACHLOR EPOXIDE	ND	ND	ND
PCB-1242	ND	ND	ND
PCB-1254	ND	ND	ND
PCB-1221	ND	ND	ND
PCB-1232	ND	ND	ND
PCB-1248	ND	ND	ND
PCB-1260	ND	ND	ND
PCB-1016	ND	ND	ND
TOXAPHENE	ND	ND	ND
TETRACHLORODIBENZO-P-DIOXIN	ND	ND	ND

000294

WATER/SOIL QUALITY DATA

	SL-01	SL-02	SL-03	SL-03	SL-03
	FEB-01-1983	FEB-01-1983	FEB-03-1983	FEB-03-1983	FEB-03-1983
SAMPLER:	MEAD	MEAD	MEAD	MEAD	MEAD
SAMPLE NO.:	SL0101	SL0202	SL0302	SL0303	SL0301
SAMPLE SOURCE:	SL	SL	SL	SL	SL
PESTICIDES, PCB'S & DIOXINS UNITS:PPB					
ALDRIN	ND	ND	ND	ND	ND
ALPHA-BHC	ND	ND	ND	ND	ND
BETA-BHC	ND	ND	ND	ND	ND
GAMMA-BHC	ND	ND	ND	ND	ND
DELTA-BHC	ND	ND	ND	ND	ND
CHLORDANE	ND	ND	ND	ND	ND
4,4'-DDT	ND	ND	ND	ND	ND
4,4'-DDE	ND	ND	ND	ND	ND
4,4'-DDD	ND	ND	ND	ND	ND
DIELDRIN	ND	ND	ND	ND	ND
ALPHA-ENDOSULFAN	ND	ND	ND	ND	ND
BETA-ENDOSULFAN	ND	ND	ND	ND	ND
ENDOSULFAN SULFATE	ND	ND	ND	ND	ND
ENDRIN	ND	ND	ND	ND	ND
ENDRIN ALDEHYDE	ND	ND	ND	ND	ND
HEPTACHLOR	ND	ND	ND	ND	ND
HEPTACHLOR EPOXIDE	ND	ND	ND	ND	ND
PCB-1242	ND	ND	ND	ND	ND
PCB-1254	ND	ND	ND	ND	ND
PCB-1221	ND	ND	ND	ND	ND
PCB-1232	ND	ND	ND	ND	ND
PCB-1248	ND	ND	ND	ND	ND
PCB-1260	ND	ND	ND	ND	ND
PCB-1016	ND	ND	ND	ND	ND
TOXAPHENE	ND	ND	ND	ND	ND
TETRACHLORODIBENZO-P-DIOXIN	ND	ND	ND	ND	ND

000295

DRAFT DRAFT

WATER/SOIL QUALITY DATA

ALL RESULTS FOR THIS PAGE ARE FOR LOCATION SL-04

	FEB-04-1983	FEB-04-1983	FEB-04-1983	FEB-04-1983
SAMPLER:	MEAD	MEAD	MEAD	MEAD
SAMPLE NO.:	SL0403	SL0404	SL0402	SL0401
SAMPLE SOURCE:	SL	SL	SL	SL

PESTICIDES, PCB'S & DIOXINS UNITS:PPB

ALDRIN	ND	ND	ND	ND
ALPHA-BHC	ND	ND	ND	ND
BETA-BHC	ND	ND	ND	ND
GAMMA-BHC	ND	ND	ND	ND
DELTA-BHC	ND	ND	ND	ND
CHLORDANE	ND	ND	ND	ND
4,4'-DDT	ND	ND	ND	ND
4,4'-DDE	ND	ND	ND	ND
4,4'-DDD	ND	ND	ND	ND
DIELDRIN	ND	ND	ND	ND
ALPHA-ENDOSULFAN	ND	ND	ND	ND
BETA-ENDOSULFAN	ND	ND	ND	ND
ENDOSULFAN SULFATE	ND	ND	ND	ND
ENDRIN	ND	ND	ND	ND
ENDRIN ALDEHYDE	ND	ND	ND	ND
HEPTACHLOR	ND	ND	ND	ND
HEPTACHLOR EPOXIDE	ND	ND	ND	ND
PCB-1242	ND	ND	ND	ND
PCB-1254	ND	ND	ND	ND
PCB-1221	ND	ND	ND	ND
PCB-1232	ND	ND	ND	ND
PCB-1248	ND	ND	ND	ND
PCB-1260	ND	ND	ND	ND
PCB-1016	ND	ND	ND	ND
TOXAPHENE	ND	ND	ND	ND
TETRACHLORODIBENZO-P-DIOXIN	ND	ND	ND	ND

WATER/SOIL QUALITY DATA

ALL RESULTS FOR THIS PAGE ARE FOR LOCATION SL-05

SAMPLED:	FEB-02-1983	FEB-02-1983	FEB-02-1983
	HEAD	HEAD	HEAD
SAMPLE NO.:	SL0501	SL0502	SL0503
SAMPLE SOURCE:	SL	SL	SL

PESTICIDES, PCB'S & DIOXINS UNITS:PPB

ALDRIN	ND	--	ND
ALPHA-BHC	ND	--	ND
BETA-BHC	ND	--	ND
GAMMA-BHC	ND	--	ND
DELTA-BHC	ND	--	ND
CHLORDANE	ND	--	ND
4,4'-DDT	ND	--	ND
4,4'-DDE	ND	--	ND
4,4'-DDD	ND	--	ND
DIELDRIN	ND	--	ND
ALPHA-ENDOSULFAN	ND	--	ND
BETA-ENDOSULFAN	ND	--	ND
ENDOSULFAN SULFATE	ND	--	ND
ENDRIN	ND	--	ND
ENDRIN ALDEHYDE	ND	--	ND
HEPTACHLOR	ND	--	ND
HEPTACHLOR EPOXIDE	ND	--	ND
PCB-1242	ND	--	ND
PCB-1254	ND	--	ND
PCB-1221	ND	--	ND
PCB-1232	ND	--	ND
PCB-1248	ND	--	ND
PCB-1260	2300.	--	ND
PCB-1016	ND	--	ND
TOXAPHENE	ND	--	ND
TETRACHLORODIBENZO-P-DIOXIN	ND	--	ND

NOTE -- INFO. FOR LOCATION SL-05 IS CONTINUED ON NEXT PAGE.

WATER/SOIL QUALITY DATA

ALL RESULTS FOR THIS PAGE ARE FOR LOCATION SL-05

	FEB-02-1983	FEB-02-1983	FEB-02-1983
SAMPLER:	MEAD	MEAD	MEAD
SAMPLE NO.:	SL0501	SL0504	SL0505
SAMPLE SOURCE:	SL	SL	SL

PESTICIDES, PCB'S & DIOXINS UNITS:PPB

ALDRIN	ND	ND	ND
ALPHA-BHC	ND	ND	ND
BETA-BHC	ND	ND	ND
GAMMA-BHC	ND	ND	ND
DELTA-BHC	ND	ND	ND
CHLORDANE	ND	ND	ND
4,4'-DDT	ND	ND	ND
4,4'-DDE	ND	ND	ND
4,4'-DDD	ND	ND	ND
DIELDRIN	ND	ND	ND
ALPHA-ENDOSULFAN	ND	ND	ND
BETA-ENDOSULFAN	ND	ND	ND
ENDOSULFAN SULFATE	ND	ND	ND
ENDRIN	ND	ND	ND
ENDRIN ALDEHYDE	ND	ND	ND
HEPTACHLOR	ND	ND	ND
HEPTACHLOR EPOXIDE	ND	ND	ND
PCB-1242	ND	ND	ND
PCB-1254	ND	ND	ND
PCB-1221	ND	ND	ND
PCB-1232	ND	ND	ND
PCB-1248	ND	ND	ND
PCB-1260	2300.	ND	ND
PCB-1016	ND	ND	ND
TOXAPHENE	ND	ND	ND
TETRACHLORODIBENZO-P-DIOXIN	ND	ND	ND

	SL-06	SL-06	SL-07
	FEB-01-1983	FEB-01-1983	FEB-01-1983
SAMPLER:	HEAD	HEAD	HEAD
SAMPLE NO.:	SL0605	SL0604	SL0703
SAMPLE SOURCE:	SL	SL	SL

PESTICIDES, PCB'S & DIOXINS UNITS:PPB

ALDRIN	ND	ND	ND
ALPHA-BHC	ND	ND	ND
BETA-BHC	ND	ND	ND
GAMMA-BHC	ND	ND	ND
DELTA-BHC	ND	ND	ND
CHLORDANE	ND	ND	ND
4,4'-DDT	ND	ND	ND
4,4'-DDE	ND	ND	ND
4,4'-DDD	ND	ND	ND
DIELDRIN	ND	ND	ND
ALPHA-ENDOSULFAN	ND	ND	ND
BETA-ENDOSULFAN	ND	ND	ND
ENDOSULFAN SULFATE	ND	ND	ND
ENDRIN	ND	ND	ND
ENDRIN ALDEHYDE	ND	ND	ND
HEPTACHLOR	ND	ND	ND
HEPTACHLOR EPOXIDE	ND	ND	ND
PCB-1242	ND	ND	ND
PCB-1254	ND	ND	ND
PCB-1221	ND	ND	ND
PCB-1232	ND	ND	ND
PCB-1248	ND	ND	ND
PCB-1260	ND	ND	ND
PCB-1016	ND	ND	ND
TOXAPHENE	ND	ND	ND
TETRACHLORODIBENZO-P-DIOXIN	ND	ND	ND

WATER/SOIL QUALITY DATA

	SW-01	SW-02
	FEB-02-1983	FEB-02-1983
SAMPLER:	MEAD	MEAD
SAMPLE NO.:	SW0112	SW0212
SAMPLE SOURCE:	SW	SW

PESTICIDES, PCB'S & DIOXINS UNITS:PPB

ALDRIN	ND	ND
ALPHA-BHC	ND	ND
BETA-BHC	ND	ND
GAMMA-BHC	ND	ND
DELTA-BHC	ND	ND
CHLORDANE	ND	ND
4,4'-DDT	ND	ND
4,4'-DDE	ND	ND
4,4'-DDD	ND	ND
DIELDRIN	ND	ND
ALPHA-ENDOSULFAN	ND	ND
BETA-ENDOSULFAN	ND	ND
ENDOSULFAN SULFATE	ND	ND
ENDRIN	ND	ND
ENDRIN ALDEHYDE	ND	ND
HEPTACHLOR	ND	ND
HEPTACHLOR EPOXIDE	ND	ND
PCB-1242	ND	ND
PCB-1254	ND	ND
PCB-1221	ND	ND
PCB-1232	ND	ND
PCB-1248	ND	ND
PCB-1260	ND	ND
PCB-1016	ND	ND
TOXAPHENE	ND	ND
TETRACHLORODIBENZO-P-DIOXIN	ND	ND

000300

WATER/SOIL QUALITY DATA

**** DRAFT ****

	OW-01	OW-02	OW-03	OW-04	OW-05
SAMPLE DATE:	FEB-08-1983	FEB-08-1983	FEB-08-1983	FEB-08-1983	FEB-08-1983
SAMPLER:	MEAD	MEAD	MEAD	MEAD	MEAD
SAMPLE NO.:	OW0105	OW0204	OW0303	OW0401	OW0502
SAMPLE SOURCE:	OW	OW	OW	OW	OW
METALS/INORGANICS UNITS: PPM					
ANTIMONY	ND	ND	ND	ND	ND
ARSENIC	ND	.130	ND	.050	ND
BERYLLIUM	ND	ND	ND	ND	ND
CADMIUM	ND	ND	.020	ND	.020
CHROMIUM	ND	ND	ND	ND	ND
COPPER	.060	ND	ND	ND	.050
LEAD	ND	ND	ND	ND	ND
MERCURY	ND	ND	ND	ND	ND
NICKEL	ND	ND	ND	ND	ND
SELENIUM	ND	ND	ND	ND	ND
SILVER	ND	ND	ND	ND	ND
THALLIUM	ND	ND	ND	ND	ND
ZINC	.120	.200	.450	.360	ND
TOTAL CYANIDES	.700	.010	.010	.050	ND

000301

WATER/SOIL QUALITY DATA

ALL RESULTS FOR THIS PAGE ARE FOR LOCATION DW-06

	FEB-08-1983	MAY-11-1983	MAY-11-1983	MAY-26-1983
SAMPLER:	MEAD	CDM	CDM	CDM
SAMPLE NO.:	0W0603	0W0611	0W0619	0W0601
SAMPLE SOURCE:	DW	DW	DW	DW
METALS/INORGANICS UNITS: PPM				
ANTIMONY	--	ND	ND	.100
ARSENIC	--	12.000	12.000	.050
BERYLLIUM	--	.300	.310	ND
CADMIUM	--	.300	.310	ND
CHROMIUM	--	17.000	2.400	ND
COPPER	--	.600	4.000	ND
LEAD	--	5.700	7.500	ND
MERCURY	--	.003	ND	ND
NICKEL	--	1.500	4.600	ND
SELENIUM	--	ND	ND	.260
SILVER	--	ND	ND	ND
THALLIUM	--	2.100	1.900	ND
ZINC	--	3.100	7.300	ND
TOTAL CYANIDES	--	ND	ND	ND

WATER/SOIL QUALITY DATA

	PW-01	PW-02	PW-03	PW-04
	FEB-23-1983	FEB-23-1983	FEB-23-1983	FEB-23-1983
SAMPLER:	MEAD	MEAD	MEAD	MEAD
SAMPLE NO.:	PW0101	PW0202	PW0303	PW0404
SAMPLE SOURCE:	PW	PW	PW	PW
METALS/INORGANICS UNITS: PPM				
ANTIMONY	ND	ND	ND	--
ARSENIC	ND	ND	ND	--
BERYLLIUM	ND	ND	ND	--
CADMIUM	ND	.040	ND	--
CHROMIUM	ND	ND	ND	--
COPPER	ND	ND	ND	--
LEAD	.350	.350	.300	--
MERCURY	ND	ND	ND	--
NICKEL	ND	ND	ND	--
SELENIUM	ND	ND	ND	--
SILVER	ND	ND	ND	--
THALLIUM	ND	ND	ND	--
ZINC	.580	.520	.200	--
TOTAL CYANIDES	ND	ND	ND	--

**** DRAFT **** **** DRAFT ****

WATER/SOIL QUALITY DATA

	SD-01	SD-02
	FEB-02-1983	FEB-01-1983
SAMPLER:	MEAD	MEAD
SAMPLE NO.:	SD0100	SD0207
SAMPLE SOURCE:	SD	SD

METALS/INORGANICS UNITS: PPM

ANTIMONY	ND	ND
ARSENIC	2.000	2.100
BERYLLIUM	.200	.590
CADMIUM	.600	.640
CHROMIUM	10.000	13.000
COPPER	13.000	60.000
LEAD	61.000	89.000
MERCURY	.025	.043
NICKEL	4.500	4.900
SELENIUM	ND	ND
SILVER	.400	.640
THALLIUM	ND	.060
ZINC	160.000	150.000
TOTAL CYANIDES	ND	ND

**** DRAFT ****

CAVALCADE YARD SITE

**** DRAFT ****

WATER/SOIL QUALITY DATA

	SD-03	SD-04	SD-05
	FEB-02-1983	FEB-02-1983	FEB-01-1983
SAMPLER:	HEAD	HEAD	HEAD
SAMPLE NO.:	SD0310	SD0411	SD0506
SAMPLE SOURCE:	SD	SD	SD

METALS/INORGANICS UNITS: PPM

ANTIMONY	ND	ND	ND
ARSENIC	1.500	2.200	1.500
BERYLLIUM	.290	.480	.190
CADMIUM	.970	1.400	ND
CHROMIUM	12.000	9.700	6.800
COPPER	21.000	82.000	21.000
LEAD	69.000	105.000	20.000
MERCURY	.032	.017	.006
NICKEL	5.400	9.100	2.700
SELENIUM	ND	ND	ND
SILVER	ND	.580	ND
THALLIUM	.970	ND	ND
ZINC	150.000	260.000	30.000
TOTAL CYANIDES	ND	ND	ND

000305

WATER/SOIL QUALITY DATA

	SL-01	SL-02	SL-03	SL-03	SL-03
	FEB-01-1983	FEB-01-1983	FEB-03-1983	FEB-03-1983	FEB-03-1983
SAMPLER:	HEAD	HEAD	HEAD	HEAD	HEAD
SAMPLE NO.:	SL0101	SL0202	SL0302	SL0303	SL0301
SAMPLE SOURCE:	SL	SL	SL	SL	SL
METALS/INORGANICS UNITS: PPM					
ANTIMONY	ND	ND	ND	ND	ND
ARSENIC	.350	2.500	1.500	.330	82.000
BERYLLIUM	.200	ND	.200	.200	.200
CADMIUM	.880	ND	ND	ND	.100
CHROMIUM	12.000	7.600	14.000	3.400	79.000
COPPER	4.400	32.000	1.900	1.300	21.000
LEAD	8.400	31.000	7.200	7.200	54.000
MERCURY	.005	.009	.062	.009	.040
NICKEL	6.600	33.000	3.000	2.100	2.700
SELENIUM	ND	ND	ND	ND	ND
SILVER	.700	ND	ND	.880	.200
THALLIUM	ND	ND	ND	ND	.100
ZINC	14.000	40.000	23.000	3.600	290.000
TOTAL CYANIDES	ND	ND	ND	ND	ND

WATER/SOIL QUALITY DATA

ALL RESULTS FOR THIS PAGE ARE FOR LOCATION SL-04

	FEB-04-1983	FEB-04-1983	FEB-04-1983	FEB-04-1983
SAMPLER:	HEAD	HEAD	HEAD	HEAD
SAMPLE NO.:	SL0403	SL0404	SL0402	SL0401
SAMPLE SOURCE:	SL	SL	SL	SL
METALS/INORGANICS UNITS: PPM				
ANTIMONY	ND	ND	ND	ND
ARSENIC	1.200	.290	2.000	1.800
BERYLLIUM	.600	.310	.280	.260
CADMIUM	.500	ND	ND	ND
CHROMIUM	9.100	3.700	4.100	14.000
COPPER	7.700	1.200	.560	ND
LEAD	9.100	6.400	.370	3.400
MERCURY	.004	.005	.005	.020
NICKEL	15.000	4.500	3.700	2.300
SELENIUM	ND	ND	ND	ND
SILVER	1.200	ND	ND	ND
THALLIUM	ND	ND	ND	ND
ZINC	24.000	5.800	23.000	150.000
TOTAL CYANIDES	ND	ND	ND	ND

000307

WATER/SOIL QUALITY DATA

ALL RESULTS FOR THIS PAGE ARE FOR LOCATION SL-05

SAMPLED:	FEB-02-1983	FEB-02-1983	FEB-02-1983
SAMPLE NO.:	HEAD	HEAD	HEAD
SAMPLE SOURCE:	SL0501	SL0502	SL0503
	SL	SL	SL
METALS/INORGANICS UNITS: PPM			
ANTIMONY			
ARSENIC	ND	ND	ND
BERYLLIUM	.940	.400	.250
CADMIUM	.200	.240	.660
CHROMIUM	1.000	ND	.660
COPPER	5.700	3.700	5.700
LEAD	30.000	.810	5.600
MERCURY	44.000	4.000	10.000
NICKEL	.023	.010	.011
SELENIUM	4.300	2.500	19.000
SILVER	ND	ND	ND
THALLIUM	1.600	.415	.940
ZINC	ND	ND	ND
TOTAL CYANIDES	23.000	4.200	22.000
	ND	ND	ND

NOTE -- INFO. FOR LOCATION SL-05 IS CONTINUED ON NEXT PAGE.

WATER/SOIL QUALITY DATA

ALL RESULTS FOR THIS PAGE ARE FOR LOCATION SL-05

	FEB-02-1983	FEB-02-1983	FEB-02-1983
SAMPLER:	HEAD	HEAD	HEAD
SAMPLE NO.:	SL0501	SL0504	SL0505
SAMPLE SOURCE:	SL	SL	SL
METALS/INORGANICS UNITS: PPM			
ANTIMONY	ND	ND	ND
ARSENIC	.940	ND	.420
BERYLLIUM	.200	.310	.710
CADMIUM	1.000	.410	.610
CHROMIUM	5.700	4.500	7.400
COPPER	30.000	3.200	5.700
LEAD	41.000	6.500	10.000
MERCURY	.023	.007	.007
NICKEL	4.300	3.700	23.000
SELENIUM	ND	ND	ND
SILVER	1.600	.420	.920
THALLIUM	ND	ND	ND
ZINC	23.000	14.000	25.000
TOTAL CYANIDES	ND	ND	ND

**** DRAFT **** **** DRAFT ****

WATER/SOIL QUALITY DATA

	SL-06	SL-06	SL-07
	FEB-01-1983	FEB-01-1983	FEB-01-1983
SAMPLER:	MEAD	MEAD	MEAD
SAMPLE NO.:	SL0605	SL0604	SL0703
SAMPLE SOURCE:	SL	SL	SL
METALS/INORGANICS UNITS: PPM			
ANTIMONY	ND	ND	ND
ARSENIC	.340	.530	.260
BERYLLIUM	.300	.200	.300
CADMIUM	ND	.560	ND
CHROMIUM	28.000	40.000	3.500
COPPER	2.900	3.500	150.000
LEAD	5.800	5.000	3.600
MERCURY	.044	.010	.006
NICKEL	12.000	24.000	6.300
SELENIUM	ND	ND	ND
SILVER	ND	ND	.600
THALLIUM	ND	ND	ND
ZINC	9.500	7.800	5.400
TOTAL CYANIDES	ND	ND	ND

WATER/SOIL QUALITY DATA

	SW-01	SW-02
	FEB-02-1983	FEB-02-1983
SAMPLER:	HEAD	HEAD
SAMPLE NO.:	SY0112	SW0212
SAMPLE SOURCE:	SW	SW

METALS/INORGANICS UNITS: PPM

ALTIMONY	ND	ND
ARSENIC	ND	ND
BERYLLIUM	ND	ND
CADMIUM	.050	ND
CHROMIUM	ND	ND
COPPER	ND	ND
LEAD	ND	ND
MERCURY	ND	ND
NICKEL	ND	ND
SELENIUM	ND	ND
SILVER	ND	ND
THALLIUM	ND	ND
ZINC	.320	.160
TOTAL CYANIDES	ND	ND

4.0 LABORATORY QUALITY ASSURANCE/QUALITY CONTROL (QA/QC) INFORMATION

000312

LABORATORY QA/QC

GENERAL

Division of Labor

Samples collected for all 129 EPA priority pollutants were analyzed by MEAD (CompuChem of Research Triangle Park, North Carolina. Specialized analyses on selected samples were analyzed by the CDM Boston Laboratory. These specialized analyses included; total petroleum hydrocarbons by infrared spectroscopy, and selected trace metals.

CDM Quality Assurance

CDM maintains an active laboratory quality assurance program to ensure the integrity of analytical results. The following summarizes some aspects of this program.

All laboratory instruments have rigorous maintenance and calibration schedules. Where applicable, the instrumentation is calibrated using standard solutions or standardized techniques whenever in use.

All test methods and analytical results are checked and approved by qualified personnel. Routine sample replicates and blind reference standards are employed in the laboratory as an integral part of the quality assurance program. CDM is a participant in many cooperative split sampling programs to monitor our ability to achieve accurate results.

A comprehensive quality assurance manual is maintained, which documents all sample collection, storage, and analysis procedures, as well as the instrumentation calibration and maintenance protocol. These procedures do not vary unless revisions are approved through proper channels. The quality assurance plan also includes documented staff training procedures. All laboratory personnel have scientific educational backgrounds.

CDM's quality assurance program conforms in all details to that specified by the environmental Protection Agency (EPA). The Boston regional laboratory is certified by the Commonwealth of Massachusetts Department of Environmental Quality Engineering for all categories of chemical and microbiological analyses of drinking water (Certificate Nos. C106 and M-132).

All testing and analytical procedures used in the laboratory have been developed using the standard methodologies of the EPA, American Society of Testing Materials (ASTM), American Public Health Association (APHA), Water Pollution Control Federation (WPCF), American Industrial Hygiene Association (AIHA), Food and Drug Administration (FDA), and the Association of Official Analytical Chemists (AOAC).

The CDM Boston laboratory is an active participant in the Environmental Protection Agency's Performance Evaluation Test Program for conventional and organic pollutants.

000313

Specifically, CDM's analytical procedures for volatile organic analyses are consistent with analytical procedures (Method 624) and Quality Control Guidelines (Appendix III) proposed in 40 CFR Part 136. Analytical and quality control procedures for inorganic parameters are consistent with EPA 600/4-79-020 Methods for Chemical Analysis of Water and Wastewater and Handbook for Analytical Quality Control in Water and Wastewater Laboratories.

ANALYTICAL QUALITY ASSURANCE/QUALITY CONTROL

1.0 Analyst Certification

Samples are analyzed only by personnel certified to perform specific analyses. An experienced scientist follows the Chemistry Personnel Training and Certification Procedure in training new personnel. A record of analyst's certification is kept by the laboratory supervisor on the Personnel Qualifications Chart.

2.0 Performance Standards

Blind Performance Standards, supplied by the Environmental Protection Agency, are analyzed (unbeknownst to the analyst) once every fifty analyses, at a minimum of once per year, or as specified in a project scope of work. Standards are submitted by the laboratory supervisor, as specified by the Quality Assurance Coordinator. A record of the accuracy of these analyses is kept by the Quality Assurance Coordinator in the Performance Standard log book. A report on these results will be submitted annually to the laboratory supervisor and corporate QA manager.

3.0 Calibration Curves

For colormetric and metal analyses, a calibration curve consisting of 7 points covering the range of concentrations (including a blank) is established. The calibration curve is verified with each batch of analyses at the 20%, low standard (LS) and the 60%, high standard (HS) of the full scale and a blank. If the verification standards are not within 15% of the LS value and 10% of the high standard value, the analyst may not proceed with the analysis.

4.0 Static Standards and Blanks

At a minimum, one static blank and one static standard (50% of full scale) are required with each batch of ten or less samples. In sample lots greater than 10, every 10th sample, shall be a static standard or blank. The 50% of full scale standard is used as the method control where appropriate. Results of static standard analyses, percent recovery, date and initials of the analyst are recorded in the Static Standard Log Sheet. At the completion of each 15 static stnadard analyses, the mean percent recovery and standard deviation of the percent recovery is calculated.

The standard deviation of the percent recovery (Sp) may be calculated using the following formula where P_i = each percent recovery and N = number of observations (15).

Chemical control charts are used to keep a running inventory of the method control relative percent recovery (error) versus the date. It is the responsibility of the analyst to keep the chemical control charts up to date. Control charts are kept, along with other quality control log sheets, in a looseleaf binder, organized by parameter.

An interim 10% control limit will be used until sufficient control data is processed to calculate statistically significant standard deviations to be used as control limits (2 Sp) and action limits (3 Sp).

5.0 Duplicate Analyses

Every tenth sample processed is run in duplicate. Results of duplicate analyses are reported both in method or personal worksheets, and on the Duplicate Quality Control Log Sheet. For each duplicate set, the date, analyst initials, results of each analysis, mean and range are reported.

6.0 Spiked Samples

Every twentieth sample run is a spikeo sample. Results of the spiked sampled analyses percent recovery, date and initials of analyst are recorded in the Spiked Sample Quality Control Log Sheet. At the completion of every 15 analyses, a mean percent recovery and standard deviation of percent recovery (See Section 4.0) are calculated.

000315

PRIORITY POLLUTANT METALS ANALYSES

Instrumentation

At the CDM Laboratory, all priority pollutant metals are analyzed on a Perkin-Elmer Atomic Absorption Spectrophotometer Model 370, equipped with a Perkin-Elmer Graphite Furnace Model HGA-500. Mercury is analyzed via the manual cold vapor technique with an apparatus described by US EPA Method 245.1.

Quality Control

1. Standards

All stock standard solutions are commercially prepared and can be traced to the National Bureau of Standards standard spectrographially pure metals. Intermediate stock solutions and calibration standards are made according to the following schedule:

$\geq$ 1.0 mg/l	every three months
0.10 to 1.0 mg/l	every week
$\geq$ 0.10 mg/l	daily

Calibration standards are made with the same type and concentration of acid and additives as are added to each sample.

2. Calibration

The A. A. is calibrated daily at the time of analysis with standards covering the appropriate range. Reagent blanks are analyzed along with the calibration standards. A minimum of five calibration points are used to establish the calibration curve.

At a minimum of every ten samples, a standard sample duplicate and blank are analyzed in order to assure precision, calibration linearity and to guard against equipment drift. Flameless techniques utilize a much higher frequency of calibration and recovery checks.

Each sample is injected a minimum of two times and spiked with an appropriate range of standard. If 90% recovery of the known analyte is not obtained, the method of Standard Additions (as described by US EPA Method 200, Section 8.5) is utilized.

3. Performance Audit

US EPA Performance Evaluation Standards ("WS" Series) are analyzed twice annually. "WP" Series are analyzed once a year.

4. Detection Limits

Detection limits vary from metal and differ greatly depending on sample preparation, instrumentation mode, and analytical technique. In general, all priority pollutants ar analyzed via flameless techniques. Direct aspiration is utilized only when concentrations are at elevated ranges (i.e. >1.0 mg/l) or when the method allows for comparable flameless detection limits as can be accomplished through sample concentration, extraction, or extended instrument scale expansion.

Sample Preservation and Preparation

Samples for metal analysis are preserved and prepared according to US EPA Method 200, Sections 2, 3, and 4.

Analytical References

PRIORITY POLLUTANT METALS US EPA SECTION 200.0*

Metal	A. A. Direct Aspiration	A. A. Furnace	Preservative
Antimony, Total	204.1	204.2	HN_3 to pH <2
Arsenic, Total		206.2	
Beryllium, Total	210.1	210.2	
Cadmium, Total	213.1	213.2	
Chromium, Total	218.1	218.2	
Copper, Total	220.1	220.2	
Lead, Total	239.1	239.2	
Mercury, Total	Cold Vapor, Manual		
Nickel, Total	249.1	245.1	
Selenium, Total		249.2	
Silver, Total	272.1	270.2	
		272.2	

000316

Thallium, Total	279.1	279.2
Zinc, Total	289.1	289.2

*US EPA Methods for Chemical Analysis of Water and Wastes, March 1979.

Total Petroleum Hydrocarbons

CDM follows standard method 503E. (Standard Methods, 15th Ed. 1980) for total petroleum hydrocarbon analysis. This method is a partition - infrared method utilizing silicon gel for the removal of polar materials selectively differentiating between oil and grease of animal and vegetable origin from that of petroleum origin. A modified extraction procedure is followed by solids and semi-solids. In general, this procedure consists of extracting a known amount of material via sonification into methylene chloride, concentrating the methylene chloride in a Kuderna-Danish, and finally exchanging the methylene chloride in from prior to analysis.

QUALITY ASSURANCE PROGRAM

FOR

COMPU/CHEM 1980

000318

I. Introduction:

Quality assurance is the cornerstone of the COMPU/CHEM service. Careful steps have been taken to assure the quality of the final product. This philosophy starts with the very basic steps, such as sample shipment, organic-free water, and good laboratory practice and extends to more sophisticated methods including round-robins and independently prepared samples.

All laboratory procedures are described in detail in the respective procedure manuals. This protocol will outline those specific steps that encompass the quality assurance monitoring system. While this manual discusses and represents COMPU/CHEM's operating philosophy for all analyses, it has, in certain areas, been tailored to the main business area, Priority Pollutants; in particular, EPA Methods 624 and 625.

Quality assurance related samples constitute 15% of all analyses performed. These samples are divided into three separate types: blanks, duplicates, and spikes. In addition, reference samples are introduced into the analysis system by management. These samples may be specially prepared extracts purchased from outside sources, check samples available from EPA, and participation in round-robin or validation studies.

II. Statement of Purpose:

The purpose of this document is to summarize the procedures for performing quality assurance. This includes laboratory and instrument procedures, evaluation of quality assurance data, and the development of precision and accuracy limits for all analyses.

III. Extractions:

The quality of work in the extractions area is crucial to the overall quality of the COMPU/CHEM service. It is the policy of the laboratory that technicians will be trained before performing extractions. The technician must demonstrate recoveries on check samples within accepted laboratory tolerances before proceeding to normal samples. To further assure that extractions are performed properly, this section of the quality assurance manual sets standards for surrogate standards and reagent purity.

Before each sample is extracted, a minimum of two surrogate standards are added at a concentration of 100 µg/l. These surrogate standards are quantitatively analyzed in the GC/MS phase. Historical records are maintained on the percent recovery of the surrogate standards for each sample. This data forms the statistical basis upon which extraction technique is monitored. If there are differences of more than two standard deviations, the data shall be suspect and supervisory personnel shall investigate to determine the cause of the error and take corrective action.

With each new lot of reagents, a reagent blank is prepared and analyzed to assure that the reagents do not introduce contaminants or interferences. Each extraction batch has at least one quality assurance sample included (blank, spike, or replicate). Reagent blanks are generated by passing a clean matrix through the entire analytical scheme. At least one reagent blank is run for every twenty (20) samples and whenever reagent lots change.

Replicates are valuable in determining the precision of the procedure under real operating circumstances. Approximately one in every twenty (20) samples will be a replicate.

000320

IV. GC/MS:

The Gas Chromatograph/Mass Spectrometer analysis is extremely important to the overall accuracy and precision of the COMPU/CHEM service. To assure that the results from this phase are the highest quality, a rigorous program of calibration and quality assurance has been established.

The mass spectrometer must first be calibrated according to the manufacturer's procedures using FC-43. Documentation of the accuracy of the calibration is maintained on file for each day the instrument is used for analysis.

Once per shift the instrument is fine tuned using Decafluorotriphenylphosphine (DFTPP) or parafluorobromobenzene (PFBB). The mass spectrum for DFTPP obtained should meet the criteria described by Harris, et. al. (AnalChem, vol. 47, pg. 995 (1975)). For DFTPP, these are the key ion and ion abundance criteria that must be met:

Table I

Mass:	DFTPP Specs:
51	30 to 60 percent of mass 198.
68	Less than 2 percent of mass 69.
70	Less than 2 percent of mass 69.
127	40 to 60 percent of mass 198.
197	Less than 1 percent of mass 198.
198	Base peak 100 percent relative abundance.
199	5 to 9 percent of mass 198.
275	10 to 30 percent of mass 198.
365	Greater than 1 percent of mass 198.
441	Present but less than mass 443.
442	Greater than 40 percent of mass 198.
443	17 to 23 percent of mass 442.

When volatile organics are analyzed, DFTPP cannot be used because of its low volatility. In these cases parafluorobromobenzene (PFBB) is used. The key ion and ion abundance criteria that must be met are:

Table II

Mass:	PFBB Specs:
50	20 to 40 percent of mass 95.
75	50 to 70 percent of mass 95.
95	Base peak, 100 percent relative abundance.
96	5 to 9 percent of mass 95.
173	Less than 1 percent of mass 95.
174	70 to 90 percent of mass 95.
175	5 to 9 percent of mass 95.
176	70 to 90 percent of mass 95.
177	5 to 9 percent of mass 95.

Once the instrument has met the key ion and ion abundance criteria for the above mentioned compounds, it is calibrated. Calibration curves are generated from the results of analyses of at least three solutions of known concentrations of pure chemicals or standards. These standard concentrations are evenly distributed throughout the range of the method corresponding to nominally 10,40 & 200 µg/l.

000321

D-10 anthracene is also injected at a constant amount, nominally 100 ng. From these data external and internal standard libraries are generated. For the internal calibration method, response factors versus concentrations are plotted. Using the external calibration method, the concentrations versus the integrated heights are plotted.

After the master set of instrument calibration curves have been established, they are verified daily by injecting at least one standard solution. If significant drift has occurred, a new calibration curve must be constructed.

The internal standard method is also used for volatile organic analysis. 100 ng of D-10 anthracene is the internal standard used for base neutrals, acids, and pesticides. For volatile organics, 100 ng each of bromochloromethane, 2-bromo-1-chloropropane, and 1,4-dichlorobutane are used. A calibration curve is prepared. The response factor (RF) is plotted against the standard concentration using a minimum of three concentrations over the range of interest. Once this calibration curve has been determined, it is verified daily by introducing at least one standard solution containing the appropriate internal standard with each sample. If significant drift occurs, a new calibration curve must be constructed.

After calibration has been completed, sample analysis can be started. A typical run log sequence will be as follows:

Standard
Blank - Organic-free water
Sample 1
2
3
4
5
6
Blank - Organic-free water
Sample 7
8
9
10
11
12
Standard
Blank
Sample 13

This cycle will be continued until the run is completed. However, if there is a shift overlap in running these samples, a DFTPP sample would be inserted at the beginning of each shift.

Duplicates and spikes are processed approximately one in every twenty (20) samples to further monitor the performance of the GC/MS. In addition, surrogate standards are used with each sample processed.

Blind samples will be routinely sent to the laboratory for analysis. These may take the form of replicates as well as using external quality control samples. These samples will be obtained from outside sources and will contain known concentrations of specific compounds. They will be submitted to the laboratory on a regular basis. This will be done at least once a month for every shift. This will allow management to determine the accuracy and precision of the lab.

000323

V. Metals

Metals, except mercury, are analyzed using flame and furnace atomic absorption spectroscopy. The analysis procedure involves two steps: digestion with nitric acid and subsequent instrumental analysis. The quality of these results are assured by several key procedures.

For each batch of samples in the digestion process, a method blank is included. This blank is analyzed along with the samples to assure that there were no contaminants introduced by the reagents or laboratory procedures.

For each element to be analyzed, a five point calibration curve is prepared using standard solutions in the concentration range of interest. System blanks, method blanks and a standard solution are also run every ten samples during the analysis sequence. The accuracy and precision of these measurements must fall within the guidelines found in Methods for Chemical Analysis of Water and Wastes (EPA-600/4-79-020) if available for the element in question. If that guideline is absent, the manufacturer's literature will be used to establish limits.

VI. Automated Methods

The COMPU/CHEM service uses automated methods for the determination of mercury, cyanides and phenols. The instrumentation and procedures are identical to those described in Method for Chemical Analysis of

Water and Wastes (EPA-600/4-79-020). Quality assurance is performed as described in that manual and its companion volume Handbook for Analytical Quality Control in Water and Wastewater Laboratories (EPA-600/4-79-019) with particular emphasis on sample handling, method blanks, standards and replicates.

5.0 SAMPLING INFORMATION LOG SHEETS

000325

SEDIMENT SAMPLES

000326

SAMPLING LOCATION LOG SHEET

Site Name	CAVALCADE YARD SITE
Site Location	HOUSTON, TEXAS
Sampling Site Code	CAV-SD-01
Sampling Point Installed (Date)	February 2, 1983

INSTALLATION TEAM

Name JEFFREY D. GRAM	Organization - CAMP,DRESSER & McKEE INC.
Name JAMES F. OCCHIALINI	Organization - CAMP,DRESSER & McKEE INC.

SURVEY INFORMATION

Ground Survey ☒ Aerial Survey ☐ Range Finder ☐ Compass ☐ Other ☐

PHOTOGRAPHIC EVIDENCE

Near Range	Background
No Photographic Evidence Required	

Roll No. -	Frame No. -	Roll No. -	Frame No. -
By -	Date -	By -	Date -

000327

SAMPLING LOCATION LOG SHEET

Site Name	CAVALCADE YARD SITE
Site Location	HOUSTON, TEXAS
Sampling Site Code	CAV-SD-02
Sampling Point Installed (Date)	February 1, 1983

INSTALLATION TEAM

Name	JEFFREY D. GRAM	Organization -	CAMP,DRESSER & McKEE INC.
Name	JAMES F. OCCHIALINI	Organization -	CAMP,DRESSER & McKEE INC.

SURVEY INFORMATION

Ground Survey ☒ Aerial Survey ☐ Range Finder ☐ Compass ☐ Other ☐

PHOTOGRAPHIC EVIDENCE

Near Range	Background
No Photographic Evidence Required	

Roll No. -	Frame No. -	Roll No. -	Frame No. -
By -	Date -	By -	Date -

SAMPLING LOCATION LOG SHEET

Site Name	CAVALCADE YARD SITE
Site Location	HOUSTON, TEXAS
Sampling Site Code	CAV-SD-03
Sampling Point Installed (Date)	February 2, 1983

INSTALLATION TEAM

Name JEFFREY D. GRAM	Organization - CAMP,DRESSER & McKEE INC.
Name JAMES F. OCCHIALINI	Organization - CAMP,DRESSER & McKEE INC.

SURVEY INFORMATION

Ground Survey ☒ Aerial Survey ☐ Range Finder ☐ Compass ☐ Other ☐

PHOTOGRAPHIC EVIDENCE

Near Range	Background
No Photographic Evidence Required	
Roll No. - Frame No. -	Roll No. - Frame No. -
By - Date -	By - Date -

000329

SAMPLING LOCATION LOG SHEET

ite Name	CAVALCADE YARD SITE
te Location	HOUSTON, TEXAS
mpling Site Code	CAV-SD-04
mpling Point Installed (Date)	February 2, 1983

INSTALLATION TEAM

me JEFFREY D. GRAM	Organization - CAMP, DRESSER & McKEE INC.
me JAMES F. OCCHIALINI	Organization - CAMP, DRESSER & McKEE INC.

SURVEY INFORMATION

ound Survey ☒ Aerial Survey ☐ Range Finder ☐ Compass ☐ Other ☐

PHOTOGRAPHIC EVIDENCE

Near Range	Background
No Photographic Evidence Required	

Roll No. -	Frame No. -	Roll No. -	Frame No. -
By -	Date -	By -	Date -

000330

SAMPLING LOCATION LOG SHEET

Site Name	CAVALCADE YARD SITE
Site Location	HOUSTON, TEXAS
Sampling Site Code	CAV-SD-05
Sampling Point Installed (Date)	February 1, 1983

INSTALLATION TEAM

Name JEFFREY D. GRAM	Organization - CAMP,DRESSER & McKEE INC.
Name JAMES F. OCCHIALINI	Organization - CAMP,DRESSER & McKEE INC.

SURVEY INFORMATION

Ground Survey ☒ Aerial Survey ☐ Range Finder ☐ Compass ☐ Other ☐

PHOTOGRAPHIC EVIDENCE

Near Range	Background
No Photographic Evidence Required	
Roll No. - Frame No. -	Roll No. - Frame No. -
By - Date -	By - Date -

000331

SURFACE WATER SAMPLES

000332

SAMPLING LOCATION LOG SHEET

Site Name	CAVALCADE YARD SITE
Site Location	HOUSTON, TEXAS
Sampling Site Code	CAV-SW-01
Sampling Point Installed (Date)	February 2, 1983

INSTALLATION TEAM

Name	JEFFREY D. GRAM	Organization -	CAMP,DRESSER & McKEE INC.
Name	JAMES F. OCCHIALINI	Organization -	CAMP,DRESSER & McKEE INC.

SURVEY INFORMATION

Ground Survey ☒ Aerial Survey ☐ Range Finder ☐ Compass ☐ Other ☐

PHOTOGRAPHIC EVIDENCE

Near Range	Background
No Photographic Evidence Required	

Roll No. -	Frame No. -	Roll No. -	Frame No. -
By -	Date -	By -	Date -

000333

SAMPLING LOCATION LOG SHEET

e Name	CAVALCADE YARD SITE
e Location	HOUSTON, TEXAS
mpling Site Code	CAV-SW-02
pling Point Installed (Date)	February 2, 1983

INSTALLATION TEAM

JEFFREY D. GRAM	Organization - CAMP,DRESSER & McKEE INC.
JAMES F. OCCHIALINI	Organization - CAMP,DRESSER & McKEE INC.

SURVEY INFORMATION

nd Survey ☒ Aerial Survey ☐ Range Finder ☐ Compass ☐ Other ☐

PHOTOGRAPHIC EVIDENCE

Near Range	Background
No Photographic Evidence Required	

Roll No. -	Frame No. -	Roll No. -	Frame No. -
By -	Date -	By -	Date -

000334

SURFACE SOIL SAMPLES

000335

SAMPLING LOCATION LOG SHEET

ite Name	CAVALCADE YARD SITE
te Location	HOUSTON, TEXAS
mpling Site Code	CAV-SL-01-001
mpling Point Installed (Date)	February 1, 1983

INSTALLATION TEAM

ame	JEFFREY D. GRAM	Organization -	CAMP,DRESSER & McKEE INC.
me	JAMES F. OCCHIALINI	Organization -	CAMP,DRESSER & McKEE INC.

SURVEY INFORMATION

ound Survey ☒ Aerial Survey ☐ Range Finder ☐ Compass ☐ Other ☐

PHOTOGRAPHIC EVIDENCE

Near Range	Background
No Photographic Evidence Required	

Roll No. -	Frame No. -	Roll No. -	Frame No. -
By -	Date -	By -	Date -

000336

SAMPLING LOCATION LOG SHEET

Site Name	CAVALCADE YARD SITE
Site Location	HOUSTON, TEXAS
Sampling Site Code	CAV-SL-02
Sampling Point Installed (Date)	February 1, 1983

INSTALLATION TEAM

Name	JEFFREY D. GRAM	Organization -	CAMP, DRESSER & McKEE INC.
Name	JAMES F. OCCHIALINI	Organization -	CAMP, DRESSER & McKEE INC.

SURVEY INFORMATION

Ground Survey ☒ Aerial Survey ☐ Range Finder ☐ Compass ☐ Other ☐

PHOTOGRAPHIC EVIDENCE

Near Range	Background
No Photographic Evidence Required	
Roll No. - / Frame No. -	Roll No. - / Frame No. -
By - / Date -	By - / Date -

000337

SAMPLING LOCATION LOG SHEET

Site Name	CAVALCADE YARD SITE
Site Location	HOUSTON, TEXAS
Sampling Site Code	CAV-SL-05
Sampling Point Installed (Date)	February 1, 1983

INSTALLATION TEAM

Name JEFFREY D. GRAM	Organization - CAMP,DRESSER & McKEE INC.
Name JAMES F. OCCHIALINI	Organization - CAMP,DRESSER & McKEE INC.

SURVEY INFORMATION

Ground Survey ☒ Aerial Survey ☐ Range Finder ☐ Compass ☐ Other ☐

PHOTOGRAPHIC EVIDENCE

Near Range	Background
No Photographic Evidence Required	
Roll No. - Frame No. -	Roll No. - Frame No. -
By - Date -	By - Date -

000338

SAMPLING LOCATION LOG SHEET

Site Name	CAVALCADE YARD SITE
Site Location	HOUSTON, TEXAS
Sampling Site Code	CAV-SL-06
Sampling Point Installed (Date)	February 1, 1983

INSTALLATION TEAM

Name JEFFREY D. GRAM	Organization - CAMP,DRESSER & McKEE INC.
Name JAMES F. OCCHIALINI	Organization - CAMP,DRESSER & McKEE INC.

SURVEY INFORMATION

Ground Survey ☒ Aerial Survey ☐ Range Finder ☐ Compass ☐ Other ☐

PHOTOGRAPHIC EVIDENCE

Near Range	Background
No Photographic Evidence Required	
Roll No. - / Frame No. -	Roll No. - / Frame No. -
By - / Date -	By - / Date -

000339

SAMPLING LOCATION LOG SHEET

Site Name	CAVALCADE YARD SITE
Site Location	HOUSTON, TEXAS
Sampling Site Code	CAV-SL-07
Sampling Point Installed (Date)	February 1, 1983

INSTALLATION TEAM

Name JEFFREY D. GRAM	Organization - CAMP,DRESSER & McKEE INC.
Name JAMES F. OCCHIALINI	Organization - CAMP,DRESSER & McKEE INC.

SURVEY INFORMATION

Ground Survey ☒ Aerial Survey ☐ Range Finder ☐ Compass ☐ Other ☐

PHOTOGRAPHIC EVIDENCE

Near Range	Background
No Photographic Evidence Required	
Roll No. - Frame No. -	Roll No. - Frame No. -
By - Date -	By - Date -

000340

SUBSURFACE SOIL SAMPLES

000341

SAMPLING LOCATION LOG SHEET

Site Name	CAVALCADE YARD SITE
Site Location	HOUSTON, TEXAS
Sampling Site Code	CAV-SL-03
Sampling Point Installed (Date)	February 3, 1983

INSTALLATION TEAM

Name PAUL WILLIAMS	Organization - CAMP,DRESSER & McKEE INC.
Name WOODROW LUNSFORD & JOHN BYARS	Organization - McCLELLAND ENGINEERS INC.

SURVEY INFORMATION

Ground Survey ☒ Aerial Survey ☐ Range Finder ☐ Compass ☐ Other ☐

PHOTOGRAPHIC EVIDENCE

Near Range	Background
No Photographic Evidence Required	
Roll No. / Frame No.	Roll No. / Frame No.
By / Date	By / Date

000342

SAMPLING LOCATION LOG SHEET

Site Name	CAVALCADE YARD SITE
Site Location	HOUSTON, TEXAS
Sampling Site Code	CAV-SL-04
Sampling Point Installed (Date)	February 4, 1983

INSTALLATION TEAM

Name PAUL WILLIAMS	Organization - CAMP,DRESSER & McKEE INC.
Name WOODROW LUNSFORD & JOHN BYARS	Organization - McCLELLAND ENGINEERS INC.

SURVEY INFORMATION

Ground Survey ☒ Aerial Survey ☐ Range Finder ☐ Compass ☐ Other ☐

PHOTOGRAPHIC EVIDENCE

Near Range	Background
No Photographic Evidence Required	

Roll No.	Frame No.	Roll No.	Frame No.

000343

SAMPLING LOCATION LOG SHEET

te Name	CAVALCADE YARD SITE
ite Location	HOUSTON, TEXAS
mpling Site Code	CAV-SL-05
mpling Point Installed (Date)	February 3, 1983

INSTALLATION TEAM

me PAUL WILLIAMS	Organization - CAMP,DRESSER & McKEE INC.
me WOODROW LUNSFORD & JOHN BYARS	Organization - McCLELLAND ENGINEERS INC.

SURVEY INFORMATION

ound Survey ☒ Aerial Survey ☐ Range Finder ☐ Compass ☐ Other ☐

PHOTOGRAPHIC EVIDENCE

Near Range	Background
No Photographic Evidence Required	

Roll No.	Frame No.	Roll No.	Frame No.
By	Date	By	Date

000344

SAMPLING LOCATION LOG SHEET

Site Name	CAVALCADE YARD SITE
Site Location	HOUSTON, TEXAS
Sampling Site Code	CAV-SL-08
Sampling Point Installed (Date)	Point not installed

INSTALLATION TEAM

Name PAUL WILLIAMS	Organization - CAMP,DRESSER & McKEE INC.
Name WOODROW LUNSFORD & JOHN BYARS	Organization - McCLELLAND ENGINEERS INC.

SURVEY INFORMATION

Ground Survey ☒ Aerial Survey ☐ Range Finder ☐ Compass ☐ Other ☐

PHOTOGRAPHIC EVIDENCE

Near Range	Background
No Photographic Evidence Required	

Roll No.	Frame No.	Roll No.	Frame No.
By	Date	By	Date

000345

SAMPLING LOCATION LOG SHEET

Site Name	CAVALCADE YARD SITE
Site Location	HOUSTON, TEXAS
Sampling Site Code	CAV-SL-09
Sampling Point Installed (Date)	Point not installed

INSTALLATION TEAM

Name PAUL WILLIAMS	Organization - CAMP, DRESSER & McKEE INC.
Name WOODROW LUNSFORD & JOHN BYARS	Organization - McCLELLAND ENGINEERS INC.

SURVEY INFORMATION

Ground Survey ☒ Aerial Survey ☐ Range Finder ☐ Compass ☐ Other ☐

PHOTOGRAPHIC EVIDENCE

Near Range	Background
No Photographic Evidence Required	

Roll No.	Frame No.	Roll No.	Frame No.
By	Date	By	Date

000346

SAMPLING LOCATION LOG SHEET

Site Name	CAVALCADE YARD SITE
Site Location	HOUSTON, TEXAS
Sampling Site Code	CAV-SL-10
Sampling Point Installed (Date)	May 10, 1983

INSTALLATION TEAM

Name PAUL WILLIAMS	Organization - CAMP, DRESSER & McKEE INC.
Name WOODROW LUNSFORD & JOHN BYARS	Organization - McCLELLAND ENGINEERS INC.

SURVEY INFORMATION

Ground Survey ☒ Aerial Survey ☐ Range Finder ☐ Compass ☐ Other ☐

PHOTOGRAPHIC EVIDENCE

Near Range	Background
No Photographic Evidence Required	

Roll No.	Frame No.	Roll No.	Frame No.
By	Date	By	Date

000347

SAMPLING LOCATION LOG SHEET

Site Name	CAVALCADE YARD SITE
Site Location	HOUSTON, TEXAS
Sampling Site Code	CAV-SL-11
Sampling Point Installed (Date)	Point not installed

INSTALLATION TEAM

Name PAUL WILLIAMS	Organization - CAMP, DRESSER & McKEE INC.
Name WOODROW LUNSFORD & JOHN BYARS	Organization - McCLELLAND ENGINEERS INC.

SURVEY INFORMATION

Ground Survey ☒ Aerial Survey ☐ Range Finder ☐ Compass ☐ Other ☐

PHOTOGRAPHIC EVIDENCE

Near Range	Background
No Photographic Evidence Required	

Roll No.	Frame No.	Roll No.	Frame No.
By	Date	By	Date

000348

SAMPLING LOCATION LOG SHEET

Site Name	CAVALCADE YARD SITE
Site Location	HOUSTON, TEXAS
Sampling Site Code	CAV-SL-12
Sampling Point Installed (Date)	point not installed

INSTALLATION TEAM

Name PAUL WILLIAMS	Organization - CAMP,DRESSER & McKEE INC.
Name WOODROW LUNSFORD & JOHN BYARS	Organization - McCLELLAND ENGINEERS INC.

SURVEY INFORMATION

Ground Survey ☐ Aerial Survey ☐ Range Finder ☐ Compass ☐ Other ☐

PHOTOGRAPHIC EVIDENCE

Near Range	Background
No Photographic Evidence Required	

Roll No.	Frame No.	Roll No.	Frame No.

000349

SAMPLING LOCATION LOG SHEET

Site Name	CAVALCADE YARD SITE
Site Location	HOUSTON, TEXAS
Sampling Site Code	CAV-SL-13
Sampling Point Installed (Date)	Point not installed

INSTALLATION TEAM

Name PAUL WILLIAMS	Organization - CAMP,DRESSER & McKEE INC.
Name WOODROW LUNSFORD & JOHN BYARS	Organization - McCLELLAND ENGINEERS INC.

SURVEY INFORMATION

Ground Survey ☑ Aerial Survey ☐ Range Finder ☐ Compass ☐ Other ☐

PHOTOGRAPHIC EVIDENCE

Near Range	Background
No Photographic Evidence Required	

Roll No.	Frame No.	Roll No.	Frame No.
By	Date	By	Date

000350

SAMPLING LOCATION LOG SHEET

Site Name	CAVALCADE YARD SITE
Site Location	HOUSTON, TEXAS
Sampling Site Code	CAV-SL-14
Sampling Point Installed (Date)	May 9, 1983

INSTALLATION TEAM

Name PAUL WILLIAMS	Organization - CAMP,DRESSER & McKEE INC.
Name WOODROW LUNSFORD & JOHN BYARS	Organization - McCLELLAND ENGINEERS INC.

SURVEY INFORMATION

Ground Survey ☒ Aerial Survey ☐ Range Finder ☐ Compass ☐ Other ☐

PHOTOGRAPHIC EVIDENCE

Near Range	Background
No Photographic Evidence Required	

Roll No.	Frame No.	Roll No.	Frame No.
By	Date	By	Date

000351

SAMPLING LOCATION LOG SHEET

Site Name	CAVALCADE YARD SITE
Site Location	HOUSTON, TEXAS
Sampling Site Code	CAV-SL-15
Sampling Point Installed (Date)	Point not installed

INSTALLATION TEAM

Name PAUL WILLIAMS	Organization - CAMP,DRESSER & McKEE INC.
Name WOODROW LUNSFORD & JOHN BYARS	Organization - McCLELLAND ENGINEERS INC.

SURVEY INFORMATION

Ground Survey ☒ Aerial Survey ☐ Range Finder ☐ Compass ☐ Other ☐

PHOTOGRAPHIC EVIDENCE

Near Range	Background
No Photographic Evidence Required	

Roll No.	Frame No.	Roll No.	Frame No.
By	Date	By	Date

000352

SAMPLING LOCATION LOG SHEET

Site Name	CAVALCADE YARD SITE
Site Location	HOUSTON, TEXAS
Sampling Site Code	CAV-SL-16
Sampling Point Installed (Date)	May 7, 1983

INSTALLATION TEAM

Name PAUL WILLIAMS	Organization - CAMP, DRESSER & McKEE INC.
Name WOODROW LUNSFORD & JOHN BYARS	Organization - McCLELLAND ENGINEERS INC.

SURVEY INFORMATION

Ground Survey ☒ Aerial Survey ☐ Range Finder ☐ Compass ☐ Other ☐

PHOTOGRAPHIC EVIDENCE

Near Range	Background
No Photographic Evidence Required	

Roll No.	Frame No.	Roll No.	Frame No.
By	Date	By	Date

000353

SAMPLING LOCATION LOG SHEET

Site Name	CAVALCADE YARD SITE
Site Location	HOUSTON, TEXAS
Sampling Site Code	CAV-SL-17
Sampling Point Installed (Date)	Point not installed

INSTALLATION TEAM

Name PAUL WILLIAMS	Organization - CAMP,DRESSER & McKEE INC.
Name WOODROW LUNSFORD & JOHN BYARS	Organization - McCLELLAND ENGINEERS INC.

SURVEY INFORMATION

Ground Survey ☒ Aerial Survey ☐ Range Finder ☐ Compass ☐ Other ☐

PHOTOGRAPHIC EVIDENCE

Near Range	Background
No Photographic Evidence Required	
Roll No. / Frame No.	Roll No. / Frame No.
By / Date	By / Date

000354

SAMPLING LOCATION LOG SHEET

Site Name	CAVALCADE YARD SITE
Site Location	HOUSTON, TEXAS
Sampling Site Code	CAV-SL-18
Sampling Point Installed (Date)	May 7, 1983

INSTALLATION TEAM

Name . PAUL WILLIAMS	Organization - CAMP,DRESSER & McKEE INC.
Name WOODROW LUNSFORD & JOHN BYARS	Organization - McCLELLAND ENGINEERS INC.

SURVEY INFORMATION

Ground Survey ☒ Aerial Survey ☐ Range Finder ☐ Compass ☐ Other ☐

PHOTOGRAPHIC EVIDENCE

Near Range	Background
No Photographic Evidence Required	

Roll No.	Frame No.	Roll No.	Frame No.
By	Date	By	Date

000355

SAMPLING LOCATION LOG SHEET

Site Name	CAVALCADE YARD SITE
Site Location	HOUSTON, TEXAS
Sampling Site Code	CAV-SL-20
Sampling Point Installed (Date)	May 7, 1983

INSTALLATION TEAM

Name PAUL WILLIAMS	Organization - CAMP,DRESSER & McKEE INC.
Name WOODROW LUNSFORD & JOHN BYARS	Organization - McCLELLAND ENGINEERS INC.

SURVEY INFORMATION

Ground Survey ☒ Aerial Survey ☐ Range Finder ☐ Compass ☐ Other ☐

PHOTOGRAPHIC EVIDENCE

Near Range	Background
No Photographic Evidence Required	
Roll No. / Frame No.	Roll No. / Frame No.
By / Date	By / Date

000356

SAMPLING LOCATION LOG SHEET

Site Name	CAVALCADE YARD SITE
Site Location	HOUSTON, TEXAS
Sampling Site Code	CAV-SL-21
Sampling Point Installed (Date)	May 12, 1983

INSTALLATION TEAM

Name PAUL WILLIAMS	Organization - CAMP, DRESSER & McKEE INC.
Name WOODROW LUNSFORD & JOHN BYARS	Organization - McCLELLAND ENGINEERS INC.

SURVEY INFORMATION

Ground Survey ☒ Aerial Survey ☐ Range Finder ☐ Compass ☐ Other ☐

PHOTOGRAPHIC EVIDENCE

Near Range	Background
No Photographic Evidence Required	
Roll No. / Frame No.	Roll No. / Frame No.
By / Date	By / Date

000357

SAMPLING LOCATION LOG SHEET

Site Name	CAVALCADE YARD SITE
Site Location	HOUSTON, TEXAS
Sampling Site Code	CAV-SL-22
Sampling Point Installed (Date)	May 12, 1983

INSTALLATION TEAM

Name PAUL WILLIAMS	Organization - CAMP,DRESSER & McKEE INC.
Name WOODROW LUNSFORD & JOHN BYARS	Organization - McCLELLAND ENGINEERS INC.

SURVEY INFORMATION

Ground Survey ☒ Aerial Survey ☐ Range Finder ☐ Compass ☐ Other ☐

PHOTOGRAPHIC EVIDENCE

Near Range	Background
No Photographic Evidence Required	

Roll No.	Frame No.	Roll No.	Frame No.
By	Date	By	Date

000358

SAMPLING LOCATION LOG SHEET

Site Name	CAVALCADE YARD SITE
Site Location	HOUSTON, TEXAS
Sampling Site Code	CAV-SL-23
Sampling Point Installed (Date)	May 9, 1983

INSTALLATION TEAM

Name . PAUL WILLIAMS	Organization - CAMP,DRESSER & McKEE INC.
Name : WOODROW LUNSFORD & JOHN BYARS	Organization - McCLELLAND ENGINEERS INC.

SURVEY INFORMATION

Ground Survey ☒ Aerial Survey ☐ Range Finder ☐ Compass ☐ Other ☐

PHOTOGRAPHIC EVIDENCE

Near Range	Background
No Photographic Evidence Required	
Roll No. / Frame No.	Roll No. / Frame No.
By / Date	By / Date

000359

SAMPLING LOCATION LOG SHEET

te Name	CAVALCADE YARD SITE
ite Location	HOUSTON, TEXAS
mpling Site Code	CAV-SL-24
mpling Point Installed (Date)	May 9, 1983

INSTALLATION TEAM

me . PAUL WILLIAMS	Organization - CAMP,DRESSER & McKEE INC.
me .. WOODROW LUNSFORD & JOHN BYARS	Organization - McCLELLAND ENGINEERS INC.

SURVEY INFORMATION

ound Survey ☒ Aerial Survey ☐ Range Finder ☐ Compass ☐ Other ☐

PHOTOGRAPHIC EVIDENCE

Near Range	Background
No Photographic Evidence Required	

Roll No.	Frame No.	Roll No.	Frame No.
By	Date	By	Date

000360

SAMPLING LOCATION LOG SHEET

Site Name	CAVALCADE YARD SITE
Site Location	HOUSTON, TEXAS
Sampling Site Code	CAV-SL-25
Sampling Point Installed (Date)	May 9, 1983

INSTALLATION TEAM

Name . PAUL WILLIAMS	Organization - CAMP,DRESSER & McKEE INC.
Name .. WOODROW LUNSFORD & JOHN BYARS	Organization - McCLELLAND ENGINEERS INC.

SURVEY INFORMATION

Ground Survey ☒ Aerial Survey ☐ Range Finder ☐ Compass ☐ Other ☐

PHOTOGRAPHIC EVIDENCE

Near Range	Background
No Photographic Evidence Required	

Roll No.	Frame No.	Roll No.	Frame No.
By	Date	By	Date

000361

SAMPLING LOCATION LOG SHEET

Site Name	CAVALCADE YARD SITE
Site Location	HOUSTON, TEXAS
Sampling Site Code	CAV-SL-26
Sampling Point Installed (Date)	May 7, 1983

INSTALLATION TEAM

Name . PAUL WILLIAMS	Organization - CAMP,DRESSER & McKEE INC.
Name .. WOODROW LUNSFORD & JOHN BYARS	Organization - McCLELLAND ENGINEERS INC.

SURVEY INFORMATION

Ground Survey ☒ Aerial Survey ☐ Range Finder ☐ Compass ☐ Other ☐

PHOTOGRAPHIC EVIDENCE

Near Range	Background
No Photographic Evidence Required	
Roll No. / Frame No.	Roll No. / Frame No.
By / Date	By / Date

000362

SAMPLING LOCATION LOG SHEET

Site Name	CAVALCADE YARD SITE
Site Location	HOUSTON, TEXAS
Sampling Site Code	CAV-SL-27
Sampling Point Installed (Date)	May 7, 1983

INSTALLATION TEAM

Name : PAUL WILLIAMS	Organization - CAMP, DRESSER & McKEE INC.
Name : WOODROW LUNSFORD & JOHN BYARS	Organization - McCLELLAND ENGINEERS INC.

SURVEY INFORMATION

Ground Survey ☒ Aerial Survey ☐ Range Finder ☐ Compass ☐ Other ☐

PHOTOGRAPHIC EVIDENCE

Near Range	Background
No Photographic Evidence Required	

Roll No.	Frame No.	Roll No.	Frame No.
By	Date	By	Date

000363

SAMPLING LOCATION LOG SHEET

Site Name	CAVALCADE YARD SITE
Site Location	HOUSTON, TEXAS
Sampling Site Code	CAV-SL-28
Sampling Point Installed (Date)	Point not installed

INSTALLATION TEAM

Name . PAUL WILLIAMS	Organization - CAMP, DRESSER & McKEE INC.
Name : WOODROW LUNSFORD & JOHN BYARS	Organization - McCLELLAND ENGINEERS INC.

SURVEY INFORMATION

Ground Survey ☒ Aerial Survey ☐ Range Finder ☐ Compass ☐ Other ☐

PHOTOGRAPHIC EVIDENCE

Near Range	Background

000364

SAMPLING LOCATION LOG SHEET

Site Name	CAVALCADE YARD SITE
Site Location	HOUSTON, TEXAS
Sampling Site Code	CAV-SL-29
Sampling Point Installed (Date)	Point not installed

INSTALLATION TEAM

Name PAUL WILLIAMS	Organization - CAMP,DRESSER & McKEE INC.
Name WOODROW LUNSFORD & JOHN BYARS	Organization - McCLELLAND ENGINEERS INC.

SURVEY INFORMATION

Ground Survey ☒ Aerial Survey ☐ Range Finder ☐ Compass ☐ Other ☐

PHOTOGRAPHIC EVIDENCE

Near Range	Background

000365

SAMPLING LOCATION LOG SHEET

Name	CAVALCADE YARD SITE
Location	HOUSTON, TEXAS
ling Site Code	CAV-SL-30
ng Point Installed (Date)	Point not installed

INSTALLATION TEAM

. PAUL WILLIAMS	Organization - CAMP,DRESSER & McKEE INC.
WOODROW LUNSFORD & JOHN BYARS	Organization - McCLELLAND ENGINEERS INC.

SURVEY INFORMATION

Survey ☒ Aerial Survey ☐ Range Finder ☐ Compass ☐ Other ☐

PHOTOGRAPHIC EVIDENCE

Near Range	Background

Evidence No.

000366

GROUNDWATER SAMPLES

000367

SAMPLING LOCATION LOG SHEET

Site Name	CAVALCADE YARD SITE
Site Location	HOUSTON, TEXAS
Sampling Site Code	CAV-OW-01
Sampling Point Installed (Date)	February 7, 1983

INSTALLATION TEAM

Name PAUL WILLIAMS	Organization - CAMP, DRESSER & McKEE INC.
Name WOODROW LUNSFORD, JOHN BYARS, MIKE PETRI	Organization - McCLELLAND ENGINEERS INC.

SURVEY INFORMATION

Ground Survey ☒ Aerial Survey ☐ Range Finder ☐ Compass ☐ Other ☐

PHOTOGRAPHIC EVIDENCE

Near Range	Background

000368

SAMPLING LOCATION LOG SHEET

Site Name	CAVALCADE YARD SITE
Site Location	HOUSTON, TEXAS
Sampling Site Code	CAV-OW-02
Sampling Point Installed (Date)	February 5, 1983

INSTALLATION TEAM

Name . PAUL WILLIAMS	Organization - CAMP,DRESSER & McKEE INC.
Name .: WOODROW LUNSFORD, JOHN BYARS, MIKE PETRI	Organization - McCLELLAND ENGINEERS INC.

SURVEY INFORMATION

Ground Survey ☒ Aerial Survey ☐ Range Finder ☐ Compass ☐ Other ☐

PHOTOGRAPHIC EVIDENCE

Near Range	Background

000369

SAMPLING LOCATION LOG SHEET

Site Name	CAVALCADE YARD SITE
Site Location	HOUSTON, TEXAS
Sampling Site Code	CAV-OW-03
Sampling Point Installed (Date)	February 7, 1983

INSTALLATION TEAM

Name . PAUL WILLIAMS	Organization - CAMP,DRESSER & McKEE INC.
Name : WOODROW LUNSFORD, JOHN BYARS, MIKE PETRI	Organization - McCLELLAND ENGINEERS INC.

SURVEY INFORMATION

Ground Survey ☒ Aerial Survey ☐ Range Finder ☐ Compass ☐ Other

PHOTOGRAPHIC EVIDENCE

Near Range	Background

No Photographic Evidence Required

000370

SAMPLING LOCATION LOG SHEET

Site Name	CAVALCADE YARD SITE
Site Location	HOUSTON, TEXAS
Sampling Site Code	CAV-OW-04
Sampling Point Installed (Date)	February 6, 1983

INSTALLATION TEAM

Name . PAUL WILLIAMS	Organization - CAMP,DRESSER & McKEE INC.
Name .: WOODROW LUNSFORD, JOHN BYARS, MIKE PETRI	Organization - McCLELLAND ENGINEERS INC.

SURVEY INFORMATION

Ground Survey ☒ Aerial Survey ☐ Range Finder ☐ Compass ☐ Other ☐

PHOTOGRAPHIC EVIDENCE

Near Range	Background

Photographic Evidence Required

Frame No.		Frame No.	
By	Date	By	Date

000371

000371

SAMPLING LOCATION LOG SHEET

Site Name	CAVALCADE YARD SITE
Site Location	HOUSTON, TEXAS
Sampling Site Code	CAV-OW-05
Sampling Point Installed (Date)	February 7, 1983

INSTALLATION TEAM

Name . PAUL WILLIAMS	Organization - CAMP,DRESSER & McKEE INC.
Name .. WOODROW LUNSFORD, JOHN BYARS, MIKE PETRI	Organization - McCLELLAND ENGINEERS INC.

SURVEY INFORMATION

Ground Survey ☒ Aerial Survey ☐ Range Finder ☐ Compass ☐ Other ☐

PHOTOGRAPHIC EVIDENCE

Near Range	Background
No Photographic Evidence Required	

Roll No.	Frame No.	Roll No.	Frame No.
By	Date	By	Date

000372

SAMPLING LOCATION LOG SHEET

Site Name	CAVALCADE YARD SITE
Site Location	HOUSTON, TX
Sampling Site Code	CAV-OW-06
Sampling Point Installed (Date)	May 12, 1983

INSTALLATION TEAM

Name	PAUL WILLIAMS	Organization -	CAMP DRESSER & McKEE INC.
Name	FIELD CREW	Organization -	URM INC.

SURVEY INFORMATION

Ground Survey ☐ Aerial Survey ☐ Range Finder ☐ Compass ☐ Other ☐

PHOTOGRAPHIC EVIDENCE

Near Range	Background
No Photographic Evidence Required	

Roll No.	Frame No.	Roll No.	Frame No.
By	Date	By	Date

000373

SAMPLING LOCATION LOG SHEET

Site Name	Cavalcade Yard Site
Site Location	Houston, Texas
Sampling Site Code	CAV-OW-07-001
Sampling Point Installed (Date)	May 3, 1983 11:30

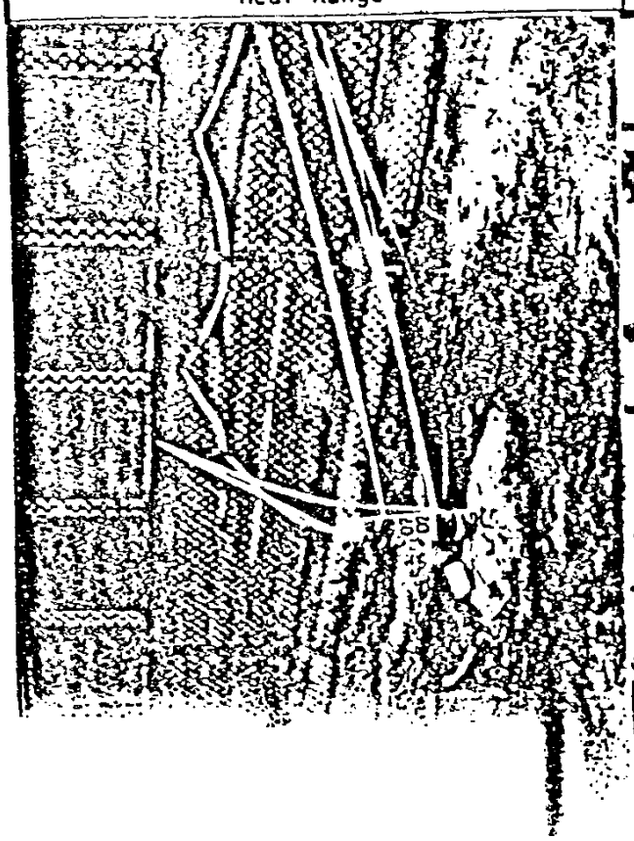
INSTALLATION TEAM

Name J.D. Gram	Organization - Camp Dresser & McKee Inc.
Name W. Lunsford & J. Byars	Organization - McClelland Engineers

SURVEY INFORMATION

Ground Survey ☒ Aerial Survey ☐ Range Finder ☐ Compass ☐ Other ☐

PHOTOGRAPHIC EVIDENCE

Near Range	Background
	

Roll No. 1	Frame No. 5	Roll No. 1	Frame No. 6
By J.D. Gram	Date 5/10/83	By J.D. Gram	Date 5/10/83

000374

SAMPLING LOCATION LOG SHEET

Site Name	Cavalcade Yard Site
Site Location	Houston, Texas
Sampling Site Code	CAV-OW-08-002
Sampling Point Installed (Date)	May 3, 1983 14:30

INSTALLATION TEAM

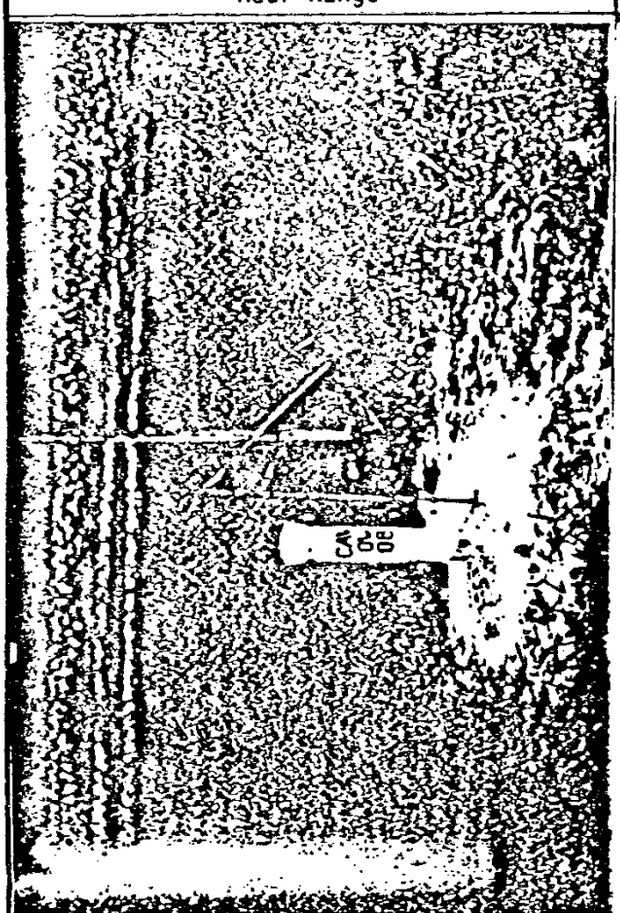
Name J.D. Gram	Organization - Camp Dresser & McKee Inc.
Name W. Lunsford & J. Byars	Organization - McClelland Engineers

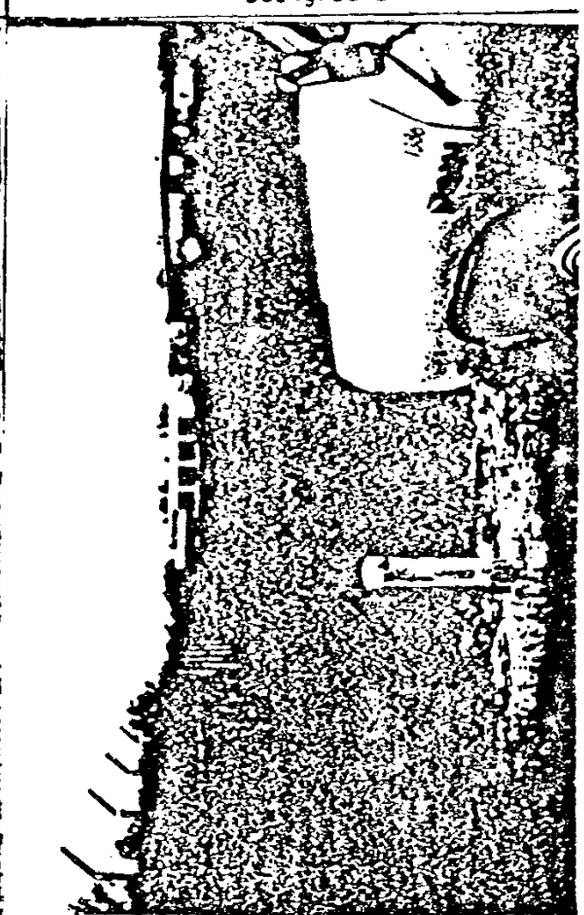
SURVEY INFORMATION

Ground Survey ☒ Aerial Survey ☐ Range Finder ☐ Compass ☐ Other ☐

PHOTOGRAPHIC EVIDENCE

Near Range	Background





Roll No. 1	Frame No. 7	Roll No. 1	Frame No. 8
By J.D. Gram	Date 5/10/83	By J.D. Gram	Date 5/10/83

000375

SAMPLING LOCATION LOG SHEET

Site Name	Cavalcade Yard Site
Site Location	Houston, Texas
Sampling Site Code	CAV-OW-09-002
Sampling Point Installed (Date)	May 5, 1983 13:30

INSTALLATION TEAM

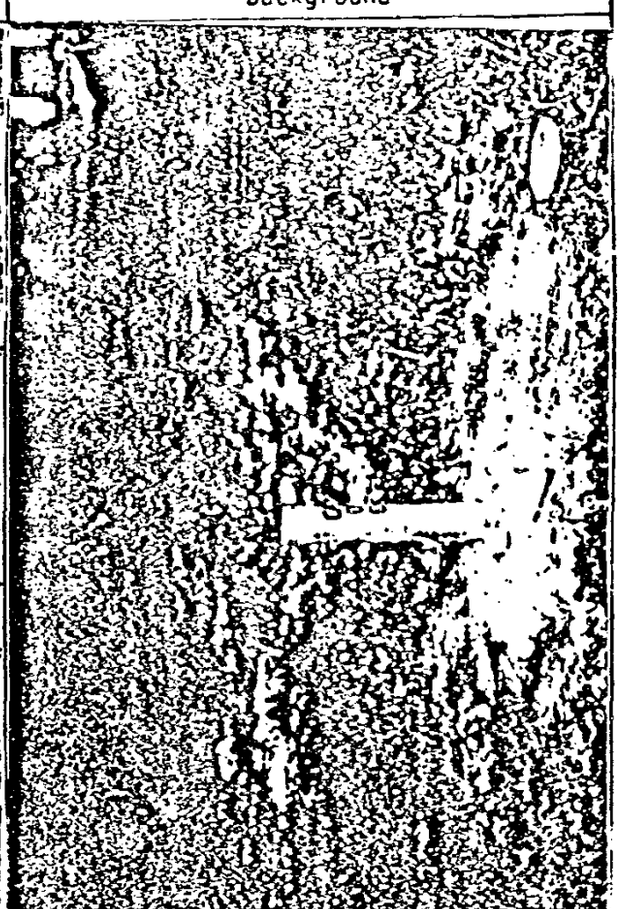
Name J.D. Gram	Organization - Camp Dresser & McKee Inc.
Name W. Lunsford & J. Bayers	Organization - McClelland Engineers

SURVEY INFORMATION

Ground Survey ☒ Aerial Survey ☐ Range Finder ☐ Compass ☐ Other ☐

PHOTOGRAPHIC EVIDENCE

Near Range	Background



Roll No. 1	Frame No. 9	Roll No. 1	Frame No. 10
By J.D. Gram	Date 5/10/83	By J.D. Gram	Date 5/10/83

000376

SAMPLING LOCATION LOG SHEET

Site Name	Cavalcade Yard Site
Site Location	Houston, Texas
Sampling Site Code	CAV-OW-10-001
Sampling Point Installed (Date)	May 4, 1983 11:15

INSTALLATION TEAM

Name J.D. Gram	Organization - Camp Dresser & McKee Inc.
Name W. Lunsford & J. Byars	Organization - McClelland Engineers

SURVEY INFORMATION

Ground Survey ☒ Aerial Survey ☐ Range Finder ☐ Compass ☐ Other ☐

PHOTOGRAPHIC EVIDENCE

Near Range

Background

Roll No. 1	Frame No. 11	Roll No. 1	Frame No. 12
By J.D. Gram	Date 5/10/83	By J.D. Gram	Date 5/10/83

000377

SAMPLING LOCATION LOG SHEET

Site Name	Cavalcade Yard Site
Site Location	Houston, Texas
Sampling Site Code	CAV-OW-11-001
Sampling Point Installed (Date)	May 5, 1983 9:00

INSTALLATION TEAM

Name J.D. Gram	Organization - Camp Dresser & McKee Inc.
Name W. Lunsford & J. Byars	Organization - McClelland Engineers

SURVEY INFORMATION

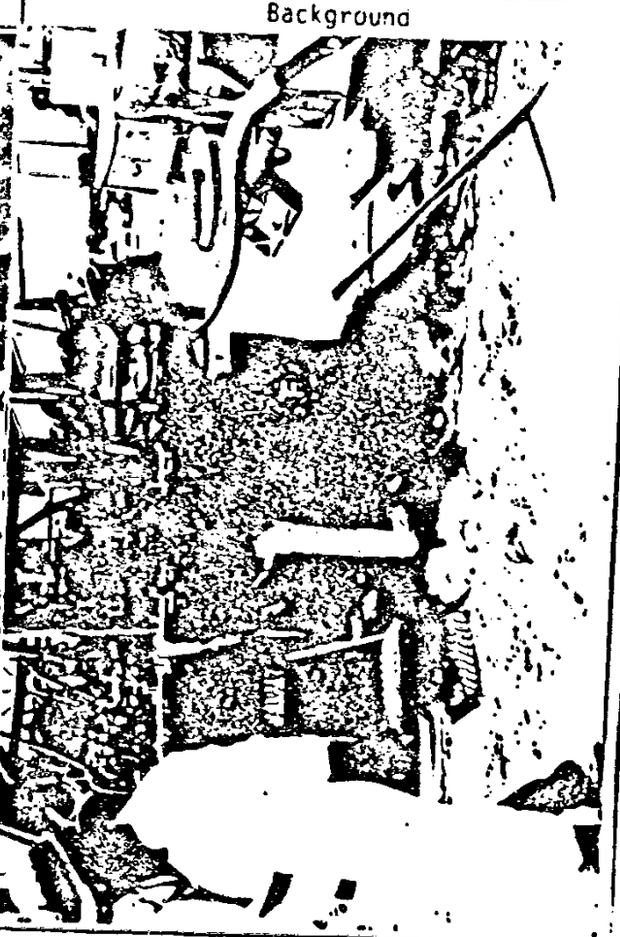
Ground Survey ☒ Aerial Survey ☐ Range Finder ☐ Compass ☐ Other ☐

PHOTOGRAPHIC EVIDENCE

Near Range

Roll No. 1	Frame No. 13
By J.D. Gram	Date 5/10/83

Background



Roll No. 1	Frame No. 14
By J.D. Gram	Date 5/10/83

000378

SAMPLING LOCATION LOG SHEET

Site Name	CAVALCADE YARD SITE
Site Location	HOUSTON, TEXAS
Sampling Site Code	CAV-OW-12
Sampling Point Installed (Date)	Point not installed

INSTALLATION TEAM

Name . PAUL WILLIAMS	Organization - CAMP,DRESSER & McKEE INC.
Name .. WOODROW LUNSFORD & JOHN BYARS	Organization - McCLELLAND ENGINEERS INC.

SURVEY INFORMATION

Ground Survey ☒ Aerial Survey ☐ Range Finder ☐ Compass ☐ Other ☐

PHOTOGRAPHIC EVIDENCE

Near Range	Background
No Photographic Evidence Required	
Roll No. / Frame No.	Roll No. / Frame No.
By / Date	By / Date

000379

SAMPLING LOCATION LOG SHEET

Name	Cavalcade Yard Site
Site Location	Houston, Texas
Sampling Site Code	CAV-OW-13-001
Sampling Point Installed (Date)	May 6, 1983 9:30

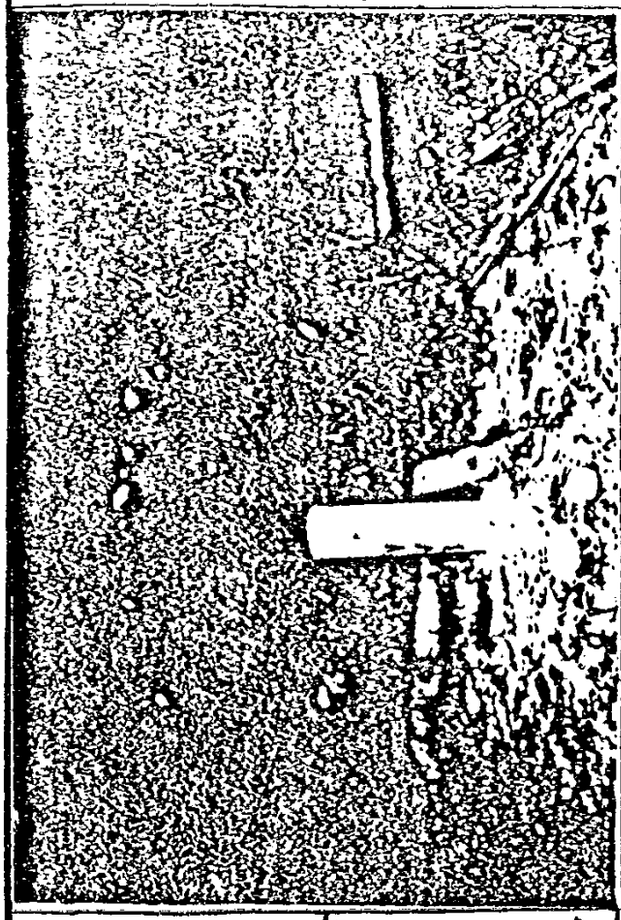
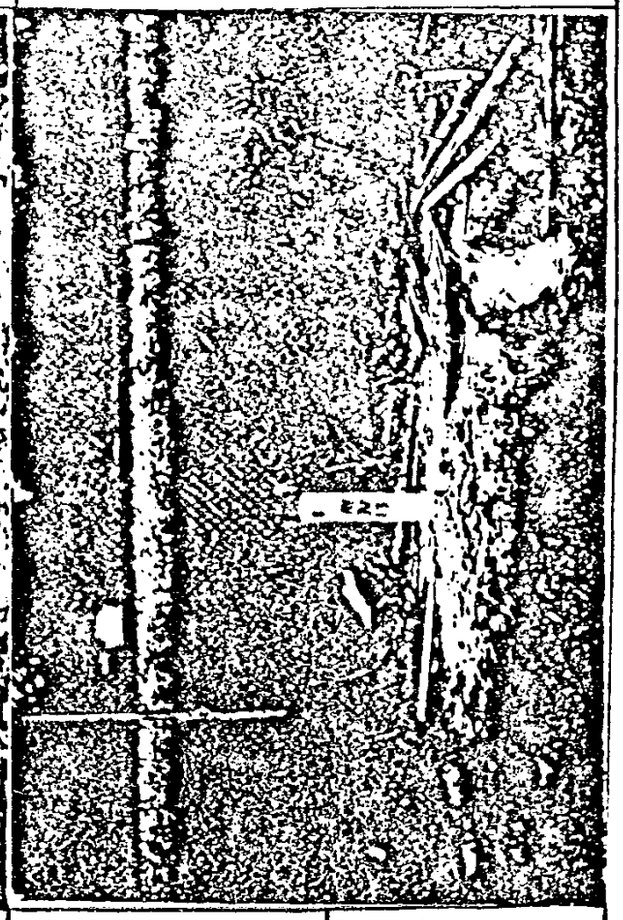
INSTALLATION TEAM

Name J.D. Gram	Organization - Camp Dresser & McKee Inc.
Name W. Lunsford & J. Byars	Organization - McClelland Engineers

SURVEY INFORMATION

Ground Survey ☒ Aerial Survey ☐ Range Finder ☐ Compass ☐ Other ☐

PHOTOGRAPHIC EVIDENCE

Near Range	Background
	
Roll No. 1 / Frame No. 1	Roll No. 1 / Frame No. 2
By J.D. Gram / Date 5/10/83	By J.D. Gram / Date 5/10/83

000380

SAMPLING LOCATION LOG SHEET

ite Name	Cavalcade Yard Site
ite Location	Houston, Texas
ampling Site Code	CAV-OW-014-001
Sampling Point Installed (Date)	May 2, 1983 14:20

INSTALLATION TEAM

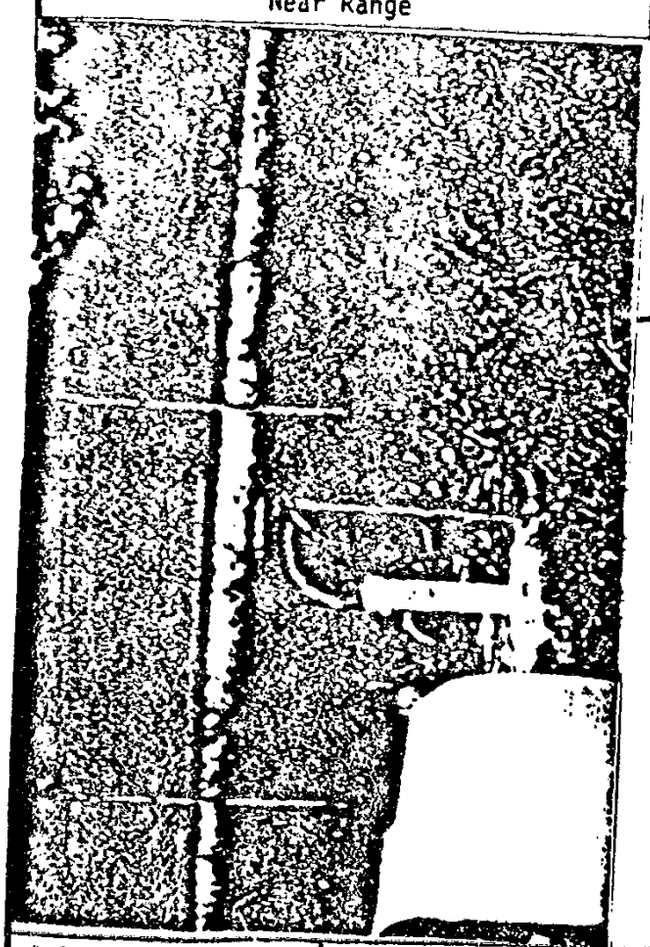
ame J.D. Gram	Organization - Camp Dresser & McKee Inc.
ame W. Lunsford & J. Byars	Organization - McClelland Engineers

SURVEY INFORMATION

round Survey ☒ Aerial Survey ☐ Range Finder ☐ Compass ☐ Other ☐

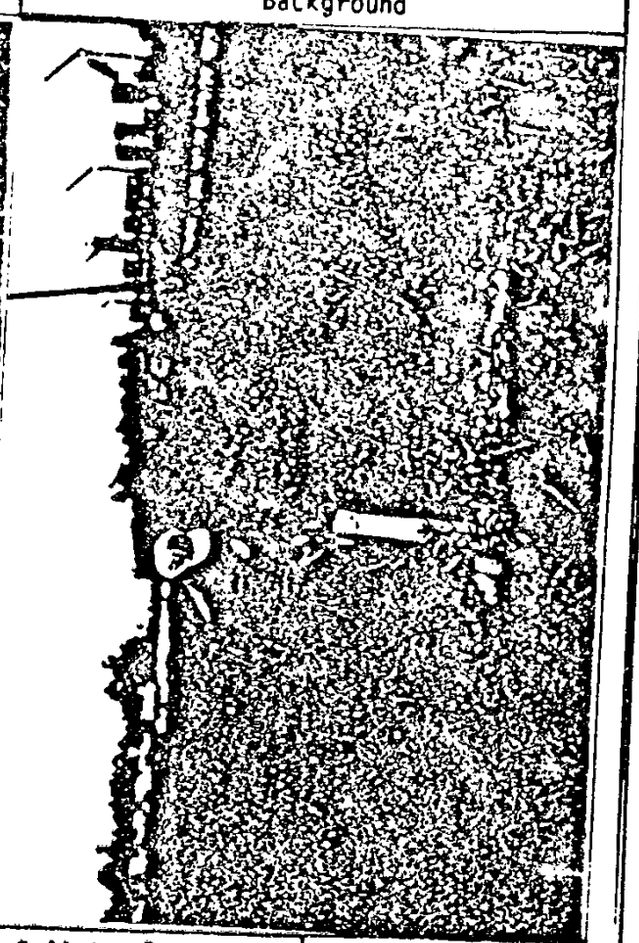
PHOTOGRAPHIC EVIDENCE

Near Range



Roll No. 1	Frame No. 3
By J.D. Gram	Date 5/10/83

Background



Roll No. 1	Frame No. 4
By J.D. Gram	Date 5/10/83

000381

PRODUCTION WELL SAMPLES

000382

SAMPLING LOCATION LOG SHEET

Site Name	CAVALCADE YARD SITE
Site Location	HOUSTON, TX
Sampling Site Code	CAV-PW-01
Sampling Point Installed (Date)	February 23, 1983

INSTALLATION TEAM

Name	JEFFREY D. GRAM	Organization -	CAMP DRESSER & McKEE INC.
Name	WILLIAM TOBIN	Organization -	McCELLAND ENGINEERS

SURVEY INFORMATION

Ground Survey ☒ Aerial Survey ☐ Range Finder ☐ Compass ☐ Other ☐

PHOTOGRAPHIC EVIDENCE

Near Range	Background
No Photographic Evidence Required	
Roll No. - Frame No. -	Roll No. - Frame No. -
By - Date -	By - Date -

000383

SAMPLING LOCATION LOG SHEET

Site Name	CAVALCADE YARD SITE
Site Location	HOUSTON, TX
Sampling Site Code	CAV-PW-02
Sampling Point Installed (Date)	February 23, 1983

INSTALLATION TEAM

Name	JEFFREY D. GRAM	Organization -	CAMP DRESSER & McKEE INC.
Name	WILLIAM TOBIN	Organization -	McCLELLAND ENGINEERS

SURVEY INFORMATION

Ground Survey ☒ Aerial Survey ☐ Range Finder ☐ Compass ☐ Other ☐

PHOTOGRAPHIC EVIDENCE

Near Range	Background
No Photographic Evidence Required	

Roll No.	Frame No.	Roll No.	Frame No.
By	Date	By	Date

000384

SAMPLING LOCATION LOG SHEET

Name	CAVALCADE YARD SITE
Location	HOUSTON, TX
ling Site Code	CAV-PW-03
ing Point Installed (Date)	February 23, 1983

INSTALLATION TEAM

JEFFREY D. GRAM	Organization -	CAMP DRESSER & McKEE INC.
WILLIAM TOBIN	Organization -	McCLELLAND ENGINEERS

SURVEY INFORMATION

und Survey ☒ Aerial Survey ☐ Range Finder ☐ Compass ☐ Other ☐

PHOTOGRAPHIC EVIDENCE

Near Range	Background
No Photographic Evidence Required	

Roll No. -	Frame No. -	Roll No. -	Frame No. -
By -	Date -	By -	Date -

000385