PHASE II SITE INVESTIGATION REPORT

FEDERAL-MOGUL CORPORATION

KINGSTON, NEW YORK

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MONTGOMERY WATSON

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1.0 INTRODUCTION

Montgomery Watson has prepared this report to summarize site investigation activities conducted at Federal-Mogul Corporation's (Federal-Mogul) facility located at 85 Grand Street, Kingston, New York. Field investigation activities were conducted by Montgomery Watson on September 8-10, 1997. The scope of work was performed in general accordance with Montgomery Watson's July 29, 1997 proposal to Federal-Mogul. The investigation included a review of relevant site information, the sampling of six existing monitoring wells, the installation of three monitoring wells, and the collection and analysis of groundwater and soil samples. The objective for this investigation was to further investigate and assess the groundwater contamination and characteristics identified during a previous investigation conducted by Conestoga-Rovers & Associates (CRA). Although the previous CRA investigation also identified concerns with soil and sewer sediment impacts, Montgomery Watson did not investigate these media as a part of this investigation.

Section 2 of this report includes a description of the site and a description of previous investigations conducted. Section 3 outlines the site investigation activities performed at the facility. Section 4 presents a summary of the analytical results and discusses investigation findings. Conclusions are contained in Section 5. References are provided in Section 6.

2.0 SITE DESCRIPTION AND BACKGROUND

2.1 SITE DESCRIPTION

The Federal-Mogul Kingston facility is located at 85 Grand Street (at the corner of Grand and Tenbroek Streets) in the City of Kingston, Ulster County, New York (Figure 1). The site was formerly a manufacturing facility and includes two buildings comprising a total of approximately 105,000 square feet (sf). The facility is currently owned by Federal-Mogul. Thiokol, which occupied and operated at the facility from approximately 1991, recently vacated the site.

According to information in the previous site reports (as discussed in Section 2.2, below), the property consists of approximately 4.5 acres. The facility had been in operation since 1889 and had been used by a number of companies for automotive, electrical, and refrigeration supplies manufacturing. The facility is situated in an area of mixed residential, industrial, and commercial development.

The facility is bound to the northeast by Tenbroek Street, to the southeast by Grand Street, to the southwest by a retail candy and tobacco store and a bank, and to the northwest by railroad tracks. Surrounding land uses are residential to the southeast beyond Grand Street; mixed residential and commercial to the northeast; and mixed commercial and light industrial to the northwest and southwest.

2.2 SUMMARY OF PREVIOUS INVESTIGATIONS

Two previous investigations were performed at the site on behalf of Thiokol. A Phase I Environmental Site Assessment (ESA) was performed in 1991 by an unknown party. Conestoga-Rovers & Associates (CRA) conducted a Phase II Environmental Assessment in August 1993.

As a part of the August 1993 CRA Phase II ESA, six monitoring wells and 29 soil borings were advanced. The monitoring wells were advanced to a depth of approximately 20-25 feet below ground surface (ft bgs) and soil borings were advanced to varying depths of up to 80 ft bgs. Groundwater, soil, and sewer sediment samples were collected and analyzed for potential impacts. Results from the analytical testing and investigation activities identified impacted areas and provided site specific soil and groundwater information. A ground penetrating radar survey was also conducted to attempt to locate four suspected underground storage tanks (USTs), of which one was located.

CRA indicated that the site is located within the Lower Hudson River Basin. Based on the stratigraphy identified in soil boring BH-1 which was advanced to approximately 80 ft bgs, it was determined that the site is underlain by unconsolidated sand to an approximate depth of 70 ft bgs. The sand is classified as a fine to coarse grained sediment, which becomes more silty with depth. Underlying the sand is a clay unit which was encountered at an

approximate depth of 70 ft bgs. Soil boring BH-1 was advanced ten feet into the clay unit, but did not penetrate it. Bedrock was not encountered during the drilling program.

During on-site drilling operations conducted by CRA, groundwater was encountered beneath the site within an unconfined sand deposit approximately 13 ft bgs. Based on the difference between the average elevations of groundwater beneath the site (approximately 170 ft above mean sea level (AMSL)) and the nearby Hudson River (approximately 5 ft AMSL and 1.5 miles east), CRA concluded that the groundwater table is likely not hydraulically connected to the Hudson River. CRA determined that groundwater at the site flows to the west. CRA also calculated groundwater flow velocity to within one order of magnitude to be 1.1 ft/day.

Thirty shallow soil samples, twelve groundwater samples, and three sediment samples were collected by CRA and were analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), Resource Conservation and Recovery Act (RCRA) Metals, cyanide, and polychlorinated biphenyls (PCBs).

Shallow (approximately 3 ft bgs) soil samples exhibited VOC impacts above New York State Department of Environmental Conservation (NYSDEC) cleanup objectives (Cleanup Criteria). The locations where the greatest concentrations were detected were near the northwest site boundary. SVOC and PCB concentrations were all below Cleanup Criteria. Metals impacts were noted above Cleanup Criteria and NYSDEC Eastern USA background values in soils collected from several locations across the site.

VOC impacts were detected above Cleanup Criteria in each of the groundwater samples collected and analyzed by CRA from the six monitoring wells. PCBs and SVOCs were not detected in groundwater samples. Cyanide was detected at one location. Dissolved metals were detected in some of the groundwater samples at concentrations that may be above background levels.

VOCs, SVOCs, PCBs, and metals were detected in samples collected from each sewer sediment sample location. Cyanide was not detected in any sewer sediment samples.

CRA did not identify a source of groundwater contamination and, if groundwater flow is to the west, did not evaluate the potential for off-site migration of contaminants at the downgradient site boundary. CRA also identified uncertainties associated with the hydraulic conductivity and groundwater velocity values calculated and contained in the CRA report.

3.0 FIELD INVESTIGATION METHODOLOGY

3.1 PRE-FIELD INVESTIGATION ACTIVITIES

Prior to initiation of on-site investigation activities, Montgomery Watson conducted the following activities:

3.1.1 Contact Local Agencies/ Perform Receptor Survey

Montgomery Watson contacted the County of Ulster Health and Sanitation Department and the Filtration Department to inquire about available well logs in the surrounding area. Ms. Judy Hansen, City of Kingston Water Superintendent, indicated that there are no wells in the City of Kingston. She reported that there may be some illegal points, but none that the City was aware of and none that the City would keep records about. Mr. Bruce Mitchell, Filtration Department, was also contacted regarding the public water supply for Kingston. Mr. Mitchell indicated that public water is supplied to the city from a reservoir (Cooper Lake) located approximately 15 miles northwest of the City of Kingston. Based on this information, the potential for public water supply receptors near the site is eliminated.

During the field investigation activities, a Montgomery Watson representative performed a driving survey of the area surrounding the facility to attempt to identify potential sensitive receptors or discharge points. The survey did not identify any nearby sensitive receptors or likely discharge points.

3.1.2 Review Site Information

Montgomery Watson reviewed building drawings and utility drawings of the site, as provided by Thiokol, to assist in proper placement of borings. Some utility corridor locations were observed on the drawings; however, based on the sandy soils encountered during site investigation activities, the depth to groundwater (approximately 13-16 ft bgs), and the hydraulic conductivity, the utility corridors are not likely to represent significant preferential pathway behavior. Montgomery Watson was not provided a copy of the Phase I ESA for the site, reportedly conducted prior to Phase II activities by CRA.

3.2 FIELD INVESTIGATION ACTIVITIES

Montgomery Watson mobilized to the site and performed investigative activities from September 8-10, 1997. Aquifer Drilling and Testing of Woodside, New York provided drilling services. Investigation activities included the installation of three monitoring wells, the performance of aquifer testing, and the sampling and analysis of groundwater from the site. A limited number of soil samples were also collected for geotechnical and total organic carbon analysis.

Three flush-mounted monitoring wells (MW07, MW08, and MW09) were installed at the site to a maximum depth of 23 ft bgs to assess site groundwater and hydrogeology and the potential for off-site impacts. Monitoring wells MW07 and MW09 were placed near the reported downgradient site boundary (as identified by CRA) and monitoring well MW08 was placed near the center of the site. Monitoring well locations are indicated on Figure 2.

Groundwater monitoring wells were installed using 4-1/4 inch diameter hollow stem augers with continuous collection of split spoon soil samples. During monitoring well boring advancement, soils were screened with a photoionization detector (PID) and logged for soil type in accordance with the Unified Soil Classification System (USCS). Soil boring logs are included in Appendix A. Soil samples were collected for analysis of total organic carbon (TOC) and grain size analysis from above and below the water table during drilling operations.

Monitoring wells were constructed using a ten foot long, two inch inner diameter (ID), poly-vinyl chloride (PVC), #10 slot well screen set consistent with previously installed wells, at least two feet above the water table and extending into the saturated zone. At each well, a sand pack was installed around the screen and extended to approximately two ft above the top of the screen section. A two to three ft thick bentonite seal was placed above the sand pack to form a lower seal. A thick bentonite slurry was placed above the lower seal to seal the borehole. A bolt-down flush-mount steel protective casing and locking water-tight cap were installed in a concrete pad to protect the wells from being tampered with. Well construction logs are included in Appendix A.

The monitoring wells were developed after a minimum period of 24 hours after installation to allow the slurry to set up and the well to stabilize. Development was performed by surging the well with a bailer and then purging the well with a peristaltic pump. Development was considered complete when specific conductivity, temperature, and pH readings, collected and recorded at well volume intervals, stabilized or a minimum of five well volumes were removed.

Investigation derived wastes (IDW) such as drill cuttings, development water, and purge water were containerized in drums and staged on-site in a central location until arrangements for proper disposal could be made. One liquid and one soil IDW sample were collected for waste characterization analysis as described in the next section. A total of three soil drums and two liquid drums were labeled and staged on-site.

After installation of the three monitoring wells, Montgomery Watson surveyed the wells to determine top of well casing elevations. Static water level readings were recorded from all nine wells in order to aid in the assessment of groundwater flow direction. Water elevation data is presented in Table 1 and discussed in Section 4.1.

3.3 SAMPLING AND ANALYSIS

3.3.1 Geotechnical Soil Sample Collection

During drilling activities, selected soil samples were collected from MW07, MW08, and MW09 for analysis of grain size distribution. Two soil samples were collected from each boring location; one each from above and below the water table. The soil samples were sealed in sample containers and placed in a secured cardboard box for shipment via overnight carrier to CGC Laboratory for analysis. The soil samples were tested for grain size analysis using American Society for Testing and Materials (ASTM) Method D117-90. Grain size analyses results are included in Appendix B and were used in conjunction with the aquifer testing described below to calculate the hydraulic conductivity and groundwater flow velocity for groundwater beneath the site.

3.3.2 Analytical Sample Collection

During drilling activities, soil samples were collected from MW07, MW08, and MW09 for the analysis of total organic carbon (TOC) content. One soil sample was collected from above and one from below the water table from each boring location.

A total of ten groundwater samples were collected and field filtered using 0.45 micron filter: one from each newly installed well, one from each existing monitoring well, and one duplicate sample. All ten groundwater samples were analyzed for VOCs and RCRA metals using U.S. EPA Method 8260 and appropriate U.S. EPA approved methods for metals, respectively. Six of the groundwater samples were also analyzed for TOC content. Samples analyzed for TOC included those collected from MW02, MW03, MW04, MW07, MW08, and MW09.

Montgomery Watson also collected and analyzed one composite soil and one liquid IDW sample for VOCs, SVOCs, and metals by the Toxicity Characteristic Leaching Procedure (TCLP) to determine applicable disposal requirements.

The soil and groundwater samples were sealed in a cooler with a trip blank sample and shipped via overnight courier to Specialized Assays laboratory for analysis.

3.4 AQUIFER TESTING

In order to evaluate the hydraulic conductivity of the aquifer formation, rising head aquifer permeability tests (slug tests) were performed in four of the monitoring wells. Slug tests were conducted at MW06, MW07, MW08, and MW09. Slug test equipment included a pressure transducer, a data logger, and a bailer of known volume.

The slug test method involves the removal of a slug of known volume from the well and measuring water level recovery. Prior to the test, a pressure transducer was placed approximately one foot above the bottom of each well and connected to an in-situ data logger. The data logger was programmed to record water levels on a logarithmically increasing time scale, and was referenced to the static water level (i.e., an initial drawdown

of zero feet). The initial static water level was measured relative to the surveyed point at the top of the well's inner casing using an electronic water level probe. Data from each test was analyzed utilizing AQTESOLV which uses the Bouwer and Rice slug test method (Bouwer, 1989a, Bouwer and Rice, 1976) clarified by Bouwer (1989b).

A copy of the water level data recorded during the slug tests and the output from the program used to analyze the data are included in Appendix C.

4.0 RESULTS

4.1 SITE GEOLOGY AND HYDROGEOLOGY

Groundwater was encountered in the sand deposit under unconfined conditions at an approximate depth of 14-16 ft bgs. Based on the groundwater level measurements recorded at each of the monitoring wells, a groundwater contour map for the site was generated and is included as Figure 3. Groundwater at the site flowed to the west. This information is consistent with the conclusions of CRA's 1993 investigation (Table 1).

The mean hydraulic conductivity was calculated to be 8.88E-03 ft/sec, and ranged from 5.54E-03 ft/sec. to 1.52E-02 ft/sec. across the site. The hydraulic gradient for the site was calculated to be approximately 0.00458 ft/ft based on the measured groundwater elevations. Grain size analyses indicated that the soil is typically greater than 90% sand. The effective porosity of the soil (fine-medium sand) in the water bearing zone was estimated to be 30% (Fetter 1980). The groundwater flow velocity was calculated to be approximately 11.7 ft/day based on the hydraulic conductivity, hydraulic gradient, and effective porosity. These values are consistent with those typically associated with the sandy soils encountered during intrusive investigation at the site and verified based on grain size analyses.

4.2 GROUNDWATER ANALYTICAL RESULTS

This section presents the groundwater analytical results from the site investigation activities. A copy of the analytical results is provided in Appendix D. The site investigation groundwater analytical results are compared to the NYSDEC values identified for groundwater in the October 1993 Division of Water Technical and Operational Guidance Series (TOGS) Memorandum entitled *Ambient Water Quality Standards and Guidance Values*. These values will be identified as Cleanup Criteria. Table 2 provides a summary of the VOCs detected in groundwater samples and compares them to Cleanup Criteria. Table 3 provides a summary of metals results in groundwater and compares them to Cleanup Criteria. Table 4 provides a summary of soil and groundwater TOC results.

Several VOCs were detected at concentrations above the analytical method detection limit (MDL) at locations across the site; however; only the samples which exceed Cleanup Criteria are discussed in the text. Trichloroethene (TCE) was detected in the groundwater sample collected from each well at concentrations above Cleanup Criteria (concentrations ranged from 11.4 ug/L to 893 ug/L). The highest concentrations of TCE were detected along the southeast boundary of the site (MW04 and MW02) and near the center of the site (MW08).

Tetrachloroethene (PCE) was detected above Cleanup Criteria in seven of the nine wells at the site. The highest concentrations of PCE were detected near the south corner boundary of the site (382 ug/L at MW02) and near the center of the northwestern site boundary (194 ug/L at MW07).

Several other VOCs were detected above Cleanup Criteria at isolated locations across the site. Cis-1,2 Dichloroethene (cis-1,2-DCE) was detected in MW02, MW04, MW06, MW07, MW08, and MW09 at concentrations ranging from 15 ug/L to 785 ug/L. Vinyl chloride, trans-1,2 Dichloroethene, 1,2,4-Trimethylbenzene, and xylenes were also detected at concentrations of 77.8, 5.6, 8.1, and 20.8 µg/L, respectively, in the sample from MW09. 1,2,4-Trimethylbenzene and vinyl chloride were detected at MW04 at concentrations of 6 and 3 ug/L, respectively. Naphthalene was detected at a concentration of 63.6 ug/L in the sample from MW07.

Metals results indicate the presence of barium and chromium in site groundwater. Concentrations of barium were below Cleanup Criteria values. Chromium was detected at concentrations above the Cleanup Criteria value in MW07 and MW08.

Only one of the six groundwater samples analyzed for TOC content indicated the presence of TOC above the MDL. MW09 indicated a TOC content of 11.8 mg/L.

4.3 SOIL ANALYTICAL RESULTS

Soil samples collected were analyzed for TOC and grain size. The results of the grain size analyses were used in conjunction with rising head slug tests to calculate a site specific hydraulic conductivity and groundwater flow velocity. Site specific hydrogeologic information is presented in Section 4.1. Grain size analysis results indicated that site soils were brown fine-medium sands with little silt and trace gravels and a USCS classification of SP-SM or SM.

TOC analyses of soil at varying depths and locations across the site indicate a range of TOC concentrations from 210 mg/kg to 1710 mg/kg.

4.4 IDW COMPOSITE SAMPLE RESULTS

Based on the analytical results, both the liquid and soil IDW are classified as non-hazardous waste. Arrangements have been made for the transport and disposal of the non-hazardous soil and liquid IDW at Chemical Waste Management's (CWM) Model City, New York facilities. Soil IDW will be disposed at CWM's Model City Landfill, and liquid IDW will be disposed at CWM's Model City Wastewater Treatment Plant.

5.0 CONCLUSIONS

This section describes the potential environmental concerns at the site. These conclusions are based on available information from historic investigations and the Phase II Site Investigation activities performed by Montgomery Watson in September 1997. The objective of this investigation was to further assess the groundwater contamination and characteristics previously identified during the August 1993 CRA Phase II Environmental Assessment. Soil and sediments, which were also identified as impacted during the CRA investigation, were not investigated as a part of the scope of work of this assessment.

Groundwater analytical results from across the site indicate the presence of elevated levels of VOCs. VOCs detected at levels above Cleanup Criteria include cis-1,2-DCE, trans-1,2-DCE, naphthalene, PCE, TCE, vinyl chloride, 1,2,4-trimethylbenzene, and xylenes. The previous CRA investigation also identified the presence of cis-1,2-DCE, PCE, and TCE; however, the concentrations of these constituents were much higher than concentrations detected by Montgomery Watson at several locations. Vinyl chloride, cis-1,2-DCE, and trans-1,2-DCE are degradation products of PCE and TCE. The decrease over time in concentrations of VOCs detected in groundwater and the presence of degradation products may indicate that the PCE and TCE present in groundwater are naturally attenuating.

Concentrations of VOCs above Cleanup Criteria were detected at both the upgradient and downgradient site boundaries. The presence of elevated concentrations of TCE at the upgradient site boundary suggests that contamination may be migrating onto the site from an off-site location. The area surrounding the site is primarily industrial; however, a driving survey and review of a regulatory database did not identify specific potential upgradient sources.

Chromium was detected in exceedance of the Cleanup Criteria in groundwater samples collected from two of the monitoring well locations (MW07 and MW08). No other metals were detected above the Cleanup Criteria in the groundwater samples collected from on-site monitoring wells.

TOC content in soils varied from 210 to 1710 mg/kg. These values indicate a low organic content of on-site soils (less than 0.2%). Low TOC concentrations are typical of the sandy soils encountered at the site. Generally, the higher the TOC content of a soil, the more likely are metals and other constituents to bind with soils. The TOC content in site soils indicate that constituents may not readily adsorb and desorb between groundwater and soil.

6.0 REFERENCES

Conestoga-Rovers & Associates, *Phase II Environmental Site Assessment, Huck International Installation Equipment Division Site, Kingston, New York*, August 1993.

Fetter, C.W. Jr. (1980). Applied Hydrogeology. Columbus: Charles E. Merrill Publishing Co.

New York State Department of Environment and Conservation, *Division of Water Technical and Operational Guidance Series (1.1.1): Ambient Water Quality Standards and Guidance Values,* October 22, 1993.

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Figures

NOTES:

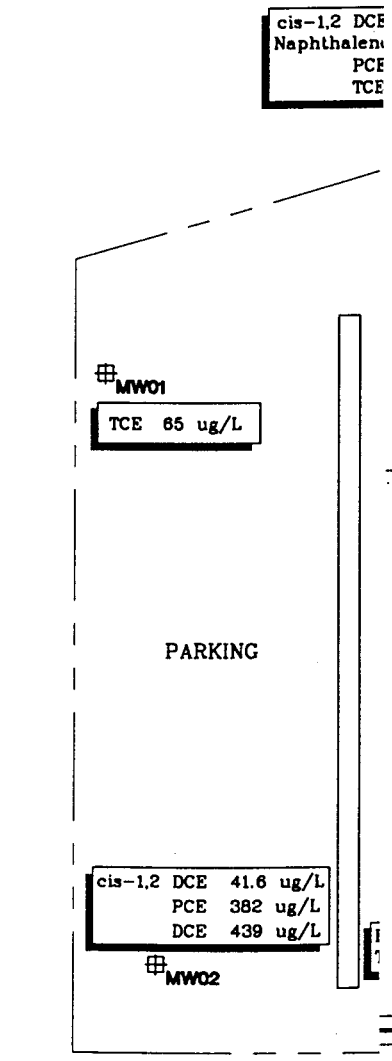
1. BASE MAP DEVELOPED FROM DELORME STREET ATLAS USA SOFTWARE (1996).

FEDERAL-MOGUL CORPORATION
KINGSTON, NEW YORK

SITE LOCATION MAP

FIGURE 1

MONTGOMERY WATSON



north

NOTES

1. BASE MAP DEVELOPED FROM THE PHASE II ENVIRONMENTAL ASSESSMENT REPORT COMPLETED BY CRA IN AUGUST 1993 AND THE JULY 1, 1997 SITE WALKOVER.
2. GROUNDWATER SAMPLING EVENT WAS CONDUCTED ON SEPTEMBER 18, 1997.

LEGEND

MW07 MONITORING WELL LOCATION (INSTALLED 9/1997 BY MONTGOMERY WATSON)

MW01 MONITORING WELL LOCATION (INSTALLED 4/1993 BY CRA)

SECURITY FENCE

DCE DICHLOROETHENE
PCE TETRACHLOROETHENE
TCE TRICHLOROETHENE
TMB TRIMETHYLBENZENE
VC VINYL CHLORIDE

0 60 120

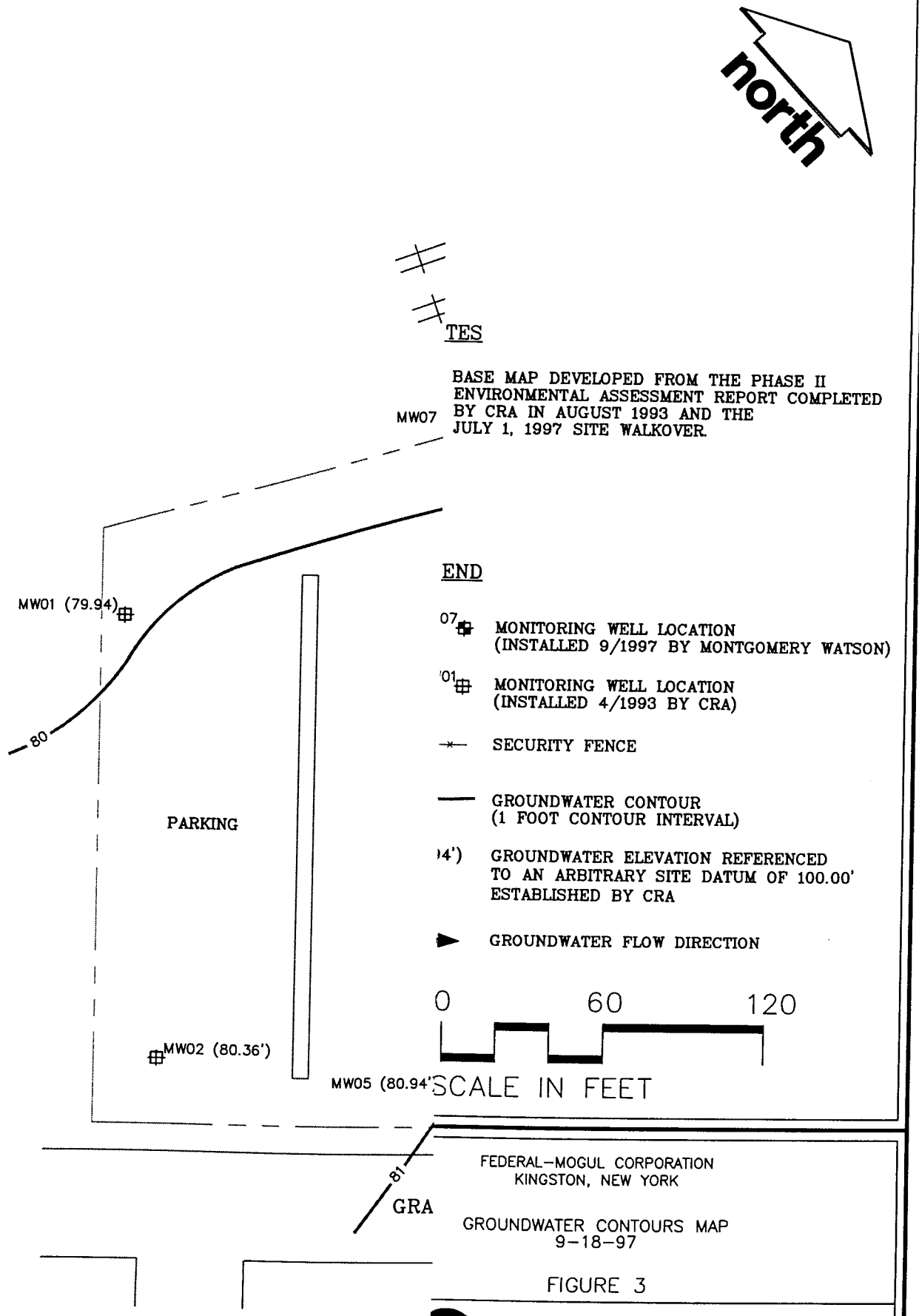
SCALE IN FEET

FEDERAL-MOGUL CORPORATION
KINGSTON, NEW YORK

SITE FEATURES MAP

FIGURE 2

MONTGOMERY WATSON


north
TES
BASE MAP DEVELOPED FROM THE PHASE II ENVIRONMENTAL ASSESSMENT REPORT COMPLETED BY CRA IN AUGUST 1993 AND THE JULY 1, 1997 SITE WALKOVER.
MW07
END
MW01 (79.94)
80
PARKING
MW02 (80.36')
MW05 (80.94')
07 MONITORING WELL LOCATION (INSTALLED 9/1997 BY MONTGOMERY WATSON)
01 MONITORING WELL LOCATION (INSTALLED 4/1993 BY CRA)
SECURITY FENCE
GROUNDWATER CONTOUR (1 FOOT CONTOUR INTERVAL)
4') GROUNDWATER ELEVATION REFERENCED TO AN ARBITRARY SITE DATUM OF 100.00' ESTABLISHED BY CRA
GROUNDWATER FLOW DIRECTION
0
60
120
SCALE IN FEET
81
GRA
FEDERAL-MOGUL CORPORATION
KINGSTON, NEW YORK
GROUNDWATER CONTOURS MAP
9-18-97
FIGURE 3
MONTGOMERY WATSON

Tables

TABLE 1
Summary of Groundwater Elevation Data
Federal-Mogul Facility
Kingston, New York

Well Number	TOIC Elevation	Measurement Date	Depth to Groundwater (ft)	Groundwater Elevation
MW-1	95.66	6/17/93	14.72	80.94
		7/15/93	15.16	80.50
		9/18/97	15.72	79.94
MW-2	95.33	6/17/93	13.80	81.53
		7/15/93	14.23	81.10
		9/18/97	14.97	80.36
MW-3	96.20	6/17/93	14.40	81.80
		7/15/93	14.86	81.34
		9/18/97	15.35	80.85
MW-4	96.73	6/17/93	13.48	83.25
		7/15/93	14.03	82.70
		9/18/97	14.72	82.01
MW-5	96.80	6/17/93	14.64	82.16
		7/15/93	15.16	81.64
		9/18/97	15.86	80.94
MW-6	96.97	6/17/93	13.89	83.08
		7/15/93	14.40	82.57
		9/18/97	15.09	81.88
MW-7	95.97	6/17/93	N/A	N/A
		7/15/93	N/A	N/A
		9/18/97	16.09	79.88
MW-8	96.61	6/17/93	N/A	N/A
		7/15/93	N/A	N/A
		9/18/97	15.2	81.41
MW-9	95.40	6/17/93	N/A	N/A
		7/15/93	N/A	N/A
		9/18/97	15.28	80.12

NOTES:

1. MW-1 through MW-6 installed by Conestoga-Rovers & Associates (CRA) in April 1993. Monitoring well and groundwater elevations for 1993 obtained from CRA Phase II ESA report, August 1993.
2. MW-7 through MW-9 installed and surveyed by Montgomery Watson in September 1997.
3. Water levels and elevations of monitoring wells measured from top of inner well casing (TOIC).
4. N/A= Not Applicable

Table 2
Summary of Groundwater Analytical Data - Volatile Organic Compounds
Federal-Mogul
Kingston, NY

Location	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	Cleanup
Sample Date	18-Sep	18-Sep	18-Sep	18-Sep	18-Sep	18-Sep	18-Sep	18-Sep	18-Sep	Criteria
1,1-Dichloroethene	ND	ND	ND	2.4	ND	ND	ND	ND	ND	5
cis-1,2-Dichloroethene	3.8	41.6	ND	795	ND	18.9	20	15	120	5
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	ND	ND	5.6	5
Ethylbenzene	ND	ND	ND	2.6	ND	ND	ND	ND	ND	5
Isopropylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	2.6	5
Naphthalene	ND	ND	ND	9.7	ND	ND	63.6	ND	ND	10
Tetrachloroethene	3	382	8.2	9.9	21	30.4	39.2	27.7	ND	5
Trichloroethene	65	439	11.4	893	23.8	46.4	194	397	51.1	5
1,2,4-Trimethylbenzene	ND	ND	ND	6	ND	ND	ND	ND	8.1	5
1,3,5-Trimethylbenzene	ND	ND	ND	2.3	ND	ND	ND	ND	ND	5
Vinyl Chloride	ND	ND	ND	3	ND	ND	ND	ND	77.8	2
Xylenes	ND	ND	ND	ND	ND	ND	ND	ND	20.8	5

Notes:

1. All concentrations in ug/L.
2. Only constituents detected above the detection limit in one or more sample are included in the table.
3. ND = Not detected above the detection limit.
4. Cleanup Criteria are New York State Department of Environmental Conservation Ambient Water Quality Standards and Guidance Values
5. All listed Cleanup Criteria are Standards (as listed in Part 703 of Title 6 NYCRR), except the value for Naphthalene which is a Guidance Value.
6. Concentrations which exceed the Cleanup Criteria or Guidance Value are shaded.

Table 3
Summary of Groundwater Analytical Data - RCRA Metals
Federal-Mogul
Kingston, NY

Location	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9	Cleanup
Sample Date	18-Sep	18-Sep	18-Sep	18-Sep	18-Sep	18-Sep	18-Sep	18-Sep	18-Sep	Criteria
Barium, dissolved	0.043	0.054	0.071	0.059	0.012	0.055	0.042	0.054	0.101	1
Chromium, dissolved	ND	0.009	ND	ND	ND	ND	**0.114**	**0.114**	ND	0.05

Notes:

1. All concentrations are in mg/L.
2. Only metals detected at concentrations above the detection limit in one or more sample are included on the table.
3. ND = Not detected above the detection limit.
4. Criteria are New York State Department of Environmental Conservation Ambient Water Quality Standards and Guidance Values
5. All listed Cleanup Criteria are Standards (as listed in Part 703 of Title 6 NYCRR).
6. Concentrations which exceed the Cleanup Criteria or Guidance Value are shaded.

Table 4
Summary of Soil and Groundwater Analytical Data - Total Organic Carbon
Federal-Mogul
Kingston, NY

Location	MW-7	MW-7	MW-8	MW-8	MW-9	MW-9
Depth of Sample*	7-9 ft	21-23 ft	7-9 ft	21-23 ft	7-9 ft	21-23 ft
Sample Date	18-Sep	18-Sep	18-Sep	18-Sep	18-Sep	18-Sep
SOIL						
Total Organic Carbon (mg/kg)	629	1710	535	210	586	1270

Location	MW-2	MW-3	MW-4	MW-7	MW-8	MW-9
Sample Date	18-Sep	18-Sep	18-Sep	18-Sep	18-Sep	18-Sep
GROUNDWATER						
Total Organic Carbon (mg/L)	ND	ND	ND	ND	ND	11.8

Notes:

1. All soil concentrations are in mg/Kg, all groundwater are in mg/L.
2. ND = Not detected

* = Depth of sample reported in feet below ground surface.

Appendix A

APPENDIX A

SOIL BORING AND WELL CONSTRUCTION LOGS

MONTGOMERY WATSON

LOG OF TEST BORING

Project **Federal-Mogul Corp.-Former Plant**

Location **Kingston, NY**

41551 Eleven Mile Road, Novi, MI 48375, TEL. (248) 344-0205

Boring No. **MW07**
Job No. **1257022.351601**
Sheet **1** of **1**
Surface Elevation
Northing:
Easting:

SAMPLE No.	Type	Rec. (in.)	Moisture	N Value	Depth (ft.)	VISUAL CLASSIFICATION and Remarks	qu (qa) (tsf)	PID (ppm)	Remarks
						6" ASPHALT			
1			D	8		Light Brown, Medium SAND (SP)		4.7	
2			D	10				0.0	
3			D	11	5	Mixed with Peat Moss from 5' to 5.5'		11.0	
4			D	14				1.5	Soil Sample for TCLP Analysis
5			D	7	10			0.0	
6			M	10		Color Changing to Brown and Gray		0.0	
7			M	12				0.0	
8			W	12	15	Color Changing to Gray		2.6	
9			W	6		Color Changing to Brown		0.0	
10			W	6	20	Brown, Fine to Medium, Silty SAND (SM)		0.0	
11			W	4				0.0	Soil Sample for TCLP Analysis
					25	End of Boring at 23.0 ft			
					30				

WATER LEVEL OBSERVATIONS

While Drilling ▽ **16.0** ft. Upon Completion of Drilling ▼ **16.1** ft.
Time After Drilling
Depth to Water
Depth to Cave in

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.

GENERAL NOTES

Start **9/16/97** End **9/16/97**
Driller **ADT** Chief **MV** Rig **Low Rig**
Logger **JJM** Editor
Drill Method **4 1/4" I.D. HSA**

C:\gi3\FEDM4 ID: DETROIT2

MONTGOMERY WATSON

LOG OF TEST BORING

Project **Federal-Mogul Corp.-Former Plant**

Location **Kingston, NY**

41551 Eleven Mile Road, Novi, MI 48375, TEL. (248) 344-0205

Boring No. **MW08**
Job No. **1257022.351601**
Sheet **1** of **1**
Surface Elevation
Northing:
Easting:

SAMPLE No.	Rec. (in.)	Moisture	N Value	Depth (ft.)	VISUAL CLASSIFICATION and Remarks	qu (qa) (tsf)	PID (ppm)	Remarks
					12" CONCRETE			
1		D	8		Brown, Fine SAND, Some Gravel (SP)		3.6	
2		D	10				0.0	
3		D	12	5	Brown, Fine SAND (SP)		2.6	
4		D	12				0.0	Soil Sample for TCLP Analysis
5		D	10				0.0	
6		M	11	10			0.0	
7		M	8		3" Brown, Silty Lens at 12.5'		0.0	
8		W	8		Color Changing to Brown/Gray		1.5	
9		W	4				0.0	
10		W	8	20			0.0	
11		W	4					Soil Sample for TCLP Analysis
				25	End of Boring at 23.0 ft			
				30				

WATER LEVEL OBSERVATIONS

While Drilling ▽ **16.0** ft. Upon Completion of Drilling ▼ **15.2** ft.
Time After Drilling
Depth to Water
Depth to Cave in

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.

GENERAL NOTES

Start **9/17/97** End **9/17/97**
Driller **ADT** Chief **MV** Rig **Low**
Logger **JJM** Editor Rig
Drill Method **4 1/4" I.D. HSA**

C:\gi3\FEDM4 ID: DETROIT2

MONTGOMERY WATSON

LOG OF TEST BORING

Project **Federal-Mogul Corp.-Former Plant**

Location **Kingston, NY**

Boring No. **MW09**
Job No. **1257022.351601**
Sheet **1** of **1**
Surface Elevation
Northing:
Easting:

41551 Eleven Mile Road, Novi, MI 48375, TEL. (248) 344-0205

SAMPLE No.	Type	Rec. (in.)	Moisture	N Value	Depth (ft.)	VISUAL CLASSIFICATION and Remarks	qu (qa) (tsf)	PID (ppm)	Remarks
						6" BLACKTOP			
1			D	16		Black, SAND, Some Gravel (FILL)		31.3	
						Brown, Fine SAND (SP)			
2			D	13		Color Change to Reddish-Brown, Some Black Stains		32.7	
3			D	12	5			43.2	
						Color Changed to Brown, Black Staining at 6', Odor Present			
4			M	10				3.0	Soil Sample for TCLP Analysis
5			M	6	10			22.1	
6			M	8		Color Change from Brown to Gray		0.0	
7			M	12				3.6	
						Occasional Gravel			
8			W	10		Color Change to Brown		0.0	
9			W	8				0.0	
10			W	6	20			0.0	
						Silty Sand Seam at 20'			
11			W	4				0.0	Soil Sample for TCLP Analysis
					25	End of Boring at 23.0 ft			
					30				

WATER LEVEL OBSERVATIONS

While Drilling ▽ 16.0 ft. Upon Completion of Drilling ▼ 15.3 ft.
Time After Drilling
Depth to Water
Depth to Cave in

The stratification lines represent the approximate boundary between soil types and the transition may be gradual.

GENERAL NOTES

Start 9/17/97 End 9/17/97
Driller ADT Chief MV Rig Low
Logger JJM Editor Rig
Drill Method 4 1/4" I.D. HSA

C:\gi3\FEDM4 ID: DETROIT2

MONTGOMERY WATSON

41551 Eleven Mile Rd.

Novi, MI 48375
TEL. (248) 344-0205

UNIFIED SOIL CLASSIFICATION SYSTEM

UNIFIED SOIL CLASSIFICATION AND SYMBOL CHART

COARSE-GRAINED SOILS

(More than 50% of material is larger than No. 200 sieve size.)

GRAVELS More than 50% of coarse fraction larger than No. 4 sieve size	Clean Gravels (Less than 5% fines)	GW	Well-graded gravels, gravel-sand mixtures, little or no fines
		GP	Poorly graded gravels, gravel-sand mixtures, little or no fines
	Gravels with Fines (More than 12% fines)	GM	Silty gravels, gravel-sand-silt mixtures
		GC	Clayey gravels, gravel-sand-clay mixtures
SANDS 50% or more of coarse fraction smaller than No. 4 sieve size	Clean Sands (Less than 5% fines)	SW	Well-graded sands, gravelly sands, little or no fines
		SP	Poorly graded sands, gravelly sands, little or no fines
	Sands with Fines (More than 12% fines)	SM	Silty sands, sand-silt mixtures
		SC	Clayey sands, sand-clay mixtures

FINE-GRAINED SOILS

(50% or more of material is smaller than No. 200 sieve size.)

SILTS AND CLAYS Liquid limit less than 50%	ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity
	CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
	OL	Organic silts and organic silty clays of low plasticity
SILTS AND CLAYS Liquid limit 50% or greater	MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts
	CH	Inorganic clays of high plasticity, fat clays
	OH	Organic clays of medium to high plasticity, organic silts
HIGHLY ORGANIC SOILS	PT	Peat and other highly organic soils

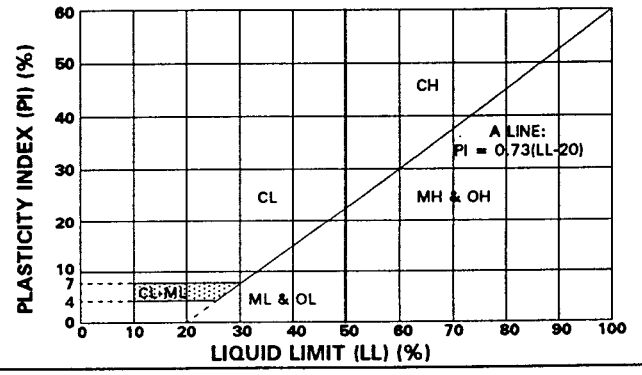
LABORATORY CLASSIFICATION CRITERIA

GW	$C_u = \frac{D_{60}}{D_{10}}$ greater than 4; $C_c = \frac{(D_{30})^2}{D_{10} X D_{60}}$ between 1 and 3	
GP	Not meeting all gradation requirements for GW	
GM	Atterberg limits below "A" line or P.I. less than 4	Above "A" line with P.I. between 4 and 7 are borderline cases requiring use of dual symbols
GC	Atterberg limits above "A" line with P.I. greater than 7	
SW	$C_u = \frac{D_{60}}{D_{10}}$ greater than 6; $C_c = \frac{(D_{30})^2}{D_{10} X D_{60}}$ between 1 and 3	
SP	Not meeting all gradation requirements for SW	
SM	Atterberg limits below "A" line or P.I. less than 4	Limits plotting in shaded zone with P.I. between 4 and 7 are borderline cases requiring use of dual symbols.
SC	Atterberg limits above "A" line with P.I. greater than 7	

Determine percentages of sand and gravel from grain-size curve. Depending on percentage of fines (fraction smaller than No. 200 sieve size), coarse-grained soils are classified as follows:

Less than 5 percent	GW, GP, SW, SP
More than 12 percent	GM, GC, SM, SC
5 to 12 percent	Borderline cases requiring dual symbols

PLASTICITY CHART



OTHER MATERIAL SYMBOLS

Topsoil	GS	SM/GM	CL-ML	Crystalline Rock	Dolomite
Pavement	GC-GM	SC/GC	Claystone	Sandstone	Siltstone
Fill							
Refuse	GS2	SC-SM	Coal	Limestone	Shale

See log description for USCS classification of the following soils:
SM/GM & SC/GC - Symbols are used to differentiate SM, GM, SC & GC soils.

GS2 - Symbol used when approximately equal percentages of gravel, sand, silt & clay exist.
GS - Symbol used for GP, GW, SP or SW soils with nearly equal sand and gravel.

MONTGOMERY WATSON

41551 Eleven Mile Rd.
Novi, MI 48375
TEL. (248) 344-0205

LOG OF TEST BORING
General Notes

EMPIRICAL CORRELATIONS WITH STANDARD PENETRATION RESISTANCE N VALUES *

	N VALUE * (BLOWS/FT)	CONSISTENCY	UNCONFINED COMPRESSIVE STRENGTH (TONS/SQ FT)
FINE GRAINED SOILS	0 - 2	VERY SOFT	0 - 0.25
	3 - 4	SOFT	0.25 - 0.50
	5 - 8	MEDIUM STIFF	0.50 - 1.00
	9 - 16	STIFF	1.00 - 2.00
	17 - 32	VERY STIFF	2.00 - 4.00
	>32	HARD	>4.00

	N VALUE * (BLOWS/FT)	RELATIVE DENSITY
COARSE GRAINED SOILS	0 - 4	VERY LOOSE
	5 - 10	LOOSE
	11 - 30	MEDIUM DENSE
	31 - 50	DENSE
	>50	VERY DENSE

* ASTM D 1586; NUMBER OF BLOWS OF 140 POUND HAMMER FALLING 30 INCHES TO DRIVE A 2 IN. O.D., 1 1/2 IN. I.D. SAMPLER ONE FOOT.

GRAIN SIZE TERMINOLOGY

Soil Fraction	Particle Size	U.S. Standard Sieve Size
Boulders	Larger than 12"	Larger than 12"
Cobbles	3" to 12"	3" to 12"
Gravel: Coarse	3/4" to 3"	3/4" to 3"
Fine	4.76 mm to 3/4"	#4 to 3/4"
Sand: Coarse	2.00 mm to 4.76 mm	#10 to #4
Medium	0.42 mm to 2.00 mm	#40 to #10
Fine	0.074 mm to 0.42 mm	#200 to #40
Silt	0.005 mm to 0.074 mm	Smaller than #200
Clay	Smaller than 0.005 mm	Smaller than #200

Plasticity characteristics differentiate between silt and clay.

ORGANIC CONTENT BY COMBUSTION METHOD

Soil Description	Loss on Ignition
Non Organic	Less than 4%
Organic Silt/Clay	4-12%
Sedimentary Peat	12-50%
Fibrous and Woody Peat	More than 50%

RELATIVE PROPORATIONS OF COHESIONLESS SOILS

Proportional Term	Defining Range By Percentage of Weight
Trace	0% - 5%
Little	5% - 12%
Some	12% - 35%
And	35% - 50%

GENERAL TERMINOLOGY

Physical Characteristics - Color, moisture, grain shape, fineness, etc.
Major Constituents - Clay, silt, sand, gravel
Structure - Laminated, varved, fibrous, stratified, cemented, fissured, etc.
Geologic Origin - Glacial, alluvial, eolian, residual, etc.

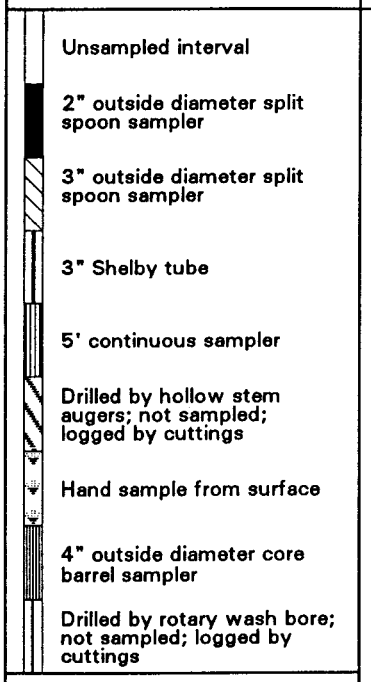
DESCRIPTION OF BORING LOG HEADINGS

No.	= Sample number within the boring.
Rec.	= Amount of sample recovery.
Moist	= Visual estimate of the amount of moisture in the sample.
Type	= Sampler type and sample interval.
N Value	= The penetration resistance, N, is the sum of blows required to effect two successive 6" penetrations of the 2" split-spoon sampler per ASTM D1586.
Depth	= Depth below ground surface.
Visual Classification	= Lithologic symbol of soil or rock type; Description of stratigraphy; Borehole material graphics.
q_a	= Penetrometer Reading, tons/sq. ft.
PID	= Photoionization detector reading. Values are recorded as benzene equivalent units in ppm above background (0 = background reading).

Other environmental analyses may be reported. Results are provided as a value where quantifiable or as zero or ND when below detection limit.

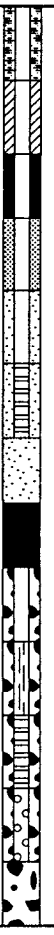
SYMBOLS

SAMPLE TYPE



- Unsampled interval
- 2" outside diameter split spoon sampler
- 3" outside diameter split spoon sampler
- 3" Shelby tube
- 5' continuous sampler
- Drilled by hollow stem augers; not sampled; logged by cuttings
- Hand sample from surface
- 4" outside diameter core barrel sampler
- Drilled by rotary wash bore; not sampled; logged by cuttings

WELL GRAPHICS



- Concrete surface seal around well casing
- Bentonite slurry or cement-bentonite grout around well casing
- Bentonite pellet seal around well casing
- Fine filter sand backfill around well casing
- Sand backfill around well casing
- Sand filter pack around well screen
- Sand backfill or natural soil collapse in borehole
- Bentonite seal in borehole
- Gravel backfill around well casing
- Gravel backfill around vertical slot gas well
- Gravel backfill around a leachate well
- Gravel backfill around a perforated gas well
- Gravel base material

LABORATORY TESTS

W	Moisture Content, %
LL	Liquid Limit, %
PL	Plastic Limit, %
LI	Loss on Ignition, %
D	Dry Unit Weight, lbs./cu. ft.
pH	Measure of Soil Alkalinity or Acidity

DRILLING AND SAMPLING

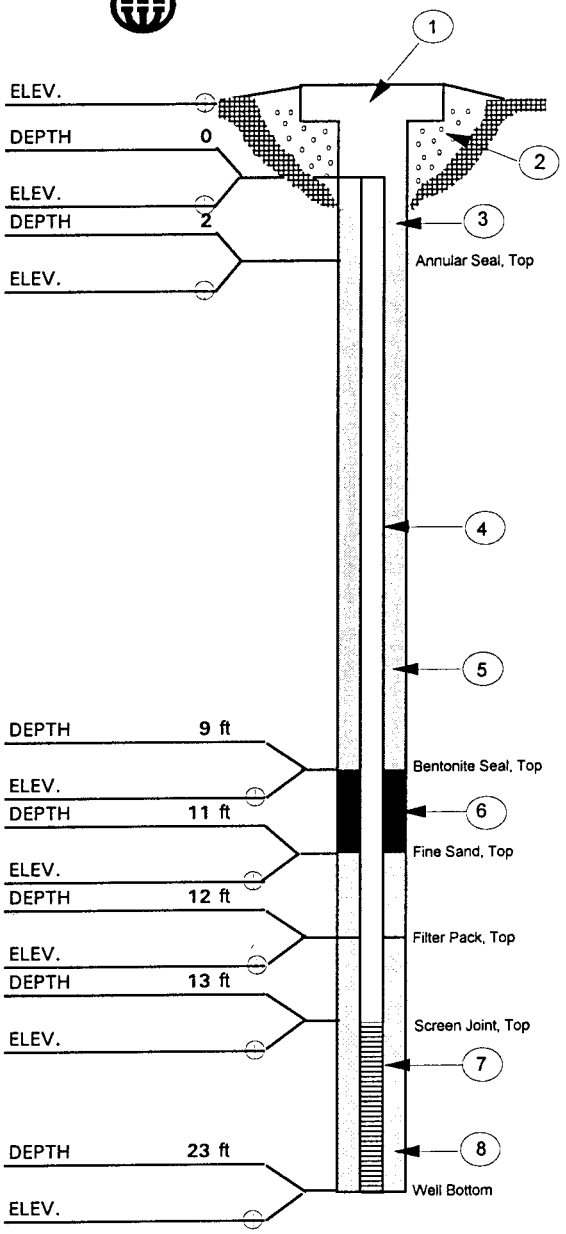
RC	Rock Coring (Size)
RQD	Rock Quality Designator
RB	Rotary Boring
DM	Drilling Mud
CW	Clear Water
AR	Air Rotary
DC	Drove Casing (Size)
HSA	Hollow Stem Auger
FA	Flight Auger
HA	Hand Auger

WATER LEVEL MEASUREMENT

▽	Water level at time shown
NW	No Water Encountered
WD	While Drilling
BCR	Before Casing Removal
ACR	After Casing Removal
AD	After Drilling

NOTE: Water level measurements shown on the boring logs represent conditions at the time indicated and may not reflect static levels.

MONTGOMERY WATSON



MONITORING WELL CONSTRUCTION INFORMATION SHEET (FLUSH-MOUNT)

PROJECT: Federal-Mogul Corp. - Former Plant, Kingston, NY

BORING/WELL NO.: MW-07

DATE: September 16, 1997

PROJECT NUMBER: 1257022.351601

1. WELL BOX DIMENSIONS: LENGTH 12 in.; DIAMETER 8 in.
   LOCK? x YES ___ NO
   WATER TIGHT WELL CAP? x YES ___ NO
2. CONCRETE SEAL? x YES ___ NO
3. SAND DRAINAGE? x YES ___ NO
4. SOLID PIPE TYPE: PVC
   SOLID PIPE LENGTH: 13 ft
5. ANNULAR SEAL MATERIAL: Bentonite slurry
   HOW INSTALLED: Tremie
   VOLUME PLACED: 3 ft^3
6. BENTONITE SEAL: Cetco medium bentonite chips
   VOLUME PLACED: 1 ft^3
7. SCREEN MATERIAL: PVC
   SCREEN MANUFACTURER:
   SCREEN LENGTH: 10 ft
   SLOT SIZE: 0.01 in.
   SLOTTED INTERVAL LENGTH: 8.5 ft
   SCREEN DIAMETER: I.D. 2 in. O.D. 2.375 in.
8. FILTER PACK MATERIAL: #5 quartz filter pack sand
   VOLUME ADDED: 5 ft^3
9. BACKFILL MATERIAL (BELOW FILTER PACK): Existing Material
10. DRILLING METHOD: 4 1/4" I.D. HSA
11. BOREHOLE DIAMETER: HSA (10 ") in.

INSTALLED BY: AD & T, Inc. SUPERVISED BY: JJM

(ALL DEPTHS MEASURED FROM GROUND SURFACE)

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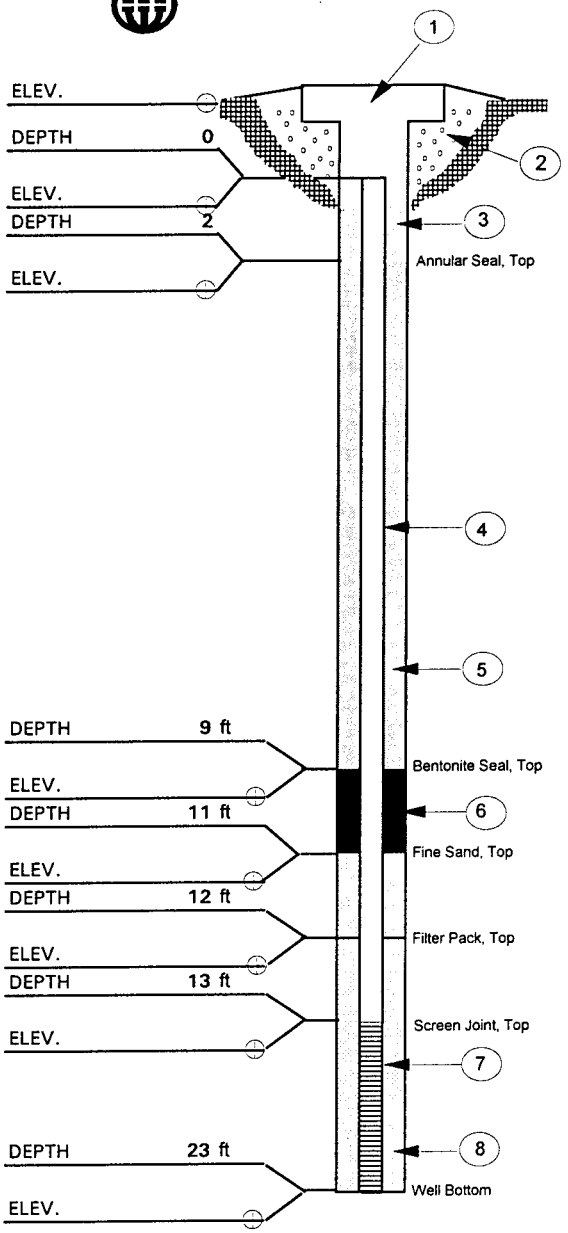
MONTGOMERY WATSON



MONITORING WELL CONSTRUCTION INFORMATION SHEET (FLUSH-MOUNT)

PROJECT: Federal-Mogul Corp. - Former Plant, Kingston, NY

BORING/WELL NO.: MW-08

DATE: September 17, 1997

PROJECT NUMBER: 1257022.351601

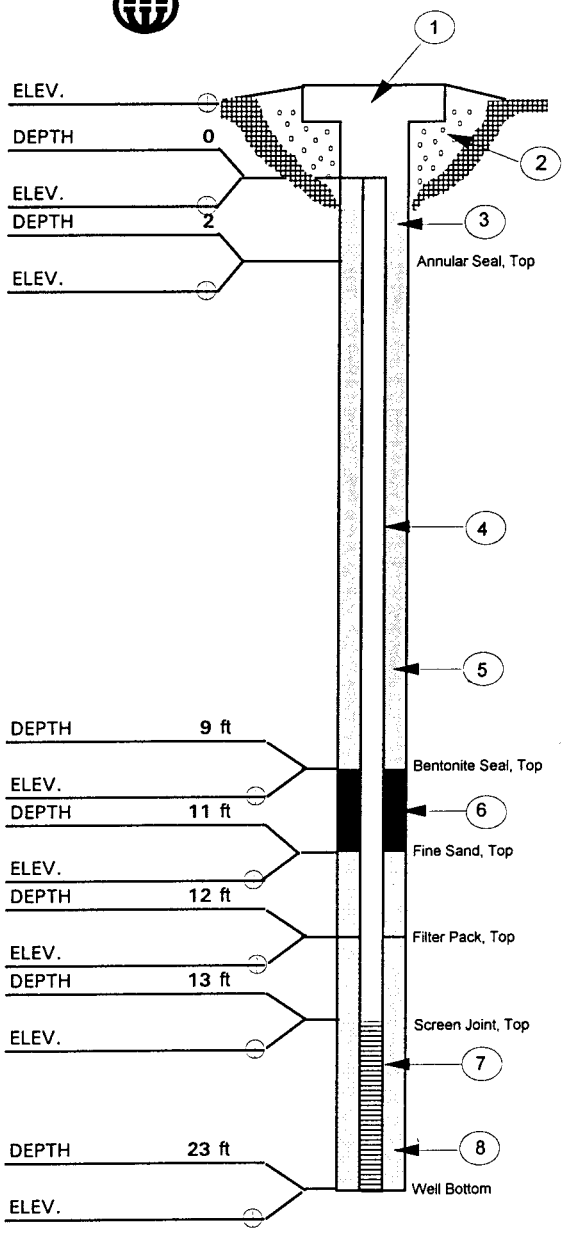
1. WELL BOX DIMENSIONS: LENGTH 12 in.; DIAMETER 8 in.
   LOCK? x YES ___ NO
   WATER TIGHT WELL CAP? x YES ___ NO
2. CONCRETE SEAL? x YES ___ NO
3. SAND DRAINAGE? x YES ___ NO
4. SOLID PIPE TYPE: PVC
   SOLID PIPE LENGTH: 13 ft
5. ANNULAR SEAL MATERIAL: Bentonite slurry
   HOW INSTALLED: Tremie
   VOLUME PLACED: 3 ft^3
6. BENTONITE SEAL: Cetco medium bentonite chips
   VOLUME PLACED: 1 ft^3
7. SCREEN MATERIAL: PVC
   SCREEN MANUFACTURER: ___
   SCREEN LENGTH: 10 ft
   SLOT SIZE: 0.01 in.
   SLOTTED INTERVAL LENGTH: 8.5 ft
   SCREEN DIAMETER: I.D. 2 in. O.D. 2.375 in.
8. FILTER PACK MATERIAL: #5 quartz filter pack sand
   VOLUME ADDED: 5 ft^3
9. BACKFILL MATERIAL (BELOW FILTER PACK): Existing Material
10. DRILLING METHOD: 4 1/4" I.D. HSA
11. BOREHOLE DIAMETER: HSA (10 ") in.

INSTALLED BY: AD & T, Inc. SUPERVISED BY: JJM

(ALL DEPTHS MEASURED FROM GROUND SURFACE)

[F:\Forms\M-FLUSH.xls]

MONTGOMERY WATSON



MONITORING WELL CONSTRUCTION INFORMATION SHEET (FLUSH-MOUNT)

PROJECT: Federal-Mogul Corp. - Former Plant, Kingston, NY

BORING/WELL NO.: MW-09

DATE: September 17, 1997

PROJECT NUMBER: 1257022.351601

1. WELL BOX DIMENSIONS: LENGTH 12 in.; DIAMETER 8 in.
   LOCK? x YES ___ NO
   WATER TIGHT WELL CAP? x YES ___ NO
2. CONCRETE SEAL? x YES ___ NO
3. SAND DRAINAGE? x YES ___ NO
4. SOLID PIPE TYPE: PVC
   SOLID PIPE LENGTH: 13 ft
5. ANNULAR SEAL MATERIAL: Bentonite slurry
   HOW INSTALLED: Tremie
   VOLUME PLACED: 3 ft^3
6. BENTONITE SEAL: Cetco medium bentonite chips
   VOLUME PLACED: 1 ft^3
7. SCREEN MATERIAL: PVC
   SCREEN MANUFACTURER:
   SCREEN LENGTH: 10 ft
   SLOT SIZE: 0.01 in.
   SLOTTED INTERVAL LENGTH: 8.5 ft
   SCREEN DIAMETER: I.D. 2 in. O.D. 2.375 in.
8. FILTER PACK MATERIAL: #5 quartz filter pack sand
   VOLUME ADDED: 5 ft^3
9. BACKFILL MATERIAL (BELOW FILTER PACK): Existing Material
10. DRILLING METHOD: 4 1/4" I.D. HSA
11. BOREHOLE DIAMETER: HSA (10 ") in.

INSTALLED BY: AD & T, Inc. SUPERVISED BY: JJM

(ALL DEPTHS MEASURED FROM GROUND SURFACE)

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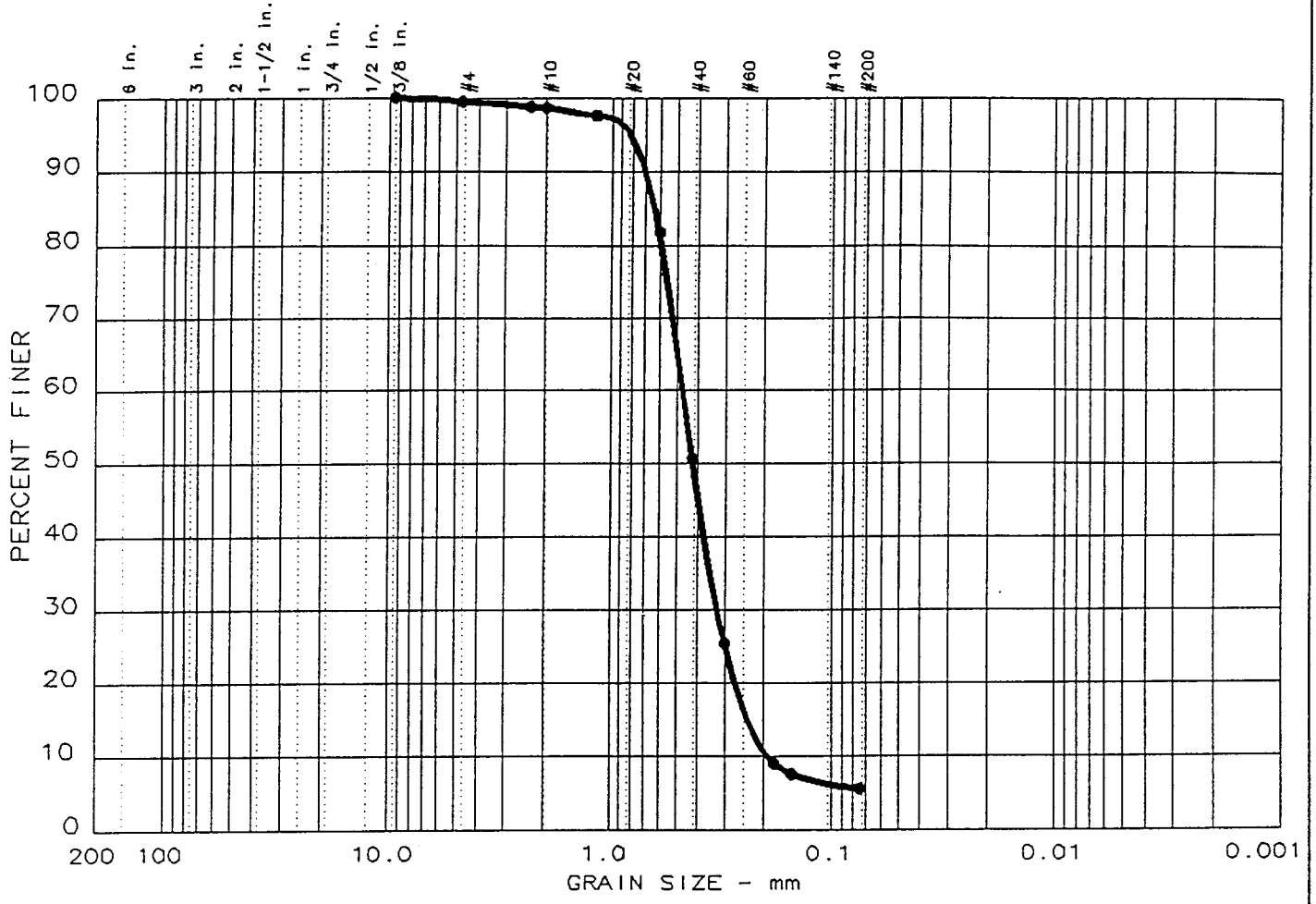
APPENDIX B

GRAIN SIZE ANALYSIS RESULTS

GRAIN SIZE DISTRIBUTION TEST REPORT



	Test	% +3"	% GRAVEL	% SAND	% SILT	% CLAY
●	11	0.0	0.5	94.0	5.5	

	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
●	NP	NP	0.63	0.47	0.42	0.324	0.2363	0.1921	1.17	2.4

MATERIAL DESCRIPTION	USCS	AASHTO
● Brown Fine-Medium SAND, Little Silt, Trace Gr	SP-SM	A-3

Project No.: 95164.41

Project: Federal Mogul Kingston/Montgomery-Watson

● Location: Jar: MW 7 at 7.0 to 9.0 ft

Date: Sept 23, 1997

GRAIN SIZE DISTRIBUTION TEST REPORT

CGC, Inc.

Remarks:

Tested By: DWA

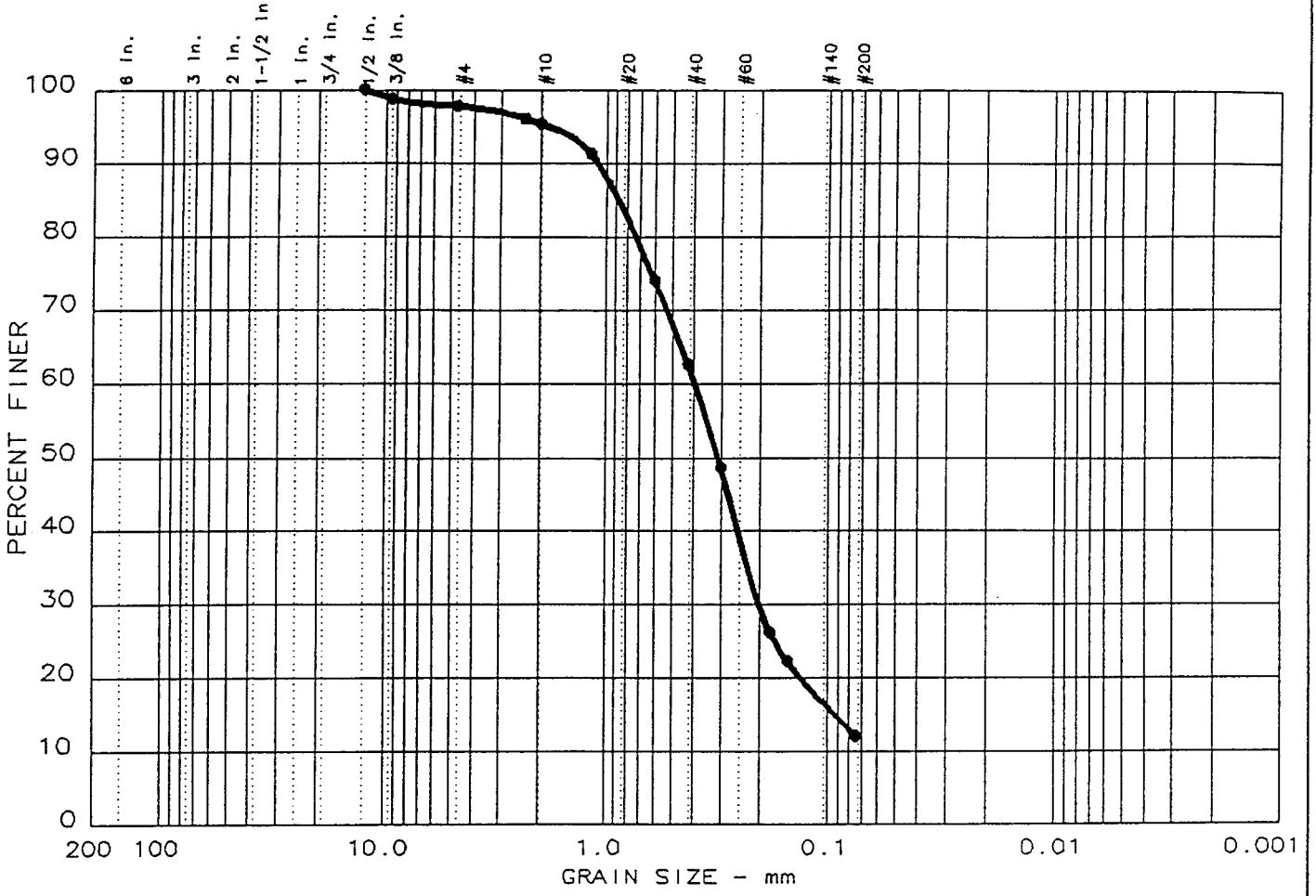
Input By : MES

Checked By : MNS

Approved By : DWA

Figure No. _____

GRAIN SIZE DISTRIBUTION TEST REPORT



	Test	% +3"	% GRAVEL	% SAND	% SILT	% CLAY
●	12	0.0	2.3	85.6	12.1	

	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
●	NP	NP	0.87	0.39	0.31	0.201	0.0919			

MATERIAL DESCRIPTION	USCS	AASHTO
● Brown Fine-Medium SAND, Some Silt, Trace Gr	SM	A-2-4

Project No.: 95164.41
Project: Federal Mogul Kingston/Montgomery-Watson
● Location: Jar: MW 7 at 21.0 to 23.0 ft

Date: Sept 23, 1997

GRAIN SIZE DISTRIBUTION TEST REPORT

CGC, Inc.

Remarks:

Tested By: DWA

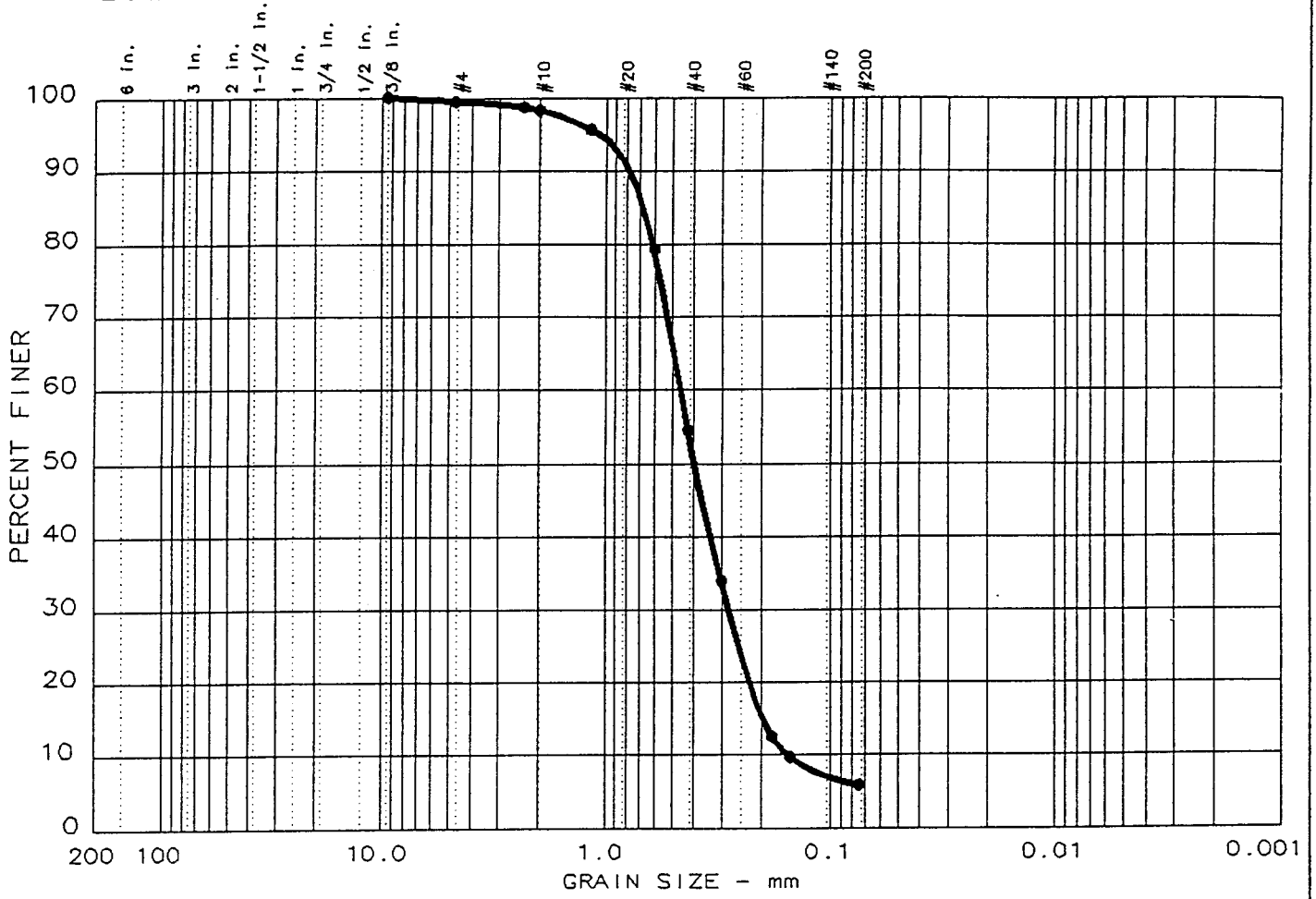
Input By : MES

Checked By : MNS

Approved By : DWA

Figure No. _____

GRAIN SIZE DISTRIBUTION TEST REPORT



	Test	% +3"	% GRAVEL	% SAND	% SILT	% CLAY
●	13	0.0	0.6	93.6	5.8	

	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
●	NP	NP	0.67	0.46	0.40	0.278	0.1968	0.1528	1..11	3.0

MATERIAL DESCRIPTION	USCS	AASHTO
● Brown Fine-Medium SAND, Little Silt, Trace Gr	SP-SM	A-3

Project No.: 95164.41
Project: Federal Mogul Kingston/Montgomery-Watson
● Location: Jar: MW 8 at 7.0 to 9.0 ft

Date: Sept 23, 1997

GRAIN SIZE DISTRIBUTION TEST REPORT

CGC, Inc.

Remarks:

Tested By: DWA

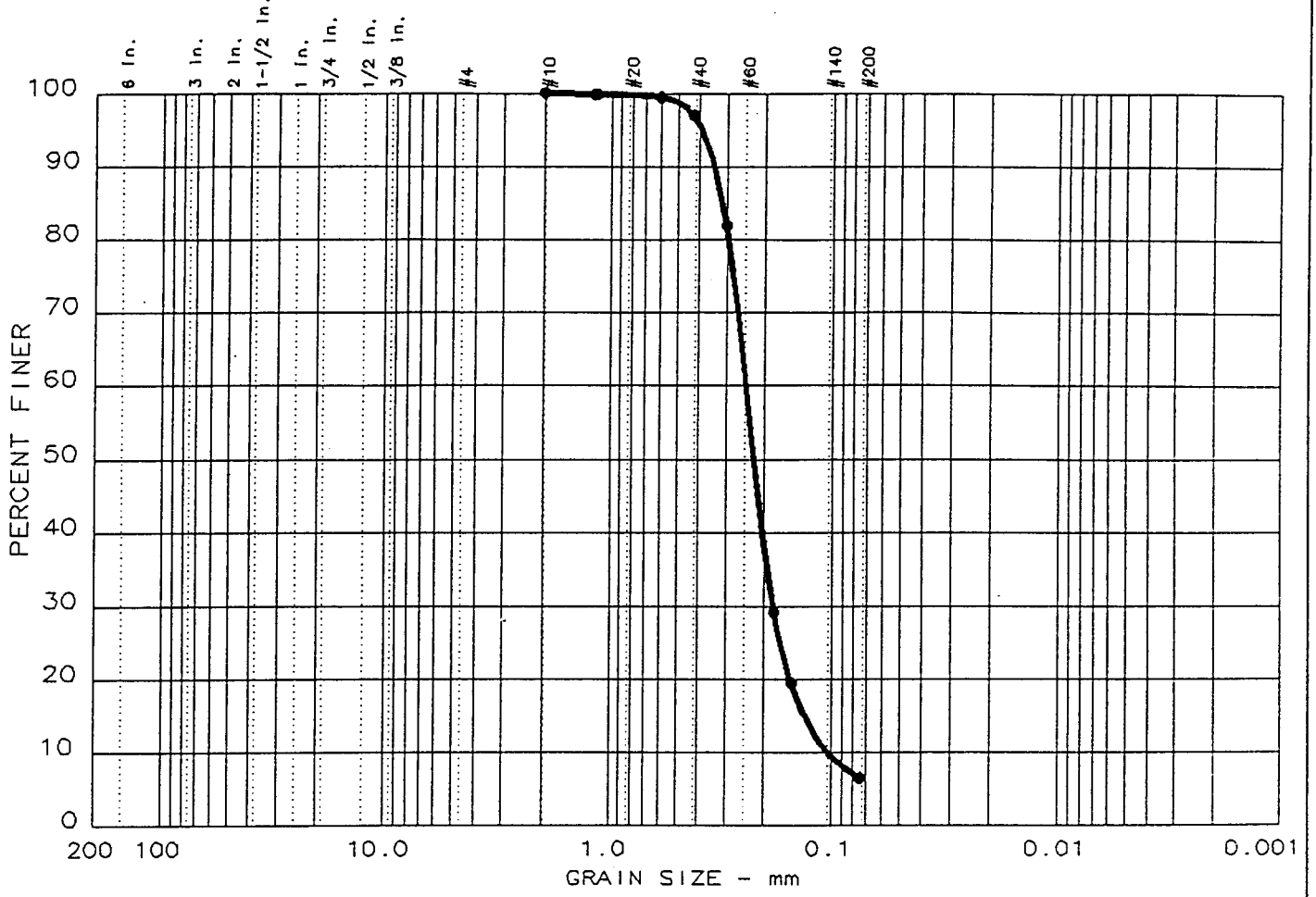
Input By : MES

Checked By : MNS

Approved By : DWA

Figure No. _____

GRAIN SIZE DISTRIBUTION TEST REPORT



	Test	% +3"	% GRAVEL	% SAND	% SILT	% CLAY
●	14	0.0	0.0	93.5	6.5	

	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
●	NP	NP	0.31	0.24	0.22	0.182	0.1302	0.1022	1.34	2.4

MATERIAL DESCRIPTION	USCS	AASHTO
● Brown Fine-Medium SAND, Little Silt	SP-SM	A-3

Project No.: 95164.41
Project: Federal Mogul Kingston/Montgomery-Watson
● Location: Jar: MW 8 at 21.0 to 23.0 ft

Date: Sept 23, 1997

GRAIN SIZE DISTRIBUTION TEST REPORT

CGC, Inc.

Remarks:

Tested By: DWA

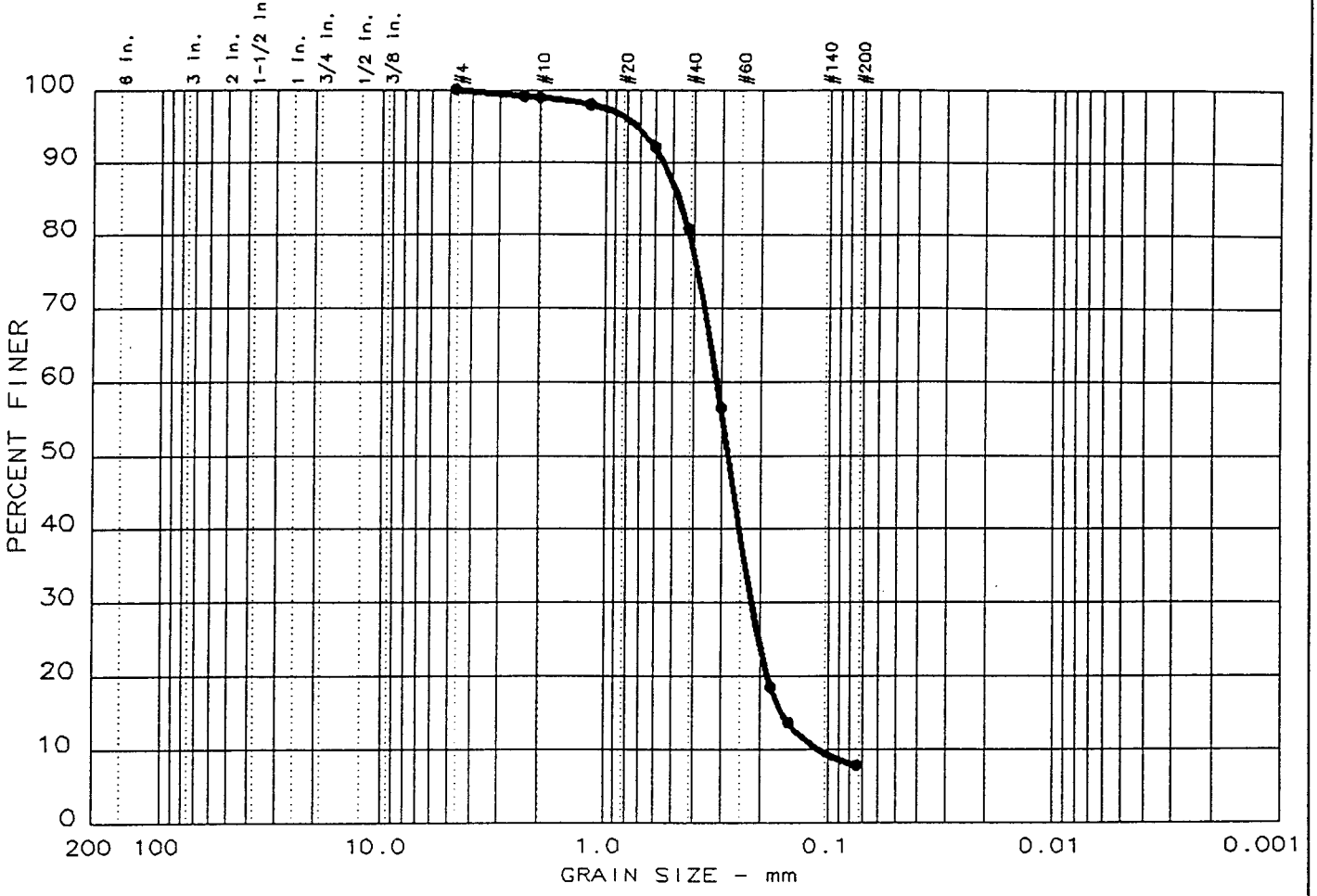
Input By : MES

Checked By : MNS

Approved By : DWA

Figure No. _____

GRAIN SIZE DISTRIBUTION TEST REPORT



	Test	% +3"	% GRAVEL	% SAND	% SILT	% CLAY
●	15	0.0	0.0	92.2	7.8	

	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
●	NP	NP	0.47	0.31	0.28	0.218	0.1600	0.1119	1.36	2.8

MATERIAL DESCRIPTION	USCS	AASHTO
● Brown Fine-Medium SAND, Little Silt	SP-SM	A-3

Project No.: 95164.41
Project: Federal Mogul Kingston/Montgomery-Watson
● Location: Jar: MW 9 at 7.0 to 9.0 ft

Date: Sept 23, 1997

GRAIN SIZE DISTRIBUTION TEST REPORT

CGC, Inc.

Remarks:

Tested By: DWA

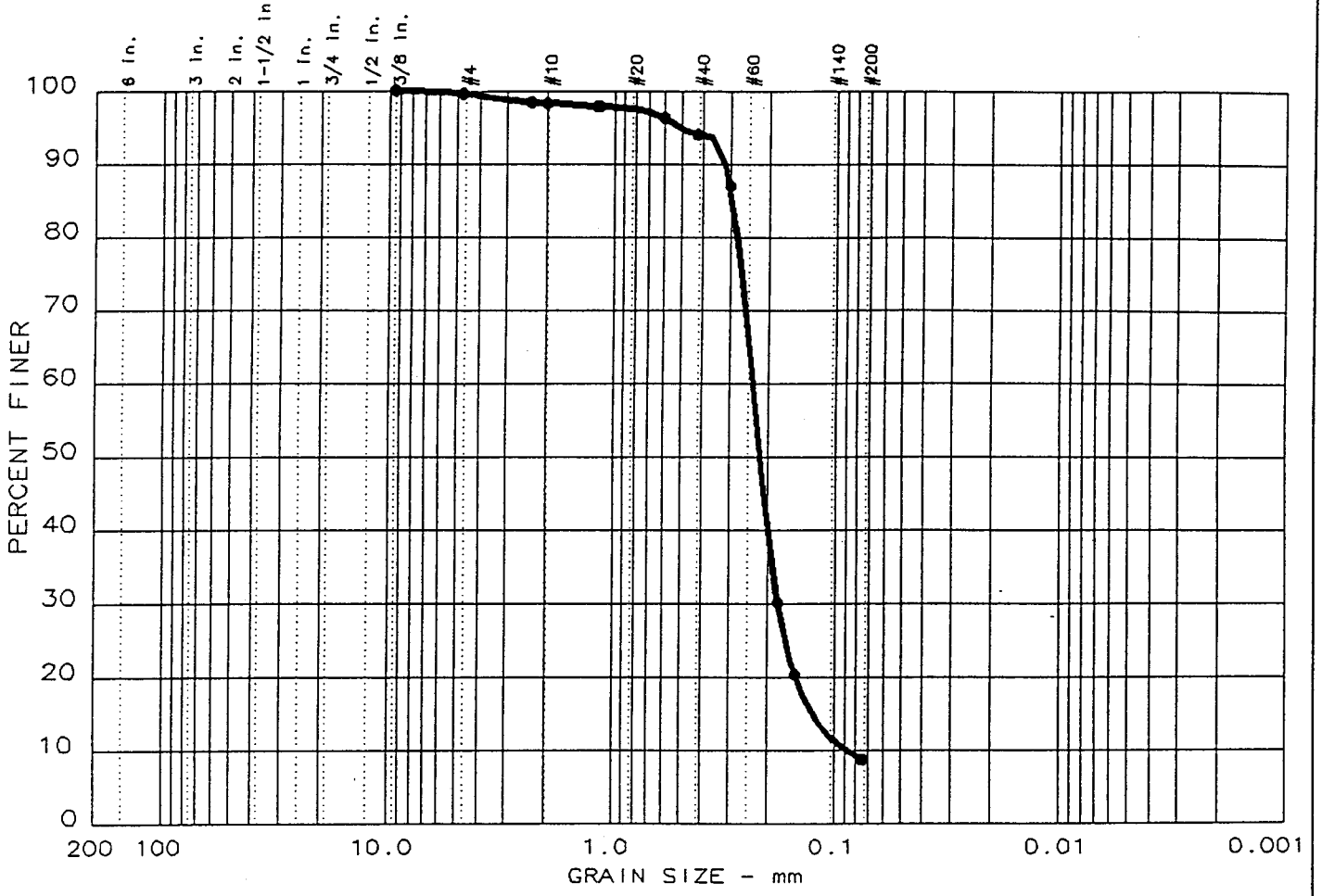
Input By : MES

Checked By : MNS

Approved By : DWA

Figure No. _____

GRAIN SIZE DISTRIBUTION TEST REPORT



	Test	% +3"	% GRAVEL	% SAND	% SILT	% CLAY
●	16	0.0	0.4	90.8	8.8	

	LL	PI	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
●	NP	NP	0.29	0.23	0.22	0.180	0.1243	0.0880	1.57	2.7

MATERIAL DESCRIPTION	USCS	AASHTO
● Brown Fine-Medium SAND, Little Silt, Trace Gr	SP-SM	A-3

Project No.: 95164.41
Project: Federal Mogul Kingston/Montgomery-Watson
● Location: Jar: MW 9 at 21.0 to 23.0 ft

Date: Sept 23, 1997

GRAIN SIZE DISTRIBUTION TEST REPORT

CGC, Inc.

Remarks:

Tested By: DWA

Input By : MES

Checked By : MNS

Approved By : DWA

Figure No. _____

MONTGOMERY WATSON

CHAIN OF CUSTODY RECORD

SPECIAL INSTRUCTIONS:
- ☐ PECFA
- ☐ WI LUST
- ☐ ACT 307
- ☐ REPORT DRY WT
- ☐ OTHER:

TURNAROUND
- ☐ 2 WEEKS (standard)
- ☐ 1 WEEK
- ☐ 3 DAYS
- ☐ 1 DAY

PROJECT NAME: FEDERAL Mogul Kingston | PROJECT #: 1257022.351601

CITY: | STATE:

SAMPLER(S): Jay Mullett

COLLECTION DATE	COLLECTION TIME	GRAB / COMP	SAMPLE ID	NO. OF CONTAINERS	Grain Size	REMARKS	LAB USE ONLY MATRIX	LAB USE ONLY LAB NO.
9/16/97	—	G	MW7 (7-9') 1-1	1	X			
↓	—	G	MW7 (21-23') 1-3	2	X			
9/17/97	—	↓	MW8 (7-9') 1-17	1	X	NO VOA		
↓	—	↓	MW8 (21-23') 1-10	2	X			
↓	—	↓	MW9 (7-9') 1-4	1	X			
↓	—	↓	MW9 (21-23') 1-2	1	X			

SPECIAL INSTRUCTIONS:
Send Results to:
Montgomery WATSON
41551 11 Mile Rd., Novi, MI 48375

TAMPER EVIDENT SEAL INTACT? ___YES ___NO ___NOT PRESENT
SEAL NO.: _____
SAMPLES RECEIVED ON ICE? ___YES ___NO TEMP: _____ °C

PROJ. MGR.: Bruce OLSON
phone # (248) 449-3407
FAX # (248) 344-0217
2-3 Working day Turnaround

	SIGNATURE	DATE	TIME		SIGNATURE	DATE	TIME
RELINQUISHED BY:	Jerome Mullett	9/19/97	12:15	RECEIVED BY:		9-22-97	
RELINQUISHED BY				RECEIVED BY:			
RELINQUISHED BY:				RECEIVED BY:			
RELINQUISHED BY				RECEIVED FOR LABORATORY BY:			

C-O-C No. 013710

NAME OF COURIER: _____

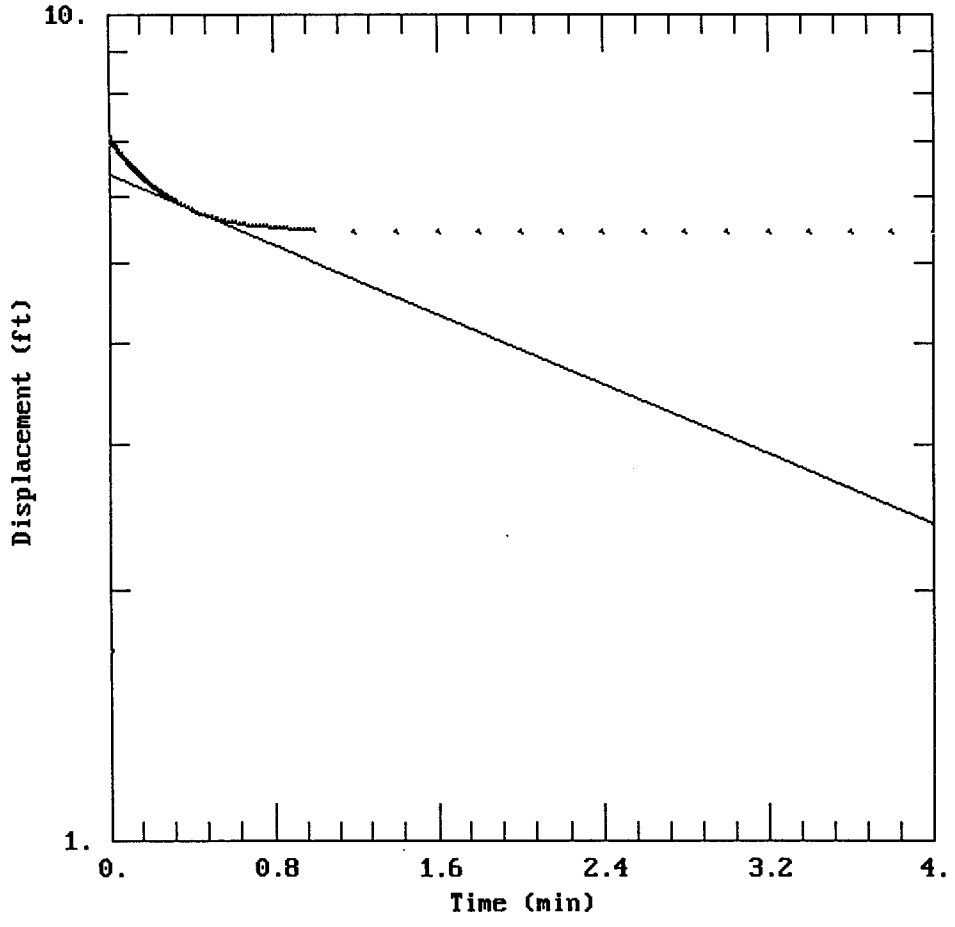
AIRBILL NUMBER: _____

APPENDIX C

SLUG TEST DATA

CLIENT: Federal-Mogul	COMPANY: Montgomery Watson
LOCATION: Kingston, New York	PROJECT: 1257022.351601

Federal-Mogul Kingston Slug Test MW-6



DATA SET:
MW6.DAT
09/25/97

AQUIFER MODEL:
Unconfined

SOLUTION METHOD:
Bouwer-Rice

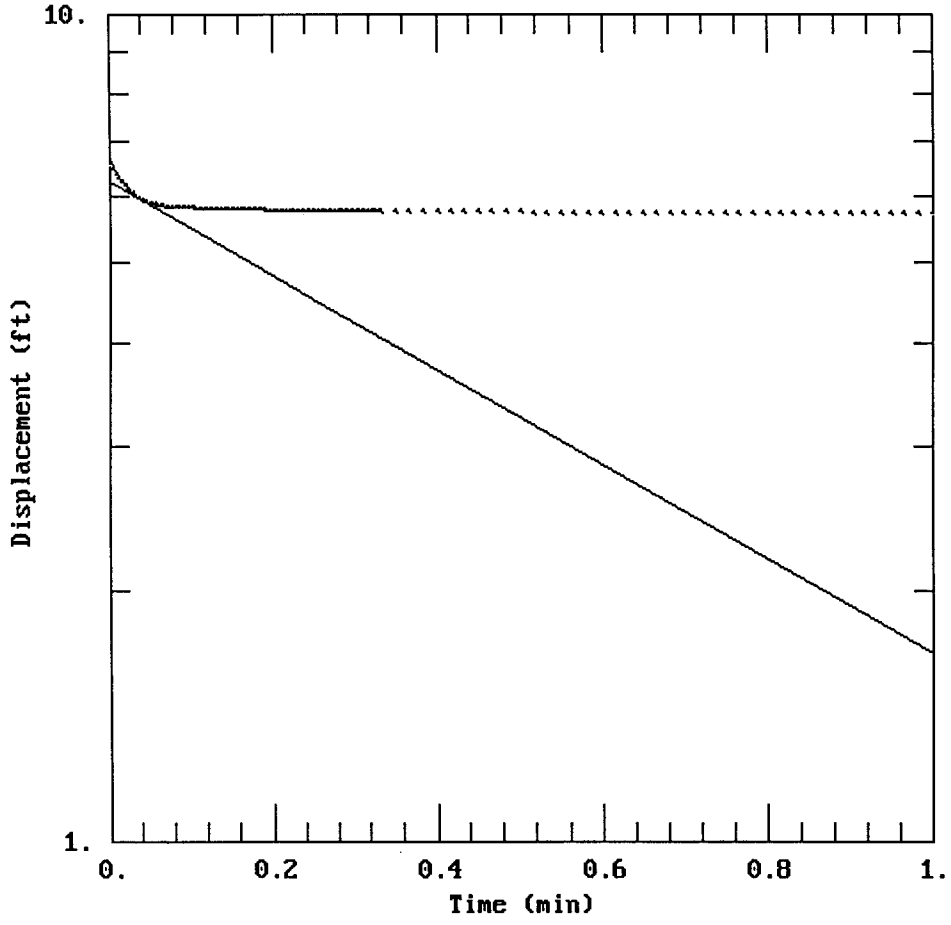
TEST DATA:
H0= 1.694 ft
r_c= 0.1936 ft
r_w= 0.1936 ft
L = 1.694 ft
b = 7.41 ft
H = 1.694 ft

PARAMETER ESTIMATES:
K = 0.003297 ft/sec
y0 = 6.385 ft

AQTESOLV

CLIENT: Federal-Mogul	COMPANY: Montgomery Watson
LOCATION: Kingston, New York	PROJECT: 1257022.351601

Federal-Mogul Kingston Slug Test MW-7



DATA SET:
MW7.DAT
09/25/97

AQUIFER MODEL:
Unconfined

SOLUTION METHOD:
Bouwer-Rice

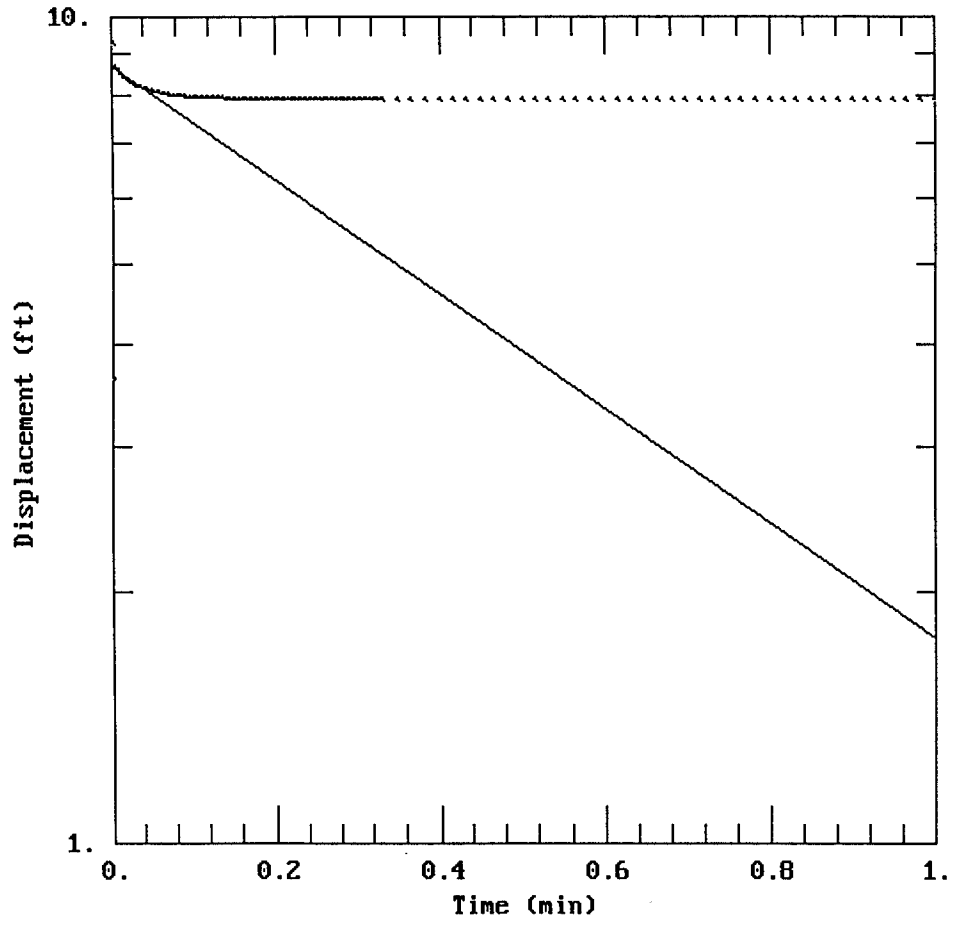
TEST DATA:
H0= 0.838 ft
r_c= 0.1936 ft
r_w= 0.1936 ft
L = 0.838 ft
b = 6.91 ft
H = 0.838 ft

PARAMETER ESTIMATES:
K = 0.02192 ft/sec
y0 = 6.259 ft

AQTESOLV

CLIENT: Federal-Mogul	COMPANY: Montgomery Watson
LOCATION: Kingston, New York	PROJECT: 1257022.351601

Federal-Mogul Kingston Slug Test MW-8



DATA SET:
MW8.DAT
09/25/97

AQUIFER MODEL:
Unconfined

SOLUTION METHOD:
Bouwer-Rice

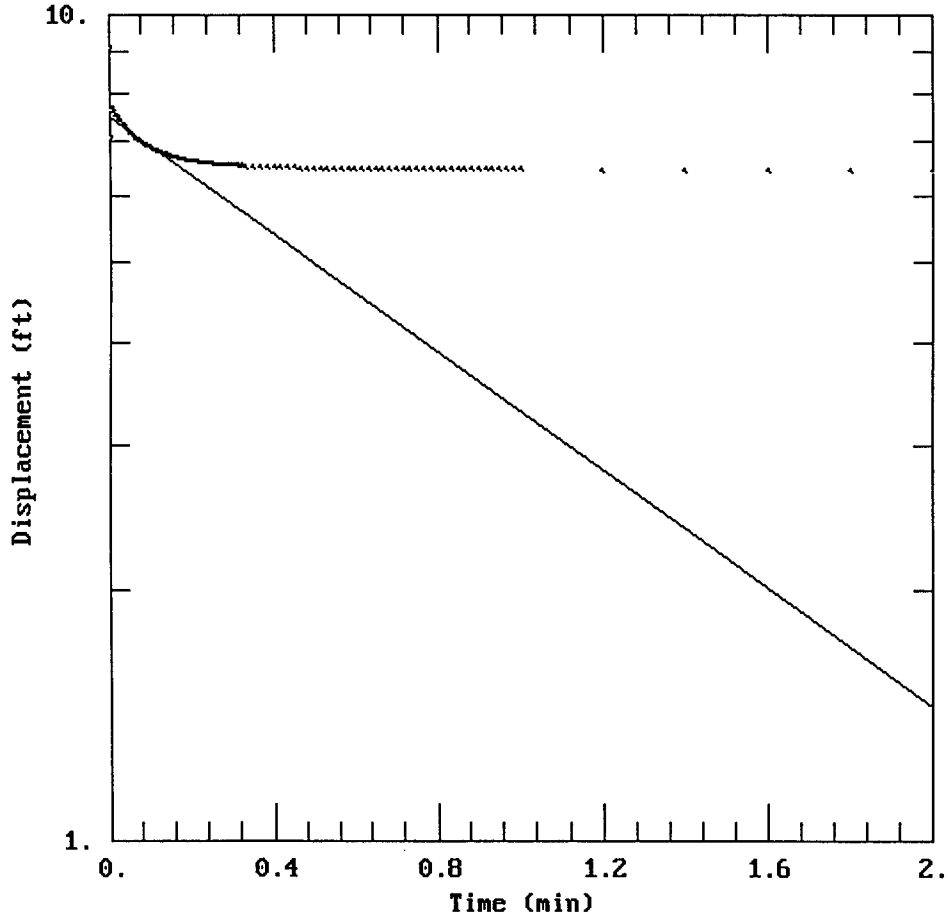
TEST DATA:
H0= 3.645 ft
r_c= 0.1936 ft
r_w= 0.1936 ft
L = 3.645 ft
b = 7.8 ft
H = 3.645 ft

PARAMETER ESTIMATES:
K = 0.01518 ft/sec
y0 = 8.688 ft

AQTESOLV

CLIENT: Federal Mogul	COMPANY: Montgomery Watson
LOCATION: Kingston, New York	PROJECT: 1257022.351601

Federal-Mogul Kingston Slug Test MW-9



DATA SET:
MW9.DAT
09/25/97

AQUIFER MODEL:
Unconfined

SOLUTION METHOD:
Bouwer-Rice

TEST DATA:
H0= 7.107 ft
r_c= 0.1936 ft
r_w= 0.1936 ft
L = 7.107 ft
b = 7.72 ft
H = 7.107 ft

PARAMETER ESTIMATES:
K = 0.005544 ft/sec
y0 = 7.49 ft

AQTESOLV

APPENDIX D

ANALYTICAL RESULTS

Federal-Mogul Kingston
1257022.351601
3.7.1

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

OCT 0 1 1997

MW DETROIT

MONTGOMERY WATSON 7065

41551 ELEVEN MILE ROAD
NOVI, MI 48375

Lab Number: 97-A081287

Sample ID: MW-7 (7-9')

Date Collected: 9/16/97

Project: 1257022.351601

Time Collected:

Project Name: FEDERAL MOGUL-KINGSTON

Date Received: 9/20/97

Sampler: JAY MULLETT

Time Received: 9:00

State Certification:

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
GENERAL CHEMISTRY PARAMETERS										
TOC, Walkly-Black	629.	mg/kg	30.0	30.0	1	9/26/97	20:00	D.Marlin	Walk-Blk	8851

ND = Not detected at the report limit.

Report Approved By: _____ Report Date: 9/29/97

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director

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SPECIALIZED ASSAYS, INC.

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P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

MONTGOMERY WATSON 7065

41551 ELEVEN MILE ROAD
NOVI, MI 48375

Lab Number: 97-A081288

Sample ID: MW-7 (21-23')

Date Collected: 9/16/97

Project: 1257022.351601

Time Collected:

Project Name: FEDERAL MOGUL-KINGSTON

Date Received: 9/20/97

Sampler: JAY MULLETT

Time Received: 9:00

State Certification:

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
GENERAL CHEMISTRY PARAMETERS										
TOC, Walkly-Black	1710	mg/kg	30.0	30.0	1	9/26/97	20:00	B.Marlin	Walk-Blk	8851

ND = Not detected at the report limit.

Report Approved By: Danny Hale Report Date: 9/29/97

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director

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ANALYTICAL REPORT

MONTGOMERY WATSON 7065

41551 ELEVEN MILE ROAD
NOVI, MI 48375

Lab Number: 97-A081289

Sample ID: MW-8 (7-9')

Date Collected: 9/17/97

Project: 1257022.351601

Time Collected:

Project Name: FEDERAL MOGUL-KINGSTON

Date Received: 9/20/97

Sampler: JAY MULLETT

Time Received: 9:00

State Certification:

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
GENERAL CHEMISTRY PARAMETERS										
TOC, Walkly-Black	535.	mg/kg	30.0	30.0	1	9/26/97	20:00	B.Marlin	Walk-Blk	8851

ND = Not detected at the report limit.

Report Approved By: Danny Hale Report Date: 9/29/97

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director

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ANALYTICAL REPORT

MONTGOMERY WATSON 7065

41551 ELEVEN MILE ROAD
NOVI, MI 48375

Lab Number: 97-A081290

Sample ID: MW-8 (21-23')

Date Collected: 9/17/97

Project: 1257022.351601

Time Collected:

Project Name: FEDERAL MOGUL-KINGSTON

Date Received: 9/20/97

Sampler: JAY MULLETT

Time Received: 9:00

State Certification:

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
GENERAL CHEMISTRY PARAMETERS										
TOC, Walkly-Black	210.	mg/kg	30.0	30.0	1	9/26/97	20:00	R.Marlin	Walk-Blk	8851

ND = Not detected at the report limit.

Report Approved By: Danny Hale Report Date: 9/29/97

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director

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ANALYTICAL REPORT

MONTGOMERY WATSON 7065

41551 ELEVEN MILE ROAD
NOVI, MI 48375

Lab Number: 97-A081291

Sample ID: MW-9 (5-7')

Date Collected: 9/17/97

Project: 1257022.351601

Time Collected:

Project Name: FEDERAL MOGUL-KINGSTON

Date Received: 9/20/97

Sampler: JAY MULLETT

Time Received: 9:00

State Certification:

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
GENERAL CHEMISTRY PARAMETERS										
TOC, Walkly-Black	586.	mg/kg	30.0	30.0	1	9/26/97	20:00	B.Marlin	Walk-Blk	8851

ND = Not detected at the report limit.

Report Approved By: Danny Hale Report Date: 9/29/97

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director

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ANALYTICAL REPORT

MONTGOMERY WATSON 7065

41551 ELEVEN MILE ROAD
NOVI, MI 48375

Lab Number: 97-A081292

Sample ID: MW-9 (21-23')

Date Collected: 9/17/97

Project: 1257022.351601

Time Collected:

Project Name: FEDERAL MOGUL-KINGSTON

Date Received: 9/20/97

Sampler: JAY MULLETT

Time Received: 9:00

State Certification:

Sample Type: Soil

Site I.D.:

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
GENERAL CHEMISTRY PARAMETERS										
TOC, Walkly-Black	1270	mg/kg	30.0	30.0	1	9/26/97	20:00	D.Marlin	Walk-Blk	8851

ND = Not detected at the report limit.

Report Approved By: Danny Hale Report Date: 9/29/97

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director

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Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

IONTGOMERY WATSON 7065

:1551 ELEVEN MILE ROAD
IOVI, MI 48375

Lab Number: 97-A081293

:ample ID: MW-7, -8, -9: COMPOSITE SAMPLE

Date Collected: 9/17/97

'roject: 1257022.351601

Time Collected:

'roject Name: FEDERAL MOGUL-KINGSTON

Date Received: 9/20/97

:ampler: JAY MULLETT

Time Received: 9:00

:tate Certification:

Sample Type: Soil

:ite I.D.:

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
EXTRACTABLE ORGANICS										
Acenaphthene	ND	mg/kg	0.330	0.330	1	9/27/97	8:11	M.Goodrich	8270C	9688
Acenaphthylene	ND	mg/kg	0.330	0.330	1	9/27/97	8:11	M.Goodrich	8270C	9688
Anthracene	ND	mg/kg	0.330	0.330	1	9/27/97	8:11	M.Goodrich	8270C	9688
Benzo(a)anthracene	ND	mg/kg	0.330	0.330	1	9/27/97	8:11	M.Goodrich	8270C	9688
Benzo(a)pyrene	ND	mg/kg	0.330	0.330	1	9/27/97	8:11	M.Goodrich	8270C	9688
Benzo(b)fluoranthene	ND	mg/kg	0.330	0.330	1	9/27/97	8:11	M.Goodrich	8270C	9688
Benzo(g,h,i)perylene	ND	mg/kg	0.330	0.330	1	9/27/97	8:11	M.Goodrich	8270C	9688
Benzo(k)fluoranthene	ND	mg/kg	0.330	0.330	1	9/27/97	8:11	M.Goodrich	8270C	9688
4-Bromophenylphenylether	ND	mg/kg	0.330	0.330	1	9/27/97	8:11	M.Goodrich	8270C	9688
Butylbenzylphthalate	ND	mg/kg	0.330	0.330	1	9/27/97	8:11	M.Goodrich	8270C	9688
Carbazole	ND	mg/kg	0.330	0.330	1	9/27/97	8:11	M.Goodrich	8270C	9688
4-Chloro-3-methylphenol	ND	mg/kg	0.330	0.330	1	9/27/97	8:11	M.Goodrich	8270C	9688
4-Chloroaniline	ND	mg/kg	0.330	0.330	1	9/27/97	8:11	M.Goodrich	8270C	9688
bis(2-Chloroethoxy)methane	ND	mg/kg	0.330	0.330	1	9/27/97	8:11	M.Goodrich	8270C	9688
bis(2-Chloroethyl)ether	ND	mg/kg	0.330	0.330	1	9/27/97	8:11	M.Goodrich	8270C	9688
bis(2-Chloroisopropyl)ether	ND	mg/kg	0.330	0.330	1	9/27/97	8:11	M.Goodrich	8270C	9688
2-Chloronaphthalene	ND	mg/kg	0.330	0.330	1	9/27/97	8:11	M.Goodrich	8270C	9688
2-Chlorophenol	ND	mg/kg	0.330	0.330	1	9/27/97	8:11	M.Goodrich	8270C	9688
4-Chlorophenylphenylether	ND	mg/kg	0.330	0.330	1	9/27/97	8:11	M.Goodrich	8270C	9688
Chrysene	ND	mg/kg	0.330	0.330	1	9/27/97	8:11	M.Goodrich	8270C	9688
Dibenzofuran	ND	mg/kg	0.330	0.330	1	9/27/97	8:11	M.Goodrich	8270C	9688
Dibenz(a,h)anthracene	ND	mg/kg	0.330	0.330	1	9/27/97	8:11	M.Goodrich	8270C	9688
1,2-Dichlorobenzene	ND	mg/kg	0.330	0.330	1	9/27/97	8:11	M.Goodrich	8270C	9688
1,3-Dichlorobenzene	ND	mg/kg	0.330	0.330	1	9/27/97	8:11	M.Goodrich	8270C	9688
1,4-Dichlorobenzene	ND	mg/kg	0.330	0.330	1	9/27/97	8:11	M.Goodrich	8270C	9688
3,3'-Dichlorobenzidine	ND	mg/kg	0.825	0.666	1	9/27/97	8:11	M.Goodrich	8270C	9688
2,4-Dichlorophenol	ND	mg/kg	0.330	0.330	1	9/27/97	8:11	M.Goodrich	8270C	9688
Diethylphthalate	ND	mg/kg	0.330	0.330	1	9/27/97	8:11	M.Goodrich	8270C	9688

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Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 97-A081293
Sample ID: MW-7, -8, -9: COMPOSITE SAMP

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
2,4-Dimethylphenol	ND	mg/kg	0.330	0.330	1	9/27/97	8:11	M.Goodrich	8270C	9688
Dimethylphthalate	ND	mg/kg	0.330	0.330	1	9/27/97	8:11	M.Goodrich	8270C	9688
Di-n-butylphthalate	ND	mg/kg	0.330	0.330	1	9/27/97	8:11	M.Goodrich	8270C	9688
4,6-Dinitro-2-methylphenol	ND	mg/kg	0.825	0.825	1	9/27/97	8:11	M.Goodrich	8270C	9688
2,4-Dinitrophenol	ND	mg/kg	0.825	0.825	1	9/27/97	8:11	M.Goodrich	8270C	9688
2,4-dinitrotoluene	ND	mg/kg	0.330	0.330	1	9/27/97	8:11	M.Goodrich	8270C	9688
2,6-Dinitrotoluene	ND	mg/kg	0.330	0.330	1	9/27/97	8:11	M.Goodrich	8270C	9688
Di-n-octylphthalate	ND	mg/kg	0.330	0.330	1	9/27/97	8:11	M.Goodrich	8270C	9688
Fluoranthene	ND	mg/kg	0.330	0.330	1	9/27/97	8:11	M.Goodrich	8270C	9688
Fluorene	ND	mg/kg	0.330	0.330	1	9/27/97	8:11	M.Goodrich	8270C	9688
Hexachlorobenzene	ND	mg/kg	0.330	0.330	1	9/27/97	8:11	M.Goodrich	8270C	9688
Hexachlorobutadiene	ND	mg/kg	0.330	0.330	1	9/27/97	8:11	M.Goodrich	8270C	9688
Hexachlorocyclopentadiene	ND	mg/kg	0.330	0.330	1	9/27/97	8:11	M.Goodrich	8270C	9688
Hexachloroethane	ND	mg/kg	0.330	0.330	1	9/27/97	8:11	M.Goodrich	8270C	9688
Indeno(1,2,3-cd)pyrene	ND	mg/kg	0.330	0.330	1	9/27/97	8:11	M.Goodrich	8270C	9688
Isophorone	ND	mg/kg	0.330	0.330	1	9/27/97	8:11	M.Goodrich	8270C	9688
2-Methylnaphthalene	ND	mg/kg	0.330	0.330	1	9/27/97	8:11	M.Goodrich	8270C	9688
2-Methylphenol	ND	mg/kg	0.330	0.330	1	9/27/97	8:11	M.Goodrich	8270C	9688
m,p-Methylphenol	ND	mg/kg	0.330	0.330	1	9/27/97	8:11	M.Goodrich	8270C	9688
Naphthalene	ND	mg/kg	0.330	0.330	1	9/27/97	8:11	M.Goodrich	8270C	9688
2-Nitroaniline	ND	mg/kg	0.825	0.825	1	9/27/97	8:11	M.Goodrich	8270C	9688
3-Nitroaniline	ND	mg/kg	0.825	0.825	1	9/27/97	8:11	M.Goodrich	8270C	9688
4-Nitroaniline	ND	mg/kg	0.825	0.825	1	9/27/97	8:11	M.Goodrich	8270C	9688
Nitrobenzene	ND	mg/kg	0.330	0.330	1	9/27/97	8:11	M.Goodrich	8270C	9688
2-Nitrophenol	ND	mg/kg	0.330	0.330	1	9/27/97	8:11	M.Goodrich	8270C	9688
4-Nitrophenol	ND	mg/kg	0.825	0.825	1	9/27/97	8:11	M.Goodrich	8270C	9688
N-nitrosodi-n-propylamine	ND	mg/kg	0.330	0.330	1	9/27/97	8:11	M.Goodrich	8270C	9688
N-nitrosodiphenylamine	ND	mg/kg	0.330	0.330	1	9/27/97	8:11	M.Goodrich	8270C	9688
Pentachlorophenol	ND	mg/kg	0.825	0.825	1	9/27/97	8:11	M.Goodrich	8270C	9688
Phenanthrene	ND	mg/kg	0.330	0.330	1	9/27/97	8:11	M.Goodrich	8270C	9688
Phenol	ND	mg/kg	0.330	0.330	1	9/27/97	8:11	M.Goodrich	8270C	9688
Pyrene	ND	mg/kg	0.330	0.330	1	9/27/97	8:11	M.Goodrich	8270C	9688
Bis(2-ethylhexyl)phthalate	ND	mg/kg	0.330	0.330	1	9/27/97	8:11	M.Goodrich	8270C	9688
1,2,4-Trichlorobenzene	ND	mg/kg	0.330	0.330	1	9/27/97	8:11	M.Goodrich	8270C	9688
2,4,5-Trichlorophenol	ND	mg/kg	0.825	0.825	1	9/27/97	8:11	M.Goodrich	8270C	9688
2,4,6-Trichlorophenol	ND	mg/kg	0.330	0.330	1	9/27/97	8:11	M.Goodrich	8270C	9688
VOLATILE ORGANICS										
Acetone	ND	mg/kg	0.0100	0.0100	1	9/23/97	1:19	G.Norton	8260B	6970
Benzene	ND	mg/kg	0.0020	0.0020	1	9/23/97	1:19	G.Norton	8260B	6970
Bromobenzene	ND	mg/kg	0.0020	0.0020	1	9/23/97	1:19	G.Norton	8260B	6970
Bromochloromethane	ND	mg/kg	0.0020	0.0020	1	9/23/97	1:19	G.Norton	8260B	6970
Bromoform	ND	mg/kg	0.0020	0.0020	1	9/23/97	1:19	G.Norton	8260B	6970
Bromomethane	ND	mg/kg	0.0100	0.0100	1	9/23/97	1:19	G.Norton	8260B	6970

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 97-A081293
Sample ID: MW-7, -8, -9: COMPOSITE SAMPLE

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
2-Butanone	ND	mg/kg	0.0100	0.0100	1	9/23/97	1:19	G.Norton	8260B	6970
n-Butylbenzene	ND	mg/kg	0.0020	0.0020	1	9/23/97	1:19	G.Norton	8260B	6970
sec-Butylbenzene	ND	mg/kg	0.0020	0.0020	1	9/23/97	1:19	G.Norton	8260B	6970
t-Butylbenzene	ND	mg/kg	0.0020	0.0020	1	9/23/97	1:19	G.Norton	8260B	6970
Carbon Disulfide	ND	mg/kg	0.0020	0.0020	1	9/23/97	1:19	G.Norton	8260B	6970
Carbon tetrachloride	ND	mg/kg	0.0020	0.0020	1	9/23/97	1:19	G.Norton	8260B	6970
Chlorobenzene	ND	mg/kg	0.0020	0.0020	1	9/23/97	1:19	G.Norton	8260B	6970
Chloroethane	ND	mg/kg	0.0020	0.0020	1	9/23/97	1:19	G.Norton	8260B	6970
2-Chloroethylvinylether	ND	mg/kg	0.0020	0.0020	1	9/23/97	1:19	G.Norton	8260B	6970
Chloroform	ND	mg/kg	0.0020	0.0020	1	9/23/97	1:19	G.Norton	8260B	6970
Chloromethane	ND	mg/kg	0.0100	0.0100	1	9/23/97	1:19	G.Norton	8260B	6970
2-Chlorotoluene	ND	mg/kg	0.0020	0.0020	1	9/23/97	1:19	G.Norton	8260B	6970
4-Chlorotoluene	ND	mg/kg	0.0020	0.0020	1	9/23/97	1:19	G.Norton	8260B	6970
1,2-Dibromo-3-chloropropane	ND	mg/kg	0.0020	0.0020	1	9/23/97	1:19	G.Norton	8260B	6970
Dibromochloromethane	ND	mg/kg	0.0020	0.0020	1	9/23/97	1:19	G.Norton	8260B	6970
1,2-Dibromoethane	ND	mg/kg	0.0020	0.0020	1	9/23/97	1:19	G.Norton	8260B	6970
Dibromomethane	ND	mg/kg	0.0020	0.0020	1	9/23/97	1:19	G.Norton	8260B	6970
1,2-Dichlorobenzene	ND	mg/kg	0.0020	0.0020	1	9/23/97	1:19	G.Norton	8260B	6970
1,3-Dichlorobenzene	ND	mg/kg	0.0020	0.0020	1	9/23/97	1:19	G.Norton	8260B	6970
1,4-Dichlorobenzene	ND	mg/kg	0.0020	0.0020	1	9/23/97	1:19	G.Norton	8260B	6970
Dichlorodifluoromethane	ND	mg/kg	0.0020	0.0020	1	9/23/97	1:19	G.Norton	8260B	6970
1,1-Dichloroethane	ND	mg/kg	0.0020	0.0020	1	9/23/97	1:19	G.Norton	8260B	6970
1,2-Dichloroethane	ND	mg/kg	0.0020	0.0020	1	9/23/97	1:19	G.Norton	8260B	6970
1,1-Dichloroethene	ND	mg/kg	0.0020	0.0020	1	9/23/97	1:19	G.Norton	8260B	6970
cis-1,2-Dichloroethene	0.0590	mg/kg	0.0020	0.0020	1	9/23/97	1:19	G.Norton	8260B	6970
trans-1,2-Dichloroethene	0.0030	mg/kg	0.0020	0.0020	1	9/23/97	1:19	G.Norton	8260B	6970
1,2-Dichloropropane	ND	mg/kg	0.0020	0.0020	1	9/23/97	1:19	G.Norton	8260B	6970
1,3-Dichloropropane	ND	mg/kg	0.0020	0.0020	1	9/23/97	1:19	G.Norton	8260B	6970
2,2-Dichloropropane	ND	mg/kg	0.0020	0.0020	1	9/23/97	1:19	G.Norton	8260B	6970
1,1-Dichloropropene	ND	mg/kg	0.0020	0.0020	1	9/23/97	1:19	G.Norton	8260B	6970
cis-1,3-Dichloropropene	ND	mg/kg	0.0020	0.0020	1	9/23/97	1:19	G.Norton	8260B	6970
trans-1,3-Dichloropropene	ND	mg/kg	0.0020	0.0020	1	9/23/97	1:19	G.Norton	8260B	6970
Ethylbenzene	ND	mg/kg	0.0020	0.0020	1	9/23/97	1:19	G.Norton	8260B	6970
Hexachlorobutadiene	ND	mg/kg	0.0020	0.0020	1	9/23/97	1:19	G.Norton	8260B	6970
2-Hexanone	ND	mg/kg	0.0100	0.0100	1	9/23/97	1:19	G.Norton	8260B	6970
Isopropylbenzene	ND	mg/kg	0.0020	0.0020	1	9/23/97	1:19	G.Norton	8260B	6970
4-Isopropyltoluene	ND	mg/kg	0.0020	0.0020	1	9/23/97	1:19	G.Norton	8260B	6970
4-Methyl-2-pentanone	ND	mg/kg	0.0100	0.0100	1	9/23/97	1:19	G.Norton	8260B	6970
Methylene chloride	ND	mg/kg	0.0020	0.0020	1	9/23/97	1:19	G.Norton	8260B	6970
Naphthalene	ND	mg/kg	0.0020	0.0020	1	9/23/97	1:19	G.Norton	8260B	6970
n-Propylbenzene	ND	mg/kg	0.0020	0.0020	1	9/23/97	1:19	G.Norton	8260B	6970
Styrene	ND	mg/kg	0.0020	0.0020	1	9/23/97	1:19	G.Norton	8260B	6970
1,1,1,2-Tetrachloroethane	ND	mg/kg	0.0020	0.0020	1	9/23/97	1:19	G.Norton	8260B	6970
1,1,2,2-Tetrachloroethane	ND	mg/kg	0.0020	0.0020	1	9/23/97	1:19	G.Norton	8260B	6970

SPECIALIZED ASSAYS, INC.

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ANALYTICAL REPORT

Laboratory Number: 97-A081293
Sample ID: MW-7, -8, -9: COMPOSITE SAM

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
Tetrachloroethene	ND	mg/kg	0.0020	0.0020	1	9/23/97	1:19	G.Norton	8260B	6970
Toluene	ND	mg/kg	0.0020	0.0020	1	9/23/97	1:19	G.Norton	8260B	6970
1,2,3-Trichlorobenzene	ND	mg/kg	0.0020	0.0020	1	9/23/97	1:19	G.Norton	8260B	6970
1,2,4-Trichlorobenzene	ND	mg/kg	0.0020	0.0020	1	9/23/97	1:19	G.Norton	8260B	6970
1,1,1-Trichloroethane	ND	mg/kg	0.0020	0.0020	1	9/23/97	1:19	G.Norton	8260B	6970
1,1,2-Trichloroethane	ND	mg/kg	0.0020	0.0020	1	9/23/97	1:19	G.Norton	8260B	6970
Trichloroethene	0.0470	mg/kg	0.0020	0.0020	1	9/23/97	1:19	G.Norton	8260B	6970
1,2,3-Trichloropropane	ND	mg/kg	0.0020	0.0020	1	9/23/97	1:19	G.Norton	8260B	6970
1,2,4-Trimethylbenzene	0.0050	mg/kg	0.0020	0.0020	1	9/23/97	1:19	G.Norton	8260B	6970
1,3,5-Trimethylbenzene	ND	mg/kg	0.0020	0.0020	1	9/23/97	1:19	G.Norton	8260B	6970
Vinyl chloride	ND	mg/kg	0.0020	0.0020	1	9/23/97	1:19	G.Norton	8260B	6970
Xylenes	ND	mg/kg	0.0020	0.0020	1	9/23/97	1:19	G.Norton	8260B	6970
Bromodichloromethane	ND	mg/kg	0.0020	0.0020	1	9/23/97	1:19	G.Norton	8260B	6970
Trichlorofluoromethane	ND	mg/kg	0.0020	0.0020	1	9/23/97	1:19	G.Norton	8260B	6970

TCLP Results

Analyte	Result	Units	Reg Limit	Matrix Spike Recovery (%)	Date	Method
Arsenic	< 0.10	mg/l	5.0	102	9/29/97	6010A
Barium	< 1.00	mg/l	100	91	9/29/97	6010A
Cadmium	< 0.10	mg/l	1.0	94	9/29/97	6010A
Chromium	< 0.50	mg/l	5.0	90	9/29/97	6010A
Lead	< 0.50	mg/l	5.0	93	9/29/97	6010A
Mercury	< 0.010	mg/l	0.20	103	9/25/97	7471
Selenium	< 0.10	mg/l	1.0	106	9/29/97	6010A
Silver	< 0.10	mg/l	5.0	87	9/29/97	6010A
TCLP Extraction	COMPLETED				9/23/97	1311

ND = Not detected at the report limit.

Sample Extraction Data

BNA's Extracted 9/25/97 Wt extracted: 30.0 gm Extract Volume: 1.0 ml C.Gerenser

** SURROGATE RECOVERIES **

Surrogate	% Recovery	Target Range
VOA Surrogate, 1,2-Dichloroethane, d4	93.0	62. - 147.

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ANALYTICAL REPORT

Laboratory Number: 97-A081293
Sample ID: MW-7, -8, -9: COMPOSITE SAMPLE

** SURROGATE RECOVERIES **

Surrogate	% Recovery	Target Range
VOA Surrogate, Toluene d8	99.0	84. - 117.
VOA Surrogate, 4-Bromofluorobenzene	110.	64. - 126.
BNA Surr., Nitrobenzene-d5	63.6	23. - 120.
BNA Surr., 2-Fluorobiphenyl	68.8	30. - 115.
BNA Surrogate, Terphenyl d14	84.9	18. - 140.
BNA Surrogate, Phenol d5	79.6	10. - 115.
BNA Surrogate, 2-Fluorophenol	65.3	20. - 121.
BNA Surrogate, 2,4,6-Tribromophenol	65.3	19. - 122.

Report Approved By: _____ Report Date: 9/29/97

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
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ANALYTICAL REPORT

MONTGOMERY WATSON 7065

41551 ELEVEN MILE ROAD
NOVI, MI 48375

Lab Number: 97-A081294

Sample ID: MW-5

Date Collected: 9/18/97

Project: 1257022.351601

Time Collected: 14:10

Project Name: FEDERAL MOGUL-KINGSTON

Date Received: 9/20/97

Sampler: JAY MULLETT

Time Received: 9:00

State Certification:

Sample Type: Ground water

Site I.D.:

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
VOLATILE ORGANICS										
Acetone	ND	ug/l	10	10	1	9/25/97	22:00	S.Sturm	8260B	8690
Benzene	ND	ug/l	2	2	1	9/25/97	22:00	S.Sturm	8260B	8690
Bromobenzene	ND	ug/l	2	2	1	9/25/97	22:00	S.Sturm	8260B	8690
Bromochloromethane	ND	ug/l	2	2	1	9/25/97	22:00	S.Sturm	8260B	8690
Bromoform	ND	ug/l	2	2	1	9/25/97	22:00	S.Sturm	8260B	8690
Bromomethane	ND	ug/l	2	2	1	9/25/97	22:00	S.Sturm	8260B	8690
2-Butanone	ND	ug/l	10	10	1	9/25/97	22:00	S.Sturm	8260B	8690
n-Butylbenzene	ND	ug/l	2	2	1	9/25/97	22:00	S.Sturm	8260B	8690
sec-Butylbenzene	ND	ug/l	2	2	1	9/25/97	22:00	S.Sturm	8260B	8690
t-Butylbenzene	ND	ug/l	2	2	1	9/25/97	22:00	S.Sturm	8260B	8690
Carbon Disulfide	ND	ug/l	2	2	1	9/25/97	22:00	S.Sturm	8260B	8690
Carbon tetrachloride	ND	ug/l	2	2	1	9/25/97	22:00	S.Sturm	8260B	8690
Chlorobenzene	ND	ug/l	2	2	1	9/25/97	22:00	S.Sturm	8260B	8690
Chloroethane	ND	ug/l	2	2	1	9/25/97	22:00	S.Sturm	8260B	8690
2-Chloroethylvinylether	ND	ug/l	2	2	1	9/25/97	22:00	S.Sturm	8260B	8690
Chloroform	ND	ug/l	2	2	1	9/25/97	22:00	S.Sturm	8260B	8690
Chloromethane	ND	ug/l	2	2	1	9/25/97	22:00	S.Sturm	8260B	8690
2-Chlorotoluene	ND	ug/l	2	2	1	9/25/97	22:00	S.Sturm	8260B	8690
4-Chlorotoluene	ND	ug/l	10	2	1	9/25/97	22:00	S.Sturm	8260B	8690
1,2-Dibromo-3-chloropropane	ND	ug/l	10	10	1	9/25/97	22:00	S.Sturm	8260B	8690
Dibromochloromethane	ND	ug/l	2	2	1	9/25/97	22:00	S.Sturm	8260B	8690
1,2-Dibromoethane	ND	ug/l	2	2	1	9/25/97	22:00	S.Sturm	8260B	8690
Dibromomethane	ND	ug/l	2	2	1	9/25/97	22:00	S.Sturm	8260B	8690
1,2-Dichlorobenzene	ND	ug/l	2	2	1	9/25/97	22:00	S.Sturm	8260B	8690
1,3-Dichlorobenzene	ND	ug/l	2	2	1	9/25/97	22:00	S.Sturm	8260B	8690
1,4-Dichlorobenzene	ND	ug/l	2	2	1	9/25/97	22:00	S.Sturm	8260B	8690
Dichlorodifluoromethane	ND	ug/l	2	2	1	9/25/97	22:00	S.Sturm	8260B	8690
1,1-Dichloroethane	ND	ug/l	2	2	1	9/25/97	22:00	S.Sturm	8260B	8690
1,2-Dichloroethane	ND	ug/l	2	2	1	9/25/97	22:00	S.Sturm	8260B	8690

SPECIALIZED ASSAYS, INC.

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ANALYTICAL REPORT

Laboratory Number: 97-A081294
Sample ID: MW-5

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
1,1-Dichloroethene	ND	ug/l	2	2	1	9/25/97	22:00	S.Sturn	8260B	8690
cis-1,2-Dichloroethene	ND	ug/l	2	2	1	9/25/97	22:00	S.Sturn	8260B	8690
trans-1,2-Dichloroethene	ND	ug/l	2	2	1	9/25/97	22:00	S.Sturn	8260B	8690
1,2-Dichloropropane	ND	ug/l	2	2	1	9/25/97	22:00	S.Sturn	8260B	8690
1,3-Dichloropropane	ND	ug/l	2	2	1	9/25/97	22:00	S.Sturn	8260B	8690
2,2-Dichloropropane	ND	ug/l	2	2	1	9/25/97	22:00	S.Sturn	8260B	8690
1,1-Dichloropropene	ND	ug/l	2	2	1	9/25/97	22:00	S.Sturn	8260B	8690
cis-1,3-Dichloropropene	ND	ug/l	2	2	1	9/25/97	22:00	S.Sturn	8260B	8690
trans-1,3-Dichloropropene	ND	ug/l	2	2	1	9/25/97	22:00	S.Sturn	8260B	8690
Ethylbenzene	ND	ug/l	2	2	1	9/25/97	22:00	S.Sturn	8260B	8690
Hexachlorobutadiene	ND	ug/l	2	2	1	9/25/97	22:00	S.Sturn	8260B	8690
2-Hexanone	ND	ug/l	10	10	1	9/25/97	22:00	S.Sturn	8260B	8690
Isopropylbenzene	ND	ug/l	2	2	1	9/25/97	22:00	S.Sturn	8260B	8690
4-Isopropyltoluene	ND	ug/l	2	2	1	9/25/97	22:00	S.Sturn	8260B	8690
4-Methyl-2-pentanone	ND	ug/l	10	10	1	9/25/97	22:00	S.Sturn	8260B	8690
Methylene chloride	ND	ug/l	2	2	1	9/25/97	22:00	S.Sturn	8260B	8690
Naphthalene	ND	ug/l	2	2	1	9/25/97	22:00	S.Sturn	8260B	8690
n-Propylbenzene	ND	ug/l	2	2	1	9/25/97	22:00	S.Sturn	8260B	8690
Styrene	ND	ug/l	2	2	1	9/25/97	22:00	S.Sturn	8260B	8690
1,1,1,2-Tetrachloroethane	ND	ug/l	2	2	1	9/25/97	22:00	S.Sturn	8260B	8690
1,1,2,2-Tetrachloroethane	ND	ug/l	2	2	1	9/25/97	22:00	S.Sturn	8260B	8690
Tetrachloroethene	21	ug/l	2	2	1	9/25/97	22:00	S.Sturn	8260B	8690
Toluene	ND	ug/l	2	2	1	9/25/97	22:00	S.Sturn	8260B	8690
1,2,3-Trichlorobenzene	ND	ug/l	2	2	1	9/25/97	22:00	S.Sturn	8260B	8690
1,2,4-Trichlorobenzene	ND	ug/l	2	2	1	9/25/97	22:00	S.Sturn	8260B	8690
1,1,1-Trichloroethane	ND	ug/l	2	2	1	9/25/97	22:00	S.Sturn	8260B	8690
1,1,2-Trichloroethane	ND	ug/l	2	2	1	9/25/97	22:00	S.Sturn	8260B	8690
Trichloroethene	23.8	ug/l	2	2	1	9/25/97	22:00	S.Sturn	8260B	8690
1,2,3-Trichloropropane	ND	ug/l	2	2	1	9/25/97	22:00	S.Sturn	8260B	8690
1,2,4-Trimethylbenzene	ND	ug/l	2	2	1	9/25/97	22:00	S.Sturn	8260B	8690
1,3,5-Trimethylbenzene	ND	ug/l	2	2	1	9/25/97	22:00	S.Sturn	8260B	8690
Vinyl chloride	ND	ug/l	2	2	1	9/25/97	22:00	S.Sturn	8260B	8690
Xylenes	ND	ug/l	2	2	1	9/25/97	22:00	S.Sturn	8260B	8690
Bromodichloromethane	ND	ug/l	2	2	1	9/25/97	22:00	S.Sturn	8260B	8690
Trichlorofluoromethane	ND	ug/l	2	2	1	9/25/97	22:00	S.Sturn	8260B	8690
METALS										
Arsenic, dissolved	ND	mg/l	0.005	0.005	1	9/26/97	9:59	R.Street	6010A	7833
Barium, dissolved	0.012	mg/l	0.010	0.010	1	9/26/97	9:59	R.Street	6010A	7833
Cadmium, dissolved	ND	mg/l	0.0010	0.0010	1	9/26/97	9:59	R.Street	6010A	7833
Chromium, dissolved	ND	mg/l	0.005	0.005	1	9/26/97	9:59	R.Street	6010A	7833
Lead, dissolved	ND	mg/l	0.0030	0.0030	1	9/26/97	9:59	R.Street	6010A	7833
Mercury, dissolved	ND	mg/l	0.00020	0.00020	1	9/23/97	7:31	R.Street	7470	6790
Selenium, dissolved	ND	mg/l	0.0050	0.0050	1	9/26/97	9:59	R.Street	6010A	7833
Silver, dissolved	ND	mg/l	0.0050	0.0050	1	9/26/97	9:59	R.Street	6010A	7833

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ANALYTICAL REPORT

Laboratory Number: 97-A081294
Sample ID: MW-5

TCLP Results

Analyte	Result	Units	Reg Limit	Matrix Spike Recovery (%)	Date	Method

ND = Not detected at the report limit.

** SURROGATE RECOVERIES **

Surrogate	% Recovery	Target Range
VOA Surrogate, 1,2-Dichloroethane, d4	99.9	80. - 124.
VOA Surrogate, Toluene d8	101.	86. - 108.
VOA Surrogate, 4-Bromofluorobenzene	90.2	77. - 118.
VOA Surrogate, Dibromofluoromethane	85.6	77. - 118.

Report Approved By: _____ Report Date: 9/29/97

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

MONTGOMERY WATSON 7065

41551 ELEVEN MILE ROAD
NOVI, MI 48375

Lab Number: 97-A081295

Sample ID: MW-4

Date Collected: 9/18/97

Project: 1257022.351601

Time Collected: 17:35

Project Name: FEDERAL MOGUL-KINGSTON

Date Received: 9/20/97

Sampler: JAY MULLETT

Time Received: 9:00

State Certification:

Sample Type: Ground water

Site I.D.:

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
VOLATILE ORGANICS										
Acetone	ND	ug/l	10	10	1	9/25/97	22:34	S.Sturm	8260B	8690
Benzene	ND	ug/l	2	2	1	9/25/97	22:34	S.Sturm	8260B	8690
Bromobenzene	ND	ug/l	2	2	1	9/25/97	22:34	S.Sturm	8260B	8690
Bromochloromethane	ND	ug/l	2	2	1	9/25/97	22:34	S.Sturm	8260B	8690
Bromoform	ND	ug/l	2	2	1	9/25/97	22:34	S.Sturm	8260B	8690
Bromomethane	ND	ug/l	2	2	1	9/25/97	22:34	S.Sturm	8260B	8690
2-Butanone	ND	ug/l	10	10	1	9/25/97	22:34	S.Sturm	8260B	8690
n-Butylbenzene	ND	ug/l	2	2	1	9/25/97	22:34	S.Sturm	8260B	8690
sec-Butylbenzene	ND	ug/l	2	2	1	9/25/97	22:34	S.Sturm	8260B	8690
t-Butylbenzene	ND	ug/l	2	2	1	9/25/97	22:34	S.Sturm	8260B	8690
Carbon Disulfide	ND	ug/l	2	2	1	9/25/97	22:34	S.Sturm	8260B	8690
Carbon tetrachloride	ND	ug/l	2	2	1	9/25/97	22:34	S.Sturm	8260B	8690
Chlorobenzene	ND	ug/l	2	2	1	9/25/97	22:34	S.Sturm	8260B	8690
Chloroethane	ND	ug/l	2	2	1	9/25/97	22:34	S.Sturm	8260B	8690
2-Chloroethylvinylether	ND	ug/l	2	2	1	9/25/97	22:34	S.Sturm	8260B	8690
Chloroform	ND	ug/l	2	2	1	9/25/97	22:34	S.Sturm	8260B	8690
Chloromethane	ND	ug/l	2	2	1	9/25/97	22:34	S.Sturm	8260B	8690
2-Chlorotoluene	ND	ug/l	2	2	1	9/25/97	22:34	S.Sturm	8260B	8690
4-Chlorotoluene	ND	ug/l	10	2	1	9/25/97	22:34	S.Sturm	8260B	8690
1,2-Dibromo-3-chloropropane	ND	ug/l	10	10	1	9/25/97	22:34	S.Sturm	8260B	8690
Dibromochloromethane	ND	ug/l	2	2	1	9/25/97	22:34	S.Sturm	8260B	8690
1,2-Dibromoethane	ND	ug/l	2	2	1	9/25/97	22:34	S.Sturm	8260B	8690
Dibromomethane	ND	ug/l	2	2	1	9/25/97	22:34	S.Sturm	8260B	8690
1,2-Dichlorobenzene	ND	ug/l	2	2	1	9/25/97	22:34	S.Sturm	8260B	8690
1,3-Dichlorobenzene	ND	ug/l	2	2	1	9/25/97	22:34	S.Sturm	8260B	8690
1,4-Dichlorobenzene	ND	ug/l	2	2	1	9/25/97	22:34	S.Sturm	8260B	8690
Dichlorodifluoromethane	ND	ug/l	2	2	1	9/25/97	22:34	S.Sturm	8260B	8690
1,1-Dichloroethane	ND	ug/l	2	2	1	9/25/97	22:34	S.Sturm	8260B	8690
1,2-Dichloroethane	ND	ug/l	2	2	1	9/25/97	22:34	S.Sturm	8260B	8690

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 97-A081295
Sample ID: MW-4

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
1,1-Dichloroethene	2.4	ug/l	2	2	1	9/25/97	22:34	S.Sturn	8260B	8690
cis-1,2-Dichloroethene	795	ug/l	10	2	5	9/26/97	14:30	S.Sturn	8260B	9205
trans-1,2-Dichloroethene	ND	ug/l	2	2	1	9/25/97	22:34	S.Sturn	8260B	8690
1,2-Dichloropropane	ND	ug/l	2	2	1	9/25/97	22:34	S.Sturn	8260B	8690
1,3-Dichloropropane	ND	ug/l	2	2	1	9/25/97	22:34	S.Sturn	8260B	8690
2,2-Dichloropropane	ND	ug/l	2	2	1	9/25/97	22:34	S.Sturn	8260B	8690
1,1-Dichloropropene	ND	ug/l	2	2	1	9/25/97	22:34	S.Sturn	8260B	8690
cis-1,3-Dichloropropene	ND	ug/l	2	2	1	9/25/97	22:34	S.Sturn	8260B	8690
trans-1,3-Dichloropropene	ND	ug/l	2	2	1	9/25/97	22:34	S.Sturn	8260B	8690
Ethylbenzene	2.6	ug/l	2	2	1	9/25/97	22:34	S.Sturn	8260B	8690
Hexachlorobutadiene	ND	ug/l	2	2	1	9/25/97	22:34	S.Sturn	8260B	8690
2-Hexanone	ND	ug/l	10	10	1	9/25/97	22:34	S.Sturn	8260B	8690
Isopropylbenzene	ND	ug/l	2	2	1	9/25/97	22:34	S.Sturn	8260B	8690
4-Isopropyltoluene	ND	ug/l	2	2	1	9/25/97	22:34	S.Sturn	8260B	8690
4-Methyl-2-pentanone	ND	ug/l	10	10	1	9/25/97	22:34	S.Sturn	8260B	8690
Methylene chloride	ND	ug/l	2	2	1	9/25/97	22:34	S.Sturn	8260B	8690
Naphthalene	9.7	ug/l	2	2	1	9/25/97	22:34	S.Sturn	8260B	8690
n-Propylbenzene	ND	ug/l	2	2	1	9/25/97	22:34	S.Sturn	8260B	8690
Styrene	ND	ug/l	2	2	1	9/25/97	22:34	S.Sturn	8260B	8690
1,1,1,2-Tetrachloroethane	ND	ug/l	2	2	1	9/25/97	22:34	S.Sturn	8260B	8690
1,1,2,2-Tetrachloroethane	ND	ug/l	2	2	1	9/25/97	22:34	S.Sturn	8260B	8690
Tetrachloroethene	9.9	ug/l	2	2	1	9/25/97	22:34	S.Sturn	8260B	8690
Toluene	ND	ug/l	2	2	1	9/25/97	22:34	S.Sturn	8260B	8690
1,2,3-Trichlorobenzene	ND	ug/l	2	2	1	9/25/97	22:34	S.Sturn	8260B	8690
1,2,4-Trichlorobenzene	ND	ug/l	2	2	1	9/25/97	22:34	S.Sturn	8260B	8690
1,1,1-Trichloroethane	ND	ug/l	2	2	1	9/25/97	22:34	S.Sturn	8260B	8690
1,1,2-Trichloroethane	ND	ug/l	2	2	1	9/25/97	22:34	S.Sturn	8260B	8690
Trichloroethene	893	ug/l	10	2	5	9/26/97	14:30	S.Sturn	8260B	9205
1,2,3-Trichloropropane	ND	ug/l	2	2	1	9/25/97	22:34	S.Sturn	8260B	8690
1,2,4-Trimethylbenzene	6	ug/l	2	2	1	9/25/97	22:34	S.Sturn	8260B	8690
1,3,5-Trimethylbenzene	2.3	ug/l	2	2	1	9/25/97	22:34	S.Sturn	8260B	8690
Vinyl chloride	3	ug/l	2	2	1	9/25/97	22:34	S.Sturn	8260B	8690
Xylenes	ND	ug/l	2	2	1	9/25/97	22:34	S.Sturn	8260B	8690
Bromodichloromethane	ND	ug/l	2	2	1	9/25/97	22:34	S.Sturn	8260B	8690
Trichlorofluoromethane	ND	ug/l	2	2	1	9/25/97	22:34	S.Sturn	8260B	8690
METALS										
Arsenic, dissolved	ND	mg/l	0.005	0.005	1	9/26/97	9:59	R.Street	6010A	7833
Barium, dissolved	0.059	mg/l	0.010	0.010	1	9/26/97	9:59	R.Street	6010A	7833
Cadmium, dissolved	ND	mg/l	0.0010	0.0010	1	9/26/97	9:59	R.Street	6010A	7833
Chromium, dissolved	ND	mg/l	0.005	0.005	1	9/26/97	9:59	R.Street	6010A	7833
Lead, dissolved	ND	mg/l	0.0030	0.0030	1	9/26/97	9:59	R.Street	6010A	7833
Mercury, dissolved	ND	mg/l	0.00020	0.00020	1	9/23/97	7:31	R.Street	7470	6790
Selenium, dissolved	ND	mg/l	0.0050	0.0050	1	9/26/97	9:59	R.Street	6010A	7833
Silver, dissolved	ND	mg/l	0.0050	0.0050	1	9/26/97	9:59	R.Street	6010A	7833

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 97-A081295
Sample ID: MW-4

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
MISCELLANEOUS CHEMISTRY										
Total Organic Carbon	ND	mg/l	3.0	3.0	1	9/24/97	9:47	K.Witte	9060	7122

ND = Not detected at the report limit.

** SURROGATE RECOVERIES **

Surrogate	% Recovery	Target Range
VOA Surrogate, 1,2-Dichloroethane, d4	95.4	80. - 124.
VOA Surrogate, Toluene d8	94.7	86. - 108.
VOA Surrogate, 4-Bromofluorobenzene	91.7	77. - 118.
VOA Surrogate, Dibromofluoromethane	88.0	77. - 118.

Report Approved By: _____ Report Date: 9/29/97

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director

SPECIALIZED ASSAYS, INC.

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P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

MONTGOMERY WATSON 7065

41551 ELEVEN MILE ROAD
NOVI, MI 48375

Lab Number: 97-A081296

Sample ID: MW-2

Date Collected: 9/18/97

Project: 1257022.351601

Time Collected: 13:45

Project Name: FEDERAL MOGUL-KINGSTON

Date Received: 9/20/97

Sampler: JAY MULLETT

Time Received: 9:00

State Certification:

Sample Type: Ground water

Site I.D.:

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
VOLATILE ORGANICS										
Acetone	ND	ug/l	10	10	1	9/25/97	23:09	S.Sturn	8260B	8690
Benzene	ND	ug/l	2	2	1	9/25/97	23:09	S.Sturn	8260B	8690
Bromobenzene	ND	ug/l	2	2	1	9/25/97	23:09	S.Sturn	8260B	8690
Bromochloromethane	ND	ug/l	2	2	1	9/25/97	23:09	S.Sturn	8260B	8690
Bromoform	ND	ug/l	2	2	1	9/25/97	23:09	S.Sturn	8260B	8690
Bromomethane	ND	ug/l	2	2	1	9/25/97	23:09	S.Sturn	8260B	8690
2-Butanone	ND	ug/l	10	10	1	9/25/97	23:09	S.Sturn	8260B	8690
n-Butylbenzene	ND	ug/l	2	2	1	9/25/97	23:09	S.Sturn	8260B	8690
sec-Butylbenzene	ND	ug/l	2	2	1	9/25/97	23:09	S.Sturn	8260B	8690
t-Butylbenzene	ND	ug/l	2	2	1	9/25/97	23:09	S.Sturn	8260B	8690
Carbon Disulfide	ND	ug/l	2	2	1	9/25/97	23:09	S.Sturn	8260B	8690
Carbon tetrachloride	ND	ug/l	2	2	1	9/25/97	23:09	S.Sturn	8260B	8690
Chlorobenzene	ND	ug/l	2	2	1	9/25/97	23:09	S.Sturn	8260B	8690
Chloroethane	ND	ug/l	2	2	1	9/25/97	23:09	S.Sturn	8260B	8690
2-Chloroethylvinylether	ND	ug/l	2	2	1	9/25/97	23:09	S.Sturn	8260B	8690
Chloroform	ND	ug/l	2	2	1	9/25/97	23:09	S.Sturn	8260B	8690
Chloromethane	ND	ug/l	2	2	1	9/25/97	23:09	S.Sturn	8260B	8690
2-Chlorotoluene	ND	ug/l	2	2	1	9/25/97	23:09	S.Sturn	8260B	8690
4-Chlorotoluene	ND	ug/l	10	2	1	9/25/97	23:09	S.Sturn	8260B	8690
1,2-Dibromo-3-chloropropane	ND	ug/l	10	10	1	9/25/97	23:09	S.Sturn	8260B	8690
Dibromochloromethane	ND	ug/l	2	2	1	9/25/97	23:09	S.Sturn	8260B	8690
1,2-Dibromoethane	ND	ug/l	2	2	1	9/25/97	23:09	S.Sturn	8260B	8690
Dibromomethane	ND	ug/l	2	2	1	9/25/97	23:09	S.Sturn	8260B	8690
1,2-Dichlorobenzene	ND	ug/l	2	2	1	9/25/97	23:09	S.Sturn	8260B	8690
1,3-Dichlorobenzene	ND	ug/l	2	2	1	9/25/97	23:09	S.Sturn	8260B	8690
1,4-Dichlorobenzene	ND	ug/l	2	2	1	9/25/97	23:09	S.Sturn	8260B	8690
Dichlorodifluoromethane	ND	ug/l	2	2	1	9/25/97	23:09	S.Sturn	8260B	8690
1,1-Dichloroethane	ND	ug/l	2	2	1	9/25/97	23:09	S.Sturn	8260B	8690
1,2-Dichloroethane	ND	ug/l	2	2	1	9/25/97	23:09	S.Sturn	8260B	8690

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 97-A081296
Sample ID: MW-2

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
1,1-Dichloroethene	ND	ug/l	2	2	1	9/25/97	23:09	S.Sturn	8260B	8690
cis-1,2-Dichloroethene	41.6	ug/l	2	2	1	9/25/97	23:09	S.Sturn	8260B	8690
trans-1,2-Dichloroethene	ND	ug/l	2	2	1	9/25/97	23:09	S.Sturn	8260B	8690
1,2-Dichloropropane	ND	ug/l	2	2	1	9/25/97	23:09	S.Sturn	8260B	8690
1,3-Dichloropropane	ND	ug/l	2	2	1	9/25/97	23:09	S.Sturn	8260B	8690
2,2-Dichloropropane	ND	ug/l	2	2	1	9/25/97	23:09	S.Sturn	8260B	8690
1,1-Dichloropropene	ND	ug/l	2	2	1	9/25/97	23:09	S.Sturn	8260B	8690
cis-1,3-Dichloropropene	ND	ug/l	2	2	1	9/25/97	23:09	S.Sturn	8260B	8690
trans-1,3-Dichloropropene	ND	ug/l	2	2	1	9/25/97	23:09	S.Sturn	8260B	8690
Ethylbenzene	ND	ug/l	2	2	1	9/25/97	23:09	S.Sturn	8260B	8690
Hexachlorobutadiene	ND	ug/l	2	2	1	9/25/97	23:09	S.Sturn	8260B	8690
2-Hexanone	ND	ug/l	10	10	1	9/25/97	23:09	S.Sturn	8260B	8690
Isopropylbenzene	ND	ug/l	2	2	1	9/25/97	23:09	S.Sturn	8260B	8690
4-Isopropyltoluene	ND	ug/l	2	2	1	9/25/97	23:09	S.Sturn	8260B	8690
4-Methyl-2-pentanone	ND	ug/l	10	10	1	9/25/97	23:09	S.Sturn	8260B	8690
Methylene chloride	ND	ug/l	2	2	1	9/25/97	23:09	S.Sturn	8260B	8690
Naphthalene	ND	ug/l	2	2	1	9/25/97	23:09	S.Sturn	8260B	8690
n-Propylbenzene	ND	ug/l	2	2	1	9/25/97	23:09	S.Sturn	8260B	8690
Styrene	ND	ug/l	2	2	1	9/25/97	23:09	S.Sturn	8260B	8690
1,1,1,2-Tetrachloroethane	ND	ug/l	2	2	1	9/25/97	23:09	S.Sturn	8260B	8690
1,1,2,2-Tetrachloroethane	ND	ug/l	2	2	1	9/25/97	23:09	S.Sturn	8260B	8690
Tetrachloroethene	382	ug/l	10	2	5	9/26/97	15:05	S.Sturn	8260B	9205
Toluene	ND	ug/l	2	2	1	9/25/97	23:09	S.Sturn	8260B	8690
1,2,3-Trichlorobenzene	ND	ug/l	2	2	1	9/25/97	23:09	S.Sturn	8260B	8690
1,2,4-Trichlorobenzene	ND	ug/l	2	2	1	9/25/97	23:09	S.Sturn	8260B	8690
1,1,1-Trichloroethane	ND	ug/l	2	2	1	9/25/97	23:09	S.Sturn	8260B	8690
1,1,2-Trichloroethane	ND	ug/l	2	2	1	9/25/97	23:09	S.Sturn	8260B	8690
Trichloroethene	439	ug/l	10	2	5	9/26/97	15:05	S.Sturn	8260B	9205
1,2,3-Trichloropropane	ND	ug/l	2	2	1	9/25/97	23:09	S.Sturn	8260B	8690
1,2,4-Trimethylbenzene	ND	ug/l	2	2	1	9/25/97	23:09	S.Sturn	8260B	8690
1,3,5-Trimethylbenzene	ND	ug/l	2	2	1	9/25/97	23:09	S.Sturn	8260B	8690
Vinyl chloride	ND	ug/l	2	2	1	9/25/97	23:09	S.Sturn	8260B	8690
Xylenes	ND	ug/l	2	2	1	9/25/97	23:09	S.Sturn	8260B	8690
Bromodichloromethane	ND	ug/l	2	2	1	9/25/97	23:09	S.Sturn	8260B	8690
Trichlorofluoromethane	ND	ug/l	2	2	1	9/25/97	23:09	S.Sturn	8260B	8690
METALS										
Arsenic, dissolved	ND	mg/l	0.005	0.005	1	9/26/97	9:59	R.Street	6010A	7833
Barium, dissolved	0.054	mg/l	0.010	0.010	1	9/26/97	9:59	R.Street	6010A	7833
Cadmium, dissolved	ND	mg/l	0.0010	0.0010	1	9/26/97	9:59	R.Street	6010A	7833
Chromium, dissolved	0.009	mg/l	0.005	0.005	1	9/26/97	9:59	R.Street	6010A	7833
Lead, dissolved	ND	mg/l	0.0030	0.0030	1	9/26/97	9:59	R.Street	6010A	7833
Mercury, dissolved	ND	mg/l	0.00020	0.00020	1	9/23/97	7:31	R.Street	7470	6790
Selenium, dissolved	ND	mg/l	0.0050	0.0050	1	9/26/97	9:59	R.Street	6010A	7833
Silver, dissolved	ND	mg/l	0.0050	0.0050	1	9/26/97	9:59	R.Street	6010A	7833

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 97-A081296
Sample ID: MW-2

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
MISCELLANEOUS CHEMISTRY										
Total Organic Carbon	ND	mg/l	3.0	3.0	1	9/24/97	9:47	K.Witte	9060	7122

ND = Not detected at the report limit.

** SURROGATE RECOVERIES **

Surrogate	% Recovery	Target Range
VOA Surrogate, 1,2-Dichloroethane, d4	103.	80. - 124.
VOA Surrogate, Toluene d8	92.2	86. - 108.
VOA Surrogate, 4-Bromofluorobenzene	89.5	77. - 118.
VOA Surrogate, Dibromofluoromethane	87.8	77. - 118.

Report Approved By: _____ Report Date: 9/29/97

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director

SPECIALIZED ASSAYS, INC.

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Phone 1-615-726-0177

ANALYTICAL REPORT

IONTGOMERY WATSON 7065

,1551 ELEVEN MILE ROAD
IOVI, MI 48375

Lab Number: 97-A081297

Sample ID: MW-8

Project: 1257022.351601

Project Name: FEDERAL MOGUL-KINGSTON

Sampler: JAY MULLETT

State Certification:

Site I.D.:

Date Collected: 9/18/97

Time Collected: 17:20

Date Received: 9/20/97

Time Received: 9:00

Sample Type: Ground water

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
VOLATILE ORGANICS										
Acetone	ND	ug/l	10	10	1	9/25/97	23:44	S.Sturn	8260B	8690
Benzene	ND	ug/l	2	2	1	9/25/97	23:44	S.Sturn	8260B	8690
Bromobenzene	ND	ug/l	2	2	1	9/25/97	23:44	S.Sturn	8260B	8690
Bromochloromethane	ND	ug/l	2	2	1	9/25/97	23:44	S.Sturn	8260B	8690
Bromoform	ND	ug/l	2	2	1	9/25/97	23:44	S.Sturn	8260B	8690
Bromomethane	ND	ug/l	2	2	1	9/25/97	23:44	S.Sturn	8260B	8690
2-Butanone	ND	ug/l	10	10	1	9/25/97	23:44	S.Sturn	8260B	8690
n-Butylbenzene	ND	ug/l	2	2	1	9/25/97	23:44	S.Sturn	8260B	8690
sec-Butylbenzene	ND	ug/l	2	2	1	9/25/97	23:44	S.Sturn	8260B	8690
t-Butylbenzene	ND	ug/l	2	2	1	9/25/97	23:44	S.Sturn	8260B	8690
Carbon Disulfide	ND	ug/l	2	2	1	9/25/97	23:44	S.Sturn	8260B	8690
Carbon tetrachloride	ND	ug/l	2	2	1	9/25/97	23:44	S.Sturn	8260B	8690
Chlorobenzene	ND	ug/l	2	2	1	9/25/97	23:44	S.Sturn	8260B	8690
Chloroethane	ND	ug/l	2	2	1	9/25/97	23:44	S.Sturn	8260B	8690
2-Chloroethylvinylether	ND	ug/l	2	2	1	9/25/97	23:44	S.Sturn	8260B	8690
Chloroform	ND	ug/l	2	2	1	9/25/97	23:44	S.Sturn	8260B	8690
Chloromethane	ND	ug/l	2	2	1	9/25/97	23:44	S.Sturn	8260B	8690
2-Chlorotoluene	ND	ug/l	2	2	1	9/25/97	23:44	S.Sturn	8260B	8690
4-Chlorotoluene	ND	ug/l	10	2	1	9/25/97	23:44	S.Sturn	8260B	8690
1,2-Dibromo-3-chloropropane	ND	ug/l	10	10	1	9/25/97	23:44	S.Sturn	8260B	8690
Dibromochloromethane	ND	ug/l	2	2	1	9/25/97	23:44	S.Sturn	8260B	8690
1,2-Dibromoethane	ND	ug/l	2	2	1	9/25/97	23:44	S.Sturn	8260B	8690
Dibromomethane	ND	ug/l	2	2	1	9/25/97	23:44	S.Sturn	8260B	8690
1,2-Dichlorobenzene	ND	ug/l	2	2	1	9/25/97	23:44	S.Sturn	8260B	8690
1,3-Dichlorobenzene	ND	ug/l	2	2	1	9/25/97	23:44	S.Sturn	8260B	8690
1,4-Dichlorobenzene	ND	ug/l	2	2	1	9/25/97	23:44	S.Sturn	8260B	8690
Dichlorodifluoromethane	ND	ug/l	2	2	1	9/25/97	23:44	S.Sturn	8260B	8690
1,1-Dichloroethane	ND	ug/l	2	2	1	9/25/97	23:44	S.Sturn	8260B	8690
1,2-Dichloroethane	ND	ug/l	2	2	1	9/25/97	23:44	S.Sturn	8260B	8690

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 97-A081297
Sample ID: MW-8

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
1,1-Dichloroethene	ND	ug/l	2	2	1	9/25/97	23:44	S.Sturm	8260B	8690
cis-1,2-Dichloroethene	15	ug/l	2	2	1	9/25/97	23:44	S.Sturm	8260B	8690
trans-1,2-Dichloroethene	ND	ug/l	2	2	1	9/25/97	23:44	S.Sturm	8260B	8690
1,2-Dichloropropane	ND	ug/l	2	2	1	9/25/97	23:44	S.Sturm	8260B	8690
1,3-Dichloropropane	ND	ug/l	2	2	1	9/25/97	23:44	S.Sturm	8260B	8690
2,2-Dichloropropane	ND	ug/l	2	2	1	9/25/97	23:44	S.Sturm	8260B	8690
1,1-Dichloropropene	ND	ug/l	2	2	1	9/25/97	23:44	S.Sturm	8260B	8690
cis-1,3-Dichloropropene	ND	ug/l	2	2	1	9/25/97	23:44	S.Sturm	8260B	8690
trans-1,3-Dichloropropene	ND	ug/l	2	2	1	9/25/97	23:44	S.Sturm	8260B	8690
Ethylbenzene	ND	ug/l	2	2	1	9/25/97	23:44	S.Sturm	8260B	8690
Hexachlorobutadiene	ND	ug/l	2	2	1	9/25/97	23:44	S.Sturm	8260B	8690
2-Hexanone	ND	ug/l	10	10	1	9/25/97	23:44	S.Sturm	8260B	8690
Isopropylbenzene	ND	ug/l	2	2	1	9/25/97	23:44	S.Sturm	8260B	8690
4-Isopropyltoluene	ND	ug/l	2	2	1	9/25/97	23:44	S.Sturm	8260B	8690
4-Methyl-2-pentanone	ND	ug/l	10	10	1	9/25/97	23:44	S.Sturm	8260B	8690
Methylene chloride	ND	ug/l	2	2	1	9/25/97	23:44	S.Sturm	8260B	8690
Naphthalene	ND	ug/l	2	2	1	9/25/97	23:44	S.Sturm	8260B	8690
n-Propylbenzene	ND	ug/l	2	2	1	9/25/97	23:44	S.Sturm	8260B	8690
Styrene	ND	ug/l	2	2	1	9/25/97	23:44	S.Sturm	8260B	8690
1,1,1,2-Tetrachloroethane	ND	ug/l	2	2	1	9/25/97	23:44	S.Sturm	8260B	8690
1,1,2,2-Tetrachloroethane	ND	ug/l	2	2	1	9/25/97	23:44	S.Sturm	8260B	8690
Tetrachloroethene	27.7	ug/l	2	2	1	9/25/97	23:44	S.Sturm	8260B	8690
Toluene	ND	ug/l	2	2	1	9/25/97	23:44	S.Sturm	8260B	8690
1,2,3-Trichlorobenzene	ND	ug/l	2	2	1	9/25/97	23:44	S.Sturm	8260B	8690
1,2,4-Trichlorobenzene	ND	ug/l	2	2	1	9/25/97	23:44	S.Sturm	8260B	8690
1,1,1-Trichloroethane	ND	ug/l	2	2	1	9/25/97	23:44	S.Sturm	8260B	8690
1,1,2-Trichloroethane	ND	ug/l	2	2	1	9/25/97	23:44	S.Sturm	8260B	8690
Trichloroethene	397	ug/l	4	2	2	9/26/97	15:40	S.Sturm	8260B	9205
1,2,3-Trichloropropane	ND	ug/l	2	2	1	9/25/97	23:44	S.Sturm	8260B	8690
1,2,4-Trimethylbenzene	ND	ug/l	2	2	1	9/25/97	23:44	S.Sturm	8260B	8690
1,3,5-Trimethylbenzene	ND	ug/l	2	2	1	9/25/97	23:44	S.Sturm	8260B	8690
Vinyl chloride	ND	ug/l	2	2	1	9/25/97	23:44	S.Sturm	8260B	8690
Xylenes	ND	ug/l	2	2	1	9/25/97	23:44	S.Sturm	8260B	8690
Bromodichloromethane	ND	ug/l	2	2	1	9/25/97	23:44	S.Sturm	8260B	8690
Trichlorofluoromethane	ND	ug/l	2	2	1	9/25/97	23:44	S.Sturm	8260B	8690
METALS										
Arsenic, dissolved	ND	mg/l	0.005	0.005	1	9/26/97	9:59	R.Street	6010A	7833
Barium, dissolved	0.054	mg/l	0.010	0.010	1	9/26/97	9:59	R.Street	6010A	7833
Cadmium, dissolved	ND	mg/l	0.0010	0.0010	1	9/26/97	9:59	R.Street	6010A	7833
Chromium, dissolved	0.114	mg/l	0.005	0.005	1	9/26/97	9:59	R.Street	6010A	7833
Lead, dissolved	ND	mg/l	0.0030	0.0030	1	9/26/97	9:59	R.Street	6010A	7833
Mercury, dissolved	ND	mg/l	0.00020	0.00020	1	9/23/97	7:31	R.Street	7470	6790
Selenium, dissolved	ND	mg/l	0.0050	0.0050	1	9/26/97	9:59	R.Street	6010A	7833
Silver, dissolved	ND	mg/l	0.0050	0.0050	1	9/26/97	9:59	R.Street	6010A	7833

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 97-A081297
Sample ID: MW-8

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
MISCELLANEOUS CHEMISTRY										
Total Organic Carbon	ND	mg/l	3.0	3.0	1	9/24/97	9:47	K.Witte	9060	7122

ND = Not detected at the report limit.

** SURROGATE RECOVERIES **

Surrogate	% Recovery	Target Range
VOA Surrogate, 1,2-Dichloroethane, d4	103.	80. - 124.
VOA Surrogate, Toluene d8	89.0	86. - 108.
VOA Surrogate, 4-Bromofluorobenzene	88.0	77. - 118.
VOA Surrogate, Dibromofluoromethane	89.3	77. - 118.

Report Approved By: _____ Report Date: 9/29/97

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

MONTGOMERY WATSON 7065

41551 ELEVEN MILE ROAD
NOVI, MI 48375

Lab Number: 97-A081298

Sample ID: MW-1

Date Collected: 9/18/97

Project: 1257022.351601

Time Collected: 13:15

Project Name: FEDERAL MOGUL-KINGSTON

Date Received: 9/20/97

Sampler: JAY MULLETT

Time Received: 9:00

State Certification:

Sample Type: Ground water

Site I.D.:

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
VOLATILE ORGANICS										
Acetone	ND	ug/l	10	10	1	9/26/97	0:18	S.Sturm	8260B	8690
Benzene	ND	ug/l	2	2	1	9/26/97	0:18	S.Sturm	8260B	8690
Bromobenzene	ND	ug/l	2	2	1	9/26/97	0:18	S.Sturm	8260B	8690
Bromochloromethane	ND	ug/l	2	2	1	9/26/97	0:18	S.Sturm	8260B	8690
Bromoform	ND	ug/l	2	2	1	9/26/97	0:18	S.Sturm	8260B	8690
Bromomethane	ND	ug/l	2	2	1	9/26/97	0:18	S.Sturm	8260B	8690
2-Butanone	ND	ug/l	10	10	1	9/26/97	0:18	S.Sturm	8260B	8690
n-Butylbenzene	ND	ug/l	2	2	1	9/26/97	0:18	S.Sturm	8260B	8690
sec-Butylbenzene	ND	ug/l	2	2	1	9/26/97	0:18	S.Sturm	8260B	8690
t-Butylbenzene	ND	ug/l	2	2	1	9/26/97	0:18	S.Sturm	8260B	8690
Carbon Disulfide	ND	ug/l	2	2	1	9/26/97	0:18	S.Sturm	8260B	8690
Carbon tetrachloride	ND	ug/l	2	2	1	9/26/97	0:18	S.Sturm	8260B	8690
Chlorobenzene	ND	ug/l	2	2	1	9/26/97	0:18	S.Sturm	8260B	8690
Chloroethane	ND	ug/l	2	2	1	9/26/97	0:18	S.Sturm	8260B	8690
2-Chloroethylvinylether	ND	ug/l	2	2	1	9/26/97	0:18	S.Sturm	8260B	8690
Chloroform	ND	ug/l	2	2	1	9/26/97	0:18	S.Sturm	8260B	8690
Chloromethane	ND	ug/l	2	2	1	9/26/97	0:18	S.Sturm	8260B	8690
2-Chlorotoluene	ND	ug/l	2	2	1	9/26/97	0:18	S.Sturm	8260B	8690
4-Chlorotoluene	ND	ug/l	10	2	1	9/26/97	0:18	S.Sturm	8260B	8690
1,2-Dibromo-3-chloropropane	ND	ug/l	10	10	1	9/26/97	0:18	S.Sturm	8260B	8690
Dibromochloromethane	ND	ug/l	2	2	1	9/26/97	0:18	S.Sturm	8260B	8690
1,2-Dibromoethane	ND	ug/l	2	2	1	9/26/97	0:18	S.Sturm	8260B	8690
Dibromomethane	ND	ug/l	2	2	1	9/26/97	0:18	S.Sturm	8260B	8690
1,2-Dichlorobenzene	ND	ug/l	2	2	1	9/26/97	0:18	S.Sturm	8260B	8690
1,3-Dichlorobenzene	ND	ug/l	2	2	1	9/26/97	0:18	S.Sturm	8260B	8690
1,4-Dichlorobenzene	ND	ug/l	2	2	1	9/26/97	0:18	S.Sturm	8260B	8690
Dichlorodifluoromethane	ND	ug/l	2	2	1	9/26/97	0:18	S.Sturm	8260B	8690
1,1-Dichloroethane	ND	ug/l	2	2	1	9/26/97	0:18	S.Sturm	8260B	8690
1,2-Dichloroethane	ND	ug/l	2	2	1	9/26/97	0:18	S.Sturm	8260B	8690

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 97-A081298
Sample ID: MW-1

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
1,1-Dichloroethene	ND	ug/l	2	2	1	9/26/97	0:18	S.Sturn	8260B	8690
cis-1,2-Dichloroethene	3.8	ug/l	2	2	1	9/26/97	0:18	S.Sturn	8260B	8690
trans-1,2-Dichloroethene	ND	ug/l	2	2	1	9/26/97	0:18	S.Sturn	8260B	8690
1,2-Dichloropropane	ND	ug/l	2	2	1	9/26/97	0:18	S.Sturn	8260B	8690
1,3-Dichloropropane	ND	ug/l	2	2	1	9/26/97	0:18	S.Sturn	8260B	8690
2,2-Dichloropropane	ND	ug/l	2	2	1	9/26/97	0:18	S.Sturn	8260B	8690
1,1-Dichloropropene	ND	ug/l	2	2	1	9/26/97	0:18	S.Sturn	8260B	8690
cis-1,3-Dichloropropene	ND	ug/l	2	2	1	9/26/97	0:18	S.Sturn	8260B	8690
trans-1,3-Dichloropropene	ND	ug/l	2	2	1	9/26/97	0:18	S.Sturn	8260B	8690
Ethylbenzene	ND	ug/l	2	2	1	9/26/97	0:18	S.Sturn	8260B	8690
Hexachlorobutadiene	ND	ug/l	2	2	1	9/26/97	0:18	S.Sturn	8260B	8690
2-Hexanone	ND	ug/l	10	10	1	9/26/97	0:18	S.Sturn	8260B	8690
Isopropylbenzene	ND	ug/l	2	2	1	9/26/97	0:18	S.Sturn	8260B	8690
4-Isopropyltoluene	ND	ug/l	2	2	1	9/26/97	0:18	S.Sturn	8260B	8690
4-Methyl-2-pentanone	ND	ug/l	10	10	1	9/26/97	0:18	S.Sturn	8260B	8690
Methylene chloride	ND	ug/l	2	2	1	9/26/97	0:18	S.Sturn	8260B	8690
Naphthalene	ND	ug/l	2	2	1	9/26/97	0:18	S.Sturn	8260B	8690
n-Propylbenzene	ND	ug/l	2	2	1	9/26/97	0:18	S.Sturn	8260B	8690
Styrene	ND	ug/l	2	2	1	9/26/97	0:18	S.Sturn	8260B	8690
1,1,1,2-Tetrachloroethane	ND	ug/l	2	2	1	9/26/97	0:18	S.Sturn	8260B	8690
1,1,2,2-Tetrachloroethane	ND	ug/l	2	2	1	9/26/97	0:18	S.Sturn	8260B	8690
Tetrachloroethene	3	ug/l	2	2	1	9/26/97	0:18	S.Sturn	8260B	8690
Toluene	ND	ug/l	2	2	1	9/26/97	0:18	S.Sturn	8260B	8690
1,2,3-Trichlorobenzene	ND	ug/l	2	2	1	9/26/97	0:18	S.Sturn	8260B	8690
1,2,4-Trichlorobenzene	ND	ug/l	2	2	1	9/26/97	0:18	S.Sturn	8260B	8690
1,1,1-Trichloroethane	ND	ug/l	2	2	1	9/26/97	0:18	S.Sturn	8260B	8690
1,1,2-Trichloroethane	ND	ug/l	2	2	1	9/26/97	0:18	S.Sturn	8260B	8690
Trichloroethene	65	ug/l	2	2	1	9/26/97	0:18	S.Sturn	8260B	8690
1,2,3-Trichloropropane	ND	ug/l	2	2	1	9/26/97	0:18	S.Sturn	8260B	8690
1,2,4-Trimethylbenzene	ND	ug/l	2	2	1	9/26/97	0:18	S.Sturn	8260B	8690
1,3,5-Trimethylbenzene	ND	ug/l	2	2	1	9/26/97	0:18	S.Sturn	8260B	8690
Vinyl chloride	ND	ug/l	2	2	1	9/26/97	0:18	S.Sturn	8260B	8690
Xylenes	ND	ug/l	2	2	1	9/26/97	0:18	S.Sturn	8260B	8690
Bromodichloromethane	ND	ug/l	2	2	1	9/26/97	0:18	S.Sturn	8260B	8690
Trichlorofluoromethane	ND	ug/l	2	2	1	9/26/97	0:18	S.Sturn	8260B	8690
METALS										
Arsenic, dissolved	ND	mg/l	0.005	0.005	1	9/26/97	9:59	R.Street	6010A	7833
Barium, dissolved	0.043	mg/l	0.010	0.010	1	9/26/97	9:59	R.Street	6010A	7833
Cadmium, dissolved	ND	mg/l	0.0010	0.0010	1	9/26/97	9:59	R.Street	6010A	7833
Chromium, dissolved	ND	mg/l	0.005	0.005	1	9/26/97	9:59	R.Street	6010A	7833
Lead, dissolved	ND	mg/l	0.0030	0.0030	1	9/26/97	9:59	R.Street	6010A	7833
Mercury, dissolved	ND	mg/l	0.00020	0.00020	1	9/23/97	7:34	R.Street	7470	6792
Selenium, dissolved	ND	mg/l	0.0050	0.0050	1	9/26/97	9:59	R.Street	6010A	7833
Silver, dissolved	ND	mg/l	0.0050	0.0050	1	9/26/97	9:59	R.Street	6010A	7833

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 97-A081298
Sample ID: MW-1

TCLP Results

Analyte	Result	Units	Reg Limit	Matrix Spike Recovery (%)	Date	Method

ND = Not detected at the report limit.

** SURROGATE RECOVERIES **

Surrogate	% Recovery	Target Range
VOA Surrogate, 1,2-Dichloroethane, d4	109.	80. - 124.
VOA Surrogate, Toluene d8	89.2	86. - 108.
VOA Surrogate, 4-Bromofluorobenzene	92.5	77. - 118.
VOA Surrogate, Dibromofluoromethane	89.8	77. - 118.

Report Approved By: _____ Report Date: 9/29/97

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

MONTGOMERY WATSON 7065

41551 ELEVEN MILE ROAD
NOVI, MI 48375

Lab Number: 97-A081299

Sample ID: MW-7

Date Collected: 9/18/97

Project: 1257022.351601

Time Collected: 16:10

Project Name: FEDERAL MOGUL-KINGSTON

Date Received: 9/20/97

Sampler: JAY MULLETT

Time Received: 9:00

State Certification:

Sample Type: Ground water

Site I.D.:

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
VOLATILE ORGANICS										
Acetone	ND	ug/l	10	10	1	9/26/97	0:53	S.Sturm	8260B	8690
Benzene	ND	ug/l	2	2	1	9/26/97	0:53	S.Sturm	8260B	8690
Bromobenzene	ND	ug/l	2	2	1	9/26/97	0:53	S.Sturm	8260B	8690
Bromochloromethane	ND	ug/l	2	2	1	9/26/97	0:53	S.Sturm	8260B	8690
Bromoform	ND	ug/l	2	2	1	9/26/97	0:53	S.Sturm	8260B	8690
Bromomethane	ND	ug/l	2	2	1	9/26/97	0:53	S.Sturm	8260B	8690
2-Butanone	ND	ug/l	10	10	1	9/26/97	0:53	S.Sturm	8260B	8690
n-Butylbenzene	ND	ug/l	2	2	1	9/26/97	0:53	S.Sturm	8260B	8690
sec-Butylbenzene	ND	ug/l	2	2	1	9/26/97	0:53	S.Sturm	8260B	8690
t-Butylbenzene	ND	ug/l	2	2	1	9/26/97	0:53	S.Sturm	8260B	8690
Carbon Disulfide	ND	ug/l	2	2	1	9/26/97	0:53	S.Sturm	8260B	8690
Carbon tetrachloride	ND	ug/l	2	2	1	9/26/97	0:53	S.Sturm	8260B	8690
Chlorobenzene	ND	ug/l	2	2	1	9/26/97	0:53	S.Sturm	8260B	8690
Chloroethane	ND	ug/l	2	2	1	9/26/97	0:53	S.Sturm	8260B	8690
2-Chloroethylvinylether	ND	ug/l	2	2	1	9/26/97	0:53	S.Sturm	8260B	8690
Chloroform	ND	ug/l	2	2	1	9/26/97	0:53	S.Sturm	8260B	8690
Chloromethane	ND	ug/l	2	2	1	9/26/97	0:53	S.Sturm	8260B	8690
2-Chlorotoluene	ND	ug/l	2	2	1	9/26/97	0:53	S.Sturm	8260B	8690
4-Chlorotoluene	ND	ug/l	10	2	1	9/26/97	0:53	S.Sturm	8260B	8690
1,2-Dibromo-3-chloropropane	ND	ug/l	10	10	1	9/26/97	0:53	S.Sturm	8260B	8690
Dibromochloromethane	ND	ug/l	2	2	1	9/26/97	0:53	S.Sturm	8260B	8690
1,2-Dibromoethane	ND	ug/l	2	2	1	9/26/97	0:53	S.Sturm	8260B	8690
Dibromomethane	ND	ug/l	2	2	1	9/26/97	0:53	S.Sturm	8260B	8690
1,2-Dichlorobenzene	ND	ug/l	2	2	1	9/26/97	0:53	S.Sturm	8260B	8690
1,3-Dichlorobenzene	ND	ug/l	2	2	1	9/26/97	0:53	S.Sturm	8260B	8690
1,4-Dichlorobenzene	ND	ug/l	2	2	1	9/26/97	0:53	S.Sturm	8260B	8690
Dichlorodifluoromethane	ND	ug/l	2	2	1	9/26/97	0:53	S.Sturm	8260B	8690
1,1-Dichloroethane	ND	ug/l	2	2	1	9/26/97	0:53	S.Sturm	8260B	8690
1,2-Dichloroethane	ND	ug/l	2	2	1	9/26/97	0:53	S.Sturm	8260B	8690

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 97-A081299
Sample ID: MW-7

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
1,1-Dichloroethene	ND	ug/l	2	2	1	9/26/97	0:53	S.Sturm	8260B	8690
cis-1,2-Dichloroethene	20	ug/l	2	2	1	9/26/97	0:53	S.Sturm	8260B	8690
trans-1,2-Dichloroethene	ND	ug/l	2	2	1	9/26/97	0:53	S.Sturm	8260B	8690
1,2-Dichloropropane	ND	ug/l	2	2	1	9/26/97	0:53	S.Sturm	8260B	8690
1,3-Dichloropropane	ND	ug/l	2	2	1	9/26/97	0:53	S.Sturm	8260B	8690
2,2-Dichloropropane	ND	ug/l	2	2	1	9/26/97	0:53	S.Sturm	8260B	8690
1,1-Dichloropropene	ND	ug/l	2	2	1	9/26/97	0:53	S.Sturm	8260B	8690
cis-1,3-Dichloropropene	ND	ug/l	2	2	1	9/26/97	0:53	S.Sturm	8260B	8690
trans-1,3-Dichloropropene	ND	ug/l	2	2	1	9/26/97	0:53	S.Sturm	8260B	8690
Ethylbenzene	ND	ug/l	2	2	1	9/26/97	0:53	S.Sturm	8260B	8690
Hexachlorobutadiene	ND	ug/l	2	2	1	9/26/97	0:53	S.Sturm	8260B	8690
2-Hexanone	ND	ug/l	10	10	1	9/26/97	0:53	S.Sturm	8260B	8690
Isopropylbenzene	ND	ug/l	2	2	1	9/26/97	0:53	S.Sturm	8260B	8690
4-Isopropyltoluene	ND	ug/l	2	2	1	9/26/97	0:53	S.Sturm	8260B	8690
4-Methyl-2-pentanone	ND	ug/l	10	10	1	9/26/97	0:53	S.Sturm	8260B	8690
Methylene chloride	ND	ug/l	2	2	1	9/26/97	0:53	S.Sturm	8260B	8690
Naphthalene	63.6	ug/l	2	2	1	9/26/97	0:53	S.Sturm	8260B	8690
n-Propylbenzene	ND	ug/l	2	2	1	9/26/97	0:53	S.Sturm	8260B	8690
Styrene	ND	ug/l	2	2	1	9/26/97	0:53	S.Sturm	8260B	8690
1,1,1,2-Tetrachloroethane	ND	ug/l	2	2	1	9/26/97	0:53	S.Sturm	8260B	8690
1,1,2,2-Tetrachloroethane	ND	ug/l	2	2	1	9/26/97	0:53	S.Sturm	8260B	8690
Tetrachloroethene	39.2	ug/l	2	2	1	9/26/97	0:53	S.Sturm	8260B	8690
Toluene	ND	ug/l	2	2	1	9/26/97	0:53	S.Sturm	8260B	8690
1,2,3-Trichlorobenzene	ND	ug/l	2	2	1	9/26/97	0:53	S.Sturm	8260B	8690
1,2,4-Trichlorobenzene	ND	ug/l	2	2	1	9/26/97	0:53	S.Sturm	8260B	8690
1,1,1-Trichloroethane	ND	ug/l	2	2	1	9/26/97	0:53	S.Sturm	8260B	8690
1,1,2-Trichloroethane	ND	ug/l	2	2	1	9/26/97	0:53	S.Sturm	8260B	8690
Trichloroethene	194	ug/l	2	2	1	9/26/97	0:53	S.Sturm	8260B	8690
1,2,3-Trichloropropane	ND	ug/l	2	2	1	9/26/97	0:53	S.Sturm	8260B	8690
1,2,4-Trimethylbenzene	ND	ug/l	2	2	1	9/26/97	0:53	S.Sturm	8260B	8690
1,3,5-Trimethylbenzene	ND	ug/l	2	2	1	9/26/97	0:53	S.Sturm	8260B	8690
Vinyl chloride	ND	ug/l	2	2	1	9/26/97	0:53	S.Sturm	8260B	8690
Xylenes	ND	ug/l	2	2	1	9/26/97	0:53	S.Sturm	8260B	8690
Bromodichloromethane	ND	ug/l	2	2	1	9/26/97	0:53	S.Sturm	8260B	8690
Trichlorofluoromethane	ND	ug/l	2	2	1	9/26/97	0:53	S.Sturm	8260B	8690
METALS										
Arsenic, dissolved	ND	mg/l	0.005	0.005	1	9/26/97	9:59	R.Street	6010A	7833
Barium, dissolved	0.042	mg/l	0.010	0.010	1	9/26/97	9:59	R.Street	6010A	7833
Cadmium, dissolved	ND	mg/l	0.0010	0.0010	1	9/26/97	9:59	R.Street	6010A	7833
Chromium, dissolved	0.114	mg/l	0.005	0.005	1	9/26/97	9:59	R.Street	6010A	7833
Lead, dissolved	ND	mg/l	0.0030	0.0030	1	9/26/97	9:59	R.Street	6010A	7833
Mercury, dissolved	ND	mg/l	0.00020	0.00020	1	9/23/97	7:34	R.Street	7470	6792
Selenium, dissolved	ND	mg/l	0.0050	0.0050	1	9/26/97	9:59	R.Street	6010A	7833
Silver, dissolved	ND	mg/l	0.0050	0.0050	1	9/26/97	9:59	R.Street	6010A	7833

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 97-A081299
Sample ID: MW-7

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
MISCELLANEOUS CHEMISTRY										
Total Organic Carbon	ND	mg/l	3.0	3.0	1	9/24/97	9:47	K.Witte	9060	7122

ND = Not detected at the report limit.

** SURROGATE RECOVERIES **

Surrogate	% Recovery	Target Range
VOA Surrogate, 1,2-Dichloroethane, d4	104.	80. - 124.
VOA Surrogate, Toluene d8	90.3	86. - 108.
VOA Surrogate, 4-Bromofluorobenzene	98.7	77. - 118.
VOA Surrogate, Dibromofluoromethane	86.1	77. - 118.

Report Approved By: _____ Report Date: 9/29/97

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director

COPY 1

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
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ANALYTICAL REPORT

MONTGOMERY WATSON 7065

41551 ELEVEN MILE ROAD
NOVI, MI 48375

Lab Number: 97-A081300

Sample ID: MW-3

Date Collected: 9/18/97

Project: 1257022.351601

Time Collected: 15:15

Project Name: FEDERAL MOGUL-KINGSTON

Date Received: 9/20/97

Sampler: JAY MULLETT

Time Received: 9:00

State Certification:

Sample Type: Ground water

Site I.D.:

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
VOLATILE ORGANICS										
Acetone	ND	ug/l	10	10	1	9/26/97	1:28	S.Sturm	8260B	8690
Benzene	ND	ug/l	2	2	1	9/26/97	1:28	S.Sturm	8260B	8690
Bromobenzene	ND	ug/l	2	2	1	9/26/97	1:28	S.Sturm	8260B	8690
Bromochloromethane	ND	ug/l	2	2	1	9/26/97	1:28	S.Sturm	8260B	8690
Bromoform	ND	ug/l	2	2	1	9/26/97	1:28	S.Sturm	8260B	8690
Bromomethane	ND	ug/l	2	2	1	9/26/97	1:28	S.Sturm	8260B	8690
2-Butanone	ND	ug/l	10	10	1	9/26/97	1:28	S.Sturm	8260B	8690
n-Butylbenzene	ND	ug/l	2	2	1	9/26/97	1:28	S.Sturm	8260B	8690
sec-Butylbenzene	ND	ug/l	2	2	1	9/26/97	1:28	S.Sturm	8260B	8690
t-Butylbenzene	ND	ug/l	2	2	1	9/26/97	1:28	S.Sturm	8260B	8690
Carbon Disulfide	ND	ug/l	2	2	1	9/26/97	1:28	S.Sturm	8260B	8690
Carbon tetrachloride	ND	ug/l	2	2	1	9/26/97	1:28	S.Sturm	8260B	8690
Chlorobenzene	ND	ug/l	2	2	1	9/26/97	1:28	S.Sturm	8260B	8690
Chloroethane	ND	ug/l	2	2	1	9/26/97	1:28	S.Sturm	8260B	8690
2-Chloroethylvinylether	ND	ug/l	2	2	1	9/26/97	1:28	S.Sturm	8260B	8690
Chloroform	ND	ug/l	2	2	1	9/26/97	1:28	S.Sturm	8260B	8690
Chloromethane	ND	ug/l	2	2	1	9/26/97	1:28	S.Sturm	8260B	8690
2-Chlorotoluene	ND	ug/l	2	2	1	9/26/97	1:28	S.Sturm	8260B	8690
4-Chlorotoluene	ND	ug/l	10	2	1	9/26/97	1:28	S.Sturm	8260B	8690
1,2-Dibromo-3-chloropropane	ND	ug/l	10	10	1	9/26/97	1:28	S.Sturm	8260B	8690
Dibromochloromethane	ND	ug/l	2	2	1	9/26/97	1:28	S.Sturm	8260B	8690
1,2-Dibromoethane	ND	ug/l	2	2	1	9/26/97	1:28	S.Sturm	8260B	8690
Dibromomethane	ND	ug/l	2	2	1	9/26/97	1:28	S.Sturm	8260B	8690
1,2-Dichlorobenzene	ND	ug/l	2	2	1	9/26/97	1:28	S.Sturm	8260B	8690
1,3-Dichlorobenzene	ND	ug/l	2	2	1	9/26/97	1:28	S.Sturm	8260B	8690
1,4-Dichlorobenzene	ND	ug/l	2	2	1	9/26/97	1:28	S.Sturm	8260B	8690
Dichlorodifluoromethane	ND	ug/l	2	2	1	9/26/97	1:28	S.Sturm	8260B	8690
1,1-Dichloroethane	ND	ug/l	2	2	1	9/26/97	1:28	S.Sturm	8260B	8690
1,2-Dichloroethane	ND	ug/l	2	2	1	9/26/97	1:28	S.Sturm	8260B	8690

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
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Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 97-A081300
Sample ID: MW-3

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
1,1-Dichloroethene	ND	ug/l	2	2	1	9/26/97	1:28	S.Sturm	8260B	8690
cis-1,2-Dichloroethene	ND	ug/l	2	2	1	9/26/97	1:28	S.Sturm	8260B	8690
trans-1,2-Dichloroethene	ND	ug/l	2	2	1	9/26/97	1:28	S.Sturm	8260B	8690
1,2-Dichloropropane	ND	ug/l	2	2	1	9/26/97	1:28	S.Sturm	8260B	8690
1,3-Dichloropropane	ND	ug/l	2	2	1	9/26/97	1:28	S.Sturm	8260B	8690
2,2-Dichloropropane	ND	ug/l	2	2	1	9/26/97	1:28	S.Sturm	8260B	8690
1,1-Dichloropropene	ND	ug/l	2	2	1	9/26/97	1:28	S.Sturm	8260B	8690
cis-1,3-Dichloropropene	ND	ug/l	2	2	1	9/26/97	1:28	S.Sturm	8260B	8690
trans-1,3-Dichloropropene	ND	ug/l	2	2	1	9/26/97	1:28	S.Sturm	8260B	8690
Ethylbenzene	ND	ug/l	2	2	1	9/26/97	1:28	S.Sturm	8260B	8690
Hexachlorobutadiene	ND	ug/l	2	2	1	9/26/97	1:28	S.Sturm	8260B	8690
2-Hexanone	ND	ug/l	10	10	1	9/26/97	1:28	S.Sturm	8260B	8690
Isopropylbenzene	ND	ug/l	2	2	1	9/26/97	1:28	S.Sturm	8260B	8690
4-Isopropyltoluene	ND	ug/l	2	2	1	9/26/97	1:28	S.Sturm	8260B	8690
4-Methyl-2-pentanone	ND	ug/l	10	10	1	9/26/97	1:28	S.Sturm	8260B	8690
Methylene chloride	ND	ug/l	2	2	1	9/26/97	1:28	S.Sturm	8260B	8690
Naphthalene	ND	ug/l	2	2	1	9/26/97	1:28	S.Sturm	8260B	8690
n-Propylbenzene	ND	ug/l	2	2	1	9/26/97	1:28	S.Sturm	8260B	8690
Styrene	ND	ug/l	2	2	1	9/26/97	1:28	S.Sturm	8260B	8690
1,1,1,2-Tetrachloroethane	ND	ug/l	2	2	1	9/26/97	1:28	S.Sturm	8260B	8690
1,1,2,2-Tetrachloroethane	ND	ug/l	2	2	1	9/26/97	1:28	S.Sturm	8260B	8690
Tetrachloroethene	8.2	ug/l	2	2	1	9/26/97	1:28	S.Sturm	8260B	8690
Toluene	ND	ug/l	2	2	1	9/26/97	1:28	S.Sturm	8260B	8690
1,2,3-Trichlorobenzene	ND	ug/l	2	2	1	9/26/97	1:28	S.Sturm	8260B	8690
1,2,4-Trichlorobenzene	ND	ug/l	2	2	1	9/26/97	1:28	S.Sturm	8260B	8690
1,1,1-Trichloroethane	ND	ug/l	2	2	1	9/26/97	1:28	S.Sturm	8260B	8690
1,1,2-Trichloroethane	ND	ug/l	2	2	1	9/26/97	1:28	S.Sturm	8260B	8690
Trichloroethene	11.4	ug/l	2	2	1	9/26/97	1:28	S.Sturm	8260B	8690
1,2,3-Trichloropropane	ND	ug/l	2	2	1	9/26/97	1:28	S.Sturm	8260B	8690
1,2,4-Trimethylbenzene	ND	ug/l	2	2	1	9/26/97	1:28	S.Sturm	8260B	8690
1,3,5-Trimethylbenzene	ND	ug/l	2	2	1	9/26/97	1:28	S.Sturm	8260B	8690
Vinyl chloride	ND	ug/l	2	2	1	9/26/97	1:28	S.Sturm	8260B	8690
Xylenes	ND	ug/l	2	2	1	9/26/97	1:28	S.Sturm	8260B	8690
Bromodichloromethane	ND	ug/l	2	2	1	9/26/97	1:28	S.Sturm	8260B	8690
Trichlorofluoromethane	ND	ug/l	2	2	1	9/26/97	1:28	S.Sturm	8260B	8690
METALS										
Arsenic, dissolved	ND	mg/l	0.005	0.005	1	9/26/97	9:59	R.Street	6010A	7833
Barium, dissolved	0.071	mg/l	0.010	0.010	1	9/26/97	9:59	R.Street	6010A	7833
Cadmium, dissolved	ND	mg/l	0.0010	0.0010	1	9/26/97	9:59	R.Street	6010A	7833
Chromium, dissolved	ND	mg/l	0.005	0.005	1	9/26/97	9:59	R.Street	6010A	7833
Lead, dissolved	ND	mg/l	0.0030	0.0030	1	9/26/97	9:59	R.Street	6010A	7833
Mercury, dissolved	ND	mg/l	0.00020	0.00020	1	9/23/97	7:34	R.Street	7470	6792
Selenium, dissolved	ND	mg/l	0.0050	0.0050	1	9/26/97	9:59	R.Street	6010A	7833
Silver, dissolved	ND	mg/l	0.0050	0.0050	1	9/26/97	9:59	R.Street	6010A	7833

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 97-A081300
Sample ID: MW-3

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
MISCELLANEOUS CHEMISTRY										
Total Organic Carbon	ND	mg/l	3.0	3.0	1	9/24/97	9:47	K.Witte	9060	7122

ND = Not detected at the report limit.

** SURROGATE RECOVERIES **

Surrogate	% Recovery	Target Range
VOA Surrogate, 1,2-Dichloroethane, d4	105.	80. - 124.
VOA Surrogate, Toluene d8	88.9	86. - 108.
VOA Surrogate, 4-Bromofluorobenzene	87.6	77. - 118.
VOA Surrogate, Dibromofluoromethane	88.5	77. - 118.

Report Approved By: _____ Report Date: 9/29/97

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

MONTGOMERY WATSON 7065

41551 ELEVEN MILE ROAD
NOVI, MI 48375

Lab Number: 97-A081301

Sample ID: MW-9

Date Collected: 9/18/97

Project: 1257022.351601

Time Collected: 15:40

Project Name: FEDERAL MOGUL-KINGSTON

Date Received: 9/20/97

Sampler: JAY MULLETT

Time Received: 9:00

State Certification:

Sample Type: Ground water

Site I.D.:

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
VOLATILE ORGANICS										
Acetone	ND	ug/l	10	10	1	9/26/97	2:03	S.Sturm	8260B	8690
Benzene	ND	ug/l	2	2	1	9/26/97	2:03	S.Sturm	8260B	8690
Bromobenzene	ND	ug/l	2	2	1	9/26/97	2:03	S.Sturm	8260B	8690
Bromochloromethane	ND	ug/l	2	2	1	9/26/97	2:03	S.Sturm	8260B	8690
Bromoform	ND	ug/l	2	2	1	9/26/97	2:03	S.Sturm	8260B	8690
Bromomethane	ND	ug/l	2	2	1	9/26/97	2:03	S.Sturm	8260B	8690
2-Butanone	ND	ug/l	10	10	1	9/26/97	2:03	S.Sturm	8260B	8690
n-Butylbenzene	ND	ug/l	2	2	1	9/26/97	2:03	S.Sturm	8260B	8690
sec-Butylbenzene	ND	ug/l	2	2	1	9/26/97	2:03	S.Sturm	8260B	8690
t-Butylbenzene	ND	ug/l	2	2	1	9/26/97	2:03	S.Sturm	8260B	8690
Carbon Disulfide	ND	ug/l	2	2	1	9/26/97	2:03	S.Sturm	8260B	8690
Carbon tetrachloride	ND	ug/l	2	2	1	9/26/97	2:03	S.Sturm	8260B	8690
Chlorobenzene	ND	ug/l	2	2	1	9/26/97	2:03	S.Sturm	8260B	8690
Chloroethane	ND	ug/l	2	2	1	9/26/97	2:03	S.Sturm	8260B	8690
2-Chloroethylvinylether	ND	ug/l	2	2	1	9/26/97	2:03	S.Sturm	8260B	8690
Chloroform	ND	ug/l	2	2	1	9/26/97	2:03	S.Sturm	8260B	8690
Chloromethane	ND	ug/l	2	2	1	9/26/97	2:03	S.Sturm	8260B	8690
2-Chlorotoluene	ND	ug/l	2	2	1	9/26/97	2:03	S.Sturm	8260B	8690
4-Chlorotoluene	ND	ug/l	10	2	1	9/26/97	2:03	S.Sturm	8260B	8690
1,2-Dibromo-3-chloropropane	ND	ug/l	10	10	1	9/26/97	2:03	S.Sturm	8260B	8690
Dibromochloromethane	ND	ug/l	2	2	1	9/26/97	2:03	S.Sturm	8260B	8690
1,2-Dibromoethane	ND	ug/l	2	2	1	9/26/97	2:03	S.Sturm	8260B	8690
Dibromomethane	ND	ug/l	2	2	1	9/26/97	2:03	S.Sturm	8260B	8690
1,2-Dichlorobenzene	ND	ug/l	2	2	1	9/26/97	2:03	S.Sturm	8260B	8690
1,3-Dichlorobenzene	ND	ug/l	2	2	1	9/26/97	2:03	S.Sturm	8260B	8690
1,4-Dichlorobenzene	ND	ug/l	2	2	1	9/26/97	2:03	S.Sturm	8260B	8690
Dichlorodifluoromethane	ND	ug/l	2	2	1	9/26/97	2:03	S.Sturm	8260B	8690
1,1-Dichloroethane	ND	ug/l	2	2	1	9/26/97	2:03	S.Sturm	8260B	8690
1,2-Dichloroethane	ND	ug/l	2	2	1	9/26/97	2:03	S.Sturm	8260B	8690

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 97-A081301
Sample ID: MW-9

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
1,1-Dichloroethene	ND	ug/l	2	2	1	9/26/97	2:03	S.Sturn	8260B	8690
cis-1,2-Dichloroethene	120	ug/l	2	2	1	9/26/97	2:03	S.Sturn	8260B	8690
trans-1,2-Dichloroethene	5.6	ug/l	2	2	1	9/26/97	2:03	S.Sturn	8260B	8690
1,2-Dichloropropane	ND	ug/l	2	2	1	9/26/97	2:03	S.Sturn	8260B	8690
1,3-Dichloropropane	ND	ug/l	2	2	1	9/26/97	2:03	S.Sturn	8260B	8690
2,2-Dichloropropane	ND	ug/l	2	2	1	9/26/97	2:03	S.Sturn	8260B	8690
1,1-Dichloropropene	ND	ug/l	2	2	1	9/26/97	2:03	S.Sturn	8260B	8690
cis-1,3-Dichloropropene	ND	ug/l	2	2	1	9/26/97	2:03	S.Sturn	8260B	8690
trans-1,3-Dichloropropene	ND	ug/l	2	2	1	9/26/97	2:03	S.Sturn	8260B	8690
Ethylbenzene	ND	ug/l	2	2	1	9/26/97	2:03	S.Sturn	8260B	8690
Hexachlorobutadiene	ND	ug/l	2	2	1	9/26/97	2:03	S.Sturn	8260B	8690
2-Hexanone	ND	ug/l	10	10	1	9/26/97	2:03	S.Sturn	8260B	8690
Isopropylbenzene	2.6	ug/l	2	2	1	9/26/97	2:03	S.Sturn	8260B	8690
4-Isopropyltoluene	ND	ug/l	2	2	1	9/26/97	2:03	S.Sturn	8260B	8690
4-Methyl-2-pentanone	ND	ug/l	10	10	1	9/26/97	2:03	S.Sturn	8260B	8690
Methylene chloride	ND	ug/l	2	2	1	9/26/97	2:03	S.Sturn	8260B	8690
Naphthalene	ND	ug/l	2	2	1	9/26/97	2:03	S.Sturn	8260B	8690
n-Propylbenzene	ND	ug/l	2	2	1	9/26/97	2:03	S.Sturn	8260B	8690
Styrene	ND	ug/l	2	2	1	9/26/97	2:03	S.Sturn	8260B	8690
1,1,1,2-Tetrachloroethane	ND	ug/l	2	2	1	9/26/97	2:03	S.Sturn	8260B	8690
1,1,2,2-Tetrachloroethane	ND	ug/l	2	2	1	9/26/97	2:03	S.Sturn	8260B	8690
Tetrachloroethene	ND	ug/l	2	2	1	9/26/97	2:03	S.Sturn	8260B	8690
Toluene	ND	ug/l	2	2	1	9/26/97	2:03	S.Sturn	8260B	8690
1,2,3-Trichlorobenzene	ND	ug/l	2	2	1	9/26/97	2:03	S.Sturn	8260B	8690
1,2,4-Trichlorobenzene	ND	ug/l	2	2	1	9/26/97	2:03	S.Sturn	8260B	8690
1,1,1-Trichloroethane	ND	ug/l	2	2	1	9/26/97	2:03	S.Sturn	8260B	8690
1,1,2-Trichloroethane	ND	ug/l	2	2	1	9/26/97	2:03	S.Sturn	8260B	8690
Trichloroethene	51.1	ug/l	2	2	1	9/26/97	2:03	S.Sturn	8260B	8690
1,2,3-Trichloropropane	ND	ug/l	2	2	1	9/26/97	2:03	S.Sturn	8260B	8690
1,2,4-Trimethylbenzene	8.1	ug/l	2	2	1	9/26/97	2:03	S.Sturn	8260B	8690
1,3,5-Trimethylbenzene	ND	ug/l	2	2	1	9/26/97	2:03	S.Sturn	8260B	8690
Vinyl chloride	77.8	ug/l	2	2	1	9/26/97	2:03	S.Sturn	8260B	8690
Xylenes	20.8	ug/l	2	2	1	9/26/97	2:03	S.Sturn	8260B	8690
Bromodichloromethane	ND	ug/l	2	2	1	9/26/97	2:03	S.Sturn	8260B	8690
Trichlorofluoromethane	ND	ug/l	2	2	1	9/26/97	2:03	S.Sturn	8260B	8690
METALS										
Arsenic, dissolved	ND	mg/l	0.005	0.005	1	9/26/97	9:59	R.Street	6010A	7833
Barium, dissolved	0.101	mg/l	0.010	0.010	1	9/26/97	9:59	R.Street	6010A	7833
Cadmium, dissolved	ND	mg/l	0.0010	0.0010	1	9/26/97	9:59	R.Street	6010A	7833
Chromium, dissolved	ND	mg/l	0.005	0.005	1	9/26/97	9:59	R.Street	6010A	7833
Lead, dissolved	ND	mg/l	0.0030	0.0030	1	9/26/97	9:59	R.Street	6010A	7833
Mercury, dissolved	ND	mg/l	0.00020	0.00020	1	9/23/97	7:34	R.Street	7470	6792
Selenium, dissolved	ND	mg/l	0.0050	0.0050	1	9/26/97	9:59	R.Street	6010A	7833
Silver, dissolved	ND	mg/l	0.0050	0.0050	1	9/26/97	9:59	R.Street	6010A	7833

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 97-A081301
Sample ID: MW-9

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
MISCELLANEOUS CHEMISTRY										
Total Organic Carbon	11.8	mg/l	3.0	3.0	1	9/24/97	9:47	K.Witte	9060	7122

ND = Not detected at the report limit.

** SURROGATE RECOVERIES **

Surrogate	% Recovery	Target Range
VOA Surrogate, 1,2-Dichloroethane, d4	104.	80. - 124.
VOA Surrogate, Toluene d8	91.8	86. - 108.
VOA Surrogate, 4-Bromofluorobenzene	91.6	77. - 118.
VOA Surrogate, Dibromofluoromethane	87.6	77. - 118.

Report Approved By: _____ Report Date: 9/29/97

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

MONTGOMERY WATSON 7065

41551 ELEVEN MILE ROAD
NOVI, MI 48375

Lab Number: 97-A081302

Sample ID: MW-6

Date Collected: 9/18/97

Project: 1257022.351601

Time Collected: 14:45

Project Name: FEDERAL MOGUL-KINGSTON

Date Received: 9/20/97

Sampler: JAY MULLETT

Time Received: 9:00

State Certification:

Sample Type: Ground water

Site I.D.:

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
VOLATILE ORGANICS										
Acetone	ND	ug/l	10	10	1	9/26/97	2:38	S.Sturm	8260B	8690
Benzene	ND	ug/l	2	2	1	9/26/97	2:38	S.Sturm	8260B	8690
Bromobenzene	ND	ug/l	2	2	1	9/26/97	2:38	S.Sturm	8260B	8690
Bromochloromethane	ND	ug/l	2	2	1	9/26/97	2:38	S.Sturm	8260B	8690
Bromoform	ND	ug/l	2	2	1	9/26/97	2:38	S.Sturm	8260B	8690
Bromomethane	ND	ug/l	2	2	1	9/26/97	2:38	S.Sturm	8260B	8690
2-Butanone	ND	ug/l	10	10	1	9/26/97	2:38	S.Sturm	8260B	8690
n-Butylbenzene	ND	ug/l	2	2	1	9/26/97	2:38	S.Sturm	8260B	8690
sec-Butylbenzene	ND	ug/l	2	2	1	9/26/97	2:38	S.Sturm	8260B	8690
t-Butylbenzene	ND	ug/l	2	2	1	9/26/97	2:38	S.Sturm	8260B	8690
Carbon Disulfide	ND	ug/l	2	2	1	9/26/97	2:38	S.Sturm	8260B	8690
Carbon tetrachloride	ND	ug/l	2	2	1	9/26/97	2:38	S.Sturm	8260B	8690
Chlorobenzene	ND	ug/l	2	2	1	9/26/97	2:38	S.Sturm	8260B	8690
Chloroethane	ND	ug/l	2	2	1	9/26/97	2:38	S.Sturm	8260B	8690
2-Chloroethylvinylether	ND	ug/l	2	2	1	9/26/97	2:38	S.Sturm	8260B	8690
Chloroform	ND	ug/l	2	2	1	9/26/97	2:38	S.Sturm	8260B	8690
Chloromethane	ND	ug/l	2	2	1	9/26/97	2:38	S.Sturm	8260B	8690
2-Chlorotoluene	ND	ug/l	2	2	1	9/26/97	2:38	S.Sturm	8260B	8690
4-Chlorotoluene	ND	ug/l	10	2	1	9/26/97	2:38	S.Sturm	8260B	8690
1,2-Dibromo-3-chloropropane	ND	ug/l	10	10	1	9/26/97	2:38	S.Sturm	8260B	8690
Dibromochloromethane	ND	ug/l	2	2	1	9/26/97	2:38	S.Sturm	8260B	8690
1,2-Dibromoethane	ND	ug/l	2	2	1	9/26/97	2:38	S.Sturm	8260B	8690
Dibromomethane	ND	ug/l	2	2	1	9/26/97	2:38	S.Sturm	8260B	8690
1,2-Dichlorobenzene	ND	ug/l	2	2	1	9/26/97	2:38	S.Sturm	8260B	8690
1,3-Dichlorobenzene	ND	ug/l	2	2	1	9/26/97	2:38	S.Sturm	8260B	8690
1,4-Dichlorobenzene	ND	ug/l	2	2	1	9/26/97	2:38	S.Sturm	8260B	8690
Dichlorodifluoromethane	ND	ug/l	2	2	1	9/26/97	2:38	S.Sturm	8260B	8690
1,1-Dichloroethane	ND	ug/l	2	2	1	9/26/97	2:38	S.Sturm	8260B	8690
1,2-Dichloroethane	ND	ug/l	2	2	1	9/26/97	2:38	S.Sturm	8260B	8690

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 97-A081302
Sample ID: MW-6

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
1,1-Dichloroethene	ND	ug/l	2	2	1	9/26/97	2:38	S.Sturm	8260B	8690
cis-1,2-Dichloroethene	18.9	ug/l	2	2	1	9/26/97	2:38	S.Sturm	8260B	8690
trans-1,2-Dichloroethene	ND	ug/l	2	2	1	9/26/97	2:38	S.Sturm	8260B	8690
1,2-Dichloropropane	ND	ug/l	2	2	1	9/26/97	2:38	S.Sturm	8260B	8690
1,3-Dichloropropane	ND	ug/l	2	2	1	9/26/97	2:38	S.Sturm	8260B	8690
2,2-Dichloropropane	ND	ug/l	2	2	1	9/26/97	2:38	S.Sturm	8260B	8690
1,1-Dichloropropene	ND	ug/l	2	2	1	9/26/97	2:38	S.Sturm	8260B	8690
cis-1,3-Dichloropropene	ND	ug/l	2	2	1	9/26/97	2:38	S.Sturm	8260B	8690
trans-1,3-Dichloropropene	ND	ug/l	2	2	1	9/26/97	2:38	S.Sturm	8260B	8690
Ethylbenzene	ND	ug/l	2	2	1	9/26/97	2:38	S.Sturm	8260B	8690
Hexachlorobutadiene	ND	ug/l	2	2	1	9/26/97	2:38	S.Sturm	8260B	8690
2-Hexanone	ND	ug/l	10	10	1	9/26/97	2:38	S.Sturm	8260B	8690
Isopropylbenzene	ND	ug/l	2	2	1	9/26/97	2:38	S.Sturm	8260B	8690
4-Isopropyltoluene	ND	ug/l	2	2	1	9/26/97	2:38	S.Sturm	8260B	8690
4-Methyl-2-pentanone	ND	ug/l	10	10	1	9/26/97	2:38	S.Sturm	8260B	8690
Methylene chloride	ND	ug/l	2	2	1	9/26/97	2:38	S.Sturm	8260B	8690
Naphthalene	ND	ug/l	2	2	1	9/26/97	2:38	S.Sturm	8260B	8690
n-Propylbenzene	ND	ug/l	2	2	1	9/26/97	2:38	S.Sturm	8260B	8690
Styrene	ND	ug/l	2	2	1	9/26/97	2:38	S.Sturm	8260B	8690
1,1,1,2-Tetrachloroethane	ND	ug/l	2	2	1	9/26/97	2:38	S.Sturm	8260B	8690
1,1,2,2-Tetrachloroethane	ND	ug/l	2	2	1	9/26/97	2:38	S.Sturm	8260B	8690
Tetrachloroethene	30.4	ug/l	2	2	1	9/26/97	2:38	S.Sturm	8260B	8690
Toluene	ND	ug/l	2	2	1	9/26/97	2:38	S.Sturm	8260B	8690
1,2,3-Trichlorobenzene	ND	ug/l	2	2	1	9/26/97	2:38	S.Sturm	8260B	8690
1,2,4-Trichlorobenzene	ND	ug/l	2	2	1	9/26/97	2:38	S.Sturm	8260B	8690
1,1,1-Trichloroethane	ND	ug/l	2	2	1	9/26/97	2:38	S.Sturm	8260B	8690
1,1,2-Trichloroethane	ND	ug/l	2	2	1	9/26/97	2:38	S.Sturm	8260B	8690
Trichloroethene	46.4	ug/l	2	2	1	9/26/97	2:38	S.Sturm	8260B	8690
1,2,3-Trichloropropane	ND	ug/l	2	2	1	9/26/97	2:38	S.Sturm	8260B	8690
1,2,4-Trimethylbenzene	ND	ug/l	2	2	1	9/26/97	2:38	S.Sturm	8260B	8690
1,3,5-Trimethylbenzene	ND	ug/l	2	2	1	9/26/97	2:38	S.Sturm	8260B	8690
Vinyl chloride	ND	ug/l	2	2	1	9/26/97	2:38	S.Sturm	8260B	8690
Xylenes	ND	ug/l	2	2	1	9/26/97	2:38	S.Sturm	8260B	8690
Bromodichloromethane	ND	ug/l	2	2	1	9/26/97	2:38	S.Sturm	8260B	8690
Trichlorofluoromethane	ND	ug/l	2	2	1	9/26/97	2:38	S.Sturm	8260B	8690
METALS										
Arsenic, dissolved	ND	mg/l	0.005	0.005	1	9/26/97	9:59	R.Street	6010A	7833
Barium, dissolved	0.055	mg/l	0.010	0.010	1	9/26/97	9:59	R.Street	6010A	7833
Cadmium, dissolved	ND	mg/l	0.0010	0.0010	1	9/26/97	9:59	R.Street	6010A	7833
Chromium, dissolved	ND	mg/l	0.005	0.005	1	9/26/97	9:59	R.Street	6010A	7833
Lead, dissolved	ND	mg/l	0.0030	0.0030	1	9/26/97	9:59	R.Street	6010A	7833
Mercury, dissolved	ND	mg/l	0.00020	0.00020	1	9/23/97	7:34	R.Street	7470	6792
Selenium, dissolved	ND	mg/l	0.0050	0.0050	1	9/26/97	9:59	R.Street	6010A	7833
Silver, dissolved	ND	mg/l	0.0050	0.0050	1	9/26/97	9:59	R.Street	6010A	7833

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 97-A081302
Sample ID: MW-6

TCLP Results

Analyte	Result	Units	Reg Limit	Matrix Spike Recovery (%)	Date	Method

ND = Not detected at the report limit.

** SURROGATE RECOVERIES **

Surrogate	% Recovery	Target Range
VOA Surrogate, 1,2-Dichloroethane, d4	108.	80. - 124.
VOA Surrogate, Toluene d8	86.0	86. - 108.
VOA Surrogate, 4-Bromofluorobenzene	91.4	77. - 118.
VOA Surrogate, Dibromofluoromethane	84.7	77. - 118.

Report Approved By: _____ Report Date: 9/29/97

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
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Phone 1-615-726-0177

ANALYTICAL REPORT

MONTGOMERY WATSON 7065

41551 ELEVEN MILE ROAD
NOVI, MI 48375

Lab Number: 97-A081303

Sample ID: PURGE WATER COMPOSITE LIQUID

Date Collected: 9/18/97

Project: 1257022.351601

Time Collected: 17:45

Project Name: FEDERAL MOGUL-KINGSTON

Date Received: 9/20/97

Sampler: JAY MULLETT

Time Received: 9:00

State Certification:

Sample Type: Ground water

Site I.D.:

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
EXTRACTABLE ORGANICS										
Acenaphthene	ND	ug/l	12.	10.	1	9/28/97	6:15	M.Goodrich	8270C	9562
Acenaphthylene	ND	ug/l	12.	10.	1	9/28/97	6:15	M.Goodrich	8270C	9562
Anthracene	ND	ug/l	12.	10.	1	9/28/97	6:15	M.Goodrich	8270C	9562
Benzo(a)anthracene	ND	ug/l	12.	10.	1	9/28/97	6:15	M.Goodrich	8270C	9562
Benzo(a)pyrene	ND	ug/l	12.	10.	1	9/28/97	6:15	M.Goodrich	8270C	9562
Benzo(b)fluoranthene	ND	ug/l	12.	10.	1	9/28/97	6:15	M.Goodrich	8270C	9562
Benzo(g,h,i)perylene	ND	ug/l	12.	10.	1	9/28/97	6:15	M.Goodrich	8270C	9562
Benzo(k)fluoranthene	ND	ug/l	12.	10.	1	9/28/97	6:15	M.Goodrich	8270C	9562
4-Bromophenylphenylether	ND	ug/l	12.	10.	1	9/28/97	6:15	M.Goodrich	8270C	9562
Butylbenzylphthalate	ND	ug/l	12.	10.	1	9/28/97	6:15	M.Goodrich	8270C	9562
Carbazole	ND	ug/l	12.	10.	1	9/28/97	6:15	M.Goodrich	8270C	9562
4-Chloro-3-methylphenol	ND	ug/l	12.	10.	1	9/28/97	6:15	M.Goodrich	8270C	9562
4-Chloroaniline	ND	ug/l	12.	10.	1	9/28/97	6:15	M.Goodrich	8270C	9562
bis(2-Chloroethoxy)methane	ND	ug/l	12.	10.	1	9/28/97	6:15	M.Goodrich	8270C	9562
bis(2-Chloroethyl)ether	ND	ug/l	12.	10.	1	9/28/97	6:15	M.Goodrich	8270C	9562
bis(2-Chloroisopropyl)ether	ND	ug/l	12.	10.	1	9/28/97	6:15	M.Goodrich	8270C	9562
2-Chloronaphthalene	ND	ug/l	12.	10.	1	9/28/97	6:15	M.Goodrich	8270C	9562
2-Chlorophenol	ND	ug/l	12.	10.	1	9/28/97	6:15	M.Goodrich	8270C	9562
4-Chlorophenylphenylether	ND	ug/l	12.	10.	1	9/28/97	6:15	M.Goodrich	8270C	9562
Chrysene	ND	ug/l	12.	10.	1	9/28/97	6:15	M.Goodrich	8270C	9562
Dibenzofuran	ND	ug/l	12.	10.	1	9/28/97	6:15	M.Goodrich	8270C	9562
Dibenz(a,h)anthracene	ND	ug/l	12.	10.	1	9/28/97	6:15	M.Goodrich	8270C	9562
1,2-Dichlorobenzene	ND	ug/l	12.	10.	1	9/28/97	6:15	M.Goodrich	8270C	9562
1,3-Dichlorobenzene	ND	ug/l	12.	10.	1	9/28/97	6:15	M.Goodrich	8270C	9562
1,4-Dichlorobenzene	ND	ug/l	12.	10.	1	9/28/97	6:15	M.Goodrich	8270C	9562
3,3'-Dichlorobenzidine	ND	ug/l	29.	25.	1	9/28/97	6:15	M.Goodrich	8270C	9562
2,4-Dichlorophenol	ND	ug/l	12.	10.	1	9/28/97	6:15	M.Goodrich	8270C	9562
Diethylphthalate	ND	ug/l	12.	10.	1	9/28/97	6:15	M.Goodrich	8270C	9562
2,4-Dimethylphenol	ND	ug/l	12.	10.	1	9/28/97	6:15	M.Goodrich	8270C	9562

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 97-A081303
Sample ID: PURGE WATER COMPOSITE LIQUID

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
Dimethylphthalate	ND	ug/l	12.	10.	1	9/28/97	6:15	M.Goodrich	8270C	9562
Di-n-butylphthalate	ND	ug/l	12.	10.	1	9/28/97	6:15	M.Goodrich	8270C	9562
4,6-Dinitro-2-methylphenol	ND	ug/l	29.	25.	1	9/28/97	6:15	M.Goodrich	8270C	9562
2,4-Dinitrophenol	ND	ug/l	29.	25.	1	9/28/97	6:15	M.Goodrich	8270C	9562
2,4-dinitrotoluene	ND	ug/l	12.	10.	1	9/28/97	6:15	M.Goodrich	8270C	9562
2,6-Dinitrotoluene	ND	ug/l	12.	10.	1	9/28/97	6:15	M.Goodrich	8270C	9562
Di-n-octylphthalate	ND	ug/l	12.	10.	1	9/28/97	6:15	M.Goodrich	8270C	9562
Fluoranthene	ND	ug/l	12.	10.	1	9/28/97	6:15	M.Goodrich	8270C	9562
Fluorene	ND	ug/l	12.	10.	1	9/28/97	6:15	M.Goodrich	8270C	9562
Hexachlorobenzene	ND	ug/l	12.	10.	1	9/28/97	6:15	M.Goodrich	8270C	9562
Hexachlorobutadiene	ND	ug/l	12.	10.	1	9/28/97	6:15	M.Goodrich	8270C	9562
Hexachlorocyclopentadiene	ND	ug/l	12.	10.	1	9/28/97	6:15	M.Goodrich	8270C	9562
Hexachloroethane	ND	ug/l	12.	10.	1	9/28/97	6:15	M.Goodrich	8270C	9562
Indeno(1,2,3-cd)pyrene	ND	ug/l	12.	10.	1	9/28/97	6:15	M.Goodrich	8270C	9562
Isophorone	ND	ug/l	12.	10.	1	9/28/97	6:15	M.Goodrich	8270C	9562
2-Methylnaphthalene	ND	ug/l	12.	10.	1	9/28/97	6:15	M.Goodrich	8270C	9562
2-Methylphenol	ND	ug/l	12.	10.	1	9/28/97	6:15	M.Goodrich	8270C	9562
3 & 4-Methylphenol	ND	ug/l	12.	10.	1	9/28/97	6:15	M.Goodrich	8270C	9562
Naphthalene	ND	ug/l	12.	10.	1	9/28/97	6:15	M.Goodrich	8270C	9562
2-Nitroaniline	ND	ug/l	29.	25.	1	9/28/97	6:15	M.Goodrich	8270C	9562
3-Nitroaniline	ND	ug/l	29.	25.	1	9/28/97	6:15	M.Goodrich	8270C	9562
4-Nitroaniline	ND	ug/l	29.	25.	1	9/28/97	6:15	M.Goodrich	8270C	9562
Nitrobenzene	ND	ug/l	12.	10.	1	9/28/97	6:15	M.Goodrich	8270C	9562
2-Nitrophenol	ND	ug/l	12.	10.	1	9/28/97	6:15	M.Goodrich	8270C	9562
4-Nitrophenol	ND	ug/l	29.	25.	1	9/28/97	6:15	M.Goodrich	8270C	9562
N-nitrosodi-n-propylamine	ND	ug/l	12.	10.	1	9/28/97	6:15	M.Goodrich	8270C	9562
N-nitrosodiphenylamine	ND	ug/l	12.	10.	1	9/28/97	6:15	M.Goodrich	8270C	9562
Pentachlorophenol	ND	ug/l	29.	25.	1	9/28/97	6:15	M.Goodrich	8270C	9562
Phenanthrene	ND	ug/l	12.	10.	1	9/28/97	6:15	M.Goodrich	8270C	9562
Phenol	ND	ug/l	12.	10.	1	9/28/97	6:15	M.Goodrich	8270C	9562
Pyrene	ND	ug/l	12.	10.	1	9/28/97	6:15	M.Goodrich	8270C	9562
Bis(2-ethylhexyl)phthalate	ND	ug/l	12.	10.	1	9/28/97	6:15	M.Goodrich	8270C	9562
1,2,4-Trichlorobenzene	ND	ug/l	12.	10.	1	9/28/97	6:15	M.Goodrich	8270C	9562
2,4,5-Trichlorophenol	ND	ug/l	29.	25.	1	9/28/97	6:15	M.Goodrich	8270C	9562
2,4,6-Trichlorophenol	ND	ug/l	12.	10.	1	9/28/97	6:15	M.Goodrich	8270C	9562
VOLATILE ORGANICS										
Acetone	ND	ug/l	10	10	1	9/26/97	3:13	S.Sturm	8260B	8690
Benzene	ND	ug/l	2	2	1	9/26/97	3:13	S.Sturm	8260B	8690
Bromobenzene	ND	ug/l	2	2	1	9/26/97	3:13	S.Sturm	8260B	8690
Bromochloromethane	ND	ug/l	2	2	1	9/26/97	3:13	S.Sturm	8260B	8690
Bromoform	ND	ug/l	2	2	1	9/26/97	3:13	S.Sturm	8260B	8690
Bromomethane	ND	ug/l	2	2	1	9/26/97	3:13	S.Sturm	8260B	8690
2-Butanone	ND	ug/l	10	10	1	9/26/97	3:13	S.Sturm	8260B	8690
n-Butylbenzene	ND	ug/l	2	2	1	9/26/97	3:13	S.Sturm	8260B	8690

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 97-A081303
Sample ID: PURGE WATER COMPOSITE LIQUID

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
sec-Butylbenzene	ND	ug/l	2	2	1	9/26/97	3:13	S.Sturn	8260B	8690
t-Butylbenzene	ND	ug/l	2	2	1	9/26/97	3:13	S.Sturn	8260B	8690
Carbon Disulfide	ND	ug/l	2	2	1	9/26/97	3:13	S.Sturn	8260B	8690
Carbon tetrachloride	ND	ug/l	2	2	1	9/26/97	3:13	S.Sturn	8260B	8690
Chlorobenzene	ND	ug/l	2	2	1	9/26/97	3:13	S.Sturn	8260B	8690
Chloroethane	ND	ug/l	2	2	1	9/26/97	3:13	S.Sturn	8260B	8690
2-Chloroethylvinylether	ND	ug/l	2	2	1	9/26/97	3:13	S.Sturn	8260B	8690
Chloroform	ND	ug/l	2	2	1	9/26/97	3:13	S.Sturn	8260B	8690
Chloromethane	ND	ug/l	2	2	1	9/26/97	3:13	S.Sturn	8260B	8690
2-Chlorotoluene	ND	ug/l	2	2	1	9/26/97	3:13	S.Sturn	8260B	8690
4-Chlorotoluene	ND	ug/l	10	2	1	9/26/97	3:13	S.Sturn	8260B	8690
1,2-Dibromo-3-chloropropane	ND	ug/l	10	10	1	9/26/97	3:13	S.Sturn	8260B	8690
Dibromochloromethane	ND	ug/l	2	2	1	9/26/97	3:13	S.Sturn	8260B	8690
1,2-Dibromoethane	ND	ug/l	2	2	1	9/26/97	3:13	S.Sturn	8260B	8690
Dibromomethane	ND	ug/l	2	2	1	9/26/97	3:13	S.Sturn	8260B	8690
1,2-Dichlorobenzene	ND	ug/l	2	2	1	9/26/97	3:13	S.Sturn	8260B	8690
1,3-Dichlorobenzene	ND	ug/l	2	2	1	9/26/97	3:13	S.Sturn	8260B	8690
1,4-Dichlorobenzene	ND	ug/l	2	2	1	9/26/97	3:13	S.Sturn	8260B	8690
Dichlorodifluoromethane	ND	ug/l	2	2	1	9/26/97	3:13	S.Sturn	8260B	8690
1,1-Dichloroethane	ND	ug/l	2	2	1	9/26/97	3:13	S.Sturn	8260B	8690
1,2-Dichloroethane	ND	ug/l	2	2	1	9/26/97	3:13	S.Sturn	8260B	8690
1,1-Dichloroethene	ND	ug/l	2	2	1	9/26/97	3:13	S.Sturn	8260B	8690
cis-1,2-Dichloroethene	45.8	ug/l	2	2	1	9/26/97	3:13	S.Sturn	8260B	8690
trans-1,2-Dichloroethene	ND	ug/l	2	2	1	9/26/97	3:13	S.Sturn	8260B	8690
1,2-Dichloropropane	ND	ug/l	2	2	1	9/26/97	3:13	S.Sturn	8260B	8690
1,3-Dichloropropane	ND	ug/l	2	2	1	9/26/97	3:13	S.Sturn	8260B	8690
2,2-Dichloropropane	ND	ug/l	2	2	1	9/26/97	3:13	S.Sturn	8260B	8690
1,1-Dichloropropene	ND	ug/l	2	2	1	9/26/97	3:13	S.Sturn	8260B	8690
cis-1,3-Dichloropropene	ND	ug/l	2	2	1	9/26/97	3:13	S.Sturn	8260B	8690
trans-1,3-Dichloropropene	ND	ug/l	2	2	1	9/26/97	3:13	S.Sturn	8260B	8690
Ethylbenzene	ND	ug/l	2	2	1	9/26/97	3:13	S.Sturn	8260B	8690
Hexachlorobutadiene	ND	ug/l	2	2	1	9/26/97	3:13	S.Sturn	8260B	8690
2-Hexanone	ND	ug/l	10	10	1	9/26/97	3:13	S.Sturn	8260B	8690
Isopropylbenzene	ND	ug/l	2	2	1	9/26/97	3:13	S.Sturn	8260B	8690
4-Isopropyltoluene	ND	ug/l	2	2	1	9/26/97	3:13	S.Sturn	8260B	8690
4-Methyl-2-pentanone	ND	ug/l	10	10	1	9/26/97	3:13	S.Sturn	8260B	8690
Methylene chloride	ND	ug/l	2	2	1	9/26/97	3:13	S.Sturn	8260B	8690
Naphthalene	ND	ug/l	2	2	1	9/26/97	3:13	S.Sturn	8260B	8690
n-Propylbenzene	ND	ug/l	2	2	1	9/26/97	3:13	S.Sturn	8260B	8690
Styrene	ND	ug/l	2	2	1	9/26/97	3:13	S.Sturn	8260B	8690
1,1,1,2-Tetrachloroethane	ND	ug/l	2	2	1	9/26/97	3:13	S.Sturn	8260B	8690
1,1,2,2-Tetrachloroethane	ND	ug/l	2	2	1	9/26/97	3:13	S.Sturn	8260B	8690
Tetrachloroethene	54.6	ug/l	2	2	1	9/26/97	3:13	S.Sturn	8260B	8690
Toluene	ND	ug/l	2	2	1	9/26/97	3:13	S.Sturn	8260B	8690
1,2,3-Trichlorobenzene	ND	ug/l	2	2	1	9/26/97	3:13	S.Sturn	8260B	8690

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 97-A081303
Sample ID: PURGE WATER COMPOSITE LIQUID

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
1,2,4-Trichlorobenzene	ND	ug/l	2	2	1	9/26/97	3:13	S.Sturm	8260B	8690
1,1,1-Trichloroethane	ND	ug/l	2	2	1	9/26/97	3:13	S.Sturm	8260B	8690
1,1,2-Trichloroethane	ND	ug/l	2	2	1	9/26/97	3:13	S.Sturm	8260B	8690
Trichloroethene	135	ug/l	2	2	1	9/26/97	3:13	S.Sturm	8260B	8690
1,2,3-Trichloropropane	ND	ug/l	2	2	1	9/26/97	3:13	S.Sturm	8260B	8690
1,2,4-Trimethylbenzene	ND	ug/l	2	2	1	9/26/97	3:13	S.Sturm	8260B	8690
1,3,5-Trimethylbenzene	ND	ug/l	2	2	1	9/26/97	3:13	S.Sturm	8260B	8690
Vinyl chloride	5.5	ug/l	2	2	1	9/26/97	3:13	S.Sturm	8260B	8690
Xylenes	ND	ug/l	2	2	1	9/26/97	3:13	S.Sturm	8260B	8690
Bromodichloromethane	ND	ug/l	2	2	1	9/26/97	3:13	S.Sturm	8260B	8690
Trichlorofluoromethane	ND	ug/l	2	2	1	9/26/97	3:13	S.Sturm	8260B	8690

TCLP Results

Analyte	Result	Units	Reg Limit	Matrix Spike Recovery (%)	Date	Method
Arsenic	< 0.10	mg/l	5.0	97	9/29/97	6010A
Barium	< 1.00	mg/l	100	92	9/29/97	6010A
Cadmium	< 0.10	mg/l	1.0	90	9/29/97	6010A
Chromium	< 0.50	mg/l	5.0	88	9/29/97	6010A
Lead	< 0.50	mg/l	5.0	89	9/29/97	6010A
Mercury	< 0.010	mg/l	0.20	99	9/25/97	7471
Selenium	< 0.10	mg/l	1.0	99	9/29/97	6010A
Silver	< 0.10	mg/l	5.0	81	9/29/97	6010A

ND = Not detected at the report limit.

Sample Extraction Data

BNA's Extracted 9/27/97 Vol extracted: 850. ml Extract Volume: 1.0 ml C.Gerenser

** SURROGATE RECOVERIES **

Surrogate	% Recovery	Target Range
VOA Surrogate, 1,2-Dichloroethane, d4	92.5	80. - 124.
VOA Surrogate, Toluene d8	92.7	86. - 108.
VOA Surrogate, 4-Bromofluorobenzene	86.7	77. - 118.
VOA Surrogate, Dibromofluoromethane	76.1	77. - 118.
BNA Surr., Nitrobenzene-d5	53.4	35. - 115.
BNA Surrogate, 2-Fluorobiphenyl	73.9	43. - 116.

SPECIALIZED ASSAYS, INC.

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Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 97-A081303
Sample ID: PURGE WATER COMPOSITE LIQUID

** SURROGATE RECOVERIES **

Surrogate	% Recovery	Target Range
BNA Surrogate, Terphenyl d14	106.	20. - 130.
BNA Surrogate, Phenol d5	27.8	10. - 110.
BNA Surrogate, 2-Fluorophenol	26.8	20. - 110.
BNA Surrogate, 2,4,6-Tribromophenol	91.4	10. - 123.

Report Approved By: Danny Hale Report Date: 9/29/97

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

MONTGOMERY WATSON 7065

41551 ELEVEN MILE ROAD
NOVI, MI 48375

Lab Number: 97-A081304

Sample ID: TRIP BLANK

Date Collected:

Project: 1257022.351601

Time Collected:

Project Name: FEDERAL MOGUL-KINGSTON

Date Received: 9/20/97

Sampler: JAY MULLETT

Time Received: 9:00

State Certification:

Sample Type: Ground water

Site I.D.:

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
VOLATILE ORGANICS										
Acetone	ND	ug/l	10	10	1	9/26/97	3:47	S.Sturm	8260B	8690
Benzene	ND	ug/l	2	2	1	9/26/97	3:47	S.Sturm	8260B	8690
Bromobenzene	ND	ug/l	2	2	1	9/26/97	3:47	S.Sturm	8260B	8690
Bromochloromethane	ND	ug/l	2	2	1	9/26/97	3:47	S.Sturm	8260B	8690
Bromoform	ND	ug/l	2	2	1	9/26/97	3:47	S.Sturm	8260B	8690
Bromomethane	ND	ug/l	2	2	1	9/26/97	3:47	S.Sturm	8260B	8690
2-Butanone	ND	ug/l	10	10	1	9/26/97	3:47	S.Sturm	8260B	8690
n-Butylbenzene	ND	ug/l	2	2	1	9/26/97	3:47	S.Sturm	8260B	8690
sec-Butylbenzene	ND	ug/l	2	2	1	9/26/97	3:47	S.Sturm	8260B	8690
t-Butylbenzene	ND	ug/l	2	2	1	9/26/97	3:47	S.Sturm	8260B	8690
Carbon Disulfide	ND	ug/l	2	2	1	9/26/97	3:47	S.Sturm	8260B	8690
Carbon tetrachloride	ND	ug/l	2	2	1	9/26/97	3:47	S.Sturm	8260B	8690
Chlorobenzene	ND	ug/l	2	2	1	9/26/97	3:47	S.Sturm	8260B	8690
Chloroethane	ND	ug/l	2	2	1	9/26/97	3:47	S.Sturm	8260B	8690
2-Chloroethylvinylether	ND	ug/l	2	2	1	9/26/97	3:47	S.Sturm	8260B	8690
Chloroform	ND	ug/l	2	2	1	9/26/97	3:47	S.Sturm	8260B	8690
Chloromethane	ND	ug/l	2	2	1	9/26/97	3:47	S.Sturm	8260B	8690
2-Chlorotoluene	ND	ug/l	2	2	1	9/26/97	3:47	S.Sturm	8260B	8690
4-Chlorotoluene	ND	ug/l	10	2	1	9/26/97	3:47	S.Sturm	8260B	8690
1,2-Dibromo-3-chloropropane	ND	ug/l	10	10	1	9/26/97	3:47	S.Sturm	8260B	8690
Dibromochloromethane	ND	ug/l	2	2	1	9/26/97	3:47	S.Sturm	8260B	8690
1,2-Dibromoethane	ND	ug/l	2	2	1	9/26/97	3:47	S.Sturm	8260B	8690
Dibromomethane	ND	ug/l	2	2	1	9/26/97	3:47	S.Sturm	8260B	8690
1,2-Dichlorobenzene	ND	ug/l	2	2	1	9/26/97	3:47	S.Sturm	8260B	8690
1,3-Dichlorobenzene	ND	ug/l	2	2	1	9/26/97	3:47	S.Sturm	8260B	8690
1,4-Dichlorobenzene	ND	ug/l	2	2	1	9/26/97	3:47	S.Sturm	8260B	8690
Dichlorodifluoromethane	ND	ug/l	2	2	1	9/26/97	3:47	S.Sturm	8260B	8690
1,1-Dichloroethane	ND	ug/l	2	2	1	9/26/97	3:47	S.Sturm	8260B	8690
1,2-Dichloroethane	ND	ug/l	2	2	1	9/26/97	3:47	S.Sturm	8260B	8690

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
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ANALYTICAL REPORT

Laboratory Number: 97-A081304
Sample ID: TRIP BLANK

Analyte	Result	Units	Report Limit	Quan Limit	Dil Factor	Date	Time	Analyst	Method	Batch
1,1-Dichloroethene	ND	ug/l	2	2	1	9/26/97	3:47	S.Sturm	8260B	8690
cis-1,2-Dichloroethene	ND	ug/l	2	2	1	9/26/97	3:47	S.Sturm	8260B	8690
trans-1,2-Dichloroethene	ND	ug/l	2	2	1	9/26/97	3:47	S.Sturm	8260B	8690
1,2-Dichloropropane	ND	ug/l	2	2	1	9/26/97	3:47	S.Sturm	8260B	8690
1,3-Dichloropropane	ND	ug/l	2	2	1	9/26/97	3:47	S.Sturm	8260B	8690
2,2-Dichloropropane	ND	ug/l	2	2	1	9/26/97	3:47	S.Sturm	8260B	8690
1,1-Dichloropropene	ND	ug/l	2	2	1	9/26/97	3:47	S.Sturm	8260B	8690
cis-1,3-Dichloropropene	ND	ug/l	2	2	1	9/26/97	3:47	S.Sturm	8260B	8690
trans-1,3-Dichloropropene	ND	ug/l	2	2	1	9/26/97	3:47	S.Sturm	8260B	8690
Ethylbenzene	ND	ug/l	2	2	1	9/26/97	3:47	S.Sturm	8260B	8690
Hexachlorobutadiene	ND	ug/l	2	2	1	9/26/97	3:47	S.Sturm	8260B	8690
2-Hexanone	ND	ug/l	10	10	1	9/26/97	3:47	S.Sturm	8260B	8690
Isopropylbenzene	ND	ug/l	2	2	1	9/26/97	3:47	S.Sturm	8260B	8690
4-Isopropyltoluene	ND	ug/l	2	2	1	9/26/97	3:47	S.Sturm	8260B	8690
4-Methyl-2-pentanone	ND	ug/l	10	10	1	9/26/97	3:47	S.Sturm	8260B	8690
Methylene chloride	ND	ug/l	2	2	1	9/26/97	3:47	S.Sturm	8260B	8690
Naphthalene	ND	ug/l	2	2	1	9/26/97	3:47	S.Sturm	8260B	8690
n-Propylbenzene	ND	ug/l	2	2	1	9/26/97	3:47	S.Sturm	8260B	8690
Styrene	ND	ug/l	2	2	1	9/26/97	3:47	S.Sturm	8260B	8690
1,1,1,2-Tetrachloroethane	ND	ug/l	2	2	1	9/26/97	3:47	S.Sturm	8260B	8690
1,1,2,2-Tetrachloroethane	ND	ug/l	2	2	1	9/26/97	3:47	S.Sturm	8260B	8690
Tetrachloroethene	ND	ug/l	2	2	1	9/26/97	3:47	S.Sturm	8260B	8690
Toluene	ND	ug/l	2	2	1	9/26/97	3:47	S.Sturm	8260B	8690
1,2,3-Trichlorobenzene	ND	ug/l	2	2	1	9/26/97	3:47	S.Sturm	8260B	8690
1,2,4-Trichlorobenzene	ND	ug/l	2	2	1	9/26/97	3:47	S.Sturm	8260B	8690
1,1,1-Trichloroethane	ND	ug/l	2	2	1	9/26/97	3:47	S.Sturm	8260B	8690
1,1,2-Trichloroethane	ND	ug/l	2	2	1	9/26/97	3:47	S.Sturm	8260B	8690
Trichloroethene	ND	ug/l	2	2	1	9/26/97	3:47	S.Sturm	8260B	8690
1,2,3-Trichloropropane	ND	ug/l	2	2	1	9/26/97	3:47	S.Sturm	8260B	8690
1,2,4-Trimethylbenzene	ND	ug/l	2	2	1	9/26/97	3:47	S.Sturm	8260B	8690
1,3,5-Trimethylbenzene	ND	ug/l	2	2	1	9/26/97	3:47	S.Sturm	8260B	8690
Vinyl chloride	ND	ug/l	2	2	1	9/26/97	3:47	S.Sturm	8260B	8690
Xylenes	ND	ug/l	2	2	1	9/26/97	3:47	S.Sturm	8260B	8690
Bromodichloromethane	ND	ug/l	2	2	1	9/26/97	3:47	S.Sturm	8260B	8690
Trichlorofluoromethane	ND	ug/l	2	2	1	9/26/97	3:47	S.Sturm	8260B	8690

ND = Not detected at the report limit.

** SURROGATE RECOVERIES **

Surrogate	% Recovery	Target Range
VOA Surrogate, 1,2-Dichloroethane, d4	116.	80. - 124.

SPECIALIZED ASSAYS, INC.

2960 Foster Creighton Dr.
P.O. Box 40566
Nashville, TN 37204-0566
Phone 1-615-726-0177

ANALYTICAL REPORT

Laboratory Number: 97-A081304
Sample ID: TRIP BLANK

** SURROGATE RECOVERIES **

Surrogate	% Recovery	Target Range
VOA Surrogate, Toluene d8	93.1	86. - 108.
VOA Surrogate, 4-Bromofluorobenzene	91.1	77. - 118.
VOA Surrogate, Dibromofluoromethane	95.2	77. - 118.

Report Approved By: _____ Report Date: 9/29/97

Theodore J. Duello, Ph.D., Q.A. Officer
Michael H. Dunn, M.S., Technical Director
Danny B. Hale, M.S., Laboratory Director

APPENDIX E

WASTE DISPOSAL DOCUMENTATION

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID & HAZARDOUS MATERIALS

NYG 0402273

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

COAK

Please type or print. Do not staple. (Rev. 3/97)

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No. AXEINPTI | Manifest Doc. No. | 2. Page 1 of 1 | Information within heavy bold line is not required by Federal Law.

3. Generator's Name and Mailing Address
FEDERAL MOGUL CORP
50 GRAND ST
KINGSTON NY 12401-3926

4. Generator's Telephone Number (248) 354-8100

A. NYG0402273

B. Generator's ID Sale

5. Transporter 1 (Company Name) Tristate Motor Transit Co | 6. US EPA ID Number MID091503819 98

C. State Transporter's ID ET 97613 CA

D. Transporter's Telephone (800) 223 8788

7. Transporter 2 (Company Name) | 8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Telephone ( )

9. Designated Facility Name and Site Address
CWM CHEMICAL SERVICES, INC.
1550 BALMER RD.
MODEL CITY NY 14107

10. US EPA ID Number NYD049836679

G. State Facility ID

H. Facility Telephone (716 754-8231

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers Number	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. NON-REGULATED MATERIAL	002	DM	00300	P	EPA / STATE
b. NON-REGULATED MATERIAL	003	DM	02400	P	EPA / STATE
c.					EPA / STATE
d.					EPA / STATE

J. Additional Descriptions for Materials listed Above
a. CF5782 -04
b. CF5811 -05

K. Handling Codes for Wastes Listed Above
a. L
b. T
c.
d.

15. Special Handling Instructions and Additional Information
AETS Emergency Response Number (888)353-2387

SR# 403556

8147952

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations.
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR if I am a small generator, I have made a good faith effort to minimize my waste and select the best waste management method that is available to me and that I can afford.

GENERATOR — Printed/Typed Name: Mark T. Bates | Signature: Mark T. Bates | Mo. 12 | Day 11 | Year 97

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Charles Bennett | Signature: Charles Bennett | Mo. 12 | Day 11 | Year 97

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name: | Signature: | Mo. | Day | Year

FACILITY

19. Discrepancy Indication Space Generator omitted Manifest Doc. No.
12a - received '3', 13a - received '2400', 12b - received '2', 13b received '300'

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: Andrew Argona | Signature: | Mo. 12 | Day 12 | Year 97

In case of emergency or spill immediately call the National Response Center (800) 424-8802 and the NYS Department of Environmental Conservation (518) 457-7362

DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID & HAZARDOUS MATERIALS

NYG 0402273

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

COAX

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UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No. | Manifest Doc. No.

2. Page 1 of 1

Information within heavy bold line is not required by Federal Law.

3. Generator's Name and Mailing Address
FEDERAL MOGUL CORP
50 GRAND ST
KINGSTON NY 12401-3926

4. Generator's Telephone Number (248) 354-8100

A. NYG 0402273

B. Generator's ID

C. State Transporter's ID

D. Transporter's Telephone ( )

E. State Transporter's ID

F. Transporter's Telephone ( )

G. State Facility ID

H. Facility Telephone (716) 754-8231

5. Transporter 1 (Company Name) | 6. US EPA ID Number

7. Transporter 2 (Company Name) | 8. US EPA ID Number

9. Designated Facility Name and Site Address
CWM CHEMICAL SERVICES, INC.
1550 BALMER RD.
MODEL CITY NY 14107

10. US EPA ID Number N Y D 0 4 9 8 3 6 6 7 9

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers Number	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. NON-REGULATED MATERIAL	002	DM	00300	P	EPA / STATE
b. NON-REGULATED MATERIAL	003	DM	02400	P	EPA / STATE
c.					EPA / STATE
d.					EPA / STATE

J. Additional Descriptions for Materials listed Above
a. CF5782
b. CF5811

K. Handling Codes for Wastes Listed Above
a. L | c.
b. T | d.

15. Special Handling Instructions and Additional Information
AETS Emergency Response Number (800)333-2387
SR# 403556

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations.
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GENERATOR

Printed/Typed Name: Mark T. Bowes | Signature: Mark T. Bowes | Mo. 12 | Day 11 | Year 97

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: Charles Bennett | Signature: Charles Bennett | Mo. 12 | Day 11 | Year 97

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name | Signature | Mo. | Day | Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name | Signature | Mo. | Day | Year

In case of emergency or spill immediately call the National Response Center (800) 424-8802 and the NYS Department of Environmental Conservation (518) 457-7362

COPY 3 — Disposer, State — Mailed by Generator

DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID & HAZARDOUS MATERIALS

NYG 0402273

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

COPY

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(Rev. 3/97)

In case of emergency or spill immediately call the National Response Center (800) 424-8802 and the NYS Department of Environmental Conservation (518) 457-7362

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No. | Manifest Doc. No.

2. Page 1 of

Information within heavy bold line is not required by Federal Law.

GENERATOR

3. Generator's Name and Mailing Address
FEDERAL MOGUL CORP
50 GRAND ST
KINGSTON NY 12401-3526

4. Generator's Telephone Number (248) 354-8100

A. NYG 0402273

B. Generator's ID

C. State Transporter's ID

D. Transporter's Telephone ( )

E. State Transporter's ID

F. Transporter's Telephone ( )

G. State Facility ID

H. Facility Telephone (716 754-8231

5. Transporter 1 (Company Name) | 6. US EPA ID Number

7 Transporter 2 (Company Name) | 8. US EPA ID Number

9. Designated Facility Name and Site Address
CWM CHEMICAL SERVICES, INC.
1550 BALMER RD.
MODEL CITY NY 14107

10. US EPA ID Number
N Y D 0 4 9 8 3 6 6 7 9

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers Number	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. NON-REGULATED MATERIAL	002	DM	00300	P	EPA STATE
b. NON-REGULATED MATERIAL	003	DM	02400	P	EPA STATE
c.					EPA STATE
d.					EPA STATE

J. Additional Descriptions for Materials listed Above
a. CF5792
b. CF5811
c.
d.

K. Handling Codes for Wastes Listed Above
a. L
b. I
c.
d.

15. Special Handling Instructions and Additional Information
CETS Emergency Response Number (800)353-2307 SR# 43556

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations.
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Printed/Typed Name	Signature	Mo.	Day	Year
Mark T. Bowe	Mark T. Bowe	12	11	97

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Mo.	Day	Year
Charles Bennett	Charles Bennett	12	11	97

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Mo.	Day	Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name	Signature	Mo.	Day	Year

COPY 4 — Generator, State — Mailed by Generator

NYG 0402273

DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID & HAZARDOUS MATERIALS

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

Please type or print. Do not staple.

(Rev. 3/97)

In case of emergency or spill immediately call the National Response Center (800) 424-8802 and the NYS Department of Environmental Conservation (518) 457-7362

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No. | Manifest Doc. No.

2. Page 1 of 1

Information within heavy bold line is not required by Federal Law.

GENERATOR

3. Generator's Name and Mailing Address

4. Generator's Telephone Number ( )

A. NYG0402273

B. Generator's ID

C. State Transporter's ID

D. Transporter's Telephone ( )

E. State Transporter's ID

F. Transporter's Telephone ( )

G. State Facility ID

H. Facility Telephone ( )

5. Transporter 1 (Company Name) | 6. US EPA ID Number

7 Transporter 2 (Company Name) | 8. US EPA ID Number

9. Designated Facility Name and Site Address

10. US EPA ID Number

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers Number	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	001	DM	030	P	EPA STATE
b.	001	DM	030	P	EPA STATE
c.					EPA STATE
d.					EPA STATE

J. Additional Descriptions for Materials listed Above

a | c

b | d

K. Handling Codes for Wastes Listed Above

a | c

b | d

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations.

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Printed/Typed Name | Signature | Mo. | Day | Year

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Mo. | Day | Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Mo. | Day | Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name | Signature | Mo. | Day | Year

COPY 8 — Generator — Retained by Generator