# ENGINEERING INVESTIGATIONS AT INACTIVE HAZARDOUS WASTE SITES

## PHASE II INVESTIGATION

VOLUME II

Cantor Brothers, Inc.
Town of Babylon

Site No. 152021
Suffolk County

Final Report

RECEIVED
SEP 11 1990
BUREAU OF ENVIRONMENTAL EXPOSURE INVESTIGATION

Prepared for :

New York State
Department of
Environmental Conservation

50 Wolf Road, Albany, New York 12233
Thomas C. Jorling, Commissioner

Division of Hazardous Waste Remediation
Michael J. O'Toole, P.E., Director

by:

LeRoy Callender, P.C.
Subcontractor to :
Gibbs & Hill, Inc.

Remediation

# ENGINEERING INVESTIGATIONS AT INACTIVE HAZARDOUS WASTE SITES

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VOLUME II

Cantor Brothers, Inc. — Site No. 152021

Town of Babylon — Suffolk County

Final Report




RECEIVED
JUN 11 1990
BUREAU OF
HAZARDOUS SITE CONTROL
DIVISION OF HAZARDOUS
WASTE REMEDIATION

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Department of
Environmental Conservation

50 Wolf Road, Albany, New York 12233
Thomas C. Jorling, Commissioner

Division of Hazardous Waste Remediation
Michael J. O'Toole, P. E., Director

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LeRoy Callender, P. C.
Subcontractor to :
Gibbs & Hill, Inc.

LeRoy Callender PC

# ENGINEERING INVESTIGATIONS AT INACTIVE HAZARDOUS WASTE SITES IN THE STATE OF NEW YORK

## PHASE II INVESTIGATIONS

## VOLUME II

CANTOR BROTHERS, INC.

NYS SITE I.D. NO. 152021

TOWN OF BABYLON

SUFFOLK COUNTY

NEW YORK STATE

Prepared For:

NYS DEPARTMENT OF ENVIRONMENTAL CONSERVATION

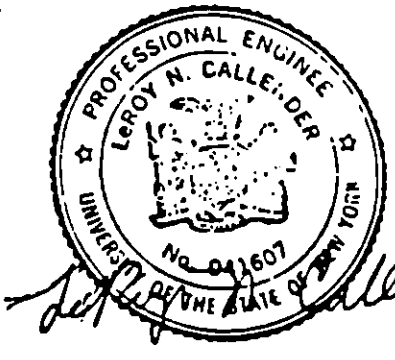
50 WOLF ROAD

ALBANY, NEW YORK 12233

THOMAS C. JORLING, COMMISSIONER

DIVISION OF HAZARDOUS WASTE REMEDIATION
MICHAEL J.O'TOOLE, P.E. DIRECTOR

Prepared By:
LEROY CALLENDER, P.C




Subcontractor to:
GIBBS & HILL, INC.

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PHASE II INVESTIGATION

CANTOR BROTHERS, INC.

VOLUME II

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- CHEMICAL ANALYTICAL RESULTS

- FIELD LOG BOOK

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VOLUME II

CANTOR BROTHERSS, INC.

CHEMICAL ANALYTICAL RESULTS

BY

H2M LABS, INC.

FOR:
VOLATILE ORGANICS
SEMI-VOLATILE ORGANICS
INORGANICS DATA
PESTICIDES/PCB's

FOR:
GROUNDWATER, SOIL
AND SEDIMENT SAMPLES

H2M LABS, INC.
Environmental and Industrial Analytical Laboratory
575 Broad Hollow Road, Melville, NY 11747-5076
(516) 694-3040

March 16, 1988

Mr. Sirous Nabavi, P.E.
Leroy Callender, P.C.
236 West 26th Street
New York, NY 10001

Dear Mr. Nabavi:

Please find enclosed copies of the lab data reports and case narratives for the samples submitted from the Cantor Bros. site for volatile, semi-volatile, and inorganic analysis. The sample data for the pesticide/pcb analysis will be forwarded to you upon completion.

If you have any questions regarding this material, please feel free to contact us.

Very truly yours,

H2M Labs, Inc.

Stanley Isaacson
Laboratory Manager

SI/ltc
Enclosure

RECEIVED
MAR 17 1989
LeRoy Callender P.C.

H2M LABS, INC.

575 Broad Hollow Road, Melville, N.Y. 11747
(516) 694-3040 FAX: (516) 694-4122

SAMPLE IDENTIFICATION AND
ANALYTICAL REQUIREMENT SUMMARY

| Customer Sample Code | Laboratory Sample Code | Analytical Requirements CLP | | | | | |
|---|---|---|---|---|---|---|---|
| | | VOA GC/MS | BNA GC/MS | VOA GC | PEST PCB | METALS TCL | OTHER CYANID |
| MW #1 | 868800 / 868801 | X | X | | X | X | X |
| MW #2 | 868802 / 868803 | X | X | | X | X | X |
| SAMPLE #1 EPTOX | 868652 / 868654 | | | | | X | X |
| SAMPLE #2 EPTOX | 868653 / 868655 | | | | | X | X |
| MW #0 | 869369 / 869376 | | | | X | X | X |
| MW #1 | 869370 / 869377 | | | | X | X | X |
| MW #2 | 869371 / 869378 | | | | X | X | X |
| MW #3 | 869372 / 869379 | | | | X | X | X |
| MW #4 | 869373 / 869380 | | | | X | X | X |
| FIELD BLANK | 869374 / 869381 | | | | X | X | X |
| CATCH BASIN #1 | 869382 / 869385 | | | | X | X | X |
| CATCH BASIN #2 | 869383 / 869386 | | | | X | X | X |
| CATCH BASIN #3 | 869384 / 869387 | | | | X | X | X |
| MW-A | 874719 | X | X | | | | |
| MW #1 | 874720 | X | X | | | | |
| MW #2 | 874721 | X | X | | | | |
| MW #3 | 874722 | X | X | | | | |
| MW #4 | 874723 | X | X | | | | |
| FIELD BLANK | 874724 | X | X | | | | |
| TRIP BLANK | 874725 | X | X | | | | |
| SD-1 | 874726 | X | X | | | | |
| SD-2 | 874727 | X | X | | | | |
| SD-3 | 874728 | X | X | | | | |

HC LABS INC
575 Broad Hollow Road, Melville, N.Y. 11747
(516) 694-3040 FAX: (516) 694-4122
ENVIRONMENTAL and INDUSTRIAL ANALYTICAL LABORATORY

## DATA REPORTING QUALIFIERS

Value - If the result is a value greater than or equal to the detection limit, report the value.

U - Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g., 10U) based on necessary concentration/dilution actions. (This is not necessarily the instrument detection limit). The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J - Indicates as estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g.: If limit of detection is 10 ug/l and a concentration of 3 ug/l is calculated, report as 3J).

C - This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides >= 10 ng/ul in the final extract should be confirmed by GC/MS.

B - This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

D - This flag identifies compounds whose concentrations are outside the calibration range of the analysis. If one or more compounds have a response greater than full scale, the extract must be diluted and reanalyzed, according to the specifications in Exhibit D. If the dilution of the extract causes any compounds identified in the first analysis to be below the calibration range in the second analysis, then the results of both analyses shall be reported on separate Forms I. The Form I the diluted sample shall have the "DL" suffix appended to the sample number. Compounds whose concentrations are above the calibration range of the first analysis shall be flagged with "D" on the Form I from that first analysis. Compounds identified in that first analysis but below the calibration range of the second analysis shall be flagged "D" on the Form I for the second analysis. The contractor shall report the results of at most two analyses, one with the "DL" suffix, and one without the suffix.

H2M LABS, INC.
Environmental and Industrial Analytical Laboratory
575 Broad Hollow Road, Melville, NY 11747-5076
(516) 694-3040

# CASE NARRATIVE FOR VOLATILE ORGANICS

## CANTOR BROTHERS SITE

All Q.C. requirements for this data package were in compliance with the following exceptions: The matrix spike % RPD for toluene, sample SDI exceeded Q.C. limits.

Sample MW#3 initial analysis exceeded linearity and was reanalyzed at a secondary dilution.

The Trip Blank was analyzed using a low level soil calibration. All soil method protocols were followed.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Date Reported: 2-27-89

**********
* JBolloy *
**********
John J. Molloy, P.E.
Laboratory Director

H2M LABS, INC.
575 Broad Hollow Road, Melville, N.Y. 11747
(516) 694-3040 FAX: (516) 694-4122

ENVIRONMENTAL and INDUSTRIAL ANALYTICAL LABORATORY

# VOLATILE ORGANICS ANALYSIS DATA SHEET

MW A = Duplicate G.W. Sample

Lab Name: H2M LABS, INC. Contract: GIBBS & HILL

LEROY CALLENDER, P.C.
CANTOR BROTHERS SITE
AQUEOUS SAMPLES

Matrix: WATER
Sample vol: 5 mL
Level: LOW
% Moisture: not dec. -- dec.
Column: (pack/cap) PACK

Lab Sample ID: 874719
Lab File ID: PU9550
Date Received: 12/28/88
Date Analyzed: 12/30/88
Dilution Factor: 1

| CAS NO. | COMPOUND | CONCENTRATION UNITS: ug/L | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 11 | B |
| 67-64-1 | Acetone | 8 | J,B |
| 75-15-0 | Carbon Disulfide | 5 | U |
| 75-35-4 | 1,1-Dichloroethene | 5 | U |
| 75-34-3 | 1,1-Dichloroethane | 5 | U |
| 540-59-0 | 1,2-Dichloroethene (total) | 7 | |
| 67-66-3 | Chloroform | 10 | B |
| 107-06-2 | 1,2-Dichloroethane | 5 | U |
| 78-93-3 | 2-Butanone | 10 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 6 | |
| 56-23-5 | Carbon Tetrachloride | 5 | U |
| 108-05-4 | Vinyl Acetate | 10 | U |
| 75-27-4 | Bromodichloromethane | 5 | U |
| 78-87-5 | 1,2-Dichloropropane | 5 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 5 | U |
| 79-01-6 | Trichloroethene | 87 | |
| 124-48-1 | Dibromochloromethane | 5 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 5 | U |
| 71-43-2 | Benzene | 5 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | 5 | U |
| 75-25-2 | Bromoform | 5 | U |
| 108-10-1 | 4-Methyl-2-Pentanone | 10 | U |
| 591-78-6 | 2-Hexanone | 10 | U |
| 127-18-4 | Tetrachloroethene | 110 | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 5 | U |
| 108-88-3 | Toluene | 5 | U |
| 108-90-7 | Chlorobenzene | 5 | U |
| 100-41-4 | Ethylbenzene | 5 | U |
| 100-42-5 | Styrene | 5 | U |
| 1330-20-7 | Xylene (total) | 5 | U |

Date Reported: 01/31/89

John J. Molloy, P.E.
Laboratory Director

H2M LABS, INC.
575 Broad Hollow Road, Melville, N.Y. 11747
(516) 694-3040 FAX: (516) 694-4122
ENVIRONMENTAL and INDUSTRIAL ANALYTICAL LABORATORY

# VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

MW A=Duplicate G.W. Sample

Lab Name: H2M LABS, INC. Contract: GIBBS & HILL

LEROY CALLENDER, P.C.
CANTOR BROTHERS SITE
AQUEOUS SAMPLES

Matrix: WATER
Sample vol: 5 (mL)
Level: LOW
% Moisture: not dec. - dec.
Column: (pack/cap) PACK

Lab Sample ID: 874719
Lab File ID: PU9550
Date Received: 12/28/88
Date Analyzed: 12/30/88
Dilution Factor: 1

Number TICs found: 0

CONCENTRATION UNITS: ug/L

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|---|
| 1 | | NO TICs FOUND | | | |
| 2 | | | | | |
| 3 | | | | | |
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Date Reported: 01/31/89

John J. Molloy, P.E.
Laboratory Director

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(516) 694-3040 FAX: (516) 694-4122
ENVIRONMENTAL and INDUSTRIAL ANALYTICAL LABORATORY

# VOLATILE ORGANICS ANALYSIS DATA SHEET

MW #1
LEROY CALLENDER, P.C.
CANTOR BROTHERS SITE
AQUEOUS SAMPLES

Lab Name: H2M LABS, INC. Contract: GIBBS & HILL
Lab Sample ID: 874720
Lab File ID: PU9553
Matrix: WATER
Sample vol: 5 mL
Level: LOW
% Moisture: not dec. -- dec.
Column: (pack/cap) PACK
Date Received: 12/28/88
Date Analyzed: 12/30/88
Dilution Factor: 1

CONCENTRATION UNITS: ug/L

| CAS NO. | COMPOUND | | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 11 | B |
| 67-64-1 | Acetone | 7 | J,B |
| 75-15-0 | Carbon Disulfide | 5 | U |
| 75-35-4 | 1,1-Dichloroethene | 5 | U |
| 75-34-3 | 1,1-Dichloroethane | 5 | U |
| 540-59-0 | 1,2-Dichloroethene (total) | 45 | |
| 67-66-3 | Chloroform | 10 | B |
| 107-06-2 | 1,2-Dichloroethane | 5 | U |
| 78-93-3 | 2-Butanone | 3 | J,B |
| 71-55-6 | 1,1,1-Trichloroethane | 3 | J |
| 56-23-5 | Carbon Tetrachloride | 5 | U |
| 108-05-4 | Vinyl Acetate | 10 | U |
| 75-27-4 | Bromodichloromethane | 5 | U |
| 78-87-5 | 1,2-Dichloropropane | 5 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 5 | U |
| 79-01-6 | Trichloroethene | 33 | |
| 124-48-1 | Dibromochloromethane | 5 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 5 | U |
| 71-43-2 | Benzene | 5 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | 5 | U |
| 75-25-2 | Bromoform | 5 | U |
| 108-10-1 | 4-Methyl-2-Pentanone | 10 | U |
| 591-78-6 | 2-Hexanone | 10 | U |
| 127-18-4 | Tetrachloroethene | 110 | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 5 | U |
| 108-88-3 | Toluene | 2 | J |
| 108-90-7 | Chlorobenzene | 5 | U |
| 100-41-4 | Ethylbenzene | 5 | U |
| 100-42-5 | Styrene | 5 | U |
| 1330-20-7 | Xylene (total) | 5 | U |

Date Reported: 01/31/89

John J. Molloy, P.E.
Laboratory Director

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(516) 694-3040 FAX: (516) 694-4122
ENVIRONMENTAL and INDUSTRIAL ANALYTICAL LABORATORY

# VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

MW #1
LEROY CALLENDER, P.C.
CANTOR BROTHERS SITE
AQUEOUS SAMPLES

Lab Name: H2M LABS, INC. Contract: GIBBS & HILL
Matrix: WATER Lab Sample ID: 874720
Sample vol: 5 (mL) Lab File ID: PU9553
Level: LOW Date Received: 12/28/88
% Moisture:not dec. - dec. Date Analyzed: 12/30/88
Column:(pack/cap) PACK Dilution Factor: 1

Number TICs found: 0 CONCENTRATION UNITS: ug/L

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|---|
| 1 | | NO TICs FOUND | | | |
| 2 | | | | | |
| 3 | | | | | |
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Date Reported: 01/31/89

John J. Molloy, P.E.
Laboratory Director

H2M LABS, INC.
575 Broad Hollow Road, Melville, N.Y. 11747
(516) 694-3040 FAX: (516) 694-4122
ENVIRONMENTAL and INDUSTRIAL ANALYTICAL LABORATORY

# VOLATILE ORGANICS ANALYSIS DATA SHEET

MW #2
LEROY CALLENDER, P.C.
CANTOR BROTHERS SITE
AQUEOUS SAMPLES

Lab Name: H2M LABS, INC. Contract: GIBBS & HILL

Matrix: WATER
Sample vol: 5 mL
Level: LOW
% Moisture:not dec. -- dec.
Column:(pack/cap) PACK

Lab Sample ID: 874721
Lab File ID: PU9554
Date Received: 12/28/88
Date Analyzed: 12/30/88
Dilution Factor: 1

| CAS NO. | COMPOUND | CONCENTRATION UNITS: ug/L | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 8 | B |
| 67-64-1 | Acetone | 5 | J,B |
| 75-15-0 | Carbon Disulfide | 5 | U |
| 75-35-4 | 1,1-Dichloroethene | 5 | U |
| 75-34-3 | 1,1-Dichloroethane | 1 | J |
| 540-59-0 | 1,2-Dichloroethene (total) | 9 | |
| 67-66-3 | Chloroform | 13 | B |
| 107-06-2 | 1,2-Dichloroethane | 5 | U |
| 78-93-3 | 2-Butanone | 4 | J,B |
| 71-55-6 | 1,1,1-Trichloroethane | 7 | |
| 56-23-5 | Carbon Tetrachloride | 5 | U |
| 108-05-4 | Vinyl Acetate | 10 | U |
| 75-27-4 | Bromodichloromethane | 5 | U |
| 78-87-5 | 1,2-Dichloropropane | 5 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 5 | U |
| 79-01-6 | Trichloroethene | 96 | |
| 124-48-1 | Dibromochloromethane | 5 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 5 | U |
| 71-43-2 | Benzene | 5 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | 5 | U |
| 75-25-2 | Bromoform | 5 | U |
| 108-10-1 | 4-Methyl-2-Pentanone | 10 | U |
| 591-78-6 | 2-Hexanone | 10 | U |
| 127-18-4 | Tetrachloroethene | 110 | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 5 | U |
| 108-88-3 | Toluene | 5 | U |
| 108-90-7 | Chlorobenzene | 5 | U |
| 100-41-4 | Ethylbenzene | 5 | U |
| 100-42-5 | Styrene | 5 | U |
| 1330-20-7 | Xylene (total) | 5 | U |

Date Reported: 01/31/89

John J. Molloy, P.E.
Laboratory Director

# H2M LABS, INC.

575 Broad Hollow Road, Melville, N.Y. 11747
(516) 694-3040 FAX: (516) 694-4122

ENVIRONMENTAL and INDUSTRIAL ANALYTICAL LABORATORY


## VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

MW #2
LEROY CALLENDER, P.C.
CANTOR BROTHERS SITE
AQUEOUS SAMPLES

Lab Name: H2M LABS, INC. Contract: GIBBS & HILL

Matrix: WATER
Sample vol: 5 (mL)
Level: LOW
% Moisture: not dec. - dec.
Column: (pack/cap) PACK

Lab Sample ID: 874721
Lab File ID: PU9554
Date Received: 12/28/88
Date Analyzed: 12/30/88
Dilution Factor: 1

Number TICs found: 6

CONCENTRATION UNITS: ug/L

| | CAS NUMBER | COMPOUND NAME | Retention Time RT | EST. CONC. | Q |
|---|---|---|---|---|---|
| 1 | 75-28-5 | 2-METHYL-PENPANE | 03:18 | 96 | J |
| 2 | | UNKNOWN | 07:30 | 100 | J |
| 3 | | UNKNOWN ALKANE | 13:51 | 6 | J |
| 4 | 589-34-4 | 3-METHYL-HEXANE | 16:45 | 8 | J |
| 5 | | UNKNOWN | 12:27 | 29 | J |
| 6 | 592-27-8 | 2-METHYL-HEPTANE | 21:48 | 9 | J |
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Date Reported: 01/31/89

John J. Molloy, P.E.
Laboratory Director

H2M LABS, INC.
575 Broad Hollow Road, Melville, N.Y. 11747
(516) 694-3040 FAX: (516) 694-4122
ENVIRONMENTAL and INDUSTRIAL ANALYTICAL LABORATORY

# VOLATILE ORGANICS ANALYSIS DATA SHEET

MW #3
LEROY CALLENDER, P.C.
CANTOR BROTHERS SITE
AQUEOUS SAMPLES

Lab Name: H2M LABS, INC. Contract: GIBBS & HILL

Matrix: WATER
Sample vol: 5 mL
Level: LOW
% Moisture:not dec. -- dec.
Column:(pack/cap) PACK

Lab Sample ID: 874722
Lab File ID: PU9555
Date Received: 12/28/88
Date Analyzed: 12/30/88
Dilution Factor: 1

| CAS NO. | COMPOUND | CONCENTRATION UNITS: ug/L | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 9 | B |
| 67-64-1 | Acetone | 5 | J,B |
| 75-15-0 | Carbon Disulfide | 5 | U |
| 75-35-4 | 1,1-Dichloroethene | 5 | U |
| 75-34-3 | 1,1-Dichloroethane | 2 | J |
| 540-59-0 | 1,2-Dichloroethene (total) | 17 | |
| 67-66-3 | Chloroform | 2 | B |
| 107-06-2 | 1,2-Dichloroethane | 5 | U |
| 78-93-3 | 2-Butanone | 3 | J,B |
| 71-55-6 | 1,1,1-Trichloroethane | 19 | |
| 56-23-5 | Carbon Tetrachloride | 5 | U |
| 108-05-4 | Vinyl Acetate | 10 | U |
| 75-27-4 | Bromodichloromethane | 5 | U |
| 78-87-5 | 1,2-Dichloropropane | 5 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 5 | U |
| 79-01-6 | Trichloroethene | 100 | |
| 124-48-1 | Dibromochloromethane | 5 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 5 | U |
| 71-43-2 | Benzene | 5 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | 5 | U |
| 75-25-2 | Bromoform | 5 | U |
| 108-10-1 | 4-Methyl-2-Pentanone | 10 | U |
| 591-78-6 | 2-Hexanone | 10 | U |
| 127-18-4 | Tetrachloroethene | 2000 | D |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 5 | U |
| 108-88-3 | Toluene | 5 | U |
| 108-90-7 | Chlorobenzene | 5 | U |
| 100-41-4 | Ethylbenzene | 5 | U |
| 100-42-5 | Styrene | 5 | U |
| 1330-20-7 | Xylene (total) | 5 | U |

Date Reported: 01/31/89

John J. Molloy, P.E.
Laboratory Director

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ENVIRONMENTAL and INDUSTRIAL ANALYTICAL LABORATORY

# VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

MW #3
LEROY CALLENDER, P.C.
CANTOR BROTHERS SITE
AQUEOUS SAMPLES

Lab Name: H2M LABS, INC. Contract: GIBBS & HILL

Matrix: WATER
Sample vol: 5 (mL)
Level: LOW
% Moisture: not dec. - dec.
Column: (pack/cap) PACK

Lab Sample ID: 874722
Lab File ID: PU9555
Date Received: 12/28/88
Date Analyzed: 12/30/88
Dilution Factor: 1

Number TICs found: 2

CONCENTRATION UNITS: ug/L

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|---|
| 1 | 75-13-1 | 1,1,2,-TRICHLORO-1,2,2,-TRI- | | | |
| 2 | | FLUOROETHANE | 07:45 | 230 | J |
| 3 | | UNKNOWN | 27:33 | 56 | J |
| 4 | | | | | |
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Date Reported: 01/31/89

John J. Molloy, P.E.
Laboratory Director

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ENVIRONMENTAL and INDUSTRIAL ANALYTICAL LABORATORY

# VOLATILE ORGANICS ANALYSIS DATA SHEET

MW #3 DL
LEROY CALLENDER, P.C.
CANTOR BROTHERS SITE
AQUEOUS SAMPLES

Lab Name: H2M LABS, INC. Contract: GIBBS & HILL

Matrix: WATER
Sample vol: 250 ul
Level: LOW
% Moisture:not dec. - dec.
Column:(pack/cap) PACK

Lab Sample ID: 874722 DL
Lab File ID: PU9558
Date Received: 12/28/88
Date Analyzed: 12/30/88
Dilution Factor: 20

CONCENTRATION UNITS: ug/L

| CAS NO. | COMPOUND | | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 200 | U |
| 74-83-9 | Bromomethane | 200 | U |
| 75-01-4 | Vinyl Chloride | 200 | U |
| 75-00-3 | Chloroethane | 200 | U |
| 75-09-2 | Methylene Chloride | 130 | B |
| 67-64-1 | Acetone | 42 | J,B |
| 75-15-0 | Carbon Disulfide | 100 | U |
| 75-35-4 | 1,1-Dichloroethene | 100 | U |
| 75-34-3 | 1,1-Dichloroethane | 100 | U |
| 540-59-0 | 1,2-Dichloroethene (total) | 100 | U |
| 67-66-3 | Chloroform | 100 | U |
| 107-06-2 | 1,2-Dichloroethane | 100 | U |
| 78-93-3 | 2-Butanone | 140 | J,B |
| 71-55-6 | 1,1,1-Trichloroethane | 34 | J |
| 56-23-5 | Carbon Tetrachloride | 100 | U |
| 108-05-4 | Vinyl Acetate | 200 | U |
| 75-27-4 | Bromodichloromethane | 100 | U |
| 78-87-5 | 1,2-Dichloropropane | 100 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 100 | U |
| 79-01-6 | Trichloroethene | 130 | |
| 124-48-1 | Dibromochloromethane | 100 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 100 | U |
| 71-43-2 | Benzene | 100 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | 100 | U |
| 75-25-2 | Bromoform | 100 | U |
| 108-10-1 | 4-Methyl-2-Pentanone | 200 | U |
| 591-78-6 | 2-Hexanone | 200 | U |
| 127-18-4 | Tetrachloroethene | 3700 | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 100 | U |
| 108-88-3 | Toluene | 100 | U |
| 108-90-7 | Chlorobenzene | 100 | U |
| 100-41-4 | Ethylbenzene | 100 | U |
| 100-42-5 | Styrene | 100 | U |
| 1330-20-7 | Xylene (total) | 100 | U |

Date Reported: 01/31/89

*Analyte found in spiking solution

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Laboratory Director

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ENVIRONMENTAL and INDUSTRIAL ANALYTICAL LABORATORY


## VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

MW #3 DL
LEROY CALLENDER, P.C.
CANTOR BROTHERS SITE
AQUEOUS SAMPLES

Lab Name: H2M LABS, INC. Contract: GIBBS & HILL

Matrix: WATER
Sample vol: 250 ul
Level: LOW
% Moisture:not dec. - dec.
Column:(pack/cap) PACK

Lab Sample ID: 874722 DL
Lab File ID: PU9558
Date Received: 12/28/88
Date Analyzed: 12/30/88
Dilution Factor: 20

Number TICs found: 0

CONCENTRATION UNITS: ug/L

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|---|
| 1 | | NO TICs FOUND | | | |
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Date Reported: 01/31/89

John J. Molloy, P.E.
Laboratory Director

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ENVIRONMENTAL and INDUSTRIAL ANALYTICAL LABORATORY

# VOLATILE ORGANICS ANALYSIS DATA SHEET

MW #4
LEROY CALLENDER, P.C.
CANTOR BROTHERS SITE
AQUEOUS SAMPLES

Lab Name: H2M LABS, INC. Contract: GIBBS & HILL

Matrix: WATER
Sample vol: 5 mL
Level: LOW
% Moisture:not dec. -- dec.
Column:(pack/cap) PACK

Lab Sample ID: 874723
Lab File ID: PU9556
Date Received: 12/28/88
Date Analyzed: 12/30/88
Dilution Factor: 1

| CAS NO. | COMPOUND | CONCENTRATION UNITS: ug/L | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 8 | B |
| 67-64-1 | Acetone | 4 | J,B |
| 75-15-0 | Carbon Disulfide | 5 | U |
| 75-35-4 | 1,1-Dichloroethene | 5 | U |
| 75-34-3 | 1,1-Dichloroethane | 5 | U |
| 540-59-0 | 1,2-Dichloroethene (total) | 5 | U |
| 67-66-3 | Chloroform | 5 | U |
| 107-06-2 | 1,2-Dichloroethane | 5 | U |
| 78-93-3 | 2-Butanone | 10 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 5 | U |
| 56-23-5 | Carbon Tetrachloride | 5 | U |
| 108-05-4 | Vinyl Acetate | 10 | U |
| 75-27-4 | Bromodichloromethane | 5 | U |
| 78-87-5 | 1,2-Dichloropropane | 5 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 5 | U |
| 79-01-6 | Trichloroethene | 10 | |
| 124-48-1 | Dibromochloromethane | 5 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 5 | U |
| 71-43-2 | Benzene | 5 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | 5 | U |
| 75-25-2 | Bromoform | 5 | U |
| 108-10-1 | 4-Methyl-2-Pentanone | 10 | U |
| 591-78-6 | 2-Hexanone | 10 | U |
| 127-18-4 | Tetrachloroethene | 18 | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 5 | U |
| 108-88-3 | Toluene | 5 | U |
| 108-90-7 | Chlorobenzene | 5 | U |
| 100-41-4 | Ethylbenzene | 5 | U |
| 100-42-5 | Styrene | 5 | U |
| 1330-20-7 | Xylene (total) | 5 | U |

Date Reported: 01/31/89

John J. Molloy, P.E.
Laboratory Director

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ENVIRONMENTAL and INDUSTRIAL ANALYTICAL LABORATORY


## VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

MW #4
LEROY CALLENDER, P.C.
CANTOR BROTHERS SITE
AQUEOUS SAMPLES

Lab Name: H2M LABS, INC. Contract: GIBBS & HILL

Matrix: WATER
Sample vol: 5 (mL)
Level: LOW
% Moisture: not dec. - dec.
Column: (pack/cap) PACK

Lab Sample ID: 874723
Lab File ID: PU9556
Date Received: 12/28/88
Date Analyzed: 12/30/88
Dilution Factor: 1

Number TICs found: 0

CONCENTRATION UNITS: ug/L

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|---|
| 1 | | NO TICs FOUND | | | |
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Date Reported: 01/31/89

John J. Molloy, P.E.
Laboratory Director

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ENVIRONMENTAL and INDUSTRIAL ANALYTICAL LABORATORY

# VOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD BLANK
LEROY CALLENDER, P.C.
CANTOR BROTHERS SITE
AQUEOUS SAMPLES

Lab Name: H2M LABS, INC. Contract: GIBBS & HILL

Matrix: WATER
Sample vol: 5 mL
Level: LOW
% Moisture:not dec. -- dec.
Column:(pack/cap) PACK

Lab Sample ID: 874724
Lab File ID: PU9557
Date Received: 12/28/88
Date Analyzed: 12/30/88
Dilution Factor: 1

| CAS NO. | COMPOUND | CONCENTRATION UNITS: ug/L | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 4 | J,B |
| 67-64-1 | Acetone | 4 | J,B |
| 75-15-0 | Carbon Disulfide | 5 | U |
| 75-35-4 | 1,1-Dichloroethene | 5 | U |
| 75-34-3 | 1,1-Dichloroethane | 5 | U |
| 540-59-0 | 1,2-Dichloroethene (total) | 5 | U |
| 67-66-3 | Chloroform | 1 | J,B |
| 107-06-2 | 1,2-Dichloroethane | 5 | U |
| 78-93-3 | 2-Butanone | 2 | J,B |
| 71-55-6 | 1,1,1-Trichloroethane | 5 | U |
| 56-23-5 | Carbon Tetrachloride | 5 | U |
| 108-05-4 | Vinyl Acetate | 10 | U |
| 75-27-4 | Bromodichloromethane | 5 | U |
| 78-87-5 | 1,2-Dichloropropane | 5 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 5 | U |
| 79-01-6 | Trichloroethene | 1 | J |
| 124-48-1 | Dibromochloromethane | 5 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 5 | U |
| 71-43-2 | Benzene | 5 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | 5 | U |
| 75-25-2 | Bromoform | 5 | U |
| 108-10-1 | 4-Methyl-2-Pentanone | 10 | U |
| 591-78-6 | 2-Hexanone | 10 | U |
| 127-18-4 | Tetrachloroethene | 5 | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 5 | U |
| 108-88-3 | Toluene | 5 | U |
| 108-90-7 | Chlorobenzene | 5 | U |
| 100-41-4 | Ethylbenzene | 5 | U |
| 100-42-5 | Styrene | 5 | U |
| 1330-20-7 | Xylene (total) | 5 | U |

Date Reported: 01/31/89

John J. Molloy, P.E.
Laboratory Director

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ENVIRONMENTAL and INDUSTRIAL ANALYTICAL LABORATORY


## VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

FIELD BLANK
LEROY CALLENDER, P.C.
CANTOR BROTHERS SITE
AQUEOUS SAMPLES

Lab Name: H2M LABS, INC. Contract: GIBBS & HILL

Matrix: WATER
Sample vol: 5 (mL)
Level: LOW
% Moisture: not dec. - dec.
Column: (pack/cap) PACK

Lab Sample ID: 874724
Lab File ID: PU9557
Date Received: 12/28/88
Date Analyzed: 12/30/88
Dilution Factor: 1

Number TICs found: 1

CONCENTRATION UNITS: ug/L

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|---|
| 1 | 1066-40-6 | TRIMETHYL SILANOL | 9:33 | 18 | J |
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Date Reported: 01/31/89

John J. Molloy, P.E.
Laboratory Director

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ENVIRONMENTAL and INDUSTRIAL ANALYTICAL LABORATORY

VOLATILE ORGANICS ANALYSIS DATA SHEET

TRIP BLANK
LEROY CALLENDER, P.C.
CANTOR BROTHERS SITE
AQUEOUS SAMPLES

Lab Name: H2M LABS, INC. Contract: GIBBS & HILL
Matrix: WATER Lab Sample ID: 874725
Sample vol: 5 mL Lab File ID: PU9568
Level: LOW Date Received: 12/28/88
% Moisture:not dec. -- dec. Date Analyzed: 12/31/88
Column:(pack/cap) PACK Dilution Factor: 1

| CAS NO. | COMPOUND | CONCENTRATION UNITS: ug/L | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 3 | J,B |
| 67-64-1 | Acetone | 23 | B |
| 75-15-0 | Carbon Disulfide | 5 | U |
| 75-35-4 | 1,1-Dichloroethene | 5 | U |
| 75-34-3 | 1,1-Dichloroethane | 5 | U |
| 540-59-0 | 1,2-Dichloroethene (total) | 5 | U |
| 67-66-3 | Chloroform | 5 | U |
| 107-06-2 | 1,2-Dichloroethane | 5 | U |
| 78-93-3 | 2-Butanone | 3 | J,B |
| 71-55-6 | 1,1,1-Trichloroethane | 5 | U |
| 56-23-5 | Carbon Tetrachloride | 5 | U |
| 108-05-4 | Vinyl Acetate | 10 | U |
| 75-27-4 | Bromodichloromethane | 5 | U |
| 78-87-5 | 1,2-Dichloropropane | 5 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 5 | U |
| 79-01-6 | Trichloroethene | 5 | U |
| 124-48-1 | Dibromochloromethane | 5 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 5 | U |
| 71-43-2 | Benzene | 5 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | 5 | U |
| 75-25-2 | Bromoform | 5 | U |
| 108-10-1 | 4-Methyl-2-Pentanone | 10 | U |
| 591-78-6 | 2-Hexanone | 10 | U |
| 127-18-4 | Tetrachloroethene | 5 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 5 | U |
| 108-88-3 | Toluene | 5 | U |
| 108-90-7 | Chlorobenzene | 5 | U |
| 100-41-4 | Ethylbenzene | 5 | U |
| 100-42-5 | Styrene | 5 | U |
| 1330-20-7 | Xylene (total) | 5 | U |

Date Reported: 01/31/89

John J. Molloy, P.E.
Laboratory Director

H2M LABS INC
575 Broad Hollow Road, Melville, N.Y. 11747
(516) 694-3040 FAX: (516) 694-4122
ENVIRONMENTAL and INDUSTRIAL ANALYTICAL LABORATORY

# VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

TRIP BLANK
LEROY CALLENDER, P.C.
CANTOR BROTHERS SITE
AQUEOUS SAMPLES

Lab Name: H2M LABS, INC. Contract: GIBBS & HILL

Matrix: WATER
Sample vol: 5 (mL)
Level: LOW
% Moisture:not dec. - dec.
Column:(pack/cap) PACK

Lab Sample ID: 874725
Lab File ID: PU9568
Date Received: 12/28/88
Date Analyzed: 12/31/88
Dilution Factor: 1

Number TICs found: 0

CONCENTRATION UNITS: ug/L

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|---|
| 1 | | NO TICs FOUND | | | |
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Date Reported: 01/31/89

John J. Molloy, P.E.
Laboratory Director

H2M LABS, INC
575 Broad Hollow Road, Melville, N.Y. 11747
(516) 694-3040 FAX: (516) 694-4122
ENVIRONMENTAL and INDUSTRIAL ANALYTICAL LABORATORY

# VOLATILE ORGANICS ANALYSIS DATA SHEET

MW A MS
LEROY CALLENDER, P.C.
CANTOR BROTHERS SITE
AQUEOUS SAMPLES

Lab Name: H2M LABS, INC. Contract: GIBBS & HILL
Matrix: WATER
Sample vol: 5 mL
Level: LOW
% Moisture: not dec. - dec.
Column: (pack/cap) PACK
Lab Sample ID: 874719 MS
Lab File ID: PU9551
Date Received: 12/28/88
Date Analyzed: 12/30/88
Dilution Factor: 1

CONCENTRATION UNITS: ug/L

| CAS NO. | COMPOUND | | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 17 | B |
| 67-64-1 | Acetone | 5 | J,B |
| 75-15-0 | Carbon Disulfide | 5 | U |
| 75-35-4 | 1,1-Dichloroethene | * | |
| 75-34-3 | 1,1-Dichloroethane | 5 | U |
| 540-59-0 | 1,2-Dichloroethene (total) | 7 | |
| 67-66-3 | Chloroform | 11 | B |
| 107-06-2 | 1,2-Dichloroethane | 5 | U |
| 78-93-3 | 2-Butanone | 5 | J,B |
| 71-55-6 | 1,1,1-Trichloroethane | 7 | |
| 56-23-5 | Carbon Tetrachloride | 5 | U |
| 108-05-4 | Vinyl Acetate | 10 | U |
| 75-27-4 | Bromodichloromethane | 5 | U |
| 78-87-5 | 1,2-Dichloropropane | 5 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 5 | U |
| 79-01-6 | Trichloroethene | * | |
| 124-48-1 | Dibromochloromethane | 5 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 5 | U |
| 71-43-2 | Benzene | * | |
| 10061-02-6 | trans-1,3-Dichloropropene | 5 | U |
| 75-25-2 | Bromoform | 5 | U |
| 108-10-1 | 4-Methyl-2-Pentanone | 10 | U |
| 591-78-6 | 2-Hexanone | 10 | U |
| 127-18-4 | Tetrachloroethene | 100 | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 5 | U |
| 108-88-3 | Toluene | * | |
| 108-90-7 | Chlorobenzene | * | |
| 100-41-4 | Ethylbenzene | 5 | U |
| 100-42-5 | Styrene | 5 | U |
| 1330-20-7 | Xylene (total) | 5 | U |

Date Reported: 01/31/89

*Analyte found in spiking solution

John J. Molloy, P.E.
Laboratory Director

# H2M LABS, INC.

575 Broad Hollow Road, Melville, N.Y. 11747
(516) 694-3040 FAX: (516) 694-4122

ENVIRONMENTAL and INDUSTRIAL ANALYTICAL LABORATORY


## VOLATILE ORGANICS ANALYSIS DATA SHEET

MW A MSD
LEROY CALLENDER, P.C.
CANTOR BROTHERS SITE
AQUEOUS SAMPLES

Lab Name: H2M LABS, INC. Contract: GIBBS & HILL

Matrix: WATER
Sample vol: 5 mL
Level: LOW
% Moisture: not dec. - dec.
Column: (pack/cap) PACK

Lab Sample ID: 874719 MSD
Lab File ID: PU9552
Date Received: 12/28/88
Date Analyzed: 12/30/88
Dilution Factor: 1

| CAS NO. | COMPOUND | CONCENTRATION UNITS: ug/L | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 20 | B |
| 67-64-1 | Acetone | 9 | J,B |
| 75-15-0 | Carbon Disulfide | 3 | B |
| 75-35-4 | 1,1-Dichloroethene | * | |
| 75-34-3 | 1,1-Dichloroethane | 5 | U |
| 540-59-0 | 1,2-Dichloroethene (total) | 8 | |
| 67-66-3 | Chloroform | 12 | B |
| 107-06-2 | 1,2-Dichloroethane | 5 | U |
| 78-93-3 | 2-Butanone | 6 | B |
| 71-55-6 | 1,1,1-Trichloroethane | 6 | |
| 56-23-5 | Carbon Tetrachloride | 5 | U |
| 108-05-4 | Vinyl Acetate | 10 | U |
| 75-27-4 | Bromodichloromethane | 5 | U |
| 78-87-5 | 1,2-Dichloropropane | 5 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 5 | U |
| 79-01-6 | Trichloroethene | * | |
| 124-48-1 | Dibromochloromethane | 5 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 5 | U |
| 71-43-2 | Benzene | * | |
| 10061-02-6 | trans-1,3-Dichloropropene | 5 | U |
| 75-25-2 | Bromoform | 5 | U |
| 108-10-1 | 4-Methyl-2-Pentanone | 10 | U |
| 591-78-6 | 2-Hexanone | 10 | U |
| 127-18-4 | Tetrachloroethene | 110 | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 5 | U |
| 108-88-3 | Toluene | * | |
| 108-90-7 | Chlorobenzene | * | |
| 100-41-4 | Ethylbenzene | 5 | U |
| 100-42-5 | Styrene | 5 | U |
| 1330-20-7 | Xylene (total) | 5 | U |

Date Reported: 01/31/89

*Analyte found in spiking solution

John J. Molloy, P.E.
Laboratory Director

# H2M LABS, INC.

## CASE NARRATIVE FOR BASE NEUTRAL/ACID EXTRACTABLES

All quality control and calibration requirements for this data package were met with the following exceptions:

The recovery of 2,4,6-tribromophenol was outside the allowable limits for MW-A, MW-A MS, MW-A MSD, MW#1 thru MW#4, SD-1 and the field blank.

The recovery of the spiked compound pyrene was outside the allowable limits for SD-1 MS/MSD.

Based on previous site data, SD-1, SD-2, SD-3 were extracted using the medium level protocol. SD-1 was also analyzed at a secondary dilution.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

John J. Molloy, P.E.
Laboratory Director

# H2M LABS, INC.

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW A

Lab Name: H2M LABS INC. Contract: -----

Lab Code: ----- Case No.: ----- SAS No.: ----- SDG No.: MW A

Matrix: (soil/water) WATER Lab Sample ID: 874719

Sample wt/vol: 1000 (g/ml) ML Lab File ID: :P5397

Level: (low/med) LOW Date Received: 12/28/88

% Moisture: not dec.-- dec. -- Date Extracted: 12/29/88

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 1/12/89

GPC Cleanup: (Y/N) N pH: 7.2 Dilution Factor: 1.00000

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L | Q |
|---|---|---|---|
| 108-95-2 | Phenol | 10. | U |
| 111-44-4 | bis(2-Chloroethyl)Ether | 10. | U |
| 95-57-8 | 2-Chlorophenol | 10. | U |
| 541-73-1 | 1,3-Dichlorobenzene | 10. | U |
| 106-46-7 | 1,4-Dichlorobenzene | 10. | U |
| 100-51-6 | Benzyl alcohol | 10. | U |
| 95-50-1 | 1,2-Dichlorobenzene | 10. | U |
| 95-48-7 | 2-Methylphenol | 10. | U |
| 39638-32-9 | bis(2-chloroisopropyl)ether | 10. | U |
| 106-44-5 | 4-Methylphenol | 10. | U |
| 621-64-7 | N-Nitroso-Di-n-propylamine | 10. | U |
| 67-72-1 | Hexachloroethane | 10. | U |
| 98-95-3 | Nitrobenzene | 10. | U |
| 78-59-1 | Isophorone | 10. | U |
| 88-75-5 | 2-Nitrophenol | 10. | U |
| 105-67-9 | 2,4-Dimethylphenol | 10. | U |
| 65-85-0 | Benzoic acid | 50. | U |
| 111-91-1 | bis(2-Chloroethoxy)methane | 10. | U |
| 120-83-2 | 2,4-Dichlorophenol | 10. | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 10. | U |
| 91-20-3 | Naphthalene | 10. | U |
| 106-47-8 | 4-Chloroaniline | 10. | U |
| 87-68-3 | Hexachlorobutadiene | 10. | U |
| 59-50-7 | 4-Chloro-3-methylphenol | 10. | U |
| 91-57-6 | 2-Methylnaphthalene | 10. | U |
| 77-47-4 | Hexachlorocyclopentadiene | 10. | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 10. | U |
| 95-95-4 | 2,4,5-Trichlorophenol | 50. | U |
| 91-58-7 | 2-Chloronaphthalene | 10. | U |
| 88-74-4 | 2-Nitroaniline | 50. | U |
| 131-11-3 | Dimethylphthalate | 10. | U |
| 208-96-8 | Acenaphthylene | 10. | U |
| 606-20-2 | 2,6-Dinitrotoluene | 10. | U |

Date Reported: 2/26/89

John J. Molloy, P.E.

H2M LABS, INC.
575 Broad Hollow Road, Melville, N.Y. 11747
(516) 694-3040 FAX (516) 694-6122

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW A

Lab Name: H2M LABS INC. Contract: -----

Lab Code: ----- Case No.: ----- SAS No.: ----- SDG No.: MW A

Matrix: (soil/water) WATER Lab Sample ID: 874719

Sample wt/vol: 1000 (g/mL) ML Lab File ID: P5397

Level: (low/med) LOW Date Received: 12/28/88

% Moisture: not dec.-- dec. -- Date Extracted: 12/29/88

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 1/12/89

GPC Cleanup: (Y/N) N pH: 7.2 Dilution Factor: 1.00000

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L | | Q |
|---|---|---|---|---|
| 99-09-2 | 3-Nitroaniline | 50. | U | |
| 83-32-9 | Acenaphthene | 10. | U | |
| 51-28-5 | 2,4-Dinitrophenol | 50. | U | |
| 100-02-7 | 4-Nitrophenol | 50. | U | |
| 132-64-9 | Dibenzofuran | 10. | U | |
| 121-14-2 | 2,4-Dinitrotoluene | 10. | U | |
| 84-66-2 | Diethylphthalate | 10. | U | |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 10. | U | |
| 86-73-7 | Fluorene | 10. | U | |
| 100-01-6 | 4-Nitroaniline | 50. | U | |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 50. | U | |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 10. | U | |
| 101-55-3 | 4-Bromophenyl-phenylether | 10. | U | |
| 118-74-1 | Hexachlorobenzene | 10. | U | |
| 87-86-5 | Pentachlorophenol | 50. | U | |
| 85-01-8 | Phenanthrene | 10. | U | |
| 120-12-7 | Anthracene | 10. | U | |
| 84-74-2 | Di-n-butylphthalate | 10. | U | |
| 206-44-0 | Fluoranthene | 10. | U | |
| 129-00-0 | Pyrene | 10. | U | |
| 85-68-7 | Butylbenzylphthalate | 10. | U | |
| 91-94-1 | 3,3'-Dichlorobenzidine | 20. | U | |
| 56-55-3 | Benzo(a)anthracene | 10. | U | |
| 218-01-9 | Chrysene | 10. | U | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 10. | I | B |
| 117-84-0 | Di-n-octylphthalate | 10. | U | |
| 205-99-2 | Benzo(b)fluoranthene | 10. | U | |
| 207-08-9 | Benzo(k)fluoranthene | 10. | U | |
| 50-32-8 | Benzo(a)pyrene | 10. | U | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 10. | U | |
| 53-70-3 | Dibenzo(a,h)anthracene | 10. | U | |
| 191-24-2 | Benzo(g,h,i)perylene | 10. | U | |

(1) - Cannot be separated from Diphenylamine

John J. Molloy, P.E.

# H2M LABS, INC.

575 Broad Hollow Road, Melville, N.Y. 11747
(516) 694-3040 FAX (516) 694-6122


SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
MW A

Lab Name: H2M LABS INC. Contract: -----

Lab Code: ----- Case No.: ----- SAS No.: ----- SDG No.: MW A

Matrix: (soil/water) WATER Lab Sample ID: 874719

Sample wt/vol: 1000 (g/mL) ML Lab File ID: >P5397

Level: (low/med) LOW Date Received: 12/28/88

% Moisture: not dec.-- dec. -- Date Extracted: 12/29/88

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 1/12/89

GPC Cleanup: (Y/N) N pH: 7.2 Dilution Factor: 1.00000

Number TICs found: 5

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|---|
| 1. | 127184 | Ethene, tetrachloro- (9CI) | 6.45 | 22. | JJ |
| 2. | 21964498 | 1,13-Tetradecadiene (8CI9CI) | 29.51 | 48. | JJB |
| 3. | | Unknown | 32.45 | 8. | JJ |
| 4. | | Unknown | 35.30 | 20. | JJ |
| 5. | | Unknown | 36.77 | 16. | JJB |
| 6. | | | | | |
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| 30. | | | | | |

Date Reported: 2/26/89

John J. Molloy P.E.
Laboratory Director

H2M LABS, INC.
575 Broad Hollow Road, Melville, N.Y. 11747
(516) 694-3040 FAX: (516) 694-8122

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

MW #1

Lab Name: H2M LABS INC. Contract: -----

Lab Code: ----- Case No.: ----- SAS No.: ----- SDG No.: MW A

Matrix: (soil/water) WATER Lab Sample ID: 874720

Sample wt/vol: 1000 (g/mL) ML Lab File ID: P5400

Level: (low med) LOW Date Received: 12/28/88

% Moisture: not dec.-- dec. -- Date Extracted: 12/29/88

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 1/12/89

GPC Cleanup: (Y/N) N pH: 7.2 Dilution Factor: 1.00000

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L | Q |
|---|---|---|---|
| 108-95-2 | Phenol | 10. | U |
| 111-44-4 | bis(2-Chloroethyl)Ether | 10. | U |
| 95-57-8 | 2-Chlorophenol | 10. | U |
| 541-73-1 | 1,3-Dichlorobenzene | 10. | U |
| 106-46-7 | 1,4-Dichlorobenzene | 10. | U |
| 100-51-6 | Benzyl alcohol | 10. | U |
| 95-50-1 | 1,2-Dichlorobenzene | 10. | U |
| 95-48-7 | 2-Methylphenol | 10. | U |
| 39638-32-9 | bis(2-chloroisopropyl)ether | 10. | U |
| 106-44-5 | 4-Methylphenol | 10. | U |
| 621-64-7 | N-Nitroso-Di-n-propylamine | 10. | U |
| 67-72-1 | Hexachloroethane | 10. | U |
| 98-95-3 | Nitrobenzene | 10. | U |
| 78-59-1 | Isophorone | 10. | U |
| 88-75-5 | 2-Nitrophenol | 10. | U |
| 105-67-9 | 2,4-Dimethylphenol | 10. | U |
| 65-85-0 | Benzoic acid | 50. | U |
| 111-91-1 | bis(2-Chloroethoxy)methane | 10. | U |
| 120-83-2 | 2,4-Dichlorophenol | 10. | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 10. | U |
| 91-20-3 | Naphthalene | 10. | U |
| 106-47-8 | 4-Chloroaniline | 10. | U |
| 87-68-3 | Hexachlorobutadiene | 10. | U |
| 59-50-7 | 4-Chloro-3-methylphenol | 10. | U |
| 91-57-6 | 2-Methylnaphthalene | 10. | U |
| 77-47-4 | Hexachlorocyclopentadiene | 10. | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 10. | U |
| 95-95-4 | 2,4,5-Trichlorophenol | 50. | U |
| 91-58-7 | 2-Chloronaphthalene | 10. | U |
| 88-74-4 | 2-Nitroaniline | 50. | U |
| 131-11-3 | Dimethylphthalate | 10. | U |
| 208-96-8 | Acenaphthylene | 10. | U |
| 606-20-2 | 2,6-Dinitrotoluene | 10. | U |

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John J. Maltby, PE

Date Reported: 2/26/89

# H2M LABS, INC.

575 Broad Hollow Road, Melville, N.Y. 1174
(516) 694-3040 FAX (516) 694-6122


SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW #1

Lab Name: H2M LABS INC. Contract: -----

Lab Code: ----- Case No.: ----- SAS No.: ----- SDG No.: MW A

Matrix: (soil/water) WATER Lab Sample ID: 874720

Sample wt/vol: 1000 (g/mL) ML Lab File ID: >P5400

Level: (low/med) LOW Date Received: 12/28/88

% Moisture: not dec.-- dec. -- Date Extracted: 12/29/88

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 1/12/89

GPC Cleanup: (Y/N) N pH: 7.2 Dilution Factor: 1.00000

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L | Q |
|---|---|---|---|
| 99-09-2 | 3-Nitroaniline | 50. | U |
| 83-32-9 | Acenaphthene | 10. | U |
| 51-28-5 | 2,4-Dinitrophenol | 50. | U |
| 100-02-7 | 4-Nitrophenol | 50. | U |
| 132-64-9 | Dibenzofuran | 10. | U |
| 121-14-2 | 2,4-Dinitrotoluene | 10. | U |
| 84-66-2 | Diethylphthalate | 10. | U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 10. | U |
| 86-73-7 | Fluorene | 10. | U |
| 100-01-6 | 4-Nitroaniline | 50. | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 50. | U |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 10. | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 10. | U |
| 118-74-1 | Hexachlorobenzene | 10. | U |
| 87-86-5 | Pentachlorophenol | 50. | U |
| 85-01-8 | Phenanthrene | 10. | U |
| 120-12-7 | Anthracene | 10. | U |
| 84-74-2 | Di-n-butylphthalate | 10. | U |
| 206-44-0 | Fluoranthene | 10. | U |
| 129-00-0 | Pyrene | 10. | U |
| 85-68-7 | Butylbenzylphthalate | 10. | U |
| 91-94-1 | 3,3'-Dichlorobenzidine | 20. | U |
| 56-55-3 | Benzo(a)anthracene | 10. | U |
| 218-01-9 | Chrysene | 10. | U |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 11. | B |
| 117-84-0 | Di-n-octylphthalate | 10. | U |
| 205-99-2 | Benzo(b)fluoranthene | 10. | U |
| 207-08-9 | Benzo(k)fluoranthene | 10. | U |
| 50-32-8 | Benzo(a)pyrene | 10. | U |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 10. | U |
| 53-70-3 | Dibenzo(a,h)anthracene | 10. | U |
| 191-24-2 | Benzo(g,h,i)perylene | 10. | U |

(1) - Cannot be separated from Diphenylamine

John J. Kenny, P.E.
Laboratory Director

H2M LABS, INC.
575 Broad Hollow Road, Melville, N.Y. 11747
(516) 694-3040 FAX (516) 694-6286

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW #1

Lab Name: H2M LABS INC. Contract: -----

Lab Code: ----- Case No.: ----- SAS No.: ----- SDG No.: MW A

Matrix: (soil/water) WATER Lab Sample ID: 874720

Sample wt/vol: 1000 (g/mL) ML Lab File ID: >P5400

Level: (low/med) LOW Date Received: 12/28/88

% Moisture: not dec.-- dec. -- Date Extracted: 12/29/88

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 1/12/89

GPC Cleanup: (Y/N) N pH: 7.2 Dilution Factor: 1.00000

Number TICs found: 7 CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|---|
| 1. | 127184 | Ethene, tetrachloro- (9CI) | 6.43 | 12. | JD |
| 2. | 21964498 | 1,13-Tetradecadiene (8CI,9CI) | 29.69 | 24. | JDE |
| 3. | 462953 | Ethane, 1,1'-[methylenebis(o | 32.48 | 10. | JD |
| 4. | | Unknown | 32.58 | 14. | JD |
| 5. | | Unknown Alcohol | 35.32 | 46. | JD |
| 6. | | Unknown | 37.80 | 20. | JD |
| 7. | | Unknown | 40.62 | 24. | JD |
| 8. | | | | | |
| 9. | | | | | |
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| 30. | | | | | |

Date Reported: 2/26/89

John I. Mulloy, P.E.
Director

# H2M LABS, INC.

575 Broad Hollow Road, Melville, N.Y. 11747
(516) 694-3040 FAX (516) 694-6286

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

MW #2

Lab Name: H2M LABS INC. Contract: -----

Lab Code: ----- Case No.: ----- SAS No.: ----- SDG No.: MW A

Matrix: (soil/water) WATER Lab Sample ID: 874721

Sample wt/vol: 1000 (g/mL) ML Lab File ID: P5401

Level: (low/med) LOW Date Received: 12/28/88

% Moisture: not dec.-- dec. -- Date Extracted: 12/29/88

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 1/12/89

GPC Cleanup: (Y/N) N pH: 7.2 Dilution Factor: 1.00000

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L | Q |
|---|---|---|---|
| 108-95-2 | Phenol | 10. | U |
| 111-44-4 | bis(2-Chloroethyl)Ether | 10. | U |
| 95-57-8 | 2-Chlorophenol | 10. | U |
| 541-73-1 | 1,3-Dichlorobenzene | 10. | U |
| 106-46-7 | 1,4-Dichlorobenzene | 10. | U |
| 100-51-6 | Benzyl alcohol | 10. | U |
| 95-50-1 | 1,2-Dichlorobenzene | 10. | U |
| 95-48-7 | 2-Methylphenol | 10. | U |
| 39638-32-9 | bis(2-chloroisopropyl)ether | 10. | U |
| 106-44-5 | 4-Methylphenol | 10. | U |
| 621-64-7 | N-Nitroso-Di-n-propylamine | 10. | U |
| 67-72-1 | Hexachloroethane | 10. | U |
| 98-95-3 | Nitrobenzene | 10. | U |
| 78-59-1 | Isophorone | 10. | U |
| 88-75-5 | 2-Nitrophenol | 10. | U |
| 105-67-9 | 2,4-Dimethylphenol | 10. | U |
| 65-85-0 | Benzoic acid | 50. | U |
| 111-91-1 | bis(2-Chloroethoxy)methane | 10. | U |
| 120-83-2 | 2,4-Dichlorophenol | 10. | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 10. | U |
| 91-20-3 | Naphthalene | 10. | U |
| 106-47-8 | 4-Chloroaniline | 10. | U |
| 87-68-3 | Hexachlorobutadiene | 10. | U |
| 59-50-7 | 4-Chloro-3-methylphenol | 10. | U |
| 91-57-6 | 2-Methylnaphthalene | 10. | U |
| 77-47-4 | Hexachlorocyclopentadiene | 10. | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 10. | U |
| 95-95-4 | 2,4,5-Trichlorophenol | 50. | U |
| 91-58-7 | 2-Chloronaphthalene | 10. | U |
| 88-74-4 | 2-Nitroaniline | 50. | U |
| 131-11-3 | Dimethylphthalate | 10. | U |
| 208-96-8 | Acenaphthylene | 10. | U |
| 606-20-2 | 2,6-Dinitrotoluene | 10. | U |

John J. Manley, P.E.

2A

# H2M LABS, INC.

575 Broad Hollow Road, Melville, N.Y. 11747
(516) 694-3040 FAX (516) 694-6286


SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

MW #2

Lab Name: H2M LABS INC. Contract: -----

Lab Code: ----- Case No.: ----- SAS No.: ----- SDG No.: MW A

Matrix: (soil/water) WATER Lab Sample ID: 874721

Sample wt/vol: 1000 (g/mL) ML Lab File ID: >P5401

Level: (low/med) LOW Date Received: 12/28/88

% Moisture: not dec.-- dec. -- Date Extracted: 12/29/88

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 1/12/89

GPC Cleanup: (Y/N) N pH: 7.2 Dilution Factor: 1.00000

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L | Q |
|---|---|---|---|
| 99-09-2 | 3-Nitroaniline | 50. | U |
| 83-32-9 | Acenaphthene | 10. | U |
| 51-28-5 | 2,4-Dinitrophenol | 50. | U |
| 100-02-7 | 4-Nitrophenol | 50. | U |
| 132-64-9 | Dibenzofuran | 10. | U |
| 121-14-2 | 2,4-Dinitrotoluene | 10. | U |
| 84-66-2 | Diethylphthalate | 10. | U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 10. | U |
| 86-73-7 | Fluorene | 10. | U |
| 100-01-6 | 4-Nitroaniline | 50. | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 50. | U |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 10. | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 10. | U |
| 118-74-1 | Hexachlorobenzene | 10. | U |
| 87-86-5 | Pentachlorophenol | 50. | U |
| 85-01-8 | Phenanthrene | 10. | U |
| 120-12-7 | Anthracene | 10. | U |
| 84-74-2 | Di-n-butylphthalate | 10. | U |
| 206-44-0 | Fluoranthene | 10. | U |
| 129-00-0 | Pyrene | 10. | U |
| 85-68-7 | Butylbenzylphthalate | 10. | U |
| 91-94-1 | 3,3'-Dichlorobenzidine | 20. | U |
| 56-55-3 | Benzo(a)anthracene | 10. | U |
| 218-01-9 | Chrysene | 10. | U |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 14. | B |
| 117-84-0 | Di-n-octylphthalate | 10. | U |
| 205-99-2 | Benzo(b)fluoranthene | 10. | U |
| 207-08-9 | Benzo(k)fluoranthene | 10. | U |
| 50-32-8 | Benzo(a)pyrene | 10. | U |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 10. | U |
| 53-70-3 | Dibenzo(a,h)anthracene | 10. | U |
| 191-24-2 | Benzo(g,h,i)perylene | 10. | U |

(1) - Cannot be separated from Diphenylamine

[signature] Laboratory Director

# H2M LABS, INC.

575 Broad Hollow Road, Melville, N.Y. 11747
(516) 694-3040 FAX (516) 694-6286


SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW #2

Lab Name: H2M LABS INC. Contract: -----

Lab Code: ----- Case No.: ----- SAS No.: ----- SDG No.: MW A

Matrix: (soil/water) WATER Lab Sample ID: 874721

Sample wt/vol: 1000 (g/mL) ML Lab File ID: P5401

Level: (low/med) LOW Date Received: 12/28/88

% Moisture: not dec.-- dec. -- Date Extracted: 12/29/88

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 1/12/89

GPC Cleanup: (Y/N) N pH: 7.2 Dilution Factor: 1.00000

Number TICs found: 4 CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|---|
| 1. | 127184 | Ethene, tetrachloro- (9CI) | 6.43 | 16. | JJ |
| 2. | 2198498 | 1,13-Tetradecadiene (8CI,9CI) | 29.55 | 100. | JB |
| 3. | | Unknown | 35.34 | 28. | JJ |
| 4. | | Unknown | 37.87 | 14. | JJ |
| 5. | | | | | |
| 6. | | | | | |
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| 28. | | Date Reported: 2/26/89 | | | |
| 29. | | | | | |
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John J. [illegible], Ph.D.
Laboratory Director

HOM LABS INC
575 Broad Hollow Road, Melville, N.Y. 11747
(516) 694-3040 FAX: (516) 694-6123

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MW #3

Lab Name: HOM LABS INC. Contract: -----

Lab Code: ----- Case No.: ----- SAS No.: ----- SDG No.: MW A

Matrix: (soil/water) WATER Lab Sample ID: 874722

Sample wt/vol: 1000 (g/mL) ML Lab File ID: P5402

Level: (low/med) LOW Date Received: 12/28/88

% Moisture: not dec.-- dec. -- Date Extracted: 12/29/88

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 1/12/89

GPC Cleanup: (Y/N) N pH: 7.2 Dilution Factor: 1.00000

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L | Q |
|---|---|---|---|
| 108-95-2 | Phenol | 10. | U |
| 111-44-4 | bis(2-Chloroethyl)Ether | 10. | U |
| 95-57-8 | 2-Chlorophenol | 10. | U |
| 541-73-1 | 1,3-Dichlorobenzene | 10. | U |
| 106-46-7 | 1,4-Dichlorobenzene | 10. | U |
| 100-51-6 | Benzyl alcohol | 10. | U |
| 95-50-1 | 1,2-Dichlorobenzene | 10. | U |
| 95-48-7 | 2-Methylphenol | 10. | U |
| 39638-32-9 | bis(2-chloroisopropyl)ether | 10. | U |
| 106-44-5 | 4-Methylphenol | 10. | U |
| 621-64-7 | N-Nitroso-Di-n-propylamine | 10. | U |
| 67-72-1 | Hexachloroethane | 10. | U |
| 98-95-3 | Nitrobenzene | 10. | U |
| 78-59-1 | Isophorone | 10. | U |
| 88-75-5 | 2-Nitrophenol | 10. | U |
| 105-67-9 | 2,4-Dimethylphenol | 10. | U |
| 65-85-0 | Benzoic acid | 50. | U |
| 111-91-1 | bis(2-Chloroethoxy)methane | 10. | U |
| 120-83-2 | 2,4-Dichlorophenol | 10. | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 10. | U |
| 91-20-3 | Naphthalene | 10. | U |
| 106-47-8 | 4-Chloroaniline | 10. | U |
| 87-68-3 | Hexachlorobutadiene | 10. | U |
| 59-50-7 | 4-Chloro-3-methylphenol | 10. | U |
| 91-57-6 | 2-Methylnaphthalene | 10. | U |
| 77-47-4 | Hexachlorocyclopentadiene | 10. | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 10. | U |
| 95-95-4 | 2,4,5-Trichlorophenol | 50. | U |
| 91-58-7 | 2-Chloronaphthalene | 10. | U |
| 88-74-4 | 2-Nitroaniline | 50. | U |
| 131-11-3 | Dimethylphthalate | 10. | U |
| 208-96-8 | Acenaphthylene | 10. | U |
| 606-20-2 | 2,6-Dinitrotoluene | 10. | U |

John J. Molloy, P.E

Date Reported: 2/26/89

H2M LABS, INC.
575 Broad Hollow Road, Melville, N.Y. 11747
(516) 694-3040 FAX (516) 694-6286

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW #3

Lab Name: H2M LABS INC. Contract: -----

Lab Code: ----- Case No.: ----- SAS No.: ----- SDG No.: MW A

Matrix: (soil/water) WATER Lab Sample ID: 874722

Sample wt/vol: 1000 (g/mL) ML Lab File ID: P5402

Level: (low/med) LOW Date Received: 12/28/88

% Moisture: not dec.-- dec. -- Date Extracted: 12/29/88

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 1/12/89

GPC Cleanup: (Y/N) N pH: 7.2 Dilution Factor: 1.00000

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L | Q |
|---|---|---|---|
| 99-09-2 | 3-Nitroaniline | 50. | U |
| 83-32-9 | Acenaphthene | 10. | U |
| 51-28-5 | 2,4-Dinitrophenol | 50. | U |
| 100-02-7 | 4-Nitrophenol | 50. | U |
| 132-64-9 | Dibenzofuran | 10. | U |
| 121-14-2 | 2,4-Dinitrotoluene | 10. | U |
| 84-66-2 | Diethylphthalate | 10. | U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 10. | U |
| 86-73-7 | Fluorene | 10. | U |
| 100-01-6 | 4-Nitroaniline | 50. | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 50. | U |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 10. | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 10. | U |
| 118-74-1 | Hexachlorobenzene | 10. | U |
| 87-86-5 | Pentachlorophenol | 50. | U |
| 85-01-8 | Phenanthrene | 10. | U |
| 120-12-7 | Anthracene | 10. | U |
| 84-74-2 | Di-n-butylphthalate | 10. | U |
| 206-44-0 | Fluoranthene | 10. | U |
| 129-00-0 | Pyrene | 10. | U |
| 85-68-7 | Butylbenzylphthalate | 10. | U |
| 91-94-1 | 3,3'-Dichlorobenzidine | 20. | U |
| 56-55-3 | Benzo(a)anthracene | 10. | U |
| 218-01-9 | Chrysene | 10. | U |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 11. | B |
| 117-84-0 | Di-n-octylphthalate | 10. | U |
| 205-99-2 | Benzo(b)fluoranthene | 10. | U |
| 207-08-9 | Benzo(k)fluoranthene | 10. | U |
| 50-32-8 | Benzo(a)pyrene | 10. | U |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 10. | U |
| 53-70-3 | Dibenzo(a,h)anthracene | 10. | U |
| 191-24-2 | Benzo(g,h,i)perylene | 10. | U |

(1) - Cannot be separated from Diphenylamine

John J. Molloy, P.E.
Laboratory Director

Date Reported: 2/26/89

# H2M LABS, INC.

575 Broad Hollow Road, Melville, N.Y. 11747
(516) 694-3040 FAX (516) 694-4122


SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW #3

Lab Name: H2M LABS INC. Contract: -----

Lab Code: ----- Case No.: ----- SAS No.: ----- SDG No.: MW #

Matrix: (soil/water) WATER Lab Sample ID: 874722

Sample wt/vol: 1000 (g/mL) ML Lab File ID: P5402

Level: (low/med) LOW Date Received: 12/28/88

% Moisture: not dec.-- dec. -- Date Extracted: 12/29/88

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 1/12/89

GPC Cleanup: (Y/N) N pH: 7.2 Dilution Factor: 1.00000

Number TICs found: 9

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/L

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|---|
| 1. | 127184 | Ethene, tetrachloro- (9CI) | 6.46 | 500. | JJ |
| 2. | | Unknown | 12.65 | 12. | JJ |
| 3. | 21964498 | 1,13-Tetradecadiene (8CI,9CI) | 29.52 | 140. | JJB |
| 4. | | Unknown | 32.48 | 14. | JJ |
| 5. | | Unknown Alcohol | 32.58 | 12. | JJ |
| 6. | | Unknown Alcohol | 35.33 | 50. | JJ |
| 7. | | Unknown | 36.76 | 22. | JJB |
| 8. | | Unknown | 37.84 | 42. | JJ |
| 9. | | Unknown | 40.62 | 52. | JJ |
| 10. | | | | | |
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Date Reported: 2/26/89

John J. Molloy, P.E.
Laboratory Director

H2M LABS, INC.
575 Broad Hollow Road, Melville, N.Y. 11747
(516) 694-3040 FAX:(516)694-2120.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

MW #4

Lab Name: H2M LABS INC. Contract: -----

Lab Code: ----- Case No.: ----- SAS No.: ----- SDG No.: MW A

Matrix: (soil/water) WATER Lab Sample ID: 874723

Sample wt/vol: 1000 (g/mL ML Lab File ID: F5403

Level: (low/med) LOW Date Received: 12/28/88

% Moisture: not dec.-- dec. -- Date Extracted: 12/29/88

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 1/13/89

GPC Cleanup: (Y/N) N pH: 7.2 Dilution Factor: 1.00000

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L | Q |
|---|---|---|---|
| 108-95-2 | Phenol | 10. | U |
| 111-44-4 | bis(2-Chloroethyl)Ether | 10. | U |
| 95-57-8 | 2-Chlorophenol | 10. | U |
| 541-73-1 | 1,3-Dichlorobenzene | 10. | U |
| 106-46-7 | 1,4-Dichlorobenzene | 10. | U |
| 100-51-6 | Benzyl alcohol | 10. | U |
| 95-50-1 | 1,2-Dichlorobenzene | 10. | U |
| 95-48-7 | 2-Methylphenol | 10. | U |
| 39638-32-9 | bis(2-chloroisopropyl)ether | 10. | U |
| 106-44-5 | 4-Methylphenol | 10. | U |
| 621-64-7 | N-Nitroso-Di-n-propylamine | 10. | U |
| 67-72-1 | Hexachloroethane | 10. | U |
| 98-95-3 | Nitrobenzene | 10. | U |
| 78-59-1 | Isophorone | 10. | U |
| 88-75-5 | 2-Nitrophenol | 10. | U |
| 105-67-9 | 2,4-Dimethylphenol | 10. | U |
| 65-85-0 | Benzoic acid | 50. | U |
| 111-91-1 | bis(2-Chloroethoxy)methane | 10. | U |
| 120-83-2 | 2,4-Dichlorophenol | 10. | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 10. | U |
| 91-20-3 | Naphthalene | 10. | U |
| 106-47-8 | 4-Chloroaniline | 10. | U |
| 87-68-3 | Hexachlorobutadiene | 10. | U |
| 59-50-7 | 4-Chloro-3-methylphenol | 10. | U |
| 91-57-6 | 2-Methylnaphthalene | 10. | U |
| 77-47-4 | Hexachlorocyclopentadiene | 10. | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 10. | U |
| 95-95-4 | 2,4,5-Trichlorophenol | 50. | U |
| 91-58-7 | 2-Chloronaphthalene | 10. | U |
| 88-74-4 | 2-Nitroaniline | 50. | U |
| 131-11-3 | Dimethylphthalate | 10. | U |
| 208-96-8 | Acenaphthylene | 10. | U |
| 606-20-2 | 2,6-Dinitrotoluene | 10. | U |

John J. Melby, P.E.

Date Reported: 2/26/89

H2M LABS INC
575 Broad Hollow Road, Melville, N.Y. 11747
(516) 694-3040 FAX (516) 694-6286

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

MW #4

Lab Name: H2M LABS INC. Contract: -----

Lab Code: ----- Case No.: ----- SAS No.: ----- SDG No.: MW #

Matrix: (soil/water) WATER Lab Sample ID: 874723

Sample wt/vol: 1000 (g/mL) ML Lab File ID: BP5403

Level: (low/med) LOW Date Received: 12/28/88

% Moisture: not dec.-- dec. -- Date Extracted: 12/29/88

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 1/13/89

GPC Cleanup: (Y/N) N pH: 7.2 Dilution Factor: 1.00000

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L | | Q |
|---|---|---|---|---|
| 99-09-2 | 3-Nitroaniline | 50. | U | |
| 83-32-9 | Acenaphthene | 10. | U | |
| 51-28-5 | 2,4-Dinitrophenol | 50. | U | |
| 100-02-7 | 4-Nitrophenol | 50. | U | |
| 132-64-9 | Dibenzofuran | 10. | U | |
| 121-14-2 | 2,4-Dinitrotoluene | 10. | U | |
| 84-66-2 | Diethylphthalate | 10. | U | |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 10. | U | |
| 86-73-7 | Fluorene | 10. | U | |
| 100-01-6 | 4-Nitroaniline | 50. | U | |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 50. | U | |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 10. | U | |
| 101-55-3 | 4-Bromophenyl-phenylether | 10. | U | |
| 118-74-1 | Hexachlorobenzene | 10. | U | |
| 87-86-5 | Pentachlorophenol | 50. | U | |
| 85-01-8 | Phenanthrene | 10. | U | |
| 120-12-7 | Anthracene | 10. | U | |
| 84-74-2 | Di-n-butylphthalate | 10. | U | |
| 206-44-0 | Fluoranthene | 10. | U | |
| 129-00-0 | Pyrene | 10. | U | |
| 85-68-7 | Butylbenzylphthalate | 20. | U | |
| 91-94-1 | 3,3'-Dichlorobenzidine | 10. | U | |
| 56-55-3 | Benzo(a)anthracene | 10. | U | |
| 218-01-9 | Chrysene | 8. | JB | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 10. | U | |
| 117-84-0 | Di-n-octylphthalate | 10. | U | |
| 205-99-2 | Benzo(b)fluoranthene | 10. | U | |
| 207-08-9 | Benzo(k)fluoranthene | 10. | U | |
| 50-32-8 | Benzo(a)pyrene | 10. | U | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 10. | U | |
| 53-70-3 | Dibenzo(a,h)anthracene | 10. | U | |
| 191-24-2 | Benzo(g,h,i)perylene | 10. | U | |

(1) - Cannot be separated from Diphenylamine

Date Reported: 1/26/89

Edmund M. Lior, P.E.
Laboratory Director

# H2M LABS, INC.

575 Broad Hollow Road, Melville, N.Y. 117
(516) 694-3040 FAX (516) 694-6120

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW 44

Lab Name: H2M LABS INC. Contract: -----

Lab Code: ----- Case No.: ----- SAS No.: ----- SDG No.: MW A

Matrix: (soil/water) WATER Lab Sample ID: 874723

Sample wt/vol: 1000 (g/mL) ML Lab File ID: P5403

Level: (low/med) LOW Date Received: 12/28/88

% Moisture: not dec.-- dec. -- Date Extracted: 12/29/88

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 1/13/89

GPC Cleanup: (Y/N) N pH: 7.2 Dilution Factor: 1.00000

Number TICs found: 4 CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|---|
| 1. | 127184 | Ethene, tetrachloro- (9CI) | 6.44 | 22. | JJ |
| 2. | 21964498 | 1,13-Tetradecadiene (8CI,9CI) | 29.62 | 54. | JJB |
| 3. | | Unknown | 35.35 | 12. | JJ |
| 4. | | Unknown | 36.76 | 12. | JJB |
| 5. | | | | | |
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| 27. | | | | | |
| 28. | | Date Reported: 2/26/89 | | | |
| 29. | | | | | |
| 30. | | | | | |

John J. Mhlloy, P.E.
Laboratory Director

H2M LABS, INC.
575 Broad Hollow Road, Melville, N.Y. 11747
(516) 694-3040 FAX (516) 694-6286

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

FIELD BLANK

Lab Name: H2M LABS INC. Contract: -----

Lab Code: ----- Case No.: ----- SAS No.: ----- SDG No.: MW A

Matrix: (soil/water) WATER Lab Sample ID: 874724

Sample wt/vol: 1000 (g/mL) ML Lab File ID: >P5404

Level: (low/med) LOW Date Received: 12/28/88

% Moisture: not dec.-- dec. -- Date Extracted: 12/29/88

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 1/13/89

GPC Cleanup: (Y/N) N pH: 7.2 Dilution Factor: 1.00000

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L | Q |
|---|---|---|---|
| 108-95-2 | Phenol | 10. | U |
| 111-44-4 | bis(2-Chloroethyl)Ether | 10. | U |
| 95-57-8 | 2-Chlorophenol | 10. | U |
| 541-73-1 | 1,3-Dichlorobenzene | 10. | U |
| 106-46-7 | 1,4-Dichlorobenzene | 10. | U |
| 100-51-6 | Benzyl alcohol | 10. | U |
| 95-50-1 | 1,2-Dichlorobenzene | 10. | U |
| 95-48-7 | 2-Methylphenol | 10. | U |
| 39638-32-9 | bis(2-chloroisopropyl)ether | 10. | U |
| 106-44-5 | 4-Methylphenol | 10. | U |
| 621-64-7 | N-Nitroso Di-n-propylamine | 10. | U |
| 67-72-1 | Hexachloroethane | 10. | U |
| 98-95-3 | Nitrobenzene | 10. | U |
| 78-59-1 | Isophorone | 10. | U |
| 88-75-5 | 2-Nitrophenol | 10. | U |
| 105-67-9 | 2,4-Dimethylphenol | 10. | U |
| 65-85-0 | Benzoic acid | 50. | U |
| 111-91-1 | bis(2-Chloroethoxy)methane | 10. | U |
| 120-83-2 | 2,4-Dichlorophenol | 10. | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 10. | U |
| 91-20-3 | Naphthalene | 10. | U |
| 106-47-8 | 4-Chloroaniline | 10. | U |
| 87-68-3 | Hexachlorobutadiene | 10. | U |
| 59-50-7 | 4-Chloro-3-methylphenol | 10. | U |
| 91-57-6 | 2-Methylnaphthalene | 10. | U |
| 77-47-4 | Hexachlorocyclopentadiene | 10. | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 10. | U |
| 95-95-4 | 2,4,5-Trichlorophenol | 50. | U |
| 91-58-7 | 2-Chloronaphthalene | 10. | U |
| 88-74-4 | 2-Nitroaniline | 50. | U |
| 131-11-3 | Dimethylphthalate | 10. | U |
| 208-96-8 | Acenaphthylene | 10. | U |
| 606-20-2 | 2,6-Dinitrotoluene | 10. | U |

John J. Molloy, PE

# H2M LABS, INC.

575 Broad Hollow Road, Melville, N.Y. 1174
(516) 694-3040 FAX (516) 694-6122

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FIELD BLANK

Lab Name: H2M LABS INC. Contract: -----

Lab Code: ----- Case No.: ----- SAS No.: ----- SDG No.: MW A

Matrix: (soil/water) WATER Lab Sample ID: 874724

Sample wt/vol: 1000 (g/mL) ML Lab File ID: P5404

Level: (low/med) LOW Date Received: 12/28/88

% Moisture: not dec.-- dec. -- Date Extracted: 12/29/88

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 1/13/89

GPC Cleanup: (Y/N) N pH: 7.2 Dilution Factor: 1.00000

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L | Q |
|---|---|---|---|
| 99-09-2 | 3-Nitroaniline | 50. | U |
| 83-32-9 | Acenaphthene | 10. | U |
| 51-28-5 | 2,4-Dinitrophenol | 50. | U |
| 100-02-7 | 4-Nitrophenol | 50. | U |
| 132-64-9 | Dibenzofuran | 10. | U |
| 121-14-2 | 2,4-Dinitrotoluene | 10. | U |
| 84-66-2 | Diethylphthalate | 10. | U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 10. | U |
| 86-73-7 | Fluorene | 10. | U |
| 100-01-6 | 4-Nitroaniline | 50. | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 50. | U |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 10. | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 10. | U |
| 118-74-1 | Hexachlorobenzene | 10. | U |
| 87-86-5 | Pentachlorophenol | 50. | U |
| 85-01-8 | Phenanthrene | 10. | U |
| 120-12-7 | Anthracene | 10. | U |
| 84-74-2 | Di-n-butylphthalate | 10. | U |
| 206-44-0 | Fluoranthene | 10. | U |
| 129-00-0 | Pyrene | 10. | U |
| 85-68-7 | Butylbenzylphthalate | 10. | U |
| 91-94-1 | 3,3'-Dichlorobenzidine | 20. | U |
| 56-55-3 | Benzo(a)anthracene | 10. | U |
| 218-01-9 | Chrysene | 10. | U |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 20. | B |
| 117-84-0 | Di-n-octylphthalate | 10. | U |
| 205-99-2 | Benzo(b)fluoranthene | 10. | U |
| 207-08-9 | Benzo(k)fluoranthene | 10. | U |
| 50-32-8 | Benzo(a)pyrene | 10. | U |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 10. | U |
| 53-70-3 | Dibenzo(a,h)anthracene | 10. | U |
| 191-24-2 | Benzo(g,h,i)perylene | 10 | U |

John J. Molloy, P.E.

(1) - Cannot be separated from Diphenylamine

# H2M LABS, INC.

575 Broad Hollow Road, Melville, N.Y. 11747
(516) 694-3040 FAX (516) 694-4122


## SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

FIELD BLANK

Lab Name: H2M LABS INC. Contract: -----

Lab Code: ----- Case No.: ----- SAS No.: ----- SDG No.: MW A

Matrix: (soil/water) WATER Lab Sample ID: 874724

Sample wt/vol: 1000 (g/mL) ML Lab File ID: P9404

Level: (low/med) LOW Date Received: 12/28/88

% Moisture: not dec.-- dec. -- Date Extracted: 12/29/88

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 1/13/89

GPC Cleanup: (Y/N) N pH: 7.2 Dilution Factor: 1.00000

Number TICs found: 2 CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|---|
| 1. | 21964498 | 1,13-Tetradecadiene (C8C9C1) | 29.53 | 130. | JB |
| 2. | | Unknown | 36.74 | 20. | JB |
| 3. | | | | | |
| 4. | | | | | |
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Date Reported: 2/26/89

John M[illegible], P.E.
Laboratory Director

# H2M LABS, INC.

575 Broad Hollow Road, Melville, N.Y. 11747
(516) 694-3040 FAX (516) 694-4122


SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW A MS

Lab Name: H2M LABS INC. Contract: -----

Lab Code: ----- Case No.: ----- SAS No.: ----- SDG No.: MW A

Matrix: (soil/water) WATER Lab Sample ID: 874719 MS

Sample wt/vol: 1000 (g/mL) ML Lab File ID: >P5398

Level: (low/med) LOW Date Received: 12/28/88

% Moisture: not dec.-- dec. -- Date Extracted: 12/29/88

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 1/12/89

GPC Cleanup: (Y/N) N pH: 7.2 Dilution Factor: 1.00000

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L | Q |
|---|---|---|---|
| 111-44-4 | bis(2-Chloroethyl)Ether | 10. | U |
| 541-73-1 | 1,3-Dichlorobenzene | 10. | U |
| 100-51-6 | Benzyl alcohol | 10. | U |
| 95-50-1 | 1,2-Dichlorobenzene | 10. | U |
| 95-48-7 | 2-Methylphenol | 10. | U |
| 39638-32-9 | bis(2-chloroisopropyl)ether | 10. | U |
| 106-44-5 | 4-Methylphenol | 10. | U |
| 67-72-1 | Hexachloroethane | 10. | U |
| 98-95-3 | Nitrobenzene | 10. | U |
| 78-59-1 | Isophorone | 10. | U |
| 88-75-5 | 2-Nitrophenol | 10. | U |
| 105-67-9 | 2,4-Dimethylphenol | 10. | U |
| 65-85-0 | Benzoic acid | 50. | U |
| 111-91-1 | bis(2-Chloroethoxy)methane | 10. | U |
| 120-83-2 | 2,4-Dichlorophenol | 10. | U |
| 91-20-3 | Naphthalene | 10. | U |
| 106-47-8 | 4-Chloroaniline | 10. | U |
| 87-68-3 | Hexachlorobutadiene | 10. | U |
| 91-57-6 | 2-Methylnaphthalene | 10. | U |
| 77-47-4 | Hexachlorocyclopentadiene | 10. | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 10. | U |
| 95-95-4 | 2,4,5-Trichlorophenol | 50. | U |
| 91-58-7 | 2-Chloronaphthalene | 10. | U |
| 88-74-4 | 2-Nitroaniline | 50. | U |
| 131-11-3 | Dimethylphthalate | 10. | U |
| 208-96-8 | Acenaphthylene | 10. | U |
| 606-20-2 | 2,6-Dinitrotoluene | 10. | U |



John J. Molloy, P.E.

Date Reported: 2/26/89

H2M LABS INC
575 Broad Hollow Road, Melville, N.Y. 11747
(516) 694-3040 FAX (516) 694-6120

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

MW A MS

Lab Name: H2M LABS INC. Contract: -----

Lab Code: ----- Case No.: ----- SAS No.: ----- SDG No.: MW A

Matrix: (soil/water) WATER Lab Sample ID: 874719 MS

Sample wt/vol: 1000 (g/mL) ML Lab File ID: >P5398

Level: (low/med) LOW Date Received: 12/28/88

% Moisture: not dec.-- dec. -- Date Extracted: 12/29/88

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 1/12/89

GPC Cleanup: (Y/N) N pH: 7.2 Dilution Factor: 1.00000

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L | Q |
|---|---|---|---|
| 99-09-2 | 3-Nitroaniline | 50. | U |
| 51-28-5 | 2,4-Dinitrophenol | 50. | U |
| 132-64-9 | Dibenzofuran | 10. | U |
| 84-66-2 | Diethylphthalate | 10. | U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 10. | U |
| 86-73-7 | Fluorene | 10. | U |
| 100-01-6 | 4-Nitroaniline | 50. | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 50. | U |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 10. | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 10. | U |
| 118-74-1 | Hexachlorobenzene | 10. | U |
| 85-01-8 | Phenanthrene | 10. | U |
| 120-12-7 | Anthracene | 10. | U |
| 84-74-2 | Di-n-butylphthalate | 10. | U |
| 206-44-0 | Fluoranthene | 10. | U |
| 85-68-7 | Butylbenzylphthalate | 10. | U |
| 91-94-1 | 3,3'-Dichlorobenzidine | 20. | U |
| 56-55-3 | Benzo(a)anthracene | 10. | U |
| 218-01-9 | Chrysene | 10. | U |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 6. | JB |
| 117-84-0 | Di-n-octylphthalate | 10. | U |
| 205-99-2 | Benzo(b)fluoranthene | 10. | U |
| 207-08-9 | Benzo(k)fluoranthene | 10. | U |
| 50-32-8 | Benzo(a)pyrene | 10. | U |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 10. | U |
| 53-70-3 | Dibenzo(a,h)anthracene | 10. | U |
| 191-24-2 | Benzo(g,h,i)perylene | 10. | U |

(1) - Cannot be separated from Diphenylamine

FORM I SV-2 1/87 Rev.

Date Reported: 2/26/89

John J. Molloy, P.E.

# H2M LABS, INC.

575 Broad Hollow Road, Melville, N.Y. 11747
(516) 694-3040 FAX: (516) 694-6122


SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

MW A MSD

Lab Name: H2M LABS INC. Contract: -----

Lab Code: ----- Case No.: ----- SAS No.: ----- SDG No.: MW A

Matrix: (soil/water) WATER Lab Sample ID: 874719 MSD

Sample wt/vol: 1000 (g/mL) ML Lab File ID: >P5399

Level: (low/med) LOW Date Received: 12/28/88

% Moisture: not dec.-- dec. -- Date Extracted: 12/29/88

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 1/12/89

GPC Cleanup: (Y/N) N pH: 7.2 Dilution Factor: 1.00000

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L | Q |
|---|---|---|---|
| 111-44-4 | bis(2-Chloroethyl)Ether | 10. | U |
| 541-73-1 | 1,3-Dichlorobenzene | 10. | U |
| 100-51-6 | Benzyl alcohol | 10. | U |
| 95-50-1 | 1,2-Dichlorobenzene | 10. | U |
| 95-48-7 | 2-Methylphenol | 10. | U |
| 39638-32-9 | bis(2-chloroisopropyl)ether | 10. | U |
| 106-44-5 | 4-Methylphenol | 10. | U |
| 67-72-1 | Hexachloroethane | 10. | U |
| 98-95-3 | Nitrobenzene | 10. | U |
| 78-59-1 | Isophorone | 10. | U |
| 88-75-5 | 2-Nitrophenol | 10. | U |
| 105-67-9 | 2,4-Dimethylphenol | 10. | U |
| 65-85-0 | Benzoic acid | 50. | U |
| 111-91-1 | bis(2-Chloroethoxy)methane | 10. | U |
| 120-83-2 | 2,4-Dichlorophenol | 10. | U |
| 91-20-3 | Naphthalene | 10. | U |
| 106-47-8 | 4-Chloroaniline | 10. | U |
| 87-68-3 | Hexachlorobutadiene | 10. | U |
| 91-57-6 | 2-Methylnaphthalene | 10. | U |
| 77-47-4 | Hexachlorocyclopentadiene | 10. | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 10. | U |
| 95-95-4 | 2,4,5-Trichlorophenol | 50. | U |
| 91-58-7 | 2-Chloronaphthalene | 10. | U |
| 88-74-4 | 2-Nitroaniline | 50. | U |
| 131-11-3 | Dimethylphthalate | 10. | U |
| 208-96-8 | Acenaphthylene | 10. | U |
| 606-20-2 | 2,6-Dinitrotoluene | 10. | U |

FORM I SV-1 1/87 Rev.

Date Reported: 2/26/89

John J. Molloy, P.E.
Laboratory Director

H2M LABS, INC.
575 Broad Hollow Road, Melville, N.Y. 11747
(516) 694-3040 FAX (516) 694-6122

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
MW A MSD

Lab Name: H2M LABS INC. Contract: -----

Lab Code: ----- Case No.: ----- SAS No.: ----- SDG No.: MW A

Matrix: (soil/water) WATER Lab Sample ID: 874719 MSD

Sample wt/vol: 1000 (g/mL) ML Lab File ID: P5390

Level: (low/med) LOW Date Received: 12/28/88

% Moisture: not dec.-- dec. -- Date Extracted: 12/29/88

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 1/12/89

GPC Cleanup: (Y/N) N pH: 7.2 Dilution Factor: 1.00000

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L | Q |
|---|---|---|---|
| 99-09-2 | 3-Nitroaniline | 50. | U |
| 51-28-5 | 2,4-Dinitrophenol | 50. | U |
| 132-64-9 | Dibenzofuran | 10. | U |
| 84-66-2 | Diethylphthalate | 10. | U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 10. | U |
| 86-73-7 | Fluorene | 10. | U |
| 100-01-6 | 4-Nitroaniline | 50. | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 50. | U |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 10. | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 10. | U |
| 118-74-1 | Hexachlorobenzene | 10. | U |
| 85-01-8 | Phenanthrene | 10. | U |
| 120-12-7 | Anthracene | 10. | U |
| 84-74-2 | Di-n-butylphthalate | 10. | U |
| 206-44-0 | Fluoranthene | 10. | U |
| 85-68-7 | Butylbenzylphthalate | 10. | U |
| 91-94-1 | 3,3'-Dichlorobenzidine | 20. | U |
| 56-55-3 | Benzo(a)anthracene | 10. | U |
| 218-01-9 | Chrysene | 10. | U |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 17. | B |
| 117-84-0 | Di-n-octylphthalate | 10. | U |
| 205-99-2 | Benzo(b)fluoranthene | 10. | U |
| 207-08-9 | Benzo(k)fluoranthene | 10. | U |
| 50-32-8 | Benzo(a)pyrene | 10. | U |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 10. | U |
| 53-70-3 | Dibenzo(a,h)anthracene | 10. | U |
| 191-24-2 | Benzo(g,h,i)perylene | 10. | U |

(1) - Cannot be separated from Diphenylamine

FORM I SV-2

1/87 Rev.

John J. Molloy, P.E.
Laboratory Director

Date Reported: 2/26/89

H2M LABS, INC.
575 Broad Hollow Road, Melville, N.Y. 11747
(516) 694-3040 FAX: (516) 694-4122
ENVIRONMENTAL and INDUSTRIAL ANALYTICAL LABORATORY

## DATA REPORTING QUALIFIERS

Value - If the result is a value greater than or equal to the detection limit, report the value.

U - Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g., 10U) based on necessary concentration/dilution actions. (This is not necessarily the instrument detection limit). The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J - Indicates as estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero (e.g.: If limit of detection is 10 ug/I and a concentration of 3 ug/l is calculated, report as 3J).

C - This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides >= 10 ng/ul in the final extract should be confirmed by GC/MS.

B - This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

D - This flag identifies compounds whose concentrations are outside the calibration range of the analysis. If one or more compounds have a response greater than full scale, the extract must be diluted and reanalyzed, according to the specifications in Exhibit D. If the dilution of the extract causes any compounds identified in the first analysis to be below the calibration range in the second analysis, then the results of both analyses shall be reported on separate Forms I. The Form I the diluted sample shall have the "DL" suffix appended to the sample number. Compounds whose concentrations are above the calibration range of the first analysis shall be flagged with "D" on the Form I from that first analysis. Compounds identified in that first analysis but below the calibration range of the second analysis shall be flagged "D" on the Form I for the second analysis. The contractor shall report the results of at most two analyses, one with the "DL" suffix, and one without the suffix.

H2M LABS, INC.
Environmental and Industrial Analytical Laboratory
575 Broad Hollow Road, Melville, NY 11747-5076
(516) 694-3040

## QUALIFIERS FOR METALS ANALYSIS

E - The reported value is estimated because of the presence of interference. An explanatory note is included in the case narrative.

M - Duplicate injection precision not met.

N - Matrix spiked sample recovery not within control limits.

S - The reported value was determined by the Method of Standard Additions (MSA).

+ - Correlation coeffiecient for the MSA is less than 0.995.

W - Post-digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance.

* - Duplicate analysis not within control limits.

Concentration Qualifiers.

B - Entered if the reported value is less than the Contract Required Detection Limit (CRDL) but greater than the Instrument Detection Limit (IDL).

U - Entered if the analyte was analyzed for but not detected, less than the IDL.

H2M LABS INC
575 Broad Hollow Road, Melville, N.Y. 1174
(516) 694-3040 FAX: (516) 694-4122
ENVIRONMENTAL and INDUSTRIAL ANALYTICAL LABORATORY

# CASE NARRATIVE FOR PESTICIDES/PCBS

System Performace Checks
DBC retention time shifts could not be determined for samples, because DBC was masked by an interference.

4.4'-DDT and Endrin degradation could not be calculated from the orginal integration of the HP5290 integrator. The area reject had been set to 5000 area, which was not low enough to detect 20% breakdown i.e. 10% per breakdown product. The raw data which were stored on an HP1000 computer were reintegrated and the HP1000 data used to compute the percentage of breakdown products. Problems occurred with the computer data file of the first Evaluation Mix B, therefore, the breakdown for the beginning of the sequence was calculated from the Evaluation Mix C instead. Also, for the last Evaluation Mix in the sequence, Evaluation Mix C had accidentally been loaded instead of Mix B.

QC Data
Recoveries for the surrogate DBC wre calculated from the confirmatory column, because of a coeluting interference on the primary column. The DBC was diluted out and could not be quantified for Catch Basin #1 and its spike duplicates.

The concentration of the solution used for spiking of the water matrix spike duplicates was too high by a factor of ten (10). Recoveries for Lindane was under the advisory QC limit and RPD was outside the limit for Heptachlor and 4.4'-DDT.

For the soil spike duplicates the Aldrin recoveries were too high on both extracts due to the coelution on an interference. (Recoveries calculated from the confirmatory column do meet QC limits.)

Sample Analyses
Only half of the extract volume of the water samples was subject to alumina cleanup resulting in a dilution factor of two.

Based on the appearance of the soil samples only 15g were extracted, but the total extract was cleaned up with GPC. In spite of the cleanup the extracts were highly colored and it was found necessary to dilute the extracts, 1:5 and 1:10 respectively for Catch Basin #1.

I certify that this data package is in compliance with the terms and conditions of the contract, both tecnically and for completeness, for other than the conditions detailed above. Release has been authorized by the Laboratory Manager or his designee, as verfied by the following signature.

Date Reported: 3/20/89

John J. Molloy, P.E.
Laboratory Director

H2M LABS, INC.
575 Broad Hollow Road, Melville, N.Y. 11747
(516) 694-3040 FAX: (516) 694-4122
ENVIRONMENTAL and INDUSTRIAL ANALYTICAL LABORATORY

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

Lab Name: H2M LABS, INC. Contract: _____

MW#0
Leroy Callender
Cantor Bros. Site

Matrix: WATER
Sample Vol: 1000 ml
Level: LOW
% Moisture: not dec. ___ dec. ___
Extraction: SEPF
GPC Cleanup: N pH: ____

Lab Sample ID: 869369
Lab File ID: 108
Date Received: 10-6-88
Date Extracted: 10-8-88
Date Analyzed: 10-21-88/10-24-88
Dilution Factor: 2

| CAS NO. | COMPOUND | CONCENTRATION UNITS: ug/l | Q |
|---|---|---|---|
| 319-84-6 | alpha-BHC | 0.10 | U |
| 319-85-7 | beta-BHC | 0.10 | U |
| 319-86-8 | delta-BHC | 0.10 | U |
| 58-89-9 | gamma-BHC (Lindane) | 0.10 | U |
| 76-44-8 | Heptachlor | 0.10 | U |
| 309-00-2 | Aldrin | 0.10 | U |
| 1024-57-3 | Heptachlor epoxide | 0.10 | U |
| 959-98-8 | Endosulfan I | 0.10 | U |
| 60-57-1 | Dieldrin | 0.20 | U |
| 72-55-9 | 4,4'-DDE | 0.20 | U |
| 72-20-8 | Endrin | 0.20 | U |
| 33213-65-9 | Endosulfan II | 0.20 | U |
| 72-54-8 | 4,4'-DDD | 0.20 | U |
| 1031-07-8 | Endosulfan sulfate | 0.20 | U |
| 50-29-3 | 4,4'-DDT | 0.20 | U |
| 72-43-5 | Methoxychlor | 0.10 | U |
| 53494-70-5 | Endrin ketone | 0.20 | U |
| 5103-71-9 | alpha-Chlordane | 0.10 | U |
| 5103-74-2 | gamma-Chlordane | 0.10 | U |
| 8001-35-2 | Toxaphene | 2.0 | U |
| 12674-11-2 | Aroclor-1016 | 0.10 | U |
| 11104-28-2 | Aroclor-1221 | 0.10 | U |
| 11141-16-5 | Aroclor-1232 | 0.10 | U |
| 53469-21-9 | Aroclor-1242 | 0.10 | U |
| 12672-29-6 | Aroclor-1248 | 0.10 | U |
| 11097-69-1 | Aroclor-1254 | 2.0 | U |
| 11096-82-5 | Aroclor-1260 | 2.0 | U |

Date Reported: 3/15/89

John J. Molloy, P.E.
Laboratory Director

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ENVIRONMENTAL and INDUSTRIAL ANALYTICAL LABORATORY

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

Lab Name: H2M LABS, INC. Contract: _____

MW#1
Leroy Callender
Cantor Bros. Site

Matrix: WATER
Sample Vol: 1000 ml
Level: LOW
% Moisture: not dec. ___ dec. ___
Extraction: SEPF
GPC Cleanup: N pH: ____

Lab Sample ID: 869370
Lab File ID: 109
Date Received: 10-6-88
Date Extracted: 10-8-88
Date Analyzed: 10-21-88/10-24-88
Dilution Factor: 2

| CAS NO. | COMPOUND | CONCENTRATION UNITS: ug/l | Q |
|---|---|---|---|
| 319-84-6 | alpha-BHC | 0.10 | U |
| 319-85-7 | beta-BHC | 0.10 | U |
| 319-86-8 | delta-BHC | 0.10 | U |
| 58-89-9 | gamma-BHC (Lindane) | 0.10 | U |
| 76-44-8 | Heptachlor | 0.10 | U |
| 309-00-2 | Aldrin | 0.10 | U |
| 1024-57-3 | Heptachlor epoxide | 0.10 | U |
| 959-98-8 | Endosulfan I | 0.10 | U |
| 60-57-1 | Dieldrin | 0.20 | U |
| 72-55-9 | 4,4'-DDE | 0.20 | U |
| 72-20-8 | Endrin | 0.20 | U |
| 33213-65-9 | Endosulfan II | 0.20 | U |
| 72-54-8 | 4,4'-DDD | 0.20 | U |
| 1031-07-8 | Endosulfan sulfate | 0.20 | U |
| 50-29-3 | 4,4'-DDT | 0.20 | U |
| 72-43-5 | Methoxychlor | 0.10 | U |
| 53494-70-5 | Endrin ketone | 0.20 | U |
| 5103-71-9 | alpha-Chlordane | 0.10 | U |
| 5103-74-2 | gamma-Chlordane | 0.10 | U |
| 8001-35-2 | Toxaphene | 2.0 | U |
| 12674-11-2 | Aroclor-1016 | 0.10 | U |
| 11104-28-2 | Aroclor-1221 | 0.10 | U |
| 11141-16-5 | Aroclor-1232 | 0.10 | U |
| 53469-21-9 | Aroclor-1242 | 0.10 | U |
| 12672-29-6 | Aroclor-1248 | 0.10 | U |
| 11097-69-1 | Aroclor-1254 | 2.0 | U |
| 11096-82-5 | Aroclor-1260 | 2.0 | U |

Date Reported: 3/15/89

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Laboratory Director

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# PESTICIDE ORGANICS ANALYSIS DATA SHEET

Lab Name: H2M LABS, INC. Contract:

MW#2
Leroy Callender
Cantor Bros. Site

Matrix: WATER
Sample Vol: 1000 ml
Level: LOW
% Moisture: not dec. ___ dec. ___
Extraction: SEPF
GPC Cleanup: N pH:

Lab Sample ID: 869371
Lab File ID: 110
Date Received: 10-6-88
Date Extracted: 10-8-88
Date Analyzed: 10-21-88/10-24-88
Dilution Factor: 2

| CAS NO. | COMPOUND | CONCENTRATION UNITS: ug/l | Q |
|---|---|---|---|
| 319-84-6 | alpha-BHC | 0.10 | U |
| 319-85-7 | beta-BHC | 0.10 | U |
| 319-86-8 | delta-BHC | 0.10 | U |
| 58-89-9 | gamma-BHC (Lindane) | 0.10 | U |
| 76-44-8 | Heptachlor | 0.10 | U |
| 309-00-2 | Aldrin | 0.10 | U |
| 1024-57-3 | Heptachlor epoxide | 0.10 | U |
| 959-98-8 | Endosulfan I | 0.10 | U |
| 60-57-1 | Dieldrin | 0.20 | U |
| 72-55-9 | 4,4'-DDE | 0.20 | U |
| 72-20-8 | Endrin | 0.20 | U |
| 33213-65-9 | Endosulfan II | 0.20 | U |
| 72-54-8 | 4,4'-DDD | 0.20 | U |
| 1031-07-8 | Endosulfan sulfate | 0.20 | U |
| 50-29-3 | 4,4'-DDT | 0.10 | U |
| 72-43-5 | Methoxychlor | 0.20 | U |
| 53494-70-5 | Endrin ketone | 0.10 | U |
| 5103-71-9 | alpha-Chlordane | 0.10 | U |
| 5103-74-2 | gamma-Chlordane | 2.0 | U |
| 8001-35-2 | Toxaphene | 0.10 | U |
| 12674-11-2 | Aroclor-1016 | 0.10 | U |
| 11104-28-2 | Aroclor-1221 | 0.10 | U |
| 11141-16-5 | Aroclor-1232 | 0.10 | U |
| 53469-21-9 | Aroclor-1242 | 0.10 | U |
| 12672-29-6 | Aroclor-1248 | 2.0 | U |
| 11097-69-1 | Aroclor-1254 | 2.0 | U |
| 11096-82-5 | Aroclor-1260 | | |

Date Reported: 3/15/89

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Laboratory Director

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ENVIRONMENTAL and INDUSTRIAL ANALYTICAL LABORATORY


## PESTICIDE ORGANICS ANALYSIS DATA SHEET

Lab Name: H2M LABS, INC. Contract:

MW#3
Leroy Callender
Cantor Bros. Site

Matrix: WATER
Sample Vol: 1000 ml
Level: LOW
% Moisture: not dec. ___ dec. ___
Extraction: SEPF
GPC Cleanup: N pH:

Lab Sample ID: 869372
Lab File ID: 111
Date Received: 10-6-88
Date Extracted: 10-8-88
Date Analyzed: 10-21-88/10-24-88
Dilution Factor: 2

| CAS NO. | COMPOUND | CONCENTRATION UNITS: ug/l | Q |
|---|---|---|---|
| 319-84-6 | alpha-BHC | 0.10 | U |
| 319-85-7 | beta-BHC | 0.10 | U |
| 319-86-8 | delta-BHC | 0.10 | U |
| 58-89-9 | gamma-BHC (Lindane) | 0.10 | U |
| 76-44-8 | Heptachlor | 0.10 | U |
| 309-00-2 | Aldrin | 0.10 | U |
| 1024-57-3 | Heptachlor epoxide | 0.10 | U |
| 959-98-8 | Endosulfan I | 0.10 | U |
| 60-57-1 | Dieldrin | 0.20 | U |
| 72-55-9 | 4,4'-DDE | 0.20 | U |
| 72-20-8 | Endrin | 0.20 | U |
| 33213-65-9 | Endosulfan II | 0.20 | U |
| 72-54-8 | 4,4'-DDD | 0.20 | U |
| 1031-07-8 | Endosulfan sulfate | 0.20 | U |
| 50-29-3 | 4,4'-DDT | 0.20 | U |
| 72-43-5 | Methoxychlor | 0.10 | U |
| 53494-70-5 | Endrin ketone | 0.20 | U |
| 5103-71-9 | alpha-Chlordane | 0.10 | U |
| 5103-74-2 | gamma-Chlordane | 0.10 | U |
| 8001-35-2 | Toxaphene | 2.0 | U |
| 12674-11-2 | Aroclor-1016 | 0.10 | U |
| 11104-28-2 | Aroclor-1221 | 0.10 | U |
| 11141-16-5 | Aroclor-1232 | 0.10 | U |
| 53469-21-9 | Aroclor-1242 | 0.10 | U |
| 12672-29-6 | Aroclor-1248 | 0.10 | U |
| 11097-69-1 | Aroclor-1254 | 2.0 | U |
| 11096-82-5 | Aroclor-1260 | 2.0 | U |

Date Reported: 3/15/89

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# PESTICIDE ORGANICS ANALYSIS DATA SHEET

Lab Name: H2M LABS, INC. Contract: _____

MW#4
Leroy Callender
Cantor Bros. Site

Matrix: WATER
Sample Vol: 1000 ml
Level: LOW
% Moisture: not dec. ___ dec. ___
Extraction: SEPF
GPC Cleanup: N pH: ___

Lab Sample ID: 869373
Lab File ID: 112
Date Received: 10-6-88
Date Extracted: 10-8-88
Date Analyzed: 10-21-88/10-24-88
Dilution Factor: 2

| CAS NO. | COMPOUND | CONCENTRATION UNITS: ug/l | Q |
|---|---|---|---|
| 319-84-6 | alpha-BHC | 0.10 | U |
| 319-85-7 | beta-BHC | 0.10 | U |
| 319-86-8 | delta-BHC | 0.10 | U |
| 58-89-9 | gamma-BHC (Lindane) | 0.10 | U |
| 76-44-8 | Heptachlor | 0.10 | U |
| 309-00-2 | Aldrin | 0.10 | U |
| 1024-57-3 | Heptachlor epoxide | 0.10 | U |
| 959-98-8 | Endosulfan I | 0.10 | U |
| 60-57-1 | Dieldrin | 0.20 | U |
| 72-55-9 | 4,4'-DDE | 0.20 | U |
| 72-20-8 | Endrin | 0.20 | U |
| 33213-65-9 | Endosulfan II | 0.20 | U |
| 72-54-8 | 4,4'-DDD | 0.20 | U |
| 1031-07-8 | Endosulfan sulfate | 0.20 | U |
| 50-29-3 | 4,4'-DDT | 0.20 | U |
| 72-43-5 | Methoxychlor | 0.10 | U |
| 53494-70-5 | Endrin ketone | 0.20 | U |
| 5103-71-9 | alpha-Chlordane | 0.10 | U |
| 5103-74-2 | gamma-Chlordane | 0.10 | U |
| 8001-35-2 | Toxaphene | 2.0 | U |
| 12674-11-2 | Aroclor-1016 | 0.10 | U |
| 11104-28-2 | Aroclor-1221 | 0.10 | U |
| 11141-16-5 | Aroclor-1232 | 0.10 | U |
| 53469-21-9 | Aroclor-1242 | 0.10 | U |
| 12672-29-6 | Aroclor-1248 | 0.10 | U |
| 11097-69-1 | Aroclor-1254 | 2.0 | U |
| 11096-82-5 | Aroclor-1260 | 2.0 | U |

Date Reported: 3/15/89

John J. Molloy, P.E.
Laboratory Director

# H2M LABS, INC.

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ENVIRONMENTAL and INDUSTRIAL ANALYTICAL LABORATORY


## PESTICIDE ORGANICS ANALYSIS DATA SHEET

Lab Name: H2M LABS, INC. Contract:

Field Blank
Leroy Callender
Cantor Bros. Site

Matrix: WATER
Sample Vol: 1000 ml
Level: LOW
% Moisture: not dec. ___ dec. ___
Extraction: SEPF
GPC Cleanup: N pH:

Lab Sample ID: 869374
Lab File ID: 114
Date Received: 10-6-88
Date Extracted: 10-8-88
Date Analyzed: 10-21-88/10-24-88
Dilution Factor: 2

| CAS NO. | COMPOUND | CONCENTRATION UNITS: ug/l | Q |
|---|---|---|---|
| 319-84-6 | alpha-BHC | 0.10 | U |
| 319-85-7 | beta-BHC | 0.10 | U |
| 319-86-8 | delta-BHC | 0.10 | U |
| 58-89-9 | gamma-BHC (Lindane) | 0.10 | U |
| 76-44-8 | Heptachlor | 0.10 | U |
| 309-00-2 | Aldrin | 0.10 | U |
| 1024-57-3 | Heptachlor epoxide | 0.10 | U |
| 959-98-8 | Endosulfan I | 0.10 | U |
| 60-57-1 | Dieldrin | 0.20 | U |
| 72-55-9 | 4,4'-DDE | 0.20 | U |
| 72-20-8 | Endrin | 0.20 | U |
| 33213-65-9 | Endosulfan II | 0.20 | U |
| 72-54-8 | 4,4'-DDD | 0.20 | U |
| 1031-07-8 | Endosulfan sulfate | 0.20 | U |
| 50-29-3 | 4,4'-DDT | 0.20 | U |
| 72-43-5 | Methoxychlor | 0.10 | U |
| 53494-70-5 | Endrin ketone | 0.20 | U |
| 5103-71-9 | alpha-Chlordane | 0.10 | U |
| 5103-74-2 | gamma-Chlordane | 0.10 | U |
| 8001-35-2 | Toxaphene | 2.0 | U |
| 12674-11-2 | Aroclor-1016 | 0.10 | U |
| 11104-28-2 | Aroclor-1221 | 0.10 | U |
| 11141-16-5 | Aroclor-1232 | 0.10 | U |
| 53469-21-9 | Aroclor-1242 | 0.10 | U |
| 12672-29-6 | Aroclor-1248 | 0.10 | U |
| 11097-69-1 | Aroclor-1254 | 2.0 | U |
| 11096-82-5 | Aroclor-1260 | 2.0 | U |

Date Reported: 3/15/89

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John J. Molloy, P.E.
Laboratory Director

H2M LABS, INC.
Environmental and Industrial Analytical Laboratory
75 Broad Hollow Road, Melville, NY 11747-5076
(516) 694-3040

## QUALIFIERS FOR METALS ANALYSIS

E - The reported value is estimated because of the presence of interference. An explanatory note included in case narrative.

M - Duplicate injection precision not met.

N - Matrix spiked sample recovery not within control limits.

S - The reported value was determined by the Method of Standard Additions (MSA).

+ - Correlation coefficient for the MSA is less than 0.995.

W - Post-digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance.

* - Duplicate analysis not within control limits.

Concentration Qualifiers.

B - entered if the reported value is less than the Contract Required Detection Limit (CRDL) but greater than the Instrument Detection Limit (IDL).

U - entered if the analyte was analyzed for but not detected, less than the IDL.

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# CASE NARRATIVE FOR METALS

ICP analysis was performed on ARL's 3410 ICP. Furnace analysis was performed on Varian GTA-96 graphite furnace, Mercury was analyzed using the manual cold vapor method. Problems encountered are as follows:

Matrix spike recoveries for sample MW2 869378 were greater than 125% for Lead analysis. All associated Lead results reported flagged with "N". Arsenic analysis required dilution on the initial sample therefore the matrix spike was incalculable. Arsenic results reported unflagged. No spike recoveries were calculated for Cobalt and Vanadium due to an absence of these elements in the flame spiking solution. Cobalt and Vanadium results reported flagged with "N".

Matrix spike recoveries for sample Catch Basin 1 869385 were less than 75% for Thallium analysis. All associated Thallium results reported flagged with "N". Zinc recoveries were greater than 125%, all associated Zinc results reported with "N". Arsenic, Selenium and Lead analysis of the initial sample required dilution therefore the spike recoveries were not calculated. Results for these elements were reported unflagged.

Duplicate analysis of sample MW2 869378 was out of the required control limits for Aluminum and Iron. All associated results reported flagged with "*".

Duplicate analysis of sample Catch Basin 1 869385 was out of the required control limits for the following parameters: Aluminum, Calcium, Chromium, Cobalt, Copper, Iron, Magnesium, Manganese, Vanadium and Zinc. All associated results reported flagged with "*".

ICP serial dilution analysis of Chromium for sample Catch Basin 2 869387 was out of the required control limit of ten percent difference. All soil Chromium results reported flagged with "E" suspecting interferences.

Furnace MSA analysis of Lead was required for samples: MW0 869376, MW2 869378 and MW3 869379. Results reported with the appropriate flag as required.

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Some samples have increased detection limits, this is due to sample dilution. Results were multiplied by the corresponding dilution factors and reported.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Date Reported: 10/12/88

**********
*  *
*  *
**********

John J. Molloy, P.E.
Laboratory Director

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ENVIRONMENTAL and INDUSTRIAL ANALYTICAL SERVICES

# CASE NARRATIVE FOR INORGANICS

Cyanide analysis was performed via manual distillation and spectrophotometric determination. The following problems were encountered:

Matrix spike recovery for sample SD #2, 869386, was less than 75%. Results for SD #1, 869385, SD #2, 869386 and SD #3, 869387, were therefore reported flagged with "N".

Soil sample detection limits vary due to percent total solids.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Date Reported: 11/03/88

John J. Molloy, P.E.
Laboratory Director

H2M LABS, INC.
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ENVIRONMENTAL and INDUSTRIAL ANALYTICAL SERVICES

# INORGANIC ANALYSIS DATA SHEET

MW #0

Lab Name: H2M LABS, INC. Contract: G & H

Matrix (soil/water): WATER Lab Sample ID: 859376

Level (low/med): LOW Date Received: 10/06/88

% Solids : -

Concentration Units (ug/L or mg/kg dry weight) ug/L

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 46000 | | * | P |
| 7440-36-0 | Antimony | 100 | | | P |
| 7440-38-2 | Arsenic | 50 | U | | F |
| 7440-39-3 | Barium | 510 | | | P |
| 7440-41-7 | Beryllium | 6 | | | P |
| 7440-43-9 | Cadmium | 2 | U | | A |
| 7440-70-2 | Calcium | 15700 | | | P |
| 7440-47-3 | Chromium | 85 | | | P |
| 7440-48-4 | Cobalt | 80 | | N | P |
| 7440-50-8 | Copper | 94 | | | P |
| 7439-89-6 | Iron | 74000 | | * | P |
| 7439-92-1 | Lead | 75 | | +N | F |
| 7439-95-4 | Magnesium | 11000 | | | P |
| 7439-96-5 | Manganese | 5300 | | | P |
| 7439-97-6 | Mercury | 0.2 | U | | CV |
| 7440-02-0 | Nickel | 69 | | | A |
| 7440-09-7 | Potassium | 8200 | | | P |
| 7782-49-2 | Selenium | 50 | U | | F |
| 7440-22-4 | Silver | 11 | | | P |
| 7440-23-5 | Sodium | 30000 | | | P |
| 7440-28-0 | Thallium | 5 | U | | F |
| 7440-62-2 | Vanadium | 95 | | N | P |
| 7440-66-6 | Zinc | 170 | | | P |
| | Cyanide | 10 | U | | C |

COMMENTS:

Date Reported: 10/26/88

John J. Molloy, P.E.
Laboratory Director

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# INORGANIC ANALYSIS DATA SHEET

MW #1

Lab Name: H2M LABS, INC. Contract: G & H

Matrix (soil/water): WATER Lab Sample ID: 859377

Level (low/med): LOW Date Received: 10/06/88

% Solids : -

Concentration Units (ug/L or mg/kg dry weight) ug/L

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 7950 | | * | P |
| 7440-36-0 | Antimony | 46 | B | | P |
| 7440-38-2 | Arsenic | 5 | U | W | F |
| 7440-39-3 | Barium | 120 | | | P |
| 7440-41-7 | Beryllium | 1 | B | | P |
| 7440-43-9 | Cadmium | 2 | U | | A |
| 7440-70-2 | Calcium | 12040 | | | P |
| 7440-47-3 | Chromium | 8 | B | | P |
| 7440-48-4 | Cobalt | 16 | B | N | P |
| 7440-50-8 | Copper | 14 | B | | P |
| 7439-89-6 | Iron | 14700 | | * | P |
| 7439-92-1 | Lead | 13 | | MN | F |
| 7439-95-4 | Magnesium | 3900 | | | P |
| 7439-96-5 | Manganese | 810 | | | P |
| 7439-97-6 | Mercury | 0.2 | U | | CV |
| 7440-02-0 | Nickel | 5 | U | | A |
| 7440-09-7 | Potassium | 3900 | B | | P |
| 7782-49-2 | Selenium | 50 | U | W | F |
| 7440-22-4 | Silver | 8 | B | | P |
| 7440-23-5 | Sodium | 21300 | | | P |
| 7440-28-0 | Thallium | 5 | U | W | F |
| 7440-62-2 | Vanadium | 15 | B | N | P |
| 7440-66-6 | Zinc | 45 | | | P |
| | Cyanide | 10 | U | | C |

COMMENTS:

Date Reported: 10/26/88

John J. Molloy, P.E.
Laboratory Director

H2M LABS, INC.
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ENVIRONMENTAL and INDUSTRIAL ANALYTICAL SERVICES

# INORGANIC ANALYSIS DATA SHEET

MW #2

Lab Name: H2M LABS, INC. Contract: G & H

Matrix (soil/water): WATER Lab Sample ID: 859378

Level (low/med): LOW Date Received: 10/06/88

% Solids : -

Concentration Units (ug/L or mg/kg dry weight) ug/L

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 35200 | | * | P |
| 7440-36-0 | Antimony | 100 | | | P |
| 7440-38-2 | Arsenic | 50 | U | | F |
| 7440-39-3 | Barium | 420 | | | P |
| 7440-41-7 | Beryllium | 5 | B | | P |
| 7440-43-9 | Cadmium | 2 | U | | A |
| 7440-70-2 | Calcium | 15100 | | | P |
| 7440-47-3 | Chromium | 71 | | | P |
| 7440-48-4 | Cobalt | 66 | | N | P |
| 7440-50-8 | Copper | 67 | | | P |
| 7439-89-6 | Iron | 55800 | | * | P |
| 7439-92-1 | Lead | 59 | | SN | F |
| 7439-95-4 | Magnesium | 8800 | | | P |
| 7439-96-5 | Manganese | 4200 | | | P |
| 7439-97-6 | Mercury | 0.2 | U | | CV |
| 7440-02-0 | Nickel | 44 | | | A |
| 7440-09-7 | Potassium | 7500 | | | P |
| 7782-49-2 | Selenium | 50 | U | | F |
| 7440-22-4 | Silver | 17 | | | P |
| 7440-23-5 | Sodium | 28800 | | | P |
| 7440-28-0 | Thallium | 5 | U | | F |
| 7440-62-2 | Vanadium | 78 | | N | P |
| 7440-66-6 | Zinc | 130 | | | P |
| | Cyanide | 10 | U | | C |

COMMENTS:

Date Reported: 10/26/88

John J. Molloy, P.E.
Laboratory Director

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# INORGANIC ANALYSIS DATA SHEET

MW #3

Lab Name: H2M LABS, INC. Contract: G & H

Matrix (soil/water): WATER Lab Sample ID: 859379

Level (low/med): LOW Date Received: 10/06/88

% Solids : -

Concentration Units (ug/L or mg/kg dry weight) ug/L

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 16600 | | * | P |
| 7440-36-0 | Antimony | 88 | | | P |
| 7440-38-2 | Arsenic | 50 | U | | F |
| 7440-39-3 | Barium | 210 | | | P |
| 7440-41-7 | Beryllium | 2 | B | | P |
| 7440-43-9 | Cadmium | 2 | U | | A |
| 7440-70-2 | Calcium | 89500 | | | P |
| 7440-47-3 | Chromium | 26 | | | P |
| 7440-48-4 | Cobalt | 23 | B | N | P |
| 7440-50-8 | Copper | 26 | | | P |
| 7439-89-6 | Iron | 19100 | | * | P |
| 7439-92-1 | Lead | 25 | | SN | F |
| 7439-95-4 | Magnesium | 7900 | | | P |
| 7439-96-5 | Manganese | 1700 | | | P |
| 7439-97-6 | Mercury | 0.2 | U | | CV |
| 7440-02-0 | Nickel | 14 | | | A |
| 7440-09-7 | Potassium | 6200 | | | R |
| 7782-49-2 | Selenium | 50 | U | W | F |
| 7440-22-4 | Silver | 9 | B | | P |
| 7440-23-5 | Sodium | 21000 | | | P |
| 7440-28-0 | Thallium | 5 | U | | F |
| 7440-62-2 | Vanadium | 34 | B | N | P |
| 7440-66-6 | Zinc | 72 | | | P |
| | Cyanide | 10 | U | | C |

COMMENTS:

Date Reported: 10/26/88

John J. Molloy, P.E.
Laboratory Director

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# INORGANIC ANALYSIS DATA SHEET

MW #4

Lab Name: H2M LABS, INC. Contract: G & H

Matrix (soil/water): WATER Lab Sample ID: 859380

Level (low/med): LOW Date Received: 10/06/88

% Solids : -

Concentration Units (ug/L or mg/kg dry weight) ug/L

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 42500 | | * | P |
| 7440-36-0 | Antimony | 98 | | | P |
| 7440-38-2 | Arsenic | 50 | U | | F |
| 7440-39-3 | Barium | 220 | | | P |
| 7440-41-7 | Beryllium | 5 | B | | P |
| 7440-43-9 | Cadmium | 2 | U | | A |
| 7440-70-2 | Calcium | 7900 | | | P |
| 7440-47-3 | Chromium | 67 | | | P |
| 7440-48-4 | Cobalt | 54 | | N | P |
| 7440-50-8 | Copper | 65 | | | P |
| 7439-89-6 | Iron | 75200 | | * | P |
| 7439-92-1 | Lead | 54 | | N | F |
| 7439-95-4 | Magnesium | 7300 | | | P |
| 7439-96-5 | Manganese | 1880 | | | P |
| 7439-97-6 | Mercury | 0.2 | U | | CV |
| 7440-02-0 | Nickel | 29 | | | A |
| 7440-09-7 | Potassium | 5000 | | | P |
| 7782-49-2 | Selenium | 50 | U | | F |
| 7440-22-4 | Silver | 5 | B | | P |
| 7440-23-5 | Sodium | 9100 | | | P |
| 7440-28-0 | Thallium | 5 | U | | F |
| 7440-62-2 | Vanadium | 99 | | N | P |
| 7440-66-6 | Zinc | 170 | | | P |
| | Cyanide | 20 | | | C |

COMMENTS:

Date Reported: 10/26/88

John J. Molloy, P.E.
Laboratory Director

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# INORGANIC ANALYSIS DATA SHEET

FIELD BLANK

Lab Name: H2M LABS, INC. Contract: G & H

Matrix (soil/water): WATER Lab Sample ID: 859381

Level (low/med): LOW Date Received: 10/06/88

% Solids : -

Concentration Units (ug/L or mg/kg dry weight) ug/L

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 200 | U | * | P |
| 7440-36-0 | Antimony | 35 | B | | P |
| 7440-38-2 | Arsenic | 5 | U | | F |
| 7440-39-3 | Barium | 1 | B | | P |
| 7440-41-7 | Beryllium | 0 | U | | P |
| 7440-43-9 | Cadmium | 2 | U | | A |
| 7440-70-2 | Calcium | 6 | U | | P |
| 7440-47-3 | Chromium | 3 | U | | P |
| 7440-48-4 | Cobalt | 4 | B | N | P |
| 7440-50-8 | Copper | 3 | B | | P |
| 7439-89-6 | Iron | 2 | B | * | P |
| 7439-92-1 | Lead | 5 | U | WN | F |
| 7439-95-4 | Magnesium | 56 | B | | P |
| 7439-96-5 | Manganese | 0 | U | | P |
| 7439-97-6 | Mercury | 0.2 | U | | CV |
| 7440-02-0 | Nickel | 5 | U | | A |
| 7440-09-7 | Potassium | 200 | U | | P |
| 7782-49-2 | Selenium | 5 | U | | F |
| 7440-22-4 | Silver | 10 | B | | P |
| 7440-23-5 | Sodium | 18 | U | | P |
| 7440-28-0 | Thallium | 5 | U | | F |
| 7440-62-2 | Vanadium | 6 | B | N | P |
| 7440-66-6 | Zinc | 1 | U | | P |
| | Cyanide | 10 | U | | C |

COMMENTS:

Date Reported: 10/26/88

John J. Molloy, P.E.
Laboratory Director

H2M LABS, INC.
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ENVIRONMENTAL and INDUSTRIAL ANALYTICAL SERVICES

# VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: H2M Labs, Inc. Lab Sample ID: 868000 MW#1 (36 Ft)
Lab Code:--- Case No.----- SAS No.: ------- SDG No.:---------
Matrix: Soil Lab File ID: PU9126
Sample Vol: 4.03 g Date Received: 9/16/88
Level: Low Date Analyzed: 9/20/88
% Moisture: 0 Dilution Factor: 1
Column: Pack

| C.A.S. Number | Compound | Concentration Unit: ug/kg | |
|---|---|---|---|
| 74-87-3 | Chloromethane | 12 | U |
| 74-83-9 | Bromomethane | 12 | U |
| 75-01-4 | Vinyl Chloride | 12 | U |
| 75-00-3 | Chloroethane | 12 | U |
| 75-09-2 | Methylene Chloride | 9 | |
| 67-64-1 | Acetone | 4 | J |
| 75-15-0 | Carbon Disulfide | 6 | U |
| 75-35-4 | 1,1-Dichloroethene | 6 | U |
| 75-34-3 | 1,1-Dichloroethane | 6 | U |
| 540-59-0 | 1,2-Dichloroethene (total) | 6 | U |
| 67-66-3 | Chloroform | 6 | U |
| 107-02-2 | 1,2-Dichloroethane | 6 | U |
| 78-93-3 | 2-Butanone | 12 | |
| 71-55-6 | 1,1,1-Trichloroethane | 21 | |
| 56-23-5 | Carbon Tetrachloride | 6 | U |
| 108-05-4 | Vinyl Acetate | 12 | U |
| 75-27-4 | Bromodichloromethane | 6 | U |
| 78-87-5 | 1,2-Dichloropropane | 6 | U |
| 10061-02-6 | cis-1,3-Dichloropropene | 6 | U |
| 79-01-6 | Trichloroethene | 6 | U |
| 124-48-1 | Dibromochloromethane | 6 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 6 | U |
| 71-43-2 | Benzene | 6 | U |
| 10061-01-5 | trans-1,3-Dichloropropene | 6 | U |
| 75-25-2 | Bromoform | 6 | U |
| 108-10-1 | 4-Methyl-2-Pentanone | 12 | U |
| 591-78-6 | 2-Hexanone | 12 | U |
| 127-18-4 | Tetrachloroethene | 6 | U |
| 79-34-5 | 1,1,2,2,Tetrachloroethane | 6 | U |
| 108-88-3 | Toluene | 6 | U |
| 108-90-7 | Chlorobenzene | 6 | U |
| 100-41-4 | Ethylbenzene | 6 | U |
| 100-42-5 | Styrene | 6 | U |
| 1330-20-7 | Xylene (total) | 6 | U |

Date Reported: 10/14/88

John J. Molloy, P.E.
Laboratory Director

H2M LABS, INC.
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# VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: H2M Labs, Inc. Lab Sample ID: 868002 MW#2 (36 Ft)
Lab Code:--- Case No.----- SAS No.: ------- SDG No.:---------
Matrix: Soil Lab File ID: PU9127
Sample Vol: 4.10 g Date Received: 9/16/88
Level: Low Date Analyzed: 9/20/88
% Moisture: 3 Dilution Factor: 1
Column: Pack

| C.A.S. Number | Compound | Concentration Unit: ug/kg | |
|---|---|---|---|
| 74-87-3 | Chloromethane | 13 | U |
| 74-83-9 | Bromomethane | 13 | U |
| 75-01-4 | Vinyl Chloride | 13 | U |
| 75-00-3 | Chloroethane | 13 | U |
| 75-09-2 | Methylene Chloride | 9 | |
| 67-64-1 | Acetone | 4 | J |
| 75-15-0 | Carbon Disulfide | 6 | U |
| 75-35-4 | 1,1-Dichloroethene | 6 | U |
| 75-34-3 | 1,1-Dichloroethane | 6 | U |
| 540-59-0 | 1,2-Dichloroethene (total) | 6 | U |
| 67-66-3 | Chloroform | 6 | U |
| 107-02-2 | 1,2-Dichloroethane | 6 | U |
| 78-93-3 | 2-Butanone | 13 | U |
| 71-55-6 | 1,1,1-Trichloroethane | 24 | |
| 56-23-5 | Carbon Tetrachloride | 6 | U |
| 108-05-4 | Vinyl Acetate | 13 | U |
| 75-27-4 | Bromodichloromethane | 6 | U |
| 78-87-5 | 1,2-Dichloropropane | 6 | U |
| 10061-02-6 | cis-1,3-Dichloropropene | 6 | U |
| 79-01-6 | Trichloroethene | 6 | U |
| 124-48-1 | Dibromochloromethane | 6 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 6 | U |
| 71-43-2 | Benzene | 6 | U |
| 10061-01-5 | trans-1,3-Dichloropropene | 6 | U |
| 75-25-2 | Bromoform | 6 | U |
| 108-10-1 | 4-Methyl-2-Pentanone | 13 | U |
| 591-78-6 | 2-Hexanone | 13 | U |
| 127-18-4 | Tetrachloroethene | 6 | U |
| 79-34-5 | 1,1,2,2,Tetrachloroethane | 6 | U |
| 108-88-3 | Toluene | 6 | U |
| 108-90-7 | Chlorobenzene | 6 | U |
| 100-41-4 | Ethylbenzene | 6 | U |
| 100-42-5 | Styrene | 6 | U |
| 1330-20-7 | Xylene (total) | 6 | U |

Date Reported: 10/14/88

John J. Molloy, P.E.
Laboratory Director

H2M LABS, INC.
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ENVIRONMENTAL and INDUSTRIAL ANALYTICAL SERVICES

# ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M Labs, Inc.
Matrix: Soil
Sample Wt: 4.03 g
Level: Low
% Moisture:
Column: Pack

SDG No.: MW#1
Lab SampleID: 868000
Lab File ID: PU9126
Date Received: 9/16/88
Date Analyzed: 9/20/88
Dilution Factor: 1

Number TICs found: 0

Concentration Units: ug/kg

| Compound Name | RT | Estimated Conc. | Q |
|---|---|---|---|
| No unknowns found | | | |

Date Reported: 10/14/88

John J. Molloy, P.E.
Laboratory Director

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# ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M Labs, Inc.
Matrix: Soil
Sample Wt: 4:10 g
Level: Low
% Moisture: not dec. 3
Column: Pack

SDG No.: MW#2
Lab SampleID: 868002
Lab File ID: PU9126
Date Received: 9/16/88
Date Analyzed: 9/20/88
Dilution Factor: 1

Number TICs found: 1

Concentration Units: ug/kg

| | Compound Name | RT | Estimated Conc. | Q |
|---|---|---|---|---|
| 625274 | 2-Methyl-2-pentene | 7:30 | 12 | JB |

Date Reported: 10/14/88

John J. Molloy, P.E.
Laboratory Director

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ENVIRONMENTAL and INDUSTRIAL ANALYTICAL SERVICES

Semi-Volatile Organics

Lab Name: H2M Labs, Inc. Contract:
Lab Code: ---- Case No.:---- Sas No.:------ SDG No.: MW#1 (36 Ft)
Matrix: Soil Lab Sample ID: 868000
Sample Wt: 30.0295 g Lab File ID: )P4845
Level: Low Date Received: 9/16/88
% Moisure: not dec. 0 Date Extracted: 9/20/88
Extraction: Sonc. Date Analyzed: 10/5/88
GPC Cleanup: No Dilution Factor: 1

| | | Concentration Unit ug/kg | Q |
|---|---|---|---|
| 108-95-2 | Phenol | 330 | U |
| 111-44-4 | bis(2-Chloroethyl)ether | 330 | U |
| 95-57-8 | 2-Chlorophenol | 330 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 330 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 330 | U |
| 100-51-6 | Benzyl alcohol | 330 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 330 | U |
| 95-48-7 | 2-Methylphenol | 330 | U |
| 108-60-1 | bis(2-Chloroisopropyl)ether | 330 | U |
| 106-44-5 | 4-Methylphenol | 330 | U |
| 621-64-7 | N-Nitroso-di-n-propylamine | 330 | U |
| 67-72-1 | Hexachloroethane | 330 | U |
| 98-95-3 | Nitrobenzene | 330 | U |
| 78-59-1 | Isophorone | 330 | U |
| 88-75-5 | 2-Nitrophenol | 330 | U |
| 105-67-9 | 2,4-Dimethylphenol | 330 | U |
| 65-85-0 | Benzoic acid | 1600 | U |
| 111-91-1 | bis(2-Chloroethoxy)methane | 330 | U |
| 120-83-2 | 2,4-Dichlorophenol | 330 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 330 | U |
| 91-20-3 | Naphthalene | 330 | U |
| 106-47-8 | 4-Chloroaniline | 330 | U |
| 87-68-3 | Hexachlorobutadiene | 330 | U |
| 59-50-7 | 4-Chloro-3-methylphenol | 330 | U |
| 91-57-6 | 2-Methylnaphthalene | 330 | U |
| 77-47-4 | Hexachlorocyclopentadiene | 330 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 330 | U |
| 95-95-4 | 2,4,5-Trichlorophenol | 1600 | U |
| 91-58-7 | 2-Chloronaphthalene | 330 | U |
| 88-74-4 | 2-Nitroaniline | 1600 | U |
| 131-11-3 | Dimethylphthalate | 330 | U |
| 208-96-8 | Acenaphthylene | 330 | U |
| 606-20-2 | 2,6-Dinitrotoluene | 330 | U |

Date Reported: 10/13/88

John J. Molloy, P.E.
Laboratory Director

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ENVIRONMENTAL and INDUSTRIAL ANALYTICAL SERVICES

Lab Name: H2M Labs, Inc.
Lab Code:-----Case No.:---- Sas No.:----- SDG No.: MW#1 (36 Ft)
Matrix: Soil
Sample Wt: 30.0295 g
Level: Low
% Moisture: not dec. 0
Extraction: Sonc.
GPC Cleanup: No

Lab Sample ID: 868000
Lab File ID: >P4845
Date Received: 9/16/88
Date Extracted: 9/20/88
Date Analyzed: 10/5/88
Dilution Factor: 1

| CAS NO. | Compound | Concentration Unit ug/kg | Q |
|---|---|---|---|
| 99-09-2 | 3-Nitroaniline | 1600 | U |
| 83-32-9 | Acenaphthene | 330 | U |
| 51-28-5 | 2,4-Dinitrophenol | 1600 | U |
| 100-02-7 | 4-Nitrophenol | 1600 | U |
| 132-64-9 | Dibenzofuran | 330 | U |
| 121-14-2 | 2,4-Dinitrotoluene | 330 | U |
| 84-66-2 | Diethylphthalate | 330 | U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 330 | U |
| 86-73-7 | Fluorene | 330 | U |
| 100-01-6 | 4-Nitroaniline | 1600 | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 1600 | U |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 330 | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 330 | U |
| 118-74-1 | Hexachlorobenzene | 330 | U |
| 87-86-5 | Pentachlorophenol | 1600 | U |
| 85-01-8 | Phenanthrene | 330 | U |
| 120-12-7 | Anthracene | 330 | U |
| 84-74-2 | Di-n-butylphthalate | 330 | U |
| 206-44-0 | Fluoranthene | 330 | U |
| 129-00-0 | Pyrene | 330 | U |
| 85-68-7 | Butylbenzylphthalate | 330 | U |
| 91-94-1 | 3,3'-Dichlorobenzidine | 660 | U |
| 56-55-3 | Benzo(a)anthracene | 330 | U |
| 218-01-9 | Chrysene | 330 | U |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 550 | B |
| 117-84-0 | Di-n-octylphthalate | 330 | U |
| 205-99-2 | Benzo(b)fluoranthene | 330 | U |
| 207-08-9 | Benzo(k)fluoranthene | 330 | U |
| 50-32-8 | Benzo(a)pyrene | 330 | U |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 330 | U |
| 53-70-3 | Dibenz(a,h)anthracene | 330 | U |
| 191-24-2 | Benzo(g,h,i)perylene | 330 | U |

(1) - Cannot be separated from Diphenylamine

Date Reported: 10/13/88

John J. Molloy, P.E.
Laboratory Director

H2M LABS, INC.
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ENVIRONMENTAL and INDUSTRIAL ANALYTICAL SERVICES

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M Labs, Inc.
Matrix: Soil
Sample Wt: 30.0295 g
Level: Low
% Moisture: 0
Extraction: Sonc.
GPC Cleanup: No

Lab SampleID: 868000
Lab File ID: )P4845
Date Received: 9/16/88
Date Extracted: 9/20/88
Date Analyzed: 10/5/88
Dilution Factor: 1

Number TICs found: 2

Concentration Units: ug/kg

| | Compound Name | RT | Estimated Conc. | Q |
|---|---|---|---|---|
| | Unknown | 14.04 | 300 | J |
| 21964498 | 1,13-Tetradecadiene | 29.50 | 4000 | J |

Date Reported: 10/4/88

John J. Molloy, P.E.
Laboratory Director

H2M LABS, INC.
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ENVIRONMENTAL and INDUSTRIAL ANALYTICAL SERVICES

Lab Name: H2M Labs, Inc. Contract:
Lab Code: ---- Case No.:---- Sas No.:------ SDG No.: MW#2 (36 Ft)
Matrix: Soil Lab Sample ID: 868002
Sample Wt: 30.0195 g Lab File ID: )P4846
Level: Low Date Received: 9/16/88
% Moisure: not dec. 3 Date Extracted: 9/20/88
Extraction: Sonc. Date Analyzed: 10/5/88
GPC Cleanup: No Dilution Factor: 1

| | | Concentration Unit ug/kg | Q |
|---|---|---|---|
| 108-95-2 | Phenol | 340 | U |
| 111-44-4 | bis(2-Chloroethyl)ether | 340 | U |
| 95-57-8 | 2-Chlorophenol | 340 | U |
| 541-73-1 | 1,3-Dichlorobenzene | 340 | U |
| 106-46-7 | 1,4-Dichlorobenzene | 340 | U |
| 100-51-6 | Benzyl alcohol | 340 | U |
| 95-50-1 | 1,2-Dichlorobenzene | 340 | U |
| 95-48-7 | 2-Methylphenol | 340 | U |
| 108-60-1 | bis(2-Chloroisopropyl)ether | 340 | U |
| 106-44-5 | 4-Methylphenol | 340 | U |
| 621-64-7 | N-Nitroso-di-n-propylamine | 340 | U |
| 67-72-1 | Hexachloroethane | 340 | U |
| 98-95-3 | Nitrobenzene | 340 | U |
| 78-59-1 | Isophorone | 340 | U |
| 88-75-5 | 2-Nitrophenol | 340 | U |
| 105-67-9 | 2,4-Dimethylphenol | 340 | U |
| 65-85-0 | Benzoic acid | 1700 | U |
| 111-91-1 | bis(2-Chloroethoxy)methane | 340 | U |
| 120-83-2 | 2,4-Dichlorophenol | 340 | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 340 | U |
| 91-20-3 | Naphthalene | 340 | U |
| 106-47-8 | 4-Chloroaniline | 340 | U |
| 87-68-3 | Hexachlorobutadiene | 340 | U |
| 59-50-7 | 4-Chloro-3-methylphenol | 340 | U |
| 91-57-6 | 2-Methylnaphthalene | 340 | U |
| 77-47-4 | Hexachlorocyclopentadiene | 340 | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 340 | U |
| 95-95-4 | 2,4,5-Trichlorophenol | 1700 | U |
| 91-58-7 | 2-Chloronaphthalene | 340 | U |
| 88-74-4 | 2-Nitroaniline | 1700 | U |
| 131-11-3 | Dimethylphthalate | 340 | U |
| 208-96-8 | Acenaphthylene | 340 | U |
| 606-20-2 | 2,6-Dinitrotoluene | 340 | U |

Date Reported: 10/13/88

John J. Molloy, P.E.
Laboratory Director

H2M LABS, INC.
575 BROAD HOLLOW ROAD, MELVILLE, N.Y. 11747 • 516-694-3040
ENVIRONMENTAL and INDUSTRIAL ANALYTICAL SERVICES

Lab Name: H2M Labs, Inc.
Lab Code:-----Case No.:---- Sas No.:----- SDG No.: MW#2 (36 Ft)
Matrix: Soil
Sample Wt: 30.0195 g
Level: Low
% Moisture: not dec. 3
Extraction: Sonc.
GPC Cleanup: No

Lab Sample ID: 868002
Lab File ID: >P4846
Date Received: 9/16/88
Date Extracted: 9/20/88
Date Analyzed: 10/5/88
Dilution Factor: 1

| CAS NO. | Compound | Concentration Unit ug/kg | Q |
|---|---|---|---|
| 99-09-2 | 3-Nitroaniline | 1700 | U |
| 83-32-9 | Acenaphthene | 340 | U |
| 51-28-5 | 2,4-Dinitrophenol | 1700 | U |
| 100-02-7 | 4-Nitrophenol | 1700 | U |
| 132-64-9 | Dibenzofuran | 340 | U |
| 121-14-2 | 2,4-Dinitrotoluene | 340 | U |
| 84-66-2 | Diethylphthalate | 340 | U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 340 | U |
| 86-73-7 | Fluorene | 340 | U |
| 100-01-6 | 4-Nitroaniline | 1700 | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 1700 | U |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 340 | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 340 | U |
| 118-74-1 | Hexachlorobenzene | 340 | U |
| 87-86-5 | Pentachlorophenol | 1700 | U |
| 85-01-8 | Phenanthrene | 340 | U |
| 120-12-7 | Anthracene | 340 | U |
| 84-74-2 | Di-n-butylphthalate | 340 | U |
| 206-44-0 | Fluoranthene | 340 | U |
| 129-00-0 | Pyrene | 340 | U |
| 85-68-7 | Butylbenzylphthalate | 340 | U |
| 91-94-1 | 3,3'-Dichlorobenzidine | 680 | U |
| 56-55-3 | Benzo(a)anthracene | 340 | U |
| 218-01-9 | Chrysene | 340 | U |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 700 | B |
| 117-84-0 | Di-n-octylphthalate | 340 | U |
| 205-99-2 | Benzo(b)fluoranthene | 340 | U |
| 207-08-9 | Benzo(k)fluoranthene | 340 | U |
| 50-32-8 | Benzo(a)pyrene | 340 | U |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 340 | U |
| 53-70-3 | Dibenz(a,h)anthracene | 340 | U |
| 191-24-2 | Benzo(g,h,i)perylene | 340 | U |

(1) - Cannot be separated from Diphenylamine

Date Reported: 10/13/88

John J. Molloy, P.E.
Laboratory Director

H2M LABS, INC.
875 BROAD HOLLOW ROAD, MELVILLE, N.Y. 11747 • 516-694-3040
ENVIRONMENTAL and INDUSTRIAL ANALYTICAL SERVICES

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M Labs, Inc.
Matrix: Soil
Sample Wt: 30.0195 g
Level: Low
% Moisture: 3
Extraction: Sonc.
GPC Cleanup: No

SDG No.: MW#1 (36 Ft)
Lab SampleID: 868002
Lab File ID: )P4846
Date Received: 9/16/88
Date Extracted: 9/20/88
Date Analyzed: 10/5/88
Dilution Factor: 1

Number TICs found: 2

Concentration Units: ug/kg

| | Compound Name | RT | Estimated Conc. | Q |
|---|---|---|---|---|
| | Unknown | 14.09 | 290 | J |
| 21964498 | 1,13-Tetradecadiene | 29.57 | 5200 | J |

Date Reported: 10/4/88

John J. Molloy, P.E.
Laboratory Director

H2M LABS, INC. · 575 BROAD HOLLOW ROAD, MELVILLE, N Y 11747 • 516-694-3040
ENVIRONMENTAL and INDUSTRIAL ANALYTICAL SERVICES

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

MW #1

Lab Name: H2M LABS, INC. Contract: G & H
Lab Code: ____ Case No.: ____ SAS No.: ____ SDG No.: ____
Matrix: SOIL Lab Sample ID: 868000
Sample wt: 29.7 g Lab File ID: HP 91
Level: ____ Date Received: 09/16/88
% Moisture: not dec. ____ dec. ____ Date Extracted: 09/20/88
Extraction: SONC Date Analyzed: 09/28/88
GPC Cleanup: N Dilution Factor: 1

| CAS NO. | COMPOUND | CONCENTRATION UNITS: ug/kg | Q |
|---|---|---|---|
| 319-84-6 | alpha-BHC | 8 | U |
| 319-85-7 | beta-BHC | 8 | U |
| 319-86-8 | delta-BHC | 8 | U |
| 58-89-9 | gamma-BHC (Lindane) | 8 | U |
| 76-44-8 | Heptachlor | 8 | U |
| 309-00-2 | Aldrin | 8 | U |
| 1024-57-3 | Heptachlor epoxide | 8 | U |
| 959-98-8 | Endosulfan I | 8 | U |
| 60-57-1 | Dieldrin | 16 | U |
| 72-55-9 | 4,4'-DDE | 16 | U |
| 72-20-8 | Endrin | 1 | J |
| 33213-65-9 | Endosulfan II | 16 | U |
| 72-54-8 | 4,4'-DDD | 16 | U |
| 1031-07-8 | Endosulfan sulfate | 16 | U |
| 50-29-3 | 4,4'-DDT | 2 | J |
| 72-43-5 | Methoxychlor | 80 | U |
| 53494-70-5 | Endrin ketone | 16 | U |
| 5103-71-9 | alpha-Chlordane | 80 | U |
| 5103-74-2 | gamma-Chlordane | 80 | U |
| 8001-35-2 | Toxaphene | 160 | U |
| 12674-11-2 | Aroclor-1016 | 80 | U |
| 11104-28-2 | Aroclor-1221 | 80 | U |
| 11141-16-5 | Aroclor-1232 | 80 | U |
| 53469-21-9 | Aroclor-1242 | 80 | U |
| 12672-29-6 | Aroclor-1248 | 80 | U |
| 11097-69-1 | Aroclor-1254 | 160 | U |
| 11096-82-5 | Aroclor-1260 | 160 | U |

Date Reported: 10/13/88

John J. Molloy, P.E.
Laboratory Director

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ENVIRONMENTAL and INDUSTRIAL ANALYTICAL SERVICES

# PESTICIDE ORGANICS ANALYSIS DATA SHEET

MW #2

Lab Name: H2M LABS, INC. Contract: G & H SDG No.:

Lab Code: Case No.: SAS No.:
Matrix: SOIL Lab Sample ID: 868002
Sample wt: 29.1 g Lab File ID: HP 92
Level: Date Received: 09/16/88
% Moisture: not dec. dec. Date Extracted: 09/20/88
Extraction: SONC Date Analyzed: 09/28/88
GPC Cleanup: N Dilution Factor: 1

| CAS NO. | COMPOUND | CONCENTRATION UNITS: ug/kg | Q |
|---|---|---|---|
| 319-84-6 | alpha-BHC | 8 | U |
| 319-85-7 | beta-BHC | 8 | U |
| 319-86-8 | delta-BHC | 8 | U |
| 58-89-9 | gamma-BHC (Lindane) | 8 | U |
| 76-44-8 | Heptachlor | 8 | U |
| 309-00-2 | Aldrin | 8 | U |
| 1024-57-3 | Heptachlor epoxide | 8 | U |
| 959-98-8 | Endosulfan I | 16 | U |
| 60-57-1 | Dieldrin | 16 | U |
| 72-55-9 | 4,4'-DDE | 16 | U |
| 72-20-8 | Endrin | 16 | U |
| 33213-65-9 | Endosulfan II | 16 | U |
| 72-54-8 | 4,4'-DDD | 16 | U |
| 1031-07-8 | Endosulfan sulfate | 16 | U |
| 50-29-3 | 4,4'-DDT | 80 | U |
| 72-43-5 | Methoxychlor | 16 | U |
| 53494-70-5 | Endrin ketone | 80 | U |
| 5103-71-9 | alpha-Chlordane | 80 | U |
| 5103-74-2 | gamma-Chlordane | 160 | U |
| 8001-35-2 | Toxaphene | 80 | U |
| 12674-11-2 | Aroclor-1016 | 80 | U |
| 11104-28-2 | Aroclor-1221 | 80 | U |
| 11141-16-5 | Aroclor-1232 | 80 | U |
| 53469-21-9 | Aroclor-1242 | 80 | U |
| 12672-29-6 | Aroclor-1248 | 160 | U |
| 11097-69-1 | Aroclor-1254 | 160 | U |
| 11096-82-5 | Aroclor-1260 | | |

Date Reported: 10/13/88

John J. Molloy, P.E.
Laboratory Director

H2M LABS, INC. 575 BROAD HOLLOW ROAD, MELVILLE, N.Y. 11747 • 516-694-3040

ENVIRONMENTAL and INDUSTRIAL ANALYTICAL SERVICES

INORGANIC ANALYSIS DATA SHEET

MW#1

Lab Name: H2M LABS, INC. Contract: G & H

Matrix (soil/water): SOIL Lab Sample ID: 868001

Level (low/med): LOW Date Received: 09/16/88

% Solids : 99.7

Concentration Units (ug/L or mg/kg dry weight) mg/kg

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 1400 | | | P |
| 7440-36-0 | Antimony | 4.7 | B | | P |
| 7440-38-2 | Arsenic | 87 | | + | F |
| 7440-39-3 | Barium | 7.5 | B | | P |
| 7440-41-7 | Beryllium | .39 | B | | P |
| 7440-43-9 | Cadmium | .20 | U | | P |
| 7440-70-2 | Calcium | 260 | B | | P |
| 7440-47-3 | Chromium | 13.0 | | *N | P |
| 7440-48-4 | Cobalt | 2.5 | B | | P |
| 7440-50-8 | Copper | 4.1 | B | *N | P |
| 7439-89-6 | Iron | 7700 | | | P |
| 7439-92-1 | Lead | 2.0 | | | F |
| 7439-95-4 | Magnesium | 360 | B | | P |
| 7439-96-5 | Manganese | 60 | | | P |
| 7439-97-6 | Mercury | .1 | U | | CV |
| 7440-02-0 | Nickel | 3.7 | B | *N | P |
| 7440-09-7 | Potassium | 219 | B | | AA |
| 7782-49-2 | Selenium | 5.0 | U | | F |
| 7440-22-4 | Silver | 3.9 | | | P |
| 7440-23-5 | Sodium | 1700 | | | P |
| 7440-28-0 | Thallium | 0.6 | U | | F |
| 7440-62-2 | Vanadium | 6.9 | B | | P |
| 7440-66-6 | Zinc | 25 | | *N | P |
| | Cyanide | 0.5 | U | | C |

COMMENTS:

Date Reported: 10/12/88

John J. Molloy, P.E.
Laboratory Director

H2M LABS, INC.
575 BROAD HOLLOW ROAD, MELVILLE, N.Y. 11747 • 516-694-3040

ENVIRONMENTAL and INDUSTRIAL ANALYTICAL SERVICES

# INORGANIC ANALYSIS DATA SHEET

MW#2

Lab Name: H2M LABS, INC. Contract: G & H

Matrix (soil/water): SOIL Lab Sample ID: 868003

Level (low/med): LOW Date Received: 09/16/88

% Solids : 97.3

Concentration Units (ug/L or mg/kg dry weight) mg/kg

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 4000 | | | P |
| 7440-36-0 | Antimony | 3.1 | U | | P |
| 7440-38-2 | Arsenic | 78 | | + | F |
| 7440-39-3 | Barium | 13.0 | B | | P |
| 7440-41-7 | Beryllium | .41 | B | | P |
| 7440-43-9 | Cadmium | .21 | U | | P |
| 7440-70-2 | Calcium | 620 | B | | P |
| 7440-47-3 | Chromium | 11.0 | | * | P |
| 7440-48-4 | Cobalt | 2.3 | B | | P |
| 7440-50-8 | Copper | 4.9 | B | * | P |
| 7439-89-6 | Iron | 7900 | | | P |
| 7439-92-1 | Lead | 11.0 | | | F |
| 7439-95-4 | Magnesium | 530 | B | | P |
| 7439-96-5 | Manganese | 79 | | | P |
| 7439-97-6 | Mercury | 0.1 | U | | CV |
| 7440-02-0 | Nickel | 2.3 | B | * | P |
| 7440-09-7 | Potassium | 300 | B | | AA |
| 7782-49-2 | Selenium | 5.2 | U | | F |
| 7440-22-4 | Silver | 2.5 | | | P |
| 7440-23-5 | Sodium | 1600 | | | P |
| 7440-28-0 | Thallium | 0.6 | U | | F |
| 7440-62-2 | Vanadium | 8.0 | B | | P |
| 7440-66-6 | Zinc | 23.0 | | * | P |
| | Cyanide | 0.50 | U | | C |

COMMENTS:

Date Reported: 10/12/88

John J. Molloy, P.E.
Laboratory Director

H2M LABS, INC.
575 Broad Hollow Road, Melville, N.Y. 11747
(516) 694-3040 FAX: (516) 694-4122
ENVIRONMENTAL and INDUSTRIAL ANALYTICAL LABORATORY

# VOLATILE ORGANICS ANALYSIS DATA SHEET

SD 1
LEROY CALLENDER, P.C.
CANTOR BROTHERS SITE
SOIL SAMPLES

Lab Name: H2M LABS, INC. Contract: GIBBS & HILL
Matrix: SOIL Lab Sample ID: 874726
Sample vol: 2.745 g Lab File ID: PU9564
Level: LOW Date Received: 12/28/88
% Moisture:not dec. 60 dec. Date Analyzed: 12/31/88
Column:(pack/cap) PACK Dilution Factor: 1

| CAS NO. | COMPOUND | CONCENTRATION UNITS: ug/Kg | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 46 | U |
| 74-83-9 | Bromomethane | 46 | U |
| 75-01-4 | Vinyl Chloride | 46 | U |
| 75-00-3 | Chloroethane | 46 | U |
| 75-09-2 | Methylene Chloride | 55 | B |
| 67-64-1 | Acetone | 200 | B |
| 75-15-0 | Carbon Disulfide | 23 | U |
| 75-35-4 | 1,1-Dichloroethene | 23 | U |
| 75-34-3 | 1,1-Dichloroethane | 23 | U |
| 540-59-0 | 1,2-Dichloroethene (total) | 23 | U |
| 67-66-3 | Chloroform | 23 | U |
| 107-06-2 | 1,2-Dichloroethane | 23 | U |
| 78-93-3 | 2-Butanone | 31 | J,B |
| 71-55-6 | 1,1,1-Trichloroethane | 23 | U |
| 56-23-5 | Carbon Tetrachloride | 23 | U |
| 108-05-4 | Vinyl Acetate | 46 | U |
| 75-27-4 | Bromodichloromethane | 23 | U |
| 78-87-5 | 1,2-Dichloropropane | 23 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 23 | U |
| 79-01-6 | Trichloroethene | 23 | U |
| 124-48-1 | Dibromochloromethane | 23 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 23 | U |
| 71-43-2 | Benzene | 23 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | 23 | U |
| 75-25-2 | Bromoform | 23 | U |
| 108-10-1 | 4-Methyl-2-Pentanone | 46 | U |
| 591-78-6 | 2-Hexanone | 46 | U |
| 127-18-4 | Tetrachloroethene | 6 | J |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 23 | U |
| 108-88-3 | Toluene | 21 | J,B |
| 108-90-7 | Chlorobenzene | 23 | U |
| 100-41-4 | Ethylbenzene | 23 | U |
| 100-42-5 | Styrene | 23 | U |
| 1330-20-7 | Xylene (total) | 23 | U |

Date Reported: 01/31/89

John J. Molloy, P.E.
Laboratory Director

H2M LABS, INC
575 Broad Hollow Road, Melville, N.Y. 11747
(516) 694-3040 FAX: (516) 694-4122
ENVIRONMENTAL and INDUSTRIAL ANALYTICAL LABORATORY

# VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

SD 1
LEROY CALLENDER, P.C.
CANTOR BROTHERS SITE
SOIL SAMPLES

Lab Name: H2M LABS, INC. Contract: GIBBS & HILL

Matrix: SOIL
Sample vol: 2.745 g
Level: LOW
% Moisture: not dec. 60 dec.
Column: (pack/cap) PACK

Lab Sample ID: 874726
Lab File ID: PU9564
Date Received: 12/28/88
Date Analyzed: 12/31/88
Dilution Factor: 1

Number TICs found: 8

CONCENTRATION UNITS: ug/Kg

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|---|
| 1 | | UNKNOWN HYDROCARBON | 20:33 | 300 | J |
| 2 | | UNKNOWN ALKENE | 21:12 | 150 | J |
| 3 | | UNKNOWN HYDROCARBON | 22:24 | 24 | J |
| 4 | | UNKNOWN CYCLOHEXANE | 25:24 | 81 | J |
| 5 | | UNKNOWN | 27:21 | 78 | J |
| 6 | | UNKNOWN | 28:33 | 70 | J |
| 7 | | UNKNOWN | 31:18 | 220 | J |
| 8 | | UNKNOWN ESTER | 33:18 | 130 | J |
| 9 | | | | | |
| 10 | | | | | |
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Date Reported: 01/31/89

John J. Molloy, P.E.
Laboratory Director

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575 Broad Hollow Road, Melville, N.Y. 11747
(516) 694-3040 FAX: (516) 694-4122
ENVIRONMENTAL and INDUSTRIAL ANALYTICAL LABORATORY

# VOLATILE ORGANICS ANALYSIS DATA SHEET

SD 2
LEROY CALLENDER, P.C.
CANTOR BROTHERS SITE
SOIL SAMPLES

Lab Name: H2M LABS, INC. Contract: GIBBS & HILL

Matrix: SOIL
Sample vol: 3.158 g
Level: LOW
% Moisture: nor dec. 75 dec.
Column: (pack/cap) PACK

Lab Sample ID: 874727
Lab File ID: PU9562
Date Received: 12/28/88
Date Analyzed: 12/31/88
Dilution Factor: 1

| CAS NO. | COMPOUND | CONCENTRATION UNITS: ug/Kg | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 63 | U |
| 74-83-9 | Bromomethane | 63 | U |
| 75-01-4 | Vinyl Chloride | 63 | U |
| 75-00-3 | Chloroethane | 63 | U |
| 75-09-2 | Methylene Chloride | 33 | B |
| 67-64-1 | Acetone | 110 | B |
| 75-15-0 | Carbon Disulfide | 45 | |
| 75-35-4 | 1,1-Dichloroethene | 32 | U |
| 75-34-3 | 1,1-Dichloroethane | 32 | U |
| 540-59-0 | 1,2-Dichloroethene (total) | 46 | |
| 67-66-3 | Chloroform | 16 | J |
| 107-06-2 | 1,2-Dichloroethane | 32 | U |
| 78-93-3 | 2-Butanone | 10 | J,B |
| 71-55-6 | 1,1,1-Trichloroethane | 32 | U |
| 56-23-5 | Carbon Tetrachloride | 32 | U |
| 108-05-4 | Vinyl Acetate | 63 | U |
| 75-27-4 | Bromodichloromethane | 32 | U |
| 78-87-5 | 1,2-Dichloropropane | 32 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 32 | U |
| 79-01-6 | Trichloroethene | 15 | J |
| 124-48-1 | Dibromochloromethane | 32 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 32 | U |
| 71-43-2 | Benzene | 32 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | 32 | U |
| 75-25-2 | Bromoform | 32 | U |
| 108-10-1 | 4-Methyl-2-Pentanone | 63 | U |
| 591-78-6 | 2-Hexanone | 63 | U |
| 127-18-4 | Tetrachloroethene | 29 | J |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 32 | U |
| 108-88-3 | Toluene | 78 | B |
| 108-90-7 | Chlorobenzene | 32 | U |
| 100-41-4 | Ethylbenzene | 32 | U |
| 100-42-5 | Styrene | 32 | U |
| 1330-20-7 | Xylene (total) | 32 | U |

Date Reported: 01/31/89

John J. Molloy, P.E.
Laboratory Director

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575 Broad Hollow Road, Melville, N.Y. 11747
(516) 694-3040 FAX: (516) 694-4122
ENVIRONMENTAL and INDUSTRIAL ANALYTICAL LABORATORY

# VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

SD 2
LEROY CALLENDER, P.C.
CANTOR BROTHERS SITE
SOIL SAMPLES

Lab Name: H2M LABS, INC. Contract: GIBBS & HILL

Matrix: SOIL
Sample vol: 3.158 g
Level: LOW
% Moisture:not dec. 75 dec.
Column:(pack/cap) PACK

Lab Sample ID: 874727
Lab File ID: PU9562
Date Received: 12/28/88
Date Analyzed: 12/31/88
Dilution Factor: 1

Number TICs found: 9

CONCENTRATION UNITS: ug/Kg

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|---|
| 1 | | UNKNOWN | 08:54 | 370 | J |
| 2 | | UNKNOWN ALKENE | 20:27 | 230 | J |
| 3 | | UNKNOWN ALKANE | 20:51 | 150 | J |
| 4 | | UNKNOWN ALKENE | 21:09 | 230 | J |
| 5 | 4923-77-7 | 1-ETHYL-2-METHYL-CIS-CYCLOHEXANE | 22:18 | 180 | J |
| 6 | | UNKNOWN ALKANE | 25:15 | 570 | J |
| 7 | 6874-28-8 | 2,6-DIMETHYL-3-OCTENE | 27:06 | 500 | J |
| 8 | | UNKNOWN ALKANE | 28:27 | 660 | J |
| 9 | | 7-METHYL-(E)-4-DECENE | 33:06 | 500 | J |
| 10 | | | | | |
| 11 | | | | | |
| 12 | | | | | |
| 13 | | | | | |
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Date Reported: 01/31/89

John J. Molloy, P.E.
Laboratory Director

H2M LABS, INC
575 Broad Hollow Road, Melville, N.Y. 11747
(516) 694-3040 FAX: (516) 694-4122
ENVIRONMENTAL and INDUSTRIAL ANALYTICAL LABORATORY

# VOLATILE ORGANICS ANALYSIS DATA SHEET

SD 3
LEROY CALLENDER, P.C.
CANTOR BROTHERS SITE
SOIL SAMPLES

Lab Name: H2M LABS, INC. Contract: GIBBS & HILL

Matrix: SOIL
Sample vol: 3.218 g
Level: LOW
% Moisture: not dec. 26 dec.
Column: (pack/cap) PACK

Lab Sample ID: 874728
Lab File ID: PU9567
Date Received: 12/28/88
Date Analyzed: 12/31/88
Dilution Factor: 1

| CAS NO. | COMPOUND | CONCENTRATION UNITS: ug/Kg | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 21 | U |
| 74-83-9 | Bromomethane | 21 | U |
| 75-01-4 | Vinyl Chloride | 21 | U |
| 75-00-3 | Chloroethane | 21 | U |
| 75-09-2 | Methylene Chloride | 20 | B |
| 67-64-1 | Acetone | 38 | B |
| 75-15-0 | Carbon Disulfide | 8 | J |
| 75-35-4 | 1,1-Dichloroethene | 10 | U |
| 75-34-3 | 1,1-Dichloroethane | 10 | U |
| 540-59-0 | 1,2-Dichloroethene (total) | 10 | U |
| 67-66-3 | Chloroform | 5 | J |
| 107-06-2 | 1,2-Dichloroethane | 10 | U |
| 78-93-3 | 2-Butanone | 14 | J,B |
| 71-55-6 | 1,1,1-Trichloroethane | 10 | U |
| 56-23-5 | Carbon Tetrachloride | 10 | U |
| 108-05-4 | Vinyl Acetate | 21 | U |
| 75-27-4 | Bromodichloromethane | 10 | U |
| 78-87-5 | 1,2-Dichloropropane | 10 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 10 | U |
| 79-01-6 | Trichloroethene | 10 | U |
| 124-48-1 | Dibromochloromethane | 10 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 10 | U |
| 71-43-2 | Benzene | 10 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | 10 | U |
| 75-25-2 | Bromoform | 10 | U |
| 108-10-1 | 4-Methyl-2-Pentanone | 21 | U |
| 591-78-6 | 2-Hexanone | 21 | U |
| 127-18-4 | Tetrachloroethene | 10 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 10 | U |
| 108-88-3 | Toluene | 68 | B |
| 108-90-7 | Chlorobenzene | 10 | U |
| 100-41-4 | Ethylbenzene | 10 | U |
| 100-42-5 | Styrene | 10 | U |
| 1330-20-7 | Xylene (total) | 10 | U |

Date Reported: 01/31/89

John J. Molloy, P.E.
Laboratory Director

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575 Broad Hollow Road, Melville, N.Y. 11747
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ENVIRONMENTAL and INDUSTRIAL ANALYTICAL LABORATORY

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SD 3
LEROY CALLENDER, P.C.
CANTOR BROTHERS SITE
SOIL SAMPLES

Lab Name: H2M LABS, INC. Contract: GIBBS & HILL

Matrix: SOIL
Sample vol: 3.218 g
Level: LOW
% Moisture: not dec. 26 dec.
Column: (pack/cap) PACK

Lab Sample ID: 874728
Lab File ID: PU9567
Date Received: 12/28/88
Date Analyzed: 12/31/88
Dilution Factor: 1

Number TICs found: 10

CONCENTRATION UNITS: ug/Kg

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|---|
| 1 | | UNKNOWN ALKANE | 18:33 | 110 | J |
| 2 | | UNKNOWN ALKANE | 19:21 | 100 | J |
| 3 | 16789-46-1 | 3-ETHYL-2-METHYL HEXANE | 21:18 | 87 | J |
| 4 | | UNKNOWN ALKANE | 23:36 | 190 | J |
| 5 | | UNKNOWN ALKANE | 25:21 | 160 | J |
| 6 | | UNKNOWN ALKENE | 27:15 | 140 | J |
| 7 | | UNKNOWN | 27:57 | 99 | J |
| 8 | 15869-93-9 | 3,5-DIMETHYL OCTANE | 29:36 | 89 | J |
| 9 | | UNKNOWN | 31:39 | 180 | J |
| 10 | | UNKNOWN | 33:18 | 390 | J |
| 11 | | | | | |
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Date Reported: 01/31/89

John J. Molloy, P.E.
Laboratory Director

H2M LABS. INC.
575 Broad Hollow Road, Melville, N.Y. 11747
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ENVIRONMENTAL and INDUSTRIAL ANALYTICAL LABORATORY

# VOLATILE ORGANICS ANALYSIS DATA SHEET

VBLK
LEROY CALLENDER, P.C.
CANTOR BROTHERS SITE

Lab Name: H2M LABS. INC. Contract: GIBBS & HILL

Matrix: WATER
Sample vol: 5 mL
Level: LOW
% Moisture: not dec. - dec.
Column: (pack/cap) PACK

Lab Sample ID:
Lab File ID: PU9549
Date Received:
Date Analyzed: 12/30/88
Dilution Factor: 1

| CAS NO. | COMPOUND | CONCENTRATION UNITS: UG/L | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 9 | |
| 67-64-1 | Acetone | 12 | |
| 75-15-0 | Carbon Disulfide | 3 | J |
| 75-35-4 | 1,1-Dichloroethene | 5 | U |
| 75-34-3 | 1,1-Dichloroethane | 5 | U |
| 540-59-0 | 1,2-Dichloroethene (total) | 5 | U |
| 67-66-3 | Chloroform | 2 | J |
| 107-06-2 | 1,2-Dichloroethane | 5 | U |
| 78-93-3 | 2-Butanone | 3 | J |
| 71-55-6 | 1,1,1-Trichloroethane | 5 | U |
| 56-23-5 | Carbon Tetrachloride | 5 | U |
| 108-05-4 | Vinyl Acetate | 10 | U |
| 75-27-4 | Bromodichloromethane | 5 | U |
| 78-87-5 | 1,2-Dichloropropane | 5 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 5 | U |
| 79-01-6 | Trichloroethene | 5 | U |
| 124-48-1 | Dibromochloromethane | 5 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 5 | U |
| 71-43-2 | Benzene | 5 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | 5 | U |
| 75-25-2 | Bromoform | 5 | U |
| 108-10-1 | 4-Methyl-2-Pentanone | 10 | U |
| 591-78-6 | 2-Hexanone | 10 | U |
| 127-18-4 | Tetrachloroethene | 5 | U |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 5 | U |
| 108-88-3 | Toluene | 5 | U |
| 108-90-7 | Chlorobenzene | 5 | U |
| 100-41-4 | Ethylbenzene | 5 | U |
| 100-42-5 | Styrene | 5 | U |
| 1330-20-7 | Xylene (total) | 5 | U |

Date Reported: 01/31/89

John J. Molloy, P.E.
Laboratory Director

# H2M LABS, INC.

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ENVIRONMENTAL and INDUSTRIAL ANALYTICAL LABORATORY


## VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

VBLK
LEROY CALLENDER, P.C.
CANTOR BROTHERS SITE

Lab Name: H2M LABS, INC. Contract: GIBBS & HILL

Matrix: WATER
Sample vol: 5 mL
Level: LOW
% Moisture: not dec. - dec.
Column: (pack/cap) PACK

Lab Sample ID:
Lab File ID: PU9549
Date Received:
Date Analyzed: 12/30/88
Dilution Factor: 1

Number TICs found: 0

CONCENTRATION UNITS: ug/L

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|---|
| 1 | | NO TICs FOUND | | | |
| 2 | | | | | |
| 3 | | | | | |
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Date Reported: 01/31/89

John J. Molloy, P.E.
Laboratory Director

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ENVIRONMENTAL and INDUSTRIAL ANALYTICAL LABORATORY

# VOLATILE ORGANICS ANALYSIS DATA SHEET

VBLK
LEROY CALLENDER, P.C.
CANTOR BROTHERS SITE

Lab Name: H2M LABS, INC. Contract: GIBBS & HILL

Matrix: WATER
Sample vol: 5 mL
Level: LOW
% Moisture:not dec. - dec.
Column:(pack/cap) PACK

Lab Sample ID:
Lab File ID: PU956J
Date Received:
Date Analyzed: 12/31/88
Dilution Factor: 1

| CAS NO. | COMPOUND | CONCENTRATION UNITS: ug/L | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 10 | U |
| 74-83-9 | Bromomethane | 10 | U |
| 75-01-4 | Vinyl Chloride | 10 | U |
| 75-00-3 | Chloroethane | 10 | U |
| 75-09-2 | Methylene Chloride | 7 | |
| 67-64-1 | Acetone | 5 | J |
| 75-15-0 | Carbon Disulfide | 5 | U |
| 75-35-4 | 1,1-Dichloroethene | 5 | U |
| 75-34-3 | 1,1-Dichloroethane | 5 | U |
| 540-59-0 | 1,2-Dichloroethene (total) | 5 | U |
| 67-66-3 | Chloroform | 5 | U |
| 107-06-2 | 1,2-Dichloroethane | 5 | U |
| 78-93-3 | 2-Butanone | 3 | J |
| 71-55-6 | 1,1,1-Trichloroethane | 4 | J |
| 56-23-5 | Carbon Tetrachloride | 5 | U |
| 108-05-4 | Vinyl Acetate | 10 | U |
| 75-27-4 | Bromodichloromethane | 5 | U |
| 78-87-5 | 1,2-Dichloropropane | 5 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 5 | U |
| 79-01-6 | Trichloroethene | 5 | U |
| 124-48-1 | Dibromochloromethane | 5 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 5 | U |
| 71-43-2 | Benzene | 5 | U |
| 10061-02-6 | trans-1,3-Dichloropropene | 5 | U |
| 75-25-2 | Bromoform | 5 | U |
| 108-10-1 | 4-Methyl-2-pentanone | 10 | U |
| 591-78-6 | 2-Hexanone | 10 | U |
| 127-18-4 | Tetrachloroethene | 5 | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 5 | U |
| 108-88-3 | Toluene | 2 | J |
| 108-90-7 | Chlorobenzene | 5 | U |
| 100-41-4 | Ethylbenzene | 5 | U |
| 100-42-5 | Styrene | 5 | U |
| 1330-20-7 | Xylene (total) | 5 | U |

Date Reported: 01/31/89

John J. Molloy, P.E.
Laboratory Director

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ENVIRONMENTAL and INDUSTRIAL ANALYTICAL LABORATORY

# VOLATILE ORGANICS ANALYSIS DATA SHEET
## TENTATIVELY IDENTIFIED COMPOUNDS

VBLK
LEROY CALLENDER, P.C.
CANTOR BROTHERS SITE

Lab Name: H2M LABS, INC. Contract: GIBBS & HILL

Matrix: WATER
Sample vol: 5 mL
Level: LOW
% Moisture: not dec. - dec.
Column: (pack/cap) PACK

Lab Sample ID:
Lab File ID: PU9561
Date Received:
Date Analyzed: 12/31/88
Dilution Factor: 1

Number TICs found: 0

CONCENTRATION UNITS: ug/L

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|---|
| 1 | | NO TICs FOUND | | | |
| 2 | | | | | |
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Date Reported: 01/31/89

John J. Molloy, P.E.
Laboratory Director

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ENVIRONMENTAL and INDUSTRIAL ANALYTICAL LABORATORY

# VOLATILE ORGANICS ANALYSIS DATA SHEET

SD 1 MS
LEROY CALLENDER, P.C.
CANTOR BROTHERS SITE
SOIL SAMPLES

Lab Name: H2M LABS, INC. Contract: GIBBS & HILL
Matrix: SOIL
Sample vol: 2.71 g
Level: LOW
% Moisture:not dec. 60 dec.
Column:(pack/cap) PACK

Lab Sample ID: 874726 MS
Lab File ID: PU9565
Date Received: 12/28/88
Date Analyzed: 12/31/88
Dilution Factor: 1

| CAS NO. | COMPOUND | CONCENTRATION UNITS: ug/Kg | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 46 | U |
| 74-83-9 | Bromomethane | 46 | U |
| 75-01-4 | Vinyl Chloride | 46 | U |
| 75-00-3 | Chloroethane | 46 | U |
| 75-09-2 | Methylene Chloride | 75 | B |
| 67-64-1 | Acetone | 250 | B |
| 75-15-0 | Carbon Disulfide | 23 | U |
| 75-35-4 | 1,1-Dichloroethene | * | |
| 75-34-3 | 1,1-Dichloroethane | 23 | U |
| 540-59-0 | 1,2-Dichloroethene (total) | 23 | U |
| 67-66-3 | Chloroform | 11 | J |
| 107-06-2 | 1,2-Dichloroethane | 23 | U |
| 78-93-3 | 2-Butanone | 54 | B |
| 71-55-6 | 1,1,1-Trichloroethane | 23 | U |
| 56-23-5 | Carbon Tetrachloride | 23 | U |
| 108-05-4 | Vinyl Acetate | 46 | U |
| 75-27-4 | Bromodichloromethane | 23 | U |
| 78-87-5 | 1,2-Dichloropropane | 23 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 23 | U |
| 79-01-6 | Trichloroethene | * | |
| 124-48-1 | Dibromochloromethane | 23 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 23 | U |
| 71-43-2 | Benzene | * | |
| 10061-02-6 | trans-1,3-Dichloropropene | 23 | U |
| 75-25-2 | Bromoform | 23 | U |
| 108-10-1 | 4-Methyl-2-Pentanone | 12 | J |
| 591-78-6 | 2-Hexanone | 46 | U |
| 127-18-4 | Tetrachloroethene | 9 | J |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 23 | U |
| 108-88-3 | Toluene | * | |
| 108-90-7 | Chlorobenzene | * | |
| 100-41-4 | Ethylbenzene | 23 | U |
| 100-42-5 | Styrene | 23 | U |
| 1330-20-7 | Xylene (total) | 23 | U |

Date Reported: 01/31/89

*Analyte found in spiking solution

John J. Molloy, P.E.
Laboratory Director

H2M LABS INC
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ENVIRONMENTAL and INDUSTRIAL ANALYTICAL LABORATORY

# VOLATILE ORGANICS ANALYSIS DATA SHEET

SD 1 MSD
LEROY CALLENDER, P.C.
CANTOR BROTHERS SITE
SOIL SAMPLES

Lab Name: H2M LABS, INC. Contract: GIBBS & HILL
Matrix: SOIL
Sample vol: 2.942 G
Level: LOW
% Moisture:not dec. 60 dec.
Column:(pack/cap) PACK
Lab Sample ID: 874726 MSD
Lab File ID: PU9566
Date Received: 12/28/88
Date Analyzed: 12/31/88
Dilution Factor: 1

| CAS NO. | COMPOUND | CONCENTRATION UNITS: ug/Kg | Q |
|---|---|---|---|
| 74-87-3 | Chloromethane | 42 | U |
| 74-83-9 | Bromomethane | 42 | U |
| 75-01-4 | Vinyl Chloride | 42 | U |
| 75-00-3 | Chloroethane | 42 | U |
| 75-09-2 | Methylene Chloride | 67 | B |
| 67-64-1 | Acetone | 130 | B |
| 75-15-0 | Carbon Disulfide | 28 | |
| 75-35-4 | 1,1-Dichloroethene | * | |
| 75-34-3 | 1,1-Dichloroethane | 21 | U |
| 540-59-0 | 1,2-Dichloroethene (total) | 21 | U |
| 67-66-3 | Chloroform | 10 | J |
| 107-06-2 | 1,2-Dichloroethane | 21 | U |
| 78-93-3 | 2-Butanone | 30 | J,B |
| 71-55-6 | 1,1,1-Trichloroethane | 21 | U |
| 56-23-5 | Carbon Tetrachloride | 21 | U |
| 108-05-4 | Vinyl Acetate | 42 | U |
| 75-27-4 | Bromodichloromethane | 21 | U |
| 78-87-5 | 1,2-Dichloropropane | 21 | U |
| 10061-01-5 | cis-1,3-Dichloropropene | 21 | U |
| 79-01-6 | Trichloroethene | * | |
| 124-48-1 | Dibromochloromethane | 21 | U |
| 79-00-5 | 1,1,2-Trichloroethane | 21 | U |
| 71-43-2 | Benzene | * | |
| 10061-02-6 | trans-1,3-Dichloropropene | 21 | U |
| 75-25-2 | Bromoform | 21 | U |
| 108-10-1 | 4-Methyl-2-Pentanone | 27 | J |
| 591-78-6 | 2-Hexanone | 42 | U |
| 127-18-4 | Tetrachloroethene | 10 | J |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 21 | U |
| 108-88-3 | Toluene | * | |
| 108-90-7 | Chlorobenzene | * | |
| 100-41-4 | Ethylbenzene | 21 | U |
| 100-42-5 | Styrene | 21 | U |
| 1330-20-7 | Xylene (total) | 21 | U |

Date Reported: 01/31/89

*Analyte found in spiking solution

John J. Molloy, P.E.
Laboratory Director

H2M LABS INC
575 Broad Hollow Road, Melville, N.Y. 11747
(516) 694-3040 FAX (516) 694-8120

# SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SD-1

Lab Name: H2M LABS INC. Contract: -----

Lab Code: ----- Case No.: ----- SAS No.: ----- SDG No.: SD-1

Matrix: (soil/water) SOIL Lab Sample ID: 874726

Sample wt/vol: 1.0401 (g/mL) G Lab File ID: >P5411

Level: (low/med) ~~LOW~~ MED Date Received: 12/28/88

% Moisture: not dec.60 dec. -- Date Extracted: 12/30/88

Extraction: (Sepf/Cont/Sonc) SONC Date Analyzed: 1/13/89

GPC Cleanup: (Y/N) ~~N~~ Y pH: 6.7 Dilution Factor: 1.00000

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg | Q |
|---|---|---|---|
| 108-95-2 | Phenol | 24000. | U |
| 111-44-4 | bis(2-Chloroethyl)Ether | 24000. | U |
| 95-57-8 | 2-Chlorophenol | 24000. | U |
| 541-73-1 | 1,3-Dichlorobenzene | 24000. | U |
| 106-46-7 | 1,4-Dichlorobenzene | 24000. | U |
| 100-51-6 | Benzyl alcohol | 24000. | U |
| 95-50-1 | 1,2-Dichlorobenzene | 24000. | U |
| 95-48-7 | 2-Methylphenol | 24000. | U |
| 39638-32-9 | bis(2-chloroisopropyl)ether | 24000. | U |
| 106-44-5 | 4-Methylphenol | 24000. | U |
| 621-64-7 | N-Nitroso-Di-n-propylamine | 24000. | U |
| 67-72-1 | Hexachloroethane | 24000. | U |
| 98-95-3 | Nitrobenzene | 24000. | U |
| 78-59-1 | Isophorone | 24000. | U |
| 88-75-5 | 2-Nitrophenol | 24000. | U |
| 105-67-9 | 2,4-Dimethylphenol | 24000. | U |
| 65-85-0 | Benzoic acid | 120000. | U |
| 111-91-1 | bis(2-Chloroethoxy)methane | 24000. | U |
| 120-83-2 | 2,4-Dichlorophenol | 24000. | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 24000. | U |
| 91-20-3 | Naphthalene | 24000. | U |
| 106-47-8 | 4-Chloroaniline | 24000. | U |
| 87-68-3 | Hexachlorobutadiene | 24000. | U |
| 59-50-7 | 4-Chloro-3-methylphenol | 24000. | U |
| 91-57-6 | 2-Methylnaphthalene | 3300. | J |
| 77-47-4 | Hexachlorocyclopentadiene | 24000. | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 24000. | U |
| 95-95-4 | 2,4,5-Trichlorophenol | 120000. | U |
| 91-58-7 | 2-Chloronaphthalene | 24000. | U |
| 88-74-4 | 2-Nitroaniline | 120000. | U |
| 131-11-3 | Dimethylphthalate | 24000. | U |
| 208-96-8 | Acenaphthylene | 9400. | J |
| 606-20-2 | 2,6-Dinitrotoluene | 24000. | U |

John T. Mollov, III
Laboratory Director

H2M LABS, INC.
575 Broad Hollow Road, Melville, N.Y. 11747
(516) 694-3040 FAX (516) 694-6200

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SD-1

Lab Name: H2M LABS INC. Contract: -----

Lab Code: ----- Case No.: ----- SAS No.: ----- SDG No.: SD-1

Matrix: (soil/water) SOIL Lab Sample ID: 874726

Sample wt/vol: 1.0401 (g/mL) G Lab File ID: >P5411

Level: (low/med) ~~LOW~~ MED Date Received: 12/28/88

% Moisture: not dec.00 dec. -- Date Extracted: 12/30/88

Extraction: (Sepf/Cont/Sonc) SONC Date Analyzed: 1/13/89

GPC Cleanup: (Y/N) Y pH: 6.7 Dilution Factor: 1.00000

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg | Q |
|---|---|---|---|
| 99-09-2 | 3-Nitroaniline | 120000. | U |
| 83-32-9 | Acenaphthene | 9800. | J |
| 51-28-5 | 2,4-Dinitrophenol | 120000. | U |
| 100-02-7 | 4-Nitrophenol | 120000. | U |
| 132-64-9 | Dibenzofuran | 8600. | J |
| 121-14-2 | 2,4-Dinitrotoluene | 24000. | U |
| 84-66-2 | Diethylphthalate | 24000. | U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 24000. | U |
| 86-73-7 | Fluorene | 33000. | |
| 100-01-6 | 4-Nitroaniline | 120000. | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 120000. | U |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 24000. | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 24000. | U |
| 118-74-1 | Hexachlorobenzene | 24000. | U |
| 87-86-5 | Pentachlorophenol | 120000. | U |
| 85-01-8 | Phenanthrene | 340000. | |
| 120-12-7 | Anthracene | 200000. | |
| 84-74-2 | Di-n-butylphthalate | 24000. | U |
| 206-44-0 | Fluoranthene | 540000. | E |
| 129-00-0 | Pyrene | 430000. | E |
| 85-68-7 | Butylbenzylphthalate | 24000. | U |
| 91-94-1 | 3,3'-Dichlorobenzidine | 48000. | U |
| 56-55-3 | Benzo(a)anthracene | 180000. | |
| 218-01-9 | Chrysene | 340000. | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 380000. | B |
| 117-84-0 | Di-n-octylphthalate | 24000. | U |
| 205-99-2 | Benzo(b)fluoranthene | 230000. | |
| 207-08-9 | Benzo(k)fluoranthene | 73000. | |
| 50-32-8 | Benzo(a)pyrene | 65000. | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 35000. | |
| 53-70-3 | Dibenzo(a,h)anthracene | 11000. | J |
| 191-24-2 | Benzo(g,h,i)perylene | 27000. | |

(1) - Cannot be separated from Diphenylamine, I.E.

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# H2M LABS, INC.

575 Broad Hollow Road, Melville, N.Y. 11747
(516) 694-3040 FAX (516) 694-4120

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SD-1

Lab Name: H2M LABS INC. Contract: -----

Lab Code: ----- Case No.: ----- SAS No.: ----- SDG No.: SD-1

Matrix: (soil/water) SOIL Lab Sample ID: 8[illegible]

Sample wt/vol: 1.0401 (g/mL) G Lab File ID: >P5411

Level: (low/med) ~~LOW~~ MED Date Received: 12/28/88

% Moisture: not dec.60 dec. -- Date Extracted: 12/30/88

Extraction: (Sepf/Cont/Sonc) SONC Date Analyzed: 1/13/89

GPC Cleanup: (Y/N) Y pH:6.7 Dilution Factor: 1.00000

Number TICs found: 20 CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|---|
| 1. | 832713 | Phenanthrene, 3-methyl- (8CI | 27.17 | 22000. | J |
| 2. | | Unknown | 27.42 | 82000. | J |
| 3. | 612942 | Naphthalene, 2-phenyl- (8CI9 | 28.08 | 75000. | J |
| 4. | | Unknown PAH | 28.94 | 26000. | J |
| 5. | | Unknown | 29.72 | 9600. | J |
| 6. | 57114 | Octadecanoic acid (9CI) | 30.30 | 12000. | J |
| 7. | 243425 | Benzo[b]naphtho[2,3-d]furan | 30.40 | 14000. | J |
| 8. | 2381217 | Pyrene, 1-methyl- (8CI9CI) | 31.10 | 48000. | J |
| 9. | 243174 | 11H-Benzo[b]fluorene (8CI9CI | 31.31 | 26000. | J |
| 10. | 238846 | 11H-Benzo[a]fluorene (8CI9CI | 31.39 | 9600. | J |
| 11. | | Unknown | 31.47 | 12000. | J |
| 12. | | Unknown | 32.69 | 19000. | J |
| 13. | 205436 | Benzo[b]naphtho[1,2-d]thioph | 32.99 | 19000. | J |
| 14. | | Unknown | 33.12 | 31000. | J |
| 15. | | Unknown | 33.24 | 9600. | J |
| 16. | 82053 | 7H-Benz[de]anthracen-7-one ( | 33.34 | 12000. | J |
| 17. | | Unknown | 34.13 | 14000. | J |
| 18. | | Unknown PAH | 35.08 | 12000. | J |
| 19. | 1090137 | 5,12-Naphthacenedione (8CI9C | 35.22 | 9600. | J |
| 20. | 192972 | Benzo[e]pyrene (8CI9CI) | 37.69 | 100000. | J |
| 21. | | | | | |
| 22. | | | | | |
| 23. | | | | | |
| 24. | | | | | |
| 25. | | | | | |
| 26. | | | | | |
| 27. | | | | | |
| 28. | | | | | |
| 29. | | | | | |
| 30. | | | | | |

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Date Reported: 2/26/89

John J. Mollow, P.E.
Laboratory Director

# H2M LABS, INC.

575 Broad Hollow Road, Melville, N.Y. 11747
(516) 694-3040 FAX (516) 694-6122


SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SD-1 DL

Lab Name: H2M LABS INC. Contract: -----

Lab Code: ----- Case No.: ----- SAS No.: ----- SDG No.: SD-1

Matrix: (soil/water) SOIL Lab Sample ID: 874726 DL

Sample wt/vol: 1.0401 (g/mL) G Lab File ID: >P5446

Level: (low/med) ~~LOW~~ MED Date Received: 12/28/88

% Moisture: not dec. 60 dec. -- Date Extracted: 12/30/88

Extraction: (Sepf/Cont/Sonc) SONC Date Analyzed: 1/18/89

GPC Cleanup: (Y/N) Y pH: 6.7 Dilution Factor: 2.00000

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg | Q |
|---|---|---|---|
| 108-95-2 | Phenol | 48000. | U |
| 111-44-4 | bis(2-Chloroethyl)Ether | 48000. | U |
| 95-57-8 | 2-Chlorophenol | 48000. | U |
| 541-73-1 | 1,3-Dichlorobenzene | 48000. | U |
| 106-46-7 | 1,4-Dichlorobenzene | 48000. | U |
| 100-51-6 | Benzyl alcohol | 48000. | U |
| 95-50-1 | 1,2-Dichlorobenzene | 48000. | U |
| 95-48-7 | 2-Methylphenol | 48000. | U |
| 39638-32-9 | bis(2-chloroisopropyl)ether | 48000. | U |
| 106-44-5 | 4-Methylphenol | 48000. | U |
| 621-64-7 | N-Nitroso-Di-n-propylamine | 48000. | U |
| 67-72-1 | Hexachloroethane | 48000. | U |
| 98-95-3 | Nitrobenzene | 48000. | U |
| 78-59-1 | Isophorone | 48000. | U |
| 88-75-5 | 2-Nitrophenol | 48000. | U |
| 105-67-9 | 2,4-Dimethylphenol | 48000. | U |
| 65-85-0 | Benzoic acid | 240000. | U |
| 111-91-1 | bis(2-Chloroethoxy)methane | 48000. | U |
| 120-83-2 | 2,4-Dichlorophenol | 48000. | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 48000. | U |
| 91-20-3 | Naphthalene | 48000. | U |
| 106-47-8 | 4-Chloroaniline | 48000. | U |
| 87-68-3 | Hexachlorobutadiene | 48000. | U |
| 59-50-7 | 4-Chloro-3-methylphenol | 48000. | U |
| 91-57-6 | 2-Methylnaphthalene | 48000. | UD |
| 77-47-4 | Hexachlorocyclopentadiene | 48000. | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 48000. | U |
| 95-95-4 | 2,4,5-Trichlorophenol | 240000. | U |
| 91-58-7 | 2-Chloronaphthalene | 48000. | U |
| 88-74-4 | 2-Nitroaniline | 240000. | U |
| 131-11-3 | Dimethylphthalate | 48000. | U |
| 208-96-8 | Acenaphthylene | 11000. | J |
| 606-20-2 | 2,6-Dinitrotoluene | 48000. | U |

# HOM LABS INC

575 Broad Hollow Road, Melville, N.Y. 11747
(516) 694-3040 FAX:(516)694-4122

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SD-1 DL

Lab Name: HOM LABS INC. Contract: -----

Lab Code: ----- Case No.: ----- SAS No.: ----- SDG No.: SD-1

Matrix: (soil/water) SOIL Lab Sample ID: 874726 DL

Sample wt/vol: 1.0401 (g/mL) G Lab File ID: >P5446

Level: (low/med) ~~LOW~~ MED Date Received: 12/28/88

% Moisture: not dec.60 dec. -- Date Extracted: 12/30/88

Extraction: (Sepf/Cont/Sonc) SONC Date Analyzed: 1/18/89

GPC Cleanup: (Y/N) ~~N~~ Y pH:6.7 Dilution Factor: 2.00000

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg | Q |
|---|---|---|---|
| 99-09-2 | 3-Nitroaniline | 240000. | U |
| 83-32-9 | Acenaphthene | 5500. | J |
| 51-28-5 | 2,4-Dinitrophenol | 240000. | U |
| 100-02-7 | 4-Nitrophenol | 240000. | U |
| 132-64-9 | Dibenzofuran | 8100. | J |
| 121-14-2 | 2,4-Dinitrotoluene | 48000. | U |
| 84-66-2 | Diethylphthalate | 48000. | U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 48000. | U |
| 86-73-7 | Fluorene | 32000. | J |
| 100-01-6 | 4-Nitroaniline | 240000. | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 240000. | U |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 48000. | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 48000. | U |
| 118-74-1 | Hexachlorobenzene | 48000. | U |
| 87-86-5 | Pentachlorophenol | 240000. | U |
| 85-01-8 | Phenanthrene | 300000. | |
| 120-12-7 | Anthracene | 200000. | |
| 84-74-2 | Di-n-butylphthalate | 48000. | U |
| 206-44-0 | Fluoranthene | 740000. | |
| 129-00-0 | Pyrene | 500000. | |
| 85-68-7 | Butylbenzylphthalate | 48000. | U |
| 91-94-1 | 3,3'-Dichlorobenzidine | 96000. | U |
| 56-55-3 | Benzo(a)anthracene | 180000. | |
| 218-01-9 | Chrysene | 390000. | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 520000. | B |
| 117-84-0 | Di-n-octylphthalate | 48000. | U |
| 205-99-2 | Benzo(b)fluoranthene | 240000. | |
| 207-08-9 | Benzo(k)fluoranthene | 150000. | |
| 50-32-8 | Benzo(a)pyrene | 80000. | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 12000. | J |
| 53-70-3 | Dibenzo(a,h)anthracene | 19000. | J |
| 191-24-2 | Benzo(g,h,i)perylene | 42000. | J |

(1) - Cannot be seperated from Diphenylamine

John J. Mottola, P.E.
Date Reported: 2/26/89 Laboratory Director

H2M LABS INC
575 Broad Hollow Road, Melville, N.Y. 11747
(516) 694-3040 FAX: (516) 694-4122

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.
SD-1 DL

Lab Name: H2M LABS INC. Contract: -----

Lab Code: ----- Case No.: ----- SAS No.: ----- SDG No.: SD-1

Matrix: (soil/water) SOIL Lab Sample ID: 874726 DL

Sample wt/vol: 1.0401 (g/mL) G Lab File ID: P5446

Level: (low/med) ~~LOW~~ MED Date Received: 12/28/88

% Moisture: not dec.60 dec. -- Date Extracted: 12/30/88

Extraction: (Sepf/Cont/Sonc) SONC Date Analyzed: 1/18/89

GPC Cleanup: (Y/N) Y pH: 6.7 Dilution Factor: 1.00000

Number TICs found: 20

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|---|
| 1. | 1961962 | 1H-Indene, 1-phenyl- (9CI) | 27.18 | 34000. | JJ |
| 2. | | Unknown | 27.40 | 110000. | JJ |
| 3. | | Unknown | 28.08 | 82000. | JJ |
| 4. | | Unknown | 29.72 | 53000. | JJ |
| 5. | | Unknown | 30.25 | 58000. | JJ |
| 6. | 243425 | Benzo[b]naphtho[2,3-d]furan | 30.40 | 38000. | JJ |
| 7. | 1210124 | 9-Anthracenecarbonitrile (9CI | 30.46 | 19000. | JJ |
| 8. | 238846 | 11H-Benzo[a]fluorene (8CI,9CI | 31.10 | 96000. | JJ |
| 9. | 243174 | 11H-Benzo[b]fluorene (8CI,9CI | 31.28 | 58000. | JJ |
| 10. | | Unknown | 31.36 | 19000. | JJ |
| 11. | | Unknown | 31.47 | 24000. | JJ |
| 12. | | Unknown | 32.68 | 43000. | JJ |
| 13. | 239350 | Benzo[b]naphtho[2,1-d]thioph | 32.99 | 48000. | JJ |
| 14. | 203123 | Benzo[ghi]fluoranthene (8CI,9 | 33.11 | 62000. | JJ |
| 15. | 82053 | 7H-Benz[de]anthracen-7-one (1 | 33.34 | 24000. | JJ |
| 16. | 2498773 | Benz[a]anthracene, 1-methyl- | 35.07 | 29000. | JJ |
| 17. | | Unknown | 35.19 | 24000. | JJ |
| 18. | | Unknown | 35.99 | 34000. | JJ |
| 19. | 205823 | Benzo[j]fluoranthene (8CI,9CI | 37.21 | 38000. | JJ |
| 20. | 192972 | Benzo[e]pyrene (8CI,9CI) | 37.66 | 120000. | JJ |
| 21. | | | | | |
| 22. | | | | | |
| 23. | | | | | |
| 24. | | | | | |
| 25. | | | | | |
| 26. | | | | | |
| 27. | | | | | |
| 28. | | | | | |
| 29. | | | | | |
| 30. | | | | | |

Date Reported: 2/26/89

John J. Milay, P.E.
Laboratory Director

# H2M LABS, INC.

575 Broad Hollow Road, Melville, N.Y. 11747
(516) 694-3040 FAX (516) 694-6286

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SD-2

Lab Name: H2M LABS INC. Contract: -----

Lab Code: ----- Case No.: ----- SAS No.: ----- SDG No.: SD-1

Matrix: (soil/water) SOIL Lab Sample ID: 874727

Sample wt/vol: 1.0832 (g/mL) G Lab File ID: /P5413

Level: (low/med) ~~LOW~~ MED Date Received: 12/28/88

% Moisture: not dec. 75 dec. -- Date Extracted: 12/30/88

Extraction: (Sepf/Cont/Sonc) SONC Date Analyzed: 1/13/89

GPC Cleanup: (Y/N) N pH: 6.7 Dilution Factor: 1.00000

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg | | Q |
|---|---|---|---|---|
| 108-95-2 | Phenol | | 37000. | U |
| 111-44-4 | bis(2-Chloroethyl)Ether | | 37000. | U |
| 95-57-8 | 2-Chlorophenol | | 37000. | U |
| 541-73-1 | 1,3-Dichlorobenzene | | 37000. | U |
| 106-46-7 | 1,4-Dichlorobenzene | | 37000. | U |
| 100-51-6 | Benzyl alcohol | | 37000. | U |
| 95-50-1 | 1,2-Dichlorobenzene | | 37000. | U |
| 95-48-7 | 2-Methylphenol | | 37000. | U |
| 39638-32-9 | bis(2-chloroisopropyl)ether | | 37000. | U |
| 106-44-5 | 4-Methylphenol | | 37000. | U |
| 621-64-7 | N-Nitroso-Di-n-propylamine | | 37000. | U |
| 67-72-1 | Hexachloroethane | | 37000. | U |
| 98-95-3 | Nitrobenzene | | 37000. | U |
| 78-59-1 | Isophorone | | 37000. | U |
| 88-75-5 | 2-Nitrophenol | | 37000. | U |
| 105-67-9 | 2,4-Dimethylphenol | | 37000. | U |
| 65-85-0 | Benzoic acid | | 190000. | U |
| 111-91-1 | bis(2-Chloroethoxy)methane | | 37000. | U |
| 120-83-2 | 2,4-Dichlorophenol | | 37000. | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | | 37000. | U |
| 91-20-3 | Naphthalene | | 37000. | U |
| 106-47-8 | 4-Chloroaniline | | 37000. | U |
| 87-68-3 | Hexachlorobutadiene | | 37000. | U |
| 59-50-7 | 4-Chloro-3-methylphenol | | 37000. | U |
| 91-57-6 | 2-Methylnaphthalene | | 37000. | U |
| 77-47-4 | Hexachlorocyclopentadiene | | 37000. | U |
| 88-06-2 | 2,4,6-Trichlorophenol | | 37000. | U |
| 95-95-4 | 2,4,5-Trichlorophenol | | 190000. | U |
| 91-58-7 | 2-Chloronaphthalene | | 37000. | U |
| 88-74-4 | 2-Nitroaniline | | 190000. | U |
| 131-11-3 | Dimethylphthalate | | 37000. | U |
| 208-96-8 | Acenaphthylene | | 8000. | J |
| 606-20-2 | 2,6-Dinitrotoluene | | 37000. | U |

John J. Malloy PE

HOM LABS INC
575 Broad Hollow Road, Melville, N.Y. 11747
(516) 694-3040 FAX (516) 694-1220

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SD-2

Lab Name: HOM LABS INC. Contract: -----

Lab Code: ----- Case No.: ----- SAS No.: ----- SDG No.: SD-1

Matrix: (soil/water) SOIL Lab Sample ID: 874727

Sample wt/vol: 1.0832 (g/mL) G Lab File ID: >P5413

Level: (low/med) ~~LOW~~ MED Date Received: 12/28/88

% Moisture: not dec.75 dec. -- Date Extracted: 12/30/88

Extraction: (Sepf/Cont/Sonc) SONC Date Analyzed: 1/13/89

GPC Cleanup: (Y/N) N pH: 6.7 Dilution Factor: 1.00000

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg | Q |
|---|---|---|---|
| 99-09-2 | 3-Nitroaniline | 190000. | U |
| 83-32-9 | Acenaphthene | 7900. | J |
| 51-28-5 | 2,4-Dinitrophenol | 190000. | U |
| 100-02-7 | 4-Nitrophenol | 190000. | U |
| 132-64-9 | Dibenzofuran | 37000. | U |
| 121-14-2 | 2,4-Dinitrotoluene | 37000. | U |
| 84-66-2 | Diethylphthalate | 37000. | U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 37000. | U |
| 86-73-7 | Fluorene | 8800. | J |
| 100-01-6 | 4-Nitroaniline | 190000. | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 190000. | U |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 37000. | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 37000. | U |
| 118-74-1 | Hexachlorobenzene | 37000. | U |
| 87-86-5 | Pentachlorophenol | 190000. | U |
| 85-01-8 | Phenanthrene | 34000. | J |
| 120-12-7 | Anthracene | 35000. | J |
| 84-74-2 | Di-n-butylphthalate | 6400. | J |
| 206-44-0 | Fluoranthene | 190000. | |
| 129-00-0 | Pyrene | 160000. | |
| 85-68-7 | Butylbenzylphthalate | 37000. | U |
| 91-94-1 | 3,3'-Dichlorobenzidine | 74000. | U |
| 56-55-3 | Benzo(a)anthracene | 52000. | |
| 218-01-9 | Chrysene | 120000. | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 350000. | B |
| 117-84-0 | Di-n-octylphthalate | 37000. | U |
| 205-99-2 | Benzo(b)fluoranthene | 110000. | |
| 207-08-9 | Benzo(k)fluoranthene | 67000. | |
| 50-32-8 | Benzo(a)pyrene | 30000. | J |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 18000. | J |
| 53-70-3 | Dibenzo(a,h)anthracene | 4900. | J |
| 191-24-2 | Benzo(g,h,i)perylene | 15000. | J |

(1) - Cannot be separated from Diphenylamine

Date Reported: 2/26/89 John T. Malloy, Jr.

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HOM LABS INC.
575 Broad Hollow Road, Melville, N.Y. 11747
(516) 694-3040 FAX (516) 694-6286

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SD-2

Lab Name: HOM LABS INC. Contract: -----

Lab Code: ----- Case No.: ----- SAS No.: ----- SDG No.: SD-1

Matrix: (soil/water) SOIL Lab Sample ID: 874727

Sample wt/vol: 1.0832 (g/mL) G Lab File ID: >P5413

Level: (low/med) ~~LOW~~ MED Date Received: 12/28/88

% Moisture: not dec.75 dec. -- Date Extracted: 12/30/88

Extraction: (Sepf/Cont/Sonc) SONC Date Analyzed: 1/13/89

GPC Cleanup: (Y/N) N pH:6.7 Dilution Factor: 1.00000

Number TICs found: 14 CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|---|
| 1. | | Unknown | 12.99 | 52000. | J |
| 2. | | Unknown Acid | 24.53 | 16000. | J |
| 3. | | Unknown Acid | 27.30 | 130000. | J |
| 4. | 203645 | 4H-Cyclopenta[def]phenanthre | 27.40 | 52000. | J |
| 5. | 84651 | 9,10-Anthracenedione (9CI) | 28.07 | 37000. | J |
| 6. | 112629 | 9-Octadecenoic acid (Z)-, me | 29.49 | 37000. | J |
| 7. | | Unknown | 29.55 | 33000. | J |
| 8. | 2381217 | Pyrene, 1-methyl- (8CI9CI) | 31.07 | 30000. | J |
| 9. | 203123 | Benzo[ghi]fluoranthene (8CI9 | 33.09 | 22000. | J |
| 10. | 2050773 | Decane, 1-iodo- (8CI9CI) | 35.85 | 15000. | J |
| 11. | 192972 | Benzo[e]pyrene (8CI9CI) | 37.64 | 78000. | J |
| 12. | 629970 | Docosane (8CI9CI) | 39.60 | 41000. | J |
| 13. | | Unknown | 39.97 | 63000. | J |
| 14. | | Unknown | 40.49 | 15000. | J |
| 15. | | | | | |
| 16. | | | | | |
| 17. | | | | | |
| 18. | | | | | |
| 19. | | | | | |
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| 27. | | | | | |
| 28. | | Date Reported: 2/26/89 | | | |
| 29. | | | | | |
| 30. | | | | | |

John Madaw, P.E.
Laboratory Director

H2M LABS INC
575 Broad Hollow Road, Melville, N.Y. 11747
(516) 694-3040 FAX (516) 694-6220

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SD-3

Lab Name: H2M LABS INC. Contract: -----

Lab Code: ----- Case No.: ----- SAS No.: ----- SDG No.: SD-1

Matrix: (soil/water) SOIL Lab Sample ID: 874728

Sample wt/vol: 1.0251 (g/mL) G Lab File ID: P5414

Level: (low/med) ~~LOW~~ MED Date Received: 12/28/88

% Moisture: not dec.26 dec. -- Date Extracted: 12/30/88

Extraction: (Sepf/Cont/Sonc) SONC Date Analyzed: 1/14/89

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.00000

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg | Q |
|---|---|---|---|
| 108-95-2 | Phenol | 13000. | U |
| 111-44-4 | bis(2-Chloroethyl)Ether | 13000. | U |
| 95-57-8 | 2-Chlorophenol | 13000. | U |
| 541-73-1 | 1,3-Dichlorobenzene | 13000. | U |
| 106-46-7 | 1,4-Dichlorobenzene | 13000. | U |
| 100-51-6 | Benzyl alcohol | 13000. | U |
| 95-50-1 | 1,2-Dichlorobenzene | 13000. | U |
| 95-48-7 | 2-Methylphenol | 13000. | U |
| 39638-32-9 | bis(2-chloroisopropyl)ether | 13000. | U |
| 106-44-5 | 4-Methylphenol | 13000. | U |
| 621-64-7 | N-Nitroso-Di-n-propylamine | 13000. | U |
| 67-72-1 | Hexachloroethane | 13000. | U |
| 98-95-3 | Nitrobenzene | 13000. | U |
| 78-59-1 | Isophorone | 13000. | U |
| 88-75-5 | 2-Nitrophenol | 13000. | U |
| 105-67-9 | 2,4-Dimethylphenol | 13000. | U |
| 65-85-0 | Benzoic acid | 65000. | U |
| 111-91-1 | bis(2-Chloroethoxy)methane | 13000. | U |
| 120-83-2 | 2,4-Dichlorophenol | 13000. | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 13000. | U |
| 91-20-3 | Naphthalene | 13000. | U |
| 106-47-8 | 4-Chloroaniline | 13000. | U |
| 87-68-3 | Hexachlorobutadiene | 13000. | U |
| 59-50-7 | 4-Chloro-3-methylphenol | 13000. | U |
| 91-57-6 | 2-Methylnaphthalene | 13000. | U |
| 77-47-4 | Hexachlorocyclopentadiene | 13000. | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 13000. | U |
| 95-95-4 | 2,4,5-Trichlorophenol | 65000. | U |
| 91-58-7 | 2-Chloronaphthalene | 13000. | U |
| 88-74-4 | 2-Nitroaniline | 65000. | U |
| 131-11-3 | Dimethylphthalate | 13000. | U |
| 208-96-8 | Acenaphthylene | 13000. | U |
| 606-20-2 | 2,6-Dinitrotoluene | 13000. | U |

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SD-3

Lab Name: H2M LABS INC. Contract: -----

Lab Code: ----- Case No.: ----- SAS No.: ----- SDG No.: SD-1

Matrix: (soil water) SOIL Lab Sample ID: 874728

Sample wt/vol: 1.0251 (g/mL) G Lab File ID: .P541a

Level: (low med) ~~LOW~~ MED Date Received: 12/28/88

% Moisture: not dec. 20 dec. -- Date Extracted: 12/30/88

Extraction: (Sepf/Cont/Sonc) SONC Date Analyzed: 1/14/89

GPC Cleanup: (Y/N) N pH: 7.0 Dilution Factor: 1.00000

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg | Q |
|---|---|---|---|
| 99-09-2 | 3-Nitroaniline | 65000. | U |
| 83-32-9 | Acenaphthene | 13000. | U |
| 51-28-5 | 2,4-Dinitrophenol | 65000. | U |
| 100-02-7 | 4-Nitrophenol | 65000. | U |
| 132-64-9 | Dibenzofuran | 13000. | U |
| 121-14-2 | 2,4-Dinitrotoluene | 13000. | U |
| 84-66-2 | Diethylphthalate | 13000. | U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 13000. | U |
| 86-73-7 | Fluorene | 13000. | U |
| 100-01-6 | 4-Nitroaniline | 65000. | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 65000. | U |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 13000. | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 13000. | U |
| 118-74-1 | Hexachlorobenzene | 13000. | U |
| 87-86-5 | Pentachlorophenol | 65000. | U |
| 85-01-8 | Phenanthrene | 3200. | J |
| 120-12-7 | Anthracene | 13000. | U |
| 84-74-2 | Di-n-butylphthalate | 13000. | U |
| 206-44-0 | Fluoranthene | 6600. | J |
| 129-00-0 | Pyrene | 5900. | J |
| 85-68-7 | Butylbenzylphthalate | 13000. | U |
| 91-94-1 | 3,3'-Dichlorobenzidine | 26000. | U |
| 56-55-3 | Benzo(a)anthracene | 2400. | J |
| 218-01-9 | Chrysene | 4900. | J |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 43000. | B |
| 117-84-0 | Di-n-octylphthalate | 13000. | U |
| 205-99-2 | Benzo(b)fluoranthene | 4200. | J |
| 207-08-9 | Benzo(k)fluoranthene | 3700. | J |
| 50-32-8 | Benzo(a)pyrene | 2200. | J |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 1800. | J |
| 53-70-3 | Dibenzo(a,h)anthracene | 13000. | U |
| 191-24-2 | Benzo(g,h,i)perylene | 1500. | J |

(1) - Cannot be separated from Diphenylamine

Reviewed by: J. Bonanno, P.E.

Date Reported: 2/26/89

# H2M LABS, INC.

575 Broad Hollow Road, Melville, N.Y. 11747
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EPA SAMPLE NO.

SD-3

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS INC. Contract: -----

Lab Code: ----- Case No.: ----- SAS No.: ----- SDG No.: SD-1

Matrix: (soil/water) SOIL Lab Sample ID: 874728

Sample wt/vol: 1.0251 (g/mL) G Lab File ID: P5414

Level: (low/med) ~~LOW~~ MED Date Received: 12/28/88

% Moisture: not dec.26 dec. -- Date Extracted: 12/30/88

Extraction: (Sepf/Cont/Sonc) SONC Date Analyzed: 1/14/89

GPC Cleanup: (Y/N) N pH:7.0 Dilution Factor: 1.00000

Number TICs found: 17

CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|---|
| 1. | 141797 | 3-Penten-2-one, 4-methyl- (8 | 6.21 | 150000. | JBA |
| 2. | | Unknown | 6.25 | 9200. | J |
| 3. | | Unknown | 7.51 | 170000. | J |
| 4. | 3074713 | Heptane, 2,3-dimethyl- (8CI9 | 7.86 | 18000. | J |
| 5. | | Unknown | 7.94 | 16000. | J |
| 6. | 921471 | Hexane, 2,3,4-trimethyl- (8C | 8.11 | 55000. | J |
| 7. | 2216333 | Octane, 3-methyl- (8CI9CI) | 8.31 | 51000. | J |
| 8. | 107700 | 2-Pentanone, 4-methoxy-4-met | 9.39 | 33000. | J |
| 9. | 98828 | Benzene, (1-methylethyl)- (9 | 9.66 | 22000. | JB |
| 10. | | Unknown | 9.84 | 36000. | J |
| 11. | 4436753 | 3-Hexene-2,5-dione (8CI9CI) | 10.57 | 28000. | JB |
| 12. | | Unknown | 12.43 | 16000. | J |
| 13. | 112403 | Dodecane (8CI9CI) | 17.77 | 11000. | J |
| 14. | 55045084 | Dodecane, 2-methyl-6-propyl- | 22.78 | 7900. | J |
| 15. | 1921706 | Pentadecane, 2,6,10,14-tetra | 24.35 | 5300. | J |
| 16. | | Unknown | 29.59 | 24000. | J |
| 17. | | Unknown | 36.73 | 9200. | JB |
| 18. | | | | | |
| 19. | | | | | |
| 20. | | | | | |
| 21. | | | | | |
| 22. | | | | | |
| 23. | | | | | |
| 24. | | | | | |
| 25. | | | | | |
| 26. | | | | | |
| 27. | | | | | 44 |
| 28. | | | | | |
| 29. | | | | | |
| 30. | | | | | |

Date Reported: 2/26/89

John J. Molloy, P.E.
Laboratory Director

# H2M LABS, INC.

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SBLK 447

Lab Name: H2M LABS INC. Contract: -----

Lab Code: ----- Case No.: ----- SAS No.: ----- SDG No.: HW A

Matrix: (soil/water) WATER Lab Sample ID: SBLK 447

Sample wt/vol: 1000 (g/mL) ML Lab File ID: >P5396

Level: (low/med) LOW Date Received: --------

% Moisture: not dec.-- dec. -- Date Extracted: 12/29/88

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 1/12/89

GPC Cleanup: (Y/N) N pH: 7.2 Dilution Factor: 1.00000

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L | Q |
|---|---|---|---|
| 108-95-2 | Phenol | 10. | U |
| 111-44-4 | bis(2-Chloroethyl)Ether | 10. | U |
| 95-57-8 | 2-Chlorophenol | 10. | U |
| 541-73-1 | 1,3-Dichlorobenzene | 10. | U |
| 106-46-7 | 1,4-Dichlorobenzene | 10. | U |
| 100-51-6 | Benzyl alcohol | 10. | U |
| 95-50-1 | 1,2-Dichlorobenzene | 10. | U |
| 95-48-7 | 2-Methylphenol | 10. | U |
| 39638-32-9 | bis(2-chloroisopropyl)ether | 10. | U |
| 106-44-5 | 4-Methylphenol | 10. | U |
| 621-64-7 | N-Nitroso-Di-n-propylamine | 10. | U |
| 67-72-1 | Hexachloroethane | 10. | U |
| 98-95-3 | Nitrobenzene | 10. | U |
| 78-59-1 | Isophorone | 10. | U |
| 88-75-5 | 2-Nitrophenol | 10. | U |
| 105-67-9 | 2,4-Dimethylphenol | 10. | U |
| 65-85-0 | Benzoic acid | 50. | U |
| 111-91-1 | bis(2-Chloroethoxy)methane | 10. | U |
| 120-83-2 | 2,4-Dichlorophenol | 10. | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 10. | U |
| 91-20-3 | Naphthalene | 10. | U |
| 106-47-8 | 4-Chloroaniline | 10. | U |
| 87-68-3 | Hexachlorobutadiene | 10. | U |
| 59-50-7 | 4-Chloro-3-methylphenol | 10. | U |
| 91-57-6 | 2-Methylnaphthalene | 10. | U |
| 77-47-4 | Hexachlorocyclopentadiene | 10. | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 10. | U |
| 95-95-4 | 2,4,5-Trichlorophenol | 50. | U |
| 91-58-7 | 2-Chloronaphthalene | 10. | U |
| 88-74-4 | 2-Nitroaniline | 50. | U |
| 131-11-3 | Dimethylphthalate | 10. | U |
| 208-96-8 | Acenaphthylene | 10. | U |
| 606-20-2 | 2,6-Dinitrotoluene | 10. | U |

John J. Matthew, P.E.
Laboratory Director

# H2M LABS, INC.

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SBLK 447

Lab Name: H2M LABS INC. Contract: -----

Lab Code: ----- Case No.: ----- SAS No.: ----- SDG No.: MW A

Matrix: (soil/water) WATER Lab Sample ID: SBLK 447

Sample wt/vol: 1000 (g/mL) ML Lab File ID: >P5396

Level: (low/med) LOW Date Received: --------

% Moisture: not dec.-- dec. -- Date Extracted: 12/29/88

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 1/12/89

GPC Cleanup: (Y/N) N pH: 7.2 Dilution Factor: 1.00000

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L | Q |
|---|---|---|---|
| 99-09-2 | 3-Nitroaniline | 50. | U |
| 83-32-9 | Acenaphthene | 10. | U |
| 51-28-5 | 2,4-Dinitrophenol | 50. | U |
| 100-02-7 | 4-Nitrophenol | 50. | U |
| 132-64-9 | Dibenzofuran | 10. | U |
| 121-14-2 | 2,4-Dinitrotoluene | 10. | U |
| 84-66-2 | Diethylphthalate | 10. | U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 10. | U |
| 86-73-7 | Fluorene | 10. | U |
| 100-01-6 | 4-Nitroaniline | 50. | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 50. | U |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 10. | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 10. | U |
| 118-74-1 | Hexachlorobenzene | 10. | U |
| 87-86-5 | Pentachlorophenol | 50. | U |
| 85-01-8 | Phenanthrene | 10. | U |
| 120-12-7 | Anthracene | 10. | U |
| 84-74-2 | Di-n-butylphthalate | 10. | U |
| 206-44-0 | Fluoranthene | 10. | U |
| 129-00-0 | Pyrene | 10. | U |
| 85-68-7 | Butylbenzylphthalate | 10. | U |
| 91-94-1 | 3,3'-Dichlorobenzidine | 20. | U |
| 56-55-3 | Benzo(a)anthracene | 10. | U |
| 218-01-9 | Chrysene | 10. | U |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 16. | |
| 117-84-0 | Di-n-octylphthalate | 10. | U |
| 205-99-2 | Benzo(b)fluoranthene | 10. | U |
| 207-08-9 | Benzo(k)fluoranthene | 10. | U |
| 50-32-8 | Benzo(a)pyrene | 10. | U |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 10. | U |
| 53-70-3 | Dibenzo(a,h)anthracene | 10. | U |
| 191-24-2 | Benzo(g,h,i)perylene | 10. | U |

(1) - Cannot be separated from Diphenylamine

Date Reported: 2/26/89

John Mulloy, P.E.

# H2M LABS, INC.

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SEMIVOLATILE ORGANICS and GC/MS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SBLK 447

Lab Name: H2M LABS INC. Contract: -----

Lab Code: ----- Case No.: ----- SAS No.: ----- SDG No.: HW #

Matrix: (soil/water) WATER Lab Sample ID: SBLK 447

Sample wt/vol: 1000 (g/mL) ML Lab File ID: >P539<

Level: (low/med) LOW Date Received: --------

% Moisture: not dec.-- dec. -- Date Extracted: 2/20/89

Extraction: (Sep/Cont/Sonc) SEPF Date Analyzed: 2/22/89

GPC Cleanup: (Y/N) N pH: 7.1 Dilution Factor: 1.0

Number TICs found: 3 CONCENTRATION UNITS: ug/L

| | CAS NUMBER | FRACTION NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|---|
| 1. | 21964-98 | 1,13-Tetradecadiene (8CI,9CI) | 29.38 | 180. | JB |
| 2. | | Unknown | 36.76 | 34. | JB |
| 3. | | | | | |
| 4. | | | | | |
| 5. | | | | | |
| 6. | | | | | |
| 7. | | | | | |
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| 26. | | | | | |
| 27. | | | | | |
| 28. | | | | | 3/8 |
| 29. | | | | | |
| 30. | | | | | |

Date Reported: 2/26/89

John J. Molloy, P.E.
Laboratory Director

# H2M LABS, INC.

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(516) 694-3040 FAX (516) 694-6286

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SBLK 448

Lab Name: H2M LABS INC. Contract: -----

Lab Code: ----- Case No.: ----- SAS No.: ----- SDG No.: SD-1

Matrix: (soil/water) SOIL Lab Sample ID: SBLK 448

Sample wt/vol: 250 (g/mL) ML Lab File ID: >P5409

Level: (low/med) LOW Date Received: --------

% Moisture: not dec.-- dec. -- Date Extracted: 12/30/88

Extraction: (Sepf./Cont./Sonc.) SONC Date Analyzed: 1/13/89

GPC Cleanup: (Y/N) N pH: 7.2 Dilution Factor: 1.00000

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg | Q |
|---|---|---|---|
| 108-95-2 | Phenol | 330. | U |
| 111-44-4 | bis(2-Chloroethyl)Ether | 330. | U |
| 95-57-8 | 2-Chlorophenol | 330. | U |
| 541-73-1 | 1,3-Dichlorobenzene | 330. | U |
| 106-46-7 | 1,4-Dichlorobenzene | 330. | U |
| 100-51-6 | Benzyl alcohol | 330. | U |
| 95-50-1 | 1,2-Dichlorobenzene | 330. | U |
| 95-48-7 | 2-Methylphenol | 330. | U |
| 39638-32-9 | bis(2-chloroisopropyl)ether | 330. | U |
| 106-44-5 | 4-Methylphenol | 330. | U |
| 621-64-7 | N-Nitroso-Di-n-propylamine | 330. | U |
| 67-72-1 | Hexachloroethane | 330. | U |
| 98-95-3 | Nitrobenzene | 330. | U |
| 78-59-1 | Isophorone | 330. | U |
| 88-75-5 | 2-Nitrophenol | 330. | U |
| 105-67-9 | 2,4-Dimethylphenol | 330. | U |
| 65-85-0 | Benzoic acid | 1700. | U |
| 111-91-1 | bis(2-Chloroethoxy)methane | 330. | U |
| 120-83-2 | 2,4-Dichlorophenol | 330. | U |
| 120-82-1 | 1,2,4-Trichlorobenzene | 330. | U |
| 91-20-3 | Naphthalene | 330. | U |
| 106-47-8 | 4-Chloroaniline | 330. | U |
| 87-68-3 | Hexachlorobutadiene | 330. | U |
| 59-50-7 | 4-Chloro-3-methylphenol | 330. | U |
| 91-57-6 | 2-Methylnaphthalene | 330. | U |
| 77-47-4 | Hexachlorocyclopentadiene | 330. | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 330. | U |
| 95-95-4 | 2,4,5-Trichlorophenol | 1700. | U |
| 91-58-7 | 2-Chloronaphthalene | 330. | U |
| 88-74-4 | 2-Nitroaniline | 1700. | U |
| 131-11-3 | Dimethylphthalate | 330. | U |
| 208-96-8 | Acenaphthylene | 330. | U |
| 606-20-2 | 2,6-Dinitrotoluene | 330. | U |

057

John J. Molloy, P.E.
Laboratory Director

# H2M LABS, INC.

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SBLK 448

Lab Name: H2M LABS INC. Contract: -----

Lab Code: ----- Case No.: ----- SAS No.: ----- SDG No.: SD-1

Matrix: (soil/water) SOIL Lab Sample ID: SBLK 448

Sample wt/vol: 250 (g/mL) ML Lab File ID: P5409

Level: (low/med) LOW Date Received: --------

% Moisture: not dec.-- dec. -- Date Extracted: 12/30/88

Extraction: (Sepf/Cont/Sonc) SONC Date Analyzed: 1/13/89

GPC Cleanup: (Y/N) N pH: 7.2 Dilution Factor: 1.00000

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg | Q |
|---|---|---|---|
| 99-09-2 | 3-Nitroaniline | 1700. | U |
| 83-32-9 | Acenaphthene | 330. | U |
| 51-28-5 | 2,4-Dinitrophenol | 1700. | U |
| 100-02-7 | 4-Nitrophenol | 1700. | U |
| 132-64-9 | Dibenzofuran | 330. | U |
| 121-14-2 | 2,4-Dinitrotoluene | 330. | U |
| 84-66-2 | Diethylphthalate | 330. | U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 330. | U |
| 86-73-7 | Fluorene | 330. | U |
| 100-01-6 | 4-Nitroaniline | 1700. | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 1700. | U |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 330. | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 330. | U |
| 118-74-1 | Hexachlorobenzene | 330. | U |
| 87-86-5 | Pentachlorophenol | 1700. | U |
| 85-01-8 | Phenanthrene | 330. | U |
| 120-12-7 | Anthracene | 330. | U |
| 84-74-2 | Di-n-butylphthalate | 330. | U |
| 206-44-0 | Fluoranthene | 330. | U |
| 129-00-0 | Pyrene | 330. | U |
| 85-68-7 | Butylbenzylphthalate | 330. | U |
| 91-94-1 | 3,3'-Dichlorobenzidine | 660. | U |
| 56-55-3 | Benzo(a)anthracene | 330. | U |
| 218-01-9 | Chrysene | 330. | U |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 170. | J |
| 117-84-0 | Di-n-octylphthalate | 330. | U |
| 205-99-2 | Benzo(b)fluoranthene | 330. | U |
| 207-08-9 | Benzo(k)fluoranthene | 330. | U |
| 50-32-8 | Benzo(a)pyrene | 330. | U |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 330. | U |
| 53-70-3 | Dibenzo(a,h)anthracene | 330. | U |
| 191-24-2 | Benzo(g,h,i)perylene | 330. | U |

(1) - Cannot be separated from Diphenylamine

John J. Wallow, P.E.
Laboratory Director

Date Reported: 2/26/89

# H2M LABS, INC.

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SBLK 448

Lab Name: H2M LABS INC. Contract: -----

Lab Code: ----- Case No.: ---- SAS No.: ----- SDG No.: SD-1

Matrix: (soil/water) WATER Lab Sample ID: SBLK 448

Sample wt/vol: 250 (g/mL) ML Lab File ID: P5409

Level: (low/med) LOW Date Received: --------

% Moisture: not dec.-- dec. -- Date Extracted: 12/30/88

Extraction: (Sepf/Cont/Sonc) SONC Date Analyzed: 1/13/89

GPC Cleanup: (Y/N) N pH: 7.2 Dilution Factor: 1.00

CONCENTRATION UNITS:
Number TICs found: 11 (ug/L or ug/Kg) ug/L

| | CAS NUMBER | COMPOUND NAME | RT | EST. CONC. | Q |
|---|---|---|---|---|---|
| 1. | 141797 | 3-Penten-2-one, 4-methyl- (8 | 6.22 | 170. | JA |
| 2. | | Unknown | 7.61 | 4700. | J |
| 3. | 1069530 | Hexane, 2,3,5-trimethyl- (8C | 7.93 | 830. | J |
| 4. | 922281 | Heptane, 3,4-dimethyl- (8C19 | 8.00 | 430. | J |
| 5. | 2213232 | Heptane, 2,4-dimethyl- (8C19 | 8.16 | 2000. | J |
| 6. | 540841 | Pentane, 2,2,4-trimethyl- (8 | 8.36 | 1900. | J |
| 7. | 79345 | Ethane, 1,1,2,2-tetrachloro- | 9.38 | 230. | J |
| 8. | 98828 | Benzene, (1-methylethyl)- (9 | 9.69 | 700. | J |
| 9. | 4436753 | 3-Hexene-2,5-dione (8C19Cl) | 10.58 | 170. | J |
| 10. | 21964498 | 1,13-Tetradecadiene (8C19Cl) | 24.43 | 430. | J |
| 11. | | Unknown | 36.73 | 300. | J |
| 12. | | | | | |
| 13. | | | | | |
| 14. | | | | | |
| 15. | | | | | |
| 16. | | | | | |
| 17. | | | | | |
| 18. | | | | | |
| 19. | | | | | |
| 20. | | | | | |
| 21. | | | | | |
| 22. | | | | | |
| 23. | | | | | |
| 24. | | | | | |
| 25. | | | | | |
| 26. | | | | | |
| 27. | | | | | |
| 28. | | | | | |
| 29. | | | | | |
| 30. | | | | | |

Date Reported: 2/26/89

John J. Jotter, P.E.
Laboratory Director

# H2M LABS, INC.

575 Broad Hollow Road, Melville, N.Y. 11747
(516) 694-3040 FAX (516) 694-6286

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SD-1 MS

Lab Name: H2M LABS INC. Contract: -----

Lab Code: ----- Case No.: ----- SAS No.: ----- SDG No.: SD-1

Matrix: (soil/water) SOIL Lab Sample ID: 87472e MS

Sample wt/vol: 1.0188 (g/mL) G Lab File ID: >P5410

Level: (low/med) ~~LOW~~ MED Date Received: 12/28/88

% Moisture: not dec.60 dec. -- Date Extracted: 12/30/88

Extraction: (Sepf/Cont/Sonc) SONC Date Analyzed: 1/13/89

GPC Cleanup: (Y/N) ~~N~~ Y pH: 6.7 Dilution Factor: 1.00000

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/kg) ug/kg | Q |
|---|---|---|---|
| 111-44-4 | bis(2-Chloroethyl)Ether | 24000. | U |
| 541-73-1 | 1,3-Dichlorobenzene | 24000. | U |
| 100-51-6 | Benzyl alcohol | 24000. | U |
| 95-50-1 | 1,2-Dichlorobenzene | 24000. | U |
| 95-48-7 | 2-Methylphenol | 24000. | U |
| 39638-32-9 | bis(2-chloroisopropyl)ether | 24000. | U |
| 106-44-5 | 4-Methylphenol | 24000. | U |
| 67-72-1 | Hexachloroethane | 24000. | U |
| 98-95-3 | Nitrobenzene | 24000. | U |
| 78-59-1 | Isophorone | 24000. | U |
| 88-75-5 | 2-Nitrophenol | 24000. | U |
| 105-67-9 | 2,4-Dimethylphenol | 24000. | U |
| 65-85-0 | Benzoic acid | 120000. | U |
| 111-91-1 | bis(2-Chloroethoxy)methane | 24000. | U |
| 120-83-2 | 2,4-Dichlorophenol | 24000. | U |
| 91-20-3 | Naphthalene | 24000. | U |
| 106-47-8 | 4-Chloroaniline | 24000. | U |
| 87-68-3 | Hexachlorobutadiene | 24000. | U |
| 91-57-6 | 2-Methylnaphthalene | 24000. | U |
| 77-47-4 | Hexachlorocyclopentadiene | 24000. | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 24000. | U |
| 95-95-4 | 2,4,5-Trichlorophenol | 120000. | U |
| 91-58-7 | 2-Chloronaphthalene | 24000. | U |
| 88-74-4 | 2-Nitroaniline | 120000. | U |
| 131-11-3 | Dimethylphthalate | 24000. | U |
| 208-96-8 | Acenaphthylene | 14000. | J |
| 606-20-2 | 2,6-Dinitrotoluene | 24000. | U |

FORM I SV-1 1/87 Re...

Date Reported: 2/26/89

John J. Mollow, P.E.

H2M LABS, INC.
575 Broad Hollow Road, Melville, N.Y. 11747
(516) 694-3040 FAX (516) 694-2412

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SD-1 MS

Lab Name: H2M LABS INC. Contract: -----

Lab Code: ----- Case No.: ----- SAS No.: ----- SDG No.: SD-1

Matrix: (soil/water) SOIL Lab Sample ID: 874726 MS

Sample wt/vol: 1.0188 (g/mL) G Lab File ID: >P5410

Level: (low/med) ~~LOW~~ MED Date Received: 12/28/88

% Moisture: not dec. 20 dec. -- Date Extracted: 12/30/88

Extraction: (Sepf/Cont/Sonc) SONC Date Analyzed: 1/13/89

GPC Cleanup: (Y/N) ~~N~~ Y pH: 6.7 Dilution Factor: 1.00000

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg | Q |
|---|---|---|---|
| 99-09-2 | 3-Nitroaniline | 120000. | U |
| 51-28-5 | 2,4-Dinitrophenol | 120000. | U |
| 132-64-9 | Dibenzofuran | 12000. | J |
| 84-66-2 | Diethylphthalate | 24000. | U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 24000. | U |
| 86-73-7 | Fluorene | 48000. | |
| 100-01-6 | 4-Nitroaniline | 120000. | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 120000. | U |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 24000. | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 24000. | U |
| 118-74-1 | Hexachlorobenzene | 24000. | U |
| 85-01-8 | Phenanthrene | 290000. | |
| 120-12-7 | Anthracene | 390000. | ED |
| 84-74-2 | Di-n-butylphthalate | 24000. | U |
| 206-44-0 | Fluoranthene | 470000. | ED |
| 85-68-7 | Butylbenzylphthalate | 24000. | U |
| 91-94-1 | 3,3'-Dichlorobenzidine | 48000. | U |
| 56-55-3 | Benzo(a)anthracene | 190000. | |
| 218-01-9 | Chrysene | 310000. | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 90000. | B |
| 117-84-0 | Di-n-octylphthalate | 24000. | U |
| 205-99-2 | Benzo(b)fluoranthene | 180000. | |
| 207-08-9 | Benzo(k)fluoranthene | 230000. | |
| 50-32-8 | Benzo(a)pyrene | 61000. | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 35000. | |
| 53-70-3 | Dibenzo(a,h)anthracene | 12000. | J |
| 191-24-2 | Benzo(g,h,i)perylene | 26000. | |

(1) - Cannot be separated from Diphenylamine



Date Reported: 2/26/89

# H2M LABS, INC.

575 Broad Hollow Road, Melville, N.Y. 11747
(516) 694-3040 FAX (516) 694-6122


SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SD-1 MSD

Lab Name: H2M LABS INC. Contract: -----

Lab Code: ----- Case No.: ----- SAS No.: ----- SDG No.: SD-1

Matrix: (soil/water) SOIL Lab Sample ID: 874726 MSD

Sample wt/vol: 1.0195 (g/mL) G Lab File ID: P5412

Level: (low/med) ~~LOW~~ MED Date Received: 12/28/88

% Moisture: not dec. 60 dec. -- Date Extracted: 12/30/88

Extraction: (Sepf/Cont/Sonc) SONC Date Analyzed: 1/13/89

GPC Cleanup: (Y/N) N Y pH: 6.7 Dilution Factor: 1.00000

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg | Q |
|---|---|---|---|
| 111-44-4 | bis(2-Chloroethyl)Ether | 24000. | U |
| 541-73-1 | 1,3-Dichlorobenzene | 24000. | U |
| 100-51-6 | Benzyl alcohol | 24000. | U |
| 95-50-1 | 1,2-Dichlorobenzene | 24000. | U |
| 95-48-7 | 2-Methylphenol | 24000. | U |
| 39638-32-9 | bis(2-chloroisopropyl)ether | 24000. | U |
| 106-44-5 | 4-Methylphenol | 24000. | U |
| 67-72-1 | Hexachloroethane | 24000. | U |
| 98-95-3 | Nitrobenzene | 24000. | U |
| 78-59-1 | Isophorone | 24000. | U |
| 88-75-5 | 2-Nitrophenol | 24000. | U |
| 105-67-9 | 2,4-Dimethylphenol | 24000. | U |
| 65-85-0 | Benzoic acid | 120000. | U |
| 111-91-1 | bis(2-Chloroethoxy)methane | 24000. | U |
| 120-83-2 | 2,4-Dichlorophenol | 24000. | U |
| 91-20-3 | Naphthalene | 24000. | U |
| 106-47-8 | 4-Chloroaniline | 24000. | U |
| 87-68-3 | Hexachlorobutadiene | 24000. | U |
| 91-57-6 | 2-Methylnaphthalene | 24000. | U |
| 77-47-4 | Hexachlorocyclopentadiene | 24000. | U |
| 88-06-2 | 2,4,6-Trichlorophenol | 24000. | U |
| 95-95-4 | 2,4,5-Trichlorophenol | 120000. | U |
| 91-58-7 | 2-Chloronaphthalene | 24000. | U |
| 88-74-4 | 2-Nitroaniline | 120000. | U |
| 131-11-3 | Dimethylphthalate | 24000. | U |
| 208-96-8 | Acenaphthylene | 13000. | J |
| 606-20-2 | 2,6-Dinitrotoluene | 24000. | U |

FORM I SV-1 1/87 Rev.

Date Reported: 2/26/89

John J. Mollov, P.E

# H2M LABS, INC.

575 Broad Hollow Road, Melville, N.Y. 11747
(516) 694-3040 FAX: (516) 694-6286

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SD-1 MSD

Lab Name: H2M LABS INC. Contract: -----

Lab Code: ----- Case No.: ----- SAS No.: ----- SDG No.: SD-1

Matrix: (soil/water) SOIL Lab Sample ID: 874726 MSD

Sample wt/vol: 1.0195 (g/mL) G Lab File ID: >P5412

Level: (low/med) ~~LOW~~ MED Date Received: 12/28/88

% Moisture: not dec. 60 dec. -- Date Extracted: 12/30/88

Extraction: (Sepf/Cont/Sonc) SONC Date Analyzed: 1/13/89

GPC Cleanup: (Y/N) Y pH: 6.7 Dilution Factor: 1.00000

| CAS NO. | COMPOUND | CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg | Q |
|---|---|---|---|
| 99-09-2 | 3-Nitroaniline | 120000. | U |
| 51-28-5 | 2,4-Dinitrophenol | 120000. | U |
| 132-64-9 | Dibenzofuran | 3900. | J |
| 84-66-2 | Diethylphthalate | 24000. | U |
| 7005-72-3 | 4-Chlorophenyl-phenylether | 24000. | U |
| 86-73-7 | Fluorene | 12000. | J |
| 100-01-6 | 4-Nitroaniline | 120000. | U |
| 534-52-1 | 4,6-Dinitro-2-methylphenol | 120000. | U |
| 86-30-6 | N-Nitrosodiphenylamine (1) | 24000. | U |
| 101-55-3 | 4-Bromophenyl-phenylether | 24000. | U |
| 118-74-1 | Hexachlorobenzene | 24000. | U |
| 85-01-8 | Phenanthrene | 75000. | |
| 120-12-7 | Anthracene | 69000. | |
| 84-74-2 | Di-n-butylphthalate | 24000. | U |
| 206-44-0 | Fluoranthene | 290000. | ~~E~~ D |
| 85-68-7 | Butylbenzylphthalate | 24000. | U |
| 91-94-1 | 3,3'-Dichlorobenzidine | 48000. | U |
| 56-55-3 | Benzo(a)anthracene | 100000. | |
| 218-01-9 | Chrysene | 220000. | |
| 117-81-7 | bis(2-Ethylhexyl)phthalate | 55000. | B |
| 117-84-0 | Di-n-octylphthalate | 24000. | U |
| 205-99-2 | Benzo(b)fluoranthene | 170000. | |
| 207-08-9 | Benzo(k)fluoranthene | 100000. | |
| 50-32-8 | Benzo(a)pyrene | 34000. | |
| 193-39-5 | Indeno(1,2,3-cd)pyrene | 22000. | J |
| 53-70-3 | Dibenzo(a,h)anthracene | 7700. | J |
| 191-24-2 | Benzo(g,h,i)perylene | 8000. | J |

(1) - Cannot be separated from Diphenylamine

FORM I SV-2 1/87 Rev.

Date Reported: 2/26/89

John J. Molloy, P.E.
Laboratory Director

H2M LABS, INC.
575 BROAD HOLLOW ROAD, MELVILLE, N.Y. 11747 • 516-694-3040
ENVIRONMENTAL and INDUSTRIAL ANALYTICAL SERVICES

# INORGANIC ANALYSIS DATA SHEET

CATCH BASIN #1

Lab Name: H2M LABS, INC. Contract: G & H

Matrix (soil/water): SOIL Lab Sample ID: 859385

Level (low/med): LOW Date Received: 10/06/88

% Solids : 47

Concentration Units (ug/L or mg/kg dry weight) mg/kg

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 4500 | | * | P |
| 7440-36-0 | Antimony | 17 | | | P |
| 7440-38-2 | Arsenic | 11 | U | W | F |
| 7440-39-3 | Barium | 33 | B | | P |
| 7440-41-7 | Beryllium | 0.64 | B | | P |
| 7440-43-9 | Cadmium | 0.43 | U | | A |
| 7440-70-2 | Calcium | 21600 | | * | P |
| 7440-47-3 | Chromium | 26 | | *E | P |
| 7440-48-4 | Cobalt | 19 | | * N | P |
| 7440-50-8 | Copper | 340 | | * | P |
| 7439-89-6 | Iron | 8700 | | * | P |
| 7439-92-1 | Lead | 300 | | | F |
| 7439-95-4 | Magnesium | 7700 | | * | P |
| 7439-96-5 | Manganese | 87 | | * | P |
| 7439-97-6 | Mercury | 0.42 | | | CV |
| 7440-02-0 | Nickel | 8.7 | B | | A |
| 7440-09-7 | Potassium | 520 | B | | P |
| 7782-49-2 | Selenium | 11 | U | | F |
| 7440-22-4 | Silver | 3.4 | | | P |
| 7440-23-5 | Sodium | 1300 | | | P |
| 7440-28-0 | Thallium | 1.1 | U | WN | F |
| 7440-62-2 | Vanadium | 24 | | * N | P |
| 7440-66-6 | Zinc | 340 | | N* | P |
| | Cyanide | 2.0 | U | | C |

COMMENTS:

Date Reported: 10/26/88

John J. Molloy, P.E.
Laboratory Director

H2M LABS, INC. 575 BROAD HOLLOW ROAD, MELVILLE, N.Y. 11747 • 516-694-3040
ENVIRONMENTAL and INDUSTRIAL ANALYTICAL SERVICES

# INORGANIC ANALYSIS DATA SHEET

CATCH BASIN #2

Lab Name: H2M LABS, INC. Contract: G & H

Matrix (soil/water): SOIL Lab Sample ID: 859386

Level (low/med): LOW Date Received: 10/06/88

% Solids : 58

Concentration Units (ug/L or mg/kg dry weight) mg/kg

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 2600 | | * | P |
| 7440-36-0 | Antimony | 26 | | | P |
| 7440-38-2 | Arsenic | 2.8 | | W | F |
| 7440-39-3 | Barium | 47 | B | | P |
| 7440-41-7 | Beryllium | 0.35 | B | | P |
| 7440-43-9 | Cadmium | 0.69 | B | | A |
| 7440-70-2 | Calcium | 7160 | | * | P |
| 7440-47-3 | Chromium | 38 | | *E | P |
| 7440-48-4 | Cobalt | 24 | | *N | P |
| 7440-50-8 | Copper | 170 | | * | P |
| 7439-89-6 | Iron | 4640 | | * | P |
| 7439-92-1 | Lead | 160 | | | F |
| 7439-95-4 | Magnesium | 1640 | | * | P |
| 7439-96-5 | Manganese | 35 | | * | P |
| 7439-97-6 | Mercury | 0.34 | | | CV |
| 7440-02-0 | Nickel | 9.0 | B | | A |
| 7440-09-7 | Potassium | 310 | B | | P |
| 7782-49-2 | Selenium | 1.7 | U | W | F |
| 7440-22-4 | Silver | 6.9 | | | P |
| 7440-23-5 | Sodium | 2030 | | | P |
| 7440-28-0 | Thallium | 1.7 | U | WN | F |
| 7440-62-2 | Vanadium | 19 | | *N | P |
| 7440-66-6 | Zinc | 360 | | N* | P |
| | Cyanide | 1.7 | U | | C |

COMMENTS:

Date Reported: 10/26/88

John J. Molloy, P.E.
Laboratory Director

H2M LABS, INC.
575 BROAD HOLLOW ROAD, MELVILLE, N.Y. 11747 • 516-694-3040
ENVIRONMENTAL and INDUSTRIAL ANALYTICAL SERVICES

# INORGANIC ANALYSIS DATA SHEET

CATCH BASIN #3

Lab Name: H2M LABS, INC. Contract: G & H

Matrix (soil/water): SOIL Lab Sample ID: 859387

Level (low/med): LOW Date Received: 10/06/88

% Solids : 74

Concentration Units (ug/L or mg/kg dry weight) mg/kg

| CAS No. | Analyte | Concentration | C | Q | M |
|---|---|---|---|---|---|
| 7429-90-5 | Aluminum | 3200 | | * | P |
| 7440-36-0 | Antimony | 18 | | | P |
| 7440-38-2 | Arsenic | 1.6 | | | F |
| 7440-39-3 | Barium | 37 | B | | P |
| 7440-41-7 | Beryllium | 0.54 | B | | P |
| 7440-43-9 | Cadmium | 0.54 | U | | A |
| 7440-70-2 | Calcium | 21700 | | * | P |
| 7440-47-3 | Chromium | 29 | | *E | P |
| 7440-48-4 | Cobalt | 4.9 | B | *N | P |
| 7440-50-8 | Copper | 53 | | * | P |
| 7439-89-6 | Iron | 10300 | | * | P |
| 7439-92-1 | Lead | 430 | | | F |
| 7439-95-4 | Magnesium | 12000 | | * | P |
| 7439-96-5 | Manganese | 88 | | * | P |
| 7439-97-6 | Mercury | 0.13 | U | | CV |
| 7440-02-0 | Nickel | 15 | | | A |
| 7440-09-7 | Potassium | 430 | B | | P |
| 7782-49-2 | Selenium | 1.4 | U | W | F |
| 7440-22-4 | Silver | 1.1 | B | | P |
| 7440-23-5 | Sodium | 1600 | | | P |
| 7440-28-0 | Thallium | 1.4 | U | WN | F |
| 7440-62-2 | Vanadium | 26 | | *N | P |
| 7440-66-6 | Zinc | 200 | | N* | P |
| | Cyanide | 1.4 | U | | C |

COMMENTS:

Date Reported: 10/26/88

John J. Molloy, P.E.
Laboratory Director

# H2M LABS, INC.

575 Broad Hollow Road, Melville, N.Y. 11747
(516) 694-3040 FAX: (516) 694-4122

ENVIRONMENTAL and INDUSTRIAL ANALYTICAL LABORATORY


## PESTICIDE ORGANICS ANALYSIS DATA SHEET

Lab Name: H2M LABS, INC. Contract:

Catch Basin #1DL
Leroy Callender
Cantor Bros. Site

Matrix: Soil
Sample Wt: 15.05
Level: LOW
% Moisture: not dec. 49 dec.
Extraction: SONC
GPC Cleanup: Y pH: 6.7

Lab Sample ID: 869382
Lab File ID: 118/17
Date Received: 10-6-88
Date Extracted: 10-10/88
Date Analyzed: 10-21-88/10-25-88
Dilution Factor: 10

| CAS NO. | COMPOUND | CONCENTRATION UNITS: ug/kg | Q |
|---|---|---|---|
| 319-84-6 | alpha-BHC | 160 | U |
| 319-85-7 | beta-BHC | 160 | U |
| 319-86-8 | delta-BHC | 160 | U |
| 58-89-9 | gamma-BHC (Lindane) | 160 | U |
| 76-44-8 | Heptachlor | 160 | U |
| 309-00-2 | Aldrin | 160 | U |
| 1024-57-3 | Heptachlor epoxide | 160 | U |
| 959-98-8 | Endosulfan I | 130 | J |
| 60-57-1 | Dieldrin | 320 | U |
| 72-55-9 | 4,4'-DDE | 320 | U |
| 72-20-8 | Endrin | 190 | J |
| 33213-65-9 | Endosulfan II | 320 | U |
| 72-54-8 | 4,4'-DDD | 320 | U |
| 1031-07-8 | Endosulfan sulfate | 320 | U |
| 50-29-3 | 4,4'-DDT | 96 | J |
| 72-43-5 | Methoxychlor | 1600 | U |
| 53494-70-5 | Endrin ketone | 320 | U |
| 5103-71-9 | alpha-Chlordane | 1600 | U |
| 5103-74-2 | gamma-Chlordane | 1600 | U |
| 8001-35-2 | Toxaphene | 3200 | U |
| 12674-11-2 | Aroclor-1016 | 1600 | U |
| 11104-28-2 | Aroclor-1221 | 1600 | U |
| 11141-16-5 | Aroclor-1232 | 1600 | U |
| 53469-21-9 | Aroclor-1242 | 1600 | U |
| 12672-29-6 | Aroclor-1248 | 1600 | U |
| 11097-69-1 | Aroclor-1254 | 3200 | U |
| 11096-82-5 | Aroclor-1260 | 3200 | U |

Date Reported: 3/15/89

John J. Molloy, P.E.
Laboratory Director

# H2M LABS, INC.

575 Broad Hollow Road, Melville, N.Y. 11747
(516) 694-3040 FAX: (516) 694-4122

ENVIRONMENTAL and INDUSTRIAL ANALYTICAL LABORATORY


## PESTICIDE ORGANICS ANALYSIS DATA SHEET

Lab Name: H2M LABS, INC. Contract:

Catch Basin #2DL
Leroy Callender
Cantor Bros. Site

Matrix: Soil
Sample Wt: 15
Level: LOW
% Moisture: not dec. 42 dec.
Extraction: SONC
GPC Cleanup: Y pH: 6.7

Lab Sample ID: 869383
Lab File ID: 127/610
Date Received: 10-6-88
Date Extracted: 10-10/88
Date Analyzed: 10-21-88/10-25-88
Dilution Factor: 5

| CAS NO. | COMPOUND | CONCENTRATION UNITS: ug/kg | Q |
|---|---|---|---|
| 319-84-6 | alpha-BHC | 70 | U |
| 319-85-7 | beta-BHC | 70 | U |
| 319-86-8 | delta-BHC | 70 | U |
| 58-89-9 | gamma-BHC (Lindane) | 70 | U |
| 76-44-8 | Heptachlor | 70 | U |
| 309-00-2 | Aldrin | 70 | U |
| 1024-57-3 | Heptachlor epoxide | 70 | U |
| 959-98-8 | Endosulfan I | 70 | U |
| 60-57-1 | Dieldrin | 140 | U |
| 72-55-9 | 4,4'-DDE | 140 | U |
| 72-20-8 | Endrin | 140 | U |
| 33213-65-9 | Endosulfan II | 140 | U |
| 72-54-8 | 4,4'-DDD | 140 | U |
| 1031-07-8 | Endosulfan sulfate | 140 | U |
| 50-29-3 | 4,4'-DDT | 140 | U |
| 72-43-5 | Methoxychlor | 700 | U |
| 53494-70-5 | Endrin ketone | 140 | U |
| 5103-71-9 | alpha-Chlordane | 700 | U |
| 5103-74-2 | gamma-Chlordane | 700 | U |
| 8001-35-2 | Toxaphene | 1400 | U |
| 12674-11-2 | Aroclor-1016 | 700 | U |
| 11104-28-2 | Aroclor-1221 | 700 | U |
| 11141-16-5 | Aroclor-1232 | 700 | U |
| 53469-21-9 | Aroclor-1242 | 700 | U |
| 12672-29-6 | Aroclor-1248 | 700 | U |
| 11097-69-1 | Aroclor-1254 | 1400 | U |
| 11096-82-5 | Aroclor-1260 | 1400 | U |

Date Reported: 3/15/89

John J. Molloy, P.E.
Laboratory Director

# H2M LABS, INC.

575 Broad Hollow Road, Melville, N.Y. 11747
(516) 694-3040 FAX: (516) 694-4122

ENVIRONMENTAL and INDUSTRIAL ANALYTICAL LABORATORY


## PESTICIDE ORGANICS ANALYSIS DATA SHEET

Lab Name: H2M LABS, INC. Contract:

Catch Basin #3DL
Leroy Callender
Cantor Bros. Site

Matrix: Soil
Sample Wt: 15.03
Level: LOW
% Moisture: not dec. 26 dec.
Extraction: SONC
GPC Cleanup: Y pH: 7.0

Lab Sample ID: 869384
Lab File ID: 130/611
Date Received: 10-6-88
Date Extracted: 10-10/88
Date Analyzed: 10-21-88/10-25-88
Dilution Factor: 5

| CAS NO. | COMPOUND | CONCENTRATION UNITS: ug/kg | Q |
|---|---|---|---|
| 319-84-6 | alpha-BHC | 55 | U |
| 319-85-7 | beta-BHC | 55 | U |
| 319-86-8 | delta-BHC | 55 | U |
| 58-89-9 | gamma-BHC (Lindane) | 55 | U |
| 76-44-8 | Heptachlor | 55 | U |
| 309-00-2 | Aldrin | 67 | |
| 1024-57-3 | Heptachlor epoxide | 55 | U |
| 959-98-8 | Endosulfan I | 130 | |
| 60-57-1 | Dieldrin | 120 | |
| 72-55-9 | 4,4'-DDE | 110 | U |
| 72-20-8 | Endrin | 240 | |
| 33213-65-9 | Endosulfan II | 110 | U |
| 72-54-8 | 4,4'-DDD | 110 | U |
| 1031-07-8 | Endosulfan sulfate | 110 | U |
| 50-29-3 | 4,4'-DDT | 340 | |
| 72-43-5 | Methoxychlor | 550 | U |
| 53494-70-5 | Endrin ketone | 110 | U |
| 5103-71-9 | alpha-Chlordane | 550 | U |
| 5103-74-2 | gamma-Chlordane | 550 | U |
| 8001-35-2 | Toxaphene | 1100 | U |
| 12674-11-2 | Aroclor-1016 | 550 | U |
| 11104-28-2 | Aroclor-1221 | 550 | U |
| 11141-16-5 | Aroclor-1232 | 550 | U |
| 53469-21-9 | Aroclor-1242 | 550 | U |
| 12672-29-6 | Aroclor-1248 | 550 | U |
| 11097-69-1 | Aroclor-1254 | 1100 | U |
| 11096-82-5 | Aroclor-1260 | 1100 | U |

Date Reported: 3/15/89

John J. Molloy, P.E.
Laboratory Director

LeRoy
Callender
PC

VOLUME II

CANTOR BROTHERS, INC.

# FIELD LOG BOOK

MONITORING WELLS

DRILLING & SAMPLING
OF GROUNDWATER & SOIL

* * *

SEPTEMBER 13, THROUGH
OCTOBER 6, 1988

Date: Sept. 13, 1988 Weather: Raining, Windy
Time arrived on site: 8:25 A.M.

Contractor's Rep. : Joe Kaufman, M.P.C.
Consultant's Rep.: S. Nabavi & L. Narayasingh, LC/PC
NYSDEC Rep. : M. O'Brien

Met with Mr. D. Maze, Cantor Brothers, and informed him that no drilling would be done today due to rain.

Met with NYSDEC Rep. and concurred that there would not be any drilling today.

Around 9:00 A.M. We left the site to go to $H_2M$ Labs for a meeting with Lab personnel to go over the sampling procedure.

Mr. Stancampiano of $H_2M$ asked for a written contract agreement between LC/PC and $H_2M$ Labs, on the basis of Gibbs & Hill contract agreement with the Lab. In addition, he asked for a written confirmation regarding the sampling protocol for the soil samples from the catch basins, which required a field blank and a trip blank if they were to be taken on a separate day from the groundwater samples.

At 10:00 AM we returned to the site. The

| DRILLER'S CREW | VEHICLES |
| --- | --- |
| JOE KAUFMAN | 1 DRILL RIG |
| KENNY REYNOLDS | 2 SUPPORT TRUCKS |
| SALIF BANSE | 1 DOC VAN |
| JOAN FLINT | 1 CONSULTANT'S CAR |

Driller's crew had arrived on the site and were taking over their staging and support areas.

Since the rain had stopped, the Driller's crew unloaded the supplies and provisions which they would need for starting the drilling operations.

We went over the well locations with the Driller's Rep., and later on with NYSDEC Rep. and it was decided to shift the proposed location of MW-3 a short distance to the SE, to move it away from the paved area. The NYDEC Rep was in agreement with this new location, which was marked on the copy of the Work Plan Update (Revised version.)

At 13:00 Hours, the Driller's crew had unloaded all their Supplies and materiel needed for tomorrows operation, and we left the site.

SIROUS H. NABAVI
S. H. Nab

LARRINGTON NARAYSINGH

Date: Sept 14, 1988 Weather: Sunny

see page 10 Time arrived on site: 9:50 AM (S. Nabavi had car accident).

Contractor's Rep: John Goff
Consultant's Rep: S. Nabavi & L. Narayasingh, LC/PC
NYSDEC Rep: M. O'Brien

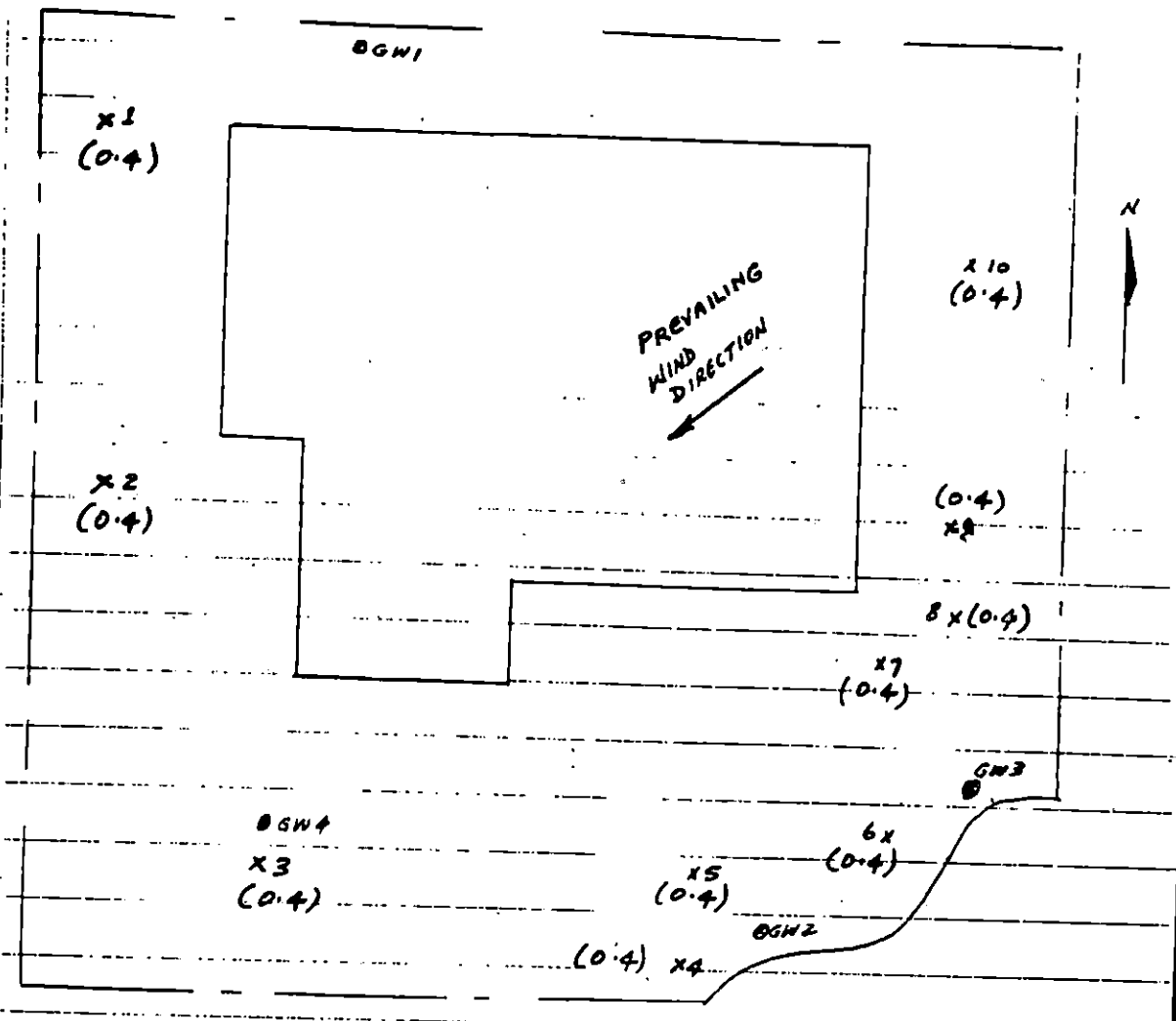
Met with Mr. M. Miller of Cantor's Brothers to obtain potable water source for steam cleaning and drilling operation.

Contractor began steam cleaning equipment to be used in drilling operation in the decon. area, while 2 of his men placed temporary taped barrier around working area of well No 1. Contractor stopped for 10 minutes to correct inefficiency of steam jenny.

Sirous Nabavi went on to do HNu survey of the perimeter of the plant area. Results and locations are shown on p. 7. A reading of 0.4 was recorded for all locations

Contractor set drill rig and equipment to be used in working area of well No 1 then break for lunch at 1:30 PM

Contractor resumed working at 2:00 PM and started drilling operations at 2:15 PM




DRAWING 1 READINGS AND LOCATIONS OF HNU SURVEY CONDUCTED SEPTEMBER 14, 1988

A record of the physical description and HNu readings of the cuttings are shown in table #1 below. For HNu calibration, the zero adjustment was made before each reading

| BLOW COUNT PER 6" DEPTH 140 lb/in² hammer | SAMPLE NUMBER | GEOLOGY DESCRIPTION | DEPTH | HNu READING |
|---|---|---|---|---|
| 3-6-13-16 | 1 | fine to coarse sand, some pebbles (light brown) | 0-2 | 0.2 |
| 1-4-10-21 | 2 | fine to coarse sand, some pebbles | 2-4 | 0.2 |
| 2-10-12-16 | 3 | fine to coarse sand | 4-6 | 0.4 0.8 HNu reading near mouth of well |
| 1-6-6-14 | 4 | fine to coarse sand, some fine gravel | 6-8 | 0.5 |
| 2-5-11-9 | 5 | white sand and fine gravel | 8-10 | 0.4 |
| 4-4-10-16 | 6 | fine to coarse sand with round pebbles | 10-12 | 0.4 |
| 2-5-3-5 | 7 | brown/light brown fine to coarse sand | 12-14 | 0.4 |
| 3-6-5-11 | 8 | brown/light brown fine to coarse sand | 14-16 | 0.4 |
| 2-4-3-10 | 9 | brown/light brown fine to coarse sand with some pebbles and damp | 20-22 | 0.4 |
| 2-6-8-14 | 10 | damp, brown/light brown, fine to coarse sand with boulders | 25-27 | 0.6 |

TABLE #1. HNu READINGS AND GEOLOGY DESCRIPTION OF CUTTINGS MW1L

(CONT'D THUR. SEPT 15 p. 13)

10

sep. 5 Contractor given 1½ hr standby for time he waited before Consultant's rep. arrived.

DRILLER'S CREW

JOHN GOFF

JOE KAUFMAN

JOAN FLINT

SALIF BANSE

KENNY REYNOLDS

At 25 foot deep contractor took break at 4:45 PM. Contractor returned at 5:10 and said that to complete well would take until 9:00 PM and there would not be enough light.
Well was protected by,
- Making augur trim with ground level.
- placing wooden pallet over auger.
- Cover on top of pallet and around with sand
- placing 55 gal drum filled with sand on top.
- placing 4 other 55 gal drums filled with sand adjacent to center drum.

Crew returned to decon. area, got rid of protective clothing and left site at 6:10 PM.

SIROUS H NABAVI
Sirous H. Nabavi

LARRY NARAYSINGH
Narayansingh.

Thur. Sept. 15, 1988.

(see p. 13)

FOR GRAIN SIZE ANALYSIS SAMPLES, (2) 400 ml JAR WAS USED. THIS WAS FILLED USING A PUTTY KNIFE WHICH WAS STEAM CLEANED BEFORE AND AFTER EACH USE.

FOR CHEMICAL ANALYSIS OF SOIL SAMPLES, 2 1000 ml GLASS JARS, AND 2 SMALL GLASS VIALS WERE PROVIDED. THE SAMPLE WERE PUT IN THE JARS USING A PUTTY KNIFE WHICH WAS STEAM CLEANED BEFORE AND AFTER EACH USE.

Date: Thursday Sept. 15, 1988 Weather: sunny & windy
Time arrived on site: 8:25 AM

Contractor unload equipment in decon. area to be steamcleaned, start steam cleaning. We did calibration of HNu meter and surveyed perimeter of work area. Results are shown on page 21.

Contractor then move to location of Well No. 1 to complete well. A continuation of HNu readings and Geology description are shown in table 1 below.

| | BLOW COUNT 6" per depth 140 lb/in² hammer | SAMPLE No. | GEOLOGY DESCRIPTION | DEPTH | HNU READING |
|---|---|---|---|---|---|
| | 8-13-6-5 | 11 | EMPTY | 30-32 | — |
| 10:15 AM GRAIN SIZE ANALYSIS (See p. 12) | 4-5-8-10 | 12 | medium brown, sandy material, few pebbles | 30-32 | 0.6 |
| 10:30 AM CHEMICAL ANALYSIS | 5-16-18-20 | 13 | medium brown, fgr-mgr looking material at some places; boulders (1½" & over); damp material. | 35-37 | 0.6 |
| 10:45 AM CHEMICAL ANALYSIS (See p. 12) | 4-6-29-21 | 14 | same as "13" | 35-37 | 0.5 |
| 10:55 AM CHEMICAL ANALYSIS | 4-6-14-13 | 15 | same as "13" | 35-37 | 0.5 |
| GROUND WATER 40'-0" | 8-6-5-12 | 16 | empty & wet | 40-42 | — |
| GRAIN SIZE ANALYSIS | 8-12-6-6 | 17 | wet brown sand with pebbles | 45-47 | 0.5 |
| | 13-20-21-7 | 18 | very wet brown, fine sand with granite pebbles | 50-52 | 0.5 |

(CONT FROM PAGE 9)

TABLE 1 HNU READINGS AND PHYSICAL DESCRIPTION OF CUTTINGS MW #1

(See page 17)

Permission was granted by DEC's Rep. M. O'Brien to place screen 1 foot above ground water table, so products that may float at the top of the water table may enter into the well.

After the last split spoon, sample No. 18, was taken, contractor broke for lunch at 12:30 PM
Back from lunch at 1:00 PM

1:30 PM At the completion of the drilling of bore hole No1, Marine Pollution Control (MPC) indicated to us that they have provided 20 slot screen to be used with 8-12 sand pack, based on previous agreement between MPC and Gibbs & Hill (G&H). We checked the information with Mr. Richard Barbour of G&H. He told us that a choice had been given to MPC to use either a 10 slot or 20 slot screen and added that MPC's decision to use a 20 slot screen would mean a longer development time and nothing else, so G&H stated that if MPC is willing to take responsibility of achieving the state spec. (below 50 NTU turbidity in the water sample) with a 20 slot screen, approval should be given to MPC to use a 20 slot screen. This call was necessary because we had suggested a use 10 slot screen and 10-20 sand pack based on the physical features of the material found in the ground water table, and information sent from G&H. When this decision was transmitted to Mr. Joe Kaufman of MPC, he stated that he contacted his superiors at MPC and would wait until his superiors at MPC had reached a final decision on the matter.

1:50 PM After J. Kaufman contacted his superiors (John

Goff) he related that in their contract with G&H they are suppose to provide 2 size screens (10&20) unless they are aware of the nature of the soil. In this case they said that they were aware of the nature of the soil so they provided 20 slot screens and would take full responsibility of developing the well below so N.T.U. Work resumed. (see page 24)

2:10 P.M. Contractor was not using tremie to put sand pack around the screened portion of casing so we stopped the operation since spec. called for tremie. Joe Kaufman said that he was told that the sand & bentonite pellets would not be tremied, he then left to call his boss. He returned and said he was told by his boss (John Goff) that there was a revision that allowed them not to use a tremie for the sand and pellets.

3:00 P.M. Sirous Vabani contacted Richard Barbour of G&H who said material should be tremied and if there are any problems, MPC should contact him. Joe Kaufman left to contact his office.

DEC's Rep. Margaret O'Brien said the DEC was flexible on replacing tremie as long as it can be demonstrated that there is no bridging and that a good seal has been achieved and placed where required.

3:46 P.M. Joe Kaufman said John Goff confirmed with

DRILLER'S CREW

JOE KAUFMAN

KENNY REYNOLDS

SAUF BANSE

JOAN FLINT

DEC REP. MARGARET O'BRIEN

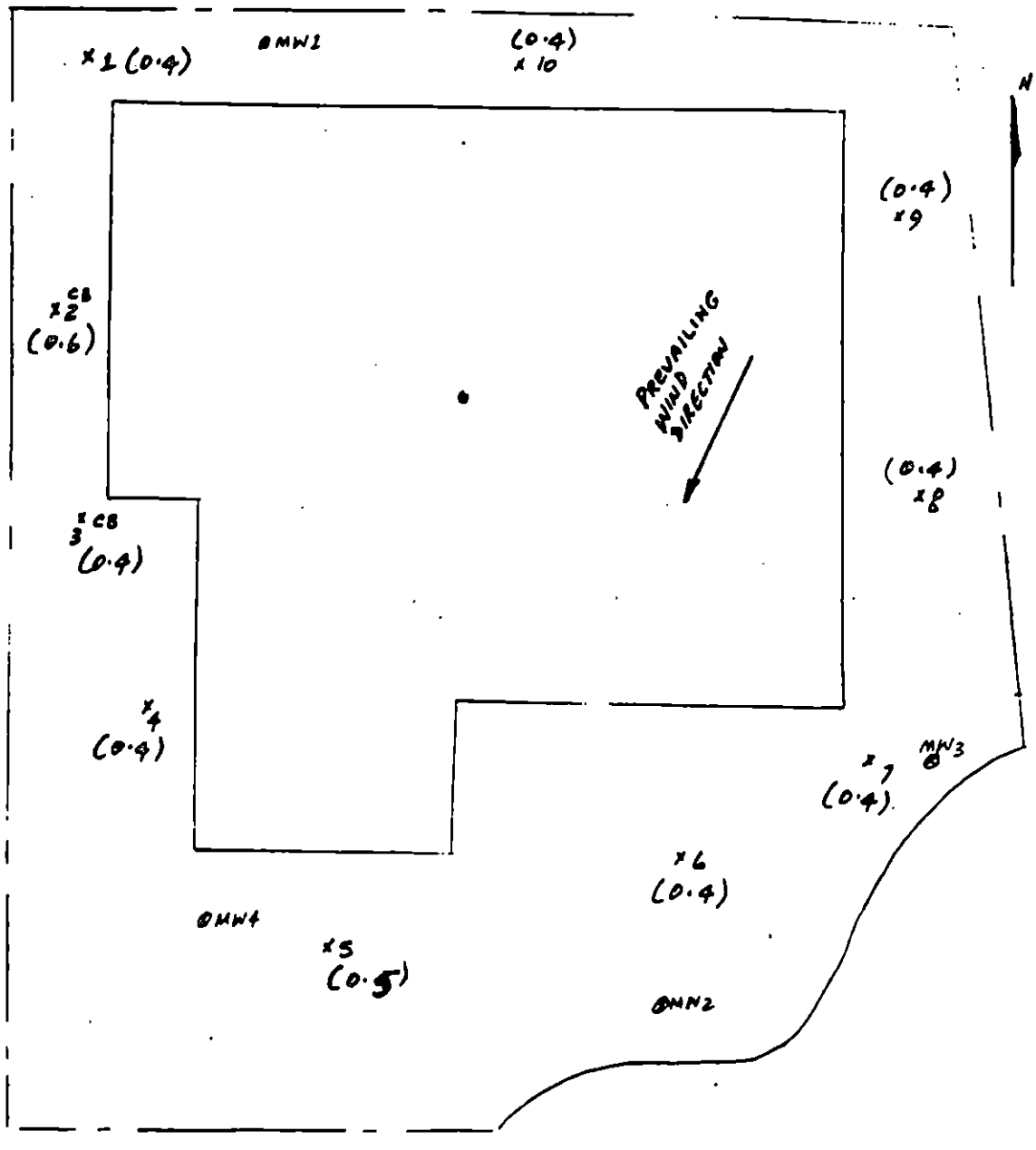
G&H that all material should be tremied.
Contractor resumed work.

5:00 PM Contractor stopped for 1 hour to allow bentonite pellets to set after pouring water.

6:00 P.M. Contractor started to tremie the cement/bentonite grout to 3½ feet from the mouth of the well.

7:30 P.M. Contractor stopped with the cement/bentonite grout at elevation 3'-10" below ground. Contractor started to use soil from the well to mix concrete for surface seal and we instructed him to stop. He was told to bring aggregate for the concrete the next day.

8:00 P.M. Contractor went to decon area to steam clean equipment.
Stop working at 8:30 P.M.




DRAWING 2 READINGS AND LOCATIONS OF HNU SURVEY CONDUCTED ON SEPTEMBER 15, 1988.

22 Thur. Sept. 15, 1988

Materials used by contractor for MW #1

Sand pack 2 - 100 lb bags size 8-12 sand

bentonite slurry 5 lb bentonite powder, 3½ gal. WATER

bentonite pellets 5 GAL

cement / bentonite grout:

1ST BATCH: 26 gal WATER

4 (94 lb) bags portland cement

20 lb bentonite powder

2ND batch: 39 gal water

6 (94 lb) bags cement

30 lb bentonite powder

cement / sand / water (surface seal)

done on Fri. Sept. 16, 1988.

1½ (94 lb) bags cement

2 (100 lb) bags gravel

MONITOR WELL CONSTRUCTION REPORT

THUR. SEPT. 15, 1988

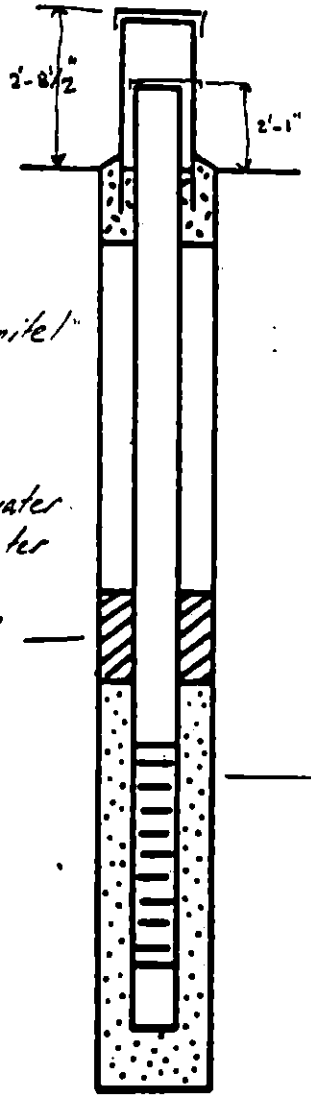
Site I.D. # 152021 Well No. 1

Total Depth _____ Surface Elev. _____ Top Riser Elev. _____

Water Levels (Depth, Date, Time) _____ Date Installed SEPT 15, 1988

| | | | | | | |
|---|---|---|---|---|---|---|
| Riser: | Dia. ____ | Material ____ | Length ____ | | | |
| Screen: | Dia. 2" | Material ____ | Length ____ | Slot Size 20 | | |
| Prot. Csg: | Dia. ____ | Material ____ | Length ____ | | | |

SCHEMATIC




2'-8½" Prot. Csg stickup

2'-1" Riser stickup

Ground Surface

3'-10" Bottom Surface Seal

Surface Seal Type concrete (sand/cement)

cement/bentonite/water

Grout Type CEMENT/BENTONITE

Seal Type Bentonite pellets/water
Bentonite powder/water

TOP OF SLURRY 34'-4"

33'-4" Top Seal

35'-6" Top Sand Pack

39'-0" Top Screen

40'-0" GROUND WATER

Sand Pack Type/Size 8-12

DRAWING 2A

49'-0" Bottom Screen

49'-2" Bottom Sump/Wellpoint

50' Total Depth of Boring

SIROUS H. NABAVI
Sirous H. Nabavi

L. D. NARAYSINGH

Date: Fri. Sept. 16, 1988 Weather, sunny, cool, 60°F
Time to arrive on site: 8:05 AM calm

Driller arrived on site 8:30 AM. Started in two places. At MW#1 site, he cleaned the work area and prepared for placing concrete around the 4" protective casing. In his decon. area, he steam-cleaned his working tools that will be used in drilling MW#2. The augers which had been cleaned the previous night were steam cleaned and water-jet cleaned once more. Then he started setting up his work area around MW#2
At the site of MW#1, Driller was still waiting for his development pump to develop the well. The cap on top of the 2" PVC casing was broken, so he was asked to provide a new cap. The concrete mound around the top of the well was placed 6" deep all around sloping away from the 4" protective casing. The lock provided for the top of the well was not available, so the driller placed a temporary lock on it and gave its key to Miss O'Brien, NYSDEC supervisor.

9:00 A.M. The HNu meter was calibrated by adjusting the zero ajustment and a perimeter survey of the plant was made. The results are shown on page 31

12:00 Contractor break for lunch.

12:30 Contractor back from lunch.

12:15 We took samples for chemical analysis for M.W. No. 1 at H2M labs.

1:10 PM Contractor started drilling, after setting up at work area for monitoring well No. 2.

Zero adjustment was made for HNU calibration before each reading.

| BLOW COUNT 6" PER DEPTH 140 lb/in² HAMMER | SAMPLE No. | GEOLOGY DESCRIPTION | DEPTH (FT) | HNU |
|---|---|---|---|---|
| 2-6-9-8 | 1 | dark/light; fine brown sand, layered | 0-2 | 1.0 |
| 10-20-30-34 | 2 | Dark/light/white fine sand Rock particles | 2-4 | 1.0 |
| 4-6-8-20 | 3 | white/light brown fine sand | 4-6 | 0.8 |
| 2-5-5-6 | 4 | light/dark, fine brown sand | 6-8 | 0.6 |
| 4-11-15-19 | 5 | light/dark fine sand | 8-10 | 0.6 |
| 4-5-11-9 | 6 | light/dark; fine to coarse with dark brown organic soil and white pebbles | 10-12 | 0.7 |
| 4-6-8-8 | 7 | same as '6' with some plant roots dark brown soil sandwiched with fine granular sand | 12-14 | 0.8 |
| 6-19-9-22 | 8 | same as '7' | 14-16 | 0.7 |
| 3-9-9-8 | 9 | light brown fine sand with organic material | 20-22 | 0.7 |
| 5-6-9-12 | 10 | same as '9' | 25-27 | 0.7 |

DRILLER'S CREW DEC REP M. O'BRIEN

JOE KAUFMAN

KENNY REYNOLDS

SALIF BANGE

JOHN FLINT

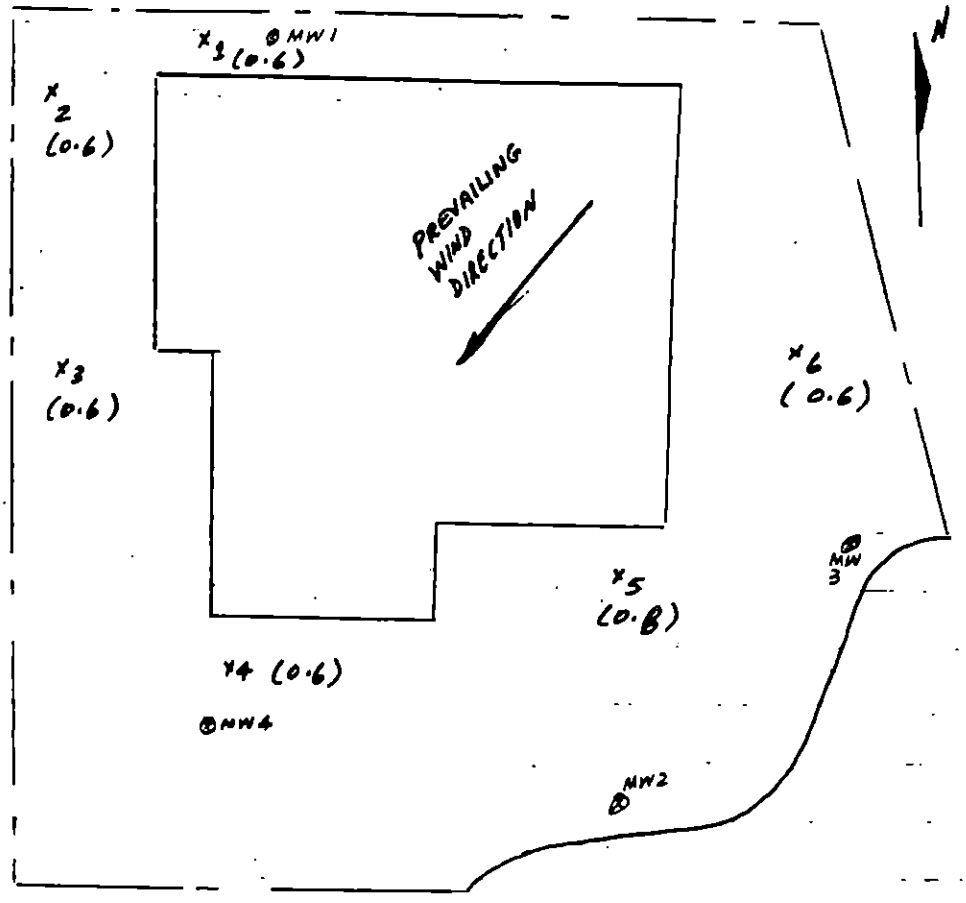
| | BLOW COUNT 6" PER DEPTH 140 lb/in² HAMMER | SAMPLE No. | GEOLOGY DESCRIPTION | DEPTH (FT) | HNU |
|---|---|---|---|---|---|
| 3:30 PM GRAIN SIZE ANALYSIS | 7-7-10-8 | 11 | Light brown fine sand with organic material | 30-32 | 0.8 |
| 3:55 P.M CHEMICAL ANALYSIS | 4-8-12-22 | 12 | same as 11 | 35-37 | 0.8 |
| 4:05 P.M CHEMICAL ANALYSIS | 5-5-7-6 | 13 | same as 11 | 35-37 | 0.7 |

(Cont on page 35)

TABLE 2. HNU READINGS AND PHYSICAL DESCRIPTION OF SAMPLES MW#2

4:10 PM Driller took break, depth stopped: 35 feet.
Contractor decided to stop for the day bearing in mind that he had not gotten to the ground water table.
Contractor secure hole by:-
- Making auger trim with ground level
- placing wooden pallet over auger
- Cover on top of, and around pallet with sand.
- placing 55 gal. drum filled with drill cuttings on pallet.
- placing 4 other 55 gal drums filled with drill cuttings adjacent to center drum.

5:00 P.M. Contractor left site.




DRAWING 3. READINGS AND LOCATION OF HNU SURVEY CONDUCTED SEPTEMBER 16, 1988.

SIROUS H. NABAVI

Sirous H. Nabavi

L. D. NARAYSINGH

L. D. Narayansingh

Monday Sept. 19, 1988 Weather: Cloudy, hazy, calm 65°F

Time arrived on site: 7:35 AM

8:10 A.M. At 8:10 before the drilling rig arrived a long tanker truck parked in front of MW No. 2 was blocking the drilling rig's location. Sirous Nabavi contacted the plant personnel and asked them to expedite the off loading in order to move the tanker truck out of the way, and was told that it would take ½ hour to unload.

8:30 A.M. Drilling rig arrived on site and Si Nabavi told Joe Kaufman (Driller's super) to start setting up his equipment in the decon-area to be steam cleaned.

8:45 A.M. HNu reading was done after zero adjustment was made for calibration. Readings and locations are shown on page 41.

9:00 A.M. The driller connected the water hose and started steam cleaning his augers, and other well-inserted tools and piping. The driller had brought in a new steam-jenny, and he is getting much drier and hotter steam (max. capacity temp. 325°F.

9:15 AM Contractor finished steam cleaning and moved to set up at well No. 2. The drilling rig moved to well No. 2 at 9:30 AM.

(See page 35)

At 1:30 Sirous Nabavi called John Goff of M.P.C. since Joe Kaufman had not been very co-operative during the morning's work period. John Goff said he would be there by 3:00 P.M. He never showed up.

9:50 A.M. Contractor started drilling. The bore hole for MW 2 was found in the same secured fashion as left on Friday Sept 16, 1988. HNU adjustment was done before each reading.

| | BLOW COUNT 6" PER DEPTH 140 lb/in² HAMMER | SAMPLE No. | GEOLOGY DESCRIPTION | DEPTH (FT) | HNU |
|---|---|---|---|---|---|
| GROUND WATER AT 39 FEET | 6-10-6-6 | 14 | dark/light Brown, fine to coarse sand wet with rounded pebbles | 40-42 | 1.2 |
| 10:40 AM GRAIN SIZE ANALYSIS NO HYDROMETER ANALYSIS NECESSARY | 7-6-4-5 | 15 | fine to coarse sand with pebbles, wet, dark/light brown | 45-47 | 1.1 |
| (CONT'D FROM) P. 29 | 3-4-2-1 | 16 | light brown, coarse sand, | 50-52 | 1.4 |

TABLE 2. HNU READINGS AND PHYSICAL DESCRIPTION OF SAMPLES MW#2

11:00 AM Contractor stopped for coffee break

11:30 AM Contractor resumed working.

Contractor started to introduce well casing. Since ground water was found at 39 feet below ground level, in order to have the screen not above the water table, the bottom of the casing was placed at 48 FEET below ground level.

1:00 P.M. Contractor introduced bentonite slurry into 1½" tremie pipe

1:20 P.M. Contractor finished introducing bentonite pellets to complete 2' seal.

(see page 24)

1:40 P.M. Contractor break for lunch

2:15 P.M. Contractor back from lunch.
D.E.C. Rep. T. S. Manickam arrived on site.

Contractor prepared site location of MW No. 3 by laying plastic and barricading area, while waiting for 1 hr. waiting period to be up for bentonite seal.

3:20 P.M. Contractor mix cement/bentonite grout and started to introduce it through the premie. Contractor placed too much of the mixture in the augers and it started overflowing. Contractor displaced screen and casing of MW No. 2 when he tried to remove his auger by raising. Contractor hit on casing to put it back to its original position, but the bentonite seal was already broken when the casing moved. The well was declared lost.

D.E.C. Rep. T.S. Manickam left to contact his office of the problem. When he came back, he related that the bore hole should be filled with cement/bentonite grout up to 3 feet below the ground level, then completed with concrete.

Upon removing his augers, contractor found end of last auger to be sealed with bentonite. Contractor had to saw-cut casing while removing augers. Contractor placed grout in hole and secure in same manner as previous day.

DRILLER'S CREW

JOE KAUFMAN

DON KLAUS

JOAN FLINT

SALIF BANSE

DEC. REP. T.S. MANICKAM

5:30 P.M. Contractor went to decon area to steam clean augers and other down-hole equipments.

6:00 P.M. Steam Jenny ran out of fuel, one of contractors crew went to get fuel.

6:40 P.M. Contractor resumed steam cleaning

7:00 P.M. Contractor left site.

Mon. Sept. 19, 1988.

Materials used by contractor for last MW #2

Sand pack 2 (100 lb) bags 8-12 sand

bentonite slurry 4 gal (including water) – 5 lb powder, 4 gal $H_2O$

bentonite pellets 3½ gal

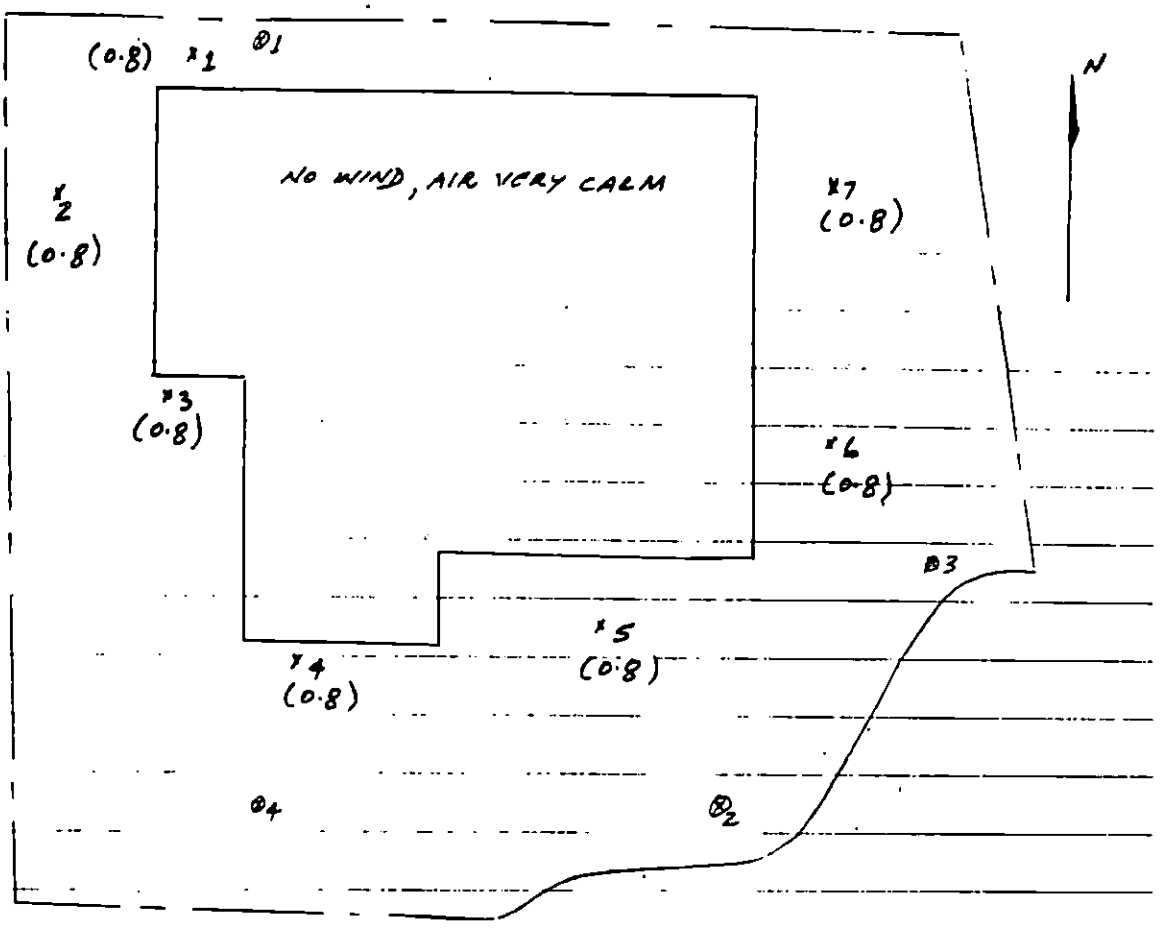
cement/bentonite grout:

1ST BATCH

10 bags (94 lb) cement

65 gal water

50 lb bentonite powder




DRAWING 4. READINGS AND LOCATIONS OF HNU SURVEY CONDUCTED ON SEPTEMBER 19, 1988

Mon. Sept. 19, 1988

## Elevation Back up.

| | ELEVATION OF MATERIAL IN BORE HOLE | ELEVATION OF BOTTOM OF AUGERS |
|---|---|---|
| After pouring sand through tremie, the following measurements were observed, after removing 3 five feet length of augers. | | |
| TAPE STUCK AT 3' SWAT | ① 42'-10"<br>3-00<br>39-10" TOP OF AUGER ABOVE GROUND TO SAND | 39-10"<br>2'-2½" AUGER STICK-UP<br>37-8" |
| | | ① 35'-0" ← 7 pieces of 5' augers<br>2'-2" ← auger stick up<br>32-8" |
| IGNORING OUR OBJECTION CONTRACTOR CONTINUE TO RAISE AUGER | | |
| | ② 42'-9"<br>3<br>39-9" | 39-9<br>2-9<br>37'-0 |
| | | ② 35-0<br>2-9"<br>32-3" |
| | ③ 43'-9"<br>3-0<br>40-9 | 40-9<br>3-5<br>37-4 |
| | | ③ 35-0<br>3'-5"<br>31'-7" |
| | CONTRACTOR NEEDED 1'-6" OF SAND TO ACHIEVE 35'-10" AVG EL. OF SAND | |
| | ④ 44'-1"<br>3-0<br>41-1" | 41-1<br>4-1<br>37-0 |
| | | ④ 35-0<br>4-1<br>30-11 |
| | ⑤ 43-1<br>3<br>40'-1" | 40'-1"<br>4'-1"<br>36-0" |
| | | ⑤ 35-0<br>4-1<br>30-11 |
| | ⑥ 42-9<br>3<br>39-9 | 39-9<br>4-4<br>35-5 ↑ TOP OF SAND |
| | | ⑥ 35-0<br>4"<br>30-8 |
| CONTRACTOR REMOVE ANOTHER AUGER AGAINST OUR OBJECTION SAYING THE SWELL PELLETS WILL SWELL UP TO 3 TIMES THE AMOUNT. | | |
| | ⑦ 38-5<br>3-0<br>35-5 | 35-6<br>4"<br>35-1 |
| | | ⑦ 30-0<br>0-4<br>29-8" |
| | ⑧ 37-6<br>3-0<br>34-6 | 39-6<br>4<br>34-2 |
| | | ⑧ 30-0<br>0-4<br>29-8 |
| | ⑨ 36-8<br>3<br>33-8 | 33-8<br>1-3<br>32-5 |
| | | ⑨ 30-0<br>1-3<br>28-9 |
| | | ⑩ 30-0<br>1-8<br>28-4 |
| | ⑩ 36-9<br>3<br>33-9 | 35-9<br>1-8<br>32-1 ← TOP OF PELLETS WITH H2O. |

Mon. Sept. 19, 1988. 43

MONITOR WELL CONSTRUCTION REPORT

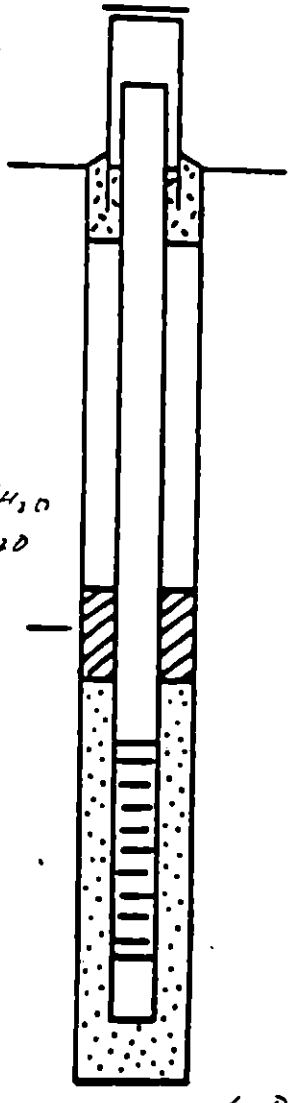
Site ID # 152021 Well No. 2 (LOST WELL)

Total Depth _____ Surface Elev. _____ Top Riser Elev. _____

Water Levels (Depth, Date, Time) _____ Date Installed SEPT 29, 1988

Riser: Dia. ____ Material _____ Length ____
Screen: Dia. ____ Material _____ Length ____ Slot Size 20
Prot. Csg: Dia. ____ Material _____ Length ____

SCHEMATIC



____ Prot. Csg stickup

2'-2" Riser stickup (LATER REMOVED)

Ground Surface

3'-0" Bottom Surface Seal

Surface Seal Type CONCRETE (CEMENT/SAND)

Grout Type CEMENT/BENTONITE POWDER

Seal Type BENTONITE PELLETS/$H_2O$ BENTONITE POWDER/$H_2O$

TOP OF SLURRY 34'-2"

32'-1" Top Seal

35'-5" Top Sand Pack

37'-10" Top Screen

GROUND WATER AT 39'

Sand Pack Type/Size 8-12

47'-10" Bottom Screen

48'-0" Bottom Sump/Wellpoint

50' Total Depth of Boring

DRAWING 4A

SIROUS H. NABAVI
Sirous H. Nabavi

L D NARAYSINGH

Tuesday September 20, 1988 Weather: cloudy, chance of rain. 69°F

Time arrived on site 7:45 A.M.

8:10 A.M. Completed HNU perimeter survey of site after setting the zero adjustment before each reading. The locations and readings are shown on page 53

8:20 AM Driller's crew arrived on site. Started steam cleaning.

9:00 AM Driller was ready to start drilling bore hole for the new MW No. 2 at the revised location, but since the owner was not available to get his consent, we told the driller to start MW No. 3 near the approved alternate location, in the edge of the grassed strip of plant (see page 55)

9:30 A.M. Contractor started drilling. For calibration zero adjustment was made before each HNU reading.

| BLOW COUNT 6" PER DEPTH 140 lb/in² HAMMER | SAMPLE NO. | GEOLOGY DESCRIPTION | DEPTH (FT) | HNU READING |
|---|---|---|---|---|
| 8-9-7-9 | 1 | fine to coarse sand with pebbles, with organic soil | 0-2 | 0.6 |
| 4-3-4-4 | 2 | fine brown sand with pebbles and organic soil, multi-layed. | 2-4 | 0.55 |
| 2-3-5-4 | 3 | fine brown sand with organic soil | 4-6 | 0.55 |
| 6-10-16-24 | 4 | fine brown sand, coarse white sand with pebbles, boulders, organic soil. | 6-8 | 0.40 |

* See p. 47.

We did not take any soil samples for chemical analysis because DEC rep said if samples' HNU readings were below 5.0 it was not necessary.

| | BLOW COUNT 6" PER DEPTH 140 lb/in² HAMMER | SAMPLE No. | GEOLOGY DESCRIPTION | DEPTH (FT) | HNU READING |
|---|---|---|---|---|---|
| | 2-12-10-11 | 5 | light/dark brown sand fine to coarse | 8-10 | 0.4 |
| | 14-10-11-11 | 6 | same as '5' | 10-12 | 0.4 |
| | 2-4-12-9 | 7 | same as '5' | 12-14 | 0.4 |
| | 4-6-10-11 | 8 | same as '5' | 14-16 | 0.4 |
| | 9-14-8-7 | 9 | same as '5' | 20-22 | 0.4 |
| | 11-8-8-18 | 10 | same as '5' | 25-27 | 0.4 |
| 11:25 AM | Contractor took break, contractor steam cleaned his split spoons, well casing and screen because they were not properly placed on pallets | | | | |
| 12:00 | Contractor resumed drilling. | | | | |
| | 13-7-8-9 | 11 | fine to coarse sand with some pebbles | 30-32 | 0.4 |
| 12:30 PM GRAIN SIZE ANALYSIS | 7-8-12-33 | 12 | fine to coarse sand with brown pebbles | 35-37 | 0.4 |
| GROUND WATER AT 42 FEET. | 6-13-9-7 | 13 | same material with some dark brown medium size grain sand. damp | 40-42 | 0.3 |
| | 3-6-5-7 | 14 | same material, wet. | 45-47 | 0.2 |
| | 3-6-5-4 | 15 | same as "14" | 50-52 | 0.2 |

see p. 46 *

TABLE 3. HNU READINGS AND PHYSICAL DESCRIPTION OF SAMPLES. MW13

1:30 PM Contractor broke for lunch

2:00 PM Contractor returned from lunch.

There was descrepancy between contractor and us about the level of the ground water table in order to place screen 1 foot above. Joe Kaufman said that ground water was reached at 40 feet but could not account for the dryness of the split spoon sample at 40-42 feet below the ground. This was resolved when DEC rep. called his office and spoke to M. Chen who said that the depth of the water table should be measured. Driller proceed to measure depth with steel rods used to support ~~sugar~~ split spoon and found the depth of ground water to be 42 feet below ground level. Contractor proceed to introduce well screen and casing so as to allow for a foot of screen above the water table. The casing did not go all the way down since there was a plug at the bottom of the auger formed by material from the ground.

2:45 P.M. Contractor introduced water into the well to eliminate plug. After this was done contractor started pouring sand pack through tremie around screen.

3:25 P.M. Chain used to pull augers above ground got broken.

4:00 PM State rep stopped job since amount of sand

CONTRACTOR'S CREW

DEC. REP. T.S. MANICKAM

JOE KAUFMAN

JOANNE FLINT

SALIF BANSE

ERIC JENNINGS

calculated was ~~less~~ more than amount used to pack 12' of sand. Contractor could not account for difference.

4:15 PM Contractor resumed working.

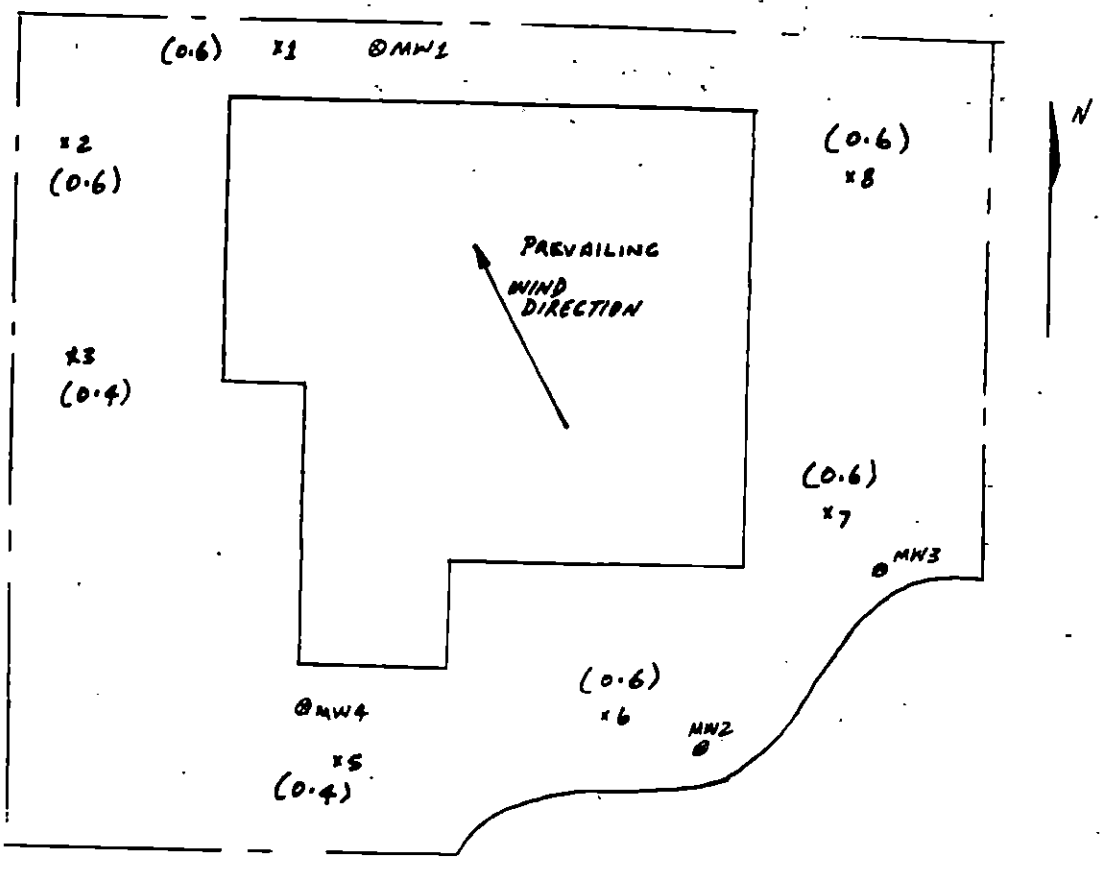
4:25 PM State Rep. stopped job to call office to find out what should be done about discrepancy.

4:40 P.M. State Rep. said that he did not get in touch with superior so job would have to be stopped until next day. He then went on to explain how the bentonite slurry should be introduced into the bore hole.

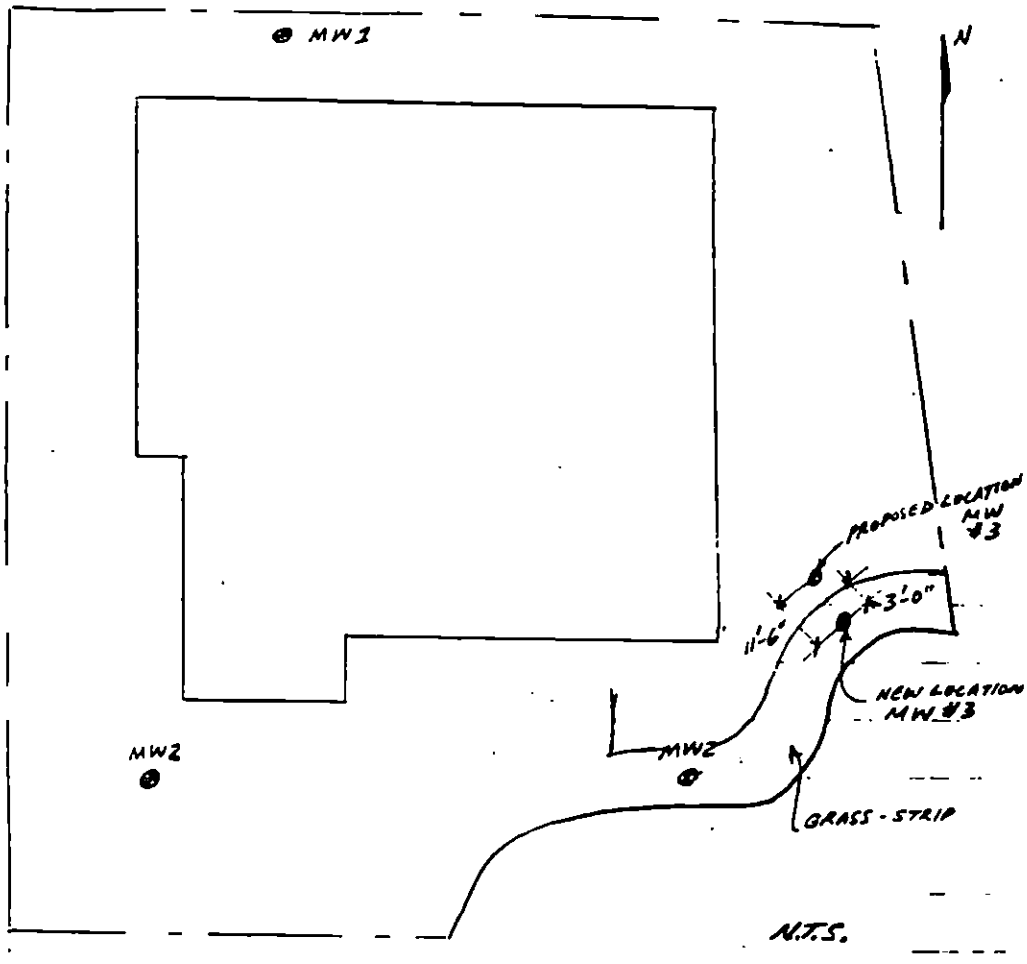
4:55 P.M. Contractor started to pack up. We labelled the drums with waste water and drill cuttings. Contractor secure well by:-
- placing empty drum over augers and casing,
- placing 4 drums with drill cuttings adjacent to center drum.
- place sand bags on top of center drum.
(This was done since site was not secure, and contractor could not leave his drill rig on augers)

5:20 P.M. Contractor started steam cleaning equipment

5:40 P.M. Contractor finished steam cleaning and left site.




DRAWING 5 . READINGS AND LOCATIONS OF HNU SURVEY CONDUCTED ON SEPTEMBER 20, 1988.




DRAWING 5A. NEW LOCATION OF MW#3.

(Proposed location was on paved area. It was decided that a location in the grass strip would be better, because trucks that enter the plant may run it over since it had a stick-up).

SIROUS H. NABAVI

Sirous H. Nabavi

LD NARAYSINGH

LD Narayansingh

Wednesday Sept. 21, 1988 Weather: Sunny; mild calm winds.

Time arrived on site: 7:50 AM

8:00 AM. Contractor arrived on site. Sirous Nabavi did perimeter survey with HNU meter of plant after making calibration with the zero adjustment knob. Results are shown on Page 63. (Plant Closed)

8:15 AM Driller started to empty his mud water pan into 55 gallon drums and prepare for steam cleaning.

8:30 AM Steam cleaning started

9:00 AM Steam cleaning ended. A measurement of the temperature of the steam was made and found to be 208°F.

9:45 AM Drill rig moved to well No. 3 to continue completion of well. An initial depth was taken for the sand and bottom of auger. Both were found to be 39'-4" below ground level. The desired top of sand elevation was not achieved as yet so contractor started pouring sand.

10:15 AM John Errington of MPC arrived on site Richard Barbour who was present had private meeting with him. Joe Kaufman (drill Master) became much more cooperative.

The bentonite slurry was mixed to a thickness approved by the D.E.C.'s rep. then introduced into bore hole.

11:15 A.M. Water was poured on bentonite tablets

11:30 A.M. Contractor broke for lunch. The bottom of the auger was 1 foot above the level of the pellets but only 4" above the level of the water which formed a slurry in the bore hole.

12:30 PM Contractor back from lunch

Contractor made his first batch of cement/bentonite grout and introduced into tremie tube, by centrifugal pump. Only half the estimated amount, by volume, was filled by the grout.

2:00 PM John Emington left site

2:45 P.M. Contractor had problem pulling his augers out resulting in a number of bolts being broke on his drill rig (These were replaced). The difficulty was caused from the first batch of grout flowing up on the outside of the bottom 10' of augers and hardening. This was also the reason why the first batch did not

CONTRACTOR'S CREW DEC. REP T.S. MANICKAM

JOE KAUFMAN

JOANNE FLINT

SALIF BANSE

ERIC JENNINGS

fill the estimated amount. It was concluded that in future, contractor should pump at a slower rate and in smaller quantities to avoid problems.

4:40 PM When last auger was taken out, approximately 2" of soil fell into the bore hole. Contractor did not have post hole digger on truck or any other means to remove soil, so he was not able to complete well with concrete mound.

Contractor secured well by:-
- Placing empty drum over casing
- placing 4 drums with drill cutting adjacent to center drum
- Place wooden pallet on top of center drum
- Place drum filled with drill cutting on top of pallet.

5:00 PM Contractor began steam cleaning augers and other equipment used in bore hole. Contractor had problems cleaning augers with grout.

6:05 PM Contractor finished steam cleaning and left site.

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Wed. Sept 21, 1988

Materials used by contractor for MW #3

Sand pack 18½ gal

bentonite slurry: 5 lb bentonite ; 4 gal $H_2O$

Bentonite pellets: 3/4 of 5 gal bucket

Cement / bentonite / water grout:-

1ST Batch

8 (94 lb each) bags cement

32 lb bentonite

52 gal. water

2ND Batch

8 bags cement

32 lb bentonite

52 gal. water

3RD Batch

4 bags cement

16 lb bentonite

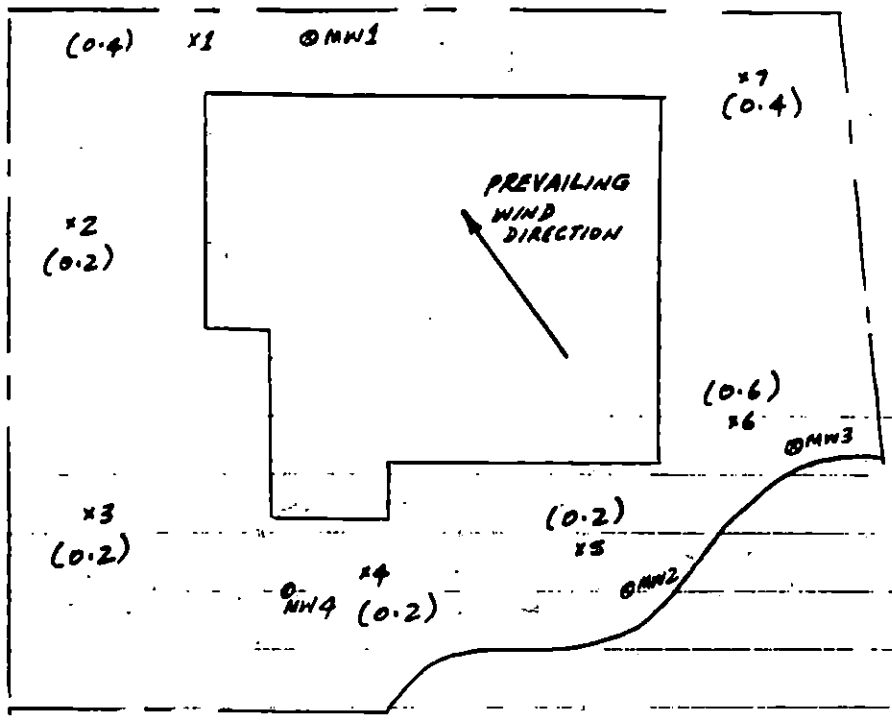
26 gal $H_2O$

4TH Batch

2½ bags cement

10 lb bentonite

16 gal water




DRAWING 6. READINGS AND LOCATIONS OF HNU SURVEY CONDUCTED ON SEPTEMBER 21, 1988

Wed. Sept. 21, 1988

# Elevation back-up

| | ELEVATION OF MATERIAL IN BORE HOLE | ELEVATION OF BOTTOM OF AUGERS |
|---|---|---|
| INITIAL MEASUREMENT BEFORE STARTING → | 40'-7" | INITIAL 40'-2" |
| | 1'-3" | -10" |
| ① | 39'-4" | 39'-4" |
| | 40'-6" | ① 40'-2" |
| | 1'-6" | 1'-1" |
| | 39'-0 | 39'-1" |
| ② | 40'-10 | ② 40'-2" |
| | 2'-3 | 1'-10" |
| | 38'-7" ← TOP OF SAND PACK | 38'-4" |
| ③ | 40'-2" | ③ 40'-6" |
| | 3'-1" | 3'-6" |
| | 37'-1" ← TOP OF BENTONITE SLURRY | 37'-0" |
| ④ | 41'-8½" | ④ 40'-2" |
| | 5'-2 | 4'-6" |
| | 36'-6½" ← TOP OF BENTONITE PELLETS | 35'-8" |
| | AFTER 1 HOUR ELEVATION OF PELLETS REMAINED THE SAME AFTER ADDING WATER | |
| ⑤ | 24'-0" | ⑤ 25'-2" |
| | 2'-5" | 3'-5" |
| | 21'-7" | 21'-9" |
| ⑥ | 22'-0 | ⑥ 20'-2" |
| | 4'-6" | 4'-6" |
| | 17'-6" | 15'-8" |
| ⑦ | 14'-0" | ⑦ 15'-2" |
| | 3'-6" | 3'-6" |
| | 10'-6" | 11'-8" |
| ⑧ | 10'-10" | ⑧ 10'-2" |
| | 2'-10" | 2'-8" |
| | 8'-0" | 7'-6" |
| ⑨ | AFTER ALL AUGERS WERE REMOVED, A FINAL MEASUREMENT WAS TAKEN AND FOUND TO BE 2'-2" ← TOP OF CEMENT/BENTONITE GROUT | |

MONITOR WELL CONSTRUCTION REPORT

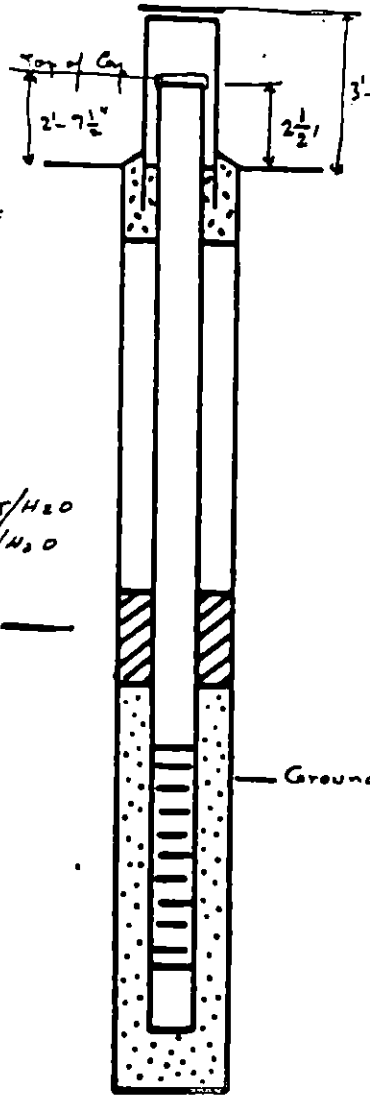
Site CANTOR BROTHERS Well No. 3

Total Depth _____ Surface Elev. _____ Top Riser Elev. _____

Water Levels (Depth, Date, Time) _____ Date Installed _____

Riser: Dia. ____ Material _____ Length ____
Screen: Dia. ____ Material _____ Length ____ Slot Size 20
Prot. Csg: Dia. ____ Material _____ Length ____

SCHEMATIC




3'-2" Prot. Csg stickup

2½' Riser stickup

Ground Surface

3'-2" Bottom Surface Seal

Surface Seal Type CONCRETE

Grout Type CEMENT/BENTONITE POWDER

Seal Type BENTONITE PELLETS/$H_2O$ BENTONITE POWDER/$H_2O$

36'-6½" Top Seal

37'-1" Top of Slurry

38'-7" Top Sand Pack

40'-9" Top Screen

Ground Water 42'

Sand Pack Type/Size _____

50'-9" Bottom Screen

50'-11" Bottom Sump/Wellpoint

52' Total Depth of Boring

DRAWING 6A

SIROUS H. NABAVI
Sirous H. Nabavi

L D NARAYSINGH

Thursday Sept 22, 1988 Weather: Clear, Sunny, mild winds
Time arrived on site: 7:45

7:45AM HNu survey conducted, readings shown on page 75.

8:30 AM Contractor arrived on site. Part of crew prepared for steam cleaning while others started clearing around MW No. 3 – removing the barrels with the boom truck and taking it to storage area.

8:45 AM Contractor started steam cleaning back of drill rig.

9:05 AM Contractor finished steam cleaning drill rig and make to set up at new location for MW No. 2 which was not yet approved by Mr. Mathew Miller, owner.

9:10 AM Contractor finished steam cleaning down hole equipment for well. State Rep., T Klinickam, raised a question on steam cleaning. The present practice is for the Driller to steam clean his equipment once at the end of the day, and once the next morning. State Rep says the one at the end of the day should only consist of washing, not steam cleaning because the equipment has to be clean not steam cleaned. Driller said that he have to steam clean his augers of cement before he takes it out of the site so it does not hardens. State Rep. said that he would

check with his superiors.

9:15 AM Joe Kaufman started to cut branches of tree to make room for his drill rig. (See sketch on page 77 for new location).

9:45 AM Joe Kaufman left the site to check on the following criteria:

1. The centrifugal pump that was sent to him to deliver the bentonite slurry down the tremie was not the right type. He said that it would not work because it had a 3" ϕ, opening and 15 feet of hose could not deliver the bentonite slurry.
2. He was required to use a side-delivery tremie pipe for the bentonite slurry. He does not have an elbow nor does he agree to cap off the bottom of the tremie pipe and saw cut an opening at the side of the pipe.

The operations stopped since the driller does not have proper equipment as per specs.

10:15 Joe Kaufman returned. He had discussed the above items with his supervisor John Ewington. On the elbow at the end of the tremie pipe, driller agreed to provide 45° elbow; but on the centrifical pump, driller does not have the proper type of pump for delivering the bentonite slurry and if he orders it, he will not get it overnight.

State Rep. then contacted Larry Alden

to report to them and to ask for information as to what should be done.

10:20 AM T. Manickam and Jee Kaufman both left to contact their headquarters for instructions. At this time the driller's crew started placing concrete for well seal on MW No. 3 and Lost MW No. 2 and in the inside of the protective casing of MW No. 1 to bring it up to ground level.

10:40 AM State rep. return

10:50 AM A call was made to GEH by Si Nabani about the necessity of getting a daily report signed by the contractor and us as to times of essence and/or any other events that have to be recorded. Daily sign-out sheets should be provided by the contractor with the amount of material and time spent.

1:30 PM Break for lunch

2:00 P.M. Back from lunch

3:05 P.M. Contractor finished cleaning site area and left.

We attempted to sample the drill cuttings that were already in drums

CONTRACTOR'S CREW

JOE KAUFMAN

JOANNE FLINT

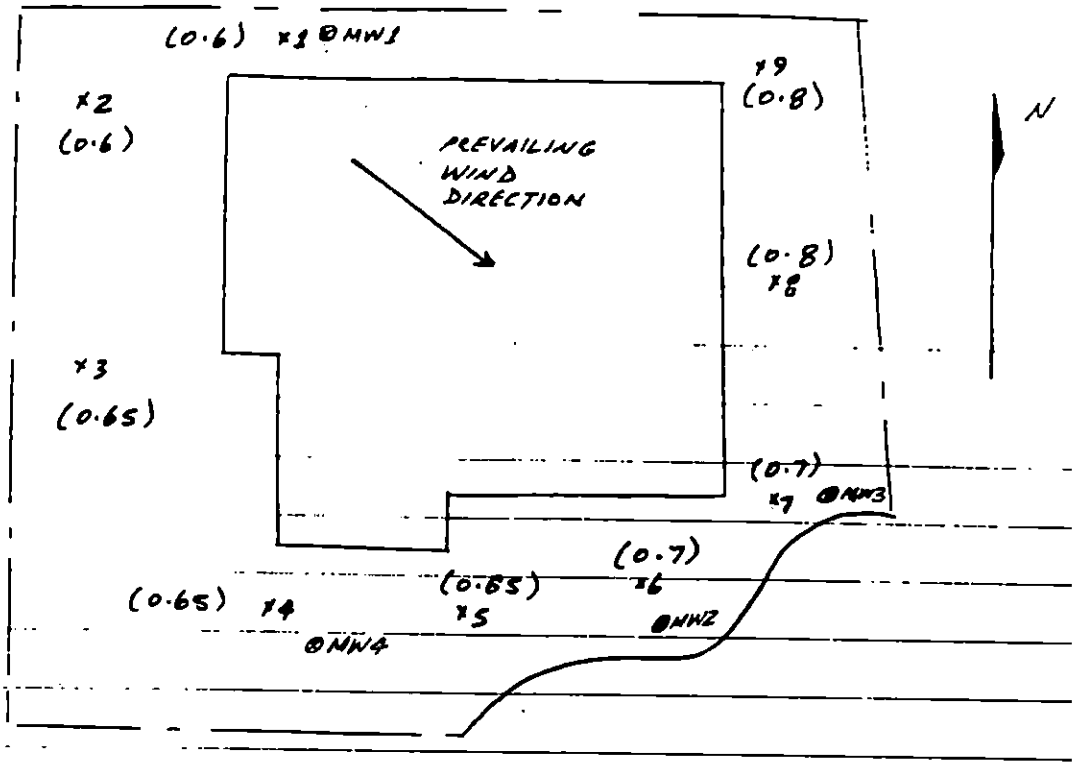
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ERIC JENNINGS

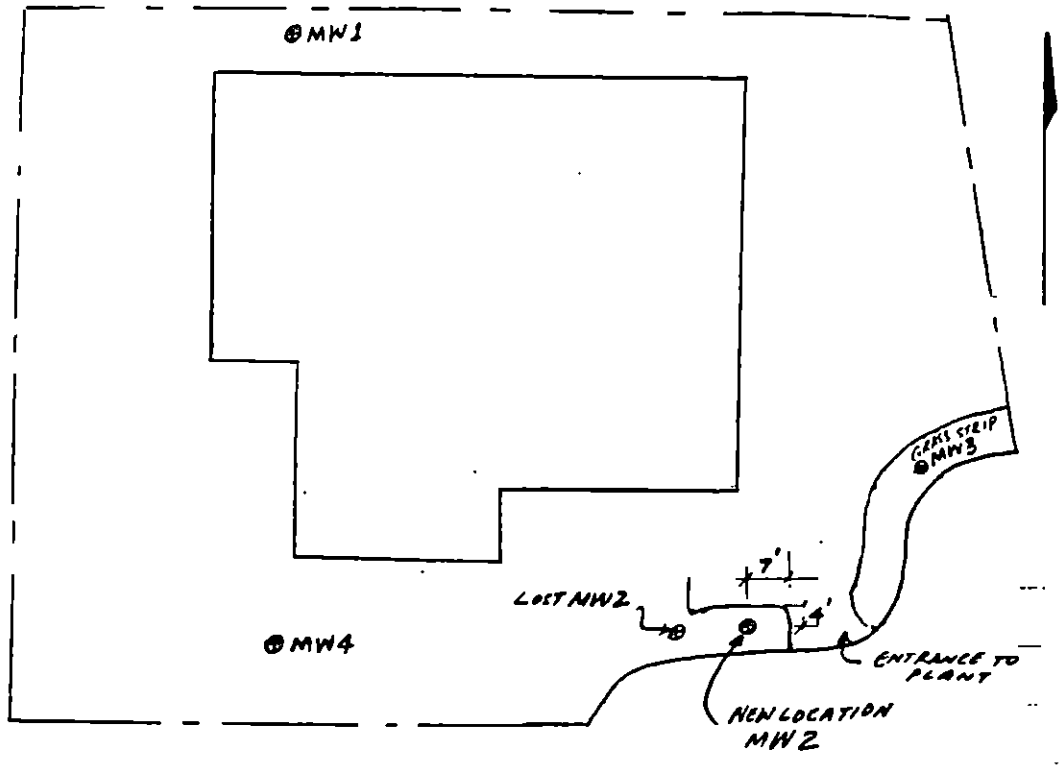
DEC. REP. T.S. MANICKAM

but did not have the right tools to take a sample half mud in drums as required by D.E.C. Rep.

Time left site : 4:30 P.M.




DRAWING 7... READINGS AND LOCATIONS OF HNU SURVEY CONDUCTED SEPTEMBER 22, 1988.




DRAWING 7A. LOCATION OF NEW M.W. #2

SIROUS H. NABAVI

Sirous H. Nabavi

L D NARASINGH

L D Narasingh

Friday Sept 23, 1988 Weather: Cloudy & cool
Time arrived on site 8:30 AM
No DEC rep. present.

Driller is not working today because they did not have the centrifugal pump needed to deliver the bentonite slurry into the borehole.

We purchased the tools necessary for taking samples of drill cuttings and waste water from drums.

3:00 P.M. Called driller's rep. (John Emington) to find out if they had received the centrifugal slurry pump. John Emington stated that they had ordered the pump on the 22nd Sept., 1988 but they had not received it by Friday, therefore he suggested we call him Monday Sept 26, 1988 in the afternoon to find out if driller had received the pump, in which case they would be able to start Tues Sept 27, 1988.

Time left the site: 4:00 PM

SIROUS H. NABAVI
Sirous H. Nabavi

L D NARAYSINGH
L D Narayansingh

[redacted]

Monday Sept 26, 1988 Weather: Sunny & Mild
Time arrived on site 9:00 AM
No DEC rep present.

Driller is not working today because they have not gotten the centrifugal pump for delivering slurry to the top of sand pack.

We started sampling of drill cuttings from drums for chemical analysis, making a composite sample from every 5 full 55 gal drums.

10:30 A.M. Composite sample No. 1 from 5 drums was collected. Drums were labelled with time and date of sampling.

10:30 A.M. Two men of the driller's crew arrived on site to load their cement mixing tank and the tool used for preventing the augers from sinking into the bore hole.

12:50 PM Composite sample No. 2, from 5 drums, was collected.

1:00 PM Break for lunch
1:30 PM Back from lunch
After lunch S. Nabavi made phone calls to MPC and G&H.
Telephone call to MPC was made in

order to find out if they had received the centrifugal pump for bentonite slurry so that they would be able to resume the drilling on Tuesday Sept. 27, 1988. MPC officer J. Emington told S. Nabavi that firstly they had not yet received the pump, and, secondly MPC had asked for a meeting with G&H in order to discuss and resolve the progress of Monitoring well drilling on Cantor Brothers site. Therefore MPC should not be able to resume the drilling operation on Tuesday Sept. 27, 1988.

S. Nabavi called G&H and talked to D. Hensey, Project manager for NYSDEC Phase II investigation project. He indicated that on Tuesday Sept 27, 1988, a meeting would be held at G&H with MPC and consultant rep. to go over the progress so far achieved at Cantor Brothers site and discuss several remaining matters which MPC had problems with.

Time left site 4:30 PM

SIROUS H. NABAVI

Sirous H. Nabavi

L. D. NARAYSINGH

L.D. Narayasingh

Thursday September 29, 1988 Weather: Sunny, Brisk; 49°F
Time arrived on site 7:50 AM
No field work done on Tues Sept 27 & Wed Sept 28, 1988
Did HNu survey of plant. Readings and locations are shown on page 95.

8:10 AM Contractor arrived on site.
8:15 - 8:30 Driller prepared for steam cleaning
8:35 AM. Driller started steam cleaning back of drill rig and augers to be used for Well No. 2.
8:55 A.M. Contractor completed steam cleaning.

9:00 AM. Contractor moved to new location of MW #2 and started drilling operations.
No split spoon samples will be taken from this borehole, because it is very close to lost MW #2. Only one split-spoon sample will be taken from the screened zone for grain size analysis.
At a depth of 5'6 to 10', there were more rocks and boulders than were found at original location of MW #2.

9:20 AM NYDEC Rep. arrived on site.

The soil coming out of the borehole is generally defined as fine - medium to coarse sand and gravel with rounded cobbles. Very similar to lost well #2.

9:30 AM John Errington of MPC is experimenting

See 10:47 AM p.87

Driller is not charging stand by time since drilling operation was in process.

with centrifugal slurry pump. The rate of flow for the pump is 4640 gal/hr (= 77 gal/min)

The mixture used for testing was 5 lbs of bentonite and 4 gal of water. The first mixture came out with too many lumps because all the bentonite power was poured at once.

10:00 Contractor prepared another mixture of the same quantities as before. The thickness of the mixture was approved by the DEC's Rep. Margaret O'Brien.

The slurry was poured into a pipe leading to the centrifugal pump, but nothing was pumped out. Contractor added water to pump as a primer but still the slurry was not pumped.

The slurry was too thick, so it had stopped the impellers of the pump from turning. This was the same mixture that was used for MW #3 and was able to be gravity fed through the trench.

10:45 DEC rep was uncertain of decision to make concerning slurry - if it should be mixed to be pumped or mixed to be thick enough then gravity fed. If mixed to be pumped, it would be of less thickness. Went to make call.

see bottom of p. 86

When Ms. O'Brien returned she stated that DEC's rep. T. Manickam had done research about a pump that can pump 2 lb of bentonite powder to 1 gal of water.

She said that for today the slurry will be gravity fed after being mixed to a thickness approved by her. After ~~tremie~~ being introduced the slurry will be tapped to avoid voids.

10:05 Meanwhile this was being done, Si Nabavi was covering happenings at MW#2.

One split spoon sample was taken.

| | BLOW COUNT PER 6" OF DEPTH 140 lb/in² HAMMER | SAMPLE No. | DEPTH | DESCRIPTION OF MATERIAL |
|---|---|---|---|---|
| G.S. Analysis | 3-9-10-20 | 1 | 40-42 | WET, FINE-MEDIUM, BROWN SAND to COARSE SAND with some rounded PEBBLES and boulder |

TABLE 2.A. HNU READINGS AND PHYSICAL DESCRIPTION OF SAMPLES

10:20 Driller took break

10:30 Driller resumed auger drilling. 2½ drums filled with drill cuttings until now

11:10 Driller completes drilling and uses potable water to flush out sand plug in lead auger.

11:20 Driller started delivering sand back through tremie pipe ~~only~~ using a funnel on top of the tremie pipe. The sand gets caught in annular space so driller used potable water to flush down sand. Driller has difficulty with the sand sticking to the tremie pipe because it is wet.

1:25PM Contractor started preparing batch of slurry mixture

Guidelines on delivering slurry mixture. (on relocated MW#2)

Thur. Sept. 29, 1988 91

1. Density: as judged by NYS DEC Rep. - 'Pudding'.
2. No pumping - Gravity Fed through tremie tube with side-delivery Elbow.
3. Tap the slurry delivered all around annular space.
4. Quantity: 4 gallons of water - 5 pounds of Bentonite Powder.

1:55 PM Contractor finished pouring slurry and introduced 3/4 of 5 gal bucket of pellets into borehole.

2:15 PM Contractor finished with pellets and time for setting starts.

NYS DEC Rep. waived the necessity to make measurement during the one-hour setting of the Bentonite Pellets.

2:30 P.M. S. Nabeni checked with Mr. Matthew Hiller about leaving a clear area in the western parking lot so Contractor would be able to start drilling operations at MW #4 tomorrow.

4:00 P.M. Contractor introduced first batch of bentonite/cement grout mixture. (78 gals)

5:00 Contractor placed second batch in annular space and pulled his auger by 5' lengths at a time. (32.5 gals)

5:20 P.M. Driller introduces third batch of grout in hole after taking measurement (13 gal)

CONTRACTOR'S CREW — DEC. REP. M. O'BRIEN.

JOHN EMINGTON

JOE KAUFMAN

SALIF BANSE

DAN ONSRUD

DON KLAUS

Quantity of materials used around well casing.

Sand pack 30 gallons
Bentonite powder slurry: 5 lb powder; 4 gals. water.
Bentonite pellets 3/4 (5 gal) bucket; 4 gal water.
Cement/Bentonite Grout:-

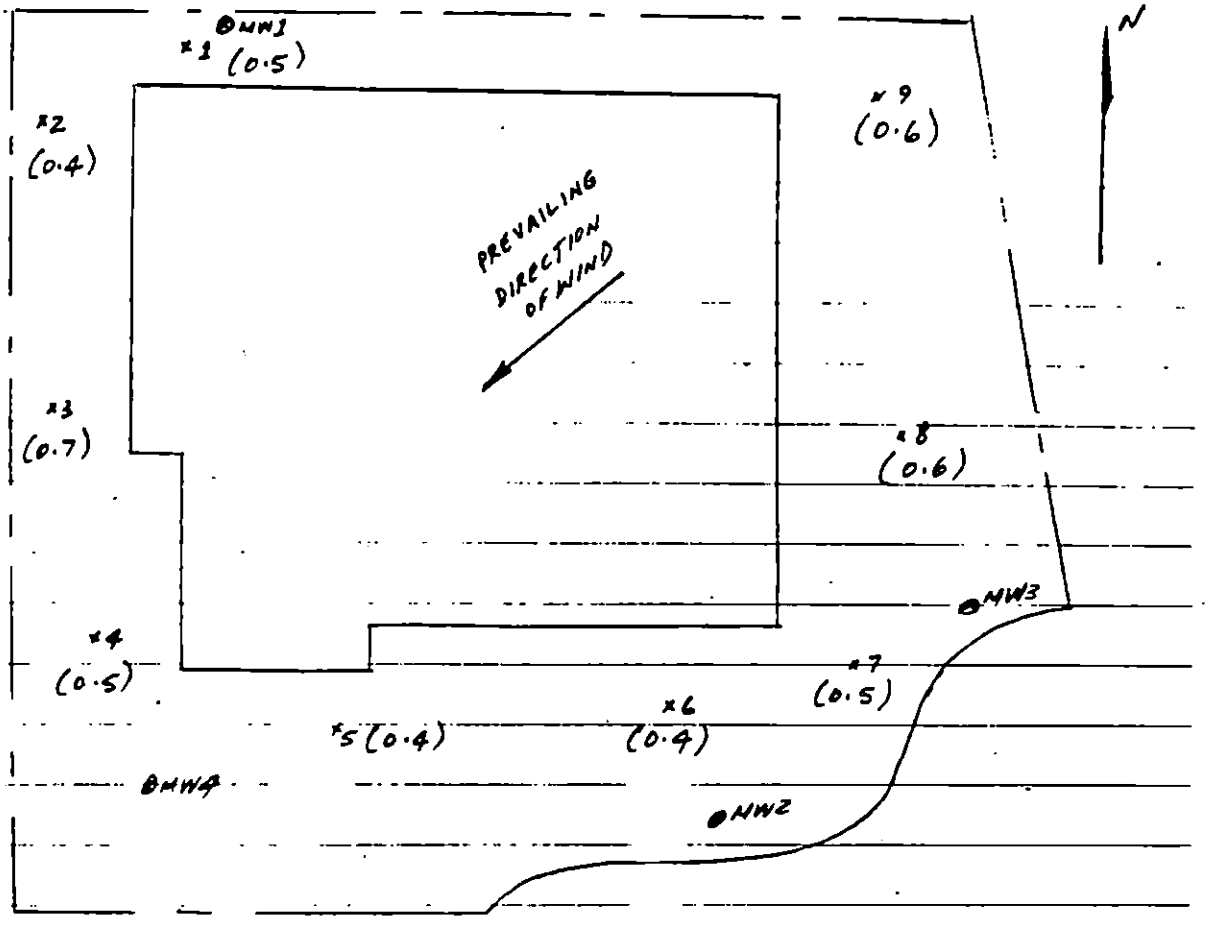
1st batch
12 (94 lb each) bags cement
60 lb bentonite powder
78 gal. of water.

2nd batch
5 bags cement
25 lbs bentonite powder
32.5 gal of water

3RD BATCH.
2 bags cement
10 lbs bentonite powder
13 gal of water

Cement/Sand seal (done on fri. Sept 30, 1988)
1 1/2 (100 lb) bags sand
3/4 (94 lb) bag cement

4 drums of drill cuttings removed




DRAWING 8. READINGS AND LOCATION OF HNU SURVEY CONDUCTED ON SEPTEMBER 29, 1988.

# Backup Elevations

ELEVATION OF TOP OF MATERIAL BELOW GROUND LEVEL

① 45'-5"
6" ← STICK UP
44'-11"

② 40'-11"
10"
40'-1"

③ 40'-8"
1'-10"
38'-10"

④ 40'-6"
2'-0"
38'-6"

⑤ 40'-4"
~~12'-4"~~
38'-6"

⑥ 40'-8"
2'-9"
37'-11"
← TOP OF SAND PACK

⑦ 40'-7"
3'-8"
36-11" ← TOP OF BENTONITE SLURRY

⑧ 39'-2" CONTRACTOR REMOVE 5' AUGER
4'-10"
34'-4"

⑨ 36'-7"
1'-6"
35'-1" ← TOP OF BENTONITE PELLETS

⑩ 23'-0"
3'-6"
19'-6"

⑬ 1'-0"
3'-9"
-2'-9" ← GROUT ABOVE GROUND IN AUGER

⑪ 3'-9"
3'-0"
9"

⑭ 10'-0"
3'-2"
6'-10"

⑫ 19'-0"
3'-6"
15'-6"

AFTER LAST AUGER WAS REMOVED THE DEPTH OF THE CEMENT BENTONITE GROUT WAS 2'-8" BELOW GROUND LEVEL.

ELEVATION OF BOTTOM AUGER BELOW GROUND LEVEL

① 45'-2"

④ 40'-2"
1'-6"
38'-8"

② 40'-2"
6"
39'-8"

⑤ 40'-2"
1'-10"
38'-4"

③ 40'-2"
1'-4"
38'-10"

⑥ 40'-2"
2'-4"
37'-10"

⑦ 40'-2"
3'-3"
36'-11"

⑧ 40'-2"
4'-5"
35'-9"

⑨ 35'-2"
1'-1"
34'-1"

⑩ 30'-2"
3'-6"
26'-8"

⑬ 15'-2"
3'-6"
11'-8"

⑪ 25'-2"
3'-6"
21'-8"

⑭ 10'-2"
2'-9"
7'-5"

⑫ 20'-2"
3'-6
16'-8"

Thur. Sept. 29, 1988



# MONITOR WELL CONSTRUCTION REPORT

Site CAYTOR BROTHERS — Well No. 2 (RELOCATED)

Total Depth _____ Surface Elev. _____ Top Riser Elev. _____

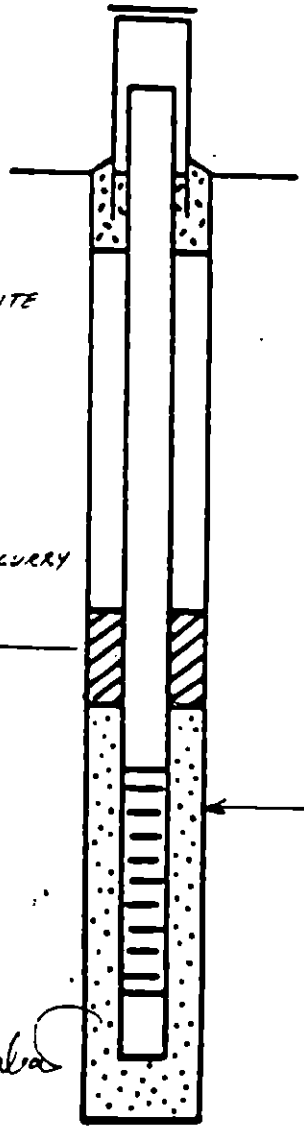
Water Levels (Depth, Date, Time) _____ Date Installed SEPT. 29, 1988

Riser: Dia. _____ Material _____ Length _____

Screen: Dia. _____ Material _____ Length _____ Slot Size 20

Prot. Csg: Dia. _____ Material _____ Length _____

SCHEMATIC



3'-1½" Prot. Csg stickup

2'-6" Riser stickup

Ground Surface

2'-8" Bottom Surface Seal

Surface Seal Type CONCRETE

CEMENT/BENTONITE POWDER GROUT

Grout Type CEMENT/BENTONITE

Seal Type BENTONITE PELLETS

BENTONITE POWDER SLURRY

TOP OF SLURRY 36'-11"

35'-8" Top Seal

37'-11" Top Sand Pack

40'-0" Top Screen

41'-0" WATER LEVEL

Sand Pack Type/Size 8-12

DRAWING BA

SH NABAVI Siamak H. Nabavi

50'-0" Bottom Screen

50'-2" Bottom Sump/Wellpoint

52'-0" Total Depth of Boring

L D NARAYSINGH

Friday Sept. 30, 1988 Weather: cloudy, warm, mild winds.

Time arrived on site: 7:45 A.M.
Si Nabavi conducted HNu survey of plant.

8:40 Driller's crew arrived on site.

8:45-9:15 AM Driller ~~steamed~~ cleaned all equipment needed for MW#4., and then moved to work area of MW#4.

9:40 AM Contractor installed auger to start drilling.

| BLOW COUNT PER 6" DEPTH 140 lb/in² | SAMPLE NUMBER | DEPTH | DESCRIPTION OF MATERIAL | HNU READING |
|---|---|---|---|---|
| 4-7-15-16 | 1 | 0-2 | light to dark brown fine sand, with pebbles | 0.6 |
| 20-20-29-32 | 2 | 2-4 | same as "1" with boulders and gravel | 0.6 |
| 1-6-8-14 | 3 | 4-6 | fine light brown sand with boulders, large cobbles. | 1.0 |
| 4-13-9-14 | 4 | 6-8 | same as "3"; also organic matter | 0.6 |
| 4-18-9-14 | 5 | 8-10 | light brown sand with pebbles with traces of white clay | 0.5 |
| 6-14-5-6 | 6 | 10-12 | white/light brown, fine/medium/coarse sand | 0.5 |
| 4-4-8-9 | 7 | 12-14 | white/light brown coarse sand | 0.6 |

[redacted]

| | BLOW COUNT PER 6" DEPTH 140 lb/in² | SAMPLE NUMBER | DEPTH | DESCRIPTION OF MATERIAL | HNU READING |
|---|---|---|---|---|---|
| | 8-9-15-15 | 8 | 14-16 | same as '9' (not much soil in sample, due to blockage by large cobble) | 0.4 |
| | 7-8-8-10 | 9 | 20-22 | fine/medium; white/ brown sand | 0.5 |
| | 5-7-13-15 | 10 | 25-27 | same as '9' w/some quartz pebbles | 0.5 |
| | 2-3-5-8 | 11 | 30-32 | fine to coarse; brown/ light brown sand | 0.4 |
| 11:55 AM GRAIN SIZE ANALYSIS | 5-9-14-16 | 12 | 35-37 | same as '11' bed with some pebbles | 0.5 |

CONTRACTOR TOOK 10 MIN BREAK AT 11:55 AM

| | | | | | |
|---|---|---|---|---|---|
| HIT WATER TABLE AT 40'-0" | 5-5-6-6 | 13 | 40-42 | fine to medium, dark brown/brown sand, with quartz pebbles (wet) | 0.4 |

12:30 PM Contractor break for lunch

1:00 PM Contractor back from lunch.

| | | | | | |
|---|---|---|---|---|---|
| 1:20 PM GRAIN SIZE ANALYSIS; NO HYDROMETER ANALYSIS NECESSARY | 8-7-6-5 | 14 | 45-47 | same as '13'. | 0.4 |
| | 6-3-2-1 | 15 | 50-52 | water, few pebbles and boulders | 0.3 |

TABLE 4. HNU READINGS AND DESCRIPTION OF SPLIT SPOON SAMPLES FOR MW#4

2:10 PM Contractor complete drilling and took break.

2:15 PM Contractor started placing sand pack in bore hole.

3:20 Bottom of auger is at 37'-8" and bottom of sand is at 37'-8". If contractor adds more sand,

DRILLER'S CREW — DEC REP. M. O'BRIEN

JOE KAUFMAN

SALIF BANSE

EDWARD TOOMY

DON KAUS

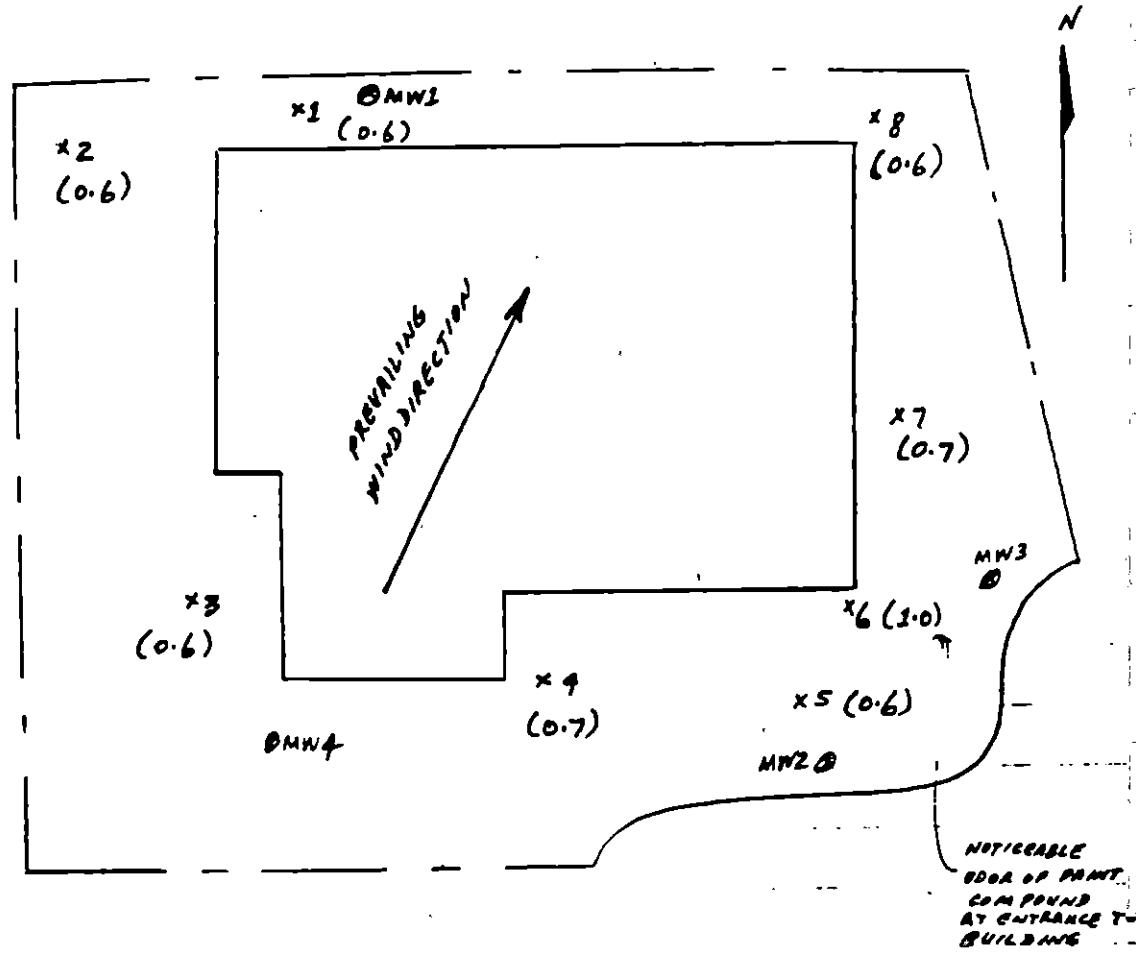
he will have to raise his augers and he would not be able to secure well with 55 gal. drum over auger. He was permitted by NYS DEC rep. M. O'Brien to finish sand-packing on Monday, and secure the top of the well at the present position, with an auger stick-up of 2'-10".

Contractor secure hole by:-

1. placing empty 55 gal drum over hole with auger stick up.
2. place 4 drums filled with sand around center drum
4. Place drum fill with sand on top of center drum.

4:00 P.M. Contractor starts steam cleaning.
4:10 PM Contractor finishes steam cleaning.

4:30 P.M. Contractor left site.




DRAWING 9. READINGS AND LOCATIONS OF HNU SURVEY CONDUCTED ON SEPTEMBER 30, 1988.

(A HNU calibration gas was obtained and calibration was done both with the gas and zero adjustment before use.)

SIROUS H. NABAVI

Sirous H. Nabavi

LARRY D. NARAYSINGH

Monday October 3, 1988 Weather: partly cloudy 57°

Time arrived on site: 7:50 AM

8:10 AM. Driller arrived on site.

Si Nabavi did HNu perimeter survey of plant. Reading and locations are shown on page 115.

8:20 Driller started pumping out wash-water from his decon pan into drums. Three drums were filled.

8:40 AM. Contractor started steam cleaning back of drill rig, and tremie pipe.

8:45 AM. Contractor finished steam cleaning and moved truck to location of MW#4.

9:20 Contractor had removed drums that were placed around MW#4, unload bags of cement to be used; remove excess drill cuttings from around bore hole, and, set his drill rig into position to resume work.

9:25 MPCs well development pump was brought to the site, John Errington started running it experimentally.

Driller cannot find chain to raise auger.

10:00 Driller finds chain and resume work.

10:12 AM Contractor completed gravel pack.

10:20 AM Driller made mixture of bentonite slurry

10:55 Contractor completed bentonite seal including pellets.

11:30 A.M. Contractor take measurement of pellets after ½ hr and proceed to prepare cement/bentonite grout mixture.

12:05 Contractor started pouring grout mixture down tremie. (78 gal)

1:40 PM After a second batch of grout (39 gal) was added the final elevation of the top of the grout below ground level was 2'-2"

2:30 PM Contractor started mixing concrete for upper seal and mound.

3:20 Contractor completed seal and cleaned work area of MW#4. Contractor went back to decon area and started steam cleaning.

4:15 End of steam cleaning.

During the time MW#4 was being completed Si Mabani was covering well development operations at MW#10 The report is as follows.

[redacted]

10:00AM A measurement of the static water level was made with the electric level indicator before starting development. A depth of 40'-1" was recorded.

The development pump was made by GEO-GUARD, and have a capacity of 36 GPM at 50' head. The suction tube that was inserted was 7 ft. of stainless steel tubing and the rest polyethylene tube on a reel. When the compressor started the pump did not pump any water. The stainless steel tube was pulled out and it was dry. It was decided to use half the length of stainless steel (3½') and lower back into the well.

11:50AM

12:00 The pump was working but the regulator pressure went up to 56 psi, and the air flow broke, the pump stopped pumping water. Adjustments were made to the pump's pressure and exhaust time. The pressure time is when pressure is applied to the water, pumping it out, and the exhaust time is when the well is recharging.

12:30PM The pressure time is set to the maximum and the exhaust time decreased. The output pressure is regulated at 20 psi (the pump catalog recommends 0.5 psi for every ft. of depth - water table is at 40' of depth

DRILLER'S CREW — DEC REP. LARRY ALDEN

JOE KAUFMAN

JOAN FLINT

SALIF BANSE

ERIC JENNINGS } WELL DEVELOPMENT

JOHN EMINGTON } WELL DEVELOPMENT

1:00 P.M. The pump is pumping at 1.5 GPM for 8 seconds and then it has to wait until the suction pipe is full before pumping again. Exhaust time = 13.0 seconds.

2:45 P.M. Well development of MW #1 was completed. The turbidity of the water at this time was 2.5 NTU. Total time for well development was 2½ hours. Capacity calculated at 1.5 GPM. The pump was taken ~~back~~ back to the decon area. The stainless steel tube was washed with alconox solution and distilled water. It was then steam cleaned along with the polyethylene tube. A final measurement of the water level showed 40'-0" below ~~above~~ ground level. One drum of dev. water was obtained.

4:30 left site.

Mon. Oct 3, 1988

QUANTITIES OF MATERIALS USED AROUND WELL CASING.

Sand pack : 31 gals.
Bentonite slurry : 5 lb bentonite powder, 4 gals. water.
Bentonite pellets : 4 gals pellets ; 5 gal water.
Cement / bentonite grout :-

1ST BATCH :

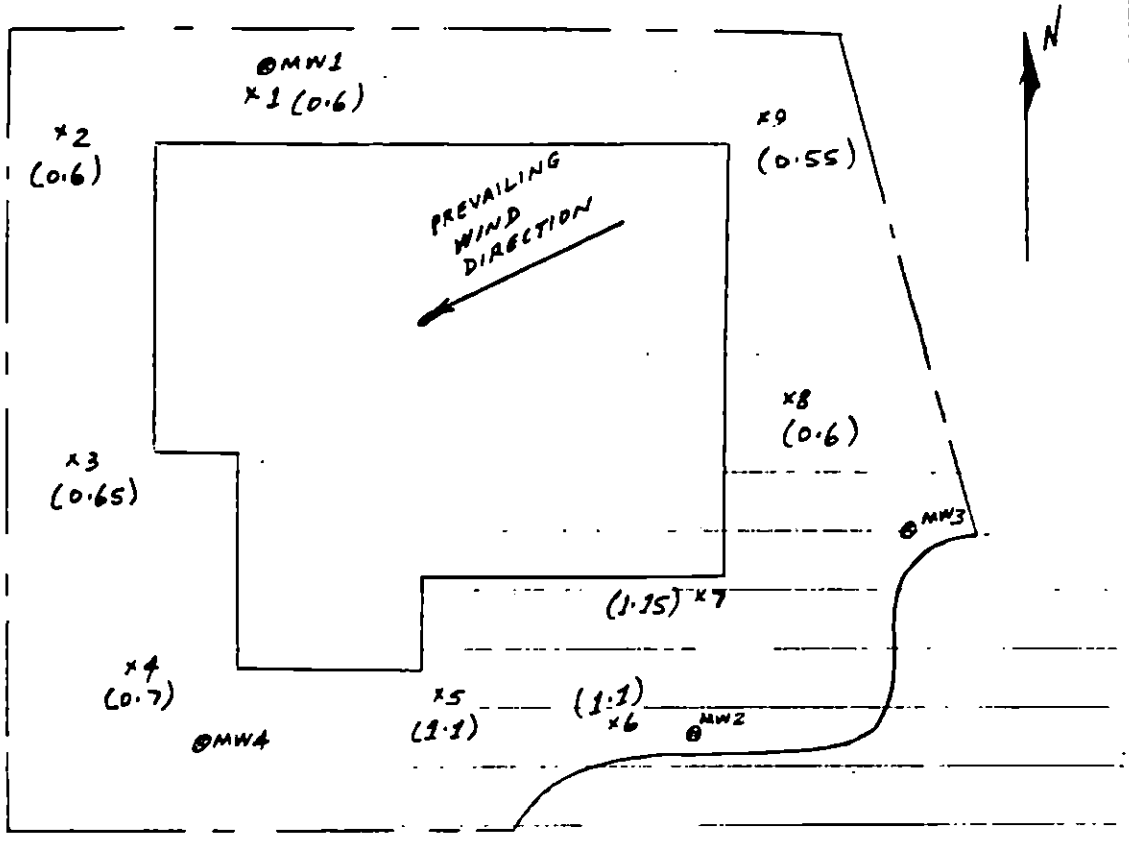
12 (94 lb each) bags cement
60 lbs. bentonite
78 gals. of water

2ND BATCH

6 bags cement
30 lb bentonite
39 gal. of water

Concrete seal

1½ bag of sand (100 lb each)
¾ bag of cement (94 lb each)




DRAWING 10. READINGS AND LOCATIONS OF HNU SURVEY CONDUCTED ON OCTOBER 3, 1988.

(Calibration was done before survey, both with calibration gas and the zero adjustment.)

# Elevation Backup

TOP OF MATERIAL BELOW GROUND LEVEL

(Base on depths)

① 40'-3 - tape
2'-8 ← stick up
37'-7"

② 40'-10"
3-2
37'-8" ← DEPTH OF SAND PACK AT END OF WORK DAY SEPT 30, 1988.

③ DRILLER REAMED HOLE AND BAKER HS AUGERS
41'-2
3'-5"
37'-9"

④ 40'-9"
4'-0"
36'-9"

⑤ 48'-0"
4'-2"
36'-10" ← TOP OF SAND PACK

⑥ 36-10
1-0
35'-10" ← TOP OF BENTONITE SLURRY

⑦ 40'-0
5'-3"
34'-9" ← TOP OF BENTONITE PELLETS

STICK UP OF TREMIE TUBE →

⑧ 20'-0"
3'-7"
16'-5"

BOTTOM OF AUGERS BELOW GROUND LEVEL.

⑧ 40'-4" – Auger + 2' mobil + 2" teeth (Lead auger)

② 40'-4
2'-8
37'-8"

③ 40'-4"
3'-1"
37'-3"

④ 40'-4"
3'-6"
36'-10"

⑤ 40'-4"
3'-9"
36'-7"

⑥ 35'-4"
6"
34'-10"

⑦ 35'-4
1'-2
34'-2"

⑧ 20'-4"
3'-7"
16'-9"

WHEN ALL THE AUGERS WERE PULLED, THE CEMENT/BENTONITE GROUT WAS AT 2'-1" BELOW GROUND LEVEL.

Mon. Oct. 3, 1988



# MONITOR WELL CONSTRUCTION REPORT

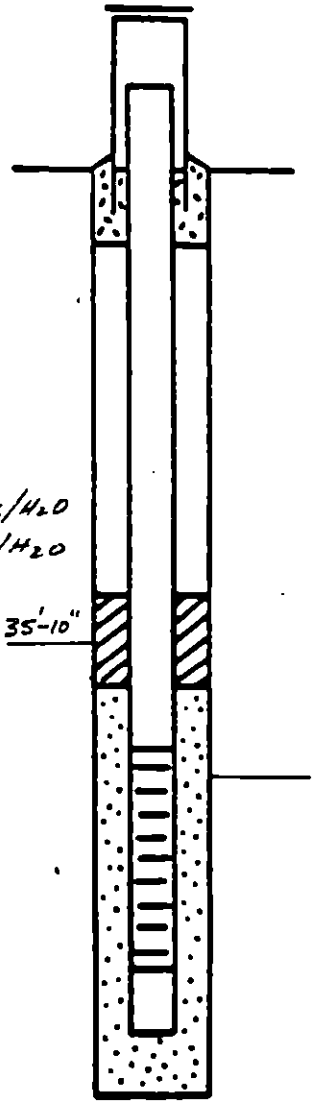
Site CALDOR ANTHERS  Well No. 4

Total Depth _____  Surface Elev. _____  Top Riser Elev. _____

Water Levels (Depth, Date, Time) _____  Date Installed _____

Riser: Dia. _____ Material _____ Length _____
Screen: Dia. _____ Material _____ Length _____ Slot Size 20
Prot. Csg: Dia. _____ Material _____ Length _____

SCHEMATIC



2'-10" Prot. Csg stickup

2'-4" Riser stickup

Ground Surface

2'-1" Bottom Surface Seal

Surface Seal Type CONCRETE

Grout Type CEMENT/BENTONITE POWDER

Seal Type BENTONITE PELLETS/$H_2O$
BENTONITE POWDER/$H_2O$

34'-9" Top Seal

TOP OF BENTONITE SLURRY 35'-10"

36'-10" Top Sand Pack

39'-0" Top Screen

GROUND WATER 40'-0"

Sand Pack Type/Size 8-12

DRAWING 10A.

49'-0" Bottom Screen

49'-4" Bottom Sump/Wellpoint

50'-0" Total Depth of Boring

S.H. NABAVI  L.D. NARAYSINGH

Tues. October 4, 1988 Weather: cloudy, lingering showers; 57°F

Time arrived on site 8:00 A.M.

9:00 AM Driller's crew arrived on site.

9:20 Start steam cleaning

9:45 End of steam cleaning operation. Contractor's men began cleaning decon and reduction area of excess material to be carried off site.

9:55 Well development of MW#3 started. The full 7' of stainless steel pipe was used. Static water level before development was 41'-10" below ground level.

11:00 Development pump stopped for refueling. During the previous hour the pump was pumping 18-23 seconds, recharge time: 10-13-18 seconds

11:15 Development pumping started again. To determine pump rate, a five gallon bucket was filled and timed. Time to fill 5 gal was 25 secs; pumping rate 0.16 gal/min (5/25)
The pumping cycle was 20 seconds
The recharge cycle was 13 seconds
Adjustments have been made with both ~~both~~ cycles, becoming equal.

12:25 Turbidity meter was not working. A lamp inside the meter was not lighting so it was assumed to be burned out. It was agreed with NYSDEC rep., Larry Alden, that a visual observation would have to be made to judge the turbidity of the well water. A visual observation was made with NYSDEC rep. and it was concluded that the water was less than 50 NTU. Ground water measurement was now 41'-8" below ground level.

12:35 The development pump was removed from the well. Total development time 2:40 min.

1:30 Development of MW#2 started after decontamination of development pump. Measurement of static water level before pumping was 40'-10" below ground level. The water level indicator was rinsed in alconox solution and then washed with distilled water before using.

2:00 PM Pumping stopped; pulled pump out to check foot valve. The foot valve was cleaned, Contractor wanted to use 3½' of stainless steel at end, DEC rep. argued against this, so all 7' was installed in well.

2:09 PM Pumping resumed. Water gets murkier; cycles are 18 sec recharge; 8 sec. pumping

2:40 Water is getting clear. Well is being surged with

suction tube; water gets more turbid.

3:45 Pumping had stop, so contractor pulled out discharge tube and suction pipe. He checked the foot valve; some sand was in the foot valve. Contractor cleaned foot valve and suction air pipe with distilled water.

4:20 PM Contractor resumed pumping.

4:18 Stopped to clean suction pipe and foot valve again.

4:26 Resumed pumping. The regulated pressure had been increased to 60 PSI

5:05 PM A visual observation was made of ~~the~~ a sample of the well water by me and Larry Alden and it was agreed that the turbidity was less than 50 NTU. Contractor stopped pumping and withdrew his equipment from well. A measurement of the water level after development showed the level to be 40'-11" below ground level.

Total development time was 2 hours and 55 minutes.

Meanwhile the well development was in progress I Nagengast was supervising the demobilization of the drilling crew over by the decon area.

Contractor took up his excess bags of sand,

CONTRACTOR'S CREW — DEC. REP. L.J. ALDEN

JOE KAUFMAN } DEMOB.
SALIF BANSE
ERIC JENNINGS

JOHN EMINGTON } WELL DEV.
PAUL SMYTH

cement and bentonite powder. He also took up excess plastic that was in area. While contractor was pumping out decon water from his pan into 55 gal drums, his pump stopped working, so he was not able to pump all out. We labelled the drums as to the material they contained and, date collected. The contractor had not taken all his drums away because his truck was filled, so he left them with the other drums for the D.E.C. A count of the labelled drums to date showed :-

| | |
|---|---|
| 23 | drill cuttings |
| 3 | development water (MW#s 1, 2, 3) |
| 7 | gunpoint decon water |
| 7 | drums of Maxene Pollution Control waste* |
| 40 | |

MPC waste contains, wash water slurry containing cement that he used to clean his pump; plastic used in working area of wells; disposed protective clothing; contaminated sandpacks; and hardened cement from his mixing tank.

Time left site : 5:30 PM

S.H. NABAVI
Siroos H. Nabavi

L. D. NARAYSINGH
Narayansingh

Wednesday October 5, 1988. Weather: Cloudy, Brisk.
Time arrived on site: 7.45 AM

8:00 AM Contractor arrived on site.

8:30 Started steam cleaning.

8:40 Driller steam cleaned hose and bailers to be used in wells, but could not dismantle stainless steel tube so it could be steame cleaned. After an unsuccessful attempt with wrenches contractor soaked joints of tube in alconox solution. He later was able to take it apart and have each section steam-cleaned.

10:25 Static water level measurement was made of MW#4. The reading was 40'-2" below ground level.

11:00 Started bailing out water at MW#2 before sample is taken.
Development of MW#4 started.

1:15 Well development stopped since a visual observation proved that the sample was less than 50 NTU. This observation was made by WD and NYDEC rep. DEV. TIME: 2 HR 15 MIN.

1:15-1:45 Break for lunch. Final measurement of the ch of water showed 40'-0" below ground level.

2:07 PM Ground water was collected from MW#4 for

Wed. Oct. 5, 1988

(See p. 129)

For chemical analysis 7 containers were provided by the lab. ($H_2M$) for each sample.

2 small glass vials (HCL) pres.
3 1000ml. glass jars (unpreserved)
1 plastic bottle ($NaOH$) pres.
1 qt cubic ($HNO_3$) pres.
7

Samples were collected into containers by pouring direct from beakers used in wells. (stainless steel cleaned before and after each use). ~~Filled~~ The samples for volatiles were always taken first. These were filled to the top then tightly sealed; after we observed to see that there were no bubbles present.

For sampling of catch basins, 4 containers were provided by the lab for each sample.

2 1000ml glass jar
2 small glass vials.
4

The samples were taken using disposable gloves to put them into the containers. Gloves were changed before and after each use.

(see p. 128) Chemical analysis and conductivity, temperature and PH readings taken. We were permitted by the state to take samples using bailer, after well development of MW#4.

TEMP OF WATER SAMPLE : 15°C
pH : 5.33
CONDUCTIVITY : 106 μ MHOS
} MW#4

(see p. 128) Sampling of catch Basin No. 2 was attempted by using a split spoon attached to PVC piping. The catch basin was filled with water, so it was mostly water that came up in the sample. Only the 2 glass vials and ½ of the other 2 bottles provided for the sample was able to be filled. The state rep said that if the sample was not enough, then the lab should only sample for volatiles and BNA and should not do for pesticides and PCB's

5:30 PM After bailing 13 gals of water from well No. 1 a sample was obtained for chemical analysis. The following readings were taken:

TEMP. OF WATER : 15°C
pH : 6.80
CONDUCTIVITY : 828 μ MHOS ?
} MW#1

6:00 PM Contractor had used pump to pump water out of well before sample was taken for MW#2. After about 20 gals was pumped,

CONTRACTOR'S CREW

JOHN EMINGTON

SALIF BANSE

PAUL SMITH

DEC REP. L.J. ALDEN

DEC rep said pumping should continue until the water becomes clear. After this samples were obtained by using a bailer. One set of sample was taken for chemical analysis, one for matrix spike sample, one for matrix spike duplicate, and one duplicate sample. The DEC rep said that the matrix spike duplicate and the duplicate were seperate samples, so a total of 4 sets of samples were taken from MW#2. The duplicate was labelled MW#0 and the matrix S/MSD labelled MW#2.

The measurements were as follows:

MW#2
- TEMP. OF WATER: 14°C
- pH : 4.91
- CONDUCTIVITY: 278 uMHOS

We were not able to take a sample from MW#3 because there were no more set of sampling containers left. It was too late to get in touch with the lab so we decided to do so the next day. A bailer and rope fill down MW#2, but was retrieved before the end of the day, after taking samples.

6:50PM left site

SIROUS H NABAVI
Sirous H. Nabavi

LARRY D NARAYSINGH
Larry D. Narayansingh

Thursday October 6, 1988 Weather: Sunny, cool 50°F.

Time arrived on site: 7:45 A.M.

No DEC rep. present.

10:45 Contractor arrived on site.

Before the contractor arrived, we started bailing out water from MW#3 in order to take sample.

No one was available when we made a call to H2M lab at 8:00 AM but we succeeded at 11:00 and told them that we were short of a set of containers for sampling. Li Nakani went to pick up this set of containers so MW#3 could be sampled.

11:00 Contractor started steam cleaning spoon sampler, split spoons and bailers.

11:10 End of steam cleaning

11:15 Contractor move to location of catch basin No. 3 and proceed to take sample with spoon sampler after removing grating. Only water and a small amount of soil was collected. The soil was placed into one of the glass vials for volatiles, but it was not able to fill it.

Contractor then used his split spoon. He had metal rods to lower the spoon into the well so he was able to

hammer the spoon into the sediment at the bottom of the basin. We were able to collect enough sample material for the jars provided after 3 other split spoons. The material was very black, and oily, and smells of gasoline.

12:10 Complete sampling C.B #3
Contractor put back cover on catch basin and proceeded to decon area to steam clean sampling equipment.

12:15 PM Contractor completed steam cleaning of equipment and moved to location of SD-1 to set up.

12:20 Sampling of SD-1 started. It was done in the same manner as SD-3, using the split spoon. Contractor had to stand on pallets and go very deep into sediment since the entire area was covered with water, from previous rain.

1:30 PM Completed sampling of SD-1. Material was black and oily and had a stink smell.
Contractor took short break

1:45 PM After contractor steam cleaned his split spoon sampler, we made our field blank samples by pouring water obtained from the lab over split spoon and bailers.

2:15 PM Contractor's crew left site.

3:00 PM When we had bailed 15 gals. of water out of MW#3 we took samples to be sent to the lab for chemical analysis. The following readings were also noted.

TEMP. OF WATER : 15°C

pH : 9.10

CONDUCTIVITY : 255 μMHOS

3:15 We completed our measurements and Li Nabeni took samples back to $H_2O$ Lab, while L. Nanayonga made final check to see that all drums had been labelled, now that the contractor had removed all his equipment off site.

Final count and labelling of the 55gal drums are as follow:

| ITEM | NO. OF DRUMS |
|---|---|
| DRILL CUTTINGS | 23 |
| DECON WATER | 8 |
| DECON SEMI-SOLIDS (½ filled) | 1 |
| WELL DEVELOPMENT WATER | 7 |
| + MARINE POLLUTION CONTROL PROPERTY | 14 |
| | 53 TOTAL |

+ This includes used plastic, cement slurry mush water, cement solids, sand bags, disposed clothing and 5 empty drums.

MPC was again reminded today to remove the drums that belong to them off site.

CONTRACTOR'S CREW

PAUL SMYTH

JOHN PANNBURST

When Si Tabani returned from H₂M lab he stated that the lab supervisors could not see the necessity of taking 2 seperate sets of samples for matrix spike and matrix spike duplicate. The lab discarded one set letting the total sets of water samples to be 6.

4:20 P.M. Left site.

SIROUS H NABAVI
Sirous H. Nabavi

LARRINGTON D NARAYSINGH
Larrington Narayasingh