

SUPPLEMENTAL AGREEMENT

THIS AGREEMENT, made as of August 2, 1994 (hereinafter called the "Effective Date") by and between THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY (hereinafter called the "Port Authority") and NAPORANO IRON & METAL ~~COMPANY, INC.~~ *Co. [Signature]* (hereinafter called the "Lessee"),

WITNESSETH, that:

WHEREAS, heretofore and as of August 2, 1994, the Port Authority and the Lessee entered into an agreement of lease (hereinafter, as the said agreement of lease has been heretofore amended, modified and supplemented, called the "Lease") covering premises at Port Newark, in the City of Newark, County of Essex and State of New Jersey; and

WHEREAS, the Port Authority and the Lessee desire to amend the Lease;

NOW, THEREFORE, for and in consideration of the mutual agreements hereinafter contained the Port Authority and the Lessee hereby agree effective as of the Effective Date, unless otherwise stated, as follows:

1. (a) That portion of the permanent premises shown in stipple on Exhibit A-3 attached hereto and hereby made a part hereof (which portion of the permanent premises is hereinafter called the "Continuous Permanent Premises") is a part of the temporary premises and is also a part of the permanent premises and, further, was previously occupied by the Lessee under that certain agreement of lease between the Port Authority and the Lessee dated as of February 1, 1990 and identified by Port Authority Lease No. L-PN-144. It is hereby recognized that the Continuous Permanent Premises constitutes a part of both the temporary premises and the permanent premises and that the term of the letting under the Lease for the Continuous Permanent Premises commenced on August 2, 1994. Further, it is hereby agreed that notwithstanding the terms and conditions of Section 2 of the Lease, the term of the letting of the Continuous Permanent Premises shall not expire upon the expiration of the letting of the temporary

premises but shall continue in full force and effect as part of the permanent premises unless the term of the letting of the Continuous Permanent Premises shall have sooner terminated.

(b) It is hereby understood and agreed that at all times the recaptured premises shall constitute a part of the premises under the Lease, that the recaptured premises shall be a portion of the permanent premises.

2. Section 2 of the Lease shall be deemed amended as follows:

(a) The letter "u" in the word "Unless" appearing in the third line thereof shall no longer be capitalized and the phrase, "Except as set forth with respect to the Continuous Permanent Premises in paragraph 1 of Supplement No. 1 to the Lease and the Extended Temporary Premises as set forth in Section 51 of the Lease appearing in Supplement No. 1 of the Lease and" shall be inserted immediately before the word "unless" and after the period appearing in the third line thereof.

(b) The number "twentieth (20th)" appearing in the third to the last line thereof shall be deemed deleted therefrom and the number "twenty-first (21st)" shall be deemed to have been inserted in lieu thereof.

(c) The date "June 30, 2015" appearing in the final line of Section 2 of the Lease shall be deemed deleted therefrom and the date "February 29, 2020" shall be deemed inserted in lieu thereof.

3. The date "July 1, 1995" appearing in subdivision (i) of subparagraph (3) of paragraph (a) of Section 3 of the Lease shall be deemed deleted therefrom and the date "March 1, 1999" shall be deemed inserted in lieu thereof.

4. Notwithstanding the provisions of paragraph (b) of Section 3 of the Lease, the Lessee shall pay a basic rental for the temporary premises exclusive of the Extended Temporary Premises (as defined in Section 51 of the Lease as herein amended) during the period from May 16, 1997 through the last day of the Construction Period at the annual rate of Seven Hundred Eleven Thousand Five Hundred Nine Dollars and Fifty-three Cents (\$711,509.53) payable in advance in equal monthly installments of Fifty-nine Thousand Two Hundred Ninety-two Dollars and Forty-six Cents (\$59,292.46) on May 16, 1997 and on the first day of each calendar month thereafter during such period. If any installment of basic rental payable hereunder shall be for less than a full calendar month then the basic rental payment for the portion of the

month for which such payment is due shall be the monthly installment prorated on a daily basis using the actual number of days in such month.

5. Paragraph (f) of Section 3 of the Lease shall be deemed deleted therefrom and the following paragraph (f) shall be inserted in lieu thereof.

"(f) Effective Date of Permanent Premises  
Rental Payment Start Date for Purposes of  
Escalations

Notwithstanding any provision of this Section to the contrary, the Port Authority and the Lessee agree that for purposes of the computation of the rate at which the basic rentals for the Open Area and the Berthing Area as set forth in paragraph (c) of this Section shall be payable (as opposed to the determination of the time that such rentals shall initially commence) and for purposes of the determination of the time at which such rentals shall escalate pursuant to the provisions of subparagraphs (1) and (3) of said paragraph (c) and shall be adjusted pursuant to the provisions of subparagraphs (2) and (4) of said paragraph (c), the Permanent Premises Rental Payment Start Date shall be and be deemed to have occurred on July 1, 1995 and such rentals shall commence at the rate, and shall be subject to such escalation and adjustment at the time, as would have been the case had the Permanent Premises Rental Payment Start Date occurred on July 1, 1995. For example, if the Permanent Premises Rental Payment Start Date as defined in subparagraph (3) of paragraph (a) of this Section shall occur on September 1, 1998, the basic rentals for the Open Area and the Berthing Area shall commence to be payable on September 1, 1998 at the escalated rate per annum respectively of Five Hundred Thirty-seven Thousand Nine Hundred Sixty-six Dollars and No Cents (\$537,966.00) and Four Hundred Ninety-five Thousand Dollars and No Cents (\$495,000.00), as such escalated rates per annum shall be adjusted respectively as set forth in subparagraphs (2) and (4) of paragraph (c) of this Section (for purposes of

which adjustment the "Base Period" shall be June, 1996; the "Adjustment Period" shall be June, 1998 [the Adjustment Period of June, 1997 having passed] and each June as shall occur thereafter; and the "Anniversary Date" shall be July 1, 1998 [the Anniversary Date of July 1, 1997 having passed] and each anniversary of such date as shall occur thereafter). Thus if the increase in the Consumer Price Index for the Adjustment Period of June, 1998 (calculated for the period from June, 1996 through June, 1998) shall be seventeen per cent (17%), then the basic rentals for the Open Area and the Berthing Area shall be payable for the period from September 1, 1998 through June 30, 1999 at the rate per annum respectively of Five Hundred Eighty-three Thousand Six Hundred Ninety-three Dollars and Eleven Cents (\$583,693.11) and Five Hundred Thirty-seven Thousand Seventy-five Dollars and No Cents (\$537,075.00); but if (1) said increase is shown to be eight per cent (8%) then the basic rentals for that period shall be payable at the rate per annum respectively of Five Hundred Seventy Thousand Seven Hundred Twenty-eight Dollars and No Cents (\$570,728.00) and Five Hundred Twenty-five Thousand One Hundred Forty-six Dollars and No Cents (\$525,146.00), and if (2) said increase is shown to be twenty-five per cent (25%) then the basic rentals for that period shall be payable at the rate per annum respectively of Five Hundred Ninety-three Thousand One Hundred Eight Dollars and No Cents (\$593,108.00) and Five Hundred Forty-five Thousand Seven Hundred Thirty-eight Dollars and No Cents (\$545,738.00)."

6. The following provision shall be inserted in Section 9 of the Lease as paragraph (n) thereof:

"(n) Without limiting the generality of any provision of the Lease and without reducing or affecting in any way any other obligations of the Lessee under the Lease, effective March 1, 1998 the Lessee shall promptly raise and remove or cause to be raised and removed any material discharged or



deposited from the premises or from vessels berthing in the Berthing Area or the Temporary Berthing Area into or upon the waters of or about the Facility. In the event that the Port Authority shall incur any additional cost in the performance of any dredging, including without limitation the performance of sampling or soundings, at the Facility as a result of the presence of any said material so discharged or deposited into or upon the waters of or about the Facility, the Lessee shall pay to the Port Authority an amount equal to such additional cost upon demand."

7. Section 12 of the Lease shall be deemed amended as follows:

(a) The following sentence shall be added at the end of paragraph (c) thereof to read as follows:

"It is hereby agreed and understood that the provisions of this paragraph (c) and Section 5(h) with respect to reasonable wear shall not apply to the environmental condition of the premises."

(b) The following new paragraph (h) shall be inserted after paragraph (g) thereof to read as follows:

"Without limiting the generality of any other term or provision of this Section or Section 5(h) and in addition thereto, at all times throughout the letting hereunder the Lessee shall ensure at its sole cost and expense, except as provided in Section 5(p), that the entire permanent premises shall be capped by pavement so as to provide a barrier to contamination of soil and ground water."

8. Paragraph (b)(3) of Section 24 of the Lease shall be deemed amended by inserting the phrase, "(as amended by paragraph 4 of Supplement No. 1 of the Lease)" immediately after the reference to paragraph "(b)" and before the word "and" appearing in the second (2nd) line thereof and by further inserting the phrase, "and under Section 51 of the Lease appearing in Supplement No. 1 of the Lease" immediately after the word "Agreement" and before the comma appearing in the third (3rd) line thereof.

9. Paragraph (a) of Section 27 of the Lease shall be deemed amended by inserting the phrase "and Section 46" immediately after the number and letter "12(c)" and before the word "hereof" appearing in the penultimate line thereof.

10. Paragraph (a) of Section 36 of the Lease shall be deemed amended as follows:

(a) Subparagraph (1) thereof shall be deemed deleted in its entirety and the following new subparagraph (1) shall be deemed to have been inserted in lieu thereof to read as follows:

"(1) for each square foot of open area constituting a part of the temporary premises the use of which is denied to the Lessee, at the annual rate of \$0.57 during the period from the Commencement Date through May 15, 1997, both dates inclusive, and for each square foot of open area constituting that part of the temporary premises which does not include the Extended Temporary Premises the use of which is denied to the Lessee, at the annual rate of \$0.60 during the period from May 16, 1997 through the last day of the Construction Period;"

(b) Subparagraph (2) thereof shall be deemed deleted in its entirety and the following new subparagraph (2) shall be deemed to have been inserted in lieu thereof to read as follows:

"(2) for each linear foot of the Temporary Berthing Area the use of which is denied to Lessee, at the annual rate of \$350.00 for the period from the Commencement Date through May 15, 1997, both dates inclusive, and for each linear foot of the Temporary Berthing Area the use of which is denied to Lessee, at the annual rate of \$367.50 for the period from the May 16, 1997 through the last day of the Construction Period, both dates inclusive;"

(c) The period appearing at the end of subparagraph (4) thereof shall be deleted therefrom and a semicolon and the word "and" inserted in lieu thereof and the following new subparagraph (5) shall be added thereafter to read as follows:

"(5) for each square foot of Area A the use of which is denied to the Lessee at the annual rate of \$1.00 during the period from March 1, 1998 through February 28, 1999, both dates inclusive, and for each square foot of Area B the use of which is denied to the Lessee at the annual rate of \$0.60 during the period from May 16, 1997 through February 28, 1999, both dates inclusive, and for each square foot of the Extended Temporary Premises the use of which is denied to the Lessee at the annual rate of \$1.04 during the period from March 1, 1999 through February 29, 2000, both dates

inclusive, and for each square foot of the Extended Temporary Premises the use of which is denied to the Lessee at the annual rate of \$1.08 during the period from March 1, 2000 through February 28, 2001, both dates inclusive."

11. Section 38 of the Lease, entitled "Termination Rights" shall be deemed amended by deleting paragraph (b) thereof in its entirety and by substituting the following new paragraph (b) in lieu thereof to read as follows:

"(b) The Port Authority shall have the right to terminate the letting under this Agreement, without cause, on the last day of the eleventh (11th) or sixteenth (16th) annual period to occur during the term of the letting on two (2) year's prior written notice to the Lessee. The Lessee shall have the right to terminate the letting under this Agreement, without cause, on the last day of the eleventh (11th) or sixteenth (16th) annual period to occur during the term of the letting on two (2) year's prior written notice to the Port Authority; provided, that, the Lessee shall not be under notice of default as to which any applicable period to cure has passed, or under notice of termination, from the Port Authority, either on the date of its giving of such notice to the Port Authority or on the effective date thereof. Termination pursuant to the provisions of this paragraph shall have the same effect as if the effective date of termination stated in the notice were the date of expiration of the term of the letting under this Agreement."

12. The final fourteen (14) lines of paragraph (c) of Section 38 of the Lease shall be deemed deleted therefrom and the following provision shall be deemed inserted in lieu thereof:

"amounts: (1) One Million Sixty-four Thousand Two Hundred Twelve Dollars and Forty-eight Cents (\$1,064,212.48) if the effective date of the termination of the letting shall occur during the first annual period; (2) Eight Hundred Thirty Thousand Eighty-five Dollars and Seventy-four Cents (\$830,085.74) if the effective date of the termination of the letting shall occur during the second annual period; (3) Five Hundred Seventy-five Thousand

Five Hundred Twenty-six Dollars and Eleven Cents (\$575,526.11) if the effective date of the termination of the letting shall occur during the third annual period; and (4) Two Hundred Ninety-nine Thousand Two Hundred Seventy-three Dollars and Fifty-eight Cents (\$299,273.58) if the effective date of the termination of the letting shall occur during the fourth annual period."

13. Except to the extent modified by paragraphs 1, 3 and 16 hereof, all terms defined in the Lease, including without limitation "the Permanent Premises Rental Payment Start Date", "the Berthing Area", "the Temporary Berthing Area", "the Open Area", "the Lessee's construction work", "the temporary premises", "the permanent premises" and "the Construction Period", shall have the same meaning in this Agreement as in the Lease.

14. Effective upon the execution of this Supplemental Agreement by the Port Authority and the Lessee and delivery thereof to the Lessee by the Port Authority, paragraph (a) of Section 38 of the Lease shall be deemed to be deleted from the Lease in its entirety.

15. Section 46 of the Lease entitled "Baseline Survey" shall be deemed deleted therefrom in its entirety and the following new Section 46 shall be deemed to have been inserted in lieu thereof to read as follows:

"Section 46: Environmental Responsibilities

(a) For purposes of the Lease, the following terms shall have the respective meanings provided below:

(1) 'Area X' shall mean that portion of the permanent premises shown in stippled diagonal hatching on Exhibit B.

(2) 'Area X Remediation Costs' shall mean the following costs actually paid by the Lessee for Area X Remediation Work provided and to extent that the inclusion of the same is permitted by sound accounting practices consistently applied, such Area X Remediation Work has been performed and the performance thereof by the Lessee has been in accordance with all the terms and provisions of this Agreement and the Lessee's plans and specifications and/or remedial action work plan for such Area X Remediation Work as approved by the Port Authority pursuant to Section 16 of the Lease:

- (i) The Lessee's payments to environmental consultants, testing laboratories, and environmental contractors, not including services of the types mentioned in items (iv) and (v) of this subparagraph;
- (ii) The Lessee's payments for supplies and materials;
- (iii) The Lessee's payments to persons, firms or corporations other than environmental consultants, testing laboratories, and environmental contractors or suppliers of materials and supplies, for services rendered or rights granted in connection with Area X Remediation Work, not including services of the types mentioned in items (iv) and (v) of this subparagraph;
- (iv) The Lessee's payments for engineering services in connection with Area X Remediation Work provided during the period that such Area X Remediation Work is being performed and only during such period;
- (v) The Lessee's payments for preparation of health and safety plans, sampling and analysis plans, remedial action plans, and architectural, planning and design services in connection with Area X Remediation Work; and
- (vi) The sum of the payments under items (iv) and (v) of this subparagraph for each Remediation Project shall not exceed 20% of the sum of the payments under items (i), (ii) and (iii) of this subparagraph for such Remediation Project; and if in fact there is any such excess, such excess shall not be a part of the Area X Remediation Costs.

Notwithstanding the foregoing, the Area X Remediation Costs shall not include:

- (i) any amounts paid for or in connection with any trade fixtures or other personal property of the Lessee; or
- (ii) any amounts for administrative or other overhead costs of the Lessee or amounts paid to employees of the Lessee whether or not allocated to the cost of the Area X Remediation Work by the Lessee's own accounting practices; or
- (iii) any amounts paid to a firm or corporation wholly or partially owned by or in common ownership with the Lessee; or
- (vi) any equipment, fixture or improvements which are secured by liens, mortgages, other encumbrances or conditional bills of sale; or
- (v) any amounts for or in connection with the Repaving Work as defined in Section 50 hereof.

(3) 'Area X Remediation Work' shall mean remediation of soil in Area X performed by the Lessee to deliver any Area X Surrendered Premises to the Port Authority on the Surrender Date therefor in a Clean condition and Initial Cleanup Work. Area X Remediation Work shall not mean or include any remediation required by any Enforcement Agency except for Initial Cleanup Work or as a result of the failure to implement a DER except the Initial DER.

(4) 'Area X Surrender Date' shall mean with respect to any Area X Surrendered Premises the date that the letting of such Area X Surrendered Premises shall have ceased, whether by expiration, termination or otherwise.

(5) 'Area X Surrendered Premises' shall mean Area X and/or any portion thereof, as the case shall be, the letting of which has ceased, whether by termination, expiration or otherwise.

(6) 'Clean' shall mean that with respect to the levels of Hazardous Substances in the soil on any Surrendered

Premises, no or no further remediation of or clean-up or removal of Hazardous Substances from the soil on such Surrendered Premises is required by or as a condition of any Enforcement Agency or any Environmental Requirement and no restrictions of any nature whatsoever arising out of the presence of one or more Hazardous Substances on such Surrendered Premises, including without limitation no engineering or institutional controls, have been or are required by or as a condition of any Enforcement Agency or Environmental Requirement to be placed upon or apply to such Surrendered Premises, the permanent premises or the Facility, or the use or occupancy of such Surrendered Premises, the permanent premises or any other portion of the Facility, or upon any operations or activities conducted or to be conducted on such Surrendered Premises, the permanent premises or the Facility, or upon the transfer of the Surrendered Premises, the permanent premises or the Facility.

(7) 'DEP' shall mean the New Jersey Department of Environmental Protection or its successors with equivalent jurisdiction and authority.

(8) 'DER' shall mean a declaration of environmental restrictions as defined by NJAC7:26E-1.8.

(9) 'Enforcement Agency' shall mean with respect to each Surrendered Premises the Governmental Authority with jurisdiction to determine if such Surrendered Premises is Clean under the law applicable to such Surrendered Premises.

(10) 'Environmental Damages' shall mean any one or more of the following:

(i) the presence on, about or under the permanent premises of any Hazardous Substance during the term of the Lease and/or the Lessee's use or occupancy of the permanent premises, whether such presence occurred prior to or during the term of the letting of the permanent premises under the Lease or resulted from any act or omission of the Lessee or others, and/or

(ii) the disposal, release or threatened release of any Hazardous Substance at or from the permanent premises during the term of the Lease and/or the Lessee's use or occupancy of the permanent premises, and/or

(iii) the presence of any Hazardous Substance

on, about or under other property at the Facility as a result of the Lessee's use or occupancy of the permanent premises, and/or

(iv) a Hazardous Substance which migrates from the permanent premises during the term of the Lease and/or the Lessee's use or occupancy of the permanent premises, and/or

(v) any personal injury, including wrongful death, or property damage, arising out of or related to any Hazardous Substance described in (i), (ii) or (iii) or (iv) above, and/or

(vi) the violation of any Environmental Requirement.

(11) 'Environmental Requirements' and 'Environmental Requirement' shall mean all applicable present and future laws, statutes, enactments, resolutions, regulations, rules, ordinances, codes, licenses, permits, orders, approvals, plans, authorizations, concessions, franchises, requirements and similar items of all Governmental Authorities and all applicable judicial, administrative and regulatory decrees, judgments and orders relating to the protection of human health or the environment which are applicable to or which affect (i) the permanent premises during the term of the Lease and/or the Lessee's use or occupancy of the permanent premises and/or (ii) the Lessee's use or occupancy of the permanent premises and/or the use or occupancy of the permanent premises by others with its consent, and/or (iii) the operations of the Lessee or of others with the consent of the Lessee on the permanent premises and/or (iv) any action or inaction by the Lessee at the permanent premises during the term of the Lease and/or the Lessee's use or occupancy of the permanent premises (v) or any Hazardous Substance described in paragraph (a)(10) above, the foregoing to include, without limitation:

(i) All requirements pertaining to reporting, licensing, permitting, investigation and remediation of emissions, discharges, releases or threatened releases of Hazardous Substances into the air, surface water, groundwater or land, or relating to the manufacture, processing, distribution, use, treatment, storage, disposal, transport or handling of Hazardous Substances; and

(ii) All requirements pertaining to the protection of the health and safety of employees or the public.

(12) 'Exhibit B' shall mean the exhibit attached hereto, hereby made a part hereof and marked 'Exhibit B'.



(13) 'Exhibit C' shall mean the exhibit attached hereto, hereby made a part hereof and marked 'Exhibit C.

(14) 'Final Certificate' shall mean with respect to each Remediation Project, a final certificate described in paragraph (c)(3) which meets all the requirements therefor set forth in paragraph (c) which has been submitted by the Lessee to the Port Authority for such Remediation Project.

(15) 'Final Date' shall mean the earlier to occur of the day immediately preceding the first anniversary of the last Area X Surrender Date or the day immediately preceding the first anniversary of the expiration date of the Lease.

(16) 'Final Payment' shall mean with respect to each Remediation Project, the payment made by the Port Authority pursuant to the Final Certificate for such Remediation Project in accordance with paragraph (c)(4)(i)(bb).

(17) 'Governmental Authority' and 'Governmental Authorities' shall mean all governmental agencies, authorities, departments, commissions, boards, bureaus or instrumentalities of the United States, states and political subdivisions thereof, except that it shall not be construed to include The Port Authority of New York and New Jersey, the lessor under the Lease.

(18) 'Hazardous Substances' and 'Hazardous Substance' shall mean and include, without limitation, any pollutant, contaminant, toxic or hazardous waste, dangerous substance, noxious substance, toxic substance, inflammable, explosive or radioactive material, urea formaldehyde foam insulation, asbestos, polychlorinated biphenyls ("PCBs"), chemicals known to cause cancer or reproductive toxicity, petroleum and petroleum products and other substances which as of or after the Effective Date are declared to be hazardous or toxic, or the removal of which is required, or the manufacture, preparation, production, generation, use, maintenance, treatment, storage, transfer, handling or ownership of which as of or after the Effective Date is restricted, prohibited, regulated or penalized by any Environmental Requirement.

(19) 'Initial Cleanup Work' shall mean remediation of Area X performed by the Lessee during the term of the Lease after the Effective Date until an Initial DER shall be implemented with respect to Area X, which remediation is either required by the DEP only as the result of the Initial DER not having been implemented with respect to Area X or is required by the Port Authority by notice given by it to the Lessee in order to comply

with the terms of an Initial DER acceptable to the DEP, the City of Newark and the Port Authority.

(20) 'Initial DER' shall mean a DER required by the DEP on Area X only as a result of the submission to the DEP by the Port Authority of the document dated May 1997 prepared by Killam Associates for the Port Authority and entitled "Environmental Baseline Investigation and Remedial Action Work Plan, Berths 30 and 32, Upland, Port Newark, New Jersey" and the levels in the soil of Area X of one or more Hazardous Substances as shown in the test results included in such document and/or the levels in the soil of Area X of one or more Hazardous Substances as shown in the test results submitted by the Port Authority to the DEP as part of or upon completion of the work performed by the Port Authority described in Exhibit C.

(21) 'Port Authority Contribution' shall mean the amount of One Million Two Hundred Fifty Thousand Dollars and No Cents (\$1,250,000.00) as the same shall be adjusted pursuant to the terms and provisions of paragraph (c)(9) below.

(22) 'Refund Payment' shall mean each payment made by the Lessee to the Port Authority pursuant to paragraphs (c)(4)(i)(bb) and (c)(4)(v) of this Section.

(23) 'Remediation Payment' shall mean each payment made by the Port Authority to the Lessee pursuant to paragraph (c) of this Section for Area X Remediation Costs.

(24) 'Remediation Project' shall mean Area X Remediation Work that is discrete both in time and location and Initial Cleanup Work.

(25) 'Surrendered Premises' shall mean the permanent premises and/or any portion thereof, as the case shall be, the letting of which has ceased, whether by termination, expiration or otherwise.

(26) 'Surrender Date' shall mean with respect to each Surrendered Premises the date that the letting shall have ceased with respect to such Surrendered Premises, whether by termination, expiration or otherwise.

(27) 'Unadjusted Remediation Payment' shall mean the amount of each Remediation Payment plus the amount of the deduction made thereto pursuant to item (z) of paragraphs (c)(4)(i)(aa) and (c)(4)(i)(bb) of this Section.

(b) (1) Without limiting the generality of any of the other terms and provisions of the Lease, the Lessee agrees to take

the permanent premises in the condition they are in as of the commencement of the term of the letting of the permanent premises hereunder and, during the term of the letting of the permanent premises and/or the Lessee's use or occupancy of the permanent premises and after the term of the Lease and the Lessee's use or occupancy of the permanent premises if arising during or related to any discharge on or from the permanent premises that occurred during the term of the Lease and/or the Lessee's use or occupancy of the permanent premises, to assume all responsibility for and relieve the Port Authority from any responsibility for the condition of the permanent premises and any and all risks, claims, penalties, costs and expenses (except to the extent that the Port Authority Contribution shall be made available to the Lessee pursuant to and in accordance with the terms and provisions of this Section, and except for the work performed by the Port Authority as set forth in Exhibit C, and except for the Repaving Work Reimbursement Amount as defined in Section 50 (m) of the Lease) of any kind whatsoever related thereto including without limitation all Environmental Requirements and all Environmental Damages and the performance of all Initial Cleanup Work, whether any such condition existed on the permanent premises prior to, on or after the effective date of the letting of the permanent premises to the Lessee.

(2) In addition to and without limiting the obligations of the Lessee set forth in subparagraph (1) of this paragraph (b), the Lessee shall at its cost and expense (except to the extent the Port Authority Contribution shall be made available to the Lessee pursuant to and in accordance with the terms and provisions of this Section) and in accordance with and subject to the provisions of Section 16 of the Lease deliver to the Port Authority each Surrendered Premises on the Surrender Date therefor in a Clean condition. The Lessee shall submit to the Port Authority on or before each Surrender Date documentation satisfactory to the Port Authority that the Surrendered Premises for such Surrender Date is Clean together with a report and test results of soil samples taken from the Surrendered Premises, which samples shall be taken and tested in accordance with the protocol established by the Enforcement Agency. A 'No Further Action Letter' or 'Certification of Completion' from the DEP shall be conclusive proof of documentation satisfactory to the Port Authority that any Surrendered Premises is Clean notwithstanding any Environmental Requirement to the contrary provided that no or no further remediation, clean-up or removal of any Hazardous Substance from the soil on such Surrendered Premises is required by or is a condition of such No Further Action Letter or Certification of Completion or by any Enforcement Agency and no restrictions of any nature whatsoever arising out of the presence of one or more Hazardous Substances on such Surrendered Premises,

including without limitation, no engineering or institutional controls, have been or are required to be placed upon or apply to such Surrendered Premises, the permanent premises or the Facility, or the use or occupancy of such Surrendered Premises, the permanent premises or any other portion of the Facility, or upon any operations or activities conducted or to be conducted on such Surrendered Premises, the permanent premises or the Facility, or upon the transfer of the Surrendered Premises, the permanent premises or the Facility as the result of the presence of one or more Hazardous Substances in the soil of such Surrendered Premises by or as a condition of such No Further Action Letter or Certification of Completion or by or as a condition of any Enforcement Agency (such 'No Further Action Letter' or 'Certification of Completion' meeting all of the foregoing requirements being hereinafter referred to as the 'Documentation'). If the Enforcement Agency for reasons other than that the Surrendered Premises is not Clean does not or is unwilling to provide the Documentation, then the Lessee shall provide the Port Authority with such other documentation, reports and test results as the Port Authority shall require to determine if the Surrendered Premises is Clean.

(3) If the Lessee has not in accordance with subparagraph (2) of this paragraph (b) established on or before the Surrender Date for a Surrendered Premises that such Surrendered Premises was Clean on its Surrender Date, and if the Port Authority, in its sole discretion, shall give notice to the Lessee permitting or requiring the Lessee to effect performance of its obligations under subparagraph (2) of this paragraph (b), the Lessee shall pay to the Port Authority as liquidated damages on the day immediately following the Surrender Date for such Surrendered Premises and on the first day of each and every calendar month occurring after such Surrender Date until the earlier of (i) the day the Lessee establishes pursuant to subparagraph (2) of this paragraph (b) that such Surrendered Premises is Clean or (ii) the date the Lessee shall have paid to the Port Authority amounts totaling One Million Two Hundred Thousand Dollars and No Cents (\$1,250,000.00) (the date such amounts totalling \$1,250,000.00 have been so paid to the Port Authority being hereinafter called the "End Date"), an amount equal to the rental for the Surrendered Premises in effect on the Surrender Date therefor, which amount shall thereafter increase in the same manner and at the same intervals provided in the Lease for the increase in the basic rental for the permanent premises as if the letting of the Surrendered Premises had not ceased and had continued or been extended beyond the expiration date, as the case shall be, upon the basic rental terms and conditions, it being understood and agreed that in no event shall the Lessee use or occupy any Surrendered Premises beyond the Surrender Date therefor unless it shall have

received notice from the Port Authority permitting or requiring the Lessee to effect performance of its obligations under subparagraph (2) of this paragraph (b) and such permitted use or occupancy shall be to the extent, and only such extent, as shall be required to remediate such Surrendered Premises in accordance with subparagraph (2) of paragraph (b). Except for claims of loss of rental income for which and to the extent that the Port Authority has been paid liquidated damages under this subparagraph (3), nothing in the Lease including without limitation this paragraph (b)(3) shall have limited, affected or waived or be deemed to have limited, affected or waived any rights, remedies or damages of the Port Authority at law, equity or otherwise upon breach of the Lease by the Lessee including without limitation the failure of the Lessee to have delivered any Surrendered Premises in a Clean condition on the Surrender Date therefor.

(4) In the event that in accordance with and pursuant to the terms of the Lease the letting of the entire permanent premises shall be terminated without cause by the Lessee or the Port Authority on at least two years' prior written notice to the other or in the event of the expiration of the letting of the entire permanent premises then, if the Port Authority has determined that the permanent premises is Clean on the Surrender Date therefor, the Port Authority shall pay to the Lessee within sixty (60) days after demand therefor by the Lessee after such Surrender Date an amount equal to the product obtained by multiplying the decimal .375 by the amount of basic rental for the Surrendered Premises payable hereunder for the year immediately preceding such Surrender Date which the Lessee as paid to the Port Authority, provided, however, in the event that the term of the letting hereunder shall be terminated by the Lessee pursuant to paragraph (b)(5) below then, if the permanent premises is Clean on the Surrender Date therefor, upon the Port Authority's determination that the permanent premises is Clean, the Port Authority shall pay to the Lessee within sixty (60) days after demand therefor by the Lessee after such Surrender Date an amount equal to the product obtained by multiplying the decimal .375 by the amount of basic rental for the Surrendered Premises payable hereunder from and after March 1, 2019 which has been paid by the Lessee to the Port Authority.

(5) If at anytime during that portion of the term of the letting under this Lease occurring from and after March 1, 2019 the Lessee shall have submitted to the Port Authority Documentation that the premises is Clean together with a report and current test results of soil samples taken from the premises, which soil samples were taken and tested in accordance with the protocol established by the Enforcement Agency, then upon such submission to the Port Authority, and only then, the Lessee shall have the

right to terminate the letting under this Lease on thirty (30) days' written notice to the Port Authority, provided, however, the Lessee shall have no such right to terminate the letting hereunder nor shall any termination notice given pursuant to this paragraph (b)(5) be effective if the Lessee has received a notice of termination from the Port Authority, either on the date of its giving such notice to the Port Authority or on the effective date of such notice. Termination pursuant to the provisions of this paragraph (b)(5) shall have the same effect as if the effective date of termination stated in the notice were the date of expiration of the term of the letting under this Lease.

(c) In the event either (i) Initial Cleanup Work is performed by the Lessee or (ii) the Lessee must remediate Area X or any portion in order for the Lessee to deliver any Area X Surrendered Premises or any portion thereof on the Surrender Date therefor in a Clean condition, and only in such events, the Port Authority shall to the extent of the Port Authority Contribution and only to such extent reimburse the Lessee for Area X Remediation Costs, subject to and in accordance with the terms and provisions hereinafter set forth.

(1) Prior to the commencement of any Area X Remediation Work, the Lessee shall subject to and in accordance with Section 16 hereof submit to the Port authority for its approval a Construction Application in the form supplied by the Port Authority, and containing such terms and conditions as the Port Authority may include, setting forth in such detail as shall be required by the Port Authority by appropriate plans and specifications and/or a remedial action work plan for the Area x Remediation Work the Lessee proposes to perform and the manner of and time periods for performing the same. Whether the Lessee shall be required hereunder to submit both plans and specifications and a remedial action work plan, or just plans and specifications or just a remedial action work plan shall be at the sole discretion of the Port Authority. Whenever the phrase or similar phrase, 'plans and specifications and/or remedial action work plan' is used in this Section 46 it shall mean and refer to those plans and specifications, if any, and that remedial action work plan, if any, required by the Port Authority pursuant to this paragraph (c)(1). Nothing in this Section 46 shall be or be deemed to constitute Port Authority approval of any Area X Remediation Work pursuant to Section 16 hereof. Additionally, if all or a part of Area X has been paved as part of the Lessee's construction work (as defined in Section 5 of the Lease), then the Lessee shall include in its submission of any Construction Application for the Initial Cleanup Work for approval by the Port Authority, the identification of all paving on Area X which it believes is in the condition required by the Lease. In the Port Authority's approval of such Construction

Application, it shall identify that portion of paving on Area X that is in the condition required by the Lease (which paving that is so identified by the Port Authority is hereinafter in this Lease called the 'Reimbursable Paving') for the purposes of reimbursement as provided in Section 50 of the Lease.

(2) On or about the tenth day of the calendar month following each month occurring prior to the Final Date in which the Lessee shall incur any Area X Remediation Costs, but no more than once in each such month, the Lessee shall deliver to the Port Authority a certificate which shall be signed by a responsible officer of the Lessee and shall:

(i) describe the Area X Remediation Work performed by the Lessee in the preceding month and certify that such Area X Remediation Work has been accomplished, that the amounts requested therefor have been paid by the Lessee or are due and payable from the Lessee, that, subject to the concurrence of the Port Authority, such work has a value of not less than the amount requested to be paid, and that amounts requested constitute Area X Remediation Costs;

(ii) identify with respect to each Remediation Project covered by such certificate the costs and certify the amount requested on account of Area X Remediation Costs for such Remediation Project qualifying as such pursuant to paragraphs (a)(2)(i), (a)(2)(ii) and (a)(2)(iii) of this Section, the amount of such costs incurred by the Lessee during such preceding month and the amount paid by the Lessee on account of such costs during such previous month, if any, and the cumulative amount of such costs incurred by the Lessee and the cumulative amount of such costs paid by the Lessee as of the end of such previous month with respect to each Remediation Project covered by such certificate;

(iii) identify with respect to each Remediation Project covered by such certificate the costs and certify the amount requested on account of Area X Remediation Costs for such Remediation Project qualifying as such pursuant to paragraphs (a)(2)(iv) and (a)(2)(v) of this Section, the amount of such costs incurred by the Lessee during such preceding month and the amount paid by the Lessee on account of such costs during such previous month, if any, and the cumulative amount of such costs incurred by the Lessee and the cumulative amount of such costs paid by the Lessee as of the end of such previous month with respect to each Remediation Project covered by such certificate;

(iv) certify all due and payable amounts included by the Lessee in previous certificates against which a Remediation Payment has been made by the Port Authority to the

Lessee and which have been paid by the Lessee since the submission of each such previous certificate and attach thereto or include therein such verification as shall be required by the Port Authority, that such amounts have been paid;

(v) certify (x) the total cumulative Area X Remediation Costs incurred by the Lessee and (y) the total cumulative payments made by the Lessee, for Area X Remediation Work from the commencement of the date of the first Area X Remediation Work performed by the Lessee to the last date covered by such certificate;

(vi) contain a representation by the Lessee that the Lessee will apply the Remediation Payment only against expenses actually incurred as Area X Remediation Costs and for no other purpose whatsoever;

(vii) certify that each portion of the Area X Remediation Work covered by such certificate has been performed in accordance with the terms of this Agreement and the plans and specifications and/or the remediation action work plan therefor as approved by the Port Authority pursuant to Section 16 of the Lease, which certification shall be made by a responsible officer of the Lessee and with respect to each Remediation Project covered by the certificate, the environmental engineer, architect or other engineer who sealed the Lessee's plans and specifications and/or remediation action work plan for such Remediation Project;

(viii) have attached thereto reproduction copies or duplicate originals of the invoices covering the portion of the Area X Remediation Work described in and covered by such certificate for which reimbursement is being requested (whether such invoices are paid or unpaid) and for such invoices which have been paid, an acknowledgment by the consultants and contractors and other persons issuing such invoices of the receipt by them of such amounts and payments;

(ix) that except for the amount, if any, stated in such certificate to be due for services and materials, there is no outstanding indebtedness known to the persons signing such certificate, after due inquiry, then due on account of the purchase of any equipment or fixtures described in the certificate or for labor, wages, materials, supplies or services in connection with any Area X Remediation Work whether or not described in or covered by such certificate which, if unpaid, might become the basis of a vendor's, mechanic's, laborers or materialmen statutory or similar lien or alleged lien upon such work or upon the permanent premises or any part thereof, or upon the Lessee's leasehold interest therein, nor are any of the equipment or fixtures described in such



certificate secured by any liens, mortgages, security interests or other encumbrances, provided, however, nothing contained herein shall be deemed or construed as a submission by the Port Authority to the application to itself of any such lien; and

(x) contain such further information and documentation with respect to the Area X Remediation Costs as the Port Authority may from time to time require, which information, documentation and certification shall be given on such forms as may be adopted by the Port Authority.

(3) Upon completion of each Remediation Project performed by the Lessee, the Lessee shall indicate on the last certificate submitted by the Lessee for such Remediation Project that it is the final certificate for such Remediation Project (it being understood and agreed that after submitting said final certificate the Lessee shall not include any Area X Remediation Costs for such Remediation Project in any future certificate), which certificate shall in addition to the requirements set forth in paragraph (c)(2) above:

(i) certify that all the Area X Remediation Work to be performed as part of such Remediation Project has been completed;

(ii) certify the final Area X Remediation Costs for that Remediation Project, the cumulative payments made by the Lessee on account of such costs, and the cumulative amounts due and payable from the Lessee on account of Area X Remediation Costs for such Remediation Project;

(iii) certify that all of the Area X Remediation Work for such Remediation Project has been performed in accordance with the final plans and specifications and/or remedial action work plan therefor as approved by the Port Authority pursuant to Section 16 of the Lease and in accordance with the provisions of this Agreement, which certification shall be made by a responsible officer of the Lessee and by the environmental engineer, architect or other engineer who sealed the Lessee's plans and specifications and/or remediation work plan for such Remediation Project; and

(iv) certify that except for the amount, if any, stated in such certificate to be due for services and materials, there is no outstanding indebtedness known to the persons signing such certificate, after due inquiry, then due on account of the purchase of any equipment or fixtures in connection with such Remediation Project for labor, wages, materials, supplies or services which, if unpaid, might become the basis of a vendor's, mechanic's, laborers or materialmen statutory or similar lien or

alleged lien upon such work or upon the permanent premises or any part thereof, or upon the Lessee's leasehold interest therein, nor are any of the equipment or fixtures described in any of the certificates submitted by the Lessee in connection with such Remediation Project secured by any liens, mortgages, security interests or other encumbrances, provided, however, nothing contained herein shall be deemed or construed as a submission by the Port Authority to the application to itself of any such lien.

(4) (i) (aa) Subject to the provisions of paragraphs (c)(4)(ii) through (c)(4)(v) of this Section and except with respect to amounts covered by the Final Certificate for each Remediation Project, within thirty (30) days after the receipt by the Port Authority of each duly submitted certificate satisfying in full the requirements set forth of this Section, the Port Authority shall remit to the Lessee an amount equal to the lesser of (i) the amount of the Port Authority Contribution or (ii) the Area X Remediation Costs incurred by the Lessee for the portion of the Area X Remediation Work performed by the Lessee in the preceding month as shown in such certificate to the extent that such amount or any portion thereof has not theretofore been included in any Remediation Payment (x) less ten percent (10%) thereof and (y) less the amount of claims, if any, made against the Port Authority by subcontractors, materialmen or workmen on account of any of the work described in the certificate and (z) less any amounts owed by the Lessee to the Port Authority.

(bb) Payment with respect to amounts covered by the final certificate submitted by the Lessee for a Remediation Project shall be made as follows: After examination and approval of such final certificate and such supporting documents and records as the Port Authority shall deem necessary to substantiate the certificate, the Port Authority shall finally inspect Area X and such Remediation Project and after such inspection the Port Authority shall notify the Lessee if such Remediation Project has been performed in accordance with the plans and specifications and/or remedial action work plan therefor as approved by the Port Authority and the provisions of this Agreement. If all of the Area X Remediation Work for such Remediation Project has been completed in accordance with the plans and specifications and/or remedial action work plan therefor as approved by the Port Authority pursuant to Section 16 of the Lease and the provisions of this Agreement, the Port Authority, subject to the conditions set forth in paragraphs (c)(4)(ii) through (c)(4)(v) below, will remit to the Lessee on account of the Area X Remediation Costs for such Remediation Project the lesser of (i) the amount of the Port Authority Contribution or (ii) the difference obtained by subtracting (aa) the sum of all prior Unadjusted Remediation Payments made by the Port Authority to the

Lessee on account of such Remediation Project (bb) from the Area X Remediation Costs for such Remediation Project (y) less the amount of claims, if any, made against the Port Authority by subcontractors, materialmen or workmen on account of any of the work described in the certificate and (z) less any amounts owed by the Lessee to the Port Authority. If the sum of all of the previous Unadjusted Remediation Payments made by the Port Authority to the Lessee on account of such Remediation Project shall exceed the Area X Remediation Costs for such Remediation Project, the Lessee shall pay to the Port Authority the amount of such excess on demand.

(ii) At the election of the Port Authority no payment will be made if the Port Authority's inspection or audit does not substantiate the contents of any such certificate and until such matters have been resolved to the satisfaction of the Port Authority, but the Port Authority shall have no obligation to conduct any such inspection or audit, provided however, if the Lessee desires that an audit for a Remediation Project commence no later than ninety (90) days after the receipt by the Port Authority of the Final Certificate for such Remediation Project, the Lessee shall give notice to the Port Authority to such effect at the time the Lessee delivers such Final Certificate to the Port Authority or at any time sixty (60) days thereafter, which notice shall be given in accordance with Section 29 of the Lease and additionally a copy of such notice shall be given to the Director of the Port Authority's Audit Department at the address to which notices are to be given to the Port Authority, and upon receipt of both such notices by the Port Authority and only in such event, the Port Authority shall be obligated hereunder to commence such audit not later than ninety (90) days after receipt by it of such Final Certificate, provided, further, however, any audit relied upon by the Port Authority to so delay or not make any Remediation Payment for any Remediation Project shall be concluded within one year after the conditions set forth in paragraph (c)(4)(i)(bb) for a Final Payment above have been met for such Remediation Project, provided, further, however, that the foregoing one year time limit shall automatically be made void and of no further force nor effect with respect to all audits hereunder upon the breach or default by the Lessee of any term, provision or condition of paragraphs (c)(6)(i), (c)(7) and (c)(8) below in which case from and after such breach or default any audit conducted at any time during the time period provided for in paragraph (c)(8) below may be relied upon by the Port Authority to so delay or not make any Remediation Payment.

(iii) No Remediation Payment shall be made by the Port Authority to the Lessee until all due and payable amounts included on all previously submitted certificates have been paid by

the Lessee and the payment thereof verified to the satisfaction of the Port Authority in accordance with this Agreement.

(iv) The obligation of the Port Authority under this Agreement for Area X Remediation Costs shall be limited in amount on any particular date to the amount of the Port Authority Contribution as of such date and limited in time to Area X Remediation Costs incurred by the Lessee on or before the last day of the calendar month immediately preceding the month in which the Final Date shall occur and covered by certificates of the Lessee submitted in accordance with paragraphs (c)(2) and (c)(3) of this Section no later than on the Final Date.

(v) No Remediation Payment for any Remediation Project made by the Port Authority hereunder shall mean or be deemed to mean that the amount of such Remediation Payment is correct or that all the requirements set forth herein with respect to the payment to the Lessee of Area X Remediation Costs have been met. In the event that the Port Authority shall determine by audit or otherwise that a Remediation Payment should not have been made or that the amount of any Remediation Payment was in excess of what should have been paid to the Lessee pursuant to the terms and conditions of this paragraph (c), the Lessee shall pay to the Port Authority within thirty (30) days after demand therefor the amount of such improperly made payment or the amount of such excess, as the case shall be, provided however, if the Lessee desires that an audit for a Remediation Project commence no later than ninety (90) days after the receipt by the Port Authority of the Final Certificate for such Remediation Project, the Lessee shall give notice to the Port Authority to such effect at the time the Lessee delivers such Final Certificate to the Port Authority or at any time sixty (60) days thereafter, which notice shall be given in accordance with Section 29 of the Lease and additionally a copy of such notice shall be given to the Director of the Port Authority's Audit Department at the address to which notices are to be given to the Port Authority, and upon receipt of both such notices by the Port Authority and only in such event, the Port Authority shall be obligated hereunder to commence such audit not later than ninety (90) days after receipt by it of such Final Certificate, provided, further, however, that any audit relied upon by the Port Authority to reduce or eliminate any Remediation Payment made by the Port Authority for a Remediation Project shall be concluded within one year after the conditions set forth in paragraph (c)(4)(i)(bb) for a Final Payment above have been met for such Remediation Project, provided, further, however, that the foregoing one year time limit shall automatically be made void and of no further force nor effect with respect to all audits hereunder upon the breach or default by the Lessee of any term, provision or condition of paragraphs (c)(6)(i), (c)(7) and (c)(8) below, in which case from and after such breach or default any audit

conducted at any time during the time period provided for in paragraph (c)(8) below may be relied upon by the Port Authority to reduce or eliminate any Remediation Payment.

(5) It is hereby understood and agreed that nothing in this Section shall be or be deemed to be for the benefit of any contractor of the Lessee or other third party and no contractor or third party shall or shall be deemed to have acquired any rights against the Port Authority by virtue of the execution of this Agreement and nothing contained herein shall operate or give to any such contractor or third party any claim or right of action against the Port Authority and its Commissioners, officers, agents and employees.

(6) (i) The parties recognize that one or more of the contracts to be entered into by the Lessee for Area X Remediation Work may cover the remediation of areas of the permanent premises other than Area X. The Lessee shall, at all times maintain, and each certificate submitted to the Port Authority hereunder shall set forth, a proper breakdown and allocation of costs and payments as between the Area X Remediation Work and such other remediation work, and the Lessee shall ensure that each applicable contract provides for such breakdown and allocation. In submitting the statements and certificates required of the Lessee hereunder, the Lessee shall in such event specifically and separately state the amounts covered by said contracts which are not for Area X Remediation Work. Moreover, the Lessee shall specifically and separately set forth therein the Area X Remediation Costs.

(ii) In the event the Port Authority questions the appropriateness or correctness of the amounts set forth by the Lessee in any certificate submitted by the Lessee pursuant to this paragraph (c), the Port Authority shall advise the Lessee to such effect and the Port Authority and the Lessee shall meet with each other in an attempt to agree upon and resolve their differences with respect thereto. If the Lessee has included in any portion of the Area X Remediation Costs any item which should not have been included therein, as for example the Lessee has included in any portion of the Area X Remediation Costs any item as having been incurred, but which in the opinion of the Port Authority was not so incurred, or which in the opinion of the Port Authority if so incurred is not an item properly chargeable to such element of the Area X Remediation Costs under sound accounting practice or to Area X Remediation Costs, or does not represent an appropriate allocation of the costs of a particular contract which are required to be designated in accordance with paragraph (c)(6)(i) above, and the parties have been unable to resolve their differences within 90 days after the Port Authority gave its notice objecting to the

same, the Port Authority's decision as to the nature of the item of the Area X Remediation Costs shall be final, subject to the Lessee's rights to pursue payment in any court of competent jurisdiction.

(7) The Lessee shall promptly submit to the Port Authority further information regarding Area X Remediation Work and Area X Remediation Costs as the Port Authority may from time to time and at any time request, including, but not limited to, the Lessee's estimate of the amounts and times of the various payments it will be making for Area X Remediation Costs, detailed cost projections for each Remediation Project accompanied by a certification signed by an independent engineering consultant to the effect that the cost projections submitted by the Lessee are accurate and that the same represent a reasonable price for such Remediation Project and a certification signed by the Lessee's environmental engineer, architect or other engineer who sealed the approved plans and specifications and/or remedial action work plan for a Remediation Project certifying the value of work performed, and the Lessee shall be available itself or cause its environmental engineer, architect or other engineer, as the case may be, to be available for consultation in connection with payment certificates submitted pursuant to paragraph (c) of this Section.

(8) Without limiting any other provision of this Agreement, the Port Authority shall have the right with respect to each Remediation Project, at any time and from time to time within five (5) years of the submission by the Lessee to the Port Authority of the Final Certificate for such Remediation Project, by its agents, employees and representatives to audit and inspect during regular business hours the books, records and other data of the Lessee relating to the Area X Remediation Work and Area X Remediation Costs including without limitation any other remediation work performed in connection therewith, it being understood that the Port Authority shall not be bound by any prior audit conducted by it. The Lessee agrees to keep such books, records and other data within the Port of New York District. The Lessee shall maintain such books, records and other data for five (5) years after the Lessee has delivered the last Final Certificate to the Port Authority.

(9) The amount of the Port Authority Contribution shall be adjusted from time to time in accordance with the following:

(aa) The amount of the Port Authority Contribution shall be reduced by each of the following:

(i) the amount of each Unadjusted Remediation

Payment made by the Port Authority; and

(ii) all costs and expenses incurred or paid by the Port Authority for remediation of all or any portion of Area X, which costs and expenses it is hereby understood and agreed shall not include costs and expenses incurred or paid by the Port Authority with respect to the investigation and remediation work set forth and described in Exhibit C; it being further understood and agreed that nothing in this item (ii) shall have or be deemed to have imposed any obligations on or granted any rights in the Port Authority to perform any remediation of Area X.

(bb) The amount of the Port Authority Contribution shall be increased by the amount of each Refund Payment made by the Lessee to the Port Authority.

(d) Without limiting any other of the Lessee's obligations under the Lease, the Lessee agrees, unless otherwise directed by the Port Authority, to provide the Manager of the Facility, upon written request therefor, at the cost and expense of the Lessee and at any time during or within five (5) years subsequent to the term of the letting of the permanent premises under the Lease, with such information, documentation, records, correspondence, notices, reports, test results, certifications and any other information as the Port Authority shall request in connection with any Environmental Requirements or Environmental Damages, and with respect to any of the foregoing which are required by any Governmental Authority to be acknowledged, sworn to, signed or executed, the Lessee shall promptly and in a manner satisfactory to such Governmental Authority acknowledge, swear to, sign and execute the same when and as directed by the Port Authority during the term of the Lease and the Lessee's use or occupancy of the permanent premises and thereafter if in connection with any matter arising during the term of the Lease or the Lessee's use or occupancy of the permanent premises or related to any discharge that occurred on or from the permanent premises during the term of the Lease or the Lessee's use or occupancy of the permanent premises. The Lessee agrees that any of the foregoing may be filed by the Port Authority with the appropriate Governmental Authority on behalf of the Lessee at the Lessee's cost and expense. Further, the Lessee agrees, unless otherwise directed by the Port Authority, to provide the Manager of the Facility with copies of all information, documentation, records, correspondence, notices, certifications, reports, test results and all other submissions with respect to any Environmental Requirements provided by the Lessee to a Governmental Authority and by a Governmental Authority to the Lessee within five (5) business days that the same are made available to or received by the Lessee.

(e) Without limiting the generality of any other provision contained in the Lease, the Lessee shall indemnify, hold harmless and reimburse the Port Authority, its Commissioners, officers, employees and representatives from all claims, demands, penalties, fines, liabilities (including strict liability), settlements, attorney and consultant fees, investigation and laboratory fees, cleanup and remediation costs, court costs and litigation expenses, damages, judgments, losses, costs and expenses of whatsoever kind or nature and whether known or unknown, contingent or otherwise, just or unjust, groundless, unforeseeable or otherwise, arising or alleged to arise out of or in any way related to any Environmental Damages or any Environmental Requirements, or the risks and responsibilities assumed hereunder by the Lessee for the condition of the permanent premises or out of a breach or default of the Lessee's obligations under this Section 46. If so directed, the Lessee shall at its own expense defend any suit based upon the foregoing, and in handling such it shall not, without obtaining express advance permission from the General Counsel of the Port Authority, raise any defense involving in any way the jurisdiction of the tribunal over the person of the Port Authority, the immunity of the Port Authority, its Commissioners, officers, agents or employees, the governmental nature of the Port Authority or the provisions of any statutes respecting suits against the Port Authority.

(f) (1) Without limiting the Lessee's obligations elsewhere under this Agreement to comply with all governmental laws, rules, regulations, requirements, orders and directions and as part of the Lessee's fulfillment of the foregoing obligations, the Lessee understands and agrees that it shall be obligated, at its cost and expense, to comply with all Environmental Requirements.

(2) Without limiting the generality of any provision of the Lease, in the event that any Environmental Requirement sets forth more than one compliance standard with respect to levels or levels of Hazardous Substances that can remain without remediation or clean-up of thereof, the Lessee agrees that the standard(s) or criteria to be applied in connection with any obligation that it may have under the Lease with respect to Hazardous Substances shall be that standard which does not require, permit or allow, whether at the present time or in the future, the imposition of any restriction of any nature whatsoever, including without limitation any engineering or institutional controls, upon the transfer of the premises or the Facility or the use or occupancy of the premises or any other portion of the Facility or upon any operations or activities conducted or to be conducted on the premises or the Facility without the prior written permission of the Port Authority.



(g) Without limiting the generality of any other term or provision of the Lease, all of the obligations of the Lessee under this Section shall survive the expiration or earlier termination of the letting of the premises.

(h) (1) Upon the execution of Supplement No. 1 to the Lease by the Lessee and delivery thereof to the Port Authority, the Lessee shall cause to be delivered to the Port Authority and caused to be maintained for a period from such delivery throughout the remainder of the term of this Lease and for a further period ending on the last day of the sixth full calendar month to occur after the date on which the Lessee shall have fulfilled all its obligations pursuant to paragraph (b)(2) of this Section (the aforesaid period being hereinafter referred to as the 'Effective Period') as security for the full, faithful and prompt performance of and compliance with, on the part of the Lessee, all of the provisions, terms, covenants and conditions of paragraph (b)(2) of this Section 46 on its part to be fulfilled, kept, performed or observed (hereinafter collectively referred to as the 'Secured Environmental Obligations') a letter of credit or letters of credit in the amount of One Million Nine Hundred Thousand Dollars and No Cents (\$1,900,000.00) meeting all the requirements set forth in subparagraph (2) below.

(2) Each letter of credit delivered pursuant to this paragraph (h) (hereinafter singularly referred to as a "Letter of Credit" and in the plural referred to as "Letters of Credit") shall be clean, irrevocable and issued to and in favor of the Port Authority by a banking institution acceptable to the Port Authority and having an office in the Port of New York District and shall be payable in the Port of New York District. The form and terms of each Letter of Credit, as well as the institution issuing it, shall be subject to the prior and continuing approval of the Port Authority. Each Letter of Credit shall provide that it shall continue until the last day of the Effective Period. Such continuance may be by provision for automatic renewal or by delivery to the Port Authority of a substitute letter of credit satisfactory to the Port Authority and meeting all the requirements set forth in this subparagraph (2) in an amount equal to the amount of the Letter of Credit it is replacing. If requested by the Port Authority, and at the cost and expense of the Port Authority, any letter of credit delivered pursuant to this paragraph (h) shall be accompanied by a letter expressing the opinion of counsel for the banking institution issuing the letter of credit that the issuance of said clean, irrevocable letter of credit is an appropriate and valid exercise by the banking institution of the corporate power conferred upon it by law.

(3) Upon notice of cancellation of a Letter of

Credit or upon notice that a Letter of Credit will not be extended the Lessee agrees that unless, by a date sixty (60) days prior to the effective date of such cancellation or expiration, such Letter of Credit is replaced by another letter of credit satisfactory to the Port Authority and meeting all the requirements of paragraph (h)(2) above in the amount of the Letter of Credit that is being replaced, the Port Authority may draw down the full amount thereof and thereafter the Port Authority will hold the same as security under this paragraph (h).

(4) In addition to any and all other remedies available to it, the Port Authority shall have the right, at its option at any time and from time to time, with or without notice, to draw upon each Letter of Credit or any part thereof in whole or partial satisfaction of any of its claims or demands against the Lessee for the Secured Environmental Obligations. There shall be no obligation on the Port Authority to exercise such right and neither the existence of such right nor the holding of one or more Letters of Credit shall cure any default or breach of the Secured Environmental Obligations.

(5) Each drawing made by the Port Authority pursuant to this paragraph (h) shall be accompanied by a statement to the issuer of the Letter of Credit that the amount of the drawing is due to the Port Authority pursuant to the obligations of the Lessee under Section 46(b)(2) or Section 46(h) of this Lease.

(6) If at any time any bank shall fail to make any payment to the Port Authority in accordance with any Letter of Credit, the Lessee shall cause to be delivered to the Port Authority on demand another letter of credit satisfactory to the Port Authority meeting all the requirements set forth in subparagraph (2) above in an amount equal to the amount of the said Letter of Credit.

(7) Failure to provide or maintain a Letter of Credit or Letter of Credits in accordance with the terms and provisions of this paragraph (h) at any time during the Effective Period valid and available to the Port Authority and any failure of any banking institution issuing a Letter of Credit to make one or more payments as provided in such Letter of Credit, shall be and be deemed to be a breach of the Lease.

(8) No action by the Port Authority pursuant to the terms of any Letter of Credit, or receipt by the Port Authority of funds from any bank issuing any Letter of Credit, shall be or be deemed to be a waiver of any breach or default by the Lessee of the Secured Environmental Obligations and all remedies under the Lease or otherwise consequent upon such breach or default shall not be

affected by the existence of or recourse to any such Letter of Credit.

(9) The provisions of this paragraph (h) (herein the 'Security Provisions') shall survive the expiration or earlier termination of this Lease and upon such event the Security Provisions shall continue in full force and effect and no part of such security shall then or thereafter be returned to the Lessee until the day after the Effective Period and upon written request of the Lessee, the Port Authority will return the said security in the possession of the Port Authority less the amount of all drawings that have been made by the Port Authority pursuant to this paragraph (h) which have been applied to the Secured Environmental Obligations.

(10) For purposes of this paragraph (h), the Lessee hereby certifies that its I.R.S. Employee Identification No. is 22-1449923.

(i) The terms and conditions of this Section 46 of the Lease shall not be used to construe or imply any meaning or interpretation of the terms and conditions of the Lease with respect to the temporary premises, including without limitation, the Continuous Permanent Premises prior to it becoming a part of the permanent premises or the terms and conditions of any other past, present or future agreement between the Lessee and the Port Authority.

(j) The Lessee shall be entitled to an abatement of rental for Area X as provided for in Section 36 of this Agreement during the performance of Initial Cleanup Work.

16. The following new Sections 49, 50 and 51 shall be deemed to have been added immediately after Section 48 of the Lease to read as follows:

"Section 49. No Waiver

No failure by the Port Authority to insist upon the strict performance of any agreement, term, covenant or condition of the Lease or to exercise any right or remedy consequent upon a breach or default thereof, and no extension, supplement or amendment of the Lease during or after a breach thereof, unless expressly stated to be a waiver, and no acceptance by the Port Authority of rentals, fees, charges or other payments in whole or in part after or during the continuance of any such breach or default, shall constitute a waiver of any such breach or default of such agreement, term, covenant or

condition. No agreement, term, covenant or condition of the Lease to be performed or complied with by the Lessee, and no breach or default thereof, shall be waived, altered or modified except by a written instrument executed by the Port Authority. No waiver by the Port Authority of any default or breach on the part of the Lessee in performance of any of agreement, term, covenant or condition of this Lease shall affect or alter the Lease, but each and every agreement, term, covenant and condition thereof shall continue in full force and effect with respect to any other then existing or subsequent breach or default thereof."

"Section 50. Repaving Work

(a) (i) In the event the Lessee has performed some or all of the Lessee's construction work (as defined in Section 5 of the Lease) in Area X and Initial Cleanup Work is required and a result thereof any pavement in Area X constituting all or a portion of the Lessee's construction work, as the case shall be, or any pavement installed by the Lessee in replacement of pavement which was part of the Lessee's construction work is damaged or removed from Area X, the Lessee shall repair all such damaged pavement to the condition required by the Lease and shall replace all such pavement which is removed with pavement installed in accordance with the plans and specifications for such pavement that was removed unless the Port Authority shall consent to pavement having plans specifications different from the plans and specifications of the pavement that was removed (the work to so repair and/or so replace such pavement is hereinafter called the 'Repaving Work'.

(ii) The Repaving Work performed by the Lessee to replace and repair Reimbursable Pavement (as defined in Section 46(c)(1) of the Lease) is hereinafter called the 'Reimbursable Repaving Work'. The Reimbursable Repaving Work shall be paid for by the Port Authority to the extent and as provided for in paragraphs (m), (n) and (o) of this Section.

(iii) The parties recognize that one or more of the contracts to be entered into by the Lessee for Repaving Work may cover both Reimbursable Repaving Work and Repaving Work for which the Lessee shall not be entitled to reimbursement hereunder because the pavement being repaired or replaced is not Reimbursable Pavement (which Repaving Work is hereinafter called the "Non-reimbursable Repaving Work"). The Lessee shall, at all times maintain, and each certificate submitted to the Port Authority pursuant this Section 50 shall set forth

a proper breakdown and allocation of costs and payments as between the Non-reimbursable Repaving Work and the Reimbursable Repaving Work, and the Lessee shall ensure that each applicable contract provides for such breakdown and allocation. In submitting the statements and certificates required of the Lessee pursuant to this Section 50, the Lessee shall in such event specifically and separately state the amounts covered by said contracts which are for Non-reimbursable Repaving Work. Moreover, the Lessee shall specifically and separately set forth therein the Cost of the Reimbursable Repaving Work (as defined in paragraph (m) below).

(b) With respect to the Repaving Work the Lessee shall be the insurer of the Port Authority, and its Commissioners, officers, agents and employees against the following distinct and several risks, whether they arise from acts or omissions of the Lessee, any contractors of the Lessee, the Port Authority, third persons, or from acts of God or the public enemy, or otherwise, excepting only risks which result solely from affirmative wilful acts done by the Port Authority subsequent to commencement of the Repaving Work:

(i) The risk of loss or damage to all such construction prior to the completion thereof. In the event of such loss or damage, the Lessee shall forthwith repair, replace and make good the Repaving Work without cost to the Port Authority;

(ii) The risk of death, injury or damage, direct or consequential, to the Port Authority, and its Commissioners, officers, agents and employees, and to its or their property, arising out of or in connection with the performance of the Repaving Work. The Lessee shall indemnify the Port Authority, and its Commissioners, officers, agents and employees, for all such injuries and damages, and for all loss suffered by reason thereof;

(iii) The risk of claims and demands, just or unjust, by third persons against the Port Authority, and its Commissioners, officers, agents and employees, arising or alleged to arise out of the performance of the Repaving Work. The Lessee shall indemnify the Port Authority, and its Commissioners, officers, agents and employees, against and from all such claims and demands, and for all loss and expense incurred by it and by them in the defense, settlement or satisfaction thereof including without limitation thereto, claims and demands

for death, for personal injury or for property damage, direct or consequential.

(c) Prior to the commencement of any of the Repaving Work, the Lessee shall submit to the Port Authority for its approval a Construction Application in the form supplied by the Port Authority, and containing such terms and conditions as the Port Authority may include, setting forth in detail by appropriate plans and specifications the work the Lessee proposes to perform, separately identifying the Non-reimbursable Repaving Work and the Reimbursable Repaving Work and the manner of and time periods for performing the Repaving Work, including without limitation a schedule listing each contract proposed to be entered into for the performance of the Repaving Work and the estimated cost of the Non-Reimbursable Repaving Work and the estimated cost of the Reimbursable Repaving Work to be performed under each such contract. If the Lessee wishes to install on Area X replacement paving having plans and specifications different from that paving which was removed (such Repaving Work is hereinafter called 'Alternative Repaving Work'), it shall make such request in the Construction Application submitted by it to the Port Authority stating the reasons for such request and providing the Port Authority with estimates from an independent professional engineer licensed to practice in the State of New Jersey of the cost to perform the Alternative Repaving Work as requested by the Lessee and of the cost to perform the Repaving Work by installing paving identical to the pavement that is being replaced (such Repaving Work is hereinafter called 'Replacement Repaving Work'). In the event that repair as well as replacement work is required, all estimates required hereunder shall include the cost of both replacement and repair work. If the Repaving Work approved by the Port Authority is Replacement Repaving Work, the Port Authority shall retain an independent professional engineer licensed to practice in the State of New Jersey to provide an estimate of the Cost of the Reimbursable Repaving Work as defined in paragraph (m) below based upon the Lessee's plans and specifications for the Reimbursable Repaving Work as approved by the Port Authority (which estimate is hereinafter referred to as the "Reimbursable Replacement Repaving Estimate") and in such instance the Reimbursable Replacement Repaving Estimate shall be the Approved Repaving Estimate used pursuant to the terms of paragraph (m) below to calculate the Repaving Work Reimbursement Amount. If the Paving Work approved by the Port Authority is Alternative Repaving Work, the Port Authority shall retain an independent professional engineer licensed to practice in the State of New Jersey to provide an estimate of the Cost of the Reimbursable Repaving Work based upon the Lessee's plans and specifications for the Reimbursable Repaving Work as approved by the Port Authority (which estimate is hereinafter referred to as the "Reimbursable Alternate Repaving

Estimate") as well as an estimate of the Cost of the Reimbursable Repaving Work based upon Replacement Repaving Work and the lower of the two estimates shall be the Approved Repaving Estimate used pursuant to the terms of paragraph (m) below to calculate the Repaving Work Reimbursement Amount. The data to be supplied by the Lessee shall identify each of the items constituting the Repaving Work, and shall describe in detail the systems, improvements, fixtures and equipment to be installed by the Lessee. The Lessee shall be responsible at its sole expense for retaining all architectural, engineering and other technical consultants and services as may be directed by the Port Authority and for developing, completing and submitting detailed plans and specifications for the Repaving Work. The plans and specifications to be submitted by the Lessee shall be in sufficient detail for a contractor to perform the Repaving Work and shall bear the seal of a qualified architect or professional engineer who shall be responsible for the administration of the Repaving Work in accordance with the Port Authority's requirements. In connection with review by the Port Authority of the Lessee's submissions under this Section, the Lessee shall submit to the Port Authority, at the Port Authority's request, such additional data, detail or information as the Port Authority may find necessary. Following the Port Authority's receipt of the Lessee's Construction Application and complete plans and specifications and the estimates required to be provided by the Lessee above, the Port Authority shall give its written approval or rejection thereof, or shall request such revisions or modifications thereto as the Port Authority may find necessary. The Lessee shall not engage any contractor or permit the use of any subcontractor unless and until each such contractor or subcontractor, and the contract such contractor is operating under, have been approved by the Port Authority. The Lessee shall include in any such contract or subcontract such provisions as are required in accordance with the provisions of this Agreement and the Construction Application approved by the Port Authority. The Lessee shall obtain and maintain or cause each contractor to obtain and maintain in force such insurance coverage as is described in paragraphs (h) through (k) of this Section and such performance bonds as the Port Authority may specify. All of the Repaving Work shall be performed by the Lessee in accordance with the Construction Application and final plans and specifications approved by the Port Authority, shall be subject to inspection by the Port Authority during the progress of the work and after the completion thereof, and the Lessee shall redo or replace at its own expense any work not done in accordance therewith. Upon final completion of all of the Repaving Work the Lessee shall deliver to the Port Authority a certificate to such effect signed by a responsible officer of the Lessee and by the architect or engineer who sealed the Lessee's plans pursuant to the provisions of this paragraph certifying that

all of the Repaving Work has been performed in accordance with the approved plans and specifications and the provisions of this Agreement, and the Lessee shall supply the Port Authority with one (1) set of as-built drawings of the Repaving Work in such form as the Port Authority shall determine. The Lessee shall keep said drawings current during the term of the letting under this Agreement. No changes or modifications to the Repaving Work shall be made without prior Port Authority consent. Following its receipt of the Lessee's certificate, the Port Authority shall inspect the Repaving Work and, unless such certification is not correct, or the Port Authority determines that Area X is unsuitable for occupancy and use by the Lessee, a certificate of final completion shall be delivered to the Lessee by the Port Authority.

(d) The Lessee shall not commence any portion of the Repaving Work until the Construction Application and plans and specifications covering such work, referred to in paragraph (c) of this Section, have been finally approved by the Port Authority.

(e) Without limiting the generality of any of the provisions of this Agreement, the Repaving Work shall be performed in such a manner that there will be at all times during construction a minimum of air pollution, water pollution or any other type of pollution, and a minimum of noise emanating from, arising out of, or resulting from construction. Subject to the provisions of this Agreement, the Lessee shall construct such reasonable structures, fences, equipment, devices and other facilities as may be necessary or appropriate to accomplish the objectives set forth in this paragraph, and, without limiting the generality of the foregoing, such construction shall be subject to the Port Authority's review and approval in accordance with the provisions of this Section.

(f) Without limiting the generality of paragraph (c) of this Section the Lessee shall be solely responsible for the plans and specifications used by it and for the adequacy or sufficiency of such plans, specifications and all the improvements, fixtures, and equipment depicted thereon or covered thereby, regardless of the consent thereto or approval thereof by the Port Authority or the incorporation therein of any Port Authority requirements or recommendations. The Port Authority shall have no obligation or liability in connection with the performance of any of the Repaving Work or for the contracts for the performance thereof entered into by the Lessee. Any warranties extended or available to the Lessee in connection with the aforesaid work shall be for the benefit of the Port Authority as well as the Lessee. The Lessee shall conduct no public operations in Area X with respect to any improvements, fixtures or equipment constituting the Repaving Work until the Port Authority shall have notified the Lessee in writing that the



Repaving Work has been completed or substantially completed to its satisfaction. In the event of any inconsistency between the provisions of this Agreement and those of the Construction Application referred to in paragraph (c) of this Section the provisions of this Agreement shall control.

(g) The Lessee shall pay all claims lawfully made against it by its contractors, subcontractors, materialmen and workmen, and all claims lawfully made against it by other third persons arising out of or in connection with or because of the performance of the Repaving Work, and shall cause its contractors and subcontractors to pay all such claims lawfully made against them. Nothing herein contained shall be deemed to constitute consent to the creation of any lien or claim against the permanent premises or any part thereof, nor to prevent the Lessee from contesting claims in good faith.

(h) In addition to all policies of insurance otherwise required by this Agreement, the Lessee shall procure and maintain or cause to be procured and maintained in effect during the performance of the Repaving Work the following:

(i) Comprehensive General Liability Insurance including but not limited to coverage for Products Liability-Completed Operations and for Broad Form Property Damage and Independent Contractor coverage, with a contractual liability endorsement covering the obligations assumed by the Lessee under paragraph (b) of this Section, which coverage shall not exclude claims arising out of or in connection with work performed within fifty feet of railroad property, and which are customarily insured under such a policy, with a minimum combined single limit coverage for bodily injury and property damage of \$5 million or such other limit as the Port Authority shall require. Said insurance shall also include coverage for explosion, collapse and underground property damage hazards.

(ii) Protection and Indemnity Insurance, if the Repaving Work involves the ownership, maintenance, operation, use, loading or unloading of watercraft, with a minimum combined single limit coverage for bodily injury and property damage of \$5 million or such other limit as the Port authority shall require.

(iii) Comprehensive Automobile Liability Insurance covering all owned, non-owned or hired vehicles used in connection with the Repaving Work with a minimum combined single limit coverage for bodily injury and property damage of \$2 million or in such other limit as the Port Authority shall require.

(iv) Workers' Compensation and Employers' Liability Insurance in accordance with the requirements of law and in limits of not less than \$1 million per accident or in such other limit as the Port Authority shall require. The Workers' Compensation Policy shall be specially endorsed to include coverage afforded by the U.S. Longshoremen's and Harbor Workers' Compensation Act and Coverage B - "Jones Act", maritime (including coverage for Masters or Members of the Crew of Vessels).

(i) In addition to the insurance required pursuant to the provisions of paragraph (h) of this Section, the Lessee shall procure or cause to be procured prior to the commencement of any Repaving Work Builder's Risk Insurance (All Risk) covering loss or damage (including any loss or damage resulting from flood or earthquake) to any structures, improvements, fixtures and equipment and furnishing and materials on the permanent premises during said construction, whether or not attached to the land, in an amount equal to the full replacement cost. Such insurance shall name the Port Authority as an insured and such policy shall provide that the loss shall be adjusted with the Port Authority, and that the proceeds thereof shall be paid to the Port Authority and shall be made available to the Lessee for and applied strictly and solely to the payment of the cost of the repair, replacement, rebuilding or other performance of the Repaving Work.

(j) With the exception of the Workers' Compensation and Employers' Liability Insurance policy each policy of insurance described in paragraph (h) of this Section shall include the Port Authority as an additional insured, and no such policy shall contain any care, custody or control exclusions, or any exclusion for bodily injury to or sickness, disease or death of any employee of the Lessee or of any of its contractors which would conflict with or in any way impair the coverages resulting from the Port Authority's status as an additional insured or the coverage under the contractual liability endorsement described in subdivision (i) of paragraph (h) of this Section. Such insurance shall also contain an endorsement providing that the protection afforded the Lessee thereunder with respect to any claim or action against the Lessee by a third party shall pertain and apply with like effect with respect to any claim or action against the Lessee by the Port Authority and against the Port Authority by the Lessee, but said endorsement shall not limit, vary, change or affect the protections afforded the Port Authority as an additional insured. Such insurance shall contain a provision that the insurer shall not, without obtaining express advance permission from the General Counsel of the Port Authority, raise any defense involving in any way the jurisdiction of the tribunal over the person of the Port

Authority, the immunity of the Port Authority, its Commissioners, officers, agents or employees, the governmental nature of the Port Authority or the provisions of any statutes respecting suits against the Port Authority.

(k) Unless otherwise set forth herein, each policy of insurance described in paragraphs (h) and (i) of this Section shall be subject to the applicable provisions of Section 11 of this Agreement. In addition, the Port Authority may require additions, deletions, amendments or modifications to the insurance described in paragraphs (h) and (i) of this Section, or may require such other and additional insurance in connection with the Repaving Work, in such reasonable amounts, against such other insurable hazards, as the Port Authority may deem required.

(l) In the performance of the Repaving Work the Lessee shall not permit any situation or condition to continue that may cause or be conducive to any labor troubles at the Facility which interferes with the progress of other construction work at the Facility. The determinations of the Port Authority shall be conclusive on the Lessee and, upon notice from the Port Authority, the Lessee shall or shall cause its contractor to immediately rectify any condition specified in the notice. In the event of failure by the Lessee or any of its contractors to immediately comply with the requirements of this paragraph (whether or not such failure is due to the Lessee's fault) the Port Authority by notice shall have the right to suspend the Port Authority's permission to the Lessee to proceed with any portion of the Repaving Work being performed by or on behalf of the Lessee, and the Lessee shall thereupon immediately cease the same. When labor troubles shall be so settled that such interference or the danger thereof no longer exists, the Port Authority by notice to the Lessee shall reinstate the permission to the Lessee to perform the Repaving Work on all the same terms and conditions as before the suspension. "Labor troubles" shall mean and include strikes, boycotts, picketing, work-stoppages, slowdowns, complaints, disputes, controversies or any other type of labor trouble, regardless of the employer of the person involved or their employment status, if any.

(m) Upon performance by the Lessee of the Repaving Work in accordance with the provisions of this Section, the Port Authority will pay to the Lessee a sum (which sum is hereinafter referred to as the 'Repaving Work Reimbursement Amount') equal to the lesser of: (1) the Approved Repaving Estimate or (2) the Cost of the Reimbursable Repaving Work, as hereinafter defined. To the extent permitted by sound accounting practice, the sum of the following items of cost incurred by the Lessee in performing the Reimbursable Repaving Work shall constitute the Cost of the Reimbursable Repaving Work, which is hereinafter sometimes referred

to as just the 'Cost', for the purposes of this Agreement:

- (1) The Lessee's payments to contractors;
- (2) The Lessee's payments for supplies and materials;
- (3) The Lessee's payments to persons, firms or corporations other than construction contractors or suppliers of materials, for services rendered or rights granted in connection with construction, not including services of the types mentioned in items (4), (5) and (6) of this paragraph;
- (4) The Lessee's payments of premiums for performance bonds and for the insurance the Lessee is required to maintain in effect in accordance with the provisions of paragraphs (h) through (k) of this Section during the period of construction only;
- (5) The Lessee's payments for engineering services in connection with the Reimbursable Repaving Work, and during the period of the construction only;
- (6) The Lessee's payments for architectural, planning and design services in connection with the Reimbursable Repaving Work;
- (7) The sum of the costs approved under items (4), (5) and (6) of this paragraph shall not exceed 20% of the sum of the costs approved under items (1), (2) and (3) of this paragraph; if in fact there is any such excess, such excess shall not be a part of the Cost of the Reimbursable Repaving Work for the purposes of this Section.

No payment or payments on account of administrative or other overhead costs and no payment to employees of the Lessee shall be included in the Cost of the Reimbursable Repaving Work whether or not allocated to the cost of the work by the Lessee's own accounting practices. No payment to a firm or corporation wholly or partially owned by or in common ownership with the Lessee shall be included in the Cost of the Reimbursable Repaving Work.

(n) On or about the tenth day of the first calendar month following the commencement of the Reimbursable Repaving Work the Lessee shall certify to the Port Authority by written certification subscribed by a responsible officer of the Lessee: (i) the amount of the Reimbursable Repaving Work performed by the Lessee in the preceding month, the Cost of the Reimbursable Repaving Work of the Reimbursable Repaving Work described in the

certificate, the amount of such Cost incurred by the Lessee during such month, and the amount paid by the Lessee on account of such Cost, if any; (ii) that except for the amount, if any, stated in such certificate to be due for services and materials, there is no outstanding indebtedness known to the persons signing such certificate, after due inquiry, then due on account of the purchase of any equipment or fixtures described in the certificate or for labor, wages, materials, supplies or services in connection with any work described therein which, if unpaid, might become the basis of a vendor's, mechanic's, laborer's or materialmen statutory or similar lien or alleged lien upon the Repaving Work or upon the permanent premises or any part thereof, or upon the Lessee's leasehold interest therein, nor are any of the equipment, or fixtures described in such certificate secured by any liens, mortgages, security interests or other encumbrances. Nothing contained herein shall be deemed or construed as a submission by the Port Authority to the application to itself of any such lien; and (iii) that the Reimbursable Repaving Work for which the amount set forth in the certificate is due has been performed in accordance with the Lessee's approved plans and specifications for the Reimbursable Repaving Work and the provisions of this Agreement. Such certificate shall also contain a certification by the Lessee and by the architect or engineer who sealed the Lessee's plans pursuant to the provisions of paragraph (c) of this Section certifying that all of the Reimbursable Repaving Work described in the certificate has been performed in accordance with the final plans and specifications for the Reimbursable Repaving Work approved by the Port Authority and in accordance with the provisions of this Agreement. Following its receipt of the Lessee's certificate, the Port Authority shall remit to the Lessee an amount equal to the Cost of the Reimbursable Repaving Work incurred by the Lessee for the portion of the Reimbursable Repaving Work performed by the Lessee in the preceding month as shown in the certificate less ten percent (10%) thereof and also less the amount of any claims made against the Port Authority by subcontractors, materialmen or workmen, if any, in connection with any of the Reimbursable Repaving Work described in the certificate. On or about the tenth day of each month thereafter during the period of the performance of the Reimbursable Repaving Work the Lessee shall deliver a similar certificate to the Port Authority signed by a responsible officer of the Lessee which certificate shall certify the amount of the Reimbursable Repaving Work performed by the Lessee in the preceding month, the Cost of the Reimbursable Repaving Work of the Reimbursable Repaving Work described in the certificate performed by the Lessee in the preceding month, the amount of such Cost incurred by the Lessee during such month, the amount paid by the Lessee on account of such Cost, the cumulative amount of such Cost incurred by the Lessee on account of the Reimbursable Repaving Work described in the certificate from the

date of the commencement of the Reimbursable Repaving Work, and the cumulative amount of all payments made on account of such cost from the date of the commencement of the Reimbursable Repaving Work, and such certificate shall also contain the statements set forth in subdivisions (ii) and (iii) of this paragraph (n) both with respect to the Reimbursable Repaving Work described in the certificate and all Reimbursable Repaving Work previously performed by the Lessee. Each such certificate shall also contain a certification by the Lessee and by the architect or engineer who sealed the Lessee's plans pursuant to the provisions of paragraph (c) of this Section certifying that all of the work described in the certificate has been performed in accordance with the final plans and specifications for the Reimbursable Repaving Work approved by the Port Authority and in accordance with the provisions of this Agreement. Following its receipt of such certificate the Port Authority shall remit to the Lessee an amount equal to the Cost of the Reimbursable Repaving Work incurred by the Lessee for the portion of the Reimbursable Repaving Work performed by the Lessee in the preceding month as shown in the certificate less ten percent (10%) thereof and less the amount of claims, if any, made against the Port Authority by subcontractors, materialmen or workmen on account of any of the work described in the certificate. Upon final completion of all of the Reimbursable Repaving Work to be performed by the Lessee as set forth in the Lessee's approved plans and specifications for the Reimbursable Repaving Work, the Lessee shall submit to the Port Authority a final certification signed by a responsible officer thereof that all the Reimbursable Repaving Work has been completed, which certificate shall certify separately the final Cost of the Reimbursable Repaving Work for all the Reimbursable Repaving Work performed by the Lessee, the cumulative payments made by the Lessee on account of such Costs, and shall also certify the items set forth in subdivisions (ii) and (iii) of this paragraph (n) with respect to all of the Reimbursable Repaving Work. In addition, the architect or engineer who sealed the Lessee's plans and specifications for the Reimbursable Repaving Work pursuant to the provisions of paragraph (c) of this Section shall certify that all of the Reimbursable Repaving Work has been performed in accordance with the final plans and specifications for the Reimbursable Repaving Work approved by the Port Authority and in accordance with the provisions of this Agreement. After examination and approval of such certificate, and such supporting documents and records as the Port Authority shall deem necessary to substantiate the certificate, the Port Authority shall finally inspect Area X and the Reimbursable Repaving Work and after such inspection the Port Authority shall notify the Lessee if all of the Reimbursable Repaving Work has been performed in accordance with the approved plans and specifications therefor and the provisions of this Agreement. If all of the Reimbursable Repaving Work has been completed in accordance with the approved plans and

specifications therefor and the provisions of this Agreement, the Port Authority will pay to the Lessee on account of the Cost of the Reimbursable Repaving Work the difference between the sum obtained by adding together all prior payments made by the Port Authority to the Lessee on account of the Cost of the Reimbursable Repaving Work and the Repaving Work Reimbursement Amount. If the sum of all of the previous payments made by the Port Authority to the Lessee on account of the Cost of the Reimbursable Repaving Work exceeds the Repaving Work Reimbursement Amount, the Lessee shall pay to the Port Authority the amount of such excess on demand. No payment made by the Port Authority to the Lessee pursuant to the provisions of this paragraph, including, without limitation, any payment made to the Lessee following the Port Authority's receipt of the Lessee's final certification of cost, shall be deemed final until the Cost of the Reimbursable Repaving Work has been finally determined by the Port Authority. Any payment made to the Lessee following the Port Authority's receipt of the Lessee's final certification of cost shall not be deemed a final determination of the Cost of the Reimbursable Repaving Work. Such final determination shall occur only after the Port Authority has examined and approved the Lessee's final certificate setting forth the Cost of the Reimbursable Repaving Work and such records and other documentation of the Lessee as the Port Authority shall deem necessary to substantiate such Cost. The Lessee shall permit the Port Authority by its agents, employees and representatives at all reasonable times prior to a final determination of the Cost of the Reimbursable Repaving Work to examine and audit the records and other documentation of the Lessee which pertain to and will substantiate such Cost. In no event whatsoever shall the Cost of the Reimbursable Repaving Work as finally determined and computed in accordance with the provisions of paragraph (m) of this Section and in accordance with the provisions of this paragraph include any expenses, outlays or charges whatsoever by or for the account of the Lessee for or in connection with any improvements, equipment or fixtures or the performance of any Reimbursable Repaving Work unless such are actually and completely installed in and or made to Area X nor shall cost include the costs of any equipment, fixtures or improvements which are secured by liens, mortgages, other encumbrances or conditional bills of sale.

(o) The Port Authority's entire obligation under this Agreement to make payments to the Lessee on account of the Cost of the Reimbursable Repaving Work shall be limited in amount to the Repaving Work Reimbursement Amount. No contractor or third party shall or shall be deemed to have acquired any rights against the Port Authority by virtue of the execution of this Agreement and nothing contained herein shall operate or give to any such contractor or third party any claim or right of action against the Port Authority and its Commissioners, officers, agents and

employees.

(p) Without limiting any of the terms and conditions hereof, the Lessee understands and agrees that it shall put into effect prior to the commencement of the Repaving Work an affirmative action program and Minority Business Enterprise (MBE) program and Women-owned Business Enterprise (WBE) program in accordance with the provisions of Schedule E, attached to the Lease, or such substitute Schedule E then in effect as shall be delivered to the Lessee by the Port Authority. The provisions of Schedule E shall be applicable to the Lessee's contractor or contractors and subcontractors at any tier of construction as well as to the Lessee, and the Lessee agrees to include the provisions of Schedule E in all of its construction contracts so as to make the provisions and undertakings set forth in Schedule E the direct obligation of the construction contractor or contractors and subcontractors at any tier of construction. The Lessee agrees to and shall require its contractors and subcontractors to furnish to the Port Authority such data, including but not limited to compliance reports, relating to the operation and implementation of the affirmative action, MBE, and WBE programs of the Lessee and its contractor, contractors, and subcontractors at any tier of construction called for under the provisions of this paragraph and Schedule E as the Port Authority may request at any time and from time to time and the Lessee agrees to and shall also require that its contractors and subcontractors at any tier of construction make and put into effect such modifications and additions thereto as may be directed by the Port Authority pursuant to the provisions of this paragraph and Schedule E to effectuate the goals of affirmative action, MBE, and WBE programs. The obligations imposed on the Lessee under this paragraph and Schedule E shall not be construed to impose any greater requirements on the Lessee than those which may be imposed on the Lessee under applicable law.

(q) In addition to and without limiting any terms and provisions hereof, the Lessee shall provide in all of its contracts and subcontracts covering the Repaving Work, or any portion thereof, that:

(1) The contractor shall not discriminate against employees or applicants for employment because of race, creed, color, national origin, sex, age, disability or marital status, and shall undertake or continue existing programs of affirmative action to ensure that minority group persons are afforded equal employment opportunity without discrimination. Such programs shall include, but not be limited to, recruitment, employment, job assignment, promotion, upgrading, demotion, transfer, layoff, termination, rates of pay or other forms of compensation, and selections for training or retraining, including apprenticeships



and on-the-job training;

(2) At the request of either the Port Authority or the Lessee, the contractor shall request such employment agency, labor union, or authorized representative of workers with which it has a collective bargaining or other agreement or understanding and which is involved in the performance of the contract with the Lessee to furnish a written statement that such employment agency, labor union or representative shall not discriminate because of race, creed, color, national origin, sex, age, disability or marital status and that such union or representative will cooperate in the implementation of the contractor's obligations hereunder;

(3) The contractor will state, in all solicitations or advertisements for employees placed by or on behalf of the contractor in the performance of the contract, that all qualified applicants will be afforded equal employment opportunity without discrimination because of race, creed, color, national origin, sex, age, disability or marital status;

(4) The contractor will include the provisions of subdivisions (1) through (3) of this paragraph in every subcontract or purchase order in such a manner that such provisions will be binding upon each subcontractor or vendor as to its work in connection with the contract;

(5) "Contractor" as used in paragraph (p) and in this paragraph shall include each contractor and subcontractor at any tier of construction."

"Section 51. Extended Temporary Premises

(a) Effective at 12:01 o'clock A.M. on March 1, 1998, in addition to the premises heretofore let to the Lessee under the Lease, the letting of which shall continue in full force and effect, the Port Authority hereby lets to the Lessee and the Lessee hires and takes from the Port Authority upon all the terms, provisions, covenants and conditions of the Lease, at Port Newark in the City of Newark, in the County of Essex and State of New Jersey, the open area shown in stipple on the sketch attached hereto, hereby made a part hereof, and marked 'Exhibit A-4', together with the buildings, structures, fixtures, improvements, and other property, if any, of the Port Authority located or to be located or constructed therein or thereon (all of the foregoing being herein collectively called 'Area A'), all of Area A to be and become a part of the temporary premises let under the Lease subject to all the terms, provisions, covenants and conditions of the Lease.

(b) That portion of the temporary premises shown in stipple on the sketch attached hereto, hereby made a part hereof and marked 'Exhibit A-5' is herein called 'Area B', and Area A and Area B are herein called the 'Extended Temporary Premises'. Unless sooner terminated, the term of the letting of the Extended Temporary Premises shall expire at 11:59 o'clock P.M. on the earliest of (i) February 28, 2001, (ii) the date of the 'No Further Action Letter' or 'Certification of Completion' issued by the DEP upon completion of clean-up of Area X by the Lessee required by the DEP due to the failure to have implemented an Initial DER on Area X, or (iii) upon implementation of an Initial DER on Area X.

(c) The Port Authority and the Lessee shall each have the right to terminate the letting of the Extended Temporary Premises, without cause, at any time, on thirty (30) days' prior written notice to the other; provided, that, with respect to the Lessee's exercise of its termination right it shall not be under notice of default as to which any applicable period to cure has passed, or under notice of termination, from the Port Authority, either on the date of its giving of such notice to the Port Authority or the effective date thereof. Termination pursuant to the provisions of this paragraph shall have the same effect as if the effective date of termination stated in the notice were the date of expiration of the term of the letting of the Extended Temporary Premises under this Agreement.

(d) The Lessee may use the Extended Temporary Premises for the purpose set forth in paragraph (a) of Section 4 of the Lease and for no other purpose whatsoever.

(e) (i) The Lessee shall pay to the Port Authority the following basic rentals for Area A:

(aa) For the period from March 1, 1998 through February 28, 1999, both dates inclusive, at the annual rate of Seventy Thousand Two Hundred Dollars and No Cents (\$70,200.00) payable in advance in equal monthly installments of Five Thousand Eight Hundred Fifty Dollars and No Cents (\$5,850.00) on March 1, 1998 and on the first day of each calendar month thereafter during such period;

(bb) For the period from March 1, 1999 through February 29, 2000, both dates inclusive, at the annual rate of Seventy-three Thousand Dollars and No Cents (\$73,000.00) payable in advance in equal monthly installments of Six Thousand Eighty-three Dollars and Thirty-three Cents (\$6,083.33) on March 1, 1999 and on the first day of each calendar month thereafter during such period; and

(cc) For the period from March 1, 2000 through February 28, 2001, both dates inclusive, at the annual rate of Seventy-five Thousand Nine Hundred Twenty-eight Dollars and Thirty-two Cents (\$75,928.32) payable in advance in equal monthly installments of Six Thousand Three Hundred Twenty-seven Dollars and Thirty-six Cents (\$6,327.36) on March 1, 2000 and on the first day of each calendar month thereafter during such period.

(ii) The Lessee shall pay to the Port Authority the following basic rentals for Area B:

(aa) For the period from May 16, 1997 through February 28, 1999, both dates inclusive, at the annual rate of Ninety-one Thousand Four Hundred Seventy-six Dollars and No Cents (\$91,476.00) payable in advance in equal monthly installments of Seven Thousand Six Hundred Twenty-three Dollars and No Cents (\$7,623.00) on May 16, 1997 and on the first day of each calendar month thereafter during such period.

(bb) For the period from March 1, 1999 through February 29, 2000, both dates inclusive, at the annual rate of One Hundred Fifty-eight Thousand Five Hundred Fifty-eight Dollars and Forty Cents (\$158,558.40) payable in advance in equal monthly installments of Thirteen Thousand Two Hundred Thirteen Dollars and Twenty Cents (\$13,213.20) on March 1, 1999 and on the first day of each calendar month thereafter during such period; and

(cc) For the period from March 1, 2000 through February 28, 2001, both dates inclusive, at the annual rate of One Hundred Sixty-four Thousand Nine Hundred Dollars and Seventy-four Cents (\$164,900.74) payable in advance in equal monthly installments of Thirteen Thousand Seven Hundred Forty-one Dollars and Seventy-three Cents (\$13,741.73) on March 1, 2000 and on the first day of each calendar month thereafter during such period.

(iii) If any installment of basic rental payable hereunder shall be for less than a full calendar month, then the rental payment for the portion of the month for which such payment is due shall be the monthly installment prorated on a daily basis using the actual number of days in the said month.

(f) The Lessee acknowledges that it has not relied upon any representation or statement of the Port Authority or its Commissioners, officers, employees or agents as to the condition of Area A or the suitability thereof for the operations permitted on Area A by this Agreement. The Port Authority shall deliver Area A in its presently existing 'as is' condition. The Lessee, prior to the execution of Supplement No. 1 to this Lease, has thoroughly examined Area A as existing and has found the same to be suitable

and satisfactory for the operations of the Lessee contemplated and permitted under this Agreement. The Lessee agrees to and shall take Area A in its 'as is' condition and the Port Authority shall have no obligations under this Agreement for finishing work or preparation of any portion of Area A for the Lessee's use. Without limiting any obligation of the Lessee to commence operations under this Agreement at the time and in the manner stated elsewhere in this Agreement, the Lessee agrees that no portion of Area A will be used initially or at any time during the letting which is in a condition unsafe or improper for the conduct of the operations of the Lessee, so that there is possibility of injury or damage to life or property, and the lessee further agrees that before any use it will immediately correct any such unsafe or improper condition."

17. Exhibit Y to the Lease is hereby amended by inserting the phrase, ", any Area X Remediation Work as defined in Section 46 of the Lease and the Repaving Work as defined in Section 50 of the Lease" immediately after the word "Lease" and before the period appearing in the eighth (8th) line of the fifth (5th) paragraph thereof.

18. As hereby amended, all the terms, provisions, covenants and conditions of the Lease shall continue in full force and effect.

19. The Lessee represents and warrants that no broker has been concerned in the negotiation of this Agreement and that there is no broker who is or may be entitled to be paid a commission in connection therewith. The Lessee shall indemnify and save harmless the Port Authority of and from all claims for commission or brokerage made by any and all persons, firms or corporations whatsoever for services in connection with the negotiation or execution of this Agreement.

20. Neither the Commissioners of the Port Authority nor any of them, nor any officer, agent or employee thereof, shall be charged personally by the Lessee with any liability, or held liable to the Lessee under any term or provision of this Agreement, or because of its execution or attempted execution, or because of any breach, or attempted or alleged breach thereof.

21. This Agreement, together with the Lease (to which it is supplementary) constitutes the entire agreement between the Port Authority and the Lessee on the subject matter, and may not be changed, modified, discharged or extended except by instrument in writing duly executed on behalf of both the Port Authority and the Lessee. The Lessee agrees that no representations or warranties shall be binding upon the Port Authority unless expressed in writing in the Lease or in this Agreement.

IN WITNESS WHEREOF, the Port Authority and the Lessee have executed these presents as of the date first above written.

ATTEST:

THE PORT AUTHORITY OF NEW YORK  
AND NEW JERSEY

*[Signature]*  
Secretary

By *Lou C. Barne*  
(Title) Director  
(seal)

ATTEST:

*[Signature]*  
Ass. Secretary

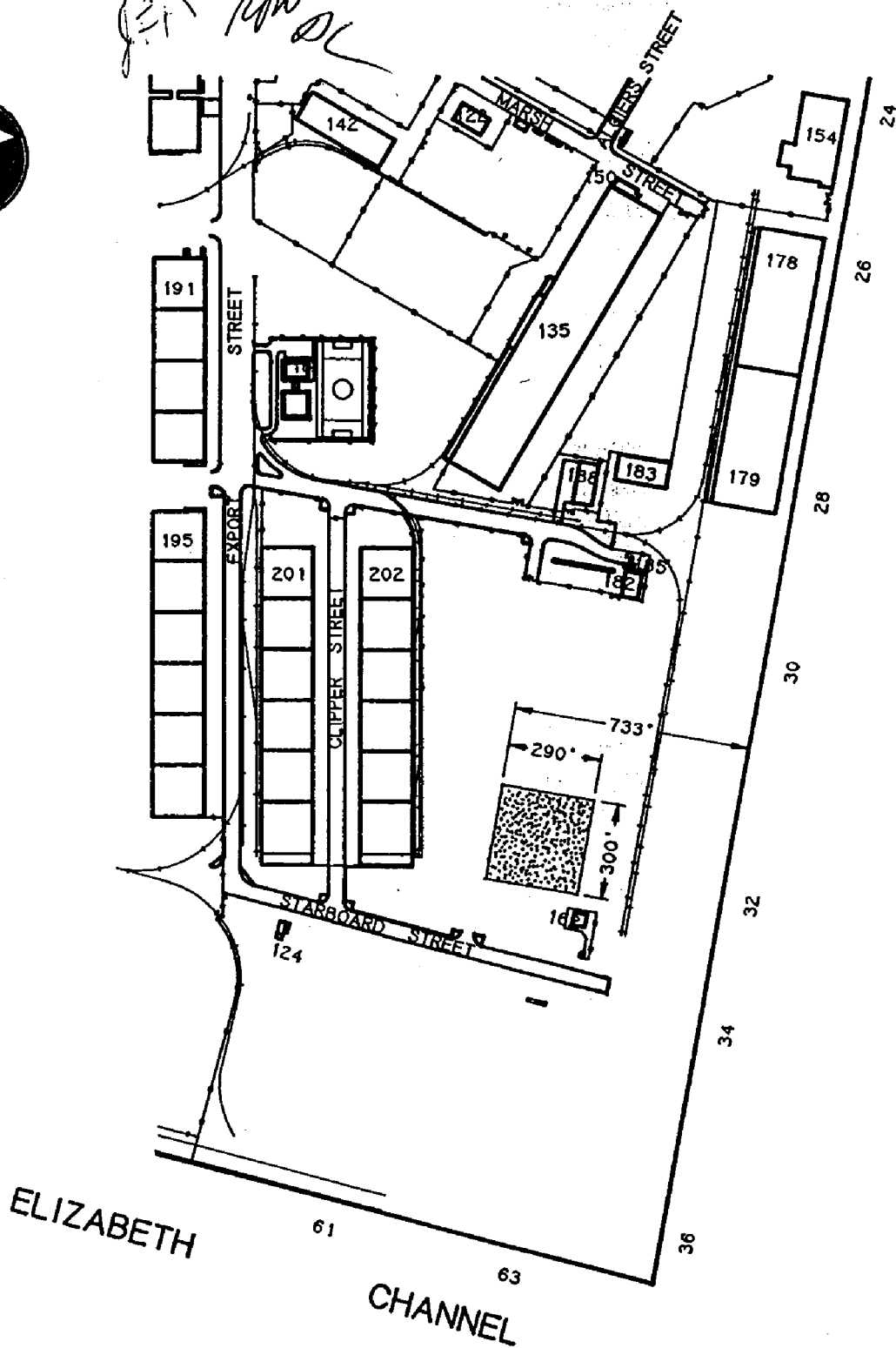
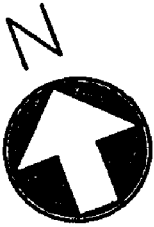
NAPORANO IRON & METAL CO. *[initials]* *[initials]*  
~~COMPANY, INC.~~  
By *Joseph Naporano*  
(Title) President  
(corporate seal)

| APPROVED:                 |                     |
|---------------------------|---------------------|
| FORM<br><i>[initials]</i> | TERMS<br><i>TOL</i> |

NAPORANO IRON & METAL CO. INC.

LPN-195

SUPP. NO. 1



INITIALLED:

FOR THE PORT AUTHORITY

FOR THE LESSEE

EXHIBIT

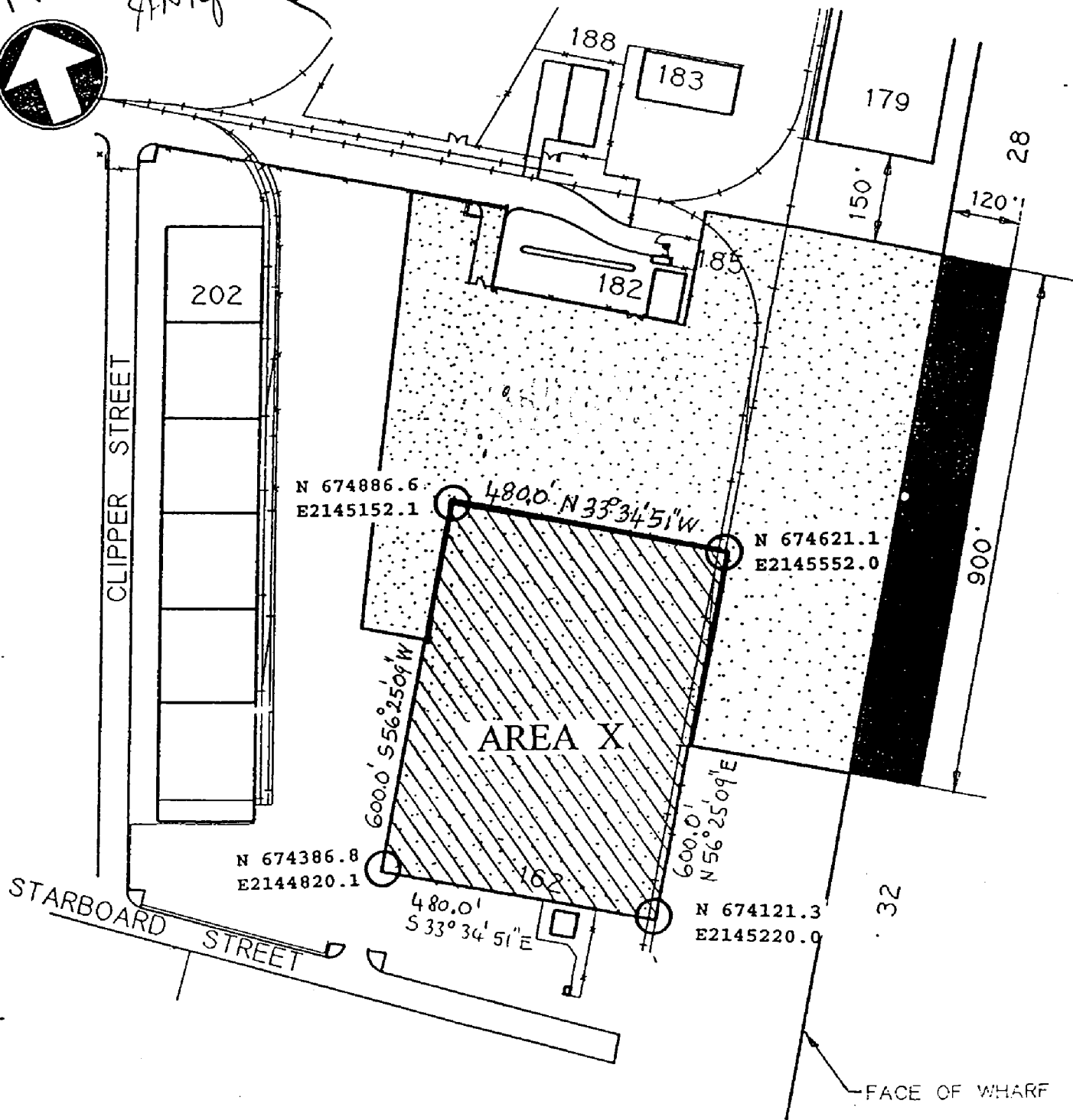
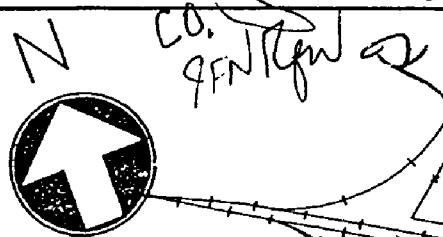
A-3

THE PORT AUTHORITY OF  
NEW YORK & NEW JERSEY

PORT NEWARK

DATE: JAN 1, 1998

LPN-195-0 02-13-98 C.M.



REV. 01-21-98<sup>34</sup>

INITIALLED:

DL  
FOR THE PORT AUTHORITY  
9FNT  
FOR THE LESSEE

EXHIBIT

B

THE PORT AUTHORITY OF  
NEW YORK & NEW JERSEY

PORT NEWARK

DATE: JULY 1, 1997

## EXHIBIT C

### REMEDIATION WORK PERFORMED BY THE PORT AUTHORITY ON AREA X

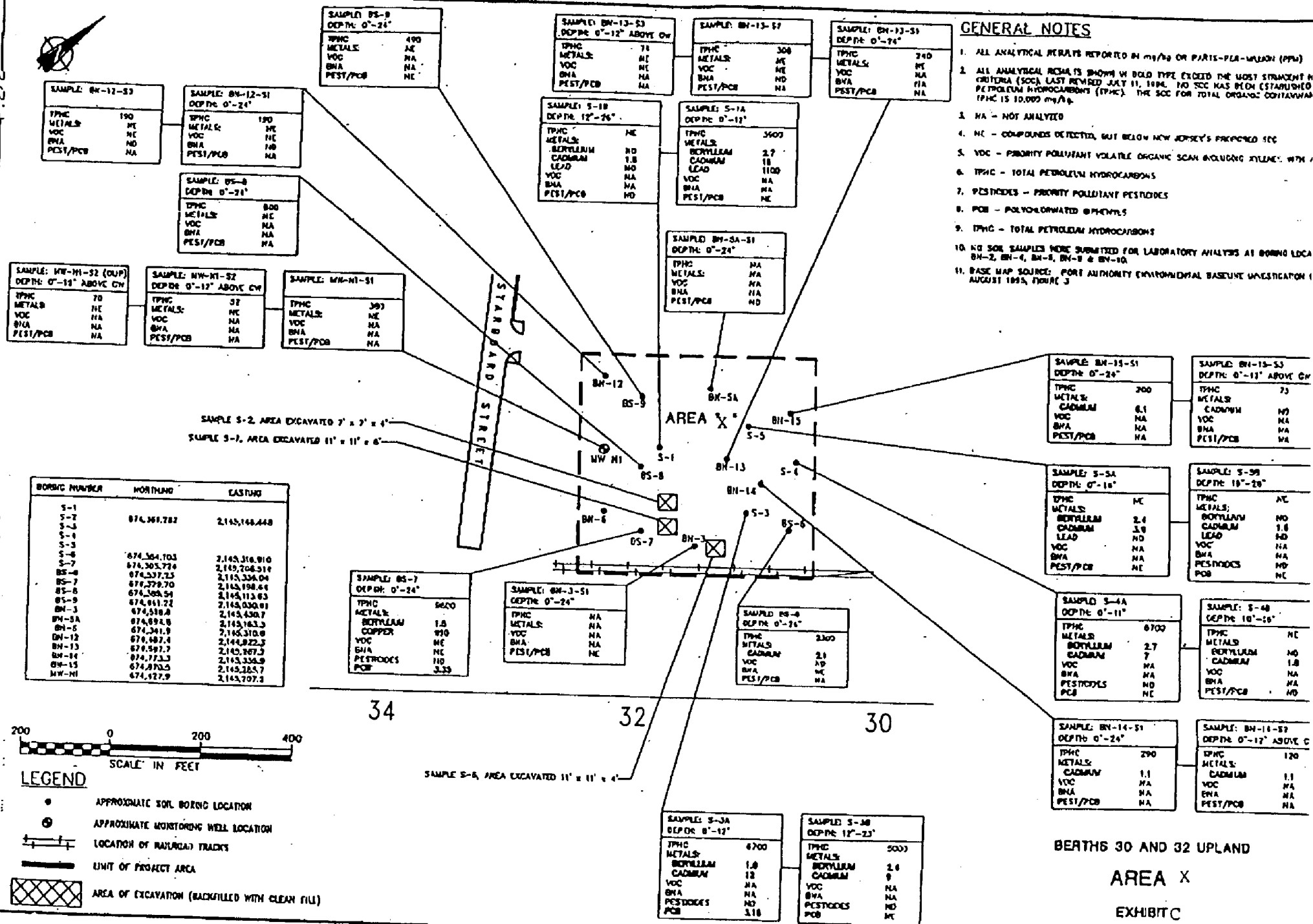
The three locations, S-2, S-6 and S-7 as shown on the drawing bearing the legend Berths 30 and 32 Upland Area X, Exhibit C and attached hereto and hereby made a part hereof were excavated on August 28, 1997 by a backhoe to a depth of three feet below the ground surface. The area of each excavation was approximately two feet by two feet. Five soil samples were collected from each excavation: one from each side of the pit and one from the bottom of the pit. A total of 15 soil samples were collected from Area X.

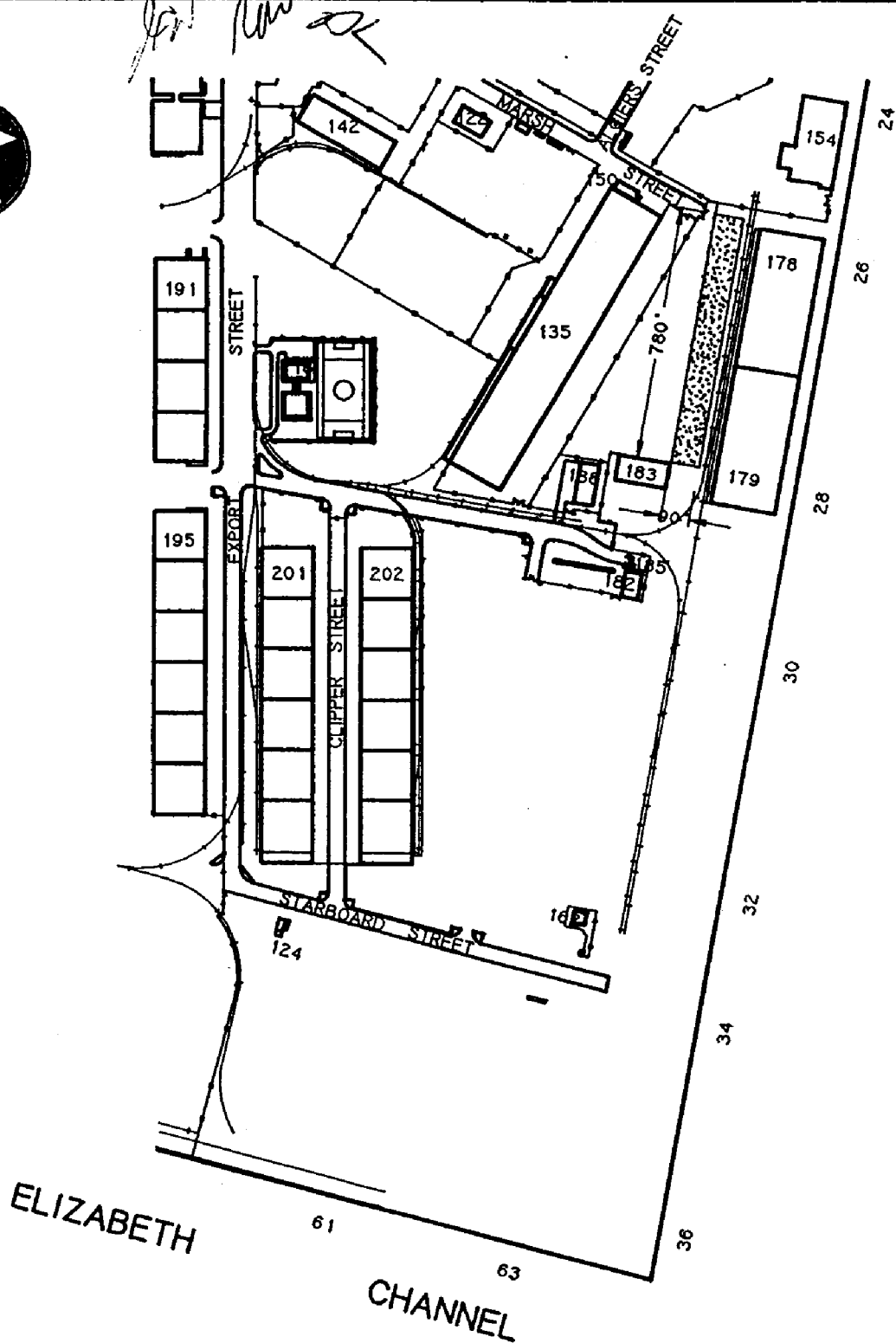
Soil samples collected from locations S-2 and S-7 were analyzed for polychlorinated biphenyls (PCB's) while soil samples collected from location S-6 were analyzed for PCB's and total petroleum hydrocarbons.

All soil excavated (approximately 2 cu. yds.) from Area X was stockpiled on a plastic liner. Five grab samples were taken and composited to one sample for analysis. The sample was tested for TCLP, TPHC, PCB's, ignitibility, corrosivity and reactivity. The results indicated that the material was non-hazardous for disposal. The material was disposed of off site.

New Jersey Department of Environmental Protection required additional removal from locations S-2 and S-6 to approve a Declaration of Environmental Restriction without engineering controls. The Port Authority completed the additional remediation in these locations on January 20, 1997. A total of 25 cubic yards of soil was excavated in the vicinity of sample locations S-2 and S-6. The dimensions of the excavated area for location S-2 and S-6 was 7 ft. X 7 ft. X 4 ft. and 11 ft. X 11 ft. X 4 ft., respectively. There were five samples were taken from each excavation. A sample was taken from each side of the excavation and one from the bottom. All ten samples were analyzed for PCB's.







INITIALLED:

FOR THE PORT AUTHORITY

FOR THE LESSEE

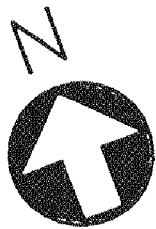
EXHIBIT

A-4

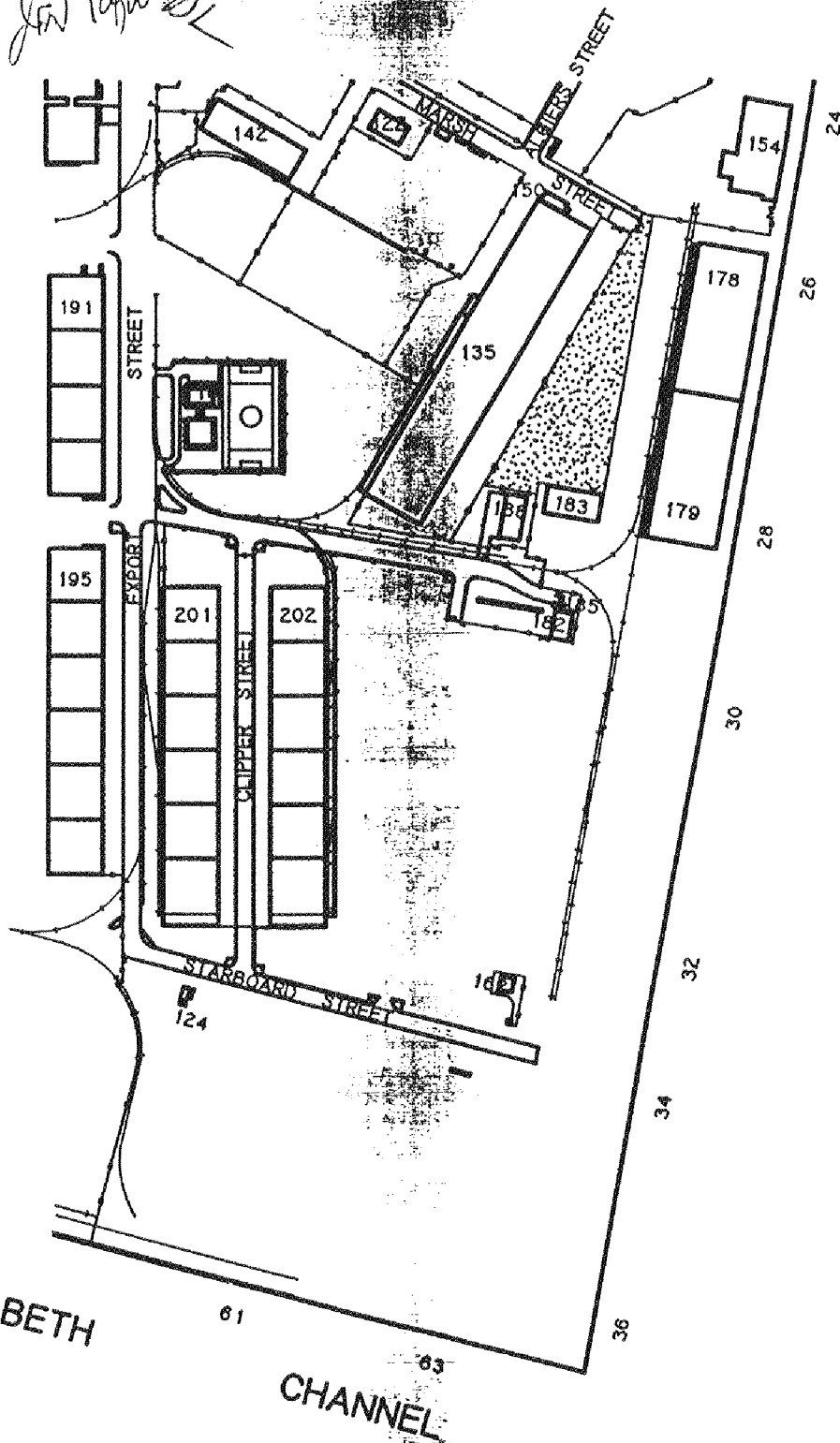
THE PORT AUTHORITY OF  
NEW YORK & NEW JERSEY

PORT NEWARK

DATE: FEB 1, 1998



*for [signature]*



INITIALLED:

*DL*  
FOR THE PORT AUTHORITY

*for [signature]*  
FOR THE LESSEE

EXHIBIT

A-5

THE PORT AUTHORITY OF  
NEW YORK & NEW JERSEY

PORT NEWARK

DATE: FEB 1, 1998

STATE OF NEW YORK

COUNTY OF NEW YORK

On this 16<sup>th</sup> day of April, 1998, before me, the subscriber, a notary public of New York, personally appeared Gillian C. Bonore the Port Commerce Dept. Director

of The Port Authority of New York and New Jersey, who I am satisfied is the person who has signed the within instrument; and, I having first made known to him the contents thereof, he did acknowledge that he signed, sealed with the corporate seal and delivered the same as such officer aforesaid and that the within instrument is the voluntary act and deed of such corporation, made by virtue of the authority of its Board of Commissioners.

Marie M. Edwards  
(notarial seal and stamp)

MARIE M. EDWARDS, NOTARY  
Public, State of New York  
No. 24-4959693  
Qualified in Kings County 1/6/2000  
Commission Expires

STATE OF New Jersey }  
COUNTY OF Essex

On this 10<sup>th</sup> day of April, 1998, before me, the subscriber, a notary Public, personally appeared Joseph Naporano the Port Co. President of

Naporano Iron & Metal Company, Inc. who I am satisfied is the person who has signed the within instrument; and I having first made known to him the contents thereof, he did acknowledge that he signed, sealed with the corporate seal and delivered the same as such officer aforesaid and that the within instrument is the voluntary act and deed of such corporation, made by virtue of the authority of its Board of Directors.

Georgette H. Capaccio  
(notarial seal and stamp)

STATE OF

COUNTY OF

GEORGETTE H. CAPACCIO  
NOTARY PUBLIC OF NEW JERSEY  
My Commission Expires Apr. 18, 2002

Be it remembered that on this \_\_\_\_\_ day of \_\_\_\_\_, 1998, before me, the subscriber, a \_\_\_\_\_, personally appeared \_\_\_\_\_

\_\_\_\_\_ who I am satisfied is the person named in and who executed the within instrument; and, I having first made known to him the contents thereof, he did acknowledge that he signed, sealed and delivered the same as his voluntary act and deed for the uses and purposes therein expressed.

\_\_\_\_\_  
(notarial seal and stamp)

**Sandler & Associates, Inc.**

P.O. Box 239  
Ewan, NJ 08025

Re:

**Environmental Consultants and Contractors**

(609) 478-6645  
Fax: (609) 478-0150

**FILE COPY**

**REPORT OF SOILS**

**SAMPLING**

**AND ASSESSMENT**

**Berths 30 and 32 Upland  
Port Newark, NJ**

**March 30, 1995**

**Prepared for:**

**Naporano Iron and Metal Company**

**P.O. Box 5158**

**Newark, NJ 07105-8155**

**Respectfully submitted,**



**Max J. Sandler  
Principal Consultant**

**NAPORANO IRON & METAL CO.**

Foot of Hawkins St.  
Newark, NJ 07105

To

EXHIBIT

B-4

## **REPORT OF SOILS SAMPLING AND ASSESSMENT**

**Berths 30 & 32 Upland**

**Port Newark, NJ**

**March 30, 1995**

### **INTRODUCTION:**

Our investigation was designed to assist in establishing baseline soil conditions for a pending lease agreement. A total of seven locations were investigated, with 14 soil samples obtained at varying depths corresponding to site-specific conditions. A de-ionized water Field Blank, and a duplicate soil sample were also analyzed as a quality control measure. The Soil Boring Location Plan was prepared by James R. Watson, N.J.P.L.S. of EKA Associates, PA. A copy of this plan indicating sampling locations is included in the Appendix of this report.

Soil samples were taken at depths ranging from 0" to 24" utilizing a truck-mounted well drilling unit provided by the Craig Test Boring Company, a New Jersey-licensed well drilling contractor. The soil samples were conveyed to the Northeastern Analytical Corporation (NJDEP Certified Laboratory No. 03117) in Marlton, NJ for analysis. The complete analytical data results may be found in the Appendix of this report.

### **SITE DESCRIPTION:**

All site work was initiated and completed on February 23, 1995. The weather was chilly, and site conditions were generally damp from recent precipitation. Areas of low elevation, which tended to be collection areas for surface water runoff, were somewhat muddy. A variety of small metal parts and debris were found to be embedded in the soils to a depth of approximately 4"-6" throughout the site. Every effort was made to remove this debris prior to soil boring operations at each location to preserve the analytical credibility of the sample.

**SCOPE OF WORK:**

All soil samples were obtained utilizing procedures and guidelines outlined in the May, 1992 edition of the Field Sampling Procedures Manual published by the New Jersey Department of Environmental Protection. These procedures, as described below, ensure the objectivity and credibility of the individual sample by preventing their contamination from tools and equipment previously utilized. Subsequent handling and storage procedures ensure the preservation of sample media in environmental conditions which limit the escape of volatile compounds. Laboratory detection methodology conforms to standard USEPA protocols for each of the compounds shown, and is described in NAC's laboratory report.

Cleaned, preserved laboratory glassware was picked up from NAC laboratories on February 22, 1995. The glassware consisted of wide-mouth sample jars for soil samples, preserved amber bottles for the Field Blank, and bottles of de-ionized water. All materials were received in insulated coolers containing ice packs to maintain a diminished interior temperature. The coolers were stored in a locked outside cabinet overnight. The insulated coolers were transported to the subject property on the morning of February 23, 1995.

The soil samples were labeled S-1 through S-7 reflecting the seven separate locations from which they were obtained. The suffix "A" indicates that it was taken at a depth of 0-12". The suffix "B" indicates that it was taken at a depth of 12-24". The sample designated S-7AD was collected at a depth of 0-12", approximately 1 foot away from the boring at location 7. The differences in the sampling depths shown in the table below reflect the presence of varying amounts of incompatible media (gravel, rocks, etc.) in the soil matrix, which were removed prior to the filling of the sample jars.

**Report of Soils Sampling and Assessment  
Port Newark, Berths 30 & 32 Upland  
Page Three**

Each soil sample was obtained in the following manner:

1. A 3" split-spoon sampling device was driven to depth by a truck mounted vertical hammer.
2. The split-spoon was retrieved, opened, and the length of the sample in the spoon measured to confirm sampling depth.
3. New latex gloves and a clean hand spade were utilized to manually remove gravel and metal debris from the sample, which was then split into two new glass jars.
4. The jars were then sealed, labeled, and replaced in the insulated cooler.
5. After each sample, the latex gloves were disposed of, and the split-spoon sampler and hand spade were washed in an Alconox cleaning solution and rinsed in clean water to prevent the introduction of extraneous contaminants materials to the next sample. Both the Alconox solution and the rinse water were also replaced at every third sampling location.

After all samples were obtained, the tools were washed in the Alconox solution. The de-ionized water provided by the laboratory was poured over the cleaned tools and accumulated in sample jars for analysis as a Field Blank. A Chain of Custody Record was completed describing the depths at which individual samples were obtained, and the samples were conveyed and accepted by NAC laboratories at 3:04 PM on February 23, 1995.

The soil samples obtained from the site were analyzed for the following:

Total Petroleum Hydrocarbons

Priority Pollutant Metals

Volatile Organic Compounds

PCB's (Polychlorinated Biphenyls)



**TABLE I - CONTAMINANTS EXCEEDING NJDEP NON-RESIDENTIAL SOIL CLEANUP CRITERIA**

| Parameter                        | Sample Depth (inches)                     | Arsenic (ppm) | Beryllium (ppm) | Cadmium (ppm) | Copper (ppm) | Lead (ppm) | Antimony (ppm) | Zinc (ppm) | Chromium (ppm) | PCB's (ppm) | Petroleum Hydrocarbons (ppm) |
|----------------------------------|---|---------------|-----------------|---------------|--------------|------------|----------------|------------|----------------|-------------|------------------------------|
| NJ Non-Residential Soil Criteria | -   | 20            | 1               | 100           | 600          | 600        | 340            | 1,500      | See Note 3     | 2           | 1,000                        |
| Sample S-1A                      | 0-12"                                     | -             | 2.7             | -             | -            | 1,100      | -              | -          | -              | -           | 3,900                        |
| Sample S-1B                      | 12-26"                                    | -             | ND              | -             | -            | ND         | ND             | -          | -              | ND          | -                            |
| Sample S-2A                      | 0-12"                                     | -             | 2.6             | -             | -            | 1,800      | -              | -          | -              | 11.5        | 2,500                        |
| Sample S-2B                      | 15-24"                                    | -             | 3.7             | -             | 830          | -          | -              | -          | -              | 3.7         | 1,700                        |
| Sample S-3A                      | 0-12"                                     | -             | 1.6             | -             | -            | -          | -              | -          | -              | 3.16        | 6,700                        |
| Sample S-3B                      | 12-23"                                    | -             | 2.4             | -             | -            | -          | ND             | -          | -              | <.49        | 5,000                        |
| Sample S-4A                      | 0-11"<br>(taken from under 3" of asphalt) | -             | 2.7             | -             | -            | -          | -              | -          | -              | <.49        | 6,700                        |
| Sample S-4B                      | 10-16"                                    | -             | ND              | -             | -            | ND         | -              | -          | -              | ND          | -                            |
| Sample S-5A                      | 0-16"                                     | ND            | 2.4             | -             | -            | -          | -              | -          | -              | <.49        | -                            |
| Sample S-5B                      | 16-26"                                    | -             | ND              | -             | -            | 1,200      | -              | -          | -              | ND          | -                            |
| Sample S-6A                      | 0-12"                                     | ND            | 4.3             | -             | -            | ND         | -              | -          | -              | <.49        | 12,000                       |
| Sample S-6B                      | 12-24"                                    | -             | 2.4             | -             | 880          | 940        | -              | -          | -              | 13.2        | 4,600                        |
| Sample S-7A                      | 6-12"                                     | 22            | 1.3             | -             | -            | -          | -              | -          | -              | 2.05        | -                            |
| Sample S-7B                      | 12-24"                                    | 68            | 1.8             | -             | 1,500        | 780        | -              | 2,000      | -              | 5.2         | 1,500                        |
| Sample S-7AD                     | 0-12"                                     | 30            | 1.9             | -             | -            | 2,100      | -              | 3,400      | -              | 22.2        | 9,600                        |
| Field Blank                      | N/A                                       | ND            | ND              | ND            | ND           | ND         | ND             | ND         | ND             | ND          | ND                           |

**Notes:**

1. ND indicates that the analyte was not detected above the method detection limit. A dash (-) indicates that the level is below the applicable standard.
2. Traces of Methylene Chloride, a volatile organic compound, were found in all samples. Its presence was determined to be a laboratory contaminant.
3. NJDEP limits for total Chromium contamination in soil are normally determined on a site-by-site basis. A limit of 400 ppm has been imposed on certain urban non-residential areas. No total Chromium levels were detected in excess of 400 ppm.
4. PCB's levels in all samples are a cumulative total of Aroclor 1232 and Aroclor 1254. No other Aroclors were found in any of the samples.

**TABLE II - CONTAMINANTS EXCEEDING NJDEP RESIDENTIAL SOIL CLEANUP CRITERIA**

| Parameter                    | Sample Depth (inches)                     | Arsenic (ppm) | Beryllium (ppm) | Cadmium (ppm) | Copper (ppm) | Lead (ppm) | Antimony (ppm) | Zinc (ppm) | Chromium (ppm) | PCB's (ppm) | Petroleum Hydrocarbons (ppm) |
|------------------------------|---|---------------|-----------------|---------------|--------------|------------|----------------|------------|----------------|-------------|------------------------------|
| NJ Residential Soil Criteria | -   | 20            | 1               | 1             | 600          | 100        | 14             | 1,500      | 75             | .49         | 1,000                        |
| Sample S-1A                  | 0-12"                                     | -             | 2.7             | 16            | -            | 1,100      | -              | -          | -              | -           | 3,900                        |
| Sample S-1B                  | 12-26"                                    | -             | ND              | 1.8           | -            | ND         | ND             | -          | -              | ND          | -                            |
| Sample S-2A                  | 0-12"                                     | -             | 2.6             | 20            | -            | 1,800      | -              | -          | 360            | 11.5        | 2,500                        |
| Sample S-2B                  | 15-24"                                    | -             | 3.7             | 86            | 830          | 280        | 28             | -          | 370            | 3.7         | 1,700                        |
| Sample S-3A                  | 0-12"                                     | -             | 1.6             | 12            | -            | 280        | ND             | -          | -              | 3.16        | 6,700                        |
| Sample S-3B                  | 12-23"                                    | -             | 2.4             | 9             | -            | -          | ND             | -          | -              | <.49        | 5,000                        |
| Sample S-4A                  | 0-11"<br>(taken from under 3" of asphalt) | -             | 2.7             | 7             | -            | -          | ND             | -          | -              | <.49        | 6,700                        |
| Sample S-4B                  | 10-16"                                    | -             | ND              | 1.8           | -            | ND         | ND             | -          | -              | ND          | -                            |
| Sample S-5A                  | 0-16"                                     | ND            | 2.4             | 3.9           | -            | -          | ND             | -          | -              | <.49        | -                            |
| Sample S-5B                  | 16-20"                                    | -             | ND              | 1.8           | -            | 1,200      | -              | -          | -              | ND          | -                            |
| Sample S-6A                  | 0-12"                                     | ND            | 4.3             | 3.5           | -            | ND         | -              | -          | -              | <.49        | 12,000                       |
| Sample S-6B                  | 12-24"                                    | -             | 2.4             | 39            | 880          | 940        | 21             | 200        | 200            | 13.2        | 4,600                        |
| Sample S-7A                  | 6-12"                                     | 22            | 1.3             | 9.4           | -            | -          | ND             | -          | -              | 2.05        | -                            |
| Sample S-7B                  | 12-24"                                    | 68            | 1.8             | 43            | 1,500        | 780        | 16             | 2,000      | 300            | 5.2         | 1,500                        |
| Sample S-7AD                 | 0-12"                                     | 30            | 1.9             | 30            | -            | 2,100      | 26             | 3,400      | 150            | 22.2        | 9,600                        |
| Field Blank                  | N/A                                       | ND            | ND              | ND            | ND           | ND         | ND             | ND         | ND             | ND          | ND                           |

**Notes:**

1. ND indicates that the analyte was not detected above the method detection limit. A dash (-) indicates that the level is below the applicable standard.
2. Traces of Methylene Chloride, a volatile organic compound, were found in all samples. Its presence was determined to be a laboratory contaminant.
3. NJDEP limits for total Chromium contamination in soil are normally determined on a site-by-site basis. A limit of 75 ppm has been imposed on certain urban residential areas.
4. PCB's levels in all samples are a cumulative total of Aroclor 1232 and Aroclor 1254. No other Aroclors were found in any of the samples.

**SUMMARY AND CONCLUSIONS:**

The investigation of soil conditions on the subject property by our firm and its subcontractors was conducted in accordance with the May, 1992 edition of the Field Sampling Procedures Manual published by the New Jersey Department of Environmental Protection. The manual mandates specific guidelines to be followed in the collection, storage, and analysis of media samples obtained in the field, and are designed to ensure the credibility of the resulting analytical data. Consequently, we believe that the analytical values shown in Tables I and II of this report accurately reflect soil conditions on the site with respect to the New Jersey Department of Environmental Protection Residential and Non-Residential Direct Contact Soil Criteria.

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**Sandler & Associates, Inc.**

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**REPORT OF SOILS  
SAMPLING  
AND ASSESSMENT**

**Berths 30 and 32 Upland  
Port Newark, NJ**

**March 30, 1995**

**Prepared for:**

**Naporano Iron and Metal Company  
P.O. Box 5158  
Newark, NJ 07105-8155**

**Respectfully submitted,**



**Max J. Sandler  
Principal Consultant**

**REPORT OF SOILS SAMPLING AND ASSESSMENT****Berths 30 & 32 Upland****Port Newark, NJ****March 30, 1995****INTRODUCTION:**

Our investigation was designed to assist in establishing baseline soil conditions for a pending lease agreement. A total of seven locations were investigated, with 14 soil samples obtained at varying depths corresponding to site-specific conditions. A de-ionized water Field Blank, and a duplicate soil sample were also analyzed as a quality control measure. The Soil Boring Location Plan was prepared by James R. Watson, A.J.P.L.S. of EKA Associates, PA. A copy of this plan indicating sampling locations is included in the Appendix of this report.

Soil samples were taken at depths ranging from 0" to 24" utilizing a truck-mounted well drilling unit provided by the Craig Test Boring Company, a New Jersey-licensed well drilling contractor. The soil samples were conveyed to the Northeastern Analytical Corporation (NJDEP Certified Laboratory No. 03117) in Marlton, NJ for analysis. The complete analytical data results may be found in the Appendix of this report.

**SITE DESCRIPTION:**

All site work was initiated and completed on February 23, 1995. The weather was chilly, and site conditions were generally damp from recent precipitation. Areas of low elevation, which tended to be collection areas for surface water runoff, were somewhat muddy. A variety of small metal parts and debris were found to be embedded in the soils to a depth of approximately 4"-6" throughout the site. Every effort was made to remove this debris prior to soil boring operations at each location to preserve the analytical credibility of the sample.

**SCOPE OF WORK:**

All soil samples were obtained utilizing procedures and guidelines outlined in the May, 1992 edition of the Field Sampling Procedures Manual published by the New Jersey Department of Environmental Protection. These procedures, as described below, ensure the objectivity and credibility of the individual sample by preventing their contamination from tools and equipment previously utilized. Subsequent handling and storage procedures ensure the preservation of sample media in environmental conditions which limit the escape of volatile compounds. Laboratory detection methodology conforms to standard USEPA protocols for each of the compounds shown, and is described in NAC's laboratory report.

Cleaned, preserved laboratory glassware was picked up from NAC laboratories on February 22, 1995. The glassware consisted of wide-mouth sample jars for soil samples, preserved amber bottles for the Field Blank, and bottles of de-ionized water. All materials were received in insulated coolers containing ice packs to maintain a diminished interior temperature. The coolers were stored in a locked outside cabinet overnight. The insulated coolers were transported to the subject property on the morning of February 23, 1995.

The soil samples were labeled S-1 through S-7 reflecting the seven separate locations from which they were obtained. The suffix "A" indicates that it was taken at a depth of 0-12". The suffix "B" indicates that it was taken at a depth of 12-24". The sample designated S-7AD was collected at a depth of 0-12", approximately 1 foot away from the boring at location 7. The differences in the sampling depths shown in the table below reflect the presence of varying amounts of incompatible media (gravel, rocks, etc.) in the soil matrix, which were removed prior to the filling of the sample jars.

**Report of Soils Sampling and Assessment  
Port Newark, Berths 30 & 32 Upland  
Page Three**

Each soil sample was obtained in the following manner:

1. A 3" split-spoon sampling device was driven to depth by a truck mounted vertical hammer.
2. The split-spoon was retrieved, opened, and the length of the sample in the spoon measured to confirm sampling depth.
3. New latex gloves and a clean hand spade were utilized to manually remove gravel and metal debris from the sample, which was then split into two new glass jars.
4. The jars were then sealed, labeled, and replaced in the insulated cooler.
5. After each sample, the latex gloves were disposed of, and the split-spoon sampler and hand spade were washed in an Alconox cleaning solution and rinsed in clean water to prevent the introduction of extraneous contaminants materials to the next sample. Both the Alconox solution and the rinse water were also replaced at every third sampling location.

After all samples were obtained, the tools were washed in the Alconox solution. The de-ionized water provided by the laboratory was poured over the cleaned tools and accumulated in sample jars for analysis as a Field Blank. A Chain of Custody Record was completed describing the depths at which individual samples were obtained, and the samples were conveyed and accepted by NAC laboratories at 3:04 PM on February 23, 1995.

The soil samples obtained from the site were analyzed for the following:

Total Petroleum Hydrocarbons

Priority Pollutant Metals

Volatile Organic Compounds

PCB's (Polychlorinated Biphenyls)



**TABLE I - CONTAMINANTS EXCEEDING NJDEP NON-RESIDENTIAL SOIL CLEANUP CRITERIA**

| Parameter                        | Sample Depth (inches)                     | Arsenic (ppm) | Beryllium (ppm) | Cadmium (ppm) | Copper (ppm) | Lead (ppm) | Antimony (ppm) | Zinc (ppm) | Chromium (ppm) | PCB's (ppm) | Petroleum Hydrocarbons (ppm) |
|----------------------------------|---|---------------|-----------------|---------------|--------------|------------|----------------|------------|----------------|-------------|------------------------------|
| NJ Non-Residential Soil Criteria | -   | 20            | 1               | 100           | 600          | 600        | 340            | 1,500      | See Note 3     | 2           | 1,000                        |
| Sample S-1A                      | 0-12"                                     | -             | 2.7             | -             | -            | 1,100      | -              | -          | -              | -           | 3,900                        |
| Sample S-1B                      | 12-26"                                    | -             | ND              | -             | -            | ND         | ND             | -          | -              | ND          | -                            |
| Sample S-2A                      | 0-12"                                     | -             | 2.6             | -             | -            | 1,800      | -              | -          | -              | 11.5        | 2,500                        |
| Sample S-2B                      | 15-24"                                    | -             | 3.7             | -             | 830          | -          | -              | -          | -              | 3.7         | 1,700                        |
| Sample S-3A                      | 0-12"                                     | -             | 1.6             | -             | -            | -          | -              | -          | -              | 3.16        | 6,700                        |
| Sample S-3B                      | 12-23"                                    | -             | 2.4             | -             | -            | -          | ND             | -          | -              | <.49        | 5,000                        |
| Sample S-4A                      | 0-11"<br>(taken from under 3" of asphalt) | -             | 2.7             | -             | -            | -          | -              | -          | -              | <.49        | 6,700                        |
| Sample S-4B                      | 10-16"                                    | -             | ND              | -             | -            | ND         | -              | -          | -              | ND          | -                            |
| Sample S-5A                      | 0-16"                                     | ND            | 2.4             | -             | -            | -          | -              | -          | -              | <.49        | -                            |
| Sample S-5B                      | 16-26"                                    | -             | ND              | -             | -            | 1,200      | -              | -          | -              | ND          | -                            |
| Sample S-6A                      | 0-12"                                     | ND            | 4.3             | -             | -            | ND         | -              | -          | -              | <.49        | 12,000                       |
| Sample S-6B                      | 12-24"                                    | -             | 2.4             | -             | 880          | 940        | -              | -          | -              | 13.2        | 4,600                        |
| Sample S-7A                      | 6-12"                                     | 22            | 1.3             | -             | -            | -          | -              | -          | -              | 2.05        | -                            |
| Sample S-7B                      | 12-24"                                    | 68            | 1.8             | -             | 1,500        | 780        | -              | 2,000      | -              | 5.2         | 1,500                        |
| Sample S-7AD                     | 0-12"                                     | 30            | 1.9             | -             | -            | 2,100      | -              | 3,400      | -              | 22.2        | 9,600                        |
| Field Blank                      | N/A                                       | ND            | ND              | ND            | ND           | ND         | ND             | ND         | ND             | ND          | ND                           |

**Notes:**

1. ND indicates that the analyte was not detected above the method detection limit. A dash (-) indicates that the level is below the applicable standard.
2. Traces of Methylene Chloride, a volatile organic compound, were found in all samples. Its presence was determined to be a laboratory contaminant.
3. NJDEP limits for total Chromium contamination in soil are normally determined on a site-by-site basis. A limit of 400 ppm has been imposed on certain urban non-residential areas. No total Chromium levels were detected in excess of 400 ppm.
4. PCB's levels in all samples are a cumulative total of Aroclor 1232 and Aroclor 1254. No other Aroclors were found in any of the samples.

**TABLE II - CONTAMINANTS EXCEEDING NJDEP RESIDENTIAL SOIL CLEANUP CRITERIA**

| Parameter                    | Sample Depth (inches)                     | Arsenic (ppm) | Beryllium (ppm) | Cadmium (ppm) | Copper (ppm) | Lead (ppm) | Antimony (ppm) | Zinc (ppm) | Chromium (ppm) | PCB's (ppm) | Petroleum Hydrocarbons (ppm) |
|------------------------------|---|---------------|-----------------|---------------|--------------|------------|----------------|------------|----------------|-------------|------------------------------|
| NJ Residential Soil Criteria | -   | 20            | 1               | 1             | 600          | 100        | 14             | 1,500      | 75             | .49         | 1,000                        |
| Sample S-1A                  | 0-12"                                     | -             | 2.7             | 16            | -            | 1,100      | -              | -          | -              | -           | 3,900                        |
| Sample S-1B                  | 12-26"                                    | -             | ND              | 1.8           | -            | ND         | ND             | -          | -              | ND          | -                            |
| Sample S-2A                  | 0-12"                                     | -             | 2.6             | 20            | -            | 1,800      | -              | -          | 360            | 11.5        | 2,500                        |
| Sample S-2B                  | 15-24"                                    | -             | 3.7             | 86            | 830          | 280        | 28             | -          | 370            | 3.7         | 1,700                        |
| Sample S-3A                  | 0-12"                                     | -             | 1.6             | 12            | -            | 280        | ND             | -          | -              | 3.16        | 6,700                        |
| Sample S-3B                  | 12-23"                                    | -             | 2.4             | 9             | -            | -          | ND             | -          | -              | <.49        | 5,000                        |
| Sample S-4A                  | 0-11"<br>(taken from under 3" of asphalt) | -             | 2.7             | 7             | -            | -          | ND             | -          | -              | <.49        | 6,700                        |
| Sample S-4B                  | 10-16"                                    | -             | ND              | 1.8           | -            | ND         | ND             | -          | -              | ND          | -                            |
| Sample S-5A                  | 0-16"                                     | ND            | 2.4             | 3.9           | -            | -          | ND             | -          | -              | <.49        | -                            |
| Sample S-5B                  | 16-20"                                    | -             | ND              | 1.8           | -            | 1,200      | -              | -          | -              | ND          | -                            |
| Sample S-6A                  | 0-12"                                     | ND            | 4.3             | 3.5           | -            | ND         | -              | -          | -              | <.49        | 12,000                       |
| Sample S-6B                  | 12-24"                                    | -             | 2.4             | 39            | 880          | 940        | 21             | 200        | 200            | 13.2        | 4,600                        |
| Sample S-7A                  | 6-12"                                     | 22            | 1.3             | 9.4           | -            | -          | ND             | -          | -              | 2.05        | -                            |
| Sample S-7B                  | 12-24"                                    | 68            | 1.8             | 43            | 1,500        | 780        | 16             | 2,000      | 300            | 5.2         | 1,500                        |
| Sample S-7AD                 | 0-12"                                     | 30            | 1.9             | 30            | -            | 2,100      | 26             | 3,400      | 150            | 22.2        | 9,600                        |
| Field Blank                  | N/A                                       | ND            | ND              | ND            | ND           | ND         | ND             | ND         | ND             | ND          | ND                           |

**Notes:**

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**FILE COPY**

**REPORT OF SOILS  
SAMPLING  
AND ASSESSMENT**

**Berths 30 and 32 Upland  
Port Newark, NJ**

**March 30, 1995**

**Prepared for:**

**Naporano Iron and Metal Company  
P.O. Box 5158  
Newark, NJ 07105-8155**

**Respectfully submitted,**



**Max J. Sandler**

**Principal Consultant**



**APPENDIX A**  
**BORING DATA**

**Prepared By:**  
**CRAIG TEST BORING CO., INC.**  
**May Landing, New Jersey**

**FIELD SOIL TEST BORING DATA**

**PORT NEWARK**

**BERTHS 30-32**

Submitted To: **SANDLER & ASSOCIATES**  
P.O. Box 239  
Ewan, NJ 08025

Submitted By: **CRAIG TEST BORING CO., INC.**  
P.O. Box 427  
Mays Landing, NJ 08330

**LAB. NO.: C-0606**

**DATE: March 17, 1995**



## FIELD SOIL CLASSIFICATION SYSTEM

### PARTICLE SIZE IDENTIFICATION

Boulders.....8 inch diameter or greater  
 Cobbles.....3 to 8 inch diameter  
 Gravel.....Coarse--1 to 3 inch  
                   medium--1/2 to 1 inch  
                   fine--4.75 mm to 1/2 inch  
 Sand.....Coarse--2.0 mm to 4.75 mm  
                   (dia. of pencil lead)  
                   medium--0.425 mm to 2.0 mm  
                   (dia. of broom straw)  
                   fine--0.075 mm to 0.425 mm  
                   (dia. of human hair)  
 Silt & Clay..smaller than 0.075 mm

### RELATIVE PROPORTIONS

| Descriptive Term     | Percent |
|----------------------|---------|
| Trace - tr .....     | 1 - 10  |
| Some - sm .....      | 11 - 20 |
| Adjective - ly ..... | 21 - 35 |
| And - & .....        | 36 - 50 |

### ABBREVIATIONS

Bn - brown  
 Gy - gray  
 Blk - black  
 Rd - red  
 Or - orange  
 Bl - blue  
 Lt - light  
 Dk - dark  
 Multi - multi colored

Coarse grained - c  
 Medium grained - m  
 Fine grained - f

### COHESIONLESS SOIL

(Gravel, sand, silt and combinations)

#### Density

Very loose.....5 blows/ft or less  
 Loose.....6 to 10 blows/ft  
 Medium dense...11 to 30 blows/ft  
 Dense.....31 to 50 blows/ft  
 Very dense.....51 blows/ft or more

### COHESIVE SOIL

(Clay, silt and combinations)

#### Consistency

Very soft.....1 blow/ft or less  
 Soft.....2 to 4 blows/ft  
 Medium stiff...5 to 8 blows/ft  
 Stiff.....9 to 15 blows/ft  
 Very stiff....16 to 30 blows/ft  
 Hard.....31 blows/ft or greater

### ROCK

#### R.Q.D.

0 - 25%  
 25 - 50%  
 50 - 75%  
 75 - 90%  
 90 - 100%

#### Rock Quality\*

Very poor  
 Poor  
 Fair  
 Good  
 Excellent

HSA - Hollow Stem Auger  
 SS - Split Spoon Sampler  
 WOR - Weight of Rods  
 WOH - Weight of Hammer  
 NR - No Recovery of Sample  
 TBC - Test Boring Completed  
 N/A - Not Available  
 N/E - None Encountered  
 N/D - None Detected

# CRAIG TEST BORING CO., INC.

P.O. Box 636 \* Mays Landing, NJ 08330-2203 (609) 625-4862 \* FAX (609) 625-4306

## FIELD TEST BORING LOG

CLIENT SANDLER & ASSOCIATES

DATE 2/23/95

PROJECT PORT NEWARK, BERTHS 30-32

LAB NO. C-0606

Boring No. B-1

Sheet 1 of 1

Ground Surface Elev.

| Ground Water Data |      |                            |                       | * - Method of Advancing Boring |  | Depth   |
|-------------------|------|----------------------------|-----------------------|--------------------------------|--|---------|
| Depth             | Hour | Date                       | Hrs. After Completion | A                              | 3" SPLIT SPOON SAMPLER                     | 0 to 4' |
| N/A               |      | 2/23/95                    | COH                   | B                              |  | to      |
|                   |      |                            |                       | C                              |  | to      |
| DEPTH             | *    | Sample                     |                       |                                | Soil Classification                        | Remarks |
|                   |      | No.                        | Depth                 | N                              |  |         |
| 0                 | A    | S-1                        | 0"-2'                 | N/R                            | CF SAND, SM CF GRAVEL, TR SILT/BN, DRY     |         |
|                   |      | S-2                        | 2'-4'                 | N/R                            | CF SAND, TR SILT/BN, DRY                   |         |
| 5                 |      | TEST BORING COMPLETED @ 4' |                       |                                |  |         |
| 10                |      |                            |                       |                                | EXACT BORING LOCATION DETERMINED BY CLIENT |         |
| 15                |      |                            |                       |                                |  |         |
| 20                |      |                            |                       |                                |  |         |
| 25                |      |                            |                       |                                |  |         |
| 30                |      |                            |                       |                                |  |         |
| 35                |      |                            |                       |                                |  |         |

☐ S - 2" O.D. Split Spoon Sample    ☒ U - Undisturbed Sample, 3" Diameter    ☒ - Core Drilling    ☐ - No Recovery

N - Standard Penetration Resistance per 6" (140# Hammer, 30" drop)

Driller G. MCANENY

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## FIELD TEST BORING LOG

CLIENT SANDLER & ASSOCIATES

DATE 2/23/95

PROJECT PORT NEWARK, BERTHS 30-32

LAB NO. C-0606

Boring No. B-2

Sheet 1 of 1

Ground Surface Elev.

| Ground Water Data |      |                            |                       | * - Method of Advancing Boring | Depth                                      |         |
|-------------------|------|----------------------------|-----------------------|--------------------------------|--|---------|
| Depth             | Hour | Date                       | Hrs. After Completion | A 3" SPLIT SPOONS              | 0 to 4'                                    |         |
| N/A               |      | 2/23/95                    | COH                   | C                              | to   |         |
| DEPTH             | *    | Sample                     |                       |                                | Soil Classification                        | Remarks |
|                   |      | No.                        | Depth                 | N                              |  |         |
| 0                 | A    | S-1                        | 0"-2'                 | N/R                            | CF SAND, SM FC GRAVEL, TR SILT/BN, DRY     |         |
|                   |      | S-2                        | 2'-4'                 | N/R                            | SAME, WET                                  |         |
| 5                 |      | TEST BORING COMPLETED @ 4' |                       |                                |  |         |
| 10                |      |                            |                       |                                | EXACT BORING LOCATION DETERMINED BY CLIENT |         |
| 15                |      |                            |                       |                                |  |         |
| 20                |      |                            |                       |                                |  |         |
| 25                |      |                            |                       |                                |  |         |
| 30                |      |                            |                       |                                |  |         |
| 35                |      |                            |                       |                                |  |         |

☐ S - 2" O.D. Split Spoon Sample ☒ U - Undisturbed Sample, 3" Diameter ☒ - Core Drilling ☐ - No Recovery

N - Standard Penetration Resistance per 6" (140# Hammer, 30" drop)

Driller G. MCANENY

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# CRAIG TEST BORING CO., INC.

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## FIELD TEST BORING LOG

CLIENT SANDLER & ASSOCIATES

DATE 2/23/95

PROJECT PORT NEWARK, BERTHS 30-32

LAB NO. C-0606

Boring No. B-3

Sheet 1 of 1

Ground Surface Elev.

| Ground Water Data |      |         |                       | * - Method of Advancing Boring |  | Depth   |                            |
|-------------------|------|---------|-----------------------|--------------------------------|--|---------|----------------------------|
| Depth             | Hour | Date    | Hrs. After Completion | A                              | B  |         |                            |
| 3'                |      | 2/23/95 | COH                   | C                              |  |         |                            |
|                   |      |         |                       | 3" SPLIT SPOONS                |  | 0 to 4' |                            |
|                   |      |         |                       |                                |  | to      |                            |
|                   |      |         |                       |                                |  | to      |                            |
| DEPTH             | *    | Sample  |                       |                                | Soil Classification                        | Remarks |                            |
|                   |      | No.     | Depth                 | N                              |  |         |                            |
| 0                 | A    | S-1     | 0"-2'                 | N/R                            | CF GRAVEL, SM CF SAND, TR SILT/BN, WET     |         |                            |
|                   |      | S-2     | 2'-4'                 | N/R                            | MF SAND, TR SILT/BN, WET                   |         |                            |
| 5                 |      |         |                       |                                |  |         | TEST BORING COMPLETED @ 4' |
| 10                |      |         |                       |                                | EXACT BORING LOCATION DETERMINED BY CLIENT |         |                            |
| 15                |      |         |                       |                                |  |         |                            |
| 20                |      |         |                       |                                |  |         |                            |
| 25                |      |         |                       |                                |  |         |                            |
| 30                |      |         |                       |                                |  |         |                            |
| 35                |      |         |                       |                                |  |         |                            |

☐ S - 2" O.D. Split Spoon Sample

☐ U - Undisturbed Sample, 3" Diameter

☒ - Core Drilling

☐ - No Recovery

N - Standard Penetration Resistance per 6" (140# Hammer, 30" drop)

Driller G. MCANENY

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TIERRA-B-012381

# CRAIG TEST BORING CO., INC.

P.O. Box 636 \* Mays Landing, NJ 08330-2203 (609) 625-4862 \* FAX (609) 625-4306

## FIELD TEST BORING LOG

CLIENT SANDLER & ASSOCIATES

DATE 2/23/95

PROJECT PORT NEWARK, BERTHS 30-32

LAB NO. C-0606

Boring No. B-4

Sheet 1 of 1

Ground Surface Elev.

| Ground Water Data |      |         |                       | * - Method of Advancing Boring |  | Depth   |
|-------------------|------|---------|-----------------------|--------------------------------|--|---------|
| Depth             | Hour | Date    | Hrs. After Completion | A                              | B  | 0 to 4' |
| N/A               |      | 2/23/95 | COH                   | C                              |  | to      |
| DEPTH             | *    | Sample  |                       |                                | Soil Classification                        | Remarks |
|                   |      | No.     | Depth                 | N                              |  |         |
| 0                 | A    | S-1     | 0"-2'                 | N/R                            | CF SAND, SM CF GRAVEL, TR SILT/BN, DRY     |         |
|                   |      | S-2     | 2'-4'                 | N/R                            | MF SAND, TR SILT/BN, DRY                   |         |
| 5                 |      |         |                       |                                |  |         |
| 10                |      |         |                       |                                | EXACT BORING LOCATION DETERMINED BY CLIENT |         |
| 15                |      |         |                       |                                |  |         |
| 20                |      |         |                       |                                |  |         |
| 25                |      |         |                       |                                |  |         |
| 30                |      |         |                       |                                |  |         |
| 35                |      |         |                       |                                |  |         |

☐ S - 2" O.D. Split Spoon Sample    ☐ U - Undisturbed Sample, 3" Diameter    ☒ - Core Drilling    ☐ - No Recovery

N - Standard Penetration Resistance per 6" (140# Hammer, 30" drop)

Driller G. MCANENY

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# CRAIG TEST BORING CO., INC.

P.O. Box 636 \* Mays Landing, NJ 08330-2203 (609) 625-4862 \* FAX (609) 625-4306

## FIELD TEST BORING LOG

CLIENT SANDLER & ASSOCIATES

DATE 2/23/95

PROJECT PORT NEWARK, BERTHS 30-32

LAB NO. C-0606

Boring No. B-5

Sheet 1 of 1

Ground Surface Elev.

| Ground Water Data |      |         |                       | * - Method of Advancing Boring |  | Depth   |
|-------------------|------|---------|-----------------------|--------------------------------|--|---------|
| Depth             | Hour | Date    | Hrs. After Completion | A                              | B  | 0 to 4' |
| N/A               |      | 2/23/95 | COH                   | C                              |  | to      |
| DEPTH             | *    | Sample  |                       |                                | Soil Classification                        | Remarks |
|                   |      | No.     | Depth                 | N                              |  |         |
| 0                 | A    | S-1     | 0"-2'                 | N/R                            | CF SAND, SM CF GRAVEL, TR SILT/BN, DRY     |         |
|                   |      | S-2     | 2'-4'                 | N/R                            | SAME                                       |         |
| 5                 |      |         |                       |                                |  |         |
| 10                |      |         |                       |                                | EXACT BORING LOCATION DETERMINED BY CLIENT |         |
| 15                |      |         |                       |                                |  |         |
| 20                |      |         |                       |                                |  |         |
| 25                |      |         |                       |                                |  |         |
| 30                |      |         |                       |                                |  |         |
| 35                |      |         |                       |                                |  |         |

☐ S - 2" O.D. Split Spoon Sample   
 ☒ U - Undisturbed Sample, 3" Diameter   
 ☒ - Core Drilling   
 ☐ - No Recovery  
 N - Standard Penetration Resistance per 6" (140# Hammer, 30" drop)   
 Driller G. MCANENY

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**CRAIG TEST BORING CO., INC.**

P.O. Box 636 \* Mays Landing, NJ 08330-2203 (609) 625-4862 \* FAX (609) 625-4306

**FIELD TEST BORING LOG**

CLIENT SANDLER &amp; ASSOCIATES

DATE 2/23/95

PROJECT PORT NEWARK, BERTHS 30-32

LAB NO. C-0606

Boring No. B-6

Sheet 1 of 1

Ground Surface Elev.

| Ground Water Data |      |         |                       | * - Method of Advancing Boring |  | Depth                      |
|-------------------|------|---------|-----------------------|--------------------------------|--|----------------------------|
| Depth             | Hour | Date    | Hrs. After Completion | A                              | B  | 0 to 4'                    |
| N/A               |      | 2/23/95 | COH                   | C                              |  | to                         |
| DEPTH             | *    | Sample  |                       |                                | Soil Classification                        | Remarks                    |
|                   |      | No.     | Depth                 | N                              |  |                            |
| 0                 | A    | S-1     | 0"-2'                 | N/R                            | CF GRAVEL, SM CF SAND, TR SILT/BN-GY, DRY  |                            |
|                   |      | S-2     | 2'-4'                 | N/R                            | SAME                                       |                            |
| 5                 |      |         |                       |                                |  | TEST BORING COMPLETED @ 4' |
| 10                |      |         |                       |                                | EXACT BORING LOCATION DETERMINED BY CLIENT |                            |
| 15                |      |         |                       |                                |  |                            |
| 20                |      |         |                       |                                |  |                            |
| 25                |      |         |                       |                                |  |                            |
| 30                |      |         |                       |                                |  |                            |
| 35                |      |         |                       |                                |  |                            |

☐ S - 2" O.D. Split Spoon Sample☐ U - Undisturbed Sample, 3" Diameter☒ - Core Drilling☐ - No Recovery

N - Standard Penetration Resistance per 6" (140# Hammer, 30" drop)

Driller G. MCANENY

# CRAIG TEST BORING CO., INC.

P.O. Box 636 \* Mays Landing, NJ 08330-2203 (609) 625-4862 \* FAX (609) 625-4306

## FIELD TEST BORING LOG

CLIENT SANDLER & ASSOCIATES

DATE 2/23/95

PROJECT PORT NEWARK, BERTHS 30-32

LAB NO. C-0606

Boring No. B-7A

Sheet 1 of 1

Ground Surface Elev.

| Ground Water Data |      |         |                       | * - Method of Advancing Boring |  | Depth   |
|-------------------|------|---------|-----------------------|--------------------------------|--|---------|
| Depth             | Hour | Date    | Hrs. After Completion | A                              | 3" SPLIT SPOONS                            | 0 to 2' |
| N/A               |      | 2/23/95 | COH                   | B                              |  | to      |
|                   |      |         |                       | C                              |  | to      |
| DEPTH             | *    | Sample  |                       |                                | Soil Classification                        | Remarks |
|                   |      | No.     | Depth                 | N                              |  |         |
| 0                 | A    | S-1     | 0"-2'                 | N/R                            | CF SAND, SM CF GRAVEL/BN, DRY              |         |
| 5                 |      |         |                       |                                | TEST BORING COMPLETED @ 2'                 |         |
| 10                |      |         |                       |                                | EXACT BORING LOCATION DETERMINED BY CLIENT |         |
| 15                |      |         |                       |                                |  |         |
| 20                |      |         |                       |                                |  |         |
| 25                |      |         |                       |                                |  |         |
| 30                |      |         |                       |                                |  |         |
| 35                |      |         |                       |                                |  |         |

☐ S - 2" O.D. Split Spoon Sample

☐ U - Undisturbed Sample, 3" Diameter

☒ - Core Drilling

☐ - No Recovery

N - Standard Penetration Resistance per 6" (140# Hammer, 30" drop)

Driller G. MCANENY

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TIERRA-B-012385



**APPENDIX B**  
**COMPLETE ANALYTICAL DATA PACKAGE**

**Prepared By:**  
**NORTHEASTERN ANALYTICAL CORPORATION**  
**Marlton, New Jersey**



NORTHEASTERN ANALYTICAL CORPORATION

ANALYTICAL DATA PACKAGE FOR:

KENNETH L. WOODRUFF ASSOCIATES  
182 WALTON DRIVE  
P.O. BOX 42  
MORRISVILLE, PA 19067

ATTN: KENNETH WOODRUFF

Project: NAP-005/PORT NEWARK TERMINAL Test Report Date: March 16, 1995  
BERTHS 30 & 32

NAC Job Number: L950626

| Lab Sample Number | Client Sample Designation | Collection Date |
|-------------------|---------------------------|-----------------|
| L950626-1         | S-1A                      | 23-FEB-95       |
| L950626-2         | S-1B                      | 23-FEB-95       |
| L950626-3         | S-2A                      | 23-FEB-95       |
| L950626-4         | S-2B                      | 23-FEB-95       |
| L950626-5         | S-3A                      | 23-FEB-95       |
| L950626-6         | S-3B                      | 23-FEB-95       |
| L950626-7         | S-4A                      | 23-FEB-95       |
| L950626-8         | S-4B                      | 23-FEB-95       |
| L950626-9         | S-5A                      | 23-FEB-95       |
| L950626-10        | S-5B                      | 23-FEB-95       |
| L950626-11        | S-6A                      | 23-FEB-95       |
| L950626-12        | S-6B                      | 23-FEB-95       |
| L950626-13        | S-7A                      | 23-FEB-95       |
| L950626-14        | S-7B                      | 23-FEB-95       |
| L950626-15        | S-7AD                     | 23-FEB-95       |
| L950626-16        | FIELD BLANK               | 23-FEB-95       |

Ian Lambert  
Laboratory Director

  
Signature

Certifications:

PH-0726(CT), 203594A+B(NH), 03117(NJ), 11022(NY), 68-379(PA)

Environmental Analysis and Asbestos Services

Evesham Corporate Center, 4 East Slow Road, Marlton, New Jersey 08053 (609) 985-8000 FAX (609) 985-9700

TIERRA-B-012387

NORTHEASTERN ANALYTICAL CORPORATION  
Test Report No. 950626  
Kenneth L. Woodruff Associates

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File: 51L\TEST\950626

NORTHEASTERN ANALYTICAL CORPORATION  
Test Report No. 950626  
Kenneth L. Woodruff Associates

CONFORMANCE/NON-CONFORMANCE SUMMARY

The following report contains the results of sample(s) sent to Northeastern Analytical Corporation by Kenneth L. Woodruff Associates. The samples were received on February 23, 1995 and were analyzed for various organic and inorganic parameters. A laboratory chronicle follows and lists the samples associated with this project.

All Quality Assurance and Quality Control measurements for sample analysis have been reviewed.

Exceptions

See checklist.

Reviewed by:

ILM

Date:

3/10/95

## LABORATORY DELIVERABLES

**THIS FORM MUST BE COMPLETED BY THE LABORATORY OR  
ENVIRONMENTAL CONSULTANT AND ACCOMPANY ALL DATA SUBMISSIONS**

The following laboratory deliverables shall be included in the data submission. All deviations from the accepted methodology and procedures or performance values outside acceptable ranges shall be summarized in the Non-Conformance Summary. The proposed "Technical Requirements for Site Remediation" rules, which appeared in the May 4, 1992 New Jersey Register, provides further details. The document shall be bound and paginated, contain a table of contents, and all pages shall be legible. Incomplete packages will be returned or held without review until the data package is completed.

It is recommended that the analytical results summary sheets listing all targeted and non-targeted compounds with the method detection limits be included in one section of the data package and in the main body of the report.

|   | Check if<br>Complete                |
|---|-------------------------------------|
| 1. Cover Page, Title Page listing Lab Certification #, facility name & address and date of report             | <input checked="" type="checkbox"/> |
| 2. Table of Contents  | <input checked="" type="checkbox"/> |
| 3. Summary Sheets listing Analytical Results for all targeted and non-targeted compounds                      | <input checked="" type="checkbox"/> |
| 4. Summary Table cross-referencing field ID #'s vs. Lab ID #'s  | <input checked="" type="checkbox"/> |
| 5. Document paginated and legible   | <input checked="" type="checkbox"/> |
| 6. Chain of Custody   | <input checked="" type="checkbox"/> |
| 7. Methodology Summary  | <input checked="" type="checkbox"/> |
| 8. Laboratory Chronicle and Holding Time Check  | <input checked="" type="checkbox"/> |
| 9. Results submitted on a dry weight basis (if applicable)  | <input checked="" type="checkbox"/> |
| 10. Method Detection Limits   | <input checked="" type="checkbox"/> |
| 11. Lab certified by NJDEPE for parameters or appropriate category of parameters or a member of the USEPA CLP | <input checked="" type="checkbox"/> |
| 12. Non-Conformance Summary   | <input checked="" type="checkbox"/> |

  
 Laboratory Director of Environmental  
 Consultant's Signature

3/16/95  
 Date

NAC JOB NO. 06.26

## GC/MS VOLATILE ORGANICS ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY CHECKLIST

- |  | <u>No</u> | <u>Yes</u> |
|--|-----------|------------|
| 1. <u>Chromatograms Labeled/Compounds Identified</u><br>(Field Samples and Method Blanks)  | _____     | _____✓     |
| 2. <u>GC/MS Tune Specifications</u><br>BFB passed  | _____     | _____✓     |
| 3. <u>GC/MS Tuning Frequency</u> - Performed every 24 hours for<br>600 series and 12 hours for 8000 series   | _____     | _____✓     |
| 4. <u>GC/MS Calibration</u> - Initial Calibration performed<br>within 30 days before sample analysis and continuing<br>calibration performed within 24 hours of sample<br>analysis for 600 series and 12 hours for 8000 series | _____     | _____✓     |
| 5. <u>GC/MS Calibration Requirements</u>   |           |            |
| a. Calibration Check Compounds   | _____     | _____✓     |
| b. System Performance Check Compounds  | _____     | _____✓     |
| 6. <u>Blank Contamination</u> - If yes, list compounds and concentrations<br>in each blank;  | _____✓    | _____      |

VOA Fraction \_\_\_\_\_

7. Surrogate Recoveries Meet Criteria

\_\_\_\_\_✓\_\_\_\_\_

If not met, list those compounds and their recoveries  
which fall outside the acceptable range

VOA Fraction

- 3 TOL @ 133 ; - 11 BFB @ 61If not met, were the calculations checked and the results  
qualified as "estimated"?

\_\_\_\_\_✓

8. Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria
- 
- (If not met, list those compounds and their recoveries
- 
- which fall outside the acceptable range)

\_\_\_\_\_✓

VOA Fraction \_\_\_\_\_

9. Internal Standard Area/Retention Time Shift Meet Criteria

\_\_\_\_\_✓

10. Analysis Holding Time Met

\_\_\_\_\_✓

If not met, list number of days exceeded for each sample: \_\_\_\_\_

Additional Comments: \_\_\_\_\_

NAC JOB NO. L950626

## V. GC ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY CHECKLIST

- |  | <u>No</u> | <u>Yes</u> |
|--|-----------|------------|
| 1. <u>Chromatograms Labeled/Compounds Identified</u><br>(Field Samples and Method Blanks)  | _____     | _____✓     |
| 2. <u>Standards Summary Submitted</u>  | _____     | _____✓     |
| 3. <u>Calibration</u> - Initial Calibration performed within<br>30 days before sample analysis and continuing<br>calibration performed within 24 hours before sample<br>analysis | _____     | _____✓     |
| 4. <u>Blank Contamination</u> - If yes, list compounds and concentrations<br>in each blank;  | _____✓    | _____      |
| a. VOA Fraction _____<br>b. B/N Fraction _____<br>c. Acid Fraction _____<br>d. Pesticides/PCB's _____<br>e. Other _____  |           |            |
| 5. <u>Surrogate Recoveries Meet Criteria (if applicable)</u>   | _____     | _____✓     |
| If not met, list those compounds and their recoveries<br>which fall outside the acceptable range:  |           |            |
| a. VOA Fraction _____<br>b. B/N Fraction _____<br>c. Acid Fraction _____<br>d. Pesticides/PCB's _____<br>e. Other _____  |           |            |
| If not met, were the calculations checked and the results<br>qualified as "estimated"?   |           |            |
| _____✓   |           |            |
| 6. <u>Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria</u><br>(if applicable)  | _____     | _____✓     |
| If not met, list those compounds and their recoveries<br>which fall outside the acceptable range:  |           |            |
| a. VOA Fraction _____<br>b. B/N Fraction _____<br>c. Acid Fraction _____<br>d. Pesticides/PCB's _____<br>e. Other _____  |           |            |

NAC JOB NO. 6950626

## V. GC ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY CHECKLIST (Continued)

- |   | <u>No</u>     | <u>Yes</u> |
|---|---------------|------------|
| 7. Retention Time Shift Meet Criteria (if applicable)           | <u>      </u> | <u>✓</u>   |
| 8. Extraction Holding Time Met                                  | <u>      </u> | <u>✓</u>   |
| If not met, list number of days exceeded for each sample: _____ |               |            |
| _____   |               |            |
| 9. Analysis Holding Time Met                                    | <u>      </u> | <u>✓</u>   |
| If not met, list number of days exceeded for each sample: _____ |               |            |
| _____   |               |            |

Additional Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



NAC JOB NO. 0626

ICP ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY CHECKLIST

- |  | No            | Yes           |
|--|---------------|---------------|
| 1. Calibration Data Meet Criteria  | <u>      </u> | <u>✓</u>      |
| 2. ICP Interference Check Sample Results Meet Criteria                                   | <u>      </u> | <u>✓</u>      |
| 3. Serial Dilution Meet Criteria   | <u>      </u> | <u>✓</u>      |
| 4. Laboratory Control Sample Meet Criteria   | <u>      </u> | <u>✓</u>      |
| 5. <u>Blank Contamination</u> - If yes, list compounds and concentrations in each blank: | <u>✓</u>      | <u>      </u> |

\_\_\_\_\_  
\_\_\_\_\_

6. Matrix Spike and Duplicate Recoveries Meet Criteria ✓         
(If not met, list those compounds and their recoveries which fall outside the acceptable range)

L950626-1 Ag 0%, Be 34%, Cd 184%, CR 10%, Ni 17%, Sb 29%,  
No Recovery for Cu, Zn Due to High Matrix Concentration in the Sample.

7. Digestion Holding Time Met        ✓

If not met, list number of days exceeded for each sample: \_\_\_\_\_  
\_\_\_\_\_

8. Analysis Holding Time Met        ✓

If not met, list number of days exceeded for each sample: \_\_\_\_\_  
\_\_\_\_\_

Additional Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Reviewed by: R2 Date: 3/16



9A

## MERCURY ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY CHECKLIST

Yes

1. Calibration Data Meet Criteria \_\_\_\_\_ ✓
2. Laboratory Control Sample Meet Criteria \_\_\_\_\_ ✓
3. Blank Contamination - If yes, list compounds and concentrations in each blank: ✓ \_\_\_\_\_

4. Matrix Spike and Duplicate Recoveries Meet Criteria (if not met, list those compounds and their recoveries which fall outside the acceptable range)

L 950626-1 Hg 133%

5. Digestion Holding Time Met \_\_\_\_\_ *K*

If not met, list number of days exceeded for each sample: \_\_\_\_\_

6. Analysis Holding Time Met \_\_\_\_\_ *✓*

If not met, list number of days exceeded for each sample: \_\_\_\_\_

Additional Comments: \_\_\_\_\_

Reviewed by: Yia Date: 3/16/95

3/95: chkst.hg

4.

#### V. PHC ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY CHECKLIST

|   | NO                                  | YES                                 |
|---|-------------------------------------|-------------------------------------|
| 1. <u>Blank Contamination</u> - If yes, list sample and the corresponding concentrations in each blank:   | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| 2. Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria (If not met, list the sample and corresponding recovery which falls outside the acceptable range) | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 3. IR Spectra submitted for all standards, blanks & samples   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 4. Chromatograms submitted for all standards, blanks & samples if GC fingerprinting was conducted   | <input type="checkbox"/>            | <input type="checkbox"/>            |
| 5. Extraction Holding Time Met  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| If not met, list number of days exceeded for each sample: _____   |                                     |                                     |
| 6. Analysis Holding Time Met  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| If not met, list number of days exceeded for each sample: _____   |                                     |                                     |
| Additional Comments: _____  |                                     |                                     |



NORTHEASTERN ANALYTICAL CORPORATION

## CHAIN OF CUSTODY RECORD

L950626

| PROJ. NO.<br>NAP<br>005                  |      | PROJECT NAME<br>Port Newark<br>Terminal<br>BATHS 30332 Up-land |      |   |                       | NO.<br>OF<br>CON-<br>TAINERS | CONTAINER TYPE |               |  |                          |  |                                     | REMARKS |
|--|------|--|------|---|-----------------------|------------------------------|----------------|---------------|--|--------------------------|--|-------------------------------------|---------|
| SAMPLERS:<br>K.L. WOODRUFF<br>M. SANDLER |      |  |      |   |                       |                              | 250ml Metal    | 100ml Plastic |  |                          |  |                                     |         |
| SAMPLE                                   | DATE | TIME   | SOIL | AD.                                     | SAMPLE LOCATION       |                              |                |               |  |                          |  |                                     |         |
| 1 S-1A                                   | 2/23 | 8:35   | X    |   | S-1 15" TOTAL SAMPLE  | Z                            | X              | X             |  |                          |  | ANALYTE for: TPHC, PCB, PPMLs, VOCs |         |
|  |      | 8:10   |      |   | S-1A 0-12" LAB Sample |                              |                |               |  |                          |  |                                     |         |
|  |      |  |      |   | Contains Much Gravel  |                              |                |               |  |                          |  |                                     |         |
| 2 S-1B                                   | 2/23 | 9:15   | X    |   | 12"-20" LAB Sample    | Z                            | X              | X             |  |                          |  |                                     |         |
|  |      |  |      |   | SANDY MAT'L.          |                              |                |               |  |                          |  |                                     |         |
|  |      |  |      |   | (4' TOTAL DEPTH)      |                              |                |               |  |                          |  |                                     |         |
| 3 S-2A                                   | 2/23 | 9:45   | X    |   | S-2A 15" TOTAL SAMPLE | Z                            | X              | X             |  |                          |  |                                     |         |
|  |      |  |      |   | 0-12" sample to LAB   |                              |                |               |  |                          |  |                                     |         |
| 4 S-2B                                   | 2/23 | 9:55   | X    |   | S-2B 12" TOTAL SAMPLE | Z                            | X              | X             |  |                          |  |                                     |         |
|  |      |  |      |   | 15"-24" sample to LAB |                              |                |               |  |                          |  |                                     |         |
| 5 S-3A                                   | 2/23 | 10:15  | X    |   | S-3A 23" TOTAL SAMPLE | Z                            | X              | X             |  |                          |  |                                     |         |
|  |      |  |      |   | 0-12" LAB Sample      |                              |                |               |  |                          |  |                                     |         |
| 6 S-3B                                   | 2/23 | 10:25  | X    |   | S-3B                  | Z                            | X              | X             |  |                          |  |                                     |         |
|  |      |  |      |   | 12-23" LAB SAMPLE     |                              |                |               |  |                          |  |                                     |         |
| Relinquished by: (Signature)             |      | Date/Time  |      | Received by: (Signature)                |                       | Relinquished by: (Signature) |                | Date/Time     |  | Received by: (Signature) |  |                                     |         |
| [Signature]                              |      | 2/23/95 1504   |      | [Signature]                             |                       |                              |                |               |  |                          |  |                                     |         |
| Relinquished by: (Signature)             |      | Date/Time  |      | Received by: (Signature)                |                       | Relinquished by: (Signature) |                | Date/Time     |  | Received by: (Signature) |  |                                     |         |
|  |      |  |      |   |                       |                              |                |               |  |                          |  |                                     |         |
| Relinquished by: (Signature)             |      | Date/Time  |      | Received for Laboratory by: (Signature) |                       | Date/Time                    |                | Remarks       |  |                          |  |                                     |         |
|  |      |  |      |   |                       |                              |                |               |  |                          |  |                                     |         |

010



NORTHEASTERN ANALYTICAL CORPORATION

## CHAIN OF CUSTODY RECORD

2/

| PROJ. NO.<br>NAP<br>005                |      | PROJECT NAME<br>PORT NEWARK<br>TERMINAL<br>DEATHS 30132 Spland |       |     |  | NO.<br>OF<br>CON-<br>TAINERS | CONTAINER TYPE                          |   |  |  |  |  |           |                          | REMARKS |
|--|------|--|-------|-----|--|------------------------------|---|---|--|--|--|--|-----------|--------------------------|---------|
| SAMPLERS:<br>M. SANDLER<br>K. WOODRUFF |      |  |       |     |  |                              |   |   |  |  |  |  |           |                          |         |
| SAMPLE                                 | DATE | TIME   | SOIL  | AO. | SAMPLE LOCATION  |                              |   |   |  |  |  |  |           |                          |         |
| 7                                      | S-4A | 2/23   | 10:45 | X   | S-4A 11" TOTAL<br>SAMPLE<br>UNDER 3" depth<br>Sand at bottom of sample | 2                            | X                                       | X |  |  |  |  |           |                          |         |
| 8                                      | S-4B | 2/23   | 10:50 | X   | S-4B 10"-18"<br>Sandy material   | 2                            | X                                       | X |  |  |  |  |           |                          |         |
| 9                                      | S-5A | 2/23   | 11:10 | X   | S-5A 0-23" TOTAL<br>SAMPLE<br>0-16" LAB<br>SAMPLE                      | 2                            | X                                       | X |  |  |  |  |           |                          |         |
| 10                                     | S-5B | 2/23   | 11:15 | X   | S-5B 16"-20"<br>LAB sample<br>Sandy material                           | 2                            | X                                       | X |  |  |  |  |           |                          |         |
| 11                                     | S-6A | 2/23   | 11:35 | X   | S-6A 0-24"<br>Gravel-Sand 0-12"<br>LAB sample                          | 2                            | X                                       | X |  |  |  |  |           |                          |         |
| 12                                     | S-6B | 2/23   | 11:40 | X   | S-6B 12-24"<br>Sample<br>Dark material & sand                          | 2                            | X                                       | X |  |  |  |  |           |                          |         |
| Relinquished by: (Signature)           |      |  |       |     |  | Date/Time                    | Received by: (Signature)                |   |  |  |  |  | Date/Time | Received by: (Signature) |         |
| Relinquished by: (Signature)           |      |  |       |     |  | Date/Time                    | Received by: (Signature)                |   |  |  |  |  | Date/Time | Received by: (Signature) |         |
| Relinquished by: (Signature)           |      |  |       |     |  | Date/Time                    | Received for Laboratory by: (Signature) |   |  |  |  |  | Date/Time | Remarks                  |         |

011



NORTHEASTERN ANALYTICAL CORPORATION

## CHAIN OF CUSTODY RECORD

3/3

| PROJ. NO.<br>N.A.P.<br>C05                 |      | PROJECT NAME<br>PORT NEWARK<br>TERMINAL<br>1351745 30102 4/10 |      |     |   | NO.<br>OF<br>CON-<br>TAINERS | CONTAINER TYPE                          |      |  |  |  |  | REMARKS              |                              |  |           |                          |  |
|--|------|---|------|-----|---|------------------------------|---|------|--|--|--|--|----------------------|------------------------------|--|-----------|--------------------------|--|
| SAMPLERS:<br>M. Sandler<br>K. Woodard      |      |   |      |     |   |                              | 250-11                                  | 7021 |  |  |  |  |                      |                              |  |           |                          |  |
| SAMPLE                                     | DATE | TIME  | SOIL | AG. | SAMPLE LOCATION   |                              |   |      |  |  |  |  |                      |                              |  |           |                          |  |
| B S-7A                                     | 2/23 | 11:55   | X    |     | S-7A 0-15" <sup>TOTAL</sup> SAMPLE<br>0-12" <sup>LAD</sup> SAMPLE | 2                            | X                                       | X    |  |  |  |  |                      |                              |  |           |                          |  |
| H S-7B                                     | 2/23 | 12:05   | X    |     | S-7B 9" <sup>TOTAL</sup> SAMPLE<br>12-24" <sup>LAD</sup> SAMPLE   | 2                            | X                                       | X    |  |  |  |  |                      |                              |  |           |                          |  |
| U S-7AD                                    | 2/23 | 12:10   | X    |     | S-7AD Duplic-L<br>0-12" <sup>LAD</sup> SAMPLE                     | 2                            | X                                       | X    |  |  |  |  |                      |                              |  |           |                          |  |
| K FIELD                                    | 2/23 | 12:20   | X    |     | BLANK   | 7                            |   |      |  |  |  |  |                      |                              |  |           |                          |  |
| Relinquished by: (Signature)<br>M. Sandler |      |   |      |     |   | Date/Time<br>2/23/15         | Received by: (Signature)<br>O. Woodard  |      |  |  |  |  | Date/Time<br>2/23/15 | Relinquished by: (Signature) |  | Date/Time | Received by: (Signature) |  |
| Relinquished by: (Signature)               |      |   |      |     |   | Date/Time                    | Received by: (Signature)                |      |  |  |  |  | Date/Time            | Relinquished by: (Signature) |  | Date/Time | Received by: (Signature) |  |
| Relinquished by: (Signature)               |      |   |      |     |   | Date/Time                    | Received for Laboratory by: (Signature) |      |  |  |  |  | Date/Time            | Remarks                      |  |           |                          |  |

012

TIERRA-B-012400





CLIENT: KENNETH L. WOODRUFF ASSOCIATES PROJECT: NAP-005/PORT NEWARK TERMINAL

| Soil: Parameters/Sample: |      |            |      |
|--------------------------|------|------------|------|
| PCB-8080 1               | - 15 | PHC 1      | - 15 |
| AS 1                     | - 15 | BE 1       | - 15 |
| CU 1                     | - 15 | HC 1       | - 15 |
| SB 1                     | - 15 | SE 1       | - 15 |
| TS 1                     | - 15 | VOA-8240 1 | - 15 |
| AG 1                     | - 15 | CD 1       | - 15 |
| CR 1                     | - 15 | NI 1       | - 15 |
| PB 1                     | - 15 | TL 1       | - 15 |
| ZN 1                     | - 15 | VOA-XYLE 1 | - 15 |

REFER TO EXTERNAL COC FOR DESIGNATED SAMPLE INFORMATION

| SAMPLE #   | ANAL<br>REQD. | LAB<br>OUT | INIT. AMT.<br>g or mL | FINAL<br>mL | EXTRACTION<br>DATE | INI | CONC.<br>DATE | INI   | CLN<br>UP | COMMENTS       |
|------------|---------------|------------|-----------------------|-------------|--------------------|-----|---------------|-------|-----------|----------------|
| BLK #1 B   | PCB           |            | 30.0g                 | 10mL        | 3-03-45            | OS  | 07<br>3-06-45 | OS/PA |           | 1ml surr       |
| 0626-8 MS  |               |            | 30.0g                 | 10mL        |                    |     |               |       | H2SO4/H2O | 1ml surr + SPR |
| 0626-8 MSD |               |            | 30.0g                 | 10mL        |                    |     |               |       | b         | 1ml surr + SPR |
| QC SPR     |               |            | 30.0g                 | 10mL        |                    |     |               |       |           | 1ml surr + SPR |
| 950626-1   |               | 3/10       | 30.0g                 | 10mL        |                    |     |               |       | H2SO4/H2O | 1ml surr       |
| -2         |               |            | 30.0g                 | 10mL        |                    |     |               |       |           | 1ml surr       |
| -3         |               |            | 30.0g                 | 10mL        |                    |     |               |       |           | 1ml surr       |
| -4         |               |            | 30.0g                 | 10mL        |                    |     |               |       |           | 1ml surr       |
| -5         |               |            | 30.0g                 | 10mL        |                    |     |               |       |           | 1ml surr       |
| -6         |               |            | 30.0g                 | 10mL        |                    |     |               |       |           | 1ml surr       |
| -7         |               |            | 30.0g                 | 10mL        |                    |     |               |       |           | 1ml surr       |
| -8         |               |            | 30.0g                 | 10mL        |                    |     |               |       |           | 1ml surr       |
| -9         |               |            | 30.0g                 | 10mL        |                    |     |               |       |           | 1ml surr       |
| -10        |               |            | 30.0g                 | 10mL        |                    |     |               |       |           | 1ml surr       |
| -11        |               |            | 30.0g                 | 10mL        |                    |     |               |       |           | 1ml surr       |
| -12        |               |            | 30.0g                 | 10mL        |                    |     |               |       |           | 1ml surr       |
| -13        |               |            | 30.0g                 | 10mL        |                    |     |               |       |           | 1ml surr       |
| -14        |               |            | 30.0g                 | 10mL        |                    |     |               |       |           | 1ml surr       |
| -15        |               |            | 30.0g                 | 10mL        |                    |     |               |       |           | 1ml surr       |
| 950674-1   |               |            | 30.0g                 | 10mL        |                    |     |               |       |           | 1ml surr       |
| 950686-1   |               |            | 30.0g                 | 10mL        |                    |     |               |       |           | 1ml surr       |
|            |               |            |                       |             |                    |     |               |       |           |                |
|            |               |            |                       |             |                    |     |               |       |           |                |
|            |               |            |                       |             |                    |     |               |       |           |                |
|            |               |            |                       |             |                    |     |               |       |           |                |
| Blank 2    |               |            |                       |             |                    |     |               |       |           |                |
| Blank 3    |               |            |                       |             |                    |     |               |       |           |                |
| Blank 4    |               |            |                       |             |                    |     |               |       |           |                |
| Blank 5    |               |            |                       |             |                    |     |               |       |           |                |
| Blank 6    |               |            |                       |             |                    |     |               |       |           |                |

KEY: A, A-, B, B-, C = AM, F = FUEL CHAR., T = TOL., P = PEST., AS = EXTRA STANDARD, S/P = GC/PC

EXTR. MET: SEPF \_\_\_ LIQ/LIQ \_\_\_ SONG ☒ SOX/LET \_\_\_

|            | MLS      | CONC.<br>mg/mL | LOT# |
|------------|----------|----------------|------|
| SURROGATE  | WAC/TCMA | 1.0            | 2/1  |
| SPIKE      | AR 1660  | 1.0            | 10   |
| SPIKE DUP. | b        | b              | b    |

| RELINQUISHED BY | RECEIVED BY | SUPPLY SIG | DATE   | TIME  | REASON                 |
|-----------------|-------------|------------|--------|-------|------------------------|
| P. 222g         |             |            | 2-7-95 | 12.00 | 3181, MS, MSD 60, 1-17 |
|                 |             |            |        |       |                        |
|                 |             |            |        |       |                        |
|                 |             |            |        |       |                        |

| SAMPLE #      | ANAL. REQD. | LAB OUT | INIT. AMT. g or mL | FINAL mL | EXTRACTION DATE | IN  | CONC. DATE | IN | CLN UP | COMMENTS                                       |
|---------------|-------------|---------|--------------------|----------|-----------------|-----|------------|----|--------|--|
| 9 BLK         | B           | PCB     | 1000 mL            | 10       | 2-16-95         | LMS | 2-21-95    | HE | IN     | 1ml SURV                                       |
| S             |             |         |                    |          |                 |     |            |    |        |  |
| SD            |             |         |                    |          |                 |     |            |    |        |  |
| 1 C12 SPK     | B           | PCB     | 1000 mL            | 10       | 2-16-95         | LMS | 2-22-95    | HE | IN     | 1ml SURV + SPK                                 |
| 2 C12 SPK DUP |             |         | 1000 mL            | 10       |                 |     |            |    |        | 1ml SURV + SPK                                 |
| 3 485-4       |             | ASAP    | 1000 mL            | 10       |                 |     |            |    |        | 1ml SURV                                       |
| 4 477-22      |             |         | 1000 mL            | 10       |                 |     |            |    |        | 1ml SURV                                       |
| 5 438-2       | PCB         | ASAP    | 1000 mL            | 5        | 2-22-95         | AR  | 2-22-95    | AR |        | 1ml SURV                                       |
| 6 0547-1      | PCB         |         | 1000 mL            | 1        | 2-23-95         | OS  | 2-27       | PN |        | REFER to G6-2085 / PL<br>1ml SURV changed to 6 |
| 7 -2          |             |         | 1000 mL            |          |                 |     |            |    |        | 1ml SURV                                       |
| 8 -3          |             |         | 1000 mL            |          |                 |     |            |    |        | 1ml SURV                                       |
| 9 -4          |             |         | 1000 mL            |          |                 |     |            |    |        | 1ml SURV                                       |
| 10 -5         |             |         | 1000 mL            |          |                 |     |            |    |        | 1ml SURV                                       |
| 11 -6         |             |         | 1000 mL            |          |                 |     |            |    |        | 1ml SURV                                       |
| 12 C12 324712 | PCB         |         | 100                |          |                 |     |            |    |        |  |
| 13 C26-16     | PCB         | 3/10    | 1000               | 10       | 3-19-95         | LMS | 3-7-95     | OS |        | 1ml SURV                                       |
| 14 C60-3      | PCB         | 3/2     | 1000               | 10 mL    |                 |     | 3-1-95     | PN |        | 1ml SURV                                       |
| 15 C37-1      | PCB         | 3/20    | 1000 mL            |          | 3-6-95          | LMS |            |    |        | 1ml SURV                                       |
| 16            |             |         |                    |          |                 |     |            |    |        |  |
| 17            |             |         |                    |          |                 |     |            |    |        |  |
| 18            |             |         |                    |          |                 |     |            |    |        |  |
| 19            |             |         |                    |          |                 |     |            |    |        |  |
| 20            |             |         |                    |          |                 |     |            |    |        |  |
| Blank 2       | PCB         | 1       | 1000               | 5        | 3-22-95         | AR  | 2-22-95    | AR |        | 1ml SURV                                       |
| Blank 3       | PCB         |         | 1000               |          | 2-22-95         | OS  |            |    |        | 1ml SURV 02-23-95 OS                           |
| Blank 4       | PCB         |         | 1000               | 10 mL    | 3-1-95          | LMS | 3-1-95     | PN |        | 1ml SURV                                       |
| Blank 5       | PCB         |         | 1000               |          | 3-6-95          | LMS |            |    |        | 1ml SURV                                       |
| Blank 6       |             |         |                    |          |                 |     |            |    |        |  |

KEY: A - A-1, B - B-1, C - C-1, D - D-1, E - E-1, F - FUEL CHARG., T - TOLUENE, P - PEST., /F - F-1  
P/F - PEST/PCB, AS - EXTRA STANDARD, G/P - G-PCPC

EXTR MET: SEPP      LIQ/LIQ      SEMG      SOXHLET     

| SURROGATE         | MLS    | CONC        | LOT#       |
|-------------------|--------|-------------|------------|
| DIETHYLENE GLYCOL | 1.0 mL | 2.20 mg/mL  | 020715 SDT |
| SPRINKLE          | 1.0 mL | 10.00 mg/mL | 011115 JRF |
| SPRINKLE DUP.     |        |             |            |

| RELINQUISHED BY    | RECEIVED BY        | SUPRV SIG | DATE    | TIME  | REASON             |
|--------------------|--------------------|-----------|---------|-------|--------------------|
| <i>[Signature]</i> | <i>[Signature]</i> |           | 1/11/95 | 1430  | BLK #2 + 7/4       |
| <i>[Signature]</i> | <i>[Signature]</i> |           | 1/11/95 | 1500  | RECALL G6-2085 2-3 |
| <i>[Signature]</i> | <i>[Signature]</i> |           | 2/11/95 | 16:45 | BLK #1 G6-2085 2-3 |
| <i>[Signature]</i> | <i>[Signature]</i> |           | 3/17/95 | 16:45 | 45-10              |
| <i>[Signature]</i> | <i>[Signature]</i> |           | 3/17/95 | 16:45 | 7512 45 13         |

NORTHEASTERN ANALYTICAL CORPORATION  
Test Report No. 950626  
Kenneth L. Woodruff Associates

METHODOLOGY

• Purgeables by GC/MS - Aqueous/Solid

Method 8240 - This is a purge and trap gas chromatograph/mass spectrometer (GC/MS) method. The organic compounds are separated by the gas chromatograph and detected using the mass spectrometer. Test Methods for Evaluating Solid Waste, SW846, 3rd Edition, November, 1986.

Report detection limits are as stated.

• PCB's by GC

Method 8080 - This method covers the determination of pesticides and polychlorinated biphenyls (PCB's) in samples by extraction/concentration with organic solvents and subsequent qualification/quantification by Gas Chromatography. The gas chromatograph utilizes an electron capture detector (ECD) which is applicable for the determination of the compounds listed for this method in Test Methods for Evaluating Solid Waste, SW846, 3rd Edition, November, 1986.

Soil samples were prepared for analysis as prescribed in sonication Method 3550 from SW846.

• Metals - Solid

This is a procedure used to determine metals concentrations in soils. It involves an acidic digestion under oxidizing conditions of approximately one (1) gram of soil. Nitric and hydrochloric acids as well as hydrogen peroxide are employed in the digestion. The digested sample is filtered and diluted to 100 milliliters. The analysis is performed by Inductively Coupled Plasma (ICP) atomic emission spectrometry. Reference methods include the CLP Statement of Work for Inorganics and Test Methods for Evaluating Solid Waste, SW846, 3rd Edition, November, 1986.

NORTHEASTERN ANALYTICAL CORPORATION  
Test Report No. 950626  
Kenneth L. Woodruff Associates

METHODOLOGY (Continued)

• Metals - Aqueous

This is a procedure used to determine metals concentrations in aqueous matrices. It involves an acidic digestion under oxidizing conditions of approximately 25 milliliters of sample. Nitric and hydrochloric acids as well as hydrogen peroxide are employed in the digestion. The digested sample is filtered and diluted to 25 milliliters. The analysis is performed by ICP, furnace atomic absorption and manual cold-vapor if mercury is requested. Reference methods are Methods for the Chemical Analysis of Water and Wastes, Revised, March 1983, and Methods for the Determination of Metals in Environmental Samples: EPA/600/4-91/010, June 1991.

• Petroleum Hydrocarbons by IR - Aqueous (PHC)

The sample is extracted with freon and an Infrared Spectrophotometer (IR) method is used to determine petroleum hydrocarbon levels in aqueous matrices. The non-petroleum hydrocarbons are removed with silica gel and the extract is analyzed by IR against a series of standard mixtures. Reference method is EPA Methods for the Chemical Analysis of Water and Wastes, Revised, March 1983, Method 418.1.

• Petroleum Hydrocarbons by IR - Solid (PHC)

This is a soxhlet extraction and Infrared Spectrophotometer (IR) method used to determine petroleum hydrocarbon levels in solid matrices. An aliquot of the sample is soxhlet extracted with freon, the non-petroleum hydrocarbons are removed with silica gel and the extract is analyzed by IR against a series of standard mixtures. Reference method is EPA Methods for the Chemical Analysis of Water and Wastes, Revised, March 1983, Method 418.1.

NORTHEASTERN ANALYTICAL CORPORATION  
Test Report No. 950626  
Kenneth L. Woodruff Associates

METHODOLOGY (Continued)

• Total Solids, Percent (TS)

This is a gravimetric analytical method used to determine the moisture content present in either aqueous or solid matrices. An aliquot of the sample is weighed into a tared beaker and then dried at 103°-105°C. The final weight is subtracted from the initial weight and then the percent total solids present in the sample is calculated. Reference method is Standard Methods for the Examination of Water and Wastewater, 16th Edition, Method 209A.

The following is a list of symbols an/or abbreviations which may be found in NAC reports.

| <u>Symbols</u> | <u>Description</u>   |
|----------------|--|
| U              | Analyte is not detected above the method detection limit                       |
| ND             | Analyte is not detected above the method detection limit                       |
| <              | Analyte is present in the sample at an amount less than the reported result    |
| >              | Analyte is present in the sample at an amount greater than the reported result |
| MDL            | Method Detection Limit   |
| RDL            | Report Detection Limit   |
| PQL            | Practical Quantitation Limit   |
| TNTC           | Coliform growth is too numerous to count (above 200)                           |
| dw             | Dry Weight   |
| B              | Analyte is present in the associated method blank                              |
| MS             | Matrix Spike   |
| MSD            | Matrix Spike Duplicate   |
| DUP            | Sample Duplicate   |
| RSD            | Relative % Standard Deviation  |
| CF             | Calibration Factor   |
| MI             | Matrix Interference  |
| HA             | High Analyte   |
| J              | Estimated Value  |
| D              | Standard spike or surrogate diluted out  |
| <=             | Less than or equal to  |
| >=             | Greater than or equal to   |
| N/A            | Not Applicable   |

## LABORATORY CHRONICLE

021

| LAB SAMPLE ID | CLIENT ID | SAMPLING DATE | MATRIX |
|---------------|-----------|---------------|--------|
| L950626-1     | S-1A      | 23-FEB-95     | Soil   |
| 950626-2      | S-1B      | 23-FEB-95     | Soil   |
| L950626-3     | S-2A      | 23-FEB-95     | Soil   |
| L950626-4     | S-2B      | 23-FEB-95     | Soil   |
| L950626-5     | S-3A      | 23-FEB-95     | Soil   |
| L950626-6     | S-3B      | 23-FEB-95     | Soil   |

## EXTRACT DATE

| PARAMETER       | -1       | -2       | -3       | -4       | -5       | -6       |
|-----------------|----------|----------|----------|----------|----------|----------|
| ARSENIC         |          |          |          |          |          |          |
| HG-A            |          |          |          |          |          |          |
| HG-S            | 03/03/95 | 03/03/95 | 03/03/95 | 03/03/95 | 03/03/95 | 03/03/95 |
| METALS (ICAP)-A |          |          |          |          |          |          |
| METALS (ICAP)-S | 03/01/95 | 03/01/95 | 03/01/95 | 03/01/95 | 03/01/95 | 03/01/95 |
| LEAD            |          |          |          |          |          |          |
| SELENIUM        |          |          |          |          |          |          |
|                 |          |          |          |          |          |          |

## ANALYSIS DATE

| PARAMETER       | -1       | -2       | -3       | -4       | -5       | -6       |
|-----------------|----------|----------|----------|----------|----------|----------|
| ARSENIC         |          |          |          |          |          |          |
| HG-A            |          |          |          |          |          |          |
| HG-S            | 03/03/95 | 03/03/95 | 03/03/95 | 03/03/95 | 03/03/95 | 03/03/95 |
| METALS (ICAP)-A |          |          |          |          |          |          |
| METALS (ICAP)-S | 03/02/95 | 03/02/95 | 03/02/95 | 03/02/95 | 03/02/95 | 03/02/95 |
| LEAD            |          |          |          |          |          |          |
| SELENIUM        |          |          |          |          |          |          |
|                 |          |          |          |          |          |          |



## LABORATORY CHRONICLE

022

| LAB SAMPLE ID | CLIENT ID | SAMPLING DATE | MATRIX |
|---------------|-----------|---------------|--------|
| L950626-1     | S-1A      | 23-FEB-95     | Soil   |
| 950626-2      | S-1B      | 23-FEB-95     | Soil   |
| 950626-3      | S-2A      | 23-FEB-95     | Soil   |
| L950626-4     | S-2B      | 23-FEB-95     | Soil   |
| L950626-5     | S-3A      | 23-FEB-95     | Soil   |
| L950626-6     | S-3B      | 23-FEB-95     | Soil   |

## EXTRACT DATE

| PARAMETER | -1       | -2       | -3       | -4       | -5       | -6       |
|-----------|----------|----------|----------|----------|----------|----------|
| THALLIUM  |          |          |          |          |          |          |
| PCB'S-A   |          |          |          |          |          |          |
| PCB'S-S   | 03/03/95 | 03/03/95 | 03/03/95 | 03/03/95 | 03/03/95 | 03/03/95 |
| VOL. ORG. |          |          |          |          |          |          |
| VOL. ORG. |          |          |          |          |          |          |
| PHC-A     |          |          |          |          |          |          |
| PHC-S     | 02/28/95 | 02/28/95 | 02/28/95 | 02/28/95 | 02/28/95 | 02/28/95 |

## ANALYSIS DATE

| PARAMETER | -1       | -2       | -3       | -4       | -5       | -6       |
|-----------|----------|----------|----------|----------|----------|----------|
| THALLIUM  |          |          |          |          |          |          |
| PCB'S-A   |          |          |          |          |          |          |
| PCB'S-S   | 03/09/95 | 03/08/95 | 03/09/95 | 03/13/95 | 03/09/95 | 03/13/95 |
| VOL. ORG. |          |          |          |          |          |          |
| VOL. ORG. | 03/03/95 | 03/03/95 | 03/03/95 | 03/03/95 | 03/03/95 | 03/06/95 |
| PHC-A     |          |          |          |          |          |          |
| PHC-S     | 02/28/95 | 02/28/95 | 02/28/95 | 02/28/95 | 02/28/95 | 02/28/95 |

## LABORATORY CHRONICLE

023

| LAB SAMPLE ID | CLIENT ID | SAMPLING DATE | MATRIX |
|---------------|-----------|---------------|--------|
| L950626-1     | S-1A      | 23-FEB-95     | Soil   |
| 950626-2      | S-1B      | 23-FEB-95     | Soil   |
| L950626-3     | S-2A      | 23-FEB-95     | Soil   |
| L950626-4     | S-2B      | 23-FEB-95     | Soil   |
| L950626-5     | S-3A      | 23-FEB-95     | Soil   |
| L950626-6     | S-3B      | 23-FEB-95     | Soil   |

## EXTRACT DATE

| PARAMETER | -1 | -2 | -3 | -4 | -5 | -6 |
|-----------|----|----|----|----|----|----|
| TS        |    |    |    |    |    |    |
|           |    |    |    |    |    |    |
|           |    |    |    |    |    |    |
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|           |    |    |    |    |    |    |
|           |    |    |    |    |    |    |
|           |    |    |    |    |    |    |

## ANALYSIS DATE

| PARAMETER | -1       | -2       | -3       | -4       | -5       | -6       |
|-----------|----------|----------|----------|----------|----------|----------|
| TS        | 02/28/95 | 02/28/95 | 02/28/95 | 02/28/95 | 02/28/95 | 02/28/95 |
|           |          |          |          |          |          |          |
|           |          |          |          |          |          |          |
|           |          |          |          |          |          |          |
|           |          |          |          |          |          |          |
|           |          |          |          |          |          |          |
|           |          |          |          |          |          |          |
|           |          |          |          |          |          |          |
|           |          |          |          |          |          |          |

## LABORATORY CHRONICLE

024

| LAB SAMPLE ID | CLIENT ID | SAMPLING DATE | MATRIX |
|---------------|-----------|---------------|--------|
| L950626-7     | S-4A      | 23-FEB-95     | Soil   |
| L950626-8     | S-4B      | 23-FEB-95     | Soil   |
| L950626-9     | S-5A      | 23-FEB-95     | Soil   |
| L950626-10    | S-5B      | 23-FEB-95     | Soil   |
| L950626-11    | S-6A      | 23-FEB-95     | Soil   |
| L950626-12    | S-6B      | 23-FEB-95     | Soil   |

## EXTRACT DATE

| PARAMETER        | -7       | -8       | -9       | -10      | -11      | -12      |
|------------------|----------|----------|----------|----------|----------|----------|
| ARSENIC          |          |          |          |          |          |          |
| HG-A             |          |          |          |          |          |          |
| HG-S             | 03/03/95 | 03/03/95 | 03/03/95 | 03/03/95 | 03/03/95 | 03/03/95 |
| METALS (ICAP) -A |          |          |          |          |          |          |
| METALS (ICAP) -S | 03/01/95 | 03/01/95 | 03/01/95 | 03/01/95 | 03/01/95 | 03/01/95 |
| LEAD             |          |          |          |          |          |          |
| SELENIUM         |          |          |          |          |          |          |
|                  |          |          |          |          |          |          |

## ANALYSIS DATE

| PARAMETER        | -7       | -8       | -9       | -10      | -11      | -12      |
|------------------|----------|----------|----------|----------|----------|----------|
| ARSENIC          |          |          |          |          |          |          |
| HG-A             |          |          |          |          |          |          |
| HG-S             | 03/03/95 | 03/03/95 | 03/03/95 | 03/03/95 | 03/03/95 | 03/03/95 |
| METALS (ICAP) -A |          |          |          |          |          |          |
| METALS (ICAP) -S | 03/02/95 | 03/02/95 | 03/02/95 | 03/02/95 | 03/02/95 | 03/02/95 |
| LEAD             |          |          |          |          |          |          |
| SELENIUM         |          |          |          |          |          |          |
|                  |          |          |          |          |          |          |

## LABORATORY CHRONICLE

025

| LAB SAMPLE ID | CLIENT ID | SAMPLING DATE | MATRIX |
|---------------|-----------|---------------|--------|
| 950626-7      | S-4A      | 23-FEB-95     | Soil   |
| 950626-8      | S-4B      | 23-FEB-95     | Soil   |
| L950626-9     | S-5A      | 23-FEB-95     | Soil   |
| L950626-10    | S-5B      | 23-FEB-95     | Soil   |
| L950626-11    | S-6A      | 23-FEB-95     | Soil   |
| L950626-12    | S-6B      | 23-FEB-95     | Soil   |

## EXTRACT DATE

| PARAMETER | -7       | -8       | -9       | -10      | -11      | -12      |
|-----------|----------|----------|----------|----------|----------|----------|
| THALLIUM  |          |          |          |          |          |          |
| PCB'S-A   |          |          |          |          |          |          |
| PCB'S-S   | 03/03/95 | 03/03/95 | 03/03/95 | 03/03/95 | 03/03/95 | 03/03/95 |
| VOL. ORG. |          |          |          |          |          |          |
| VOL. ORG. |          |          |          |          |          |          |
| PHC-A     |          |          |          |          |          |          |
| PHC-S     | 02/28/95 | 02/28/95 | 02/28/95 | 02/28/95 | 02/28/95 | 02/28/95 |

## ANALYSIS DATE

| PARAMETER | -7       | -8       | -9       | -10      | -11      | -12      |
|-----------|----------|----------|----------|----------|----------|----------|
| THALLIUM  |          |          |          |          |          |          |
| PCB'S-A   |          |          |          |          |          |          |
| PCB'S-S   | 03/13/95 | 03/08/95 | 03/13/95 | 03/08/95 | 03/13/95 | 03/09/95 |
| VOL. ORG. |          |          |          |          |          |          |
| VOL. ORG. | 03/03/95 | 03/07/95 | 03/06/95 | 03/06/95 | 03/07/95 | 03/07/95 |
| PHC-A     |          |          |          |          |          |          |
| PHC-S     | 02/28/95 | 02/28/95 | 02/28/95 | 02/28/95 | 02/28/95 | 02/28/95 |

## LABORATORY CHRONICLE

026

| LAB SAMPLE ID | CLIENT ID | SAMPLING DATE | MATRIX |
|---------------|-----------|---------------|--------|
| 950626-7      | S-4A      | 23-FEB-95     | Soil   |
| 950626-8      | S-4B      | 23-FEB-95     | Soil   |
| L950626-9     | S-5A      | 23-FEB-95     | Soil   |
| L950626-10    | S-5B      | 23-FEB-95     | Soil   |
| L950626-11    | S-6A      | 23-FEB-95     | Soil   |
| L950626-12    | S-6B      | 23-FEB-95     | Soil   |

## EXTRACT DATE

| PARAMETER | -7 | -8 | -9 | -10 | -11 | -12 |
|-----------|----|----|----|-----|-----|-----|
| TS        |    |    |    |     |     |     |
|           |    |    |    |     |     |     |
|           |    |    |    |     |     |     |
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|           |    |    |    |     |     |     |
|           |    |    |    |     |     |     |
|           |    |    |    |     |     |     |

## ANALYSIS DATE

| PARAMETER | -7       | -8       | -9       | -10      | -11      | -12      |
|-----------|----------|----------|----------|----------|----------|----------|
| TS        | 02/28/95 | 02/28/95 | 02/28/95 | 02/28/95 | 02/28/95 | 02/28/95 |
|           |          |          |          |          |          |          |
|           |          |          |          |          |          |          |
|           |          |          |          |          |          |          |
|           |          |          |          |          |          |          |
|           |          |          |          |          |          |          |
|           |          |          |          |          |          |          |
|           |          |          |          |          |          |          |

## LABORATORY CHRONICLE

027

| LAB SAMPLE ID | CLIENT ID   | SAMPLING DATE | MATRIX  |
|---------------|-------------|---------------|---------|
| 1950626-13    | S-7A        | 23-FEB-95     | Soil    |
| 50626-14      | S-7B        | 23-FEB-95     | Soil    |
| 50626-15      | S-7AD       | 23-FEB-95     | Soil    |
| L950626-16    | FIELD BLANK | 23-FEB-95     | Aqueous |
|               |             |               |         |
|               |             |               |         |

**FILE COPY**

## EXTRACT DATE

| PARAMETER       | -13      | -14      | -15      | -16      | -17 | -18 |
|-----------------|----------|----------|----------|----------|-----|-----|
| ARSENIC         |          |          |          | 02/28/95 |     |     |
| HG-A            |          |          |          | 03/07/95 |     |     |
| HG-S            | 03/03/95 | 03/03/95 | 03/03/95 |          |     |     |
| METALS (ICAP)-A |          |          |          | 02/28/95 |     |     |
| METALS (ICAP)-S | 03/01/95 | 03/01/95 | 03/01/95 |          |     |     |
| LEAD            |          |          |          | 02/28/95 |     |     |
| SELENIUM        |          |          |          | 02/28/95 |     |     |
|                 |          |          |          |          |     |     |

## ANALYSIS DATE

| PARAMETER       | -13      | -14      | -15      | -16      | -17 | -18 |
|-----------------|----------|----------|----------|----------|-----|-----|
| ARSENIC         |          |          |          | 03/02/95 |     |     |
| HG-A            |          |          |          | 03/07/95 |     |     |
| HG-S            | 03/03/95 | 03/03/95 | 03/03/95 |          |     |     |
| METALS (ICAP)-A |          |          |          | 03/01/95 |     |     |
| METALS (ICAP)-S | 03/02/95 | 03/02/95 | 03/02/95 |          |     |     |
| LEAD            |          |          |          | 03/02/95 |     |     |
| SELENIUM        |          |          |          | 03/03/95 |     |     |
|                 |          |          |          |          |     |     |

## LABORATORY CHRONICLE

028

| LAB SAMPLE ID | CLIENT ID   | SAMPLING DATE | MATRIX  |
|---------------|-------------|---------------|---------|
| 50626-13      | S-7A        | 23-FEB-95     | Soil    |
| 50626-14      | S-7B        | 23-FEB-95     | Soil    |
| 50626-15      | S-7AD       | 23-FEB-95     | Soil    |
| 50626-16      | FIELD BLANK | 23-FEB-95     | Aqueous |
|               |             |               |         |
|               |             |               |         |

## EXTRACT DATE

| PARAMETER | -13      | -14      | -15      | -16      | -17 | -18 |
|-----------|----------|----------|----------|----------|-----|-----|
| THALLIUM  |          |          |          | 02/28/95 |     |     |
| PCB'S-A   |          |          |          | 03/01/95 |     |     |
| PCB'S-S   | 03/03/95 | 03/03/95 | 03/03/95 | 03/13/95 |     |     |
| VOL. ORG. |          |          |          |          |     |     |
| VOL. ORG. |          |          |          |          |     |     |
| PHC-A     |          |          |          | 02/27/95 |     |     |
| PHC-S     | 02/28/95 | 02/28/95 | 02/28/95 |          |     |     |
|           |          |          |          |          |     |     |

## ANALYSIS DATE

| PARAMETER | -13      | -14      | -15      | -16      | -17 | -18 |
|-----------|----------|----------|----------|----------|-----|-----|
| THALLIUM  |          |          |          | 03/02/95 |     |     |
| PCB'S-A   |          |          |          | 03/08/95 |     |     |
| PCB'S-S   | 03/09/95 | 03/09/95 | 03/13/95 |          |     |     |
| VOL. ORG. |          |          |          | 03/06/95 |     |     |
| VOL. ORG. | 03/07/95 | 03/07/95 | 03/08/95 |          |     |     |
| PHC-A     |          |          |          | 02/28/95 |     |     |
| PHC-S     | 02/28/95 | 02/28/95 | 02/28/95 |          |     |     |
|           |          |          |          |          |     |     |

## LABORATORY CHRONICLE

029

| LAB SAMPLE ID | CLIENT ID   | SAMPLING DATE | MATRIX  |
|---------------|-------------|---------------|---------|
| 50626-13      | S-7A        | 23-FEB-95     | Soil    |
| 50626-14      | S-7B        | 23-FEB-95     | Soil    |
| L950626-15    | S-7AD       | 23-FEB-95     | Soil    |
| L950626-16    | FIELD BLANK | 23-FEB-95     | Aqueous |
|               |             |               |         |
|               |             |               |         |

## EXTRACT DATE

| PARAMETER | -13 | -14 | -15 | -16 | -17 | -18 |
|-----------|-----|-----|-----|-----|-----|-----|
| TS        |     |     |     |     |     |     |
|           |     |     |     |     |     |     |
|           |     |     |     |     |     |     |
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|           |     |     |     |     |     |     |
|           |     |     |     |     |     |     |
|           |     |     |     |     |     |     |
|           |     |     |     |     |     |     |

## ANALYSIS DATE

| PARAMETER | -13      | -14      | -15      | -16 | -17 | -18 |
|-----------|----------|----------|----------|-----|-----|-----|
| TS        | 02/28/95 | 02/28/95 | 02/28/95 |     |     |     |
|           |          |          |          |     |     |     |
|           |          |          |          |     |     |     |
|           |          |          |          |     |     |     |
|           |          |          |          |     |     |     |
|           |          |          |          |     |     |     |
|           |          |          |          |     |     |     |
|           |          |          |          |     |     |     |
|           |          |          |          |     |     |     |



ORGANIC RESULTS SUMMARY SECTION

## NORTHEASTERN ANALYTICAL CORPORATION

## REPORT OF RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES Date Sampled: Feb 23, 1995  
 NAC Job Number: L950626 Date Received: Feb 23, 1995  
 Client ID: S-1A  
 Lab Sample ID: L950626-1  
 Total Solids: 93.19%

| PARAMETER                 | RESULTS | MDL | QUAL | UNITS    |
|---------------------------|---------|-----|------|----------|
| Chloromethane             | ND      | 4.0 |      | ug/kg dw |
| Bromomethane              | ND      | 6.5 |      | ug/kg dw |
| Vinyl Chloride            | ND      | 5.4 |      | ug/kg dw |
| Chloroethane              | ND      | 3.4 |      | ug/kg dw |
| Methylene Chloride        | 5.9     | 3.3 |      | ug/kg dw |
| Acrolein                  | ND      | 54  |      | ug/kg dw |
| Acrylonitrile             | ND      | 54  |      | ug/kg dw |
| Trichlorofluoromethane    | ND      | 2.3 |      | ug/kg dw |
| 1,1-Dichloroethene        | ND      | 2.7 |      | ug/kg dw |
| 1,1-Dichloroethane        | ND      | 2.4 |      | ug/kg dw |
| Trans-1,2-Dichloroethene  | ND      | 3.0 |      | ug/kg dw |
| Chloroform                | ND      | 2.8 |      | ug/kg dw |
| 1,2-Dichloroethane        | ND      | 2.0 |      | ug/kg dw |
| 1,1,1-Trichloroethane     | ND      | 4.1 |      | ug/kg dw |
| Carbon Tetrachloride      | ND      | 2.9 |      | ug/kg dw |
| Bromodichloromethane      | ND      | 3.6 |      | ug/kg dw |
| 1,2-Dichloropropane       | ND      | 4.7 |      | ug/kg dw |
| cis-1,3-Dichloropropene   | ND      | 4.5 |      | ug/kg dw |
| Trichloroethene           | ND      | 8.7 |      | ug/kg dw |
| Dibromochloromethane      | ND      | 3.1 |      | ug/kg dw |
| 1,1,2-Trichloroethane     | ND      | 3.8 |      | ug/kg dw |
| Benzene                   | ND      | 4.5 |      | ug/kg dw |
| trans-1,3-Dichloropropene | ND      | 3.0 |      | ug/kg dw |
| 2-Chloroethylvinylether   | ND      | 4.0 |      | ug/kg dw |
| Bromoform                 | ND      | 2.8 |      | ug/kg dw |
| Tetrachloroethene         | ND      | 2.3 |      | ug/kg dw |
| 1,1,2,2-Tetrachloroethane | ND      | 4.0 |      | ug/kg dw |
| Toluene                   | ND      | 3.0 |      | ug/kg dw |
| Chlorobenzene             | ND      | 2.5 |      | ug/kg dw |
| Ethylbenzene              | ND      | 3.0 |      | ug/kg dw |
| Xylenes (Total)           | ND      | 5.7 |      | ug/kg dw |

Date Extracted: N/A  
 Date Analyzed: 03-MAR-95  
 Dilution: 1

NORTHEASTERN ANALYTICAL CORPORATION  
VOLATILE UNKNOWN IDENTIFICATION

LAB SAMPLE ID: 95L-0626-1

LAB FILE ID: &gt;E1923

DATE RECEIVED: 02/23/95

DATE ANALYZED: 950303

SAMPLE WT/VOL: 5.0GR/5.0ML

LEVEL: LOW

DRY WT: .9319

COMPOUND

RET TIME(MIN)

CONC

---

NONE FOUND

## NORTHEASTERN ANALYTICAL CORPORATION

## REPORT OF RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES

Date Sampled: Feb 23, 1995

NAC Job Number: L950626

Date Received: Feb 23, 1995

Client ID: S-1A

Lab Sample ID: L950626-1

Total Solids: 93.19%

| PARAMETER    | RESULTS | MDL | QUAL | UNITS    |
|--------------|---------|-----|------|----------|
| Aroclor 1016 | ND      | 180 | \    | ug/kg dw |
| Aroclor 1221 | ND      | 360 |      | ug/kg dw |
| Aroclor 1232 | 850     | 180 |      | ug/kg dw |
| Aroclor 1242 | ND      | 180 |      | ug/kg dw |
| Aroclor 1248 | ND      | 180 |      | ug/kg dw |
| Aroclor 1254 | 750     | 180 |      | ug/kg dw |
| Aroclor 1260 | ND      | 180 |      | ug/kg dw |

Date Extracted: 03-MAR-95  
Date Analyzed: 09-MAR-95

## NORTHEASTERN ANALYTICAL CORPORATION

## REPORT OF RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES

Date Sampled: Feb 23, 1995

NAC Job Number: L950626

Date Received: Feb 23, 1995

Client ID: S-1B

Lab Sample ID: L950626-2

Total Solids: 95.25%

| PARAMETER                 | RESULTS | MDL | QUAL | UNITS    |
|---------------------------|---------|-----|------|----------|
| Chloromethane             | ND      | 3.9 |      | ug/kg dw |
| Bromomethane              | ND      | 6.4 |      | ug/kg dw |
| Vinyl Chloride            | ND      | 5.2 |      | ug/kg dw |
| Chloroethane              | ND      | 3.4 |      | ug/kg dw |
| Methylene Chloride        | 6.2     | 3.3 |      | ug/kg dw |
| Acrolein                  | ND      | 52  |      | ug/kg dw |
| Acrylonitrile             | ND      | 52  |      | ug/kg dw |
| Trichlorofluoromethane    | ND      | 2.2 |      | ug/kg dw |
| 1,1-Dichloroethene        | ND      | 2.6 |      | ug/kg dw |
| 1,1-Dichloroethane        | ND      | 2.3 |      | ug/kg dw |
| Trans-1,2-Dichloroethene  | ND      | 2.9 |      | ug/kg dw |
| Chloroform                | ND      | 2.7 |      | ug/kg dw |
| 1,2-Dichloroethane        | ND      | 2.0 |      | ug/kg dw |
| 1,1,1-Trichloroethane     | ND      | 4.0 |      | ug/kg dw |
| Carbon Tetrachloride      | ND      | 2.8 |      | ug/kg dw |
| Bromodichloromethane      | ND      | 3.6 |      | ug/kg dw |
| 1,2-Dichloropropane       | ND      | 4.6 |      | ug/kg dw |
| cis-1,3-Dichloropropene   | ND      | 4.4 |      | ug/kg dw |
| Trichloroethene           | ND      | 8.5 |      | ug/kg dw |
| Dibromochloromethane      | ND      | 3.0 |      | ug/kg dw |
| 1,1,2-Trichloroethane     | ND      | 3.7 |      | ug/kg dw |
| Benzene                   | ND      | 4.4 |      | ug/kg dw |
| trans-1,3-Dichloropropene | ND      | 2.9 |      | ug/kg dw |
| 2-Chloroethylvinylether   | ND      | 3.9 |      | ug/kg dw |
| Bromoform                 | ND      | 2.7 |      | ug/kg dw |
| Tetrachloroethene         | ND      | 2.2 |      | ug/kg dw |
| 1,1,2,2-Tetrachloroethane | ND      | 3.9 |      | ug/kg dw |
| Toluene                   | ND      | 2.9 |      | ug/kg dw |
| Chlorobenzene             | ND      | 2.4 |      | ug/kg dw |
| Ethylbenzene              | ND      | 2.9 |      | ug/kg dw |
| Xylenes (Total)           | ND      | 5.6 |      | ug/kg dw |

Date Extracted: N/A  
Date Analyzed: 03-MAR-95  
Dilution: 1

NORTHEASTERN ANALYTICAL CORPORATION  
VOLATILE UNKNOWN IDENTIFICATION

LAB SAMPLE ID: 95L-0626-2

LAB FILE ID: &gt;E1921

DATE RECEIVED: 02/23/95

DATE ANALYZED: 950303

SAMPLE WT/VOL: 5.0GR/5.0ML

LEVEL: LOW

DRY WT: .9525

| COMPOUND | RET TIME(MIN) | CONC |
|----------|---------------|------|
|----------|---------------|------|

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NONE FOUND

## NORTHEASTERN ANALYTICAL CORPORATION

## REPORT OF RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES Date Sampled: Feb 23, 1995  
NAC Job Number: L950626 Date Received: Feb 23, 1995  
Client ID: S-1B  
Lab Sample ID: L950626-2  
Total Solids: 95.25%

| PARAMETER    | RESULTS | MDL | QUAL | UNITS    |
|--------------|---------|-----|------|----------|
| Aroclor 1016 | ND      | 35  |      | ug/kg dw |
| Aroclor 1221 | ND      | 70  |      | ug/kg dw |
| Aroclor 1232 | ND      | 35  |      | ug/kg dw |
| Aroclor 1242 | ND      | 35  |      | ug/kg dw |
| Aroclor 1248 | ND      | 35  |      | ug/kg dw |
| Aroclor 1254 | ND      | 35  |      | ug/kg dw |
| Aroclor 1260 | ND      | 35  |      | ug/kg dw |

Date Extracted: 03-MAR-95  
Date Analyzed: 08-MAR-95

## NORTHEASTERN ANALYTICAL CORPORATION

## REPORT OF RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES

Date Sampled: Feb 23, 1995

NAC Job Number: L950626

Date Received: Feb 23, 1995

Client ID: S-2A

Lab Sample ID: L950626-3

Total Solids: 89.73%

| PARAMETER                 | RESULTS | MDL | QUAL | UNITS    |
|---------------------------|---------|-----|------|----------|
| Chloromethane             | ND      | 4.1 |      | ug/kg dw |
| Bromomethane              | ND      | 6.8 |      | ug/kg dw |
| Vinyl Chloride            | ND      | 5.6 |      | ug/kg dw |
| Chloroethane              | ND      | 3.6 |      | ug/kg dw |
| Methylene Chloride        | 9.5     | 3.5 |      | ug/kg dw |
| Acrolein                  | ND      | 56  |      | ug/kg dw |
| Acrylonitrile             | ND      | 56  |      | ug/kg dw |
| Trichlorofluoromethane    | ND      | 2.3 |      | ug/kg dw |
| 1,1-Dichloroethene        | ND      | 2.8 |      | ug/kg dw |
| 1,1-Dichloroethane        | ND      | 2.5 |      | ug/kg dw |
| Trans-1,2-Dichloroethene  | ND      | 3.1 |      | ug/kg dw |
| Chloroform                | ND      | 2.9 |      | ug/kg dw |
| 1,2-Dichloroethane        | ND      | 2.1 |      | ug/kg dw |
| 1,1,1-Trichloroethane     | ND      | 4.2 |      | ug/kg dw |
| Carbon Tetrachloride      | ND      | 3.0 |      | ug/kg dw |
| Bromodichloromethane      | ND      | 3.8 |      | ug/kg dw |
| 1,2-Dichloropropane       | ND      | 4.9 |      | ug/kg dw |
| cis-1,3-Dichloropropene   | ND      | 4.7 |      | ug/kg dw |
| Trichloroethene           | ND      | 9.0 |      | ug/kg dw |
| Dibromochloromethane      | ND      | 3.2 |      | ug/kg dw |
| 1,1,2-Trichloroethane     | ND      | 3.9 |      | ug/kg dw |
| Benzene                   | ND      | 4.7 |      | ug/kg dw |
| trans-1,3-Dichloropropene | ND      | 3.1 |      | ug/kg dw |
| 2-Chloroethylvinylether   | ND      | 4.1 |      | ug/kg dw |
| Bromoform                 | ND      | 2.9 |      | ug/kg dw |
| Tetrachloroethene         | 110     | 2.3 |      | ug/kg dw |
| 1,1,2,2-Tetrachloroethane | ND      | 4.1 |      | ug/kg dw |
| Toluene                   | 6.4     | 3.1 |      | ug/kg dw |
| Chlorobenzene             | ND      | 2.6 |      | ug/kg dw |
| Ethylbenzene              | 3.8     | 3.1 |      | ug/kg dw |
| Xylenes (Total)           | 16      | 5.9 |      | ug/kg dw |

Date Extracted: N/A  
Date Analyzed: 03-MAR-95  
Dilution: 1



NORTHEASTERN ANALYTICAL CORPORATION  
VOLATILE UNKNOWN IDENTIFICATION

038

LAB SAMPLE ID:95L-0626-3  
DATE RECEIVED:02/23/95  
SAMPLE WT/VOL:5.0GR/5.0ML  
DRY WT:.8973

LAB FILE ID:>E1925  
DATE ANALYZED:950303  
LEVEL:LOW

| COMPOUND                       | RET TIME | CONC       |
|--------------------------------|----------|------------|
| 1.Unknown                      | 23.80    | 7 UG/KG J  |
| 2.Dimethylbenzene Isomer       | 24.65    | 7 UG/KG J  |
| 3.Unknown Aromatic             | 25.81    | 6 UG/KG J  |
| 4.Unknown Aromatic             | 26.11    | 19 UG/KG J |
| 5.Ethylidimethylbenzene Isomer | 26.29    | 10 UG/KG J |
| 6.Tetramethylbenzene Isomer    | 27.90    | 7 UG/KG J  |
| 7.Unknown Alkane               | 28.16    | 11 UG/KG J |
| 8.Unknown                      | 29.46    | 15 UG/KG J |
| 9.Unknown Alkane               | 30.09    | 19 UG/KG J |
| 10.Unknown                     | 31.39    | 9 UG/KG J  |
| 11.Unknown Alkene              | 31.89    | 19 UG/KG J |
| 12.Unknown Aromatic            | 32.21    | 8 UG/KG J  |
| 13.Unknown Alkane              | 32.86    | 7 UG/KG J  |
| 14.Unknown Alkane              | 33.58    | 8 UG/KG J  |
| 15.Dimethylnaphthalene Isomer  | 34.58    | 9 UG/KG J  |

J; Estimated Concentration

## NORTHEASTERN ANALYTICAL CORPORATION

## REPORT OF RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES

Date Sampled: Feb 23, 1995

## NORTHEASTERN ANALYTICAL CORPORATION

## REPORT OF RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES

Date Sampled: Feb 23, 1995

NAC Job Number: L950626

Date Received: Feb 23, 1995

Client ID: S-2A

Lab Sample ID: L950626-3

Total Solids: 89.73%

| PARAMETER    | RESULTS | MDL | QUAL | UNITS    |
|--------------|---------|-----|------|----------|
| Aroclor 1016 | ND      | 180 |      | ug/kg dw |
| Aroclor 1221 | ND      | 370 |      | ug/kg dw |
| Aroclor 1232 | 8800    | 180 |      | ug/kg dw |
| Aroclor 1242 | ND      | 180 |      | ug/kg dw |
| Aroclor 1248 | ND      | 180 |      | ug/kg dw |
| Aroclor 1254 | 2700    | 180 |      | ug/kg dw |
| Aroclor 1260 | ND      | 180 |      | ug/kg dw |

NORTHEASTERN ANALYTICAL CORPORATION  
VOLATILE UNKNOWN IDENTIFICATION

LAB SAMPLE ID: 95L-0626-4

LAB FILE ID: &gt;E1926

DATE RECEIVED: 02/23/95

DATE ANALYZED: 950303

SAMPLE WT/VOL: 5.06G/5.0ML

LEVEL: LOW

DRY WT: .8758

| COMPOUND | RET TIME (MIN) | CONC |
|----------|----------------|------|
|----------|----------------|------|

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NONE FOUND

043

042

## NORTHEASTERN ANALYTICAL CORPORATION

## REPORT OF RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES Date Sampled: Feb 23, 1995  
NAC Job Number: L950626 Date Received: Feb 23, 1995  
Client ID: S-2B  
Lab Sample ID: L950626-4  
Total Solids: 87.58%

| PARAMETER    | RESULTS | MDL | QUAL | UNITS    |
|--------------|---------|-----|------|----------|
| Aroclor 1016 | ND      | 190 |      | ug/kg dw |
| Aroclor 1221 | ND      | 380 |      | ug/kg dw |
| Aroclor 1232 | 2500    | 190 |      | ug/kg dw |
| Aroclor 1242 | ND      | 190 |      | ug/kg dw |
| Aroclor 1248 | ND      | 190 |      | ug/kg dw |
| Aroclor 1254 | 1200    | 190 |      | ug/kg dw |
| Aroclor 1260 | ND      | 190 |      | ug/kg dw |

Date Extracted: 03-MAR-95  
Date Analyzed: 13-MAR-95

TIERRA-B-012429

0.14

NORTHEASTERN ANALYTICAL CORPORATION  
VOLATILE UNKNOWN IDENTIFICATION

LAB SAMPLE ID: 95L-0626-5

LAB FILE ID: >E1931

DATE RECEIVED: 02/23/95

DATE ANALYZED: 950303

SAMPLE WT/VOL: 5.0GR/5.0ML

LEVEL: LOW

DRY WT: .9815

COMPOUND

RET TIME (MIN)

CONC

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NONE FOUND

## NORTHEASTERN ANALYTICAL CORPORATION

## REPORT OF RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES Date Sampled: Feb 23, 1995  
NAC Job Number: L950626 Date Received: Feb 23, 1995  
Client ID: S-3A  
Lab Sample ID: L950626-5  
Total Solids: 98.15%

| PARAMETER    | RESULTS | MDL | QUAL | UNITS    |
|--------------|---------|-----|------|----------|
| Aroclor 1016 | ND      | 170 |      | ug/kg dw |
| Aroclor 1221 | ND      | 340 |      | ug/kg dw |
| Aroclor 1232 | 2200    | 170 |      | ug/kg dw |
| Aroclor 1242 | ND      | 170 |      | ug/kg dw |
| Aroclor 1248 | ND      | 170 |      | ug/kg dw |
| Aroclor 1254 | 960     | 170 |      | ug/kg dw |
| Aroclor 1260 | ND      | 170 |      | ug/kg dw |

Date Extracted: 03-MAR-95  
Date Analyzed: 09-MAR-95

## NORTHEASTERN ANALYTICAL CORPORATION

## REPORT OF RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES

Date Sampled: Feb 23, 1995

NAC Job Number: L950626

Date Received: Feb 23, 1995

Client ID: S-3B

Lab Sample ID: L950626-6

Total Solids: 90.63%

| PARAMETER                 | RESULTS | MDL | QUAL | UNITS    |
|---------------------------|---------|-----|------|----------|
| Chloromethane             | ND      | 4.1 |      | ug/kg dw |
| Bromomethane              | ND      | 6.7 |      | ug/kg dw |
| Vinyl Chloride            | ND      | 5.5 |      | ug/kg dw |
| Chloroethane              | ND      | 3.5 |      | ug/kg dw |
| Methylene Chloride        | 6.4     | 3.4 |      | ug/kg dw |
| Acrolein                  | ND      | 55  |      | ug/kg dw |
| Acrylonitrile             | ND      | 55  |      | ug/kg dw |
| Trichlorofluoromethane    | ND      | 2.3 |      | ug/kg dw |
| 1,1-Dichloroethene        | ND      | 2.8 |      | ug/kg dw |
| 1,1-Dichloroethane        | ND      | 2.4 |      | ug/kg dw |
| Trans-1,2-Dichloroethene  | ND      | 3.1 |      | ug/kg dw |
| Chloroform                | ND      | 2.9 |      | ug/kg dw |
| 1,2-Dichloroethane        | ND      | 2.1 |      | ug/kg dw |
| 1,1,1-Trichloroethane     | ND      | 4.2 |      | ug/kg dw |
| Carbon Tetrachloride      | ND      | 3.0 |      | ug/kg dw |
| Bromodichloromethane      | ND      | 3.8 |      | ug/kg dw |
| 1,2-Dichloropropane       | ND      | 4.9 |      | ug/kg dw |
| cis-1,3-Dichloropropene   | ND      | 4.6 |      | ug/kg dw |
| Trichloroethene           | ND      | 8.9 |      | ug/kg dw |
| Dibromochloromethane      | ND      | 3.2 |      | ug/kg dw |
| 1,1,2-Trichloroethane     | ND      | 3.9 |      | ug/kg dw |
| Benzene                   | ND      | 4.6 |      | ug/kg dw |
| trans-1,3-Dichloropropene | ND      | 3.1 |      | ug/kg dw |
| 2-Chloroethylvinylether   | ND      | 4.1 |      | ug/kg dw |
| Bromoform                 | ND      | 2.9 |      | ug/kg dw |
| Tetrachloroethene         | ND      | 2.3 |      | ug/kg dw |
| 1,1,2,2-Tetrachloroethane | ND      | 4.1 |      | ug/kg dw |
| Toluene                   | ND      | 3.1 |      | ug/kg dw |
| Chlorobenzene             | ND      | 2.5 |      | ug/kg dw |
| Ethylbenzene              | ND      | 3.1 |      | ug/kg dw |
| Xylenes (Total)           | ND      | 5.8 |      | ug/kg dw |

Date Extracted: N/A  
Date Analyzed: 06-MAR-95  
Dilution: 1

NORTHEASTERN ANALYTICAL CORPORATION  
VOLATILE UNKNOWN IDENTIFICATION

LAB SAMPLE ID: 95L-0626-6

LAB FILE ID: &gt;E1943

DATE RECEIVED: 02/23/95

DATE ANALYZED: 950306

SAMPLE WT/VOL: 5.0GR/5.0ML

LEVEL: LOW

DRY WT: .9063

| COMPOUND | RET TIME (MIN) | CONC |
|----------|----------------|------|
|----------|----------------|------|

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NONE FOUND



## NORTHEASTERN ANALYTICAL CORPORATION

## REPORT OF RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES

Date Sampled: Feb 23, 1995

NAC Job Number: L950626

Date Received: Feb 23, 1995

Client ID: S-3B

Lab Sample ID: L950626-6

Total Solids: 90.63%

| PARAMETER    | RESULTS | MDL | QUAL | UNITS    |
|--------------|---------|-----|------|----------|
| Aroclor 1016 | ND      | 36  |      | ug/kg dw |
| Aroclor 1221 | ND      | 74  |      | ug/kg dw |
| Aroclor 1232 | 42      | 36  |      | ug/kg dw |
| Aroclor 1242 | ND      | 36  |      | ug/kg dw |
| Aroclor 1248 | ND      | 36  |      | ug/kg dw |
| Aroclor 1254 | 44      | 36  |      | ug/kg dw |
| Aroclor 1260 | ND      | 36  |      | ug/kg dw |

Date Extracted: 03-MAR-95  
Date Analyzed: 13-MAR-95

## NORTHEASTERN ANALYTICAL CORPORATION

## REPORT OF RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES

Date Sampled: Feb 23, 1995

NAC Job Number: L950626

Date Received: Feb 23, 1995

Client ID: S-4A

Lab Sample ID: L950626-7

Total Solids: 94.89%

| PARAMETER                 | RESULTS | MDL | QUAL | UNITS    |
|---------------------------|---------|-----|------|----------|
| Chloromethane             | ND      | 3.9 |      | ug/kg dw |
| Bromomethane              | ND      | 6.4 |      | ug/kg dw |
| Vinyl Chloride            | ND      | 5.3 |      | ug/kg dw |
| Chloroethane              | ND      | 3.4 |      | ug/kg dw |
| Methylene Chloride        | ND      | 3.3 |      | ug/kg dw |
| Acrolein                  | ND      | 53  |      | ug/kg dw |
| Acrylonitrile             | ND      | 53  |      | ug/kg dw |
| Trichlorofluoromethane    | ND      | 2.2 |      | ug/kg dw |
| 1,1-Dichloroethene        | ND      | 2.6 |      | ug/kg dw |
| 1,1-Dichloroethane        | ND      | 2.3 |      | ug/kg dw |
| Trans-1,2-Dichloroethene  | ND      | 3.0 |      | ug/kg dw |
| Chloroform                | ND      | 2.7 |      | ug/kg dw |
| 1,2-Dichloroethane        | ND      | 2.0 |      | ug/kg dw |
| 1,1,1-Trichloroethane     | ND      | 4.0 |      | ug/kg dw |
| Carbon Tetrachloride      | ND      | 2.8 |      | ug/kg dw |
| Bromodichloromethane      | ND      | 3.6 |      | ug/kg dw |
| 1,2-Dichloropropane       | ND      | 4.6 |      | ug/kg dw |
| cis-1,3-Dichloropropene   | ND      | 4.4 |      | ug/kg dw |
| Trichloroethene           | ND      | 8.5 |      | ug/kg dw |
| Dibromochloromethane      | ND      | 3.1 |      | ug/kg dw |
| 1,1,2-Trichloroethane     | ND      | 3.7 |      | ug/kg dw |
| Benzene                   | ND      | 4.4 |      | ug/kg dw |
| trans-1,3-Dichloropropene | ND      | 3.0 |      | ug/kg dw |
| 2-Chloroethylvinylether   | ND      | 3.9 |      | ug/kg dw |
| Bromoform                 | ND      | 2.7 |      | ug/kg dw |
| Tetrachloroethene         | ND      | 2.2 |      | ug/kg dw |
| 1,1,2,2-Tetrachloroethane | ND      | 3.9 |      | ug/kg dw |
| Toluene                   | ND      | 3.0 |      | ug/kg dw |
| Chlorobenzene             | ND      | 2.4 |      | ug/kg dw |
| Ethylbenzene              | ND      | 3.0 |      | ug/kg dw |
| Xylenes (Total)           | ND      | 5.6 |      | ug/kg dw |

Date Extracted: N/A  
Date Analyzed: 03-MAR-95  
Dilution: 1

050

NORTHEASTERN ANALYTICAL CORPORATION  
VOLATILE UNKNOWN IDENTIFICATION

LAB SAMPLE ID: 95L-0626-7

LAB FILE ID: >E1930

DATE RECEIVED: 02/23/95

DATE ANALYZED: 950303

SAMPLE WT/VOL: 5.06G/5.0ML

LEVEL: LOW

DRY WT: .9489

| COMPOUND | RET TIME (MIN) | CONC |
|----------|----------------|------|
|----------|----------------|------|

NONE FOUND

## NORTHEASTERN ANALYTICAL CORPORATION

## REPORT OF RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES

Date Sampled: Feb 23, 1995

NAC Job Number: L950626

Date Received: Feb 23, 1995

Client ID: S-4A

Lab Sample ID: L950626-7

Total Solids: 94.89%

| PARAMETER    | RESULTS | MDL | QUAL | UNITS    |
|--------------|---------|-----|------|----------|
| Aroclor 1016 | ND      | 35  |      | ug/kg dw |
| Aroclor 1221 | ND      | 71  |      | ug/kg dw |
| Aroclor 1232 | 160     | 35  |      | ug/kg dw |
| Aroclor 1242 | ND      | 35  |      | ug/kg dw |
| Aroclor 1248 | ND      | 35  |      | ug/kg dw |
| Aroclor 1254 | 98      | 35  |      | ug/kg dw |
| Aroclor 1260 | ND      | 35  |      | ug/kg dw |

Date Extracted: 03-MAR-95  
Date Analyzed: 13-MAR-95

## NORTHEASTERN ANALYTICAL CORPORATION

## REPORT OF RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES

Date Sampled: Feb 23, 1995

NAC Job Number: L950626

Date Received: Feb 23, 1995

Client ID: S-4B

Lab Sample ID: L950626-8

Total Solids: 92.69%

| PARAMETER                 | RESULTS | MDL | QUAL | UNITS    |
|---------------------------|---------|-----|------|----------|
| Chloromethane             | ND      | 4.0 |      | ug/kg dw |
| Bromomethane              | ND      | 6.6 |      | ug/kg dw |
| Vinyl Chloride            | ND      | 5.4 |      | ug/kg dw |
| Chloroethane              | ND      | 3.5 |      | ug/kg dw |
| Methylene Chloride        | 4.3     | 3.3 |      | ug/kg dw |
| Acrolein                  | ND      | 54  |      | ug/kg dw |
| Acrylonitrile             | ND      | 54  |      | ug/kg dw |
| Trichlorofluoromethane    | ND      | 2.3 |      | ug/kg dw |
| 1,1-Dichloroethene        | ND      | 2.7 |      | ug/kg dw |
| 1,1-Dichloroethane        | ND      | 2.4 |      | ug/kg dw |
| Trans-1,2-Dichloroethene  | ND      | 3.0 |      | ug/kg dw |
| Chloroform                | ND      | 2.8 |      | ug/kg dw |
| 1,2-Dichloroethane        | ND      | 2.0 |      | ug/kg dw |
| 1,1,1-Trichloroethane     | ND      | 4.1 |      | ug/kg dw |
| Carbon Tetrachloride      | ND      | 2.9 |      | ug/kg dw |
| Bromodichloromethane      | ND      | 3.7 |      | ug/kg dw |
| 1,2-Dichloropropane       | ND      | 4.7 |      | ug/kg dw |
| cis-1,3-Dichloropropene   | ND      | 4.5 |      | ug/kg dw |
| Trichloroethene           | ND      | 8.7 |      | ug/kg dw |
| Dibromochloromethane      | ND      | 3.1 |      | ug/kg dw |
| 1,1,2-Trichloroethane     | ND      | 3.8 |      | ug/kg dw |
| Benzene                   | ND      | 4.5 |      | ug/kg dw |
| trans-1,3-Dichloropropene | ND      | 3.0 |      | ug/kg dw |
| 2-Chloroethylvinylether   | ND      | 4.0 |      | ug/kg dw |
| Bromoform                 | ND      | 2.8 |      | ug/kg dw |
| Tetrachloroethene         | ND      | 2.3 |      | ug/kg dw |
| 1,1,2,2-Tetrachloroethane | ND      | 4.0 |      | ug/kg dw |
| Toluene                   | ND      | 3.0 |      | ug/kg dw |
| Chlorobenzene             | ND      | 2.5 |      | ug/kg dw |
| Ethylbenzene              | ND      | 3.0 |      | ug/kg dw |
| Xylenes (Total)           | ND      | 5.7 |      | ug/kg dw |

Date Extracted: N/A  
Date Analyzed: 07-MAR-95  
Dilution: 1

NORTHEASTERN ANALYTICAL CORPORATION  
VOLATILE UNKNOWN IDENTIFICATION

LAB SAMPLE ID: 95L-0626-8

LAB FILE ID: &gt;E1958

DATE RECEIVED: 02/23/95

DATE ANALYZED: 950307

SAMPLE WT/VOL: 5.06G/5.0ML

LEVEL: LOW

DRY WT: .9269

| COMPOUND | RET TIME(MIN) | CONC |
|----------|---------------|------|
|----------|---------------|------|

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NONE FOUND

## NORTHEASTERN ANALYTICAL CORPORATION

## REPORT OF RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES Date Sampled: Feb 23, 1995  
NAC Job Number: L950626 Date Received: Feb 23, 1995  
Client ID: S-4B  
Lab Sample ID: L950626-8  
Total Solids: 92.69%

| PARAMETER    | RESULTS | MDL | QUAL | UNITS    |
|--------------|---------|-----|------|----------|
| Aroclor 1016 | ND      | 36  |      | ug/kg dw |
| Aroclor 1221 | ND      | 72  |      | ug/kg dw |
| Aroclor 1232 | ND      | 36  |      | ug/kg dw |
| Aroclor 1242 | ND      | 36  |      | ug/kg dw |
| Aroclor 1248 | ND      | 36  |      | ug/kg dw |
| Aroclor 1254 | ND      | 36  |      | ug/kg dw |
| Aroclor 1260 | ND      | 36  |      | ug/kg dw |

Date Extracted: 03-MAR-95  
Date Analyzed: 08-MAR-95

## NORTHEASTERN ANALYTICAL CORPORATION

## REPORT OF RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES

Date Sampled: Feb 23, 1995

NAC Job Number: L950626

Date Received: Feb 23, 1995

Client ID: S-5A

Lab Sample ID: L950626-9

Total Solids: 94.51%

| PARAMETER                 | RESULTS | MDL | QUAL | UNITS    |
|---------------------------|---------|-----|------|----------|
| Chloromethane             | ND      | 3.9 |      | ug/kg dw |
| Bromomethane              | ND      | 6.5 |      | ug/kg dw |
| Vinyl Chloride            | ND      | 5.3 |      | ug/kg dw |
| Chloroethane              | ND      | 3.4 |      | ug/kg dw |
| Methylene Chloride        | 9       | 3.3 |      | ug/kg dw |
| Acrolein                  | ND      | 53  |      | ug/kg dw |
| Acrylonitrile             | ND      | 53  |      | ug/kg dw |
| Trichlorofluoromethane    | ND      | 2.2 |      | ug/kg dw |
| 1,1-Dichloroethene        | ND      | 2.6 |      | ug/kg dw |
| 1,1-Dichloroethane        | ND      | 2.3 |      | ug/kg dw |
| Trans-1,2-Dichloroethene  | ND      | 3.0 |      | ug/kg dw |
| Chloroform                | ND      | 2.8 |      | ug/kg dw |
| 1,2-Dichloroethane        | ND      | 2.0 |      | ug/kg dw |
| 1,1,1-Trichloroethane     | ND      | 4.0 |      | ug/kg dw |
| Carbon Tetrachloride      | ND      | 2.9 |      | ug/kg dw |
| Bromodichloromethane      | ND      | 3.6 |      | ug/kg dw |
| 1,2-Dichloropropane       | ND      | 4.7 |      | ug/kg dw |
| cis-1,3-Dichloropropene   | ND      | 4.4 |      | ug/kg dw |
| Trichloroethene           | ND      | 8.6 |      | ug/kg dw |
| Dibromochloromethane      | ND      | 3.1 |      | ug/kg dw |
| 1,1,2-Trichloroethane     | ND      | 3.7 |      | ug/kg dw |
| Benzene                   | ND      | 4.4 |      | ug/kg dw |
| trans-1,3-Dichloropropene | ND      | 3.0 |      | ug/kg dw |
| 2-Chloroethylvinylether   | ND      | 3.9 |      | ug/kg dw |
| Bromoform                 | ND      | 2.8 |      | ug/kg dw |
| Tetrachloroethene         | ND      | 2.2 |      | ug/kg dw |
| 1,1,2,2-Tetrachloroethane | ND      | 3.9 |      | ug/kg dw |
| Toluene                   | 6.4     | 3.0 |      | ug/kg dw |
| Chlorobenzene             | ND      | 2.4 |      | ug/kg dw |
| Ethylbenzene              | ND      | 3.0 |      | ug/kg dw |
| Xylenes (Total)           | 9.2     | 5.6 |      | ug/kg dw |

Date Extracted: N/A  
Date Analyzed: 06-MAR-95  
Dilution: 1



NORTHEASTERN ANALYTICAL CORPORATION  
VOLATILE UNKNOWN IDENTIFICATION

LAB SAMPLE ID: 95L-0626-9

LAB FILE ID: &gt;E1951

DATE RECEIVED: 02/23/95

DATE ANALYZED: 950306

SAMPLE WT/VOL: 5.06g/5.0mL

LEVEL: LOW

DRY WT: .9451

| COMPOUND   | RET TIME | CONC      |
|------------|----------|-----------|
| 1. Unknown | 22.85    | 6 UG/KG J |

J; Estimated Concentration

## NORTHEASTERN ANALYTICAL CORPORATION

## REPORT OF RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES

Date Sampled: Feb 23, 1995

NAC Job Number: L950626

Date Received: Feb 23, 1995

Client ID: S-5A

Lab Sample ID: L950626-9

Total Solids: 94.51%

| PARAMETER    | RESULTS | MDL | QUAL | UNITS    |
|--------------|---------|-----|------|----------|
| Aroclor 1016 | ND      | 35  |      | ug/kg dw |
| Aroclor 1221 | ND      | 71  |      | ug/kg dw |
| Aroclor 1232 | 130     | 35  |      | ug/kg dw |
| Aroclor 1242 | ND      | 35  |      | ug/kg dw |
| Aroclor 1248 | ND      | 35  |      | ug/kg dw |
| Aroclor 1254 | 68      | 35  |      | ug/kg dw |
| Aroclor 1260 | ND      | 35  |      | ug/kg dw |

Date Extracted: 03-MAR-95  
Date Analyzed: 13-MAR-95

## NORTHEASTERN ANALYTICAL CORPORATION

## REPORT OF RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES

Date Sampled: Feb 23, 1995

NAC Job Number: L950626

Date Received: Feb 23, 1995

Client ID: S-5B

Lab Sample ID: L950626-10

Total Solids: 95.29%

| PARAMETER                 | RESULTS | MDL | QUAL | UNITS    |
|---------------------------|---------|-----|------|----------|
| Chloromethane             | ND      | 3.9 |      | ug/kg dw |
| Bromomethane              | ND      | 6.4 |      | ug/kg dw |
| Vinyl Chloride            | ND      | 5.2 |      | ug/kg dw |
| Chloroethane              | ND      | 3.4 |      | ug/kg dw |
| Methylene Chloride        | 7.1     | 3.3 |      | ug/kg dw |
| Acrolein                  | ND      | 52  |      | ug/kg dw |
| Acrylonitrile             | ND      | 52  |      | ug/kg dw |
| Trichlorofluoromethane    | ND      | 2.2 |      | ug/kg dw |
| 1,1-Dichloroethene        | ND      | 2.6 |      | ug/kg dw |
| 1,1-Dichloroethane        | ND      | 2.3 |      | ug/kg dw |
| Trans-1,2-Dichloroethene  | ND      | 2.9 |      | ug/kg dw |
| Chloroform                | ND      | 2.7 |      | ug/kg dw |
| 1,2-Dichloroethane        | ND      | 2.0 |      | ug/kg dw |
| 1,1,1-Trichloroethane     | ND      | 4.0 |      | ug/kg dw |
| Carbon Tetrachloride      | ND      | 2.8 |      | ug/kg dw |
| Bromodichloromethane      | ND      | 3.6 |      | ug/kg dw |
| 1,2-Dichloropropane       | ND      | 4.6 |      | ug/kg dw |
| cis-1,3-Dichloropropene   | ND      | 4.4 |      | ug/kg dw |
| Trichloroethene           | ND      | 8.5 |      | ug/kg dw |
| Dibromochloromethane      | ND      | 3.0 |      | ug/kg dw |
| 1,1,2-Trichloroethane     | ND      | 3.7 |      | ug/kg dw |
| Benzene                   | ND      | 4.4 |      | ug/kg dw |
| trans-1,3-Dichloropropene | ND      | 2.9 |      | ug/kg dw |
| 2-Chloroethylvinylether   | ND      | 3.9 |      | ug/kg dw |
| Bromoform                 | ND      | 2.7 |      | ug/kg dw |
| Tetrachloroethene         | ND      | 2.2 |      | ug/kg dw |
| 1,1,2,2-Tetrachloroethane | ND      | 3.9 |      | ug/kg dw |
| Toluene                   | ND      | 2.9 |      | ug/kg dw |
| Chlorobenzene             | ND      | 2.4 |      | ug/kg dw |
| Ethylbenzene              | ND      | 2.9 |      | ug/kg dw |
| Xylenes (Total)           | ND      | 5.6 |      | ug/kg dw |

Date Extracted: N/A  
Date Analyzed: 06-MAR-95  
Dilution: 1

059

NORTHEASTERN ANALYTICAL CORPORATION  
VOLATILE UNKNOWN IDENTIFICATION

LAB SAMPLE ID: 95L-0626-10

LAB FILE ID: >E1952

DATE RECEIVED: 02/23/95

DATE ANALYZED: 950306

SAMPLE WT/VOL: 5.06G/5.0ML

LEVEL: LOW

DRY WT: .9529

| COMPOUND | RET TIME (MIN) | CONC |
|----------|----------------|------|
|----------|----------------|------|

NONE FOUND

## NORTHEASTERN ANALYTICAL CORPORATION

## REPORT OF RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES

Date Sampled: Feb 23, 1995

NAC Job Number: L950626

Date Received: Feb 23, 1995

Client ID: S-5B

Lab Sample ID: L950626-10

Total Solids: 95.29%

| PARAMETER    | RESULTS | MDL | QUAL | UNITS    |
|--------------|---------|-----|------|----------|
| Aroclor 1016 | ND      | 35  |      | ug/kg dw |
| Aroclor 1221 | ND      | 70  |      | ug/kg dw |
| Aroclor 1232 | ND      | 35  |      | ug/kg dw |
| Aroclor 1242 | ND      | 35  |      | ug/kg dw |
| Aroclor 1248 | ND      | 35  |      | ug/kg dw |
| Aroclor 1254 | ND      | 35  |      | ug/kg dw |
| Aroclor 1260 | ND      | 35  |      | ug/kg dw |

Date Extracted: 03-MAR-95  
Date Analyzed: 08-MAR-95

## NORTHEASTERN ANALYTICAL CORPORATION

## REPORT OF RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES

Date Sampled: Feb 23, 1995

NAC Job Number: L950626

Date Received: Feb 23, 1995

Client ID: S-6A

Lab Sample ID: L950626-11

Total Solids: 97.57%

| PARAMETER                 | RESULTS | MDL | QUAL | UNITS    |
|---------------------------|---------|-----|------|----------|
| Chloromethane             | ND      | 3.8 |      | ug/kg dw |
| Bromomethane              | ND      | 6.3 |      | ug/kg dw |
| Vinyl Chloride            | ND      | 5.1 |      | ug/kg dw |
| Chloroethane              | ND      | 3.3 |      | ug/kg dw |
| Methylene Chloride        | 7.9     | 3.2 |      | ug/kg dw |
| Acrolein                  | ND      | 51  |      | ug/kg dw |
| Acrylonitrile             | ND      | 51  |      | ug/kg dw |
| Trichlorofluoromethane    | 4.9     | 2.2 |      | ug/kg dw |
| 1,1-Dichloroethene        | ND      | 2.6 |      | ug/kg dw |
| 1,1-Dichloroethane        | ND      | 2.3 |      | ug/kg dw |
| Trans-1,2-Dichloroethene  | ND      | 2.9 |      | ug/kg dw |
| Chloroform                | ND      | 2.7 |      | ug/kg dw |
| 1,2-Dichloroethane        | ND      | 1.9 |      | ug/kg dw |
| 1,1,1-Trichloroethane     | ND      | 3.9 |      | ug/kg dw |
| Carbon Tetrachloride      | ND      | 2.8 |      | ug/kg dw |
| Bromodichloromethane      | ND      | 3.5 |      | ug/kg dw |
| 1,2-Dichloropropane       | ND      | 4.5 |      | ug/kg dw |
| cis-1,3-Dichloropropene   | ND      | 4.3 |      | ug/kg dw |
| Trichloroethene           | ND      | 8.3 |      | ug/kg dw |
| Dibromochloromethane      | ND      | 3.0 |      | ug/kg dw |
| 1,1,2-Trichloroethane     | ND      | 3.6 |      | ug/kg dw |
| Benzene                   | ND      | 4.3 |      | ug/kg dw |
| trans-1,3-Dichloropropene | ND      | 2.9 |      | ug/kg dw |
| 2-Chloroethylvinylether   | ND      | 3.8 |      | ug/kg dw |
| Bromoform                 | ND      | 2.7 |      | ug/kg dw |
| Tetrachloroethene         | ND      | 2.2 |      | ug/kg dw |
| 1,1,2,2-Tetrachloroethane | ND      | 3.8 |      | ug/kg dw |
| Toluene                   | ND      | 2.9 |      | ug/kg dw |
| Chlorobenzene             | ND      | 2.4 |      | ug/kg dw |
| Ethylbenzene              | ND      | 2.9 |      | ug/kg dw |
| Xylenes (Total)           | ND      | 5.4 |      | ug/kg dw |

Date Extracted: N/A  
Date Analyzed: 07-MAR-95  
Dilution: 1

NORTHEASTERN ANALYTICAL CORPORATION  
VOLATILE UNKNOWN IDENTIFICATION

LAB SAMPLE ID: 95L-0626-11

LAB FILE ID: &gt;E1953

DATE RECEIVED: 02/23/95

DATE ANALYZED: 950307

SAMPLE WT/VOL: 5.06G/5.0ML

LEVEL: LOW

DRY WT: .9257

| COMPOUND                   | RET TIME | CONC       |
|----------------------------|----------|------------|
| 1. Unknown Alkane          | 28.16    | 9 UG/KG J  |
| 2. 1-Hexene, 5,5-dimethyl- | 28.38    | 18 UG/KG J |
| 3. Unknown                 | 29.18    | 6 UG/KG J  |
| 4. Unknown                 | 29.47    | 20 UG/KG J |
| 5. Unknown                 | 30.10    | 6 UG/KG J  |
| 6. Unknown                 | 31.41    | 5 UG/KG J  |

J; Estimated Concentration

## NORTHEASTERN ANALYTICAL CORPORATION

## REPORT OF RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES

Date Sampled: Feb 23, 1995

NAC Job Number: L950626

Date Received: Feb 23, 1995

Client ID: S-6A

Lab Sample ID: L950626-11

Total Solids: 97.57%

| PARAMETER    | RESULTS | MDL | QUAL | UNITS    |
|--------------|---------|-----|------|----------|
| Aroclor 1016 | ND      | 68  |      | ug/kg dw |
| Aroclor 1221 | ND      | 140 |      | ug/kg dw |
| Aroclor 1232 | 170     | 68  |      | ug/kg dw |
| Aroclor 1242 | ND      | 68  |      | ug/kg dw |
| Aroclor 1248 | ND      | 68  |      | ug/kg dw |
| Aroclor 1254 | 250     | 68  |      | ug/kg dw |
| Aroclor 1260 | ND      | 68  |      | ug/kg dw |

Date Extracted: 03-MAR-95  
Date Analyzed: 13-MAR-95



## NORTHEASTERN ANALYTICAL CORPORATION

## REPORT OF RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES

Date Sampled: Feb 23, 1995

NAC Job Number: L950626

Date Received: Feb 23, 1995

Client ID: S-6B

Lab Sample ID: L950626-12

Total Solids: 81.94%

| PARAMETER                 | RESULTS | MDL | QUAL | UNITS    |
|---------------------------|---------|-----|------|----------|
| Chloromethane             | ND      | 4.5 |      | ug/kg dw |
| Bromomethane              | ND      | 7.4 |      | ug/kg dw |
| Vinyl Chloride            | ND      | 6.1 |      | ug/kg dw |
| Chloroethane              | ND      | 3.9 |      | ug/kg dw |
| Methylene Chloride        | 9.7     | 3.8 |      | ug/kg dw |
| Acrolein                  | ND      | 61  |      | ug/kg dw |
| Acrylonitrile             | ND      | 61  |      | ug/kg dw |
| Trichlorofluoromethane    | ND      | 2.6 |      | ug/kg dw |
| 1,1-Dichloroethene        | ND      | 3.1 |      | ug/kg dw |
| 1,1-Dichloroethane        | ND      | 2.7 |      | ug/kg dw |
| Trans-1,2-Dichloroethene  | ND      | 3.4 |      | ug/kg dw |
| Chloroform                | ND      | 3.2 |      | ug/kg dw |
| 1,2-Dichloroethane        | ND      | 2.3 |      | ug/kg dw |
| 1,1,1-Trichloroethane     | ND      | 4.6 |      | ug/kg dw |
| Carbon Tetrachloride      | ND      | 3.3 |      | ug/kg dw |
| Bromodichloromethane      | ND      | 4.1 |      | ug/kg dw |
| 1,2-Dichloropropane       | ND      | 5.4 |      | ug/kg dw |
| cis-1,3-Dichloropropene   | ND      | 5.1 |      | ug/kg dw |
| Trichloroethene           | ND      | 9.9 |      | ug/kg dw |
| Dibromochloromethane      | ND      | 3.5 |      | ug/kg dw |
| 1,1,2-Trichloroethane     | ND      | 4.3 |      | ug/kg dw |
| Benzene                   | ND      | 5.1 |      | ug/kg dw |
| trans-1,3-Dichloropropene | ND      | 3.4 |      | ug/kg dw |
| 2-Chloroethylvinylether   | ND      | 4.5 |      | ug/kg dw |
| Bromoform                 | ND      | 3.2 |      | ug/kg dw |
| Tetrachloroethene         | ND      | 2.6 |      | ug/kg dw |
| 1,1,2,2-Tetrachloroethane | ND      | 4.5 |      | ug/kg dw |
| Toluene                   | ND      | 3.4 |      | ug/kg dw |
| Chlorobenzene             | ND      | 2.8 |      | ug/kg dw |
| Ethylbenzene              | ND      | 3.4 |      | ug/kg dw |
| Xylenes (Total)           | ND      | 6.5 |      | ug/kg dw |

Date Extracted: N/A  
Date Analyzed: 07-MAR-95  
Dilution: 1

NORTHEASTERN ANALYTICAL CORPORATION  
VOLATILE UNKNOWN IDENTIFICATION

LAB SAMPLE ID: 95L-0626-12

LAB FILE ID: 95E1954

DATE RECEIVED: 02/23/95

DATE ANALYZED: 950307

SAMPLE WT/VOL: 5.06G/5.0ML

LEVEL: LOW

DRY WT: .8194

| COMPOUND                      | RET TIME | CONC        |
|-------------------------------|----------|-------------|
| 1. Acetone                    | 4.85     | 11 UG/KG J  |
| 2. Unknown Alkene             | 22.90    | 580 UG/KG J |
| 3. Unknown Alkene             | 24.29    | 62 UG/KG J  |
| 4. Unknown Alkene             | 25.40    | 28 UG/KG J  |
| 5. Unknown Cycloalkane        | 27.13    | 8 UG/KG J   |
| 6. Unknown                    | 27.47    | 10 UG/KG J  |
| 7. Unknown                    | 29.18    | 10 UG/KG J  |
| 8. Naphthalene                | 30.13    | 20 UG/KG J  |
| 9. Methyl naphthalene Isomer  | 32.23    | 9 UG/KG J   |
| 10. Methyl naphthalene Isomer | 32.68    | 12 UG/KG J  |

J: Estimated Concentration

## NORTHEASTERN ANALYTICAL CORPORATION

## REPORT OF RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES Date Sampled: Feb 23, 1995  
NAC Job Number: L950626 Date Received: Feb 23, 1995  
Client ID: S-6B  
Lab Sample ID: L950626-12  
Total Solids: 81.94%

| PARAMETER    | RESULTS | MDL | QUAL | UNITS    |
|--------------|---------|-----|------|----------|
| Aroclor 1016 | ND      | 200 |      | ug/kg dw |
| Aroclor 1221 | ND      | 410 |      | ug/kg dw |
| Aroclor 1232 | 2200    | 200 |      | ug/kg dw |
| Aroclor 1242 | ND      | 200 |      | ug/kg dw |
| Aroclor 1248 | ND      | 200 |      | ug/kg dw |
| Aroclor 1254 | 11000   | 200 |      | ug/kg dw |
| Aroclor 1260 | ND      | 200 |      | ug/kg dw |

Date Extracted: 03-MAR-95  
Date Analyzed: 09-MAR-95

## NORTHEASTERN ANALYTICAL CORPORATION

## REPORT OF RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES

Date Sampled: Feb 23, 1995

NAC Job Number: L950626

Date Received: Feb 23, 1995

Client ID: S-7A

Lab Sample ID: L950626-13

Total Solids: 79.12%

| PARAMETER                 | RESULTS | MDL | QUAL | UNITS    |
|---------------------------|---------|-----|------|----------|
| Chloromethane             | ND      | 4.7 |      | ug/kg dw |
| Bromomethane              | ND      | 7.7 |      | ug/kg dw |
| Vinyl Chloride            | ND      | 6.3 |      | ug/kg dw |
| Chloroethane              | ND      | 4.0 |      | ug/kg dw |
| Methylene Chloride        | 7.3     | 3.9 |      | ug/kg dw |
| Acrolein                  | ND      | 63  |      | ug/kg dw |
| Acrylonitrile             | ND      | 63  |      | ug/kg dw |
| Trichlorofluoromethane    | ND      | 2.7 |      | ug/kg dw |
| 1,1-Dichloroethene        | ND      | 3.2 |      | ug/kg dw |
| 1,1-Dichloroethane        | ND      | 2.8 |      | ug/kg dw |
| Trans-1,2-Dichloroethene  | ND      | 3.5 |      | ug/kg dw |
| Chloroform                | ND      | 3.3 |      | ug/kg dw |
| 1,2-Dichloroethane        | ND      | 2.4 |      | ug/kg dw |
| 1,1,1-Trichloroethane     | ND      | 4.8 |      | ug/kg dw |
| Carbon Tetrachloride      | ND      | 3.4 |      | ug/kg dw |
| Bromodichloromethane      | ND      | 4.3 |      | ug/kg dw |
| 1,2-Dichloropropane       | ND      | 5.6 |      | ug/kg dw |
| cis-1,3-Dichloropropene   | ND      | 5.3 |      | ug/kg dw |
| Trichloroethene           | ND      | 10  |      | ug/kg dw |
| Dibromochloromethane      | ND      | 3.7 |      | ug/kg dw |
| 1,1,2-Trichloroethane     | ND      | 4.4 |      | ug/kg dw |
| Benzene                   | ND      | 5.3 |      | ug/kg dw |
| trans-1,3-Dichloropropene | ND      | 3.5 |      | ug/kg dw |
| 2-Chloroethylvinylether   | ND      | 4.7 |      | ug/kg dw |
| Bromoform                 | ND      | 3.3 |      | ug/kg dw |
| Tetrachloroethene         | ND      | 2.7 |      | ug/kg dw |
| 1,1,2,2-Tetrachloroethane | ND      | 4.7 |      | ug/kg dw |
| Toluene                   | 4.6     | 3.5 |      | ug/kg dw |
| Chlorobenzene             | ND      | 2.9 |      | ug/kg dw |
| Ethylbenzene              | 3.6     | 3.5 |      | ug/kg dw |
| Xylenes (Total)           | 13      | 6.7 |      | ug/kg dw |

Date Extracted: N/A  
Date Analyzed: 07-MAR-95  
Dilution: 1

NORTHEASTERN ANALYTICAL CORPORATION  
VOLATILE UNKNOWN IDENTIFICATION

LAB SAMPLE ID: 95L-0626-13

LAB FILE ID: 95E1960

DATE RECEIVED: 02/23/95

DATE ANALYZED: 950307

SAMPLE WT/VOL: 5.06g/5.0mL

LEVEL: LOW

DRY WT: .7912

| COMPOUND                       | RET TIME | CONC       |
|--------------------------------|----------|------------|
| 1. Unknown Alkene              | 22.40    | 45 UG/KG J |
| 2. Unknown                     | 26.13    | 7 UG/KG J  |
| 3. Naphthalene                 | 30.12    | 29 UG/KG J |
| 4. Methyl naphthalene Isomer   | 32.22    | 13 UG/KG J |
| 5. Methyl naphthalene Isomer   | 32.68    | 24 UG/KG J |
| 6. Dimethyl naphthalene Isomer | 34.61    | 19 UG/KG J |

J: Estimated Concentration

## NORTHEASTERN ANALYTICAL CORPORATION

## REPORT OF RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES

Date Sampled: Feb 23, 1992

NAC Job Number: L950626

Date Received: Feb 23, 1992

Client ID: S-7A

Lab Sample ID: L950626-13

Total Solids: 79.12%

| PARAMETER    | RESULTS | MDL | QUAL | UNITS    |
|--------------|---------|-----|------|----------|
| Aroclor 1016 | ND      | 210 |      | ug/kg dw |
| Aroclor 1221 | ND      | 420 |      | ug/kg dw |
| Aroclor 1232 | 1100    | 210 |      | ug/kg dw |
| Aroclor 1242 | ND      | 210 |      | ug/kg dw |
| Aroclor 1248 | ND      | 210 |      | ug/kg dw |
| Aroclor 1254 | 950     | 210 |      | ug/kg dw |
| Aroclor 1260 | ND      | 210 |      | ug/kg dw |

Date Extracted: 03-MAR-95  
Date Analyzed: 09-MAR-95

## NORTHEASTERN ANALYTICAL CORPORATION

## REPORT OF RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES

Date Sampled: Feb 23, 1995

NAC Job Number: L950626

Date Received: Feb 23, 1995

Client ID: S-7B

Lab Sample ID: L950626-14

Total Solids: 86.41%

| PARAMETER                 | RESULTS | MDL | QUAL | UNITS    |
|---------------------------|---------|-----|------|----------|
| Chloromethane             | ND      | 4.3 |      | ug/kg dw |
| Bromomethane              | ND      | 7.1 |      | ug/kg dw |
| Vinyl Chloride            | ND      | 5.8 |      | ug/kg dw |
| Chloroethane              | ND      | 3.7 |      | ug/kg dw |
| Methylene Chloride        | 7.3     | 3.6 |      | ug/kg dw |
| Acrolein                  | ND      | 58  |      | ug/kg dw |
| Acrylonitrile             | ND      | 58  |      | ug/kg dw |
| Trichlorofluoromethane    | ND      | 2.4 |      | ug/kg dw |
| 1,1-Dichloroethene        | ND      | 2.9 |      | ug/kg dw |
| 1,1-Dichloroethane        | ND      | 2.5 |      | ug/kg dw |
| Trans-1,2-Dichloroethene  | ND      | 3.2 |      | ug/kg dw |
| Chloroform                | ND      | 3.0 |      | ug/kg dw |
| 1,2-Dichloroethane        | ND      | 2.2 |      | ug/kg dw |
| 1,1,1-Trichloroethane     | ND      | 4.4 |      | ug/kg dw |
| Carbon Tetrachloride      | ND      | 3.1 |      | ug/kg dw |
| Bromodichloromethane      | ND      | 3.9 |      | ug/kg dw |
| 1,2-Dichloropropane       | ND      | 5.1 |      | ug/kg dw |
| cis-1,3-Dichloropropene   | ND      | 4.9 |      | ug/kg dw |
| Trichloroethene           | ND      | 9.4 |      | ug/kg dw |
| Dibromochloromethane      | ND      | 3.4 |      | ug/kg dw |
| 1,1,2-Trichloroethane     | ND      | 4.1 |      | ug/kg dw |
| Benzene                   | ND      | 4.9 |      | ug/kg dw |
| trans-1,3-Dichloropropene | ND      | 3.2 |      | ug/kg dw |
| 2-Chloroethylvinylether   | ND      | 4.3 |      | ug/kg dw |
| Bromoform                 | ND      | 3.0 |      | ug/kg dw |
| Tetrachloroethene         | ND      | 2.4 |      | ug/kg dw |
| 1,1,2,2-Tetrachloroethane | ND      | 4.3 |      | ug/kg dw |
| Toluene                   | ND      | 3.2 |      | ug/kg dw |
| Chlorobenzene             | ND      | 2.7 |      | ug/kg dw |
| Ethylbenzene              | ND      | 3.2 |      | ug/kg dw |
| Xylenes (Total)           | ND      | 6.1 |      | ug/kg dw |

Date Extracted: N/A  
Date Analyzed: 07-MAR-95  
Dilution: 1

NORTHEASTERN ANALYTICAL CORPORATION  
VOLATILE UNKNOWN IDENTIFICATION

LAB SAMPLE ID: 95L-0626-14

LAB FILE ID: &gt;E1962

DATE RECEIVED: 02/23/95

DATE ANALYZED: 950307

SAMPLE WT/VOL: 5.06G/5.0ML

LEVEL: LOW

DRY WT: .8641

| COMPOUND       | RET TIME | CONC       |
|----------------|----------|------------|
| 1. Unknown     | 27.46    | 8 UG/KG J  |
| 2. Naphthalene | 30.12    | 10 UG/KG J |

J: Estimated Concentration



## NORTHEASTERN ANALYTICAL CORPORATION

## REPORT OF RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES

Date Sampled: Feb 23, 1995

NAC Job Number: L950626

Date Received: Feb 23, 1995

Client ID: S-7B

Lab Sample ID: L950626-14

Total Solids: 86.41%

| PARAMETER    | RESULTS | MDL | QUAL | UNITS    |
|--------------|---------|-----|------|----------|
| Aroclor 1016 | ND      | 190 |      | ug/kg dw |
| Aroclor 1221 | ND      | 390 |      | ug/kg dw |
| Aroclor 1232 | 2700    | 190 |      | ug/kg dw |
| Aroclor 1242 | ND      | 190 |      | ug/kg dw |
| Aroclor 1248 | ND      | 190 |      | ug/kg dw |
| Aroclor 1254 | 2500    | 190 |      | ug/kg dw |
| Aroclor 1260 | ND      | 190 |      | ug/kg dw |

Date Extracted: 03-MAR-95  
Date Analyzed: 09-MAR-95

## NORTHEASTERN ANALYTICAL CORPORATION

## REPORT OF RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES

Date Sampled: Feb 23, 1995

NAC Job Number: L950626

Date Received: Feb 23, 1995

Client ID: S-7AD

Lab Sample ID: L950626-15

Total Solids: 80.95%

| PARAMETER                 | RESULTS | MDL | QUAL | UNITS    |
|---------------------------|---------|-----|------|----------|
| Chloromethane             | ND      | 4.6 |      | ug/kg dw |
| Bromomethane              | ND      | 7.5 |      | ug/kg dw |
| Vinyl Chloride            | ND      | 6.2 |      | ug/kg dw |
| Chloroethane              | ND      | 4.0 |      | ug/kg dw |
| Methylene Chloride        | 5.6     | 3.8 |      | ug/kg dw |
| Acrolein                  | ND      | 62  |      | ug/kg dw |
| Acrylonitrile             | ND      | 62  |      | ug/kg dw |
| Trichlorofluoromethane    | ND      | 2.6 |      | ug/kg dw |
| 1,1-Dichloroethene        | ND      | 3.1 |      | ug/kg dw |
| 1,1-Dichloroethane        | ND      | 2.7 |      | ug/kg dw |
| Trans-1,2-Dichloroethene  | ND      | 3.5 |      | ug/kg dw |
| Chloroform                | ND      | 3.2 |      | ug/kg dw |
| 1,2-Dichloroethane        | ND      | 2.3 |      | ug/kg dw |
| 1,1,1-Trichloroethane     | ND      | 4.7 |      | ug/kg dw |
| Carbon Tetrachloride      | ND      | 3.3 |      | ug/kg dw |
| Bromodichloromethane      | ND      | 4.2 |      | ug/kg dw |
| 1,2-Dichloropropane       | ND      | 5.4 |      | ug/kg dw |
| cis-1,3-Dichloropropene   | ND      | 5.2 |      | ug/kg dw |
| Trichloroethene           | ND      | 10  |      | ug/kg dw |
| Dibromochloromethane      | ND      | 3.6 |      | ug/kg dw |
| 1,1,2-Trichloroethane     | ND      | 4.3 |      | ug/kg dw |
| Benzene                   | ND      | 5.2 |      | ug/kg dw |
| trans-1,3-Dichloropropene | ND      | 3.5 |      | ug/kg dw |
| 2-Chloroethylvinylether   | ND      | 4.6 |      | ug/kg dw |
| Bromoform                 | ND      | 3.2 |      | ug/kg dw |
| Tetrachloroethene         | ND      | 2.6 |      | ug/kg dw |
| 1,1,2,2-Tetrachloroethane | ND      | 4.6 |      | ug/kg dw |
| Toluene                   | 4.8     | 3.5 |      | ug/kg dw |
| Chlorobenzene             | ND      | 2.8 |      | ug/kg dw |
| Ethylbenzene              | 5.3     | 3.5 |      | ug/kg dw |
| Xylenes (Total)           | 68      | 6.5 |      | ug/kg dw |

Date Extracted: N/A  
Date Analyzed: 08-MAR-95  
Dilution: 1

NORTHEASTERN ANALYTICAL CORPORATION  
VOLATILE UNKNOWN IDENTIFICATION

LAB SAMPLE ID: 95L-0626-15

LAB FILE ID: &gt;A8661

DATE RECEIVED: 02/23/95

DATE ANALYZED: 950308

SAMPLE WT/VOL: 5.0GR/5.0ML

LEVEL: LOW

DRY WT: .8095

| COMPOUND                       | RET TIME | CONC       |
|--------------------------------|----------|------------|
| 1. Unknown Alkane              | 22.68    | 19 UG/KG J |
| 2. Ethylmethylbenzene Isomer   | 23.99    | 38 UG/KG J |
| 3. Ethylmethylbenzene Isomer   | 24.08    | 38 UG/KG J |
| 4. Ethylmethylbenzene Isomer   | 24.56    | 21 UG/KG J |
| 5. Ethylmethylbenzene Isomer   | 24.84    | 70 UG/KG J |
| 6. Unknown Alkane              | 25.16    | 46 UG/KG J |
| 7. Ethylmethylbenzene Isomer   | 25.71    | 22 UG/KG J |
| 8. Methylpropylbenzene Isomer  | 26.06    | 14 UG/KG J |
| 9. Ethyldimethylbenzene Isomer | 26.20    | 27 UG/KG J |
| 10. Unknown Aromatic           | 27.33    | 14 UG/KG J |
| 11. Unknown Aromatic           | 29.33    | 25 UG/KG J |
| 12. Naphthalene                | 30.04    | 35 UG/KG J |
| 13. Methylnaphthalene Isomer   | 32.10    | 19 UG/KG J |
| 14. Methylnaphthalene Isomer   | 32.98    | 30 UG/KG J |
| 15. Dimethylnaphthalene Isomer | 34.49    | 30 UG/KG J |

J; Estimated Concentration

## NORTHEASTERN ANALYTICAL CORPORATION

## REPORT OF RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES

Date Sampled: Feb 23, 1995

NAC Job Number: L950626

Date Received: Feb 23, 1995

Client ID: S-7AD

Lab Sample ID: L950626-15

Total Solids: 80.95%

| PARAMETER    | RESULTS | MDL  | QUAL | UNITS    |
|--------------|---------|------|------|----------|
| Aroclor 1016 | ND      | 820  |      | ug/kg dw |
| Aroclor 1221 | ND      | 1700 |      | ug/kg dw |
| Aroclor 1232 | 16000   | 820  |      | ug/kg dw |
| Aroclor 1242 | ND      | 820  |      | ug/kg dw |
| Aroclor 1248 | ND      | 820  |      | ug/kg dw |
| Aroclor 1254 | 6200    | 820  |      | ug/kg dw |
| Aroclor 1260 | ND      | 820  |      | ug/kg dw |

Date Extracted: 03-MAR-95  
Date Analyzed: 13-MAR-95

## NORTHEASTERN ANALYTICAL CORPORATION

## REPORT OF RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES

Date Sampled: Feb 23, 1995

NAC Job Number: L950626

Date Received: Feb 23, 1995

Client ID: FIELD BLANK

Lab Sample ID: L950626-16

| PARAMETER                 | RESULTS | MDL | QUAL | UNITS |
|---------------------------|---------|-----|------|-------|
| Chloromethane             | ND      | 3.7 |      | ug/l  |
| Bromomethane              | ND      | 6.1 |      | ug/l  |
| Vinyl Chloride            | ND      | 5.0 |      | ug/l  |
| Chloroethane              | ND      | 3.2 |      | ug/l  |
| Methylene Chloride        | ND      | 3.1 |      | ug/l  |
| Acrolein                  | ND      | 50  |      | ug/l  |
| Acrylonitrile             | ND      | 50  |      | ug/l  |
| Trichlorofluoromethane    | ND      | 2.1 |      | ug/l  |
| 1,1-Dichloroethene        | ND      | 2.5 |      | ug/l  |
| 1,1-Dichloroethane        | ND      | 2.2 |      | ug/l  |
| Trans-1,2-Dichloroethene  | ND      | 2.8 |      | ug/l  |
| Chloroform                | ND      | 2.6 |      | ug/l  |
| 1,2-Dichloroethane        | ND      | 1.9 |      | ug/l  |
| 1,1,1-Trichloroethane     | ND      | 3.8 |      | ug/l  |
| Carbon Tetrachloride      | ND      | 2.7 |      | ug/l  |
| Bromodichloromethane      | ND      | 3.4 |      | ug/l  |
| 1,2-Dichloropropane       | ND      | 4.4 |      | ug/l  |
| cis-1,3-Dichloropropene   | ND      | 4.2 |      | ug/l  |
| Trichloroethene           | ND      | 2.3 |      | ug/l  |
| Dibromochloromethane      | ND      | 2.9 |      | ug/l  |
| 1,1,2-Trichloroethane     | ND      | 3.5 |      | ug/l  |
| Benzene                   | ND      | 4.2 |      | ug/l  |
| trans-1,3-Dichloropropene | ND      | 2.8 |      | ug/l  |
| 2-Chloroethylvinylether   | ND      | 3.7 |      | ug/l  |
| Bromoform                 | ND      | 2.6 |      | ug/l  |
| Tetrachloroethene         | ND      | 2.1 |      | ug/l  |
| 1,1,2,2-Tetrachloroethane | ND      | 3.7 |      | ug/l  |
| Toluene                   | ND      | 2.8 |      | ug/l  |
| Chlorobenzene             | ND      | 2.3 |      | ug/l  |
| Ethylbenzene              | ND      | 2.8 |      | ug/l  |
| Xylenes (Total)           | ND      | 5.3 |      | ug/l  |

Date Extracted: N/A  
Date Analyzed: 06-MAR-95  
Dilution: 1

NORTHEASTERN ANALYTICAL CORPORATION  
VOLATILE UNKNOWN IDENTIFICATION

LAB SAMPLE ID: 95L-0626-16

LAB FILE ID: &gt;E1942

DATE RECEIVED: 02/23/95

DATE ANALYZED: 950306

SAMPLE WT/VOL: 5.0ML

LEVEL: LOW

COMPOUND

RET TIME (MIN)

CUNC

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NONE FOUND

## NORTHEASTERN ANALYTICAL CORPORATION

## REPORT OF RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES

Date Sampled: Feb 23, 1995

NAC Job Number: L950626

Date Received: Feb 23, 1995

Client ID: FIELD BLANK

Lab Sample ID: L950626-16

| PARAMETER    | RESULTS | MDL | QUAL | UNITS |
|--------------|---------|-----|------|-------|
| Aroclor 1016 | ND      | 1.0 |      | ug/l  |
| Aroclor 1221 | ND      | 2.0 |      | ug/l  |
| Aroclor 1232 | ND      | 1.0 |      | ug/l  |
| Aroclor 1242 | ND      | 1.0 |      | ug/l  |
| Aroclor 1248 | ND      | 1.0 |      | ug/l  |
| Aroclor 1254 | ND      | 1.0 |      | ug/l  |
| Aroclor 1260 | ND      | 1.0 |      | ug/l  |

Date Extracted: 01-MAR-95  
Date Analyzed: 08-MAR-95

INORGANIC RESULTS



## NORTHEASTERN ANALYTICAL CORPORATION

## REPORT OF RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES

Date Sampled: Feb 23, 1995

NAC Job Number: L950626

Date Received: Feb 23, 1995

Client ID: S-1A

Lab Sample ID: L950626-1

Total Solids: 93.19%

| PARAMETER | RESULTS | MDL  | QUAL | UNITS    |
|-----------|---------|------|------|----------|
| Antimony  | 11      | 6.4  |      | mg/kg dw |
| Arsenic   | 2.7     | 0.54 |      | mg/kg dw |
| Beryllium | 2.7     | 0.54 |      | mg/kg dw |
| Cadmium   | 16      | 0.32 |      | mg/kg dw |
| Chromium  | 79      | 1.1  |      | mg/kg dw |
| Copper    | 330     | 2.7  |      | mg/kg dw |
| Lead      | 1100    | 11   |      | mg/kg dw |
| Mercury   | 0.38    | 0.11 |      | mg/kg dw |
| Nickel    | 100     | 4.3  |      | mg/kg dw |
| Selenium  | ND      | 0.54 |      | mg/kg dw |
| Silver    | ND      | 1.1  |      | mg/kg dw |
| Thallium  | ND      | 0.54 |      | mg/kg dw |
| Zinc      | 630     | 2.1  |      | mg/kg dw |

Date Extracted: See Laboratory Chronicle  
Date Analyzed: See Laboratory Chronicle

## NORTHEASTERN ANALYTICAL CORPORATION

## REPORT OF RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES Date Sampled: Feb 23, 1995  
NAC Job Number: L950626 Date Received: Feb 23, 1995  
Client ID: S-1A  
Lab Sample ID: L950626-1  
Total Solids: 93.19%

| PARAMETER              | RESULTS | MDL | QUAL | UNITS    |
|------------------------|---------|-----|------|----------|
| Petroleum Hydrocarbons | 3900    | 21  |      | mg/kg dw |

Date Extracted: N/A  
Date Analyzed: See Laboratory Chronicle

## NORTHEASTERN ANALYTICAL CORPORATION

## REPORT OF RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES

Date Sampled: Feb 23, 1995

NAC Job Number: L950626

Date Received: Feb 23, 1995

Client ID: S-1B

Lab Sample ID: L950626-2

Total Solids: 95.25%

| PARAMETER | RESULTS | MDL  | QUAL | UNITS    |
|-----------|---------|------|------|----------|
| Antimony  | ND      | 6.3  |      | mg/kg dw |
| Arsenic   | 2.0     | 0.52 |      | mg/kg dw |
| Beryllium | ND      | 0.52 |      | mg/kg dw |
| Cadmium   | 1.8     | 0.31 |      | mg/kg dw |
| Chromium  | 29      | 1.0  |      | mg/kg dw |
| Copper    | 5.3     | 2.6  |      | mg/kg dw |
| Lead      | ND      | 10   |      | mg/kg dw |
| Mercury   | ND      | 0.1  |      | mg/kg dw |
| Nickel    | 27      | 4.2  |      | mg/kg dw |
| Selenium  | ND      | 0.52 |      | mg/kg dw |
| Silver    | ND      | 1.0  |      | mg/kg dw |
| Thallium  | ND      | 0.52 |      | mg/kg dw |
| Zinc      | 19      | 2.1  |      | mg/kg dw |

Date Extracted: See Laboratory Chronicle  
Date Analyzed: See Laboratory Chronicle

## NORTHEASTERN ANALYTICAL CORPORATION

## REPORT OF RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES Date Sampled: Feb 23, 1995  
NAC Job Number: L950626 Date Received: Feb 23, 1995  
Client ID: S-1B  
Lab Sample ID: L950626-2  
Total Solids: 95.25%

| PARAMETER              | RESULTS | MDL | QUAL | UNITS    |
|------------------------|---------|-----|------|----------|
| Petroleum Hydrocarbons | 130     | 21  |      | mg/kg dw |

Date Extracted: N/A  
Date Analyzed: See Laboratory Chronicle

## NORTHEASTERN ANALYTICAL CORPORATION

## REPORT OF RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES

Date Sampled: Feb 23, 1995

NAC Job Number: L950626

Date Received: Feb 23, 1995

Client ID: S-2A

Lab Sample ID: L950626-3

Total Solids: 89.73%

| PARAMETER | RESULTS | MDL  | QUAL | UNITS    |
|-----------|---------|------|------|----------|
| Antimony  | 13      | 6.7  |      | mg/kg dw |
| Arsenic   | 8.0     | 0.56 |      | mg/kg dw |
| Beryllium | 2.6     | 0.56 |      | mg/kg dw |
| Cadmium   | 20      | 0.33 |      | mg/kg dw |
| Chromium  | 360     | 1.1  |      | mg/kg dw |
| Copper    | 600     | 2.8  |      | mg/kg dw |
| Lead      | 1800    | 11   |      | mg/kg dw |
| Mercury   | 0.6     | 0.11 |      | mg/kg dw |
| Nickel    | 110     | 4.5  |      | mg/kg dw |
| Selenium  | ND      | 0.56 |      | mg/kg dw |
| Silver    | ND      | 1.1  |      | mg/kg dw |
| Thallium  | ND      | 0.56 |      | mg/kg dw |
| Zinc      | 1400    | 2.2  |      | mg/kg dw |

Date Extracted: See Laboratory Chronicle  
Date Analyzed: See Laboratory Chronicle

## NORTHEASTERN ANALYTICAL CORPORATION

## REPORT OF RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES

Date Sampled: Feb 23, 1995

NAC Job Number: L950626

Date Received: Feb 23, 1995

Client ID: S-2A

Lab Sample ID: L950626-3

Total Solids: 89.73%

| PARAMETER              | RESULTS | MDL | QUAL | UNITS    |
|------------------------|---------|-----|------|----------|
| Petroleum Hydrocarbons | 2500    | 22  |      | mg/kg dw |

Date Extracted: N/A  
Date Analyzed: See Laboratory Chronicle

## NORTHEASTERN ANALYTICAL CORPORATION

## REPORT OF RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES

Date Sampled: Feb 23, 1995

NAC Job Number: L950626

Date Received: Feb 23, 1995

Client ID: S-2B

Lab Sample ID: L950626-4

Total Solids: 87.58%

| PARAMETER | RESULTS | MDL  | QUAL | UNITS    |
|-----------|---------|------|------|----------|
| Antimony  | 28      | 6.9  |      | mg/kg dw |
| Arsenic   | 6.2     | 0.57 |      | mg/kg dw |
| Beryllium | 3.7     | 0.57 |      | mg/kg dw |
| Cadmium   | 86      | 0.34 |      | mg/kg dw |
| Chromium  | 370     | 1.1  |      | mg/kg dw |
| Copper    | 830     | 2.9  |      | mg/kg dw |
| Lead      | 280     | 11   |      | mg/kg dw |
| Mercury   | 0.22    | 0.11 |      | mg/kg dw |
| Nickel    | 190     | 4.6  |      | mg/kg dw |
| Selenium  | ND      | 0.57 |      | mg/kg dw |
| Silver    | ND      | 1.1  |      | mg/kg dw |
| Thallium  | ND      | 0.57 |      | mg/kg dw |
| Zinc      | 1000    | 2.3  |      | mg/kg dw |

Date Extracted: See Laboratory Chronicle  
Date Analyzed: See Laboratory Chronicle

## NORTHEASTERN ANALYTICAL CORPORATION

## REPORT OF RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES Date Sampled: Feb 23, 1995  
NAC Job Number: L950626 Date Received: Feb 23, 1995  
Client ID: S-2B  
Lab Sample ID: L950626-4  
Total Solids: 87.58%

| PARAMETER              | RESULTS | MDL | QUAL | UNITS    |
|------------------------|---------|-----|------|----------|
| Petroleum Hydrocarbons | 1700    | 23  |      | mg/kg dw |

Date Extracted: N/A  
Date Analyzed: See Laboratory Chronicle



## NORTHEASTERN ANALYTICAL CORPORATION

## REPORT OF RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES  
 NAC Job Number: L950626  
 Client ID: S-3A  
 Lab Sample ID: L950626-5  
 Total Solids: 98.15%

Date Sampled: Feb 23, 1995  
 Date Received: Feb 23, 1995

| PARAMETER | RESULTS | MDL  | QUAL | UNITS    |
|-----------|---------|------|------|----------|
| Antimony  | ND      | 6.1  |      | mg/kg dw |
| Arsenic   | 4.3     | 0.51 |      | mg/kg dw |
| Beryllium | 1.6     | 0.51 |      | mg/kg dw |
| Cadmium   | 12      | 0.31 |      | mg/kg dw |
| Chromium  | 46      | 1.0  |      | mg/kg dw |
| Copper    | 280     | 2.5  |      | mg/kg dw |
| Lead      | 280     | 10   |      | mg/kg dw |
| Mercury   | 0.3     | 0.1  |      | mg/kg dw |
| Nickel    | 42      | 4.1  |      | mg/kg dw |
| Selenium  | ND      | 0.51 |      | mg/kg dw |
| Silver    | ND      | 1.0  |      | mg/kg dw |
| Thallium  | ND      | 0.51 |      | mg/kg dw |
| Zinc      | 980     | 2.0  |      | mg/kg dw |

Date Extracted: See Laboratory Chronicle  
 Date Analyzed: See Laboratory Chronicle

## NORTHEASTERN ANALYTICAL CORPORATION

## REPORT OF RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES Date Sampled: Feb 23, 1995  
NAC Job Number: L950626 Date Received: Feb 23, 1995  
Client ID: S-3A  
Lab Sample ID: L950626-5  
Total Solids: 98.15%

| PARAMETER              | RESULTS | MDL | QUAL | UNITS    |
|------------------------|---------|-----|------|----------|
| Petroleum Hydrocarbons | 6700    | 20  |      | mg/kg dw |

Date Extracted: N/A  
Date Analyzed: See Laboratory Chronicle

## NORTHEASTERN ANALYTICAL CORPORATION

## REPORT OF RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES Date Sampled: Feb 23, 1995  
NAC Job Number: L950626 Date Received: Feb 23, 1995  
Client ID: S-3B  
Lab Sample ID: L950626-6  
Total Solids: 90.63%

| PARAMETER | RESULTS | MDL  | QUAL | UNITS    |
|-----------|---------|------|------|----------|
| Antimony  | ND      | 6.6  |      | mg/kg dw |
| Arsenic   | 2.3     | 0.55 |      | mg/kg dw |
| Beryllium | 2.4     | 0.55 |      | mg/kg dw |
| Cadmium   | 9.0     | 0.33 |      | mg/kg dw |
| Chromium  | 11      | 1.1  |      | mg/kg dw |
| Copper    | 53      | 2.8  |      | mg/kg dw |
| Lead      | 48      | 11   |      | mg/kg dw |
| Mercury   | ND      | 0.11 |      | mg/kg dw |
| Nickel    | 19      | 4.4  |      | mg/kg dw |
| Selenium  | ND      | 0.55 |      | mg/kg dw |
| Silver    | ND      | 1.1  |      | mg/kg dw |
| Thallium  | ND      | 0.55 |      | mg/kg dw |
| Zinc      | 180     | 2.2  |      | mg/kg dw |

Date Extracted: See Laboratory Chronicle  
Date Analyzed: See Laboratory Chronicle

## NORTHEASTERN ANALYTICAL CORPORATION

## REPORT OF RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES Date Sampled: Feb 23, 1995  
NAC Job Number: L950626 Date Received: Feb 23, 1995  
Client ID: S-3B  
Lab Sample ID: L950626-6  
Total Solids: 90.63%

| PARAMETER              | RESULTS | MDL | QUAL | UNITS    |
|------------------------|---------|-----|------|----------|
| Petroleum Hydrocarbons | 5000    | 22  |      | mg/kg dw |

Date Extracted: N/A  
Date Analyzed: See Laboratory Chronicle

## NORTHEASTERN ANALYTICAL CORPORATION

## REPORT OF RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES

Date Sampled: Feb 23, 1995

NAC Job Number: L950626

Date Received: Feb 23, 1995

Client ID: S-4A

Lab Sample ID: L950626-7

Total Solids: 94.89%

| PARAMETER | RESULTS | MDL  | QUAL | UNITS    |
|-----------|---------|------|------|----------|
| Antimony  | ND      | 6.3  |      | mg/kg dw |
| Arsenic   | 1.1     | 0.53 |      | mg/kg dw |
| Beryllium | 2.7     | 0.53 |      | mg/kg dw |
| Cadmium   | 7.0     | 0.32 |      | mg/kg dw |
| Chromium  | 7.4     | 1.1  |      | mg/kg dw |
| Copper    | 48      | 2.6  |      | mg/kg dw |
| Lead      | 22      | 11   |      | mg/kg dw |
| Mercury   | ND      | 0.11 |      | mg/kg dw |
| Nickel    | 15      | 4.2  |      | mg/kg dw |
| Selenium  | ND      | 0.53 |      | mg/kg dw |
| Silver    | ND      | 1.1  |      | mg/kg dw |
| Thallium  | ND      | 0.53 |      | mg/kg dw |
| Zinc      | 75      | 2.1  |      | mg/kg dw |

Date Extracted: See Laboratory Chronicle  
Date Analyzed: See Laboratory Chronicle

## NORTHEASTERN ANALYTICAL CORPORATION

## REPORT OF RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES

Date Sampled: Feb 23, 1995

NAC Job Number: L950626

Date Received: Feb 23, 1995

Client ID: S-4A

Lab Sample ID: L950626-7

Total Solids: 94.89%

| PARAMETER              | RESULTS | MDL | QUAL | UNITS    |
|------------------------|---------|-----|------|----------|
| Petroleum Hydrocarbons | 6700    | 21  |      | mg/kg dw |

Date Extracted: N/A  
Date Analyzed: See Laboratory Chronicle

## NORTHEASTERN ANALYTICAL CORPORATION

## REPORT OF RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES

Date Sampled: Feb 23, 1995

NAC Job Number: L950626

Date Received: Feb 23, 1995

Client ID: S-4B

Lab Sample ID: L950626-8

Total Solids: 92.69%

| PARAMETER | RESULTS | MDL  | QUAL | UNITS    |
|-----------|---------|------|------|----------|
| Antimony  | ND      | 6.5  |      | mg/kg dw |
| Arsenic   | 1.4     | 0.54 |      | mg/kg dw |
| Beryllium | ND      | 0.54 |      | mg/kg dw |
| Cadmium   | 1.8     | 0.32 |      | mg/kg dw |
| Chromium  | 8.9     | 1.1  |      | mg/kg dw |
| Copper    | 3.7     | 2.7  |      | mg/kg dw |
| Lead      | ND      | 11   |      | mg/kg dw |
| Mercury   | ND      | 0.11 |      | mg/kg dw |
| Nickel    | 7.0     | 4.3  |      | mg/kg dw |
| Selenium  | ND      | 0.54 |      | mg/kg dw |
| Silver    | ND      | 1.1  |      | mg/kg dw |
| Thallium  | ND      | 0.54 |      | mg/kg dw |
| Zinc      | 15      | 2.2  |      | mg/kg dw |

Date Extracted: See Laboratory Chronicle  
Date Analyzed: See Laboratory Chronicle

## NORTHEASTERN ANALYTICAL CORPORATION

## REPORT OF RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES Date Sampled: Feb 23, 1995  
NAC Job Number: L950626 Date Received: Feb 23, 1995  
Client ID: S-4B  
Lab Sample ID: L950626-8  
Total Solids: 92.69%

| PARAMETER              | RESULTS | MDL | QUAL | UNITS    |
|------------------------|---------|-----|------|----------|
| Petroleum Hydrocarbons | 320     | 22  |      | mg/kg dw |

Date Extracted: N/A  
Date Analyzed: See Laboratory Chronicle



FILE COPY

## NORTHEASTERN ANALYTICAL CORPORATION

## REPORT OF RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES Date Sampled: Feb 23, 1995  
NAC Job Number: L950626 Date Received: Feb 23, 1995  
Client ID: S-5A  
Lab Sample ID: L950626-9  
Total Solids: 94.51%

| PARAMETER | RESULTS | MDL  | QUAL | UNITS    |
|-----------|---------|------|------|----------|
| Antimony  | ND      | 6.3  |      | mg/kg dw |
| Arsenic   | ND      | 0.53 |      | mg/kg dw |
| Beryllium | 2.4     | 0.53 |      | mg/kg dw |
| Cadmium   | 3.9     | 0.32 |      | mg/kg dw |
| Chromium  | 12      | 1.1  |      | mg/kg dw |
| Copper    | 35      | 2.6  |      | mg/kg dw |
| Lead      | 17      | 11   |      | mg/kg dw |
| Mercury   | ND      | 0.11 |      | mg/kg dw |
| Nickel    | 10      | 4.2  |      | mg/kg dw |
| Selenium  | ND      | 0.53 |      | mg/kg dw |
| Silver    | ND      | 1.1  |      | mg/kg dw |
| Thallium  | ND      | 0.53 |      | mg/kg dw |
| Zinc      | 47      | 2.1  |      | mg/kg dw |

Date Extracted: See Laboratory Chronicle  
Date Analyzed: See Laboratory Chronicle

## NORTHEASTERN ANALYTICAL CORPORATION

## REPORT OF RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES

Date Sampled: Feb 23, 1995

NAC Job Number: L950626

Date Received: Feb 23, 1995

Client ID: S-5A

Lab Sample ID: L950626-9

Total Solids: 94.51%

| PARAMETER              | RESULTS | MDL | QUAL | UNITS    |
|------------------------|---------|-----|------|----------|
| Petroleum Hydrocarbons | 560     | 21  |      | mg/kg dw |

Date Extracted: N/A  
Date Analyzed: See Laboratory Chronicle

## NORTHEASTERN ANALYTICAL CORPORATION

## REPORT OF RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES

Date Sampled: Feb 23, 1998

NAC Job Number: L950626

Date Received: Feb 23, 1998

Client ID: S-5B

Lab Sample ID: L950626-10

Total Solids: 95.29%

| PARAMETER | RESULTS | MDL  | QUAL | UNITS    |
|-----------|---------|------|------|----------|
| Antimony  | 7.4     | 6.3  |      | mg/kg dw |
| Arsenic   | 1.7     | 0.52 |      | mg/kg dw |
| Beryllium | ND      | 0.52 |      | mg/kg dw |
| Cadmium   | 1.8     | 0.31 |      | mg/kg dw |
| Chromium  | 8.3     | 1.0  |      | mg/kg dw |
| Copper    | 4.4     | 2.6  |      | mg/kg dw |
| Lead      | 1200    | 10   |      | mg/kg dw |
| Mercury   | ND      | 0.1  |      | mg/kg dw |
| Nickel    | 9.1     | 4.2  |      | mg/kg dw |
| Selenium  | ND      | 0.52 |      | mg/kg dw |
| Silver    | ND      | 1.0  |      | mg/kg dw |
| Thallium  | ND      | 0.52 |      | mg/kg dw |
| Zinc      | 16      | 2.1  |      | mg/kg dw |

Date Extracted: See Laboratory Chronicle  
Date Analyzed: See Laboratory Chronicle

## NORTHEASTERN ANALYTICAL CORPORATION

## REPORT OF RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES

Date Sampled: Feb 23, 1995

NAC Job Number: L950626

Date Received: Feb 23, 1995

Client ID: S-5B

Lab Sample ID: L950626-10

Total Solids: 95.29%

| PARAMETER              | RESULTS | MDL | QUAL | UNITS    |
|------------------------|---------|-----|------|----------|
| Petroleum Hydrocarbons | 130     | 21  |      | mg/kg dw |

Date Extracted: N/A  
Date Analyzed: See Laboratory Chronicle

## NORTHEASTERN ANALYTICAL CORPORATION

## REPORT OF RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES

Date Sampled: Feb 23, 1995

NAC Job Number: L950626

Date Received: Feb 23, 1995

Client ID: S-6A

Lab Sample ID: L950626-11

Total Solids: 97.57%

| PARAMETER | RESULTS | MDL  | QUAL | UNITS    |
|-----------|---------|------|------|----------|
| Antimony  | 6.2     | 6.1  |      | mg/kg dw |
| Arsenic   | ND      | 0.51 |      | mg/kg dw |
| Beryllium | 4.3     | 0.51 |      | mg/kg dw |
| Cadmium   | 3.5     | 0.31 |      | mg/kg dw |
| Chromium  | 8.6     | 1.0  |      | mg/kg dw |
| Copper    | 63      | 2.6  |      | mg/kg dw |
| Lead      | ND      | 10   |      | mg/kg dw |
| Mercury   | ND      | 0.1  |      | mg/kg dw |
| Nickel    | 17      | 4.1  |      | mg/kg dw |
| Selenium  | ND      | 0.51 |      | mg/kg dw |
| Silver    | ND      | 1.0  |      | mg/kg dw |
| Thallium  | ND      | 0.51 |      | mg/kg dw |
| Zinc      | 24      | 2.0  |      | mg/kg dw |

Date Extracted: See Laboratory Chronicle  
Date Analyzed: See Laboratory Chronicle

## NORTHEASTERN ANALYTICAL CORPORATION

## REPORT OF RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES

Date Sampled: Feb 23, 1995

NAC Job Number: L950626

Date Received: Feb 23, 1995

Client ID: S-6A

Lab Sample ID: L950626-11

Total Solids: 97.57%

| PARAMETER              | RESULTS | MDL | QUAL | UNITS    |
|------------------------|---------|-----|------|----------|
| Petroleum Hydrocarbons | 12000   | 20  |      | mg/kg dw |

Date Extracted: N/A  
Date Analyzed: See Laboratory Chronicle

## NORTHEASTERN ANALYTICAL CORPORATION

## REPORT OF RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES

Date Sampled: Feb 23, 1995

NAC Job Number: L950626

Date Received: Feb 23, 1995

Client ID: S-6B

Lab Sample ID: L950626-12

Total Solids: 81.94%

| PARAMETER | RESULTS | MDL  | QUAL | UNITS    |
|-----------|---------|------|------|----------|
| Antimony  | 21      | 7.3  |      | mg/kg dw |
| Arsenic   | 15      | 0.61 |      | mg/kg dw |
| Beryllium | 2.4     | 0.61 |      | mg/kg dw |
| Cadmium   | 39      | 0.37 |      | mg/kg dw |
| Chromium  | 200     | 1.2  |      | mg/kg dw |
| Copper    | 880     | 3.1  |      | mg/kg dw |
| Lead      | 940     | 12   |      | mg/kg dw |
| Mercury   | 0.87    | 0.12 |      | mg/kg dw |
| Nickel    | 200     | 4.9  |      | mg/kg dw |
| Selenium  | ND      | 0.61 |      | mg/kg dw |
| Silver    | ND      | 1.2  |      | mg/kg dw |
| Thallium  | ND      | 0.61 |      | mg/kg dw |
| Zinc      | 1200    | 2.4  |      | mg/kg dw |

Date Extracted: See Laboratory Chronicle  
Date Analyzed: See Laboratory Chronicle

## NORTHEASTERN ANALYTICAL CORPORATION

## REPORT OF RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES Date Sampled: Feb 23, 1995  
NAC Job Number: L950626 Date Received: Feb 23, 1995  
Client ID: S-6B  
Lab Sample ID: L950626-12  
Total Solids: 81.94%

| PARAMETER              | RESULTS | MDL | QUAL | UNITS    |
|------------------------|---------|-----|------|----------|
| Petroleum Hydrocarbons | 4600    | 24  |      | mg/kg dw |

Date Extracted: N/A  
Date Analyzed: See Laboratory Chronicle



## NORTHEASTERN ANALYTICAL CORPORATION

## REPORT OF RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES

Date Sampled: Feb 23, 1995

NAC Job Number: L950626

Date Received: Feb 23, 1995

Client ID: S-7A

Lab Sample ID: L950626-13

Total Solids: 79.12%

| PARAMETER | RESULTS | MDL  | QUAL | UNITS    |
|-----------|---------|------|------|----------|
| Antimony  | ND      | 7.6  |      | mg/kg dw |
| Arsenic   | 22      | 0.63 |      | mg/kg dw |
| Beryllium | 1.3     | 0.63 |      | mg/kg dw |
| Cadmium   | 9.4     | 0.38 |      | mg/kg dw |
| Chromium  | 70      | 1.3  |      | mg/kg dw |
| Copper    | 170     | 3.2  |      | mg/kg dw |
| Lead      | 160     | 13   |      | mg/kg dw |
| Mercury   | 0.55    | 0.13 |      | mg/kg dw |
| Nickel    | 51      | 5.1  |      | mg/kg dw |
| Selenium  | ND      | 0.63 |      | mg/kg dw |
| Silver    | ND      | 1.3  |      | mg/kg dw |
| Thallium  | ND      | 0.63 |      | mg/kg dw |
| Zinc      | 200     | 2.5  |      | mg/kg dw |

Date Extracted: See Laboratory Chronicle  
Date Analyzed: See Laboratory Chronicle

## NORTHEASTERN ANALYTICAL CORPORATION

## REPORT OF RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES Date Sampled: Feb 23, 1995  
NAC Job Number: L950626 Date Received: Feb 23, 1995  
Client ID: S-7A  
Lab Sample ID: L950626-13  
Total Solids: 79.12%

| PARAMETER              | RESULTS | MDL | QUAL | UNITS    |
|------------------------|---------|-----|------|----------|
| Petroleum Hydrocarbons | 600     | 25  |      | mg/kg dw |

Date Extracted: N/A  
Date Analyzed: See Laboratory Chronicle

## NORTHEASTERN ANALYTICAL CORPORATION

## REPORT OF RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES

Date Sampled: Feb 23, 1995

NAC Job Number: L950626

Date Received: Feb 23, 1995

Client ID: S-7B

Lab Sample ID: L950626-14

Total Solids: 86.41%

| PARAMETER | RESULTS | MDL  | QUAL | UNITS    |
|-----------|---------|------|------|----------|
| Antimony  | 16      | 6.9  |      | mg/kg dw |
| Arsenic   | 68      | 0.58 |      | mg/kg dw |
| Beryllium | 1.8     | 0.58 |      | mg/kg dw |
| Cadmium   | 43      | 0.35 |      | mg/kg dw |
| Chromium  | 300     | 1.2  |      | mg/kg dw |
| Copper    | 1500    | 2.9  |      | mg/kg dw |
| Lead      | 780     | 12   |      | mg/kg dw |
| Mercury   | 1.3     | 0.12 |      | mg/kg dw |
| Nickel    | 250     | 4.6  |      | mg/kg dw |
| Selenium  | ND      | 0.58 |      | mg/kg dw |
| Silver    | ND      | 1.2  |      | mg/kg dw |
| Thallium  | ND      | 0.58 |      | mg/kg dw |
| Zinc      | 2000    | 2.3  |      | mg/kg dw |

Date Extracted: See Laboratory Chronicle  
Date Analyzed: See Laboratory Chronicle

## NORTHEASTERN ANALYTICAL CORPORATION

## REPORT OF RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES Date Sampled: Feb 23, 1995  
NAC Job Number: L950626 Date Received: Feb 23, 1995  
Client ID: S-7B  
Lab Sample ID: L950626-14  
Total Solids: 86.41%

| PARAMETER              | RESULTS | MDL | QUAL | UNITS    |
|------------------------|---------|-----|------|----------|
| Petroleum Hydrocarbons | 1500    | 23  |      | mg/kg dw |

Date Extracted: N/A  
Date Analyzed: See Laboratory Chronicle

## NORTHEASTERN ANALYTICAL CORPORATION

## REPORT OF RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES

Date Sampled: Feb 23, 199

NAC Job Number: L950626

Date Received: Feb 23, 199

Client ID: S-7AD

Lab Sample ID: L950626-15

Total Solids: 80.95%

| PARAMETER | RESULTS | MDL  | QUAL | UNITS    |
|-----------|---------|------|------|----------|
| Antimony  | 26      | 7.4  |      | mg/kg dw |
| Arsenic   | 30      | 0.62 |      | mg/kg dw |
| Beryllium | 1.9     | 0.62 |      | mg/kg dw |
| Cadmium   | 30      | 0.37 |      | mg/kg dw |
| Chromium  | 150     | 1.2  |      | mg/kg dw |
| Copper    | 460     | 3.1  |      | mg/kg dw |
| Lead      | 2100    | 12   |      | mg/kg dw |
| Mercury   | 1.5     | 0.12 |      | mg/kg dw |
| Nickel    | 270     | 4.9  |      | mg/kg dw |
| Selenium  | ND      | 0.62 |      | mg/kg dw |
| Silver    | ND      | 1.2  |      | mg/kg dw |
| Thallium  | ND      | 0.62 |      | mg/kg dw |
| Zinc      | 3400    | 2.5  |      | mg/kg dw |

Date Extracted: See Laboratory Chronicle  
Date Analyzed: See Laboratory Chronicle

## NORTHEASTERN ANALYTICAL CORPORATION

## REPORT OF RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES

Date Sampled: Feb 23, 199

NAC Job Number: L950626

Date Received: Feb 23, 199

Client ID: S-7AD

Lab Sample ID: L950626-15

Total Solids: 80.95%

| PARAMETER              | RESULTS | MDL | QUAL | UNITS    |
|------------------------|---------|-----|------|----------|
| Petroleum Hydrocarbons | 9600    | 25  |      | mg/kg dw |

Date Extracted: N/A  
Date Analyzed: See Laboratory Chronicle

## NORTHEASTERN ANALYTICAL CORPORATION

## REPORT OF RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES

Date Sampled: Feb 23, 1995

NAC Job Number: L950626

Date Received: Feb 23, 1995

Client ID: FIELD BLANK

Lab Sample ID: L950626-16

| PARAMETER | RESULTS | MDL    | QUAL | UNITS |
|-----------|---------|--------|------|-------|
| Antimony  | ND      | 0.06   |      | mg/l  |
| Arsenic   | ND      | 0.005  |      | mg/l  |
| Beryllium | ND      | 0.005  |      | mg/l  |
| Cadmium   | ND      | 0.003  |      | mg/l  |
| Chromium  | ND      | 0.01   |      | mg/l  |
| Copper    | ND      | 0.025  |      | mg/l  |
| Lead      | ND      | 0.005  |      | mg/l  |
| Mercury   | ND      | 0.0002 |      | mg/l  |
| Nickel    | ND      | 0.04   |      | mg/l  |
| Selenium  | ND      | 0.005  |      | mg/l  |
| Silver    | ND      | 0.01   |      | mg/l  |
| Thallium  | ND      | 0.005  |      | mg/l  |
| Zinc      | ND      | 0.02   |      | mg/l  |

Date Extracted: See Laboratory Chronicle  
Date Analyzed: See Laboratory Chronicle

## NORTHEASTERN ANALYTICAL CORPORATION

## REPORT OF RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES

Date Sampled: Feb 23, 1995

NAC Job Number: L950626

Date Received: Feb 23, 1995

Client ID: FIELD BLANK

Lab Sample ID: L950626-16

| PARAMETER              | RESULTS | MDL | QUAL | UNITS |
|------------------------|---------|-----|------|-------|
| Petroleum Hydrocarbons | ND      | 1.0 |      | mg/l  |

Date Extracted: N/A  
Date Analyzed: See Laboratory Chronicle



GC/MS DATA PACKAGE BY FRACTION

## NORTHEASTERN ANALYTICAL CORPORATION

## BFB GC/MS TUNE SUMMARY SHEET

INSTRUMENT A

LAB FILE ID:&gt;A8651

DATE:03/08/95

TIME:11:39

This Performance tune applies to the following Samples, Blanks  
and Standards.

| LAB SAMPLE ID | LAB FILE ID | INJECT DATE AND TIME |
|---------------|-------------|----------------------|
| VSTD050       | >A8652      | 03/08/95 12:37       |
| VSTD010       | >A8654      | 03/08/95 14:09       |
| VSTD020       | >A8655      | 03/08/95 14:54       |
| VSTD100       | >A8656      | 03/08/95 15:46       |
| VSTD200       | >A8657      | 03/08/95 16:41       |
| METHOD BLANK  | >A8658      | 03/08/95 17:46       |
| 95L-0687-4    | >A8659      | 03/08/95 18:54       |
| 95L-0687-5    | >A8660      | 03/08/95 19:44       |
| 95L-0626-15   | >A8661      | 03/08/95 20:34       |
| 95L-0698-2    | >A8663      | 03/08/95 22:02       |
| 95L-0698-3    | >A8664      | 03/08/95 22:45       |
| 95L-0698-4    | >A8665      | 03/08/95 23:27       |

## GC/MS PERFORMANCE STANDARD

## Bromofluorobenzene (BFB)

| m/z | Ion Abundance<br>Criteria          | % Relative Abundance<br>Base<br>Peak | Appropriate<br>Peak | Status |
|-----|------------------------------------|--------------------------------------|---------------------|--------|
| 50  | 15-40% of mass 95                  | 21.98                                | 21.98               | Ok     |
| 75  | 30-60% of mass 95                  | 49.54                                | 49.54               | Ok     |
| 95  | Base peak, 100% relative abundance | 100.00                               | 100.00              | Ok     |
| 96  | 5-9% of mass 95                    | 6.59                                 | 6.59                | Ok     |
| 173 | Less than 2% of mass 174           | 0.00                                 | 0.00                | Ok     |
| 174 | Greater than 50% of mass 95        | 76.41                                | 76.41               | Ok     |
| 175 | 5-9% of mass 174                   | 5.49                                 | 7.19                | Ok     |
| 176 | 95-101% of mass 174                | 75.07                                | 98.24               | Ok     |
| 177 | 5-9% of mass 176                   | 5.19                                 | 6.91                | Ok     |

Injection Date: 03/08/95

Injection Time: 11:34

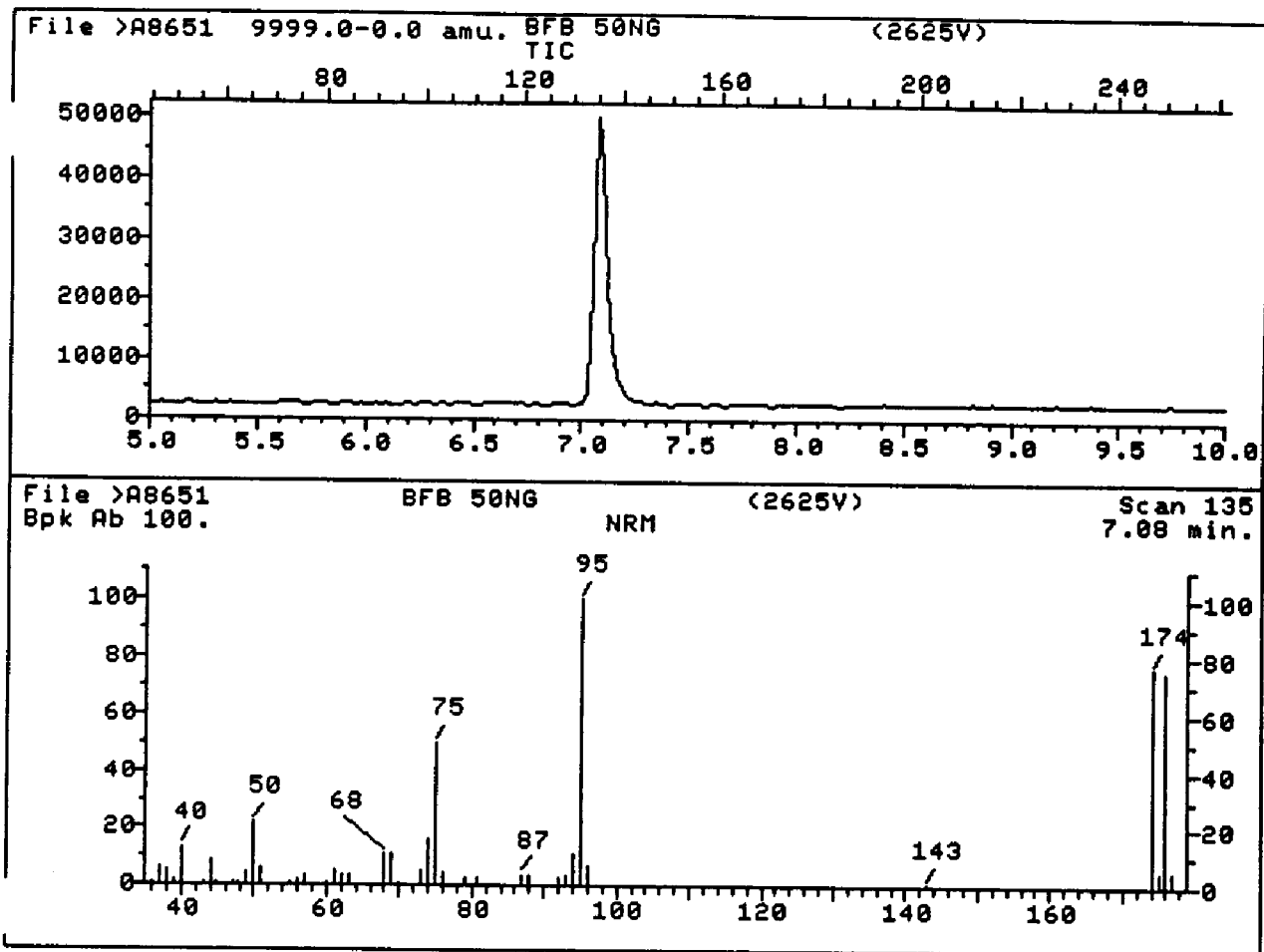
Data File: &gt;A8651

Scan: 135

NRM,100  
FMGR : TAB>A8651      BFB 50NG      (2625V)  
135      NRM

File: &gt;A8651    Scan #:      135    Retn. time:    7.08

| m/z   | Int.   | m/z   | Int.   | m/z   | Int.   | m/z   | Int.   | m/z    | Int.    |
|-------|--------|-------|--------|-------|--------|-------|--------|--------|---------|
| 36.00 | 1.010  | 47.90 | .716   | 61.00 | 5.179  | 75.00 | 49.544 | 94.00  | 11.388  |
| 37.00 | 5.905  | 49.00 | 4.453  | 62.00 | 3.933  | 76.00 | 4.365  | 95.00  | 100.000 |
| 38.00 | 5.316  | 50.00 | 21.981 | 63.00 | 3.502  | 78.90 | 2.550  | 96.00  | 6.591   |
| 39.00 | 2.276  | 51.00 | 6.376  | 68.00 | 10.897 | 80.90 | 2.845  | 142.90 | .814    |
| 39.90 | 12.938 | 54.90 | .804   | 69.00 | 11.309 | 87.00 | 3.796  | 174.00 | 76.410  |
| 43.00 | 1.000  | 56.00 | 1.815  | 70.00 | 1.010  | 88.00 | 3.198  | 175.00 | 5.493   |
| 44.00 | 8.622  | 57.00 | 3.855  | 73.00 | 5.199  | 92.00 | 2.668  | 175.90 | 75.066  |
| 44.90 | 1.167  | 59.90 | 1.148  | 74.00 | 16.263 | 93.00 | 3.443  | 176.90 | 5.189   |
| 47.00 | 1.010  |       |        |       |        |       |        |        |         |



## NORTHEASTERN ANALYTICAL CORPORATION

## BFB GC/MS TUNE SUMMARY SHEET

INSTRUMENT ~~X~~ E 2.22.95  
JRF

LAB FILE ID:&gt;E1709

DATE:02/20/95

TIME:11:23

This Performance tune applies to the following Samples, Blanks  
and Standards.

| LAB SAMPLE ID       | LAB FILE ID | INJECT DATE AND TIME |
|---------------------|-------------|----------------------|
| VSTD050             | >E1710      | 02/20/95 11:43       |
| VSTD010             | >E1711      | 02/20/95 24:27       |
| VSTD020             | >E1712      | 02/20/95 13:10       |
| VSTD100             | >E1713      | 02/20/95 13:53       |
| VSTD200             | >E1714      | 02/20/95 14:36       |
| METHOD BLANK        | >E1715      | 02/20/95 15:45       |
| QC SPIKE S-397      | >E1716      | 02/20/95 17:09       |
| 95L-0464-6MS S-397  | >E1717      | 02/20/95 17:53       |
| 95L-0464-6MSD S-397 | >E1718      | 02/20/95 18:36       |
| 95L-0465-4          | >E1719      | 02/20/95 19:19       |
| 95L-0465-9          | >E1720      | 02/20/95 20:01       |
| 95L-0468-1          | >E1722      | 02/20/95 21:27       |

## GC/MS PERFORMANCE STANDARD

## Bromofluorobenzene (BFB)

| m/z | Ion Abundance<br>Criteria          | % Relative Abundance<br>Base<br>Peak | % Relative Abundance<br>Appropriate<br>Peak | Status |
|-----|------------------------------------|--------------------------------------|---|--------|
| 50  | 15-40% of mass 95                  | 16.52                                | 16.52                                       | Ok     |
| 75  | 30-60% of mass 95                  | 39.06                                | 39.06                                       | Ok     |
| 95  | Base peak, 100% relative abundance | 100.00                               | 100.00                                      | Ok     |
| 96  | 5-9% of mass 95                    | 6.96                                 | 6.96  | Ok     |
| 173 | Less than 2% of mass 174           | 0.00                                 | 0.00  | Ok     |
| 174 | Greater than 50% of mass 95        | 71.61                                | 71.61                                       | Ok     |
| 175 | 5-9% of mass 174                   | 5.58                                 | 7.79  | Ok     |
| 176 | 95-101% of mass 174                | 70.83                                | 98.91                                       | Ok     |
| 177 | 5-9% of mass 176                   | 4.57                                 | 6.45  | Ok     |

Injection Date: 02/20/95

Injection Time: 11:23

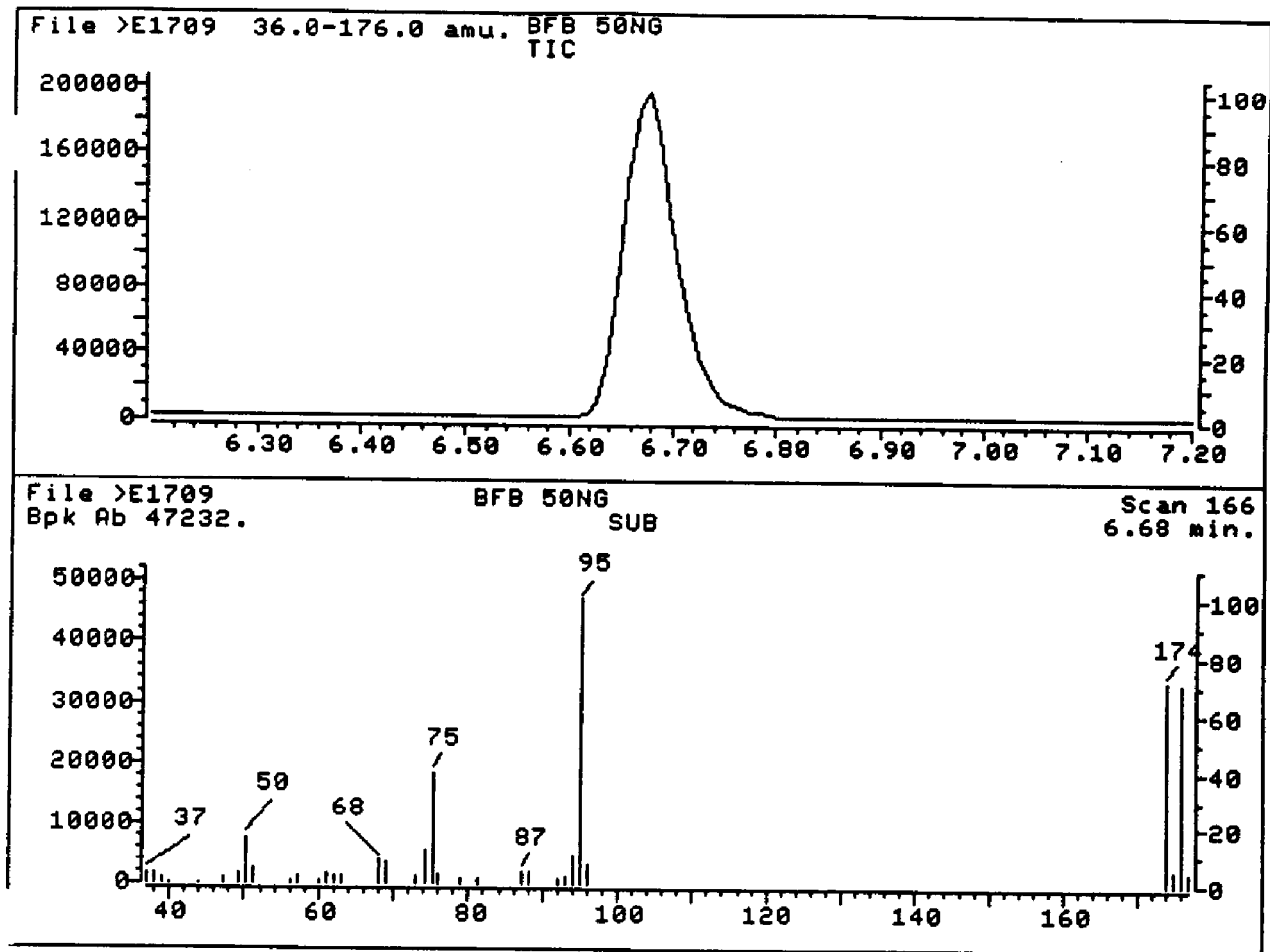
Data File: &gt;E1709

Scan: 166

>E1709      BFB 50NG  
166      SUB NRM

File: &gt;E1709 Scan #: 166 Retn. time: 6.68

| m/z   | Int.  | m/z   | Int.   | m/z   | Int.   | m/z   | Int.  | m/z    | Int.    |
|-------|-------|-------|--------|-------|--------|-------|-------|--------|---------|
| 37.05 | 3.794 | 50.05 | 16.525 | 63.00 | 2.437  | 78.95 | 1.814 | 95.05  | 100.000 |
| 38.05 | 3.720 | 51.05 | 4.971  | 68.00 | 8.456  | 81.05 | 1.645 | 96.05  | 6.959   |
| 39.05 | 1.685 | 56.00 | 1.217  | 69.00 | 7.694  | 87.05 | 4.723 | 173.95 | 71.612  |
| 40.05 | .025  | 57.00 | 2.407  | 73.00 | 3.015  | 87.95 | 4.135 | 174.95 | 5.579   |
| 43.95 | .277  | 60.00 | .817   | 74.10 | 12.180 | 92.05 | 2.088 | 175.95 | 70.833  |
| 47.05 | 1.702 | 61.10 | 3.646  | 75.10 | 39.058 | 93.05 | 3.068 | 176.95 | 4.567   |
| 49.05 | 3.762 | 62.00 | 3.085  | 76.05 | 3.250  | 94.05 | 9.875 |        |         |



## NORTHEASTERN ANALYTICAL CORPORATION

## BFB GC/MS TUNE SUMMARY SHEET

INSTRUMENT ~~AE~~ 3-7-95  
JRF

LAB FILE ID:&gt;E1917

DATE:03/03/95

TIME:08:01

This Performance tune applies to the following Samples, Blanks  
and Standards.

| LAB SAMPLE ID | LAB FILE ID | INJECT DATE AND TIME |
|---------------|-------------|----------------------|
| VSTD050       | >E1918      | 03/03/95 08:20       |
| METHOD BLANK  | >E1919      | 03/03/95 09:19       |
| 95L-0626-2    | >E1921      | 03/03/95 11:07       |
| 95L-0627-1    | >E1922      | 03/03/95 24:25       |
| 95L-0626-1    | >E1923      | 03/03/95 13:20       |
| 95L-0626-3    | >E1925      | 03/03/95 15:01       |
| 95L-0626-4    | >E1926      | 03/03/95 15:55       |
| 95L-0626-3R   | >E1927      | 03/03/95 16:39       |
| 95L-0626-7    | >E1930      | 03/03/95 18:58       |
| 95L-0626-5    | >E1931      | 03/03/95 19:42       |



## GC/MS PERFORMANCE STANDARD

## Bromofluorobenzene (BFB)

| m/z | Ion Abundance<br>Criteria          | % Relative Abundance<br>Base<br>Peak | Appropriate<br>Peak | Status |
|-----|------------------------------------|--------------------------------------|---------------------|--------|
| 50  | 15-40% of mass 95                  | 16.17                                | 16.17               | Ok     |
| 75  | 30-60% of mass 95                  | 39.87                                | 39.87               | Ok     |
| 95  | Base peak, 100% relative abundance | 100.00                               | 100.00              | Ok     |
| 96  | 5-9% of mass 95                    | 6.84                                 | 6.84                | Ok     |
| 173 | Less than 2% of mass 174           | 0.00                                 | 0.00                | Ok     |
| 174 | Greater than 50% of mass 95        | 68.68                                | 68.68               | Ok     |
| 175 | 5-9% of mass 174                   | 4.95                                 | 7.21                | Ok     |
| 176 | 95-101% of mass 174                | 66.66                                | 97.05               | Ok     |
| 177 | 5-9% of mass 176                   | 4.50                                 | 6.75                | Ok     |

Injection Date: 03/03/95

Injection Time: 08:01

Data File: &gt;E1917

Scan: 167

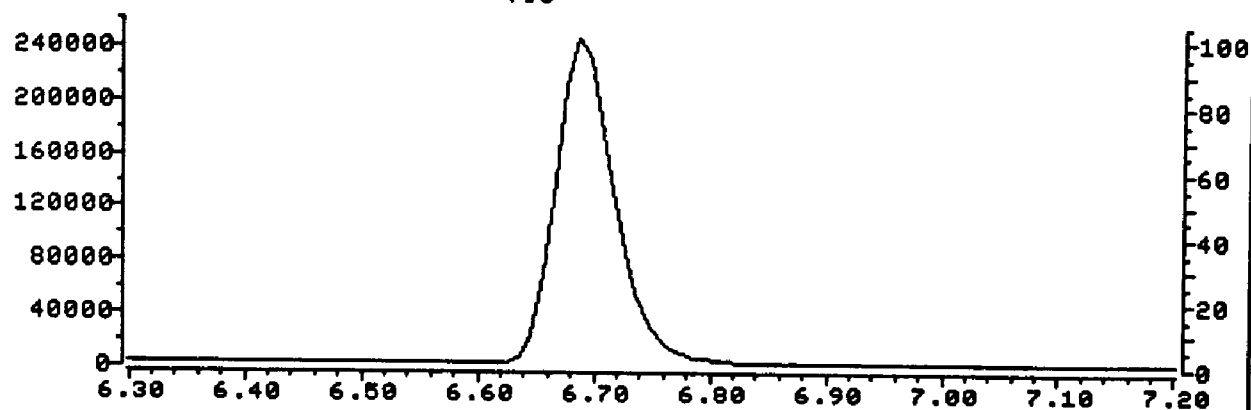
*Intell*  
*3-3-95*

 >E1917      BFB 50NG  
 167        SUB NRM ENH

File: &gt;E1917    Scan #:        167    Retn. time:    6.69

| m/z   | Int.  | m/z   | Int.   | m/z   | Int.   | m/z   | Int.  | m/z    | Int.    |
|-------|-------|-------|--------|-------|--------|-------|-------|--------|---------|
| 36.05 | .696  | 50.05 | 16.171 | 68.00 | 8.178  | 78.95 | 1.727 | 95.05  | 100.000 |
| 37.05 | 4.306 | 51.05 | 4.941  | 69.00 | 7.771  | 80.95 | 1.839 | 96.05  | 6.840   |
| 38.05 | 3.438 | 56.00 | 1.092  | 73.00 | 3.307  | 86.95 | 4.737 | 142.90 | .199    |
| 39.05 | 1.679 | 57.00 | 2.240  | 74.10 | 11.904 | 87.95 | 4.825 | 173.95 | 68.678  |
| 44.05 | .503  | 60.00 | .574   | 75.10 | 39.870 | 92.05 | 2.150 | 174.95 | 4.951   |
| 45.05 | .877  | 61.00 | 3.649  | 76.05 | 3.565  | 93.05 | 3.029 | 175.95 | 66.656  |
| 47.05 | 1.784 | 62.00 | 3.400  | 78.05 | .253   | 94.05 | 9.914 | 176.95 | 4.500   |
| 49.05 | 3.513 | 63.00 | 2.259  |       |        |       |       |        |         |

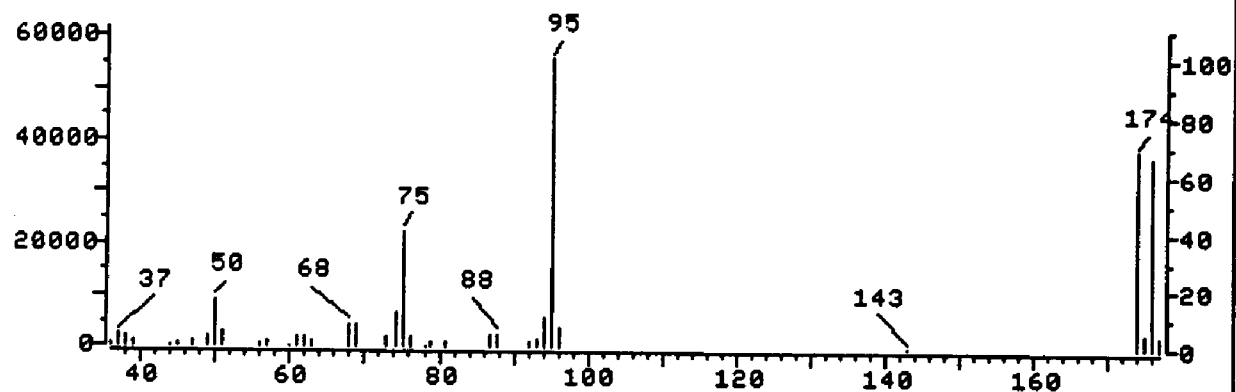
File >E1917 36.0-176.0 amu. BFB 50NG  
TIC



File >E1917  
Bpk Ab 55901.

BFB 50NG  
SUB ENH

Scan 167  
6.69 min.



## NORTHEASTERN ANALYTICAL CORPORATION

## BFB GC/MS TUNE SUMMARY SHEET

INSTRUMENT *AE* 3-7-95  
JRF

LAB FILE ID:&gt;E1932

DATE:03/06/95

TIME:07:43

This Performance tune applies to the following Samples, Blanks  
and Standards.

| LAB SAMPLE ID       | LAB FILE ID | INJECT DATE AND TIME |
|---------------------|-------------|----------------------|
| VSTD050             | >E1933      | 03/06/95 08:02       |
| METHOD BLANK        | >E1934      | 03/06/95 09:14       |
| 95L-0682-5          | >E1935      | 03/06/95 10:03       |
| 95L-0682-5MS A-722  | >E1936      | 03/06/95 10:49       |
| 95L-0682-5MSD A-722 | >E1937      | 03/06/95 11:35       |
| QC SPIKE A-722      | >E1938      | 03/06/95 24:31       |
| 95L-0626-2MS S-400  | >E1939      | 03/06/95 13:14       |
| 95L-0626-2MSD S-400 | >E1940      | 03/06/95 14:01       |
| QC SPIKE S-400      | >E1941      | 03/06/95 14:44       |
| 95L-0626-16         | >E1942      | 03/06/95 15:40       |
| 95L-0626-6          | >E1943      | 03/06/95 16:49       |

## GC/MS PERFORMANCE STANDARD

## Bromofluorobenzene (BFB)

| m/z | Ion Abundance<br>Criteria          | % Relative Abundance<br>Base<br>Peak | Appropriate<br>Peak | Status |
|-----|------------------------------------|--------------------------------------|---------------------|--------|
| 50  | 15-40% of mass 95                  | 16.33                                | 16.33               | Ok     |
| 75  | 30-60% of mass 95                  | 39.07                                | 39.07               | Ok     |
| 95  | Base peak, 100% relative abundance | 100.00                               | 100.00              | Ok     |
| 96  | 5-9% of mass 95                    | 6.79                                 | 6.79                | Ok     |
| 173 | Less than 2% of mass 174           | 0.00                                 | 0.00                | Ok     |
| 174 | Greater than 50% of mass 95        | 69.62                                | 69.62               | Ok     |
| 175 | 5-9% of mass 174                   | 5.08                                 | 7.29                | Ok     |
| 176 | 95-101% of mass 174                | 69.35                                | 99.61               | Ok     |
| 177 | 5-9% of mass 176                   | 4.66                                 | 6.71                | Ok     |

Injection Date: 03/06/95

Injection Time: 07:43

Data File: &gt;E1932

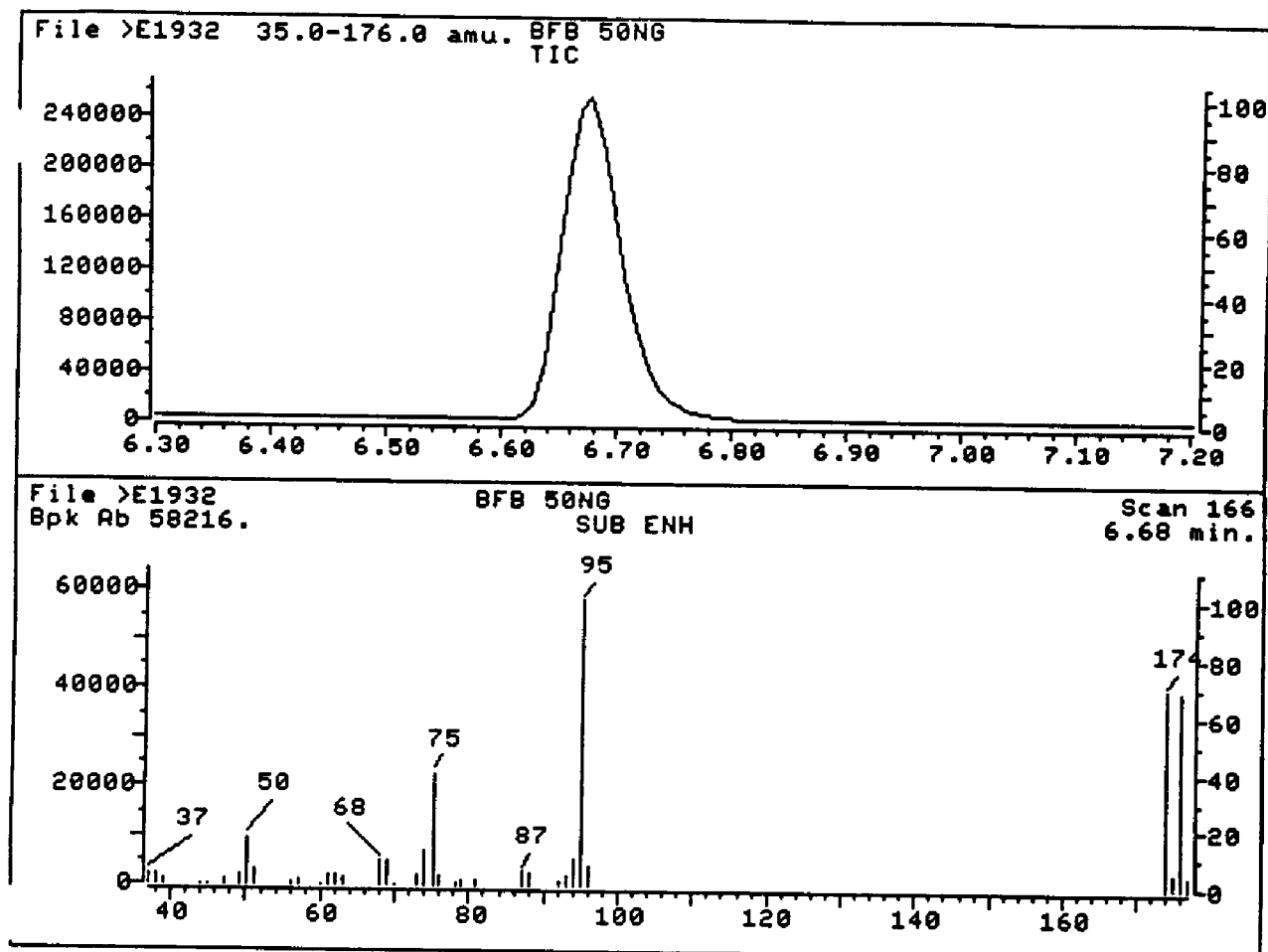
Scan: 166

>E1932  
166BFB 50NG  
SUB NRM ENH

File: &gt;E1932 Scan #: 166 Retn. time: 6.68

| m/z   | Int.   | m/z   | Int.  | m/z   | Int.   | m/z   | Int.  | m/z    | Int.    |
|-------|--------|-------|-------|-------|--------|-------|-------|--------|---------|
| 37.05 | 3.927  | 51.05 | 4.966 | 68.00 | 8.519  | 78.05 | .819  | 94.05  | 9.719   |
| 38.05 | 3.526  | 56.00 | 1.260 | 69.00 | 8.239  | 78.95 | 1.754 | 95.05  | 100.000 |
| 39.05 | 1.603  | 57.00 | 2.287 | 70.10 | .319   | 80.95 | 1.882 | 96.05  | 6.794   |
| 43.95 | .099   | 60.00 | .636  | 73.00 | 3.311  | 86.95 | 4.893 | 173.95 | 69.621  |
| 45.05 | .616   | 61.00 | 3.512 | 74.00 | 12.065 | 87.95 | 4.645 | 174.95 | 5.076   |
| 47.05 | 1.851  | 62.00 | 3.307 | 75.10 | 39.073 | 92.05 | 2.160 | 175.95 | 69.346  |
| 49.05 | 3.533  | 63.10 | 2.360 | 76.05 | 3.472  | 93.05 | 3.181 | 176.95 | 4.656   |
| 50.05 | 16.326 |       |       |       |        |       |       |        |         |

FMGR : ,Z



## NORTHEASTERN ANALYTICAL CORPORATION

## BFB GC/MS TUNE SUMMARY SHEET

INSTRUMENT ~~AE~~ 3 1.95

LAB FILE ID:&gt;E1944

DATE:03/06/95

JRF

TIME:17:36

This Performance tune applies to the following Samples, Blanks  
and Standards.

| LAB SAMPLE ID | LAB FILE ID | INJECT DATE AND TIME |
|---------------|-------------|----------------------|
| VSTD050       | >E1945      | 03/06/95 17:57       |
| METHOD BLANK  | >E1946      | 03/06/95 19:04       |
| 95L-0682-1    | >E1947      | 03/06/95 19:57       |
| 95L-0682-2    | >E1948      | 03/06/95 20:41       |
| 95L-0626-9    | >E1951      | 03/06/95 22:52       |
| 95L-0626-10   | >E1952      | 03/06/95 23:36       |
| 95L-0626-11   | >E1953      | 03/07/95 00:19       |
| 95L-0626-12   | >E1954      | 03/07/95 01:04       |

## GC/MS PERFORMANCE STANDARD

## Bromofluorobenzene (BFB)

| m/z | Ion Abundance<br>Criteria          | % Relative Abundance<br>Base<br>Peak | Appropriate<br>Peak | Status |
|-----|------------------------------------|--------------------------------------|---------------------|--------|
| 50  | 15-40% of mass 95                  | 16.18                                | 16.18               | Ok     |
| 75  | 30-60% of mass 95                  | 38.62                                | 38.62               | Ok     |
| 95  | Base peak, 100% relative abundance | 100.00                               | 100.00              | Ok     |
| 96  | 5-9% of mass 95                    | 7.29                                 | 7.29                | Ok     |
| 173 | Less than 2% of mass 174           | 0.00                                 | 0.00                | Ok     |
| 174 | Greater than 50% of mass 95        | 70.26                                | 70.26               | Ok     |
| 175 | 5-9% of mass 174                   | 5.12                                 | 7.29                | Ok     |
| 176 | 95-101% of mass 174                | 68.73                                | 97.83               | Ok     |
| 177 | 5-9% of mass 176                   | 4.46                                 | 6.49                | Ok     |

Injection Date: 03/06/95

Injection Time: 17:36

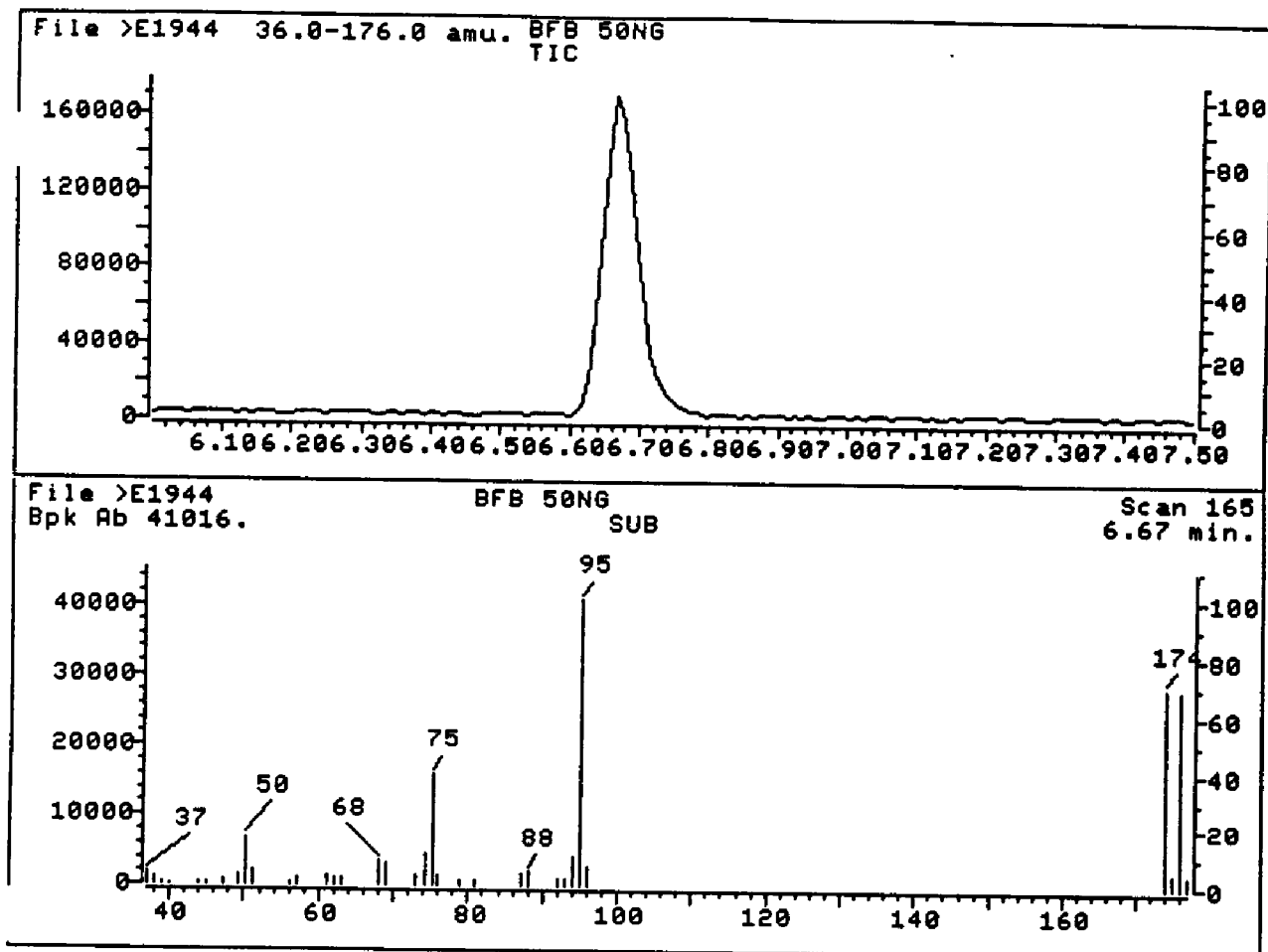
Data File: &gt;E1944

Scan: 165

>E1944      BFB 50NG  
165      SUB NRM

File: &gt;E1944 Scan #: 165 Retn. time: 6.67

| m/z   | Int.  | m/z   | Int.   | m/z   | Int.   | m/z   | Int.   | m/z    | Int.    |
|-------|-------|-------|--------|-------|--------|-------|--------|--------|---------|
| 37.05 | 4.045 | 49.05 | 3.218  | 63.00 | 2.660  | 78.85 | 1.804  | 95.05  | 100.000 |
| 38.05 | 3.118 | 50.05 | 16.184 | 68.00 | 8.287  | 80.95 | 2.063  | 96.05  | 7.287   |
| 39.05 | 1.370 | 51.05 | 5.069  | 69.10 | 7.926  | 87.05 | 4.510  | 173.95 | 70.256  |
| 39.95 | .032  | 56.00 | 1.143  | 73.00 | 3.313  | 87.95 | 4.842  | 174.95 | 5.125   |
| 44.05 | .692  | 57.00 | 2.531  | 74.10 | 11.186 | 92.05 | 2.477  | 175.95 | 68.734  |
| 45.05 | 1.114 | 61.00 | 3.482  | 75.10 | 38.617 | 93.05 | 2.967  | 176.95 | 4.459   |
| 47.05 | 1.733 | 62.00 | 2.967  | 76.05 | 3.533  | 94.05 | 10.467 |        |         |





## NORTHEASTERN ANALYTICAL CORPORATION

## BFB GC/MS TUNE SUMMARY SHEET

INSTRUMENT ~~A~~ E 39.45  
JRF

LAB FILE ID:&gt;E1955

DATE:03/07/95

TIME:07:37

This Performance tune applies to the following Samples, Blanks  
and Standards.

| LAB SAMPLE ID | LAB FILE ID | INJECT DATE AND TIME |       |
|---------------|-------------|----------------------|-------|
| VSTD050       | >E1956      | 03/07/95             | 07:58 |
| METHOD BLANK  | >E1957      | 03/07/95             | 09:06 |
| 95L-0626-8    | >E1958      | 03/07/95             | 10:09 |
| 95L-0626-11R  | >E1959      | 03/07/95             | 11:04 |
| 95L-0626-13   | >E1960      | 03/07/95             | 24:03 |
| 95L-0626-14   | >E1962      | 03/07/95             | 13:48 |
| 95L-0687-1    | >E1963      | 03/07/95             | 14:45 |
| 95L-0687-2    | >E1964      | 03/07/95             | 15:46 |
| 95L-0687-3    | >E1965      | 03/07/95             | 16:39 |

## GC/MS PERFORMANCE STANDARD

## Bromofluorobenzene (BFB)

| m/z | Ion Abundance<br>Criteria          | % Relative<br>Base<br>Peak | Abundance<br>Appropriate<br>Peak | Status |
|-----|------------------------------------|----------------------------|----------------------------------|--------|
| 50  | 15-40% of mass 95                  | 15.50                      | 15.50                            | Ok     |
| 75  | 30-60% of mass 95                  | 38.19                      | 38.19                            | Ok     |
| 95  | Base peak, 100% relative abundance | 100.00                     | 100.00                           | Ok     |
| 96  | 5-9% of mass 95                    | 6.57                       | 6.57                             | Ok     |
| 173 | Less than 2% of mass 174           | 0.00                       | 0.00                             | Ok     |
| 174 | Greater than 50% of mass 95        | 68.40                      | 68.40                            | Ok     |
| 175 | 5-9% of mass 174                   | 5.05                       | 7.39                             | Ok     |
| 176 | 95-101% of mass 174                | 67.31                      | 98.41                            | Ok     |
| 177 | 5-9% of mass 176                   | 4.40                       | 6.54                             | Ok     |

Injection Date: 03/07/95

Injection Time: 07:37

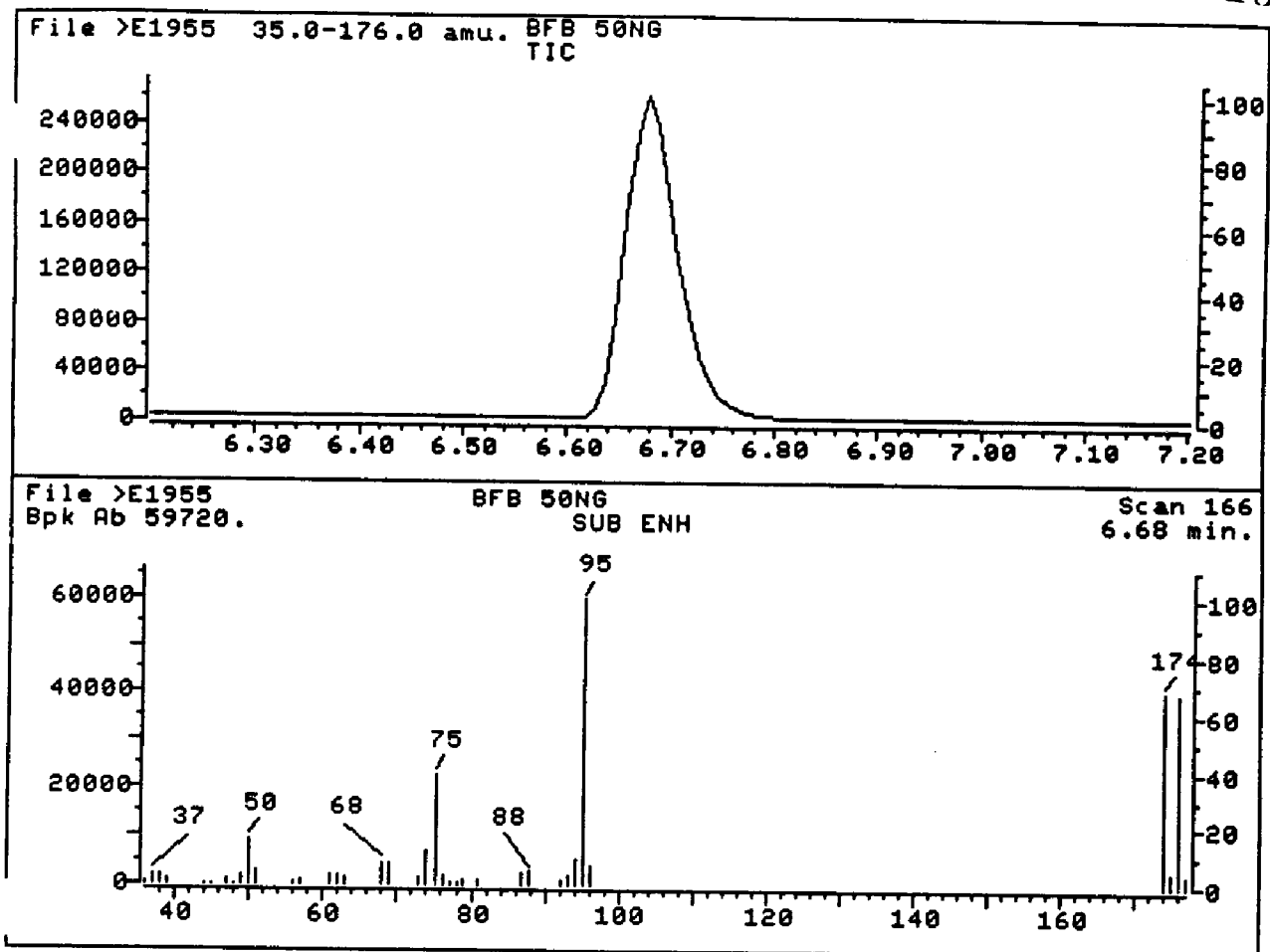
Data File: &gt;E1955

Scan: 166

>E1955      BFB 50NG  
166      SUB NRM ENH

File: &gt;E1955 Scan #: 166 Retn. time: 6.68

| m/z   | Int.  | m/z   | Int.   | m/z   | Int.   | m/z   | Int.  | m/z    | Int.    |
|-------|-------|-------|--------|-------|--------|-------|-------|--------|---------|
| 36.05 | .861  | 49.05 | 3.366  | 68.00 | 8.027  | 78.05 | .765  | 94.05  | 9.600   |
| 37.05 | 3.926 | 50.05 | 15.497 | 69.00 | 7.923  | 78.95 | 1.794 | 95.05  | 100.000 |
| 38.05 | 3.583 | 51.05 | 4.985  | 73.00 | 3.034  | 80.95 | 1.802 | 96.05  | 6.566   |
| 39.05 | 1.515 | 56.00 | 1.151  | 74.00 | 11.705 | 86.95 | 4.800 | 173.95 | 68.399  |
| 44.05 | .089  | 57.00 | 2.121  | 75.10 | 38.192 | 87.95 | 4.969 | 174.95 | 5.055   |
| 45.05 | .584  | 61.00 | 3.599  | 76.05 | 3.574  | 92.05 | 2.078 | 175.95 | 67.314  |
| 47.05 | 1.968 | 62.00 | 3.226  | 77.05 | .851   | 93.05 | 3.384 | 176.95 | 4.400   |
| 47.95 | .237  | 63.00 | 2.314  |       |        |       |       |        |         |



## Calibration Report

131

Title: HP VOA Standards for 5 Point Calibration Curve Rev. E  
 Calibrated: 950308 17:28

| Compound                  | Files: >A8654 >A8655 >A8652 >A8656 >A8657 |         |         |         |         | RRT   | RF      | % RSD                                     |
|---------------------------|---|---------|---------|---------|---------|-------|---------|---|
|                           | RF  | RF      | RF      | RF      | RF      |       |         |   |
|                           | 10.00                                     | 20.00   | 50.00   | 100.00  | 200.00  |       |         |   |
| Chloromethane             | .59593                                    | .54974  | .50393  | .50532  | .55816  | .234  | .54261  | 7.151                                     |
| Bromomethane              | .96799                                    | .95316  | .93609  | .93161  | .94317  | .300  | .94640  | 1.538                                     |
| Vinyl Chloride            | .73807                                    | .72115  | .66618  | .65528  | .69154  | .245  | .69445  | 5.069                                     |
| Chloroethane              | .52092                                    | .51208  | .51098  | .50753  | .55252  | .313  | .52081  | 3.534                                     |
| Methylene Chloride        | 1.13661                                   | 1.16534 | 1.15103 | 1.16643 | 1.27226 | .535  | 1.17833 | 4.574                                     |
| Acrolein                  | .06134                                    | .04656  | .05608  | .04470  | .04712  | .413  | .05116  | 14.063 (Conc=40.0,80.0,200.0,400.0,800.0) |
| Acrylonitrile             | .21789                                    | .19311  | .21211  | .17661  | .19340  | .567  | .19863  | 8.331 (Conc=40.0,80.0,200.0,400.0,800.0)  |
| Acetone                   | .46618                                    | .40572  | .39418  | .32236  | .33961  | .426  | .38561  | 14.833                                    |
| Carbon Disulfide          | 2.75367                                   | 2.80878 | 2.80638 | 2.84192 | 3.14558 | .529  | 2.87126 | 5.453                                     |
| Trichlorofluoromethane    | 2.74846                                   | 2.64393 | 2.69325 | 2.55092 | 2.50981 | .346  | 2.62927 | 3.752                                     |
| 1,1-Dichloroethene        | 1.08992                                   | 1.07470 | 1.10346 | 1.11317 | 1.21538 | .442  | 1.11932 | 4.969                                     |
| 1,1-Dichloroethane        | 2.18399                                   | 2.15690 | 2.09507 | 2.15421 | 2.32848 | .715  | 2.18373 | 3.992                                     |
| t-Butyl Alcohol           | .23467                                    | .16188  | .15132  | .13701  | .13150  | .466  | .16327  | 25.514                                    |
| Trans-1,2-Dichloroethene  | 1.20645                                   | 1.19448 | 1.21920 | 1.22828 | 1.35369 | .601  | 1.24042 | 5.208                                     |
| Chloroform                | 3.25250                                   | 3.07051 | 2.94062 | 2.91658 | 3.11955 | .958  | 3.05995 | 4.491                                     |
| 1,2-Dichloroethane-d4     | 1.73963                                   | 1.76670 | 1.92424 | 1.82738 | 1.89677 | 1.151 | 1.83095 | 4.362                                     |
| Methyl t-Butyl Ether      | 3.39062                                   | 3.14141 | 3.20645 | 3.12908 | 3.37928 | .578  | 3.24937 | 3.917                                     |
| 1,2-Dichloroethane        | 2.12184                                   | 2.05976 | 2.06123 | 2.03040 | 2.18447 | 1.173 | 2.09154 | 2.949                                     |
| 2-Butanone                | .15265                                    | .11985  | .12261  | .10443  | .11621  | .690  | .12315  | 14.527                                    |
| 1,1,1-Trichloroethane     | .68345                                    | .66410  | .65135  | .67890  | .70458  | .855  | .67648  | 2.983                                     |
| Carbon Tetrachloride      | .46143                                    | .43405  | .49014  | .53853  | .57544  | .903  | .49992  | 11.452                                    |
| Vinyl Acetate             | .20503                                    | .22141  | .15350  | .17419  | .18909  | .583  | .18864  | 13.992                                    |
| cis-1,2-Dichloroethene    | .33606                                    | .33525  | .33209  | .33412  | .36594  | .726  | .34069  | 4.165                                     |
| Bromodichloromethane      | .71908                                    | .68531  | .69367  | .73013  | .80446  | 1.116 | .72653  | 6.500                                     |
| 1,2-Dichloropropane       | .32395                                    | .31535  | .29592  | .32124  | .34335  | 1.080 | .31996  | 5.331                                     |
| cis-1,3-Dichloropropene   | .52902                                    | .50651  | .50867  | .53939  | .57676  | 1.204 | .53207  | 5.367                                     |
| Trichloroethene           | .43722                                    | .43950  | .42518  | .46108  | .48727  | 1.050 | .45005  | 5.444                                     |
| Dibromochloromethane      | .47635                                    | .44725  | .45489  | .49958  | .55733  | 1.366 | .48708  | 9.083                                     |
| 1,1,2-Trichloroethane     | .37615                                    | .33750  | .31616  | .33729  | .35886  | 1.299 | .34519  | 6.653                                     |
| Benzene                   | .76017                                    | .75131  | .70193  | .71850  | .79492  | .939  | .74537  | 4.892                                     |
| trans-1,3-Dichloropropene | .52863                                    | .49844  | .49697  | .52675  | .58035  | 1.279 | .52623  | 6.419                                     |
| 2-Chloroethylvinylether   | .14592                                    | .13298  | .13518  | .15112  | .17721  | 1.175 | .14848  | 11.935                                    |
| Bromoform                 | .48930                                    | .41730  | .48172  | .50542  | .57938  | 1.574 | .49462  | 11.734                                    |
| 2-Hexanone                | .45483                                    | .38255  | .31419  | .28747  | .30972  | .904  | .34975  | 19.635                                    |
| 4-Methyl-2-Pentanone      | .77668                                    | .58233  | .56693  | .55437  | .60140  | .816  | .61634  | 14.820                                    |
| Tetrachloroethene         | .52034                                    | .50164  | .48389  | .52292  | .55394  | .926  | .51654  | 5.069                                     |
| 1,1,2,2-Tetrachloroethane | .90164                                    | .70268  | .67788  | .65731  | .71050  | 1.105 | .73000  | 13.455                                    |
| Toluene                   | .65554                                    | .62162  | .60974  | .64546  | .68927  | .863  | .64433  | 4.821                                     |
| Toluene-d8                | 1.01661                                   | 1.04510 | 1.10143 | 1.14329 | 1.14401 | .856  | 1.09009 | 5.288                                     |

RF - Response Factor (Subscript is amount in ug/L)

RRT - Average Relative Retention Time (RT Std/RT 1std)

RF - Average Response Factor

XRSD - Percent Relative Standard Deviation

## Calibration Report

132

Title: HP VOA Standards for 5 Point Calibration Curve Rev. E  
 Calibrated: 950308 17:28

| Compound            | Files: >A8654 | >A8655 | >A8652 | >A8656  | >A8657  | <u>RRT</u> | <u>RF</u> | % RSD |
|---------------------|---------------|--------|--------|---------|---------|------------|-----------|-------|
|                     | RF            | RF     | RF     | RF      | RF      |            |           |       |
|                     | 10.00         | 20.00  | 50.00  | 100.00  | 200.00  |            |           |       |
| Chlorobenzene       | .99153        | .92184 | .89648 | .95416  | 1.02943 | 1.004      | .95869    | 5.552 |
| Ethylbenzene        | .42016        | .39413 | .39925 | .45003  | .44049  | 1.010      | .42081    | 5.843 |
| Styrene             | .90750        | .84253 | .81678 | .87446  | .96216  | 1.060      | .88069    | 6.457 |
| Xylenes (Total)     | .52869        | .50114 | .49264 | .52854  | .54638  | 1.018      | .51948    | 4.247 |
| Bromofluorobenzene  | .82001        | .80357 | .86493 | .82708  | .88329  | 1.112      | .83978    | 3.944 |
| 1,3-Dichlorobenzene | 1.00953       | .90557 | .86419 | .95453  | .99153  | 1.210      | .94507    | 6.372 |
| 1,4-Dichlorobenzene | 1.03225       | .95877 | .94369 | 1.01686 | 1.07947 | 1.220      | 1.00621   | 5.515 |
| 1,2-Dichlorobenzene | 1.00647       | .88823 | .86047 | .93338  | .99001  | 1.252      | .93571    | 6.733 |

(Conc=30.0, 60.0, 150.0, 300.0, 600.0)

- 
- RF - Response Factor (Subscript is amount in ug/L)
- RRT - Average Relative Retention Time (RT Std/RT Istd)
- RF - Average Response Factor
- %RSD - Percent Relative Standard Deviation

Title: HP VOA Standards for 5 Point Calibration Curve Rev. E  
Calibrated: 950220 15:39

| Compound                  | Files: >E1711 >E1712 >E1710 >E1713 >E1714 |             |             |              |              | RRT   | RF      | % RSD                                     |
|---------------------------|---|-------------|-------------|--------------|--------------|-------|---------|---|
|                           | RF<br>10.00                               | RF<br>20.00 | RF<br>50.00 | RF<br>100.00 | RF<br>200.00 |       |         |   |
| Chloromethane             | .77610                                    | .65244      | .73998      | .77387       | .81216       | .232  | .75091  | 8.081                                     |
| Bromomethane              | 1.29280                                   | 1.05539     | 1.14063     | 1.15920      | 1.17884      | .300  | 1.16537 | 7.327                                     |
| Vinyl Chloride            | .90264                                    | .77993      | .82687      | .83824       | .83124       | .246  | .83579  | 5.248                                     |
| Chloroethane              | .65287                                    | .55895      | .64492      | .65838       | .66905       | .311  | .63683  | 6.974                                     |
| Methylene Chloride        | 1.25071                                   | 1.02353     | 1.17975     | 1.19942      | 1.24318      | .533  | 1.17932 | 7.800                                     |
| Acrolein                  | .05456                                    | .03800      | .04561      | .03936       | .04315       | .411  | .04414  | 14.870 (Conc=40.0,80.0,200.0,400.0,800.0) |
| Acrylonitrile             | .23227                                    | .16519      | .19213      | .17111       | .19040       | .559  | .19022  | 13.819 (Conc=40.0,80.0,200.0,400.0,800.0) |
| Acetone                   | .29593                                    | .17422      | .21725      | .19721       | .20675       | .423  | .21827  | 21.180                                    |
| Carbon Disulfide          | 3.27290                                   | 2.80061     | 3.21727     | 3.33733      | 3.44249      | .529  | 3.21412 | 7.649                                     |
| Trichlorofluoromethane    | 2.18431                                   | 1.94073     | 2.25849     | 2.36602      | 2.43595      | .349  | 2.23710 | 8.576                                     |
| 1,1-Dichloroethene        | 1.12744                                   | .94710      | 1.12078     | 1.14613      | 1.19522      | .444  | 1.10733 | 8.506                                     |
| 1,1-Dichloroethane        | 2.22117                                   | 1.89027     | 2.23542     | 2.24322      | 2.39401      | .710  | 2.19682 | 8.427                                     |
| t-Butyl Alcohol           | .09921                                    | .04674      | .09367      | .07597       | .08037       | .468  | .07919  | 25.840                                    |
| Trans-1,2-Dichloroethene  | 1.22237                                   | 1.03208     | 1.22353     | 1.23705      | 1.30081      | .602  | 1.20317 | 8.387                                     |
| Chloroform                | 2.64475                                   | 2.17899     | 2.54352     | 2.50488      | 2.69542      | .958  | 2.51351 | 8.036                                     |
| 1,2-Dichloroethane-d4     | 1.07992                                   | 1.04985     | 1.14882     | 1.13588      | 1.13338      | 1.155 | 1.10957 | 3.836                                     |
| Methyl t-Butyl Ether      | 2.50588                                   | 1.92068     | 2.36672     | 2.23586      | 2.33144      | .581  | 2.27211 | 9.641                                     |
| 1,2-Dichloroethane        | 1.25198                                   | 1.01870     | 1.22614     | 1.18006      | 1.26336      | 1.179 | 1.18805 | 8.412                                     |
| Isopropyl Ether           | -   | -           | -           | -            | -            | -     | -       | -   |
| 2-Butanone                | .12951                                    | .07041      | .10147      | .09435       | .10081       | .676  | .09931  | 21.231                                    |
| 1,1,1-Trichloroethane     | .52007                                    | .41993      | .51398      | .53499       | .56851       | .852  | .51150  | 10.827                                    |
| Carbon Tetrachloride      | .47327                                    | .39674      | .49440      | .51339       | .55031       | .903  | .48562  | 11.778                                    |
| Vinyl Acetate             | .26085                                    | .19143      | .26151      | .24728       | .26441       | .573  | .24509  | 12.535                                    |
| cis-1,2-Dichloroethene    | .32950                                    | .27196      | .33856      | .34396       | .37364       | .715  | .33152  | 11.215                                    |
| Bromodichloromethane      | .63118                                    | .49202      | .60183      | .61099       | .64495       | 1.118 | .59620  | 10.170                                    |
| 1,2-Dichloropropane       | .37473                                    | .30168      | .36350      | .37100       | .39082       | 1.081 | .36035  | 9.514                                     |
| cis-1,3-Dichloropropene   | .49162                                    | .39058      | .48464      | .49806       | .53731       | 1.209 | .48044  | 11.287                                    |
| Trichloroethene           | .44926                                    | .37218      | .44283      | .46468       | .49198       | 1.053 | .44419  | 10.016                                    |
| Dibromochloromethane      | .45679                                    | .34934      | .42873      | .43788       | .46190       | 1.374 | .42693  | 10.642                                    |
| 1,1,2-Trichloroethane     | .31809                                    | .23576      | .29232      | .29510       | .30795       | 1.305 | .28984  | 11.025                                    |
| Benzene                   | .83434                                    | .68049      | .80760      | .82649       | .87040       | .935  | .80386  | 9.036                                     |
| trans-1,3-Dichloropropene | .41323                                    | .32328      | .41382      | .42823       | .45415       | 1.285 | .40654  | 12.155                                    |
| Ethylene Dibromide        | -   | -           | -           | -            | -            | -     | -       | -   |
| 2-Chloroethylvinylether   | .05083                                    | .04059      | .06168      | .06576       | .07627       | 1.179 | .05903  | 23.303                                    |
| Bromoform                 | .43594                                    | .30867      | .39606      | .40776       | .43123       | 1.585 | .39593  | 13.002                                    |
| 2-Hexanone                | .32516                                    | .17252      | .23742      | .22700       | .22865       | .902  | .23815  | 23.088                                    |
| 4-Methyl-2-Pentanone      | .47223                                    | .27388      | .36413      | .35167       | .37520       | .813  | .36742  | 19.271                                    |
| Tetrachloroethene         | .43371                                    | .37068      | .41940      | .43063       | .47453       | .927  | .42579  | 8.740                                     |
| 1,1,2,2-Tetrachloroethane | .64744                                    | .44082      | .55160      | .53877       | .56643       | 1.106 | .54901  | 13.449                                    |

RF - Response Factor (Subscript is amount in ug/L)

RRT - Average Relative Retention Time (RT Std/RT Istd)

RF - Average Response Factor

%RSD - Percent Relative Standard Deviation

Title: HP VOA Standards for 5 Point Calibration Curve Rev. E  
 Calibrated: 950220 15:39

| Compound            | Files: >E1711 >E1712 >E1710 >E1713 >E1714 |         |         |         |         | RRT   | RF      | % RSD |
|---------------------|---|---------|---------|---------|---------|-------|---------|-------|
|                     | RF  | RF      | RF      | RF      | RF      |       |         |       |
|                     | 10.00                                     | 20.00   | 50.00   | 100.00  | 200.00  |       |         |       |
| Toluene             | .64431                                    | .53306  | .61647  | .63290  | .68840  | .861  | .62303  | 9.137 |
| Toluene-d8          | 1.09871                                   | 1.03861 | 1.06358 | 1.13206 | 1.14623 | .854  | 1.09584 | 4.126 |
| Chlorobenzene       | .93325                                    | .75838  | .88145  | .91036  | .96996  | 1.004 | .89068  | 9.065 |
| Ethylbenzene        | .43009                                    | .36328  | .40770  | .41774  | .43643  | 1.011 | .41105  | 7.035 |
| Styrene             | .90007                                    | .75851  | .87630  | .92488  | .97497  | 1.061 | .88695  | 9.085 |
| Xylenes (Total)     | .54229                                    | .45355  | .52401  | .50728  | .56717  | 1.018 | .51886  | 8.238 |
| Bromofluorobenzene  | .86755                                    | .78814  | .82045  | .87156  | .86162  | 1.113 | .84186  | 4.314 |
| 1,3-Dichlorobenzene | .90640                                    | .74735  | .85511  | .90930  | .95786  | 1.213 | .87520  | 9.162 |
| 1,4-Dichlorobenzene | 1.86014                                   | 1.53407 | 1.75915 | 1.86249 | 1.98101 | 1.223 | 1.79937 | 9.327 |
| 1,2-Dichlorobenzene | .87663                                    | .70547  | .80026  | .85180  | .91127  | 1.255 | .82909  | 9.657 |
| Naphthalene         | -   | -       | -       | -       | -       | -     | -       | -     |

(Conc=30.0,60.0,150.0,300.0,600.0)

RF - Response Factor (Subscript is amount in ug/L)  
 RRT - Average Relative Retention Time (RT Std/RT Istd)  
 RF - Average Response Factor  
 %RSD - Percent Relative Standard Deviation

## Calibration Check Report

Title: HP VOA Standards for 5 Point Calibration Curve Rev. E  
 Calibrated: 950220 15:39

Check Standard Data File: >E1918  
 Injection Time: 950303 08:20

| Compound                  | RF      | RF      | %Diff | Calib Meth            |
|---------------------------|---------|---------|-------|-----------------------|
| Chloromethane             | .75091  | .86932  | 15.77 | Average               |
| Bromomethane              | 1.16537 | 1.29889 | 11.46 | Average               |
| Vinyl Chloride            | .83579  | .98468  | 17.81 | Average               |
| Chloroethane              | .63683  | .75660  | 18.81 | Average               |
| Methylene Chloride        | 1.17932 | 1.34865 | 14.36 | Average               |
| Acrolein                  | .04414  | .04598  | 4.18  | Average (Conc=200.00) |
| Acrylonitrile             | .19022  | .21426  | 12.64 | Average (Conc=200.00) |
| Acetone                   | .21827  | .23330  | 6.88  | Average               |
| Carbon Disulfide          | 3.21412 | 3.64645 | 13.45 | Average               |
| Trichlorofluoromethane    | 2.23710 | 2.55149 | 14.05 | Average               |
| 1,1-Dichloroethene        | 1.10733 | 1.27424 | 15.07 | Average               |
| 1,1-Dichloroethane        | 2.19682 | 2.49133 | 13.41 | Average               |
| t-Butyl Alcohol           | .07919  | .08956  | 13.09 | Average               |
| Trans-1,2-Dichloroethene  | 1.20317 | 1.33244 | 10.74 | Average               |
| Chloroform                | 2.51351 | 2.77434 | 10.38 | Average               |
| 1,2-Dichloroethane-d4     | 1.10957 | 1.23571 | 11.37 | Average               |
| Methyl t-Butyl Ether      | 2.27211 | 2.53388 | 11.52 | Average               |
| 1,2-Dichloroethane        | 1.18805 | 1.29985 | 9.41  | Average               |
| Isopropyl Ether           | -       | -       | -     | Average               |
| 2-Butanone                | .09931  | .11511  | 15.91 | Average               |
| 1,1,1-Trichloroethane     | .51150  | .56066  | 9.61  | Average               |
| Carbon Tetrachloride      | .48562  | .53873  | 10.94 | Average               |
| Vinyl Acetate             | .24509  | .20073  | 18.10 | Average               |
| cis-1,2-Dichloroethene    | .33152  | .37433  | 12.91 | Average               |
| Bromodichloromethane      | .59620  | .66363  | 11.31 | Average               |
| 1,2-Dichloropropane       | .36035  | .41179  | 14.28 | Average               |
| cis-1,3-Dichloropropene   | .48044  | .54651  | 13.75 | Average               |
| Trichloroethene           | .44419  | .48453  | 9.08  | Average               |
| Dibromochloromethane      | .42693  | .46994  | 10.07 | Average               |
| 1,1,2-Trichloroethane     | .28984  | .33023  | 13.93 | Average               |
| Benzene                   | .80386  | .91444  | 13.76 | Average               |
| trans-1,3-Dichloropropene | .40654  | .46473  | 14.31 | Average               |
| Ethylene Dibromide        | -       | -       | -     | Average               |
| 2-Chloroethylvinylether   | .05903  | .08738  | 48.03 | Average               |
| Bromoform                 | .39593  | .44562  | 12.55 | Average               |
| 2-Hexanone                | .23815  | .27383  | 14.98 | Average               |
| 4-Methyl-2-Pentanone      | .36742  | .43354  | 18.00 | Average               |
| Tetrachloroethene         | .42579  | .45385  | 6.59  | Average               |
| 1,1,2,2-Tetrachloroethane | .54901  | .63367  | 15.42 | Average               |
| Toluene                   | .62303  | .69341  | 11.30 | Average               |

RF - Response Factor from daily standard file at 50.00 ug/L

RF - Average Response Factor from Initial Calibration

%Diff - % Difference from original average or curve



## Calibration Check Report

136

Title: HP VOA Standards for 5 Point Calibration Curve Rev. E  
Calibrated: 950220 15:39

Check Standard Data File: >E1918  
Injection Time: 950303 08:20

| Compound            | $\overline{RF}$ | RF      | %Diff | Calib Meth |
|---------------------|-----------------|---------|-------|------------|
| Toluene-d8          | 1.09584         | 1.20593 | 10.05 | Average    |
| Chlorobenzene       | .89068          | .98061  | 10.10 | Average    |
| Ethylbenzene        | .41105          | .44879  | 9.18  | Average    |
| Styrene             | .88695          | .98214  | 10.73 | Average    |
| Xylenes (Total)     | .51886          | .58178  | 12.13 | Average    |
| Bromofluorobenzene  | .84186          | .95534  | 13.48 | Average    |
| 1,3-Dichlorobenzene | .87520          | .93661  | 7.02  | Average    |
| 1,4-Dichlorobenzene | 1.79937         | 1.93699 | 7.65  | Average    |
| 1,2-Dichlorobenzene | .82909          | .90808  | 9.53  | Average    |
| Naphthalene         | -               | -       | -     | Average    |

(Conc=150.00)

RF - Response Factor from daily standard file at 50.00 ug/L

$\overline{RF}$  - Average Response Factor from Initial Calibration

%Diff - % Difference from original average or curve

## Calibration Check Report

137

Title: HP VOA Standards for 5 Point Calibration Curve Rev. E  
 Calibrated: 950220 15:39

Check Standard Data File: >E1933  
 Injection Time: 950306 08:02

| Compound                  | $\overline{\text{RF}}$ | RF      | %Diff | Calib Meth            |
|---------------------------|------------------------|---------|-------|-----------------------|
| Chloromethane             | .75091                 | .89892  | 19.71 | Average               |
| Bromomethane              | 1.16537                | 1.33194 | 14.29 | Average               |
| Vinyl Chloride            | .83579                 | 1.00501 | 20.25 | Average               |
| Chloroethane              | .63683                 | .78006  | 22.49 | Average               |
| Methylene Chloride        | 1.17932                | 1.38799 | 17.69 | Average               |
| Acrolein                  | .04414                 | .04143  | 6.13  | Average (Conc=200.00) |
| Acrylonitrile             | .19022                 | .19625  | 3.17  | Average (Conc=200.00) |
| Acetone                   | .21827                 | .21119  | 3.24  | Average               |
| Carbon Disulfide          | 3.21412                | 3.76223 | 17.05 | Average               |
| Trichlorofluoromethane    | 2.23710                | 2.63186 | 17.65 | Average               |
| 1,1-Dichloroethene        | 1.10733                | 1.32362 | 19.53 | Average               |
| 1,1-Dichloroethane        | 2.19682                | 2.61908 | 19.22 | Average               |
| t-Butyl Alcohol           | .07919                 | .07916  | .04   | Average               |
| Trans-1,2-Dichloroethene  | 1.20317                | 1.38356 | 14.99 | Average               |
| Chloroform                | 2.51351                | 2.94949 | 17.35 | Average               |
| 1,2-Dichloroethane-d4     | 1.10957                | 1.28891 | 16.16 | Average               |
| Methyl t-Butyl Ether      | 2.27211                | 2.46584 | 8.53  | Average               |
| 1,2-Dichloroethane        | 1.18805                | 1.34092 | 12.87 | Average               |
| Isopropyl Ether           | -                      | -       | -     | Average               |
| 2-Butanone                | .09931                 | .08744  | 11.96 | Average               |
| 1,1,1-Trichloroethane     | .51150                 | .55781  | 9.05  | Average               |
| Carbon Tetrachloride      | .48562                 | .53611  | 10.40 | Average               |
| Vinyl Acetate             | .24509                 | .16255  | 33.68 | Average               |
| cis-1,2-Dichloroethene    | .33152                 | .37145  | 12.05 | Average               |
| Bromodichloromethane      | .59620                 | .64763  | 8.63  | Average               |
| 1,2-Dichloropropane       | .36035                 | .40785  | 13.18 | Average               |
| cis-1,3-Dichloropropene   | .48044                 | .53417  | 11.18 | Average               |
| Trichloroethene           | .44419                 | .47248  | 6.37  | Average               |
| Dibromochloromethane      | .42693                 | .44207  | 3.55  | Average               |
| 1,1,2-Trichloroethane     | .28984                 | .30012  | 3.55  | Average               |
| Benzene                   | .80386                 | .90436  | 12.50 | Average               |
| trans-1,3-Dichloropropene | .40654                 | .44880  | 10.39 | Average               |
| Ethylene Dibromide        | -                      | -       | -     | Average               |
| 2-Chloroethylvinylether   | .05903                 | .07848  | 32.95 | Average               |
| Bromoform                 | .39593                 | .39157  | 1.10  | Average               |
| 2-Hexanone                | .23815                 | .20906  | 12.22 | Average               |
| 4-Methyl-2-Pentanone      | .36742                 | .35195  | 4.21  | Average               |
| Tetrachloroethene         | .42579                 | .44808  | 5.24  | Average               |
| 1,1,2,2-Tetrachloroethane | .54901                 | .54573  | .60   | Average               |
| Toluene                   | .62303                 | .69010  | 10.77 | Average               |

RF - Response Factor from daily standard file at 50.00 ug/L

$\overline{\text{RF}}$  - Average Response Factor from Initial Calibration

%Diff - % Difference from original average or curve

## Calibration Check Report

Title: HP VOA Standards for 5 Point Calibration Curve Rev. E  
 Calibrated: 950220 15:39

Check Standard Data File: >E1933

Injection Time: 950306 08:02

| Compound            | <u>RF</u> | RF      | %Diff | Calib Meth |
|---------------------|-----------|---------|-------|------------|
| Toluene-d8          | 1.09584   | 1.21186 | 10.59 | Average    |
| Chlorobenzene       | .89068    | .96930  | 8.83  | Average    |
| Ethylbenzene        | .41105    | .45273  | 10.14 | Average    |
| Styrene             | .88695    | .95778  | 7.99  | Average    |
| Xylenes (Total)     | .51886    | .57057  | 9.97  | Average    |
| Bromofluorobenzene  | .84186    | .90179  | 7.12  | Average    |
| 1,3-Dichlorobenzene | .87520    | .91045  | 4.03  | Average    |
| 1,4-Dichlorobenzene | 1.79937   | 1.87320 | 4.10  | Average    |
| 1,2-Dichlorobenzene | .82909    | .86788  | 4.68  | Average    |
| Naphthalene         | -         | -       | -     | Average    |

(Conc=150.00)

RF - Response Factor from daily standard file at 50.00 ug/L

RF - Average Response Factor from Initial Calibration

%Diff - % Difference from original average or curve

## Calibration Check Report

139

Title: HP VOA Standards for 5 Point Calibration Curve Rev. E  
 Calibrated: 950220 15:39

Check Standard Data File: &gt;E1945

Injection Time: 950306 17:57

| Compound                  | $\overline{RF}$ | RF      | XDiff | Calib Meth            |
|---------------------------|-----------------|---------|-------|-----------------------|
| Chloromethane             | .75091          | .90185  | 20.10 | Average               |
| Bromomethane              | 1.16537         | 1.30246 | 11.76 | Average               |
| Vinyl Chloride            | .83579          | .99714  | 19.31 | Average               |
| Chloroethane              | .63683          | .77016  | 20.94 | Average               |
| Methylene Chloride        | 1.17932         | 1.39979 | 18.69 | Average               |
| Acrolein                  | .04414          | .01289  | 70.79 | Average (Conc=200.00) |
| Acrylonitrile             | .19022          | .20302  | 6.73  | Average (Conc=200.00) |
| Acetone                   | .21827          | .21944  | .54   | Average               |
| Carbon Disulfide          | 3.21412         | 3.69888 | 15.08 | Average               |
| Trichlorofluoromethane    | 2.23710         | 2.54692 | 13.85 | Average               |
| 1,1-Dichloroethene        | 1.10733         | 1.29653 | 17.09 | Average               |
| 1,1-Dichloroethane        | 2.19682         | 2.56844 | 16.92 | Average               |
| t-Butyl Alcohol           | .07919          | .08393  | 5.98  | Average               |
| Trans-1,2-Dichloroethene  | 1.20317         | 1.39202 | 15.70 | Average               |
| Chloroform                | 2.51351         | 2.87723 | 14.47 | Average               |
| 1,2-Dichloroethane-d4     | 1.10957         | 1.17987 | 6.34  | Average               |
| Methyl t-Butyl Ether      | 2.27211         | 2.49939 | 10.00 | Average               |
| 1,2-Dichloroethane        | 1.18805         | 1.32325 | 11.38 | Average               |
| Isopropyl Ether           | -               | -       | -     | Average               |
| 2-Butanone                | .09931          | .09517  | 4.17  | Average               |
| 1,1,1-Trichloroethane     | .51150          | .55274  | 8.06  | Average               |
| Carbon Tetrachloride      | .48562          | .52395  | 7.89  | Average               |
| Vinyl Acetate             | .24509          | .16476  | 32.78 | Average               |
| cis-1,2-Dichloroethene    | .33152          | .36390  | 9.77  | Average               |
| Bromodichloromethane      | .59620          | .64719  | 8.55  | Average               |
| 1,2-Dichloropropane       | .36035          | .40864  | 13.40 | Average               |
| cis-1,3-Dichloropropene   | .48044          | .53369  | 11.08 | Average               |
| Trichloroethene           | .44419          | .48469  | 9.12  | Average               |
| Dibromochloromethane      | .42693          | .45210  | 5.90  | Average               |
| 1,1,2-Trichloroethane     | .28984          | .31314  | 8.04  | Average               |
| Benzene                   | .80386          | .91333  | 13.62 | Average               |
| trans-1,3-Dichloropropene | .40654          | .45187  | 11.15 | Average               |
| Ethylene Dibromide        | -               | -       | -     | Average               |
| 2-Chloroethylvinylether   | .05903          | .10170  | 72.29 | Average               |
| Bromoform                 | .39593          | .41516  | 4.86  | Average               |
| 2-Hexanone                | .23815          | .22587  | 5.15  | Average               |
| 4-Methyl-2-Pentanone      | .36742          | .39935  | 8.69  | Average               |
| Tetrachloroethene         | .42579          | .47270  | 11.02 | Average               |
| 1,1,2,2-Tetrachloroethane | .54901          | .58348  | 6.28  | Average               |
| Toluene                   | .62303          | .71226  | 14.32 | Average               |

RF - Response Factor from daily standard file at 50.00 ug/L

 $\overline{RF}$  - Average Response Factor from Initial Calibration

XDiff - % Difference from original average or curve

Calibration Check Report

140

Title: HP VOA Standards for 5 Point Calibration Curve Rev. E  
Calibrated: 950220 15:39

Check Standard Data File: >E1945  
Injection Time: 950306 17:57

| Compound            | <u>RF</u> | RF      | %Diff | Calib Meth |
|---------------------|-----------|---------|-------|------------|
| Toluene-d8          | 1.09584   | 1.16190 | 6.03  | Average    |
| Chlorobenzene       | .89068    | .99988  | 12.26 | Average    |
| Ethylbenzene        | .41105    | .45273  | 10.14 | Average    |
| Styrene             | .88695    | .99129  | 11.76 | Average    |
| Xylenes (Total)     | .51886    | .58462  | 12.67 | Average    |
| Bromofluorobenzene  | .84186    | .88404  | 5.01  | Average    |
| 1,3-Dichlorobenzene | .87520    | .94641  | 8.14  | Average    |
| 1,4-Dichlorobenzene | 1.79937   | 1.94038 | 7.84  | Average    |
| 1,2-Dichlorobenzene | .82909    | .88743  | 7.04  | Average    |
| Naphthalene         | -         | -       | -     | Average    |

(Conc=150.00)

RF - Response Factor from daily standard file at 50.00 ug/L

RF - Average Response Factor from Initial Calibration

%Diff - % Difference from original average or curve

## Calibration Check Report

111

Title: HP VOA Standards for 5 Point Calibration Curve Rev. E  
 Calibrated: 950220 15:39

Check Standard Data File: &gt;E1956

Injection Time: 950307 07:58

| Compound                  | $\overline{RF}$ | RF      | %Diff | Calib Meth            |
|---------------------------|-----------------|---------|-------|-----------------------|
| Chloromethane             | .75091          | .77276  | 2.91  | Average               |
| Bromomethane              | 1.16537         | 1.15402 | .97   | Average               |
| Vinyl Chloride            | .83579          | .87750  | 4.99  | Average               |
| Chloroethane              | .63683          | .67208  | 5.53  | Average               |
| Methylene Chloride        | 1.17932         | 1.20921 | 2.53  | Average               |
| Acrolein                  | .04414          | .02416  | 45.25 | Average (Conc=200.00) |
| Acrylonitrile             | .19022          | .19100  | .41   | Average (Conc=200.00) |
| Acetone                   | .21827          | .18758  | 14.06 | Average               |
| Carbon Disulfide          | 3.21412         | 3.24756 | 1.04  | Average               |
| Trichlorofluoromethane    | 2.23710         | 2.25811 | .94   | Average               |
| 1,1-Dichloroethene        | 1.10733         | 1.14853 | 3.72  | Average               |
| 1,1-Dichloroethane        | 2.19682         | 2.28448 | 3.99  | Average               |
| t-Butyl Alcohol           | .07919          | .06649  | 16.05 | Average               |
| Trans-1,2-Dichloroethene  | 1.20317         | 1.25912 | 4.65  | Average               |
| Chloroform                | 2.51351         | 2.57712 | 2.53  | Average               |
| 1,2-Dichloroethane-d4     | 1.10957         | 1.10550 | .37   | Average               |
| Methyl t-Butyl Ether      | 2.27211         | 2.24944 | 1.00  | Average               |
| 1,2-Dichloroethane        | 1.18805         | 1.20008 | 1.01  | Average               |
| Isopropyl Ether           | -               | -       | -     | Average               |
| 2-Butanone                | .09931          | .08615  | 13.26 | Average               |
| 1,1,1-Trichloroethane     | .51150          | .50391  | 1.48  | Average               |
| Carbon Tetrachloride      | .48562          | .48032  | 1.09  | Average               |
| Vinyl Acetate             | .24509          | .14707  | 39.99 | Average               |
| cis-1,2-Dichloroethene    | .33152          | .33404  | .76   | Average               |
| Bromodichloromethane      | .59620          | .58877  | 1.25  | Average               |
| 1,2-Dichloropropane       | .36035          | .36680  | 1.79  | Average               |
| cis-1,3-Dichloropropene   | .48044          | .48491  | .93   | Average               |
| Trichloroethene           | .44419          | .42563  | 4.18  | Average               |
| Dibromochloromethane      | .42693          | .40389  | 5.40  | Average               |
| 1,1,2-Trichloroethane     | .28984          | .27887  | 3.79  | Average               |
| Benzene                   | .80386          | .81245  | 1.07  | Average               |
| trans-1,3-Dichloropropene | .40654          | .40163  | 1.21  | Average               |
| Ethylene Dibromide        | -               | -       | -     | Average               |
| 2-Chloroethylvinylether   | .05903          | .08382  | 42.01 | Average               |
| Bromoform                 | .39593          | .36241  | 8.47  | Average               |
| 2-Hexanone                | .23815          | .19920  | 16.35 | Average               |
| 4-Methyl-2-Pentanone      | .36742          | .34646  | 5.71  | Average               |
| Tetrachloroethene         | .42579          | .40568  | 4.72  | Average               |
| 1,1,2,2-Tetrachloroethane | .54901          | .50740  | 7.58  | Average               |
| Toluene                   | .62303          | .61705  | .96   | Average               |

RF - Response Factor from daily standard file at 50.00 ug/L

 $\overline{RF}$  - Average Response Factor from Initial Calibration

%Diff - % Difference from original average or curve

Title: HP VOA Standards for 5 Point Calibration Curve Rev. E  
 Calibrated: 950220 15:39

Check Standard Data File: >E1956  
 Injection Time: 950307 07:58

| Compound            | $\overline{RF}$ | RF      | %Diff | Calib Meth            |
|---------------------|-----------------|---------|-------|-----------------------|
| Toluene-d8          | 1.09584         | 1.04025 | 5.07  | Average               |
| Chlorobenzene       | .89068          | .87244  | 2.05  | Average               |
| Ethylbenzene        | .41105          | .40122  | 2.39  | Average               |
| Styrene             | .88695          | .85965  | 3.08  | Average               |
| Xylenes (Total)     | .51886          | .51330  | 1.07  | Average (Conc=150.00) |
| Bromofluorobenzene  | .84186          | .80578  | 4.29  | Average               |
| 1,3-Dichlorobenzene | .87520          | .82097  | 6.20  | Average               |
| 1,4-Dichlorobenzene | 1.79937         | 1.68795 | 6.19  | Average               |
| 1,2-Dichlorobenzene | .82909          | .79045  | 4.66  | Average               |
| Naphthalene         | -               | -       | -     | Average               |

RF - Response Factor from daily standard file at 50.00 ug/L

$\overline{RF}$  - Average Response Factor from Initial Calibration

%Diff - % Difference from original average or curve

## NORTHEASTERN ANALYTICAL CORPORATION

## VOLATILE METHOD BLANK SUMMARY SHEET

LAB SAMPLE ID:METHOD BLANK

LAB FILE ID:&gt;A8658

MATRIX:AQUEOUS

LEVEL:LOW

DATE ANALYZED:03/08/95

TIME ANALYZED:17:46

This method blank applies to the following Samples, MS and MSD

| LAB SAMPLE ID | LAB FILE ID | INJECT DATE AND TIME |
|---------------|-------------|----------------------|
| 95L-0626-15   | >A8661      | 03/08/95 20:34       |



## NORTHEASTERN ANALYTICAL CORPORATION

## METHOD BLANK RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES Date Analyzed: 08-MAR-95  
 NAC Job Number: L950626 Date Received: NA  
 Lab Sample ID: 08-MAR-95 Client ID: BLANK  
 File ID: A8658

| PARAMETER                 | RESULT | MDL | QUAL | UNITS |
|---------------------------|--------|-----|------|-------|
| Chloromethane             | ND     | 3.7 |      | ug/kg |
| Bromomethane              | ND     | 6.1 |      | ug/kg |
| Vinyl Chloride            | ND     | 5   |      | ug/kg |
| Chloroethane              | ND     | 3.2 |      | ug/kg |
| Methylene Chloride        | ND     | 3.1 |      | ug/kg |
| Acrolein                  | ND     | 50  |      | ug/kg |
| Acrylonitrile             | ND     | 50  |      | ug/kg |
| Acetone                   | ND     | 6.9 |      | ug/kg |
| Carbon Disulfide          | ND     | 2.4 |      | ug/kg |
| Trichlorofluoromethane    | ND     | 2.1 |      | ug/kg |
| 1,1-Dichloroethene        | ND     | 2.5 |      | ug/kg |
| 1,1-Dichloroethane        | ND     | 2.2 |      | ug/kg |
| t-Butyl Alcohol           | ND     | 50  |      | ug/kg |
| Trans-1,2-Dichloroethene  | ND     | 2.8 |      | ug/kg |
| Chloroform                | ND     | 2.6 |      | ug/kg |
| Methyl t-Butyl Ether      | ND     | 4.1 |      | ug/kg |
| 1,2-Dichloroethane        | ND     | 1.9 |      | ug/kg |
| Isopropyl Ether           | ND     | 5   |      | ug/kg |
| 2-Butanone                | ND     | 10  |      | ug/kg |
| 1,1,1-Trichloroethane     | ND     | 3.8 |      | ug/kg |
| Carbon Tetrachloride      | ND     | 2.7 |      | ug/kg |
| Vinyl Acetate             | ND     | 4.7 |      | ug/kg |
| Bromodichloromethane      | ND     | 3.4 |      | ug/kg |
| 1,2-Dichloropropane       | ND     | 4.4 |      | ug/kg |
| cis-1,3-Dichloropropene   | ND     | 4.2 |      | ug/kg |
| Trichloroethene           | ND     | 2.3 |      | ug/kg |
| Dibromochloromethane      | ND     | 2.9 |      | ug/kg |
| 1,1,2-Trichloroethane     | ND     | 3.5 |      | ug/kg |
| Benzene                   | ND     | 4.2 |      | ug/kg |
| trans-1,3-Dichloropropene | ND     | 2.8 |      | ug/kg |
| 2-Chloroethylvinylether   | ND     | 3.7 |      | ug/kg |
| Bromoform                 | ND     | 2.6 |      | ug/kg |
| 2-Hexanone                | ND     | 6.3 |      | ug/kg |
| 4-Methyl-2-Pentanone      | ND     | 4.5 |      | ug/kg |
| Tetrachloroethene         | ND     | 2.1 |      | ug/kg |
| 1,1,2,2-Tetrachloroethane | ND     | 3.7 |      | ug/kg |
| Toluene                   | ND     | 2.8 |      | ug/kg |
| Chlorobenzene             | ND     | 2.3 |      | ug/kg |
| Ethylbenzene              | ND     | 2.8 |      | ug/kg |
| Styrene                   | ND     | 2.4 |      | ug/kg |
| Xylenes (Total)           | ND     | 5.3 |      | ug/kg |
| Naphthalene               | ND     | 3.4 |      | ug/kg |

ND - Not detected at or below the MDL

NORTHEASTERN ANALYTICAL CORPORATION  
VOLATILE UNKNOWN IDENTIFICATION

LAB SAMPLE ID:METHOD BLANK

LAB FILE ID: &gt;A8658

DATE RECEIVED:NA

DATE ANALYZED:950308

SAMPLE WT/VOL:5.0ML

LEVEL:LOW

COMPOUND

RET TIME(MIN)

CUNC

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NONE FOUND

## QUANT REPORT

Page 1

Operator ID: LAURA  
Output File: ^A8658::A1  
Data File: >A8658::A2  
Name: METHOD BLANK  
Misc: S.UML

Quant Rev: 7      Quant Time: 950308 18:21  
                  Injected at: 950308 17:46  
Dilution Factor: 1.00000  
Instrument ID: INST A

ID File: ID\_AAA::QT


Title: HP VOA Standards for 5 Point Calibration Curve Rev. E

Last Calibration: 950308 17:34

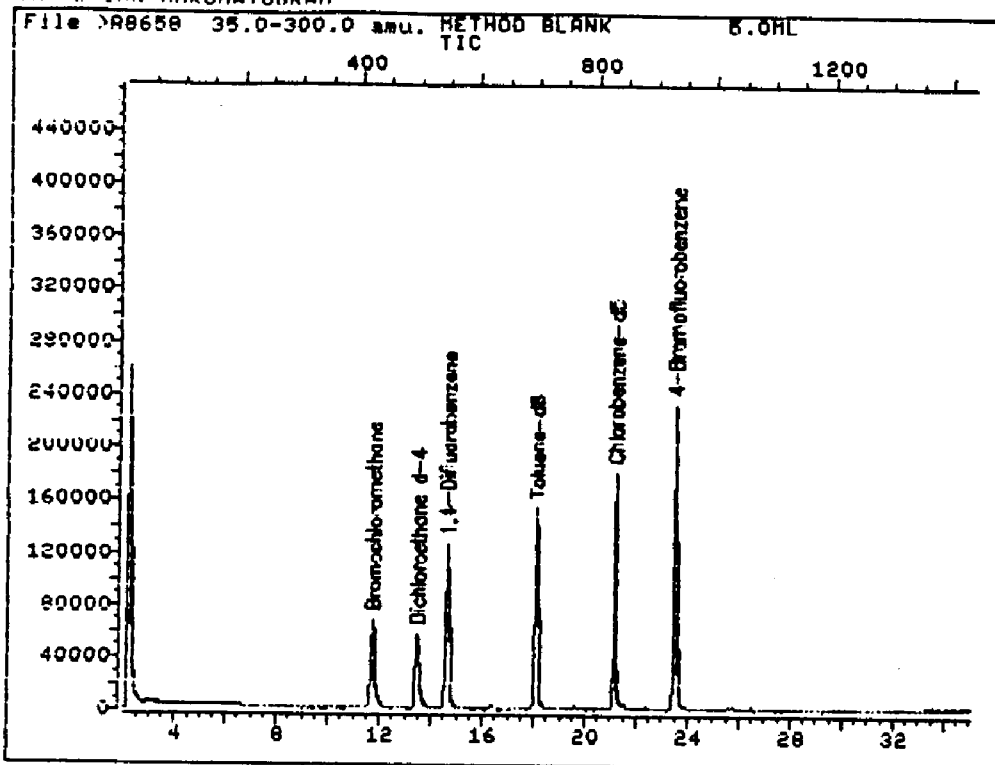
Last Qual Time: &lt;none&gt;

|     | Compound              | R.T.  | Scan# | Area    | Conc  | Units | q  |
|-----|-----------------------|-------|-------|---------|-------|-------|----|
| 1)  | *Bromochloromethane   | 11.71 | 422   | 118553  | 50.00 | ug/L  | 90 |
| 17) | 1,2-Dichloroethane-d4 | 13.45 | 498   | 217637  | 50.13 | ug/L  | 95 |
| 20) | *1,4-Difluorobenzene  | 14.60 | 548   | 477233  | 50.00 | ug/L  | 68 |
| 36) | *Chlorobenzene-d5     | 21.12 | 832   | 355055  | 50.00 | ug/L  | 95 |
| 42) | Toluene-d8            | 18.07 | 699   | 420521M | 54.33 | ug/L  | 98 |
| 47) | Bromofluorobenzene    | 23.47 | 934   | 312146  | 52.34 | ug/L  | 77 |

\* Compound is ISID

 3-8-95

## TOTAL ION CHROMATOGRAM



Data File: &gt;A8658::A2

Name: METHOD BLANK

Misc: 5.0ML

Quant Output File: ^A8658::A1

Instrument ID: INST A

Id File: ID\_AAA::Q1

Title: HP VOA Standards for 5 Point Calibration Curve Rev. E

Last Calibration: 950308 17:34

Last Wcal Time: &lt;none&gt;

Operator ID: LAURA

Quant Time : 950308 18:21

Injected at: 950308 17:46

## NORTHEASTERN ANALYTICAL CORPORATION

## VOLATILE METHOD BLANK SUMMARY SHEET

LAB SAMPLE ID:METHOD BLANK

LAB FILE ID:&gt;E1919

MATRIX:AQUEOUS

LEVEL:LOW

DATE ANALYZED:03/03/95

TIME ANALYZED:09:19

This method blank applies to the following Samples, MS and MSD

| LAB SAMPLE ID | LAB FILE ID | INJECT DATE AND TIME |
|---------------|-------------|----------------------|
| 95L-0626-1    | >E1923      | 03/03/95 13:20       |
| 95L-0626-2    | >E1921      | 03/03/95 11:07       |
| 95L-0626-3    | >E1925      | 03/03/95 15:01       |
| 95L-0626-4    | >E1926      | 03/03/95 15:55       |
| 95L-0626-5    | >E1931      | 03/03/95 19:42       |
| 95L-0626-7    | >E1930      | 03/03/95 18:58       |
| 95L-0626-3R   | >E1927      | 03/03/95 16:39       |

## NORTHEASTERN ANALYTICAL CORPORATION

## METHOD BLANK RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES Date Analyzed: 03-MAR-95  
 NAC Job Number: L950626 Date Received: NA  
 Lab Sample ID: 03-MAR-95 Client ID: BLANK  
 File ID: E1919

| PARAMETER                 | RESULT | MDL | QUAL | UNITS |
|---------------------------|--------|-----|------|-------|
| Chloromethane             | ND     | 3.7 |      | ug/kg |
| Bromomethane              | ND     | 6.1 |      | ug/kg |
| Vinyl Chloride            | ND     | 5   |      | ug/kg |
| Chloroethane              | ND     | 3.2 |      | ug/kg |
| Methylene Chloride        | ND     | 3.1 |      | ug/kg |
| Acrolein                  | ND     | 50  |      | ug/kg |
| Acrylonitrile             | ND     | 50  |      | ug/kg |
| Acetone                   | ND     | 6.9 |      | ug/kg |
| Carbon Disulfide          | ND     | 2.4 |      | ug/kg |
| Trichlorofluoromethane    | ND     | 2.1 |      | ug/kg |
| 1,1-Dichloroethene        | ND     | 2.5 |      | ug/kg |
| 1,1-Dichloroethane        | ND     | 2.2 |      | ug/kg |
| t-Butyl Alcohol           | ND     | 50  |      | ug/kg |
| Trans-1,2-Dichloroethene  | ND     | 2.8 |      | ug/kg |
| Chloroform                | ND     | 2.6 |      | ug/kg |
| Methyl t-Butyl Ether      | ND     | 4.1 |      | ug/kg |
| 1,2-Dichloroethane        | ND     | 1.9 |      | ug/kg |
| Isopropyl Ether           | ND     | 5   |      | ug/kg |
| 2-Butanone                | ND     | 10  |      | ug/kg |
| 1,1,1-Trichloroethane     | ND     | 3.8 |      | ug/kg |
| Carbon Tetrachloride      | ND     | 2.7 |      | ug/kg |
| Vinyl Acetate             | ND     | 4.7 |      | ug/kg |
| Bromodichloromethane      | ND     | 3.4 |      | ug/kg |
| 1,2-Dichloropropane       | ND     | 4.4 |      | ug/kg |
| cis-1,3-Dichloropropene   | ND     | 4.2 |      | ug/kg |
| Trichloroethene           | ND     | 2.3 |      | ug/kg |
| Dibromochloromethane      | ND     | 2.9 |      | ug/kg |
| 1,1,2-Trichloroethane     | ND     | 3.5 |      | ug/kg |
| Benzene                   | ND     | 4.2 |      | ug/kg |
| trans-1,3-Dichloropropene | ND     | 2.8 |      | ug/kg |
| 2-Chloroethylvinylether   | ND     | 3.7 |      | ug/kg |
| Bromoform                 | ND     | 2.6 |      | ug/kg |
| 2-Hexanone                | ND     | 6.3 |      | ug/kg |
| 4-Methyl-2-Pentanone      | ND     | 4.5 |      | ug/kg |
| Tetrachloroethene         | ND     | 2.1 |      | ug/kg |
| 1,1,2,2-Tetrachloroethane | ND     | 3.7 |      | ug/kg |
| Toluene                   | ND     | 2.8 |      | ug/kg |
| Chlorobenzene             | ND     | 2.3 |      | ug/kg |
| Ethylbenzene              | ND     | 2.8 |      | ug/kg |
| Styrene                   | ND     | 2.4 |      | ug/kg |
| Xylenes (Total)           | ND     | 5.3 |      | ug/kg |
| Naphthalene               | ND     | 3.4 |      | ug/kg |

ND - Not detected at or below the MDL

NORTHEASTERN ANALYTICAL CORPORATION  
VOLATILE UNKNOWN IDENTIFICATION

LAB SAMPLE ID:METHOD BLANK

LAB FILE ID:&gt;E1919

DATE RECEIVED:NA

DATE ANALYZED:950303

SAMPLE WT/VOL:5.0ML

LEVEL:LOW

COMPOUND

RET TIME(MIN)

CONC

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NONE FOUND

## QUANT REPORT

Page 1

Operator ID: LAURA  
 Output File: ^E1919::A1  
 Data File: ^E1919::D0  
 Name: METHOD BLANK  
 Misc: 5.0ML

Quant Rev: 2      Quant Time: 950303 10:05  
                   Injected at: 950303 09:19  
                   Dilution Factor: 1.00000  
                   Instrument ID: HPD0S05

ID File: ID\_SEE::DB

Title: HP VOA Standards For 5 Point Calibration Curve Rev. E

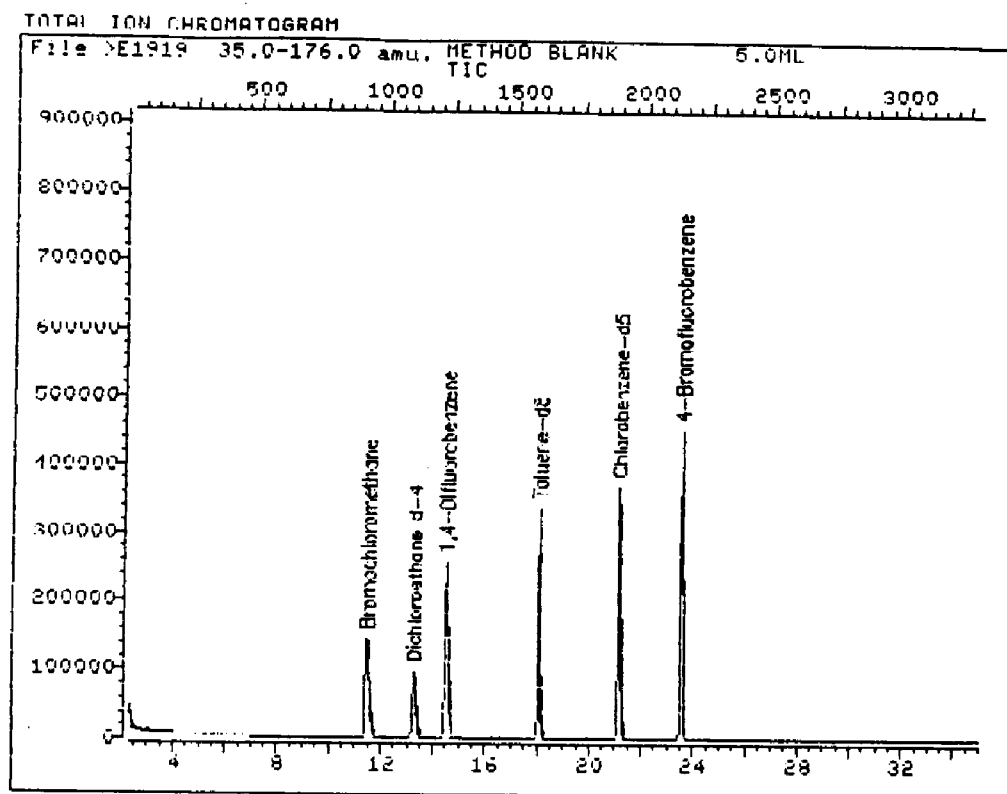
Last Calibration: 950220 15:41

Last Qual Time: <none>

| Compound                  | R.T.  | Scan# | Area   | Conc  | Units | q  |
|---------------------------|-------|-------|--------|-------|-------|----|
| 1) *Bromochloromethane    | 11.47 | 924   | 220906 | 50.00 | ug/L  | 68 |
| 17) 1,2-Dichloroethane-d4 | 13.26 | 1104  | 255637 | 52.15 | ug/L  | 69 |
| 20) *1,4-Difluorobenzene  | 14.49 | 1228  | 942271 | 50.00 | ug/L  | 69 |
| 38) *Chlorobenzene-d5     | 21.11 | 1896  | 744199 | 50.00 | ug/L  | 95 |
| 44) Toluene-d8            | 18.03 | 1585  | 874177 | 53.60 | ug/L  | 92 |
| 49) Bromofluorobenzene    | 23.50 | 2137  | 612869 | 48.91 | ug/L  | 96 |

\* Compound is ISID





Data File: >E1919::DU  
Name: METHOD BLANK  
Misc: 5.0ML

Quant Output File: ^E1919::A1  
Instrument ID: HP00505

Id File: ID\_SEE::UB  
Title: HP VOA Standards for 5 Point Calibration Curve Rev. E  
Last Calibration: 950220 15:41  
Last Qual Time: <none>

Operator ID: LAURA  
Quant Time : 950303 10:05  
Injected at: 950303 09:19

## NORTHEASTERN ANALYTICAL CORPORATION

## VOLATILE METHOD BLANK SUMMARY SHEET

LAB SAMPLE ID:METHOD BLANK

LAB FILE ID:&gt;E1934

MATRIX:AQUEOUS

LEVEL:LOW

DATE ANALYZED:03/06/95

TIME ANALYZED:09:14

This method blank applies to the following Samples, MS and MSD

| LAB SAMPLE ID  | LAB FILE ID | INJECT DATE AND TIME |
|----------------|-------------|----------------------|
| 95L-0626-6     | >E1943      | 03/06/95 16:49       |
| 95L-0626-16    | >E1942      | 03/06/95 15:40       |
| 95L-0626-2MS   | >E1939      | 03/06/95 13:14       |
| 95L-0626-2MSD  | >E1940      | 03/06/95 14:01       |
| QC SPIKE S-400 | >E1941      | 03/06/95 14:44       |

## NORTHEASTERN ANALYTICAL CORPORATION

## METHOD BLANK RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES Date Analyzed: 06-MAR-95  
 NAC Job Number: L950626 Date Received: NA  
 Lab Sample ID: 06-MAR-95 Client ID: BLANK  
 File ID: E1934

| PARAMETER                 | RESULT | MDL | QUAL | UNITS |
|---------------------------|--------|-----|------|-------|
| Chloromethane             | ND     | 3.7 |      | ug/kg |
| Bromomethane              | ND     | 6.1 |      | ug/kg |
| Vinyl Chloride            | ND     | 5   |      | ug/kg |
| Chloroethane              | ND     | 3.2 |      | ug/kg |
| Methylene Chloride        | ND     | 3.1 |      | ug/kg |
| Acrolein                  | ND     | 50  |      | ug/kg |
| Acrylonitrile             | ND     | 50  |      | ug/kg |
| Acetone                   | ND     | 6.9 |      | ug/kg |
| Carbon Disulfide          | ND     | 2.4 |      | ug/kg |
| Trichlorofluoromethane    | ND     | 2.1 |      | ug/kg |
| 1,1-Dichloroethene        | ND     | 2.5 |      | ug/kg |
| 1,1-Dichloroethane        | ND     | 2.2 |      | ug/kg |
| t-Butyl Alcohol           | ND     | 50  |      | ug/kg |
| Trans-1,2-Dichloroethene  | ND     | 2.8 |      | ug/kg |
| Chloroform                | ND     | 2.6 |      | ug/kg |
| Methyl t-Butyl Ether      | ND     | 4.1 |      | ug/kg |
| 1,2-Dichloroethane        | ND     | 1.9 |      | ug/kg |
| Isopropyl Ether           | ND     | 5   |      | ug/kg |
| 2-Butanone                | ND     | 10  |      | ug/kg |
| 1,1,1-Trichloroethane     | ND     | 3.8 |      | ug/kg |
| Carbon Tetrachloride      | ND     | 2.7 |      | ug/kg |
| Vinyl Acetate             | ND     | 4.7 |      | ug/kg |
| Bromodichloromethane      | ND     | 3.4 |      | ug/kg |
| 1,2-Dichloropropane       | ND     | 4.4 |      | ug/kg |
| cis-1,3-Dichloropropene   | ND     | 4.2 |      | ug/kg |
| Trichloroethene           | ND     | 2.3 |      | ug/kg |
| Dibromochloromethane      | ND     | 2.9 |      | ug/kg |
| 1,1,2-Trichloroethane     | ND     | 3.5 |      | ug/kg |
| Benzene                   | ND     | 4.2 |      | ug/kg |
| trans-1,3-Dichloropropene | ND     | 2.8 |      | ug/kg |
| 2-Chloroethylvinylether   | ND     | 3.7 |      | ug/kg |
| Bromoform                 | ND     | 2.6 |      | ug/kg |
| 2-Hexanone                | ND     | 6.3 |      | ug/kg |
| 4-Methyl-2-Pentanone      | ND     | 4.5 |      | ug/kg |
| Tetrachloroethene         | ND     | 2.1 |      | ug/kg |
| 1,1,2,2-Tetrachloroethane | ND     | 3.7 |      | ug/kg |
| Toluene                   | ND     | 2.8 |      | ug/kg |
| Chlorobenzene             | ND     | 2.3 |      | ug/kg |
| Ethylbenzene              | ND     | 2.8 |      | ug/kg |
| Styrene                   | ND     | 2.4 |      | ug/kg |
| Xylenes (Total)           | ND     | 5.3 |      | ug/kg |
| Naphthalene               | ND     | 3.4 |      | ug/kg |

ND - Not detected at or below the MDL

NORTHEASTERN ANALYTICAL CORPORATION  
VOLATILE UNKNOWN IDENTIFICATION

LAB SAMPLE ID:METHOD BLANK

LAB FILE ID:&gt;E1934

DATE RECEIVED:NA

DATE ANALYZED:950306

SAMPLE WT/VOL:5.0ML

LEVEL:LOW

COMPOUND

RET TIME(MIN)

CONC

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NONE FOUND

## QUANT REPORT

Page 1

Operator ID: LAURA  
Output File: ^E1934::A1  
Data File: >E1934::D2  
Name: METHOD BLANK  
Misc: 5.UML

Quant Rev: 7      Quant Time: 950306 09:59  
                  Injected at: 950306 09:14  
Dilution Factor: 1.00000  
Instrument ID: HPDOS05

ID File: ID\_SEE::DB

Title: HP VOA Standards for 5 Point Calibration Curve Rev. E

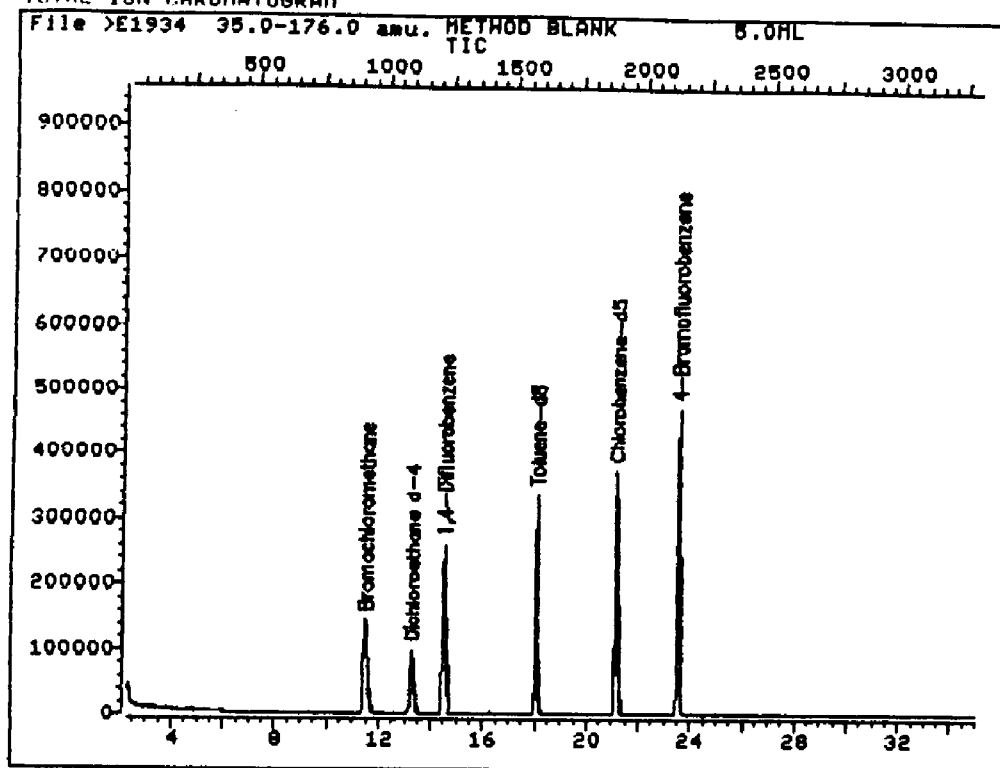
Last Calibration: 950220 15:41

Last Qcal Time: &lt;none&gt;

| Compound                  | R.T.  | Scan# | Area   | Conc  | Units | q  |
|---------------------------|-------|-------|--------|-------|-------|----|
| 1) *Bromochloromethane    | 11.46 | 923   | 223157 | 50.00 | ug/L  | 63 |
| 17) 1,2-Dichloroethane-d4 | 13.25 | 1103  | 263379 | 53.18 | ug/L  | 75 |
| 20) *1,4-Difluorobenzene  | 14.48 | 1227  | 955903 | 50.00 | ug/L  | 68 |
| 38) *Chlorobenzene-d5     | 21.11 | 1896  | 740832 | 50.00 | ug/L  | 95 |
| 44) Toluene-d8            | 18.03 | 1585  | 879598 | 54.17 | ug/L  | 90 |
| 49) Bromofluorobenzene    | 23.49 | 2136  | 643099 | 51.56 | ug/L  | 99 |

\* Compound is ISTD

## TOTAL ION CHROMATOGRAM



Data File: &gt;E1934::D2

Name: METHOD BLANK

Misc: 5.0ML

Quant Output File: ^E1934::A1

Instrument ID: HPDQS05

Id File: ID\_SEE::DB

Title: HP VOA Standards for 5 Point Calibration Curve Rev. E

Last Calibration: 950220 15:41

Last Qcal Time: &lt;none&gt;

Operator ID: LAURA

Quant Time : 950306 09:59

Injected at: 950306 09:14

## NORTHEASTERN ANALYTICAL CORPORATION

## VOLATILE METHOD BLANK SUMMARY SHEET

**FILE COPY**

LAB SAMPLE ID:METHOD BLANK

LAB FILE ID:&gt;E1946

MATRIX:AQUEOUS

LEVEL:LOW

DATE ANALYZED:03/06/95

TIME ANALYZED:19:04

This method blank applies to the following Samples, MS and MSD

| LAB SAMPLE ID | LAB FILE ID | INJECT DATE AND TIME |
|---------------|-------------|----------------------|
| 95L-0626-9    | >E1951      | 03/06/95 22:52       |
| 95L-0626-10   | >E1952      | 03/06/95 23:36       |
| 95L-0626-11   | >E1953      | 03/07/95 00:19       |
| 95L-0626-12   | >E1954      | 03/07/95 01:04       |

## NORTHEASTERN ANALYTICAL CORPORATION

## METHOD BLANK RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES Date Analyzed: 06-MAR-95  
 NAC Job Number: L950626 Date Received: NA  
 Lab Sample ID: 06-MAR-95 Client ID: BLANK  
 File ID: E1946

| PARAMETER                 | RESULT | MDL | QUAL | UNITS |
|---------------------------|--------|-----|------|-------|
| Chloromethane             | ND     | 3.7 |      | ug/kg |
| Bromomethane              | ND     | 6.1 |      | ug/kg |
| Vinyl Chloride            | ND     | 5   |      | ug/kg |
| Chloroethane              | ND     | 3.2 |      | ug/kg |
| Methylene Chloride        | ND     | 3.1 |      | ug/kg |
| Acrolein                  | ND     | 50  |      | ug/kg |
| Acrylonitrile             | ND     | 50  |      | ug/kg |
| Acetone                   | ND     | 6.9 |      | ug/kg |
| Carbon Disulfide          | ND     | 2.4 |      | ug/kg |
| Trichlorofluoromethane    | ND     | 2.1 |      | ug/kg |
| 1,1-Dichloroethene        | ND     | 2.5 |      | ug/kg |
| 1,1-Dichloroethane        | ND     | 2.2 |      | ug/kg |
| t-Butyl Alcohol           | ND     | 50  |      | ug/kg |
| Trans-1,2-Dichloroethene  | ND     | 2.8 |      | ug/kg |
| Chloroform                | ND     | 2.6 |      | ug/kg |
| Methyl t-Butyl Ether      | ND     | 4.1 |      | ug/kg |
| 1,2-Dichloroethane        | ND     | 1.9 |      | ug/kg |
| Isopropyl Ether           | ND     | 5   |      | ug/kg |
| 2-Butanone                | ND     | 10  |      | ug/kg |
| 1,1,1-Trichloroethane     | ND     | 3.8 |      | ug/kg |
| Carbon Tetrachloride      | ND     | 2.7 |      | ug/kg |
| Vinyl Acetate             | ND     | 4.7 |      | ug/kg |
| Bromodichloromethane      | ND     | 3.4 |      | ug/kg |
| 1,2-Dichloropropane       | ND     | 4.4 |      | ug/kg |
| cis-1,3-Dichloropropene   | ND     | 4.2 |      | ug/kg |
| Trichloroethene           | ND     | 2.3 |      | ug/kg |
| Dibromochloromethane      | ND     | 2.9 |      | ug/kg |
| 1,1,2-Trichloroethane     | ND     | 3.5 |      | ug/kg |
| Benzene                   | ND     | 4.2 |      | ug/kg |
| trans-1,3-Dichloropropene | ND     | 2.8 |      | ug/kg |
| 2-Chloroethylvinylether   | ND     | 3.7 |      | ug/kg |
| Bromoform                 | ND     | 2.6 |      | ug/kg |
| 2-Hexanone                | ND     | 6.3 |      | ug/kg |
| 4-Methyl-2-Pentanone      | ND     | 4.5 |      | ug/kg |
| Tetrachloroethene         | ND     | 2.1 |      | ug/kg |
| 1,1,2,2-Tetrachloroethane | ND     | 3.7 |      | ug/kg |
| Toluene                   | ND     | 2.8 |      | ug/kg |
| Chlorobenzene             | ND     | 2.3 |      | ug/kg |
| Ethylbenzene              | ND     | 2.8 |      | ug/kg |
| Styrene                   | ND     | 2.4 |      | ug/kg |
| Xylenes (Total)           | ND     | 5.3 |      | ug/kg |
| Naphthalene               | ND     | 3.4 |      | ug/kg |

ND - Not detected at or below the MDL



NORTHEASTERN ANALYTICAL CORPORATION  
VOLATILE UNKNOWN IDENTIFICATION

LAB SAMPLE ID:METHOD BLANK

LAB FILE ID: &gt;E1946

DATE RECEIVED:NA

DATE ANALYZED:950306

SAMPLE WT/VOL:5.0ML

LEVEL:LOW

COMPOUND

RET TIME(MIN)

CUNC

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NONE FOUND

## QUANT REPORT

Page 1

Operator ID: LAURA  
Output File: ^E1946::A1  
Data File: >E1946::U2  
Name: METHOD BLANK  
Misc: 5.UML

Quant Rev: 2      Quant Time: 950306 19:49  
                  Injected at: 950306 19:04  
Dilution Factor: 1.00000  
Instrument ID: HPD0505

ID File: ID\_SEE::DB

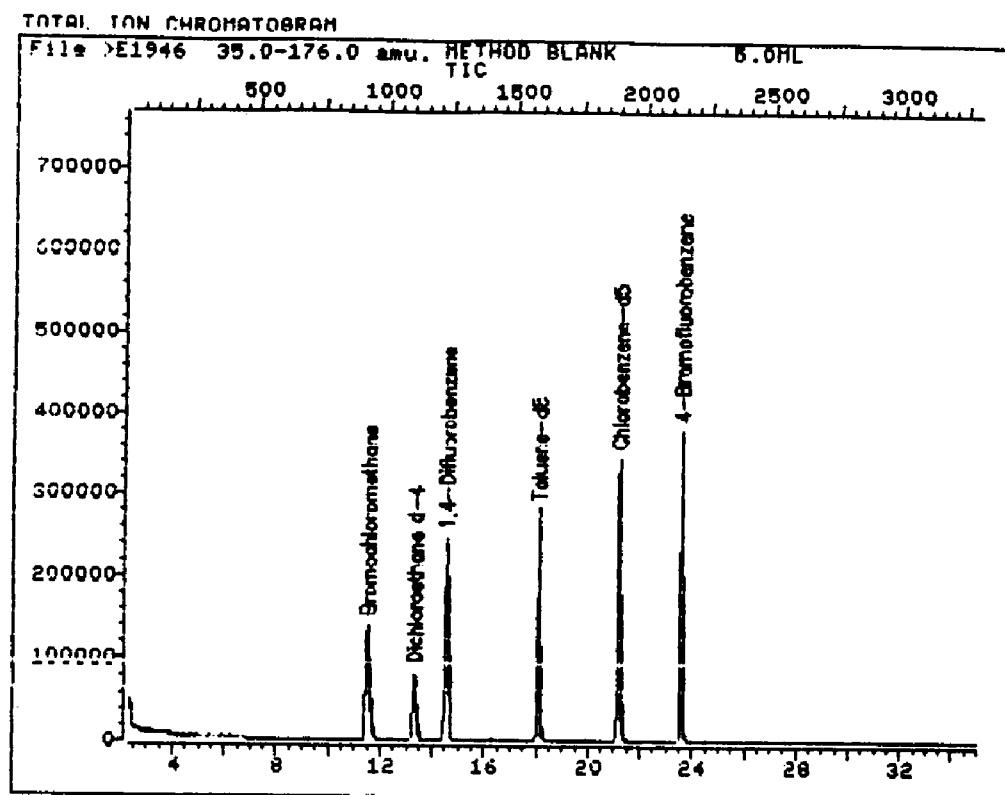
Title: HP VOA Standards for 5 Point Calibration Curve Rev. E

Last Calibration: 950220 15:41

Last Qual Time: &lt;none&gt;

|     | Compound              | R.T.  | Scan# | Area   | Conc  | Units | q  |
|-----|-----------------------|-------|-------|--------|-------|-------|----|
| 1)  | *Bromochloromethane   | 11.49 | 926   | 208548 | 50.00 | ug/L  | 61 |
| 17) | 1,2-Dichloroethane-d4 | 13.29 | 1107  | 210203 | 45.42 | ug/L  | 77 |
| 20) | *1,4-Difluorobenzene  | 14.51 | 1230  | 900008 | 50.00 | ug/L  | 69 |
| 38) | *Chlorobenzene-d5     | 21.13 | 1898  | 694930 | 50.00 | ug/L  | 94 |
| 44) | Toluene-d8            | 18.04 | 1586  | 740724 | 48.63 | ug/L  | 91 |
| 49) | Bromofluorobenzene    | 23.52 | 2139  | 516733 | 44.16 | ug/L  | 97 |

\* Compound is ISID



Data File: >E1946::D2  
Name: METHOD BLANK  
Misc: 5.0ML

Quant Output File: ^E1946::A1  
Instrument ID: HPD0505

Id File: ID\_SEE::DB  
Title: HP VOA Standards for 5 Point Calibration Curve Rev. E  
Last Calibration: 950220 15:41 Last Qual Time: <none>

Operator ID: LAURA  
Quant Time : 950306 19:49  
Injected at: 950306 19:04

## NORTHEASTERN ANALYTICAL CORPORATION

## VOLATILE METHOD BLANK SUMMARY SHEET

LAB SAMPLE ID:METHOD BLANK

LAB FILE ID:&gt;E1957

MATRIX:AQUEOUS

LEVEL:LOW

DATE ANALYZED:03/07/95

TIME ANALYZED:09:06

This method blank applies to the following Samples, MS and MSD

| LAB SAMPLE ID | LAB FILE ID | INJECT DATE AND TIME |
|---------------|-------------|----------------------|
| 95L-0626-8    | >E1958      | 03/07/95 10:09       |
| 95L-0626-13   | >E1960      | 03/07/95 24:03       |
| 95L-0626-14   | >E1962      | 03/07/95 13:48       |
| 95L-0626-11R  | >E1959      | 03/07/95 11:04       |

## NORTHEASTERN ANALYTICAL CORPORATION

## METHOD BLANK RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES Date Analyzed: 07-MAR-95  
 NAC Job Number: L950626 Date Received: NA  
 Lab Sample ID: 07-MAR-95 Client ID: BLANK  
 File ID: E1957

| PARAMETER                 | RESULT | MDL | QUAL | UNITS |
|---------------------------|--------|-----|------|-------|
| Chloromethane             | ND     | 3.7 |      | ug/kg |
| Bromomethane              | ND     | 6.1 |      | ug/kg |
| Vinyl Chloride            | ND     | 5   |      | ug/kg |
| Chloroethane              | ND     | 3.2 |      | ug/kg |
| Methylene Chloride        | ND     | 3.1 |      | ug/kg |
| Acrolein                  | ND     | 50  |      | ug/kg |
| Acrylonitrile             | ND     | 50  |      | ug/kg |
| Acetone                   | ND     | 6.9 |      | ug/kg |
| Carbon Disulfide          | ND     | 2.4 |      | ug/kg |
| Trichlorofluoromethane    | ND     | 2.1 |      | ug/kg |
| 1,1-Dichloroethene        | ND     | 2.5 |      | ug/kg |
| 1,1-Dichloroethane        | ND     | 2.2 |      | ug/kg |
| t-Butyl Alcohol           | ND     | 50  |      | ug/kg |
| Trans-1,2-Dichloroethene  | ND     | 2.8 |      | ug/kg |
| Chloroform                | ND     | 2.6 |      | ug/kg |
| Methyl t-Butyl Ether      | ND     | 4.1 |      | ug/kg |
| 1,2-Dichloroethane        | ND     | 1.9 |      | ug/kg |
| Isopropyl Ether           | ND     | 5   |      | ug/kg |
| 2-Butanone                | ND     | 10  |      | ug/kg |
| 1,1,1-Trichloroethane     | ND     | 3.8 |      | ug/kg |
| Carbon Tetrachloride      | ND     | 2.7 |      | ug/kg |
| Vinyl Acetate             | ND     | 4.7 |      | ug/kg |
| Bromodichloromethane      | ND     | 3.4 |      | ug/kg |
| 1,2-Dichloropropane       | ND     | 4.4 |      | ug/kg |
| cis-1,3-Dichloropropene   | ND     | 4.2 |      | ug/kg |
| Trichloroethene           | ND     | 2.3 |      | ug/kg |
| Dibromochloromethane      | ND     | 2.9 |      | ug/kg |
| 1,1,2-Trichloroethane     | ND     | 3.5 |      | ug/kg |
| Benzene                   | ND     | 4.2 |      | ug/kg |
| trans-1,3-Dichloropropene | ND     | 2.8 |      | ug/kg |
| 2-Chloroethylvinylether   | ND     | 3.7 |      | ug/kg |
| Bromoform                 | ND     | 2.6 |      | ug/kg |
| 2-Hexanone                | ND     | 6.3 |      | ug/kg |
| 4-Methyl-2-Pentanone      | ND     | 4.5 |      | ug/kg |
| Tetrachloroethene         | ND     | 2.1 |      | ug/kg |
| 1,1,2,2-Tetrachloroethane | ND     | 3.7 |      | ug/kg |
| Toluene                   | ND     | 2.8 |      | ug/kg |
| Chlorobenzene             | ND     | 2.3 |      | ug/kg |
| Ethylbenzene              | ND     | 2.8 |      | ug/kg |
| Styrene                   | ND     | 2.4 |      | ug/kg |
| Xylenes (Total)           | ND     | 5.3 |      | ug/kg |
| Naphthalene               | ND     | 3.4 |      | ug/kg |

ND - Not detected at or below the MDL

NORTHEASTERN ANALYTICAL CORPORATION  
VOLATILE UNKNOWN IDENTIFICATION

LAB SAMPLE ID:METHOD BLANK

LAB FILE ID: &gt;E1957

DATE RECEIVED:NA

DATE ANALYZED:950307

SAMPLE WT/VOL:5.0ML

LEVEL:LOW

COMPOUND

RET TIME(MIN)

CUNC

---

NONE FOUND

## QUANT REPORT

Page 1

Operator ID: LAURA  
Output File: ^E1957::A1  
Data File: >E1957::D3  
Name: METHOD BLANK  
Misc: 5.0ML

Quant Rev: 7      Quant Time: 950307 09:52  
                  Injected at: 950307 09:06  
Dilution Factor: 1.00000  
Instrument ID: HPD0505

ID File: ID\_SEE::DB

Title: HP VOA Standards for 5 Point Calibration Curve Rev. E

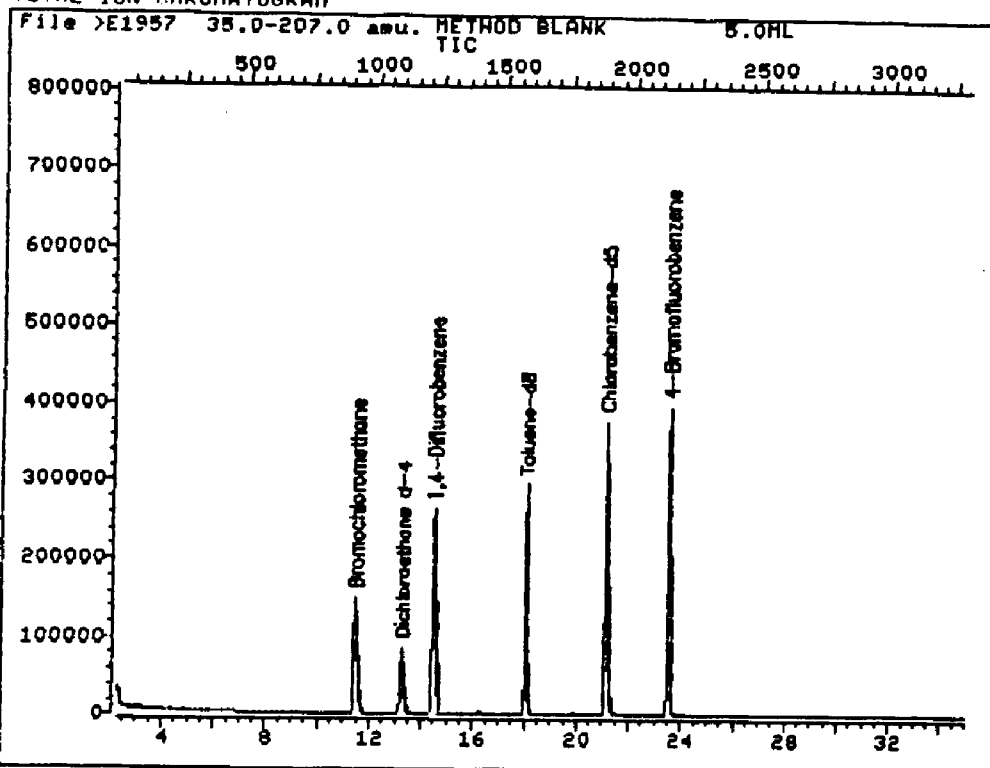
Last Calibration: 950220 15:41

Last Qcal Time: &lt;none&gt;

| Compound                  | R.T.  | Scan# | Area    | Conc  | Units | q  |
|---------------------------|-------|-------|---------|-------|-------|----|
| 1) *Bromochloromethane    | 11.45 | 922   | 224718  | 50.00 | ug/L  | 64 |
| 17) 1,2-Dichloroethane-d4 | 13.25 | 1103  | 221387  | 44.39 | ug/L  | 76 |
| 20) *1,4-Difluorobenzene  | 14.48 | 1227  | 962973  | 50.00 | ug/L  | 69 |
| 38) *Chlorobenzene-d5     | 21.11 | 1896  | 754246  | 50.00 | ug/L  | 96 |
| 44) Toluene-d8            | 18.02 | 1584  | 768538  | 46.49 | ug/L  | 88 |
| 49) Bromofluorobenzene    | 23.49 | 2136  | 563784M | 44.39 | ug/L  | 99 |

\* Compound is ISID

## TOTAL ION CHROMATOGRAM



Data File: &gt;E1957::D3

Name: METHAD BLANK

Misc: 5.0ML

Quant Output File: ^E1957::A1

Instrument ID: HP00S05

Id File: ID\_SEE::DB

Title: HP VOA Standards for 5 Point Calibration Curve Rev. E

Last Calibration: 950220 15:41

Last Qual Time: &lt;none&gt;

Operator ID: LAURA

Quant Time : 950307 09:52

Injected at: 950307 09:06



## NORTHEASTERN ANALYTICAL CORPORATION

## VOLATILE SOIL SURROGATE SPIKE PERCENT RECOVERY

\* INDICATES RECOVERY OUTSIDE OF RANGE

| DATA FILE | DATE     | SAMPLE ID    | TOLUENE-88<br>(81-117) | BROMOFLUORO<br>BENZENE<br>(74-121) | 1,2-DICHLORO<br>ETHANE<br>(70-121) |
|-----------|----------|--------------|------------------------|------------------------------------|------------------------------------|
| >E1923    | 03/03/95 | 95L-0626-1   | 116                    | 98                                 | 109                                |
| >E1921    | 03/03/95 | 95L-0626-2   | 114                    | 101                                | 106                                |
| >E1925    | 03/03/95 | 95L-0626-3   | 133*                   | 103                                | 117                                |
| >E1927    | 03/03/95 | 95L-0626-3R  | 135*                   | 115                                | 124*                               |
| >E1926    | 03/03/95 | 95L-0626-4   | 94                     | 74                                 | 90                                 |
| >E1931    | 03/03/95 | 95L-0626-5   | 108                    | 87                                 | 100                                |
| >E1943    | 03/06/95 | 95L-0626-6   | 93                     | 81                                 | 88                                 |
| >E1930    | 03/03/95 | 95L-0626-7   | 102                    | 93                                 | 98                                 |
| >E1958    | 03/07/95 | 95L-0626-8   | 98                     | 89                                 | 94                                 |
| >E1951    | 03/06/95 | 95L-0626-9   | 113                    | 88                                 | 108                                |
| >E1952    | 03/06/95 | 95L-0626-10  | 101                    | 90                                 | 99                                 |
| >E1953    | 03/07/95 | 95L-0626-11  | 91                     | 61*                                | 82                                 |
| >E1959    | 03/07/95 | 95L-0626-11R | 112                    | 79                                 | 97                                 |
| >E1954    | 03/07/95 | 95L-0626-12  | 107                    | 92                                 | 103                                |
| >E1960    | 03/07/95 | 95L-0626-13  | 111                    | 80                                 | 102                                |
| >E1962    | 03/07/95 | 95L-0626-14  | 110                    | 84                                 | 99                                 |
| >A8661    | 03/08/95 | 95L-0626-15  | 106                    | 93                                 | 97                                 |

## NORTHEASTERN ANALYTICAL CORPORATION

## VOLATILE AQUEOUS SURROGATE SPIKE PERCENT RECOVERY

\* INDICATES RECOVERY OUTSIDE OF RANGE

| DATA FILE | DATE     | SAMPLE ID   | TOLUENE-88<br>(88-110) | BROMOFLUORO<br>BENZENE<br>(86-115) | 1,2-DICHLORO<br>ETHANE<br>(76-114) |
|-----------|----------|-------------|------------------------|------------------------------------|------------------------------------|
| >E1942    | 03/06/95 | 95L-0626-16 | 97                     | 87                                 | 90                                 |

## NORTHEASTERN ANALYTICAL CORPORATION

## VOLATILE AQUEOUS SURROGATE SPIKE PERCENT RECOVERY

\* INDICATES RECOVERY OUTSIDE OF RANGE

| DATA FILE | DATE     | SAMPLE ID    | TOLUENE-d8<br>(88-110) | BROMOFLUORO<br>BENZENE<br>(86-115) | 1,2-DICHLORO<br>ETHANE<br>(76-114) |
|-----------|----------|--------------|------------------------|------------------------------------|------------------------------------|
| >A8658    | 03/08/95 | METHOD BLANK | 109                    | 105                                | 100                                |

## NORTHEASTERN ANALYTICAL CORPORATION

## VOLATILE AQUEOUS SURROGATE SPIKE PERCENT RECOVERY

\* INDICATES RECOVERY OUTSIDE OF RANGE

| DATA FILE | DATE     | SAMPLE ID    | TOLUENE- $d_8$<br>(88-110) | BROMOFLUORO<br>BENZENE<br>(86-115) | 1,2-DICHLORO<br>ETHANE<br>(76-114) |
|-----------|----------|--------------|----------------------------|------------------------------------|------------------------------------|
| DE1919    | 03/03/95 | METHOD BLANK | 107                        | 98                                 | 104                                |

## NORTHEASTERN ANALYTICAL CORPORATION

## VOLATILE AQUEOUS SURROGATE SPIKE PERCENT RECOVERY

\* INDICATES RECOVERY OUTSIDE OF RANGE

| DATA FILE | DATE     | SAMPLE ID    | TOLUENE-d8<br>(88-110) | BROMOFLUORO<br>BENZENE<br>(86-115) | 1,2-DICHLORO<br>ETHANE<br>(76-114) |
|-----------|----------|--------------|------------------------|------------------------------------|------------------------------------|
| >E1934    | 03/06/95 | METHOD BLANK | 108                    | 103                                | 106                                |

## NORTHEASTERN ANALYTICAL CORPORATION

## VOLATILE AQUEOUS SURROGATE SPIKE PERCENT RECOVERY

\* INDICATES RECOVERY OUTSIDE OF RANGE

| DATA FILE | DATE     | SAMPLE ID    | TOLUENE-d8<br>(88-110) | BROMOFLUORO<br>BENZENE<br>(86-115) | 1,2-DICHLORO<br>ETHANE<br>(76-114) |
|-----------|----------|--------------|------------------------|------------------------------------|------------------------------------|
| >E1946    | 03/06/95 | METHOD BLANK | 97                     | 88                                 | 91                                 |

## NORTHEASTERN ANALYTICAL CORPORATION

## VOLATILE AQUEOUS SURROGATE SPIKE PERCENT RECOVERY

\* INDICATES RECOVERY OUTSIDE OF RANGE

| DATA FILE | DATE     | SAMPLE ID    | TOLUENE-<br>(88-110) | BROMOFLUORO<br>BENZENE<br>(86-115) | 1,2-DICHLORO<br>ETHANE<br>(76-114) |
|-----------|----------|--------------|----------------------|------------------------------------|------------------------------------|
| >E1957    | 03/07/95 | METHOD BLANK | 93                   | 89                                 | 89                                 |

NORTHEASTERN ANALYTICAL CORPORATION  
VOLATILE SOIL      SURROGATE SPIKE PERCENT RECOVERY

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| DATA FILE | DATE     | SAMPLE ID     | * INDICATES RECOVERY OUTSIDE OF RANGE |                                    |                                    |
|-----------|----------|---------------|---------------------------------------|------------------------------------|------------------------------------|
|           |          |               | TOLUENE-d8<br>(81-117)                | BROMOFLOURO<br>BENZENE<br>(74-121) | 1,2-DICHLORO<br>ETHENE<br>(70-121) |
| >E1939    | 03/06/95 | 95L-0626-2MS  | 103                                   | 98                                 | 95                                 |
| >E1940    | 03/06/95 | 95L-0626-2MSD | 105                                   | 100                                | 101                                |



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NORTHEASTERN ANALYTICAL CORPORATION  
SOIL VOLATILE MATRIX SPIKE AND MATRIX SPIKE DUPLICATE

SAMPLE NAME:95L-0626-2

ANALYSIS DATE://

BATCH NO:400

| COMPOUND           | SPIKE<br>ADDED | MS<br>CONC | MSD<br>CONC | SAM<br>CONC | MS%<br>REC | MSD%<br>REC | RPD |
|--------------------|----------------|------------|-------------|-------------|------------|-------------|-----|
| 1,1-Dichloroethene | 50             | 50         | 52          | ND          | 100        | 104         | 4   |
| Trichloroethene    | 50             | 45         | 46          | ND          | 90         | 92          | 2   |
| Benzene            | 50             | 51         | 51          | ND          | 102        | 102         | 0   |
| Toluene            | 50             | 52         | 52          | ND          | 104        | 104         | 0   |
| Chlorobenzene      | 50             | 50         | 50          | ND          | 100        | 100         | 0   |

UNITS OF CONCENTRATION ARE UG/KG

| QC LIMITS          | %REC   | RPD |
|--------------------|--------|-----|
| 1,1-Dichloroethene | 59-172 | 22  |
| Trichloroethene    | 59-137 | 24  |
| Benzene            | 60-133 | 21  |
| Toluene            | 60-139 | 21  |
| Chlorobenzene      | 66-142 | 21  |

\* INDICATES RECOVERY OUTSIDE OF LIMITS

RPD: 0 OUT OF 5 OUTSIDE OF LIMITS  
SPIKE RECOVERY: 0 OUT OF 10 OUTSIDE OF LIMITS

PAGE 1 OF 1

NORTHEASTERN ANALYTICAL CORPORATION  
VOLATILE SOIL SURROGATE SPIKE PERCENT RECOVERY

| DATA FILE | DATE     | SAMPLE ID     | TOLUENE-d8<br>(81-117) | BROMOFLOURO<br>BENZENE<br>(74-121) | 1,2-DICHLORO<br>ETHENE<br>(70-121) |
|-----------|----------|---------------|------------------------|------------------------------------|------------------------------------|
| >E2027    | 03/10/95 | 95L-0655-1MS  | 94                     | 84                                 | 82                                 |
| >E2028    | 03/10/95 | 95L-0655-1MSD | 107                    | 106                                | 85                                 |

NORTHEASTERN ANALYTICAL CORPORATION  
SOIL VOLATILE MATRIX SPIKE AND MATRIX SPIKE DUPLICATE

SAMPLE NAME: 95L-0655-1

ANALYSIS DATE: 03/10/95

BATCH NO: 401

| COMPOUND           | SPIKE<br>ADDED | MS<br>CONC | MSD<br>CONC | SAM<br>CONC | MS%<br>REC | MSD%<br>REC | RPD |
|--------------------|----------------|------------|-------------|-------------|------------|-------------|-----|
| 1,1-Dichloroethene | 50             | 51         | 55          | ND          | 102        | 110         | 8   |
| Trichloroethene    | 50             | 43         | 48          | ND          | 86         | 96          | 11  |
| Benzene            | 50             | 49         | 55          | ND          | 98         | 110         | 12  |
| Toluene            | 50             | 55         | 58          | 3           | 104        | 110         | 6   |
| Chlorobenzene      | 50             | 49         | 56          | ND          | 98         | 112         | 13  |

UNITS OF CONCENTRATION ARE UG/KG

| QC LIMITS          | %REC   | RPD |
|--------------------|--------|-----|
| 1,1-Dichloroethene | 59-172 | 22  |
| Trichloroethene    | 59-137 | 24  |
| Benzene            | 60-133 | 21  |
| Toluene            | 60-139 | 21  |
| Chlorobenzene      | 66-142 | 21  |

\* INDICATES RECOVERY OUTSIDE OF LIMITS

RPD: 0 OUT OF 5 OUTSIDE OF LIMITS

SPIKE RECOVERY: 0 OUT OF 10 OUTSIDE OF LIMITS

PAGE 1 OF 1

NORTHEASTERN ANALYTICAL CORPORATION  
VOLATILE AQUEOUS SURROGATE SPIKE PERCENT RECOVERY

| DATA FILE | DATE     | SAMPLE ID     | TOLUENE-d8<br>(88-110) | BROMOFLOURO<br>BENZENE<br>(86-115) | 1,2-DICHLORO<br>ETHENE<br>(76-114) |
|-----------|----------|---------------|------------------------|------------------------------------|------------------------------------|
| >E1936    | 03/06/95 | 95L-0682-5MS  | 108                    | 101                                | 105                                |
| >E1937    | 03/06/95 | 95L-0682-5MSD | 105                    | 100                                | 101                                |

NORTHEASTERN ANALYTICAL CORPORATION  
AQUEOUS VOLATILE MATRIX SPIKE AND MATRIX SPIKE DUPLICATE

SAMPLE NAME: 95L-0682-5

ANALYSIS DATE: 03/06/95

BATCH NO: 722

| COMPOUND           | SPIKE<br>ADDED | MS<br>CONC | MSD<br>CONC | SAM<br>CONC | MS%<br>REC | MSD%<br>REC | RPD |
|--------------------|----------------|------------|-------------|-------------|------------|-------------|-----|
| 1,1-Dichloroethene | 50             | 52         | 49          | ND          | 104        | 98          | 6   |
| Trichloroethene    | 50             | 47         | 46          | ND          | 94         | 92          | 2   |
| Benzene            | 50             | 53         | 51          | ND          | 106        | 102         | 4   |
| Toluene            | 50             | 54         | 52          | ND          | 108        | 104         | 4   |
| Chlorobenzene      | 50             | 52         | 49          | ND          | 104        | 98          | 6   |

UNITS OF CONCENTRATION ARE UG/L

| QC LIMITS          | %REC   | RPD |
|--------------------|--------|-----|
| 1,1-Dichloroethene | 61-145 | 14  |
| Trichloroethene    | 71-120 | 14  |
| Benzene            | 76-127 | 11  |
| Toluene            | 76-125 | 13  |
| Chlorobenzene      | 75-130 | 13  |

\* INDICATES RECOVERY OUTSIDE OF LIMITS

RPD: 0 OUT OF 5 OUTSIDE OF LIMITS  
SPIKE RECOVERY: 0 OUT OF 10 OUTSIDE OF LIMITS

NORTHEASTERN ANALYTICAL CORPORATION  
VOLATILE INTERNAL STANDARD SUMMARY SHEET

LAB SAMPLE ID:95L-0626-1

INSTRUMENT ID:A

SAMPLE FILE ID:&gt;E1923

STANDARD FILE ID:&gt;E1918

DATE ANALYZED:03/03/95

TIME ANALYZED:13:20

## INTERNAL STANDARD

|                     | SAM<br>SCAN | STD<br>SCAN | SAMPLE<br>AREA | STAND<br>AREA | UPPER<br>LIMIT | LOWER<br>LIMIT |
|---------------------|-------------|-------------|----------------|---------------|----------------|----------------|
| Bromochloromethane  | 923         | 925         | 169708         | 216908        | 433816         | 108454         |
| 1,4-Difluorobenzene | 1227        | 1229        | 739560         | 883560        | 1767120        | 441780         |
| Chlorobenzene-d5    | 1897        | 1896        | 541347         | 735321        | 1470642        | 367660         |

UPPER LIMIT=STAND AREA X 2  
LOWER LIMIT=STAND AREA/2

NORTHEASTERN ANALYTICAL CORPORATION  
VOLATILE INTERNAL STANDARD SUMMARY SHEET

182

LAB SAMPLE ID:95L-0626-2

INSTRUMENT ID:A

SAMPLE FILE ID:>E1921

STANDARD FILE ID:>E1918

DATE ANALYZED:03/03/95

TIME ANALYZED:11:07

INTERNAL STANDARD

|                     | SAM<br>SCAN | STD<br>SCAN | SAMPLE<br>AREA | STAND<br>AREA | UPPER<br>LIMIT | LOWER<br>LIMIT |
|---------------------|-------------|-------------|----------------|---------------|----------------|----------------|
| Bromochloromethane  | 924         | 925         | 170796         | 216908        | 433816         | 108454         |
| 1,4-Difluorobenzene | 1229        | 1229        | 752514         | 883560        | 1767120        | 441780         |
| Chlorobenzene-d5    | 1897        | 1896        | 593262         | 735321        | 1470642        | 367660         |

UPPER LIMIT=STAND AREA X 2  
LOWER LIMIT=STAND AREA/2

NORTHEASTERN ANALYTICAL CORPORATION  
VOLATILE INTERNAL STANDARD SUMMARY SHEET

LAB SAMPLE ID:95L-0626-3

INSTRUMENT ID:A

SAMPLE FILE ID:&gt;E1925

STANDARD FILE ID:&gt;E1918

DATE ANALYZED:03/03/95

TIME ANALYZED:15:01

## INTERNAL STANDARD

|                     | SAM<br>SCAN | STD<br>SCAN | SAMPLE<br>AREA | STAND<br>AREA | UPPER<br>LIMIT | LOWER<br>LIMIT |
|---------------------|-------------|-------------|----------------|---------------|----------------|----------------|
| Bromochloromethane  | 922         | 925         | 147883         | 216908        | 433816         | 108454         |
| 1,4-Difluorobenzene | 1227        | 1229        | 572768         | 883560        | 1767120        | 441780         |
| Chlorobenzene-d5    | 1897        | 1896        | 384417         | 735321        | 1470642        | 367660         |

UPPER LIMIT=STAND AREA X 2  
LOWER LIMIT=STAND AREA/2



NORTHEASTERN ANALYTICAL CORPORATION  
VOLATILE INTERNAL STANDARD SUMMARY SHEET

LAB SAMPLE ID:95L-0626-3R

INSTRUMENT ID:A

SAMPLE FILE ID:&gt;E1927

STANDARD FILE ID:&gt;E1918

DATE ANALYZED:03/03/95

TIME ANALYZED:16:39

| INTERNAL STANDARD   | SAM<br>SCAN | STD<br>SCAN | SAMPLE<br>AREA | STAND<br>AREA | UPPER<br>LIMIT | LOWER<br>LIMIT |
|---------------------|-------------|-------------|----------------|---------------|----------------|----------------|
| Bromochloromethane  | 924         | 925         | 136344         | 216908        | 433816         | 108454         |
| 1,4-Difluorobenzene | 1227        | 1229        | 565048         | 883560        | 1767120        | 441780         |
| Chlorobenzene-d5    | 1896        | 1896        | 419472         | 735321        | 1470642        | 367660         |

UPPER LIMIT=STAND AREA X 2

LOWER LIMIT=STAND AREA/2

NORTHEASTERN ANALYTICAL CORPORATION  
VOLATILE INTERNAL STANDARD SUMMARY SHEET

LAB SAMPLE ID:95L-0626-4

INSTRUMENT ID:A

SAMPLE FILE ID:&gt;E1926

STANDARD FILE ID:&gt;E1918

DATE ANALYZED:03/03/95

TIME ANALYZED:15:55

| INTERNAL STANDARD   | SAM<br>SCAN | STD<br>SCAN | SAMPLE<br>AREA | STAND<br>AREA | UPPER<br>LIMIT | LOWER<br>LIMIT |
|---------------------|-------------|-------------|----------------|---------------|----------------|----------------|
| Bromochloromethane  | 925         | 925         | 186658         | 216908        | 433816         | 108454         |
| 1,4-Difluorobenzene | 1228        | 1229        | 799466         | 883560        | 1767120        | 441780         |
| Chlorobenzene-d5    | 1897        | 1896        | 574696         | 735321        | 1470642        | 367660         |

UPPER LIMIT=STAND AREA X 2  
LOWER LIMIT=STAND AREA/2

NORTHEASTERN ANALYTICAL CORPORATION  
VOLATILE INTERNAL STANDARD SUMMARY SHEET

186

LAB SAMPLE ID:95L-0626-5

INSTRUMENT ID:A

SAMPLE FILE ID:>E1931

STANDARD FILE ID:>E1918

DATE ANALYZED:03/03/95

TIME ANALYZED:19:42

| INTERNAL STANDARD   | SAM<br>SCAN | STD<br>SCAN | SAMPLE<br>AREA | STAND<br>AREA | UPPER<br>LIMIT | LOWER<br>LIMIT |
|---------------------|-------------|-------------|----------------|---------------|----------------|----------------|
| Bromochloromethane  | 923         | 925         | 147924         | 216908        | 433816         | 108454         |
| 1,4-Difluorobenzene | 1228        | 1229        | 603687         | 883560        | 1767120        | 441780         |
| Chlorobenzene-d5    | 1896        | 1896        | 421174         | 735321        | 1470642        | 367660         |

UPPER LIMIT=STAND AREA X 2  
LOWER LIMIT=STAND AREA/2

NORTHEASTERN ANALYTICAL CORPORATION  
VOLATILE INTERNAL STANDARD SUMMARY SHEET

LAB SAMPLE ID:95L-0626-6

INSTRUMENT ID:A

SAMPLE FILE ID:&gt;E1943

STANDARD FILE ID:&gt;E1933

DATE ANALYZED:03/06/95

TIME ANALYZED:16:49

| INTERNAL STANDARD   | SAM<br>SCAN | STD<br>SCAN | SAMPLE<br>AREA | STAND<br>AREA | UPPER<br>LIMIT | LOWER<br>LIMIT |
|---------------------|-------------|-------------|----------------|---------------|----------------|----------------|
| Bromochloromethane  | 927         | 924         | 171252         | 217436        | 434872         | 108718         |
| 1,4-Difluorobenzene | 1230        | 1227        | 707262         | 955382        | 1910764        | 477691         |
| Chlorobenzene-d5    | 1898        | 1895        | 540814         | 775381        | 1550762        | 387690         |

UPPER LIMIT=STAND AREA X 2  
LOWER LIMIT=STAND AREA/2

NORTHEASTERN ANALYTICAL CORPORATION  
VOLATILE INTERNAL STANDARD SUMMARY SHEET

188

LAB SAMPLE ID:95L-0626-7

INSTRUMENT ID:A

SAMPLE FILE ID:>E1930

STANDARD FILE ID:>E1918

DATE ANALYZED:03/03/95

TIME ANALYZED:18:58

| INTERNAL STANDARD   | SAM<br>SCAN | STD<br>SCAN | SAMPLE<br>AREA | STAND<br>AREA | UPPER<br>LIMIT | LOWER<br>LIMIT |
|---------------------|-------------|-------------|----------------|---------------|----------------|----------------|
| Bromochloromethane  | 921         | 925         | 159395         | 216908        | 433816         | 108454         |
| 1,4-Difluorobenzene | 1227        | 1229        | 708322         | 883560        | 1767120        | 441780         |
| Chlorobenzene-d5    | 1897        | 1896        | 568113         | 735321        | 1470642        | 367660         |

UPPER LIMIT=STAND AREA X 2  
LOWER LIMIT=STAND AREA/2

NORTHEASTERN ANALYTICAL CORPORATION  
VOLATILE INTERNAL STANDARD SUMMARY SHEET

LAB SAMPLE ID:95L-0626-8

INSTRUMENT ID:A

SAMPLE FILE ID:&gt;E1958

STANDARD FILE ID:&gt;E1956

DATE ANALYZED:03/07/95

TIME ANALYZED:10:09

| INTERNAL STANDARD   | SAM<br>SCAN | STD<br>SCAN | SAMPLE<br>AREA | STAND<br>AREA | UPPER<br>LIMIT | LOWER<br>LIMIT |
|---------------------|-------------|-------------|----------------|---------------|----------------|----------------|
| Bromochloromethane  | 921         | 924         | 204925         | 230590        | 461180         | 115295         |
| 1,4-Difluorobenzene | 1226        | 1227        | 869702         | 976467        | 1952934        | 488233         |
| Chlorobenzene-d5    | 1896        | 1895        | 695383         | 795741        | 1591482        | 397870         |

UPPER LIMIT=STAND AREA X 2  
LOWER LIMIT=STAND AREA/2

NORTHEASTERN ANALYTICAL CORPORATION  
VOLATILE INTERNAL STANDARD SUMMARY SHEET

LAB SAMPLE ID:95L-0626-9

INSTRUMENT ID:A

SAMPLE FILE ID:&gt;E1951

STANDARD FILE ID:&gt;E1945

DATE ANALYZED:03/06/95

TIME ANALYZED:22:52

| INTERNAL STANDARD   | SAM<br>SCAN | STD<br>SCAN | SAMPLE<br>AREA | STAND<br>AREA | UPPER<br>LIMIT | LOWER<br>LIMIT |
|---------------------|-------------|-------------|----------------|---------------|----------------|----------------|
| Bromochloromethane  | 924         | 924         | 166308         | 202181        | 404362         | 101090         |
| 1,4-Difluorobenzene | 1228        | 1227        | 623803         | 878309        | 1756618        | 439155         |
| Chlorobenzene-d5    | 1896        | 1895        | 451839         | 692786        | 1385572        | 346393         |

UPPER LIMIT=STAND AREA X 2  
LOWER LIMIT=STAND AREA/2

NORTHEASTERN ANALYTICAL CORPORATION  
VOLATILE INTERNAL STANDARD SUMMARY SHEET

LAB SAMPLE ID:95L-0626-10

INSTRUMENT ID:A

SAMPLE FILE ID:&gt;E1952

STANDARD FILE ID:&gt;E1945

DATE ANALYZED:03/06/95

TIME ANALYZED:23:36

| INTERNAL STANDARD   | SAM<br>SCAN | STD<br>SCAN | SAMPLE<br>AREA | STAND<br>AREA | UPPER<br>LIMIT | LOWER<br>LIMIT |
|---------------------|-------------|-------------|----------------|---------------|----------------|----------------|
| Bromochloromethane  | 924         | 924         | 168128         | 202181        | 404362         | 101090         |
| 1,4-Difluorobenzene | 1228        | 1227        | 706832         | 878309        | 1756618        | 439155         |
| Chlorobenzene-d5    | 1898        | 1895        | 574394         | 692786        | 1385572        | 346393         |

UPPER LIMIT=STAND AREA X 2  
LOWER LIMIT=STAND AREA/2



NORTHEASTERN ANALYTICAL CORPORATION  
VOLATILE INTERNAL STANDARD SUMMARY SHEET

LAB SAMPLE ID:95L-0626-11

INSTRUMENT ID:A

SAMPLE FILE ID:&gt;E1953

STANDARD FILE ID:&gt;E1945

DATE ANALYZED:03/07/95

TIME ANALYZED:00:19

| INTERNAL STANDARD   | SAM<br>SCAN | STD<br>SCAN | SAMPLE<br>AREA | STAND<br>AREA | UPPER<br>LIMIT | LOWER<br>LIMIT |
|---------------------|-------------|-------------|----------------|---------------|----------------|----------------|
| Bromochloromethane  | 924         | 924         | 169225         | 202181        | 404362         | 101090         |
| 1,4-Difluorobenzene | 1228        | 1227        | 629124         | 878309        | 1756618        | 439155         |
| Chlorobenzene-d5    | 1897        | 1895        | 390965         | 692786        | 1385572        | 346393         |

UPPER LIMIT=STAND AREA X 2  
LOWER LIMIT=STAND AREA/2

NORTHEASTERN ANALYTICAL CORPORATION  
VOLATILE INTERNAL STANDARD SUMMARY SHEET

LAB SAMPLE ID:95L-0626-11R

INSTRUMENT ID:A

SAMPLE FILE ID:&gt;E1959

STANDARD FILE ID:&gt;E1956

DATE ANALYZED:03/07/95

TIME ANALYZED:11:04

| INTERNAL STANDARD   | SAM<br>SCAN | STD<br>SCAN | SAMPLE<br>AREA | STAND<br>AREA | UPPER<br>LIMIT | LOWER<br>LIMIT |
|---------------------|-------------|-------------|----------------|---------------|----------------|----------------|
| Bromochloromethane  | 922         | 924         | 169189         | 230590        | 461180         | 115295         |
| 1,4-Difluorobenzene | 1227        | 1227        | 611810         | 976467        | 1952934        | 488233         |
| Chlorobenzene-d5    | 1896        | 1895        | 374156*        | 795741        | 1591482        | 397870         |

UPPER LIMIT=STAND AREA X 2  
LOWER LIMIT=STAND AREA/2

\* INDICATES AREA OUTSIDE OF LIMITS

NORTHEASTERN ANALYTICAL CORPORATION  
VOLATILE INTERNAL STANDARD SUMMARY SHEET

LAB SAMPLE ID:95L-0626-12

INSTRUMENT ID:A

SAMPLE FILE ID:&gt;E1954

STANDARD FILE ID:&gt;E1945

DATE ANALYZED:03/07/95

TIME ANALYZED:01:04

## INTERNAL STANDARD

|                     | SAM<br>SCAN | STD<br>SCAN | SAMPLE<br>AREA | STAND<br>AREA | UPPER<br>LIMIT | LOWER<br>LIMIT |
|---------------------|-------------|-------------|----------------|---------------|----------------|----------------|
| Bromochloromethane  | 925         | 924         | 123958         | 202181        | 404362         | 101090         |
| 1,4-Difluorobenzene | 1228        | 1227        | 512103         | 878309        | 1756618        | 439155         |
| Chlorobenzene-d5    | 1897        | 1895        | 372646         | 692786        | 1385572        | 346393         |

UPPER LIMIT=STAND AREA X 2  
LOWER LIMIT=STAND AREA/2

NORTHEASTERN ANALYTICAL CORPORATION  
VOLATILE INTERNAL STANDARD SUMMARY SHEET

LAB SAMPLE ID:95L-0626-13

INSTRUMENT ID:A

SAMPLE FILE ID:&gt;E1960

STANDARD FILE ID:&gt;E1956

DATE ANALYZED:03/07/95

TIME ANALYZED:24:03

| INTERNAL STANDARD   | SAM<br>SCAN | STD<br>SCAN | SAMPLE<br>AREA | STAND<br>AREA | UPPER<br>LIMIT | LOWER<br>LIMIT |
|---------------------|-------------|-------------|----------------|---------------|----------------|----------------|
| Bromochloromethane  | 923         | 924         | 151289         | 230590        | 461180         | 115295         |
| 1,4-Difluorobenzene | 1227        | 1227        | 660505         | 976467        | 1952934        | 488233         |
| Chlorobenzene-d5    | 1896        | 1895        | 441895         | 795741        | 1591482        | 397870         |

UPPER LIMIT=STAND AREA X 2  
LOWER LIMIT=STAND AREA/2

NORTHEASTERN ANALYTICAL CORPORATION  
VOLATILE INTERNAL STANDARD SUMMARY SHEET

196

LAB SAMPLE ID:95L-0626-14

INSTRUMENT ID:A

SAMPLE FILE ID:>E1962

STANDARD FILE ID:>E1956

DATE ANALYZED:03/07/95

TIME ANALYZED:13:48

| INTERNAL STANDARD   | SAM<br>SCAN | STD<br>SCAN | SAMPLE<br>AREA | STAND<br>AREA | UPPER<br>LIMIT | LOWER<br>LIMIT |
|---------------------|-------------|-------------|----------------|---------------|----------------|----------------|
| Bromochloromethane  | 923         | 924         | 159827         | 230590        | 461180         | 115295         |
| 1,4-Difluorobenzene | 1227        | 1227        | 666520         | 976467        | 1952934        | 488233         |
| Chlorobenzene-d5    | 1897        | 1895        | 459155         | 795741        | 1591482        | 397870         |

UPPER LIMIT=STAND AREA X 2  
LOWER LIMIT=STAND AREA/2

NORTHEASTERN ANALYTICAL CORPORATION  
VOLATILE INTERNAL STANDARD SUMMARY SHEET

LAB SAMPLE ID:95L-0626-15

INSTRUMENT ID:A

SAMPLE FILE ID:&gt;A8661

STANDARD FILE ID:&gt;A8652

DATE ANALYZED:03/08/95

TIME ANALYZED:20:34

| INTERNAL STANDARD   | SAM<br>SCAN | STD<br>SCAN | SAMPLE<br>AREA | STAND<br>AREA | UPPER<br>LIMIT | LOWER<br>LIMIT |
|---------------------|-------------|-------------|----------------|---------------|----------------|----------------|
| Bromochloromethane  | 423         | 420         | 86113          | 110339        | 220678         | 55170          |
| 1,4-Difluorobenzene | 549         | 547         | 356148         | 444587        | 889174         | 222294         |
| Chlorobenzene-d5    | 833         | 831         | 250172         | 342161        | 684322         | 171080         |

UPPER LIMIT=STAND AREA X 2  
LOWER LIMIT=STAND AREA/2

NORTHEASTERN ANALYTICAL CORPORATION  
VOLATILE INTERNAL STANDARD SUMMARY SHEET

LAB SAMPLE ID:95L-0626-16

INSTRUMENT ID:A

SAMPLE FILE ID:&gt;E1942

STANDARD FILE ID:&gt;E1933

DATE ANALYZED:03/06/95

TIME ANALYZED:15:40

| INTERNAL STANDARD   | SAM<br>SCAN | STD<br>SCAN | SAMPLE<br>AREA | STAND<br>AREA | UPPER<br>LIMIT | LOWER<br>LIMIT |
|---------------------|-------------|-------------|----------------|---------------|----------------|----------------|
| Bromochloromethane  | 929         | 924         | 230801         | 217436        | 434872         | 108718         |
| 1,4-Difluorobenzene | 1231        | 1227        | 987796         | 955382        | 1910764        | 477691         |
| Chlorobenzene-d5    | 1899        | 1895        | 742165         | 775381        | 1550762        | 387690         |

UPPER LIMIT=STAND AREA X 2  
LOWER LIMIT=STAND AREA/2

NORTHEASTERN ANALYTICAL CORPORATION  
VOLATILE INTERNAL STANDARD SUMMARY SHEET

199

LAB SAMPLE ID:METHOD BLANK

INSTRUMENT ID:A

SAMPLE FILE ID:>A8658

STANDARD FILE ID:>A8652

DATE ANALYZED:03/08/95

TIME ANALYZED:17:46

| INTERNAL STANDARD   | SAM<br>SCAN | STD<br>SCAN | SAMPLE<br>AREA | STAND<br>AREA | UPPER<br>LIMIT | LOWER<br>LIMIT |
|---------------------|-------------|-------------|----------------|---------------|----------------|----------------|
| Bromochloromethane  | 422         | 420         | 118553         | 110339        | 220678         | 55170          |
| 1,4-Difluorobenzene | 548         | 547         | 477233         | 444587        | 889174         | 222294         |
| Chlorobenzene-d5    | 832         | 831         | 355055         | 342161        | 684322         | 171080         |

UPPER LIMIT=STAND AREA X 2  
LOWER LIMIT=STAND AREA/2



NORTHEASTERN ANALYTICAL CORPORATION  
VOLATILE INTERNAL STANDARD SUMMARY SHEET

200

LAB SAMPLE ID:METHOD BLANK

INSTRUMENT ID:A

SAMPLE FILE ID:>E1919

STANDARD FILE ID:>E1918

DATE ANALYZED:03/03/95

TIME ANALYZED:09:19

INTERNAL STANDARD

|                     | SAM<br>SCAN | STD<br>SCAN | SAMPLE<br>AREA | STAND<br>AREA | UPPER<br>LIMIT | LOWER<br>LIMIT |
|---------------------|-------------|-------------|----------------|---------------|----------------|----------------|
| Bromochloromethane  | 924         | 925         | 220906         | 216908        | 433816         | 108454         |
| 1,4-Difluorobenzene | 1228        | 1229        | 942771         | 883560        | 1767120        | 441780         |
| Chlorobenzene-d5    | 1896        | 1896        | 744199         | 735321        | 1470642        | 367660         |

UPPER LIMIT=STAND AREA X 2  
LOWER LIMIT=STAND AREA/2

NORTHEASTERN ANALYTICAL CORPORATION  
VOLATILE INTERNAL STANDARD SUMMARY SHEET

201

LAB SAMPLE ID:METHOD BLANK

INSTRUMENT ID:A

SAMPLE FILE ID:>E1934

STANDARD FILE ID:>E1933

DATE ANALYZED:03/06/95

TIME ANALYZED:09:14

INTERNAL STANDARD

|                     | SAM<br>SCAN | STD<br>SCAN | SAMPLE<br>AREA | STAND<br>AREA | UPPER<br>LIMIT | LOWER<br>LIMIT |
|---------------------|-------------|-------------|----------------|---------------|----------------|----------------|
| Bromochloromethane  | 923         | 924         | 223157         | 217436        | 434872         | 108718         |
| 1,4-Difluorobenzene | 1227        | 1227        | 955903         | 955382        | 1910764        | 477691         |
| Chlorobenzene-d5    | 1896        | 1895        | 740832         | 775381        | 1550762        | 387690         |

UPPER LIMIT=STAND AREA X 2  
LOWER LIMIT=STAND AREA/2

NORTHEASTERN ANALYTICAL CORPORATION  
VOLATILE INTERNAL STANDARD SUMMARY SHEET

LAB SAMPLE ID:METHOD BLANK

INSTRUMENT ID:A

SAMPLE FILE ID:&gt;E1946

STANDARD FILE ID:&gt;E1945

DATE ANALYZED:03/06/95

TIME ANALYZED:19:04

| INTERNAL STANDARD   | SAM<br>SCAN | STD<br>SCAN | SAMPLE<br>AREA | STAND<br>AREA | UPPER<br>LIMIT | LOWER<br>LIMIT |
|---------------------|-------------|-------------|----------------|---------------|----------------|----------------|
| Bromochloromethane  | 926         | 924         | 208548         | 202181        | 404362         | 101090         |
| 1,4-Difluorobenzene | 1230        | 1227        | 900008         | 878309        | 1756618        | 439155         |
| Chlorobenzene-d5    | 1898        | 1895        | 694930         | 692786        | 1385572        | 346393         |

UPPER LIMIT=STAND AREA X 2  
LOWER LIMIT=STAND AREA/2

NORTHEASTERN ANALYTICAL CORPORATION  
VOLATILE INTERNAL STANDARD SUMMARY SHEET

LAB SAMPLE ID:METHOD BLANK

INSTRUMENT ID:A

SAMPLE FILE ID:&gt;E1957

STANDARD FILE ID:&gt;E1956

DATE ANALYZED:03/07/95

TIME ANALYZED:09:06

## INTERNAL STANDARD

|                     | SAM<br>SCAN | STD<br>SCAN | SAMPLE<br>AREA | STAND<br>AREA | UPPER<br>LIMIT | LOWER<br>LIMIT |
|---------------------|-------------|-------------|----------------|---------------|----------------|----------------|
| Bromochloromethane  | 922         | 924         | 224718         | 230590        | 461180         | 115295         |
| 1,4-Difluorobenzene | 1227        | 1227        | 962973         | 976467        | 1952934        | 488233         |
| Chlorobenzene-d5    | 1896        | 1895        | 754246         | 795741        | 1591482        | 397870         |

UPPER LIMIT=STAND AREA X 2  
LOWER LIMIT=STAND AREA/2

NORTHEASTERN ANALYTICAL CORPORATION  
VOLATILE INTERNAL STANDARD SUMMARY SHEET

204

LAB SAMPLE ID:95L-0626-2MS S-400

INSTRUMENT ID:A

SAMPLE FILE ID:>E1939

STANDARD FILE ID:>E1933

DATE ANALYZED:03/06/95

TIME ANALYZED:13:14

INTERNAL STANDARD

|                     | SAM<br>SCAN | STD<br>SCAN | SAMPLE<br>AREA | STAND<br>AREA | UPPER<br>LIMIT | LOWER<br>LIMIT |
|---------------------|-------------|-------------|----------------|---------------|----------------|----------------|
| Bromochloromethane  | 927         | 924         | 181734         | 217436        | 434872         | 108718         |
| 1,4-Difluorobenzene | 1230        | 1227        | 750971         | 955382        | 1910764        | 477691         |
| Chlorobenzene-d5    | 1898        | 1895        | 599476         | 775381        | 1550762        | 387690         |

UPPER LIMIT=STAND AREA X 2  
LOWER LIMIT=STAND AREA/2

NORTHEASTERN ANALYTICAL CORPORATION  
VOLATILE INTERNAL STANDARD SUMMARY SHEET

LAB SAMPLE ID:95L-0626-2MSD S-400

INSTRUMENT ID:A

SAMPLE FILE ID:&gt;E1940

STANDARD FILE ID:&gt;E1933

DATE ANALYZED:03/06/95

TIME ANALYZED:14:01

| INTERNAL STANDARD   | SAM<br>SCAN | STD<br>SCAN | SAMPLE<br>AREA | STAND<br>AREA | UPPER<br>LIMIT | LOWER<br>LIMIT |
|---------------------|-------------|-------------|----------------|---------------|----------------|----------------|
| Bromochloromethane  | 926         | 924         | 193718         | 217436        | 434872         | 108718         |
| 1,4-Difluorobenzene | 1229        | 1227        | 785825         | 955382        | 1910764        | 477691         |
| Chlorobenzene-d5    | 1898        | 1895        | 654490         | 775381        | 1550762        | 387690         |

UPPER LIMIT=STAND AREA X 2  
LOWER LIMIT=STAND AREA/2

NORTHEASTERN ANALYTICAL CORPORATION  
VOLATILE INTERNAL STANDARD SUMMARY SHEET

LAB SAMPLE ID:95L-0655-1MS S-401

INSTRUMENT ID:A

SAMPLE FILE ID:&gt;E2027

STANDARD FILE ID:&gt;E2024

DATE ANALYZED:03/10/95

TIME ANALYZED:11:49

| INTERNAL STANDARD   | SAM<br>SCAN | STD<br>SCAN | SAMPLE<br>AREA | STAND<br>AREA | UPPER<br>LIMIT | LOWER<br>LIMIT |
|---------------------|-------------|-------------|----------------|---------------|----------------|----------------|
| Bromochloromethane  | 923         | 923         | 209476         | 235134        | 470268         | 117567         |
| 1,4-Difluorobenzene | 1228        | 1225        | 879685         | 981580        | 1963160        | 490790         |
| Chlorobenzene-d5    | 1897        | 1894        | 697467         | 780292        | 1560584        | 390146         |

UPPER LIMIT=STAND AREA X 2  
LOWER LIMIT=STAND AREA/2

NORTHEASTERN ANALYTICAL CORPORATION  
VOLATILE INTERNAL STANDARD SUMMARY SHEET

LAB SAMPLE ID:95L-0655-1MSD S-401

INSTRUMENT ID:A

SAMPLE FILE ID:&gt;E2028

STANDARD FILE ID:&gt;E2024

DATE ANALYZED:03/10/95

TIME ANALYZED:24:40

## INTERNAL STANDARD

|                     | SAM<br>SCAN | STD<br>SCAN | SAMPLE<br>AREA | STAND<br>AREA | UPPER<br>LIMIT | LOWER<br>LIMIT |
|---------------------|-------------|-------------|----------------|---------------|----------------|----------------|
| Bromochloromethane  | 923         | 923         | 160560         | 235134        | 470268         | 117567         |
| 1,4-Difluorobenzene | 1227        | 1225        | 645884         | 981580        | 1963160        | 490790         |
| Chlorobenzene-d5    | 1897        | 1894        | 572930         | 780292        | 1560584        | 390146         |

UPPER LIMIT=STAND AREA X 2  
LOWER LIMIT=STAND AREA/2



NORTHEASTERN ANALYTICAL CORPORATION  
VOLATILE INTERNAL STANDARD SUMMARY SHEET

208

LAB SAMPLE ID:95L-0682-5MS A-722

INSTRUMENT ID:A

SAMPLE FILE ID:>E1936

STANDARD FILE ID:>E1933

DATE ANALYZED:03/06/95

TIME ANALYZED:10:49

INTERNAL STANDARD

|                     | SAM<br>SCAN | STD<br>SCAN | SAMPLE<br>AREA | STAND<br>AREA | UPPER<br>LIMIT | LOWER<br>LIMIT |
|---------------------|-------------|-------------|----------------|---------------|----------------|----------------|
| Bromochloromethane  | 927         | 924         | 229894         | 217436        | 434872         | 108718         |
| 1,4-Difluorobenzene | 1230        | 1227        | 965084         | 955382        | 1910764        | 477691         |
| Chlorobenzene-d5    | 1898        | 1895        | 741814         | 775381        | 1550762        | 387690         |

UPPER LIMIT=STAND AREA X 2  
LOWER LIMIT=STAND AREA/2

NORTHEASTERN ANALYTICAL CORPORATION  
VOLATILE INTERNAL STANDARD SUMMARY SHEET

209

LAB SAMPLE ID:95L-0682-5MSD A-722

INSTRUMENT ID:A

SAMPLE FILE ID:>E1937

STANDARD FILE ID:>E1933

DATE ANALYZED:03/06/95

TIME ANALYZED:11:35

INTERNAL STANDARD

|                     | SAM<br>SCAN | STD<br>SCAN | SAMPLE<br>AREA | STAND<br>AREA | UPPER<br>LIMIT | LOWER<br>LIMIT |
|---------------------|-------------|-------------|----------------|---------------|----------------|----------------|
| Bromochloromethane  | 926         | 924         | 229250         | 217436        | 434872         | 108718         |
| 1,4-Difluorobenzene | 1229        | 1227        | 957642         | 955382        | 1910764        | 477691         |
| Chlorobenzene-d5    | 1898        | 1895        | 733443         | 775381        | 1550762        | 387690         |

UPPER LIMIT=STAND AREA X 2  
LOWER LIMIT=STAND AREA/2

## QUANT REPORT

Page 1

Operator ID: LAURA  
 Output File: >E1923::A1  
 Data File: >E1923::D0  
 Name: 95L-0626-1  
 Misc: 5.06R/5.0ML

Quant Rev: / Quant Time: 950303 14:05  
 Injected at: 950303 13:20  
 Dilution Factor: 1.00000  
 Instrument ID: HPDUS05

ID File: IDSSBE::DB

Title: HP VOA Standards for 5 Point Calibration Curve Rev. E

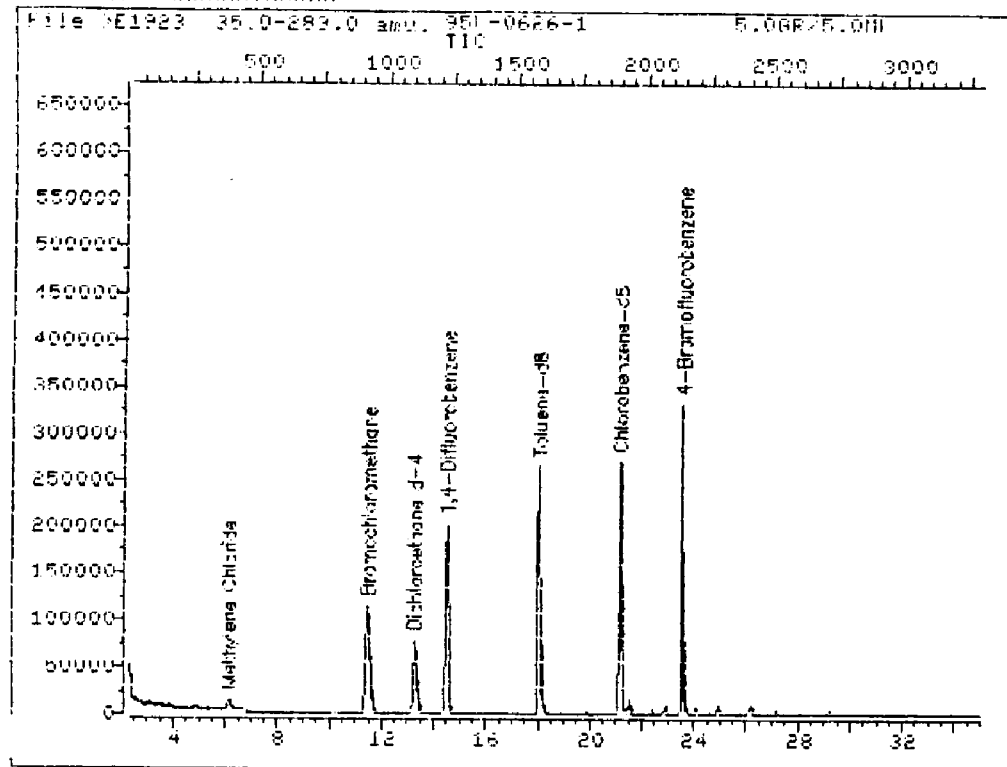
Last Calibration: 950220 15:43

Last Cal Time: <none>

| Compound                   | R.T.  | Scan# | Area   | Conc  | Units | q  |
|----------------------------|-------|-------|--------|-------|-------|----|
| 11) *Bromochloromethane    | 11.46 | 923   | 169708 | 50.00 | UG/KG | 53 |
| 61) Methylene Chloride     | 6.12  | 384   | 22174  | 5.54  | UG/KG | 74 |
| 171) 1,2-Dichloroethane-d4 | 13.25 | 1103  | 205181 | 54.48 | UG/KG | 75 |
| 201) *1,4-Difluorobenzene  | 14.48 | 1227  | 739560 | 50.00 | UG/KG | 69 |
| 381) *Chlorobenzene-d5     | 21.12 | 1897  | 541347 | 50.00 | UG/KG | 96 |
| 441) Toluene-d8            | 18.02 | 1585  | 689057 | 58.08 | UG/KG | 90 |
| 491) Bromofluorobenzene    | 23.50 | 2138  | 442707 | 49.12 | UG/KG | 97 |

Compound is ISID

## TOTAL ION CHROMATOGRAM



Data File: >E1923::D0  
Name: 951-0626-1  
Misc: 5.0GR/5.0ML

Quant Output File: >E1923::A1  
Instrument ID: HPDUS05

Id File: JUSSEE::08  
Title: HP UOA Standards for 5 Point Calibration Curve Rev. E  
Last Calibration: 950220 15:45 Last Qual Time: <none>

Operator ID: LAURA  
Quant Time : 950303 14:05  
Injected at: 950303 13:20

## QUANT REPORT

Page 1

Operator ID: LAURA  
 Output File: <E1921::A1  
 Data File: <E1921::D0  
 Name: 95L-0626-2  
 Misc: 5.0GR/5.0ML

Quant Rev: 2 Quant Time: 950303 11:52  
 Injected at: 950303 11:07  
 Dilution Factor: 1.00000  
 Instrument ID: HPDUS05

ID File: IDSSEE::DE

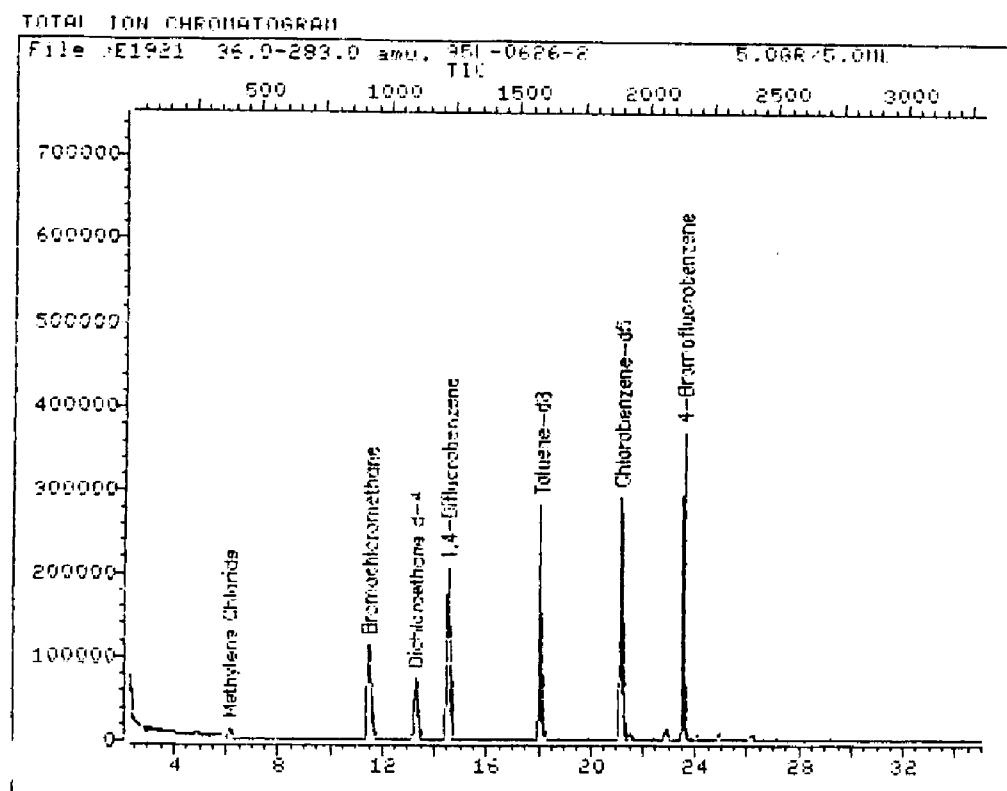
Title: HP VOA Standards for 5 Point Calibration Curve Rev. E

Last Calibration: 950220 15:43

Last Cal Time: <none>

|     | Compound              | R.T.  | Scan# | Area   | Conc  | Units | q  |
|-----|-----------------------|-------|-------|--------|-------|-------|----|
| 1)  | *Bromochloromethane   | 11.47 | 924   | 170796 | 50.00 | UG/KG | 59 |
| 6)  | Methylene Chloride    | 6.12  | 384   | 23989  | 5.95  | UG/KG | 60 |
| 17) | 1,2-Dichloroethane-d4 | 13.26 | 1104  | 200550 | 52.91 | UG/KG | 71 |
| 20) | *1,4-Difluorobenzene  | 14.50 | 1229  | 752514 | 50.00 | UG/KG | 69 |
| 38) | *Chlorobenzene-d5     | 21.12 | 1897  | 593262 | 50.00 | UG/KG | 95 |
| 44) | Toluene-d8            | 18.03 | 1585  | 738808 | 56.82 | UG/KG | 90 |
| 49) | Bromofluorobenzene    | 23.50 | 2137  | 502557 | 50.31 | UG/KG | 98 |

Compound is 1510



Data File: >E1921::D0  
Name: 95L-0626-2  
Misc: 5.06R/5.0ML

Quant Output File: >E1921::A1  
Instrument ID: HPD0505

Id File: IDSSEE::DB  
Title: HP UGA Standards for 5 Point Calibration Curve Rev. E  
Last Calibration: 950220 15:43 Last Cal Time: <none>

Operator ID: LAURA  
Quant Time : 950303 11:52  
Injected at: 950303 11:07

## QUANT REPORT

Page 1

Operator ID: LAURA  
 Output File: ^E1925::A1  
 Data File: >E1925::D0  
 Name: 95L-0626-3  
 Misc: 5.UGR/5.0ML

Quant Rev: 7      Quant Time: 950303 15:47  
 Injected at: 950303 15:01  
 Dilution Factor: 1.00000  
 Instrument ID: HPD0505

ID File: IDSSEE::DB

Title: HP VDA Standards for 5 Point Calibration Curve Rev. E

Last Calibration: 950220 15:43

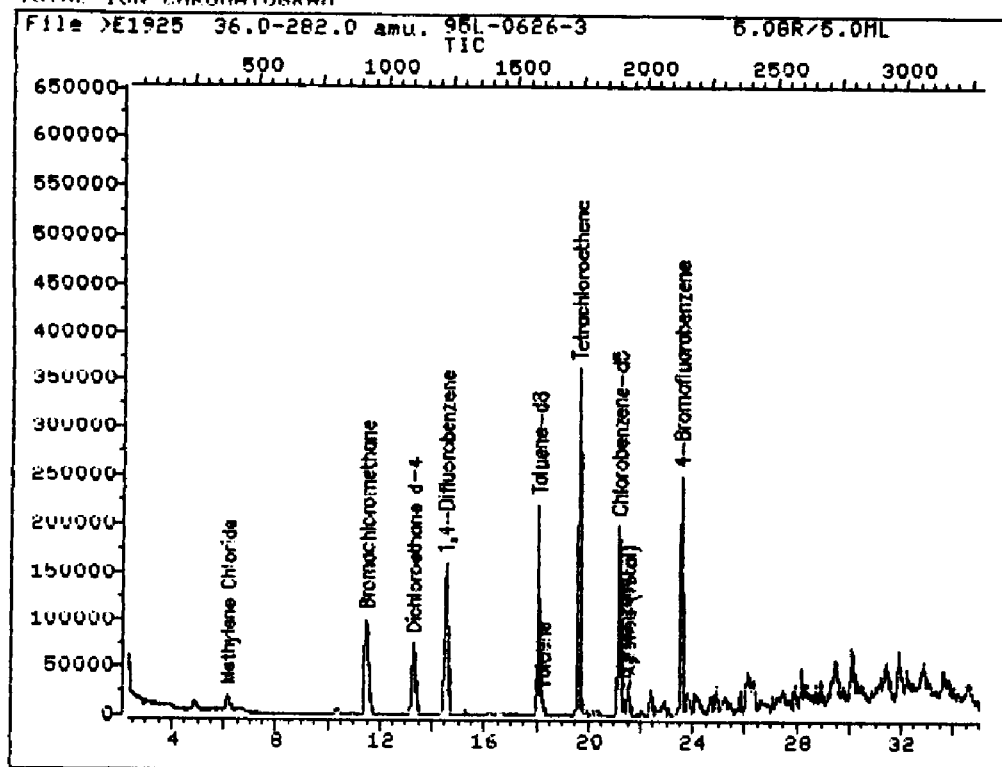
Last Qual Time: &lt;none&gt;

|     | Compound              | R.T.  | Scan# | Area   | Conc  | Units | q  |
|-----|-----------------------|-------|-------|--------|-------|-------|----|
| 1)  | *Bromochloromethane   | 11.46 | 922   | 147883 | 50.00 | UG/KG | 52 |
| 6)  | Methylene Chloride    | 6.12  | 384   | 29785  | 8.54  | UG/KG | 60 |
| 17) | 1,2-Dichloroethane-d4 | 13.26 | 1104  | 192052 | 58.52 | UG/KG | 73 |
| 20) | *1,4-Difluorobenzene  | 14.48 | 1227  | 572768 | 50.00 | UG/KG | 69 |
| 38) | *Chlorobenzene-d5     | 21.13 | 1897  | 384417 | 50.00 | UG/KG | 95 |
| 41) | Tetrachloroethene     | 19.58 | 1741  | 315627 | 96.42 | UG/KG | 97 |
| 43) | Toluene               | 18.20 | 1602  | 27520  | 5.75  | UG/KG | 99 |
| 44) | Toluene-d8            | 18.03 | 1585  | 559313 | 66.39 | UG/KG | 92 |
| 46) | Ethylbenzene          | 21.34 | 1919  | 10723M | 3.39  | UG/KG |    |
| 48) | Xylenes (Total)       | 21.51 | 1936  | 56764M | 14.23 | UG/KG | 92 |
| 49) | Bromofluorobenzene    | 23.51 | 2137  | 333763 | 51.57 | UG/KG | 99 |

\* Compound is ISTD

*6/10* 3-3-15

## TOTAL ION CHROMATOGRAM



Data File: &gt;E1925::D0

Name: 95L-0626-3

Misc: 5.0GR/5.0ML

Quant Output File: ^E1925::A1

Instrument ID: HPD0505

Id File: IDSSEE::DB

Title: HP VOA Standards for 5 Point Calibration Curve Rev. E

Last Calibration: 950220 15:43

Last Qual Time: &lt;none&gt;

Operator ID: LAURA

Quant Time : 950303 15:47

Injected at: 950303 15:01



## QUANT REPORT

Page 1

Operator ID: LAURA  
 Output File: ^E1927::A1  
 Data File: >E1927::D0  
 Name: 95L-0626-3R  
 Misc: 5.UGR/5.0ML

Quant Rev: 7      Quant Time: 950303 17:24  
 Injected at: 950303 16:39  
 Dilution Factor: 1.00000  
 Instrument ID: HPD0505

ID File: IDSSEE::DB

Title: HP VOA Standards for 5 Point Calibration Curve Rev. E

Last Calibration: 950220 15:43

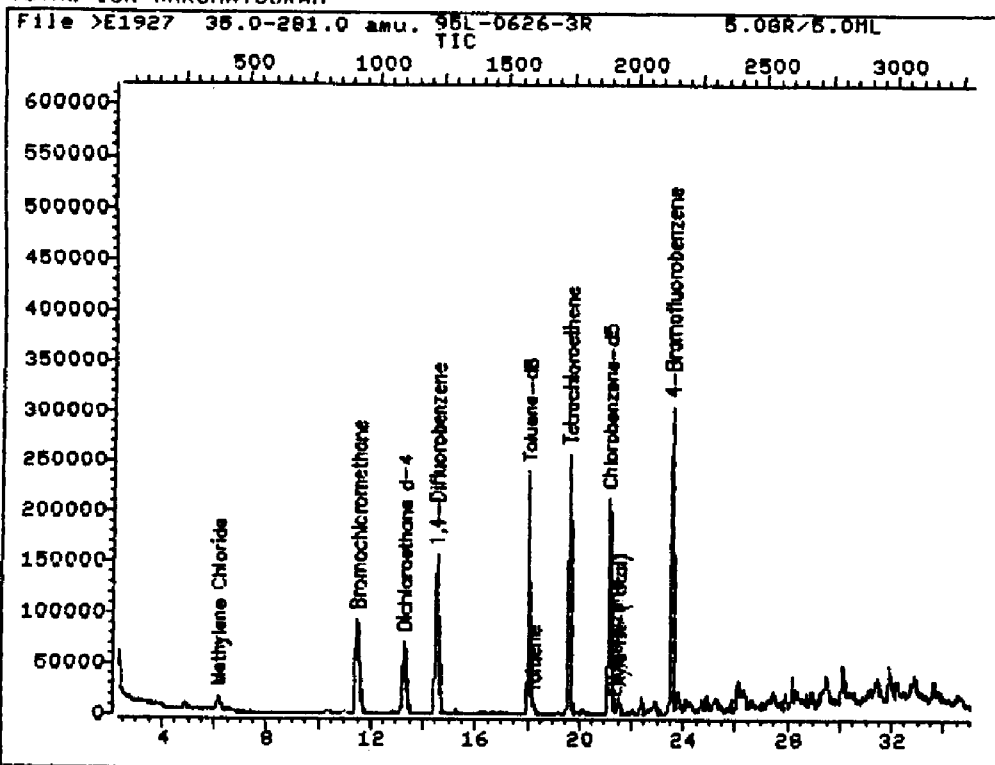
Last Qcal Time: &lt;none&gt;

|     | Compound              | R.T.  | Scan# | Area   | Conc  | Units | q  |
|-----|-----------------------|-------|-------|--------|-------|-------|----|
| 1)  | *Bromochloromethane   | 11.47 | 924   | 136344 | 50.00 | UG/KG | 58 |
| 6)  | Methylene Chloride    | 6.12  | 384   | 23941  | 7.44  | UG/KG | 63 |
| 17) | 1,2-Dichloroethane-d4 | 13.26 | 1104  | 188142 | 62.18 | UG/KG | 72 |
| 20) | *1,4-Difluorobenzene  | 14.48 | 1227  | 565048 | 50.00 | UG/KG | 68 |
| 38) | *Chlorobenzene-d5     | 21.11 | 1896  | 419472 | 50.00 | UG/KG | 95 |
| 41) | Tetrachloroethene     | 19.58 | 1741  | 228988 | 64.10 | UG/KG | 98 |
| 43) | Toluene               | 18.19 | 1601  | 15559  | 2.98  | UG/KG | 96 |
| 44) | Toluene-d8            | 18.02 | 1584  | 619251 | 67.36 | UG/KG | 90 |
| 46) | Ethylbenzene          | 21.34 | 1919  | 5789   | 1.68  | UG/KG | 66 |
| 48) | Xylenes (Total)       | 21.51 | 1936  | 32537M | 7.47  | UG/KG | 86 |
| 49) | Bromofluorobenzene    | 23.51 | 2137  | 407376 | 57.68 | UG/KG | 97 |

\* Compound is ISID

B/m 3-3-95

## TOTAL ION CHROMATOGRAM



Data File: &gt;E1927::D0

Name: 95L-0626-3R

Misc: 5.0GR/5.0ML

Quant Output File: ^E1927::A1

Instrument ID: HPD0505

Id File: IDSSEE::DB

Title: HP VOA Standards for 5 Point Calibration Curve Rev. E

Last Calibration: 950220 15:43

Last Qcal Time: &lt;none&gt;

Operator ID: LAURA

Quant Time : 950303 17:24

Injected at: 950303 16:39

## QUANT REPORT

Page 1

Operator ID: LAURA  
 Output File: ^E1926::A1  
 Data File: >E1926::D0  
 Name: 95L-0626-4  
 Misc: 5.0GR/5.0ML

Quant Rev: 7      Quant Time: 950303 16:40  
                   Injected at: 950303 15:55  
                   Dilution Factor: 1.00000  
                   Instrument ID: HPDOS05

ID File: IDSSEE::DB

Title: HP VOA Standards for 5 Point Calibration Curve Rev. E

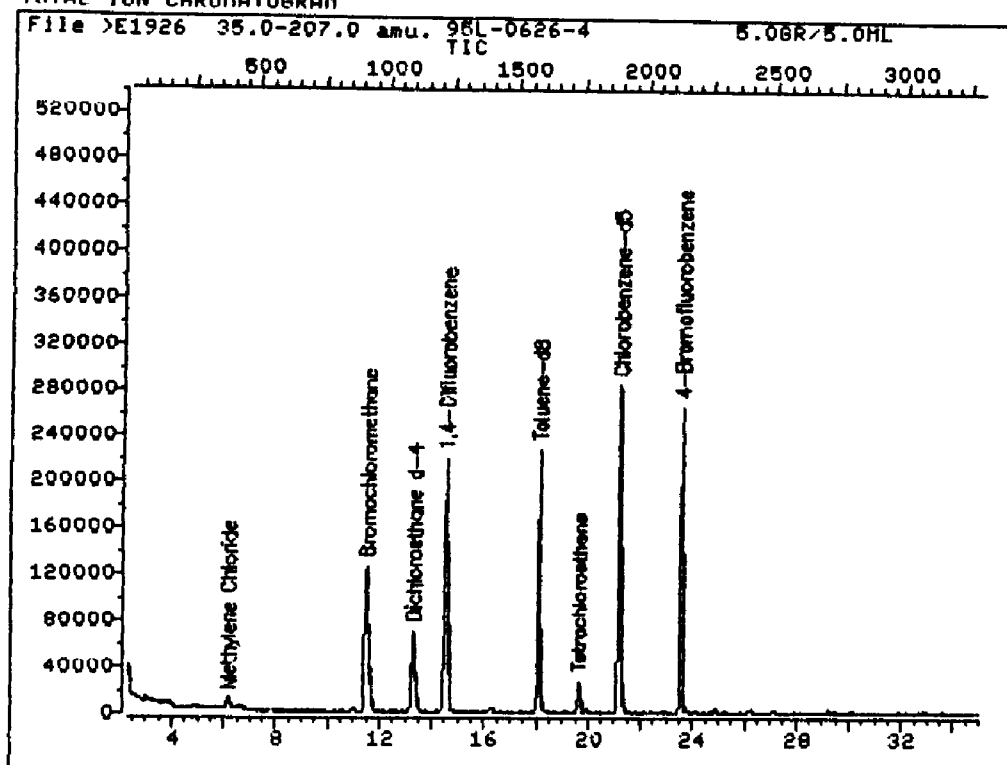
Last Calibration: 950220 15:43

Last Qcal Time: &lt;none&gt;

|     | Compound              | R.T.  | Scan# | Area    | Conc  | Units | q  |
|-----|-----------------------|-------|-------|---------|-------|-------|----|
| 1)  | *Bromochloromethane   | 11.48 | 925   | 186658  | 50.00 | UG/KG | 56 |
| 6)  | Methylene Chloride    | 6.14  | 386   | 16271   | 3.70  | UG/KG | 61 |
| 17) | 1,2-Dichloroethane-d4 | 13.27 | 1105  | 186504  | 45.03 | UG/KG | 73 |
| 20) | *1,4-Difluorobenzene  | 14.49 | 1228  | 799466  | 50.00 | UG/KG | 69 |
| 38) | *Chlorobenzene-d5     | 21.12 | 1897  | 574696  | 50.00 | UG/KG | 95 |
| 41) | Tetrachloroethene     | 19.59 | 1742  | 23389   | 4.78  | UG/KG | 96 |
| 44) | Toluene-d8            | 18.04 | 1586  | 594190  | 47.17 | UG/KG | 90 |
| 49) | Bromofluorobenzene    | 23.51 | 2138  | 357387M | 36.93 | UG/KG | 98 |

\* Compound is ISTD

## TOTAL ION CHROMATOGRAM



Data File: &gt;E1926::D0

Name: 95L-0626-4

Misc: 5.0GR/5.0ML

Quant Output File: ^E1926::A1

Instrument ID: HPD0505

Id File: IDSLEE::DB

Title: HP UOA Standards for 5 Point Calibration Curve Rev. E

Last Calibration: 950220 15:43

Last Qcal Time: &lt;none&gt;

Operator ID: LAURA

Quant Time : 950303 16:40

Injected at: 950303 15:55

## QUANT REPORT

Page 1

Operator ID: LAURA  
Output File: ^E1931::A1  
Data File: ^E1931::D0  
Name: 95L-0626-5  
Misc: 5.0GR/5.0ML

Quant Rev: 7      Quant Time: 950303 20:26  
                  Injected at: 950303 19:42  
                  Dilution Factor: 1.00000  
                  Instrument ID: HPD0505

ID File: IDSSEE::DB

Title: HP VOA Standards for 5 Point Calibration Curve Rev. E

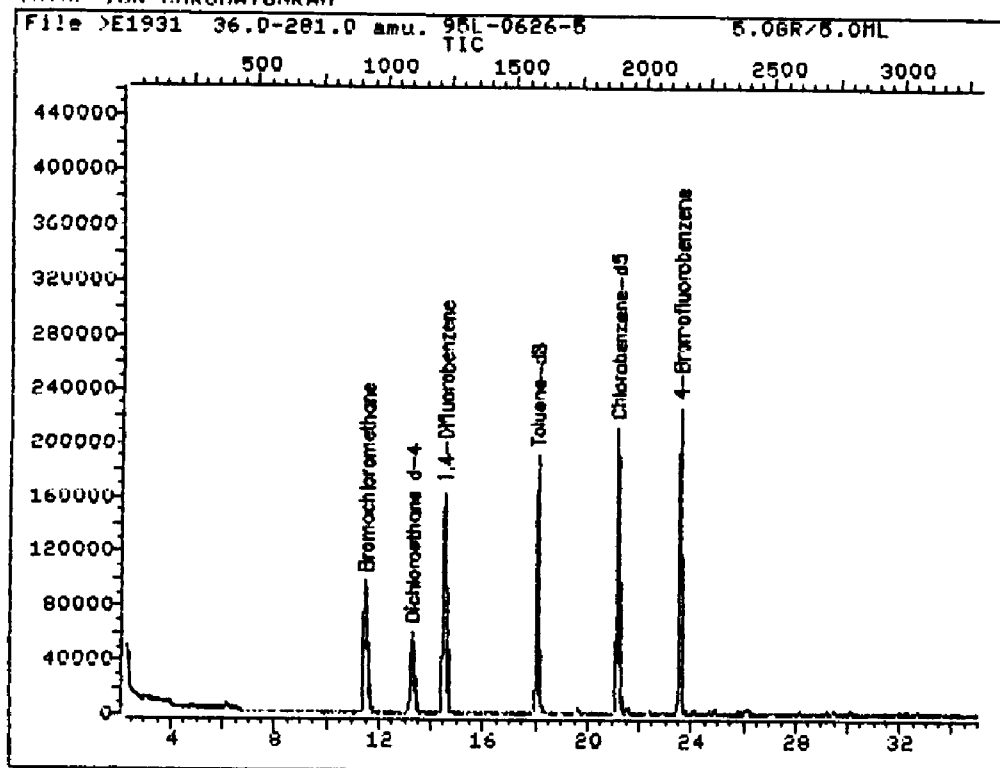
Last Calibration: 950220 15:43

Last Qcal Time: &lt;none&gt;

|     | Compound              | R.T.  | Scan# | Area   | Conc  | Units | q  |
|-----|-----------------------|-------|-------|--------|-------|-------|----|
| 1)  | *Bromochloromethane   | 11.46 | 923   | 147924 | 50.00 | UG/KG | 56 |
| 17) | 1,2-Dichloroethane-d4 | 13.25 | 1103  | 163785 | 49.89 | UG/KG | 76 |
| 20) | *1,4-Difluorobenzene  | 14.49 | 1228  | 603687 | 50.00 | UG/KG | 68 |
| 38) | *Chlorobenzene-d5     | 21.11 | 1896  | 421174 | 50.00 | UG/KG | 93 |
| 44) | Toluene-d8            | 18.02 | 1584  | 496460 | 53.78 | UG/KG | 91 |
| 49) | Bromofluorobenzene    | 23.50 | 2137  | 307323 | 43.34 | UG/KG | 96 |

\* Compound is ISD

## TOTAL ION CHROMATOGRAM



Data File: &gt;E1931::DU

Name: 95L-0626-5

Misc: 5.0GR/5.0ML

Quant Output File: ^E1931::A1

Instrument ID: HPDOS05

Id File: IDSSEE::DB

Title: HP VOA Standards for 5 Point Calibration Curve Rev. E

Last Calibration: 950220 15:43

Last Qual Time: &lt;none&gt;

Operator ID: LAURA

Quant Time : 950303 20:26

Injected at: 950303 19:42

## QUANT REPORT

Page 1

Operator ID: LAURA  
 Output File: ^E1943::A1  
 Data File: ^E1943::D2  
 Name: 95L-0626-6  
 Misc: 5.UGR/5.UML

Quant Rev: 2      Quant Time: 950306 17:35  
 Injected at: 950306 16:49  
 Dilution Factor: 1.00000  
 Instrument ID: HPD0505

ID File: IDSSEE::DB

Title: HP VOA Standards for 5 Point Calibration Curve Rev. E

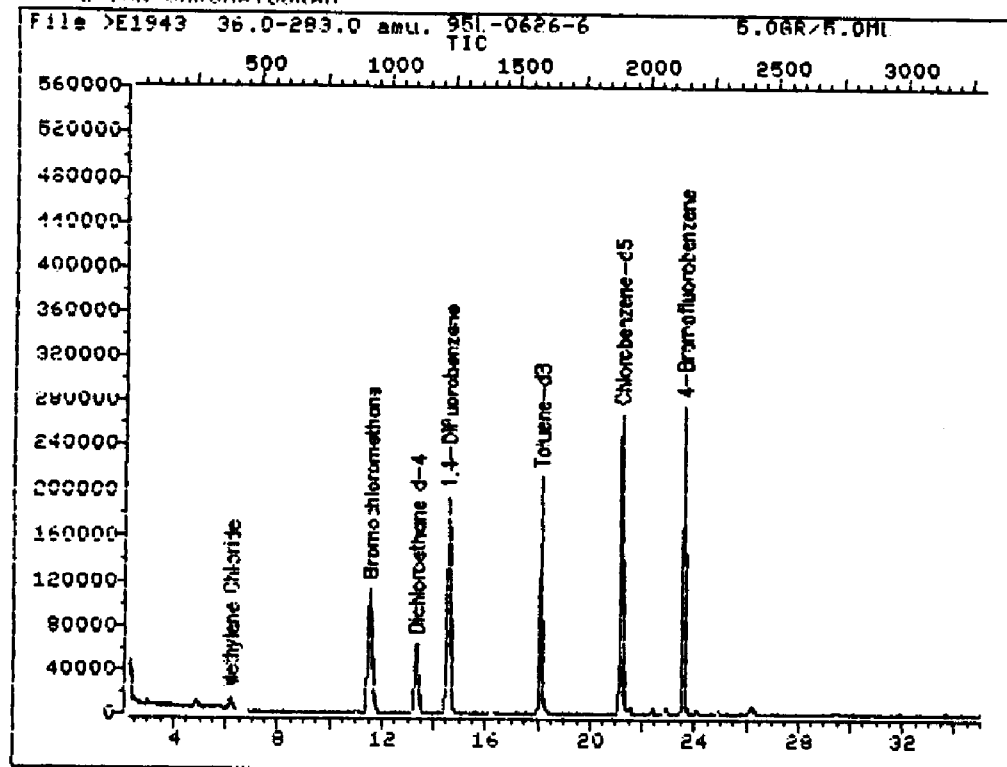
Last Calibration: 950220 15:43

Last Qual Time: &lt;none&gt;

|     | Compound              | R.T.  | Scan# | Area   | Conc  | Units | q  |
|-----|-----------------------|-------|-------|--------|-------|-------|----|
| 1)  | *Bromochloromethane   | 11.50 | 927   | 171252 | 50.00 | UG/KG | 52 |
| 6)  | Methylene Chloride    | 6.16  | 388   | 23426  | 5.80  | UG/KG | 70 |
| 17) | 1,2-Dichloroethane-d4 | 13.29 | 1107  | 167362 | 44.04 | UG/KG | 72 |
| 20) | *1,4-Difluorobenzene  | 14.51 | 1230  | 707262 | 50.00 | UG/KG | 70 |
| 38) | *Chlorobenzene-d5     | 21.13 | 1898  | 540814 | 50.00 | UG/KG | 95 |
| 44) | Toluene-d8            | 18.05 | 1587  | 548432 | 46.27 | UG/KG | 90 |
| 49) | Bromofluorobenzene    | 23.52 | 2139  | 367311 | 40.34 | UG/KG | 95 |

\* Compound is ISID

## TOTAL ION CHROMATOGRAM



Data File: &gt;E1943::D2

Name: 95L-0626-6

Misc: 5.0GR/5.0ML

Quant Output File: ^E1943::A1

Instrument ID: HPD05U5

Id File: 10SSEE::DE

Title: HP VOA Standards for 5 Point Calibration Curve Rev. E

Last Calibration: 950220 15:43

Last Qual Time: &lt;none&gt;

Operator ID: LAURA

Quant Time : 950306 17:35

Injected at: 950306 16:49



## QUANT REPORT

Page 1

Operator ID: LAURA  
Output File: ^E1930::A1  
Data File: >E1930::D0  
Name: 95L-0626-7  
Misc: 5.UGR/5.UML

Quant Rev: 7      Quant Time: 950303 19:43  
                  Injected at: 950303 18:58  
Dilution Factor: 1.00000  
Instrument ID: HPD0505

ID File: IDSSEE::DB

Title: HP VOA Standards for 5 Point Calibration Curve Rev. E

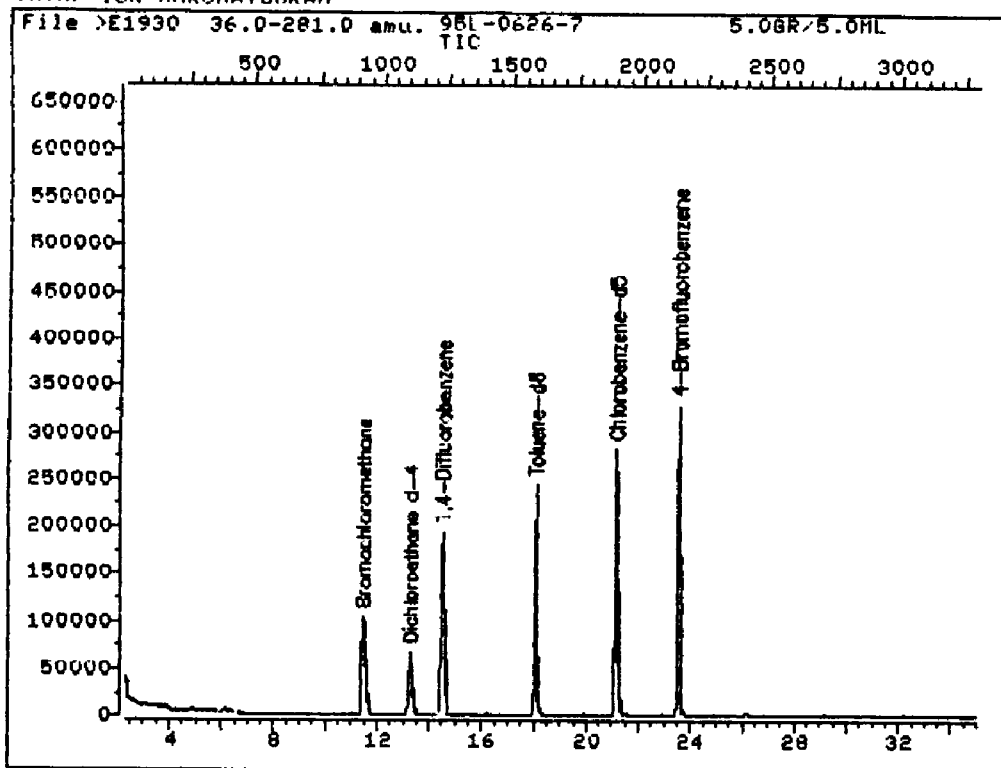
Last Calibration: 950220 15:43

Last Qcal Time: &lt;none&gt;

|     | Compound              | R.T.  | Scan# | Area   | Conc  | Units | q  |
|-----|-----------------------|-------|-------|--------|-------|-------|----|
| 1)  | *Bromochloromethane   | 11.44 | 921   | 159395 | 50.00 | UG/KG | 54 |
| 17) | 1,2-Dichloroethane-d4 | 13.26 | 1104  | 172790 | 48.85 | UG/KG | 72 |
| 20) | *1,4-Difluorobenzene  | 14.48 | 1227  | 708322 | 50.00 | UG/KG | 69 |
| 38) | *Chlorobenzene-d5     | 21.12 | 1897  | 568113 | 50.00 | UG/KG | 97 |
| 44) | Toluene-d8            | 18.03 | 1585  | 634405 | 50.95 | UG/KG | 91 |
| 49) | Bromofluorobenzene    | 23.50 | 2137  | 445886 | 46.61 | UG/KG | 98 |

\* Compound is ISD

## TOTAL ION CHROMATOGRAM



Data File: &gt;E1930::D0

Quant Output File: ^E1930::A1

Name: 95L-0626-7

Instrument ID: HPD0505

Misc: 5.0GR/5.0ML

Id File: IDSSEE::DB

Title: HP VOA Standards for 5 Point Calibration Curve Rev. E

Last Calibration: 950220 15:43

Last Qcal Time: &lt;none&gt;

Operator ID: LAURA

Quant Time : 950303 19:43

Injected at: 950303 18:58

## QUANT REPORT

Page 1

Operator ID: LAURA  
Output File: ^E1958::A1  
Data File: ^E1958::D3  
Name: 95L-0626-8  
Misc: 5.0GR/5.0ML

Quant Rev: 7      Quant Time: 950307 10:55  
                  Injected at: 950307 10:09  
Dilution Factor: 1.00000  
Instrument ID: HP00505

ID File: IDSSEE::DB

Title: HP UOA Standards for 5 Point Calibration Curve Rev. E

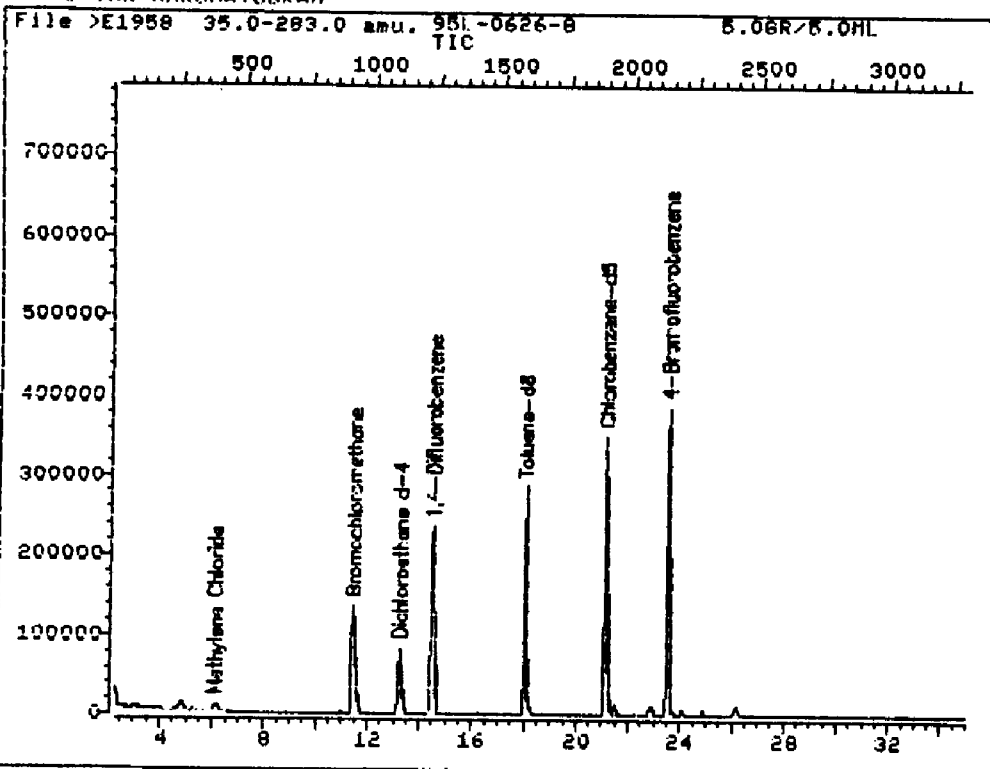
Last Calibration: 950220 15:43

Last Qcal Time: &lt;none&gt;

|     | Compound              | R.T.  | Scan# | Area   | Conc  | Units | q  |
|-----|-----------------------|-------|-------|--------|-------|-------|----|
| 1)  | *Bromochloromethane   | 11.44 | 921   | 204925 | 50.00 | UG/KG | 58 |
| 6)  | Methylene Chloride    | 6.11  | 383   | 19148  | 3.96  | UG/KG | 59 |
| 17) | 1,2-Dichloroethane-d4 | 13.24 | 1102  | 214191 | 47.10 | UG/KG | 74 |
| 20) | *1,4-Difluorobenzene  | 14.47 | 1226  | 869702 | 50.00 | UG/KG | 69 |
| 38) | *Chlorobenzene-d5     | 21.11 | 1896  | 695383 | 50.00 | UG/KG | 96 |
| 44) | Toluene-d8            | 18.02 | 1584  | 743738 | 48.80 | UG/KG | 90 |
| 49) | Bromofluorobenzene    | 23.49 | 2136  | 521464 | 44.54 | UG/KG | 99 |

\* Compound is ISID

## TOTAL ION CHROMATOGRAM



Data File: &gt;E1958::D3

Name: 95L-0626-8

Misc: 5.0GR/5.0ML

Quant Output File: ^E1958::A1

Instrument ID: HPDUS05

Id File: IDSSEE::DB

Title: HP VOA Standards for 5 Point Calibration Curve Rev. E

Last Calibration: 950220 15:43

Last Wcal Time: &lt;none&gt;

Operator ID: LAURA

Quant time : 950307 10:55

Injected at: 950307 10:09

## QUANT REPORT

Page 1

Operator ID: LAURA  
 Output File: >E1951::A1  
 Data File: >E1951::D2  
 Name: 95L-0626-9  
 Misc: 5.UGR/5.0ML

Quant Rev: / Quant Time: 950306 23:38  
 Injected at: 950306 22:52  
 Dilution Factor: 1.00000  
 Instrument ID: HPD0505

ID File: IDSSEE::DB

Title: HP UVA Standards for 5 Point Calibration Curve Rev. E

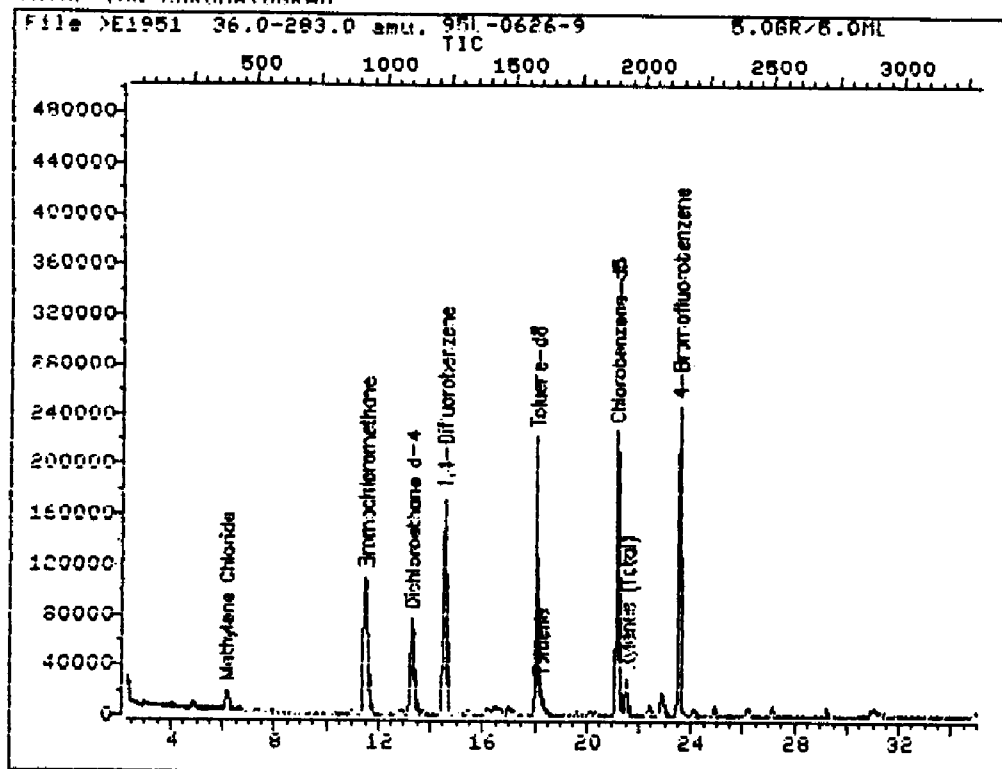
Last Calibration: 950220 15:43

Last Qual Time: <none>

|     | Compound              | R.T.  | Scan# | Area   | Conc  | Units | q  |
|-----|-----------------------|-------|-------|--------|-------|-------|----|
| 1)  | *Bromochloromethane   | 11.48 | 924   | 166308 | 50.00 | UG/KG | 59 |
| 6)  | Methylene Chloride    | 6.13  | 385   | 33190  | 8.46  | UG/KG | 70 |
| 17) | 1,2-Dichloroethane-d4 | 13.26 | 1104  | 199542 | 54.07 | UG/KG | 74 |
| 20) | *1,4-Difluorobenzene  | 14.49 | 1228  | 623803 | 50.00 | UG/KG | 69 |
| 38) | *Chlorobenzene-d5     | 21.12 | 1896  | 451839 | 50.00 | UG/KG | 95 |
| 43) | Toluene               | 18.20 | 1602  | 34084  | 6.05  | UG/KG | 97 |
| 44) | Toluene-d8            | 18.03 | 1585  | 558662 | 56.41 | UG/KG | 90 |
| 48) | Xylenes (Total)       | 21.52 | 1937  | 409861 | 8.74  | UG/KG | 91 |
| 49) | Bromofluorobenzene    | 23.51 | 2137  | 355215 | 44.06 | UG/KG | 97 |

\* Compound is ISID

## TOTAL ION CHROMATOGRAM



Data File: &gt;E1951::D2

Name: 95L-0626-9

Misc: 5.06R/5.0ML

Quant Output File: &gt;E1951::A1

Instrument ID: HPD0505

Id File: IDSSEE::DB

Title: HP VOA Standards for 5 Point Calibration Curve Rev. E

Last Calibration: 950220 15:43

Last Qual Time: &lt;none&gt;

Operator ID: LAURA

Quant Time: 950306 23:38

Injected at: 950306 22:52

## QUANT REPORT

Page 1

Operator ID: LAURA  
 Output File: >E1952::A1  
 Data File: >E1952::D2  
 Name: 95L-0626-10  
 Misc: 5.0GR/5.0ML

Quant Rev: 7      Quant Time: 950307 00:21  
 Injected at: 950306 23:36  
 Dilution Factor: 1.00000  
 Instrument ID: HPDUS05

ID File: IDSSEE::DB

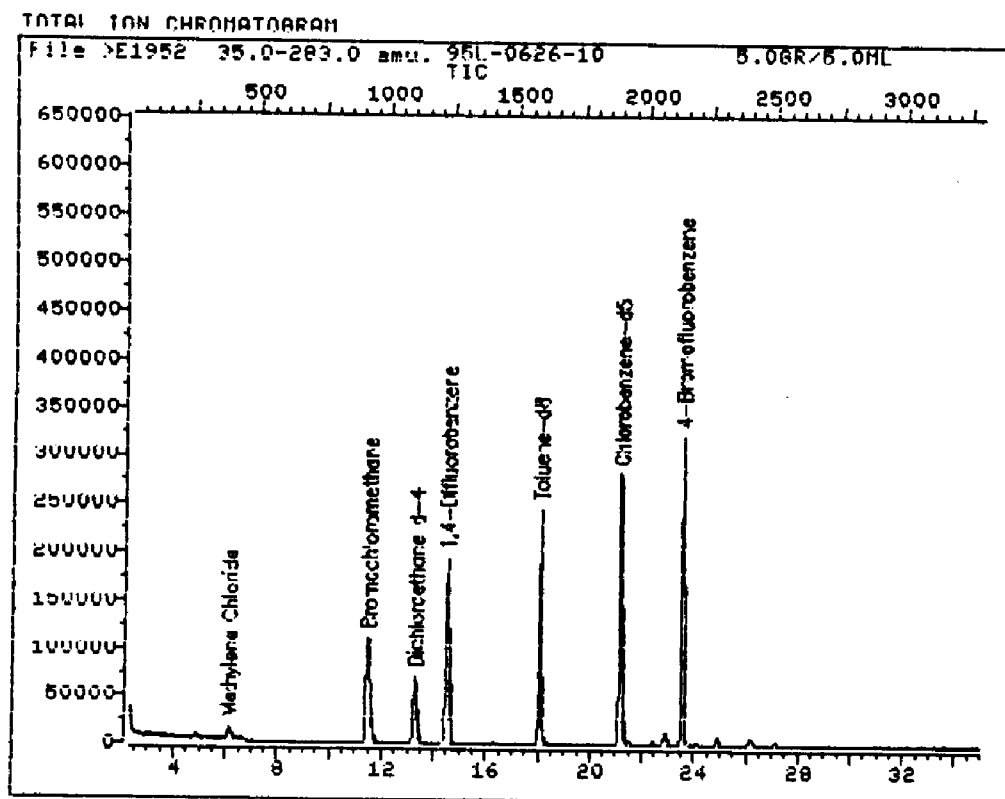
Title: HP VOA Standards for 5 Point Calibration Curve Rev. E

Last Calibration: 950220 15:43

Last Qcal Time: <none>

|     | Compound              | R.T.  | Scan# | Area   | Conc  | Units | q  |
|-----|-----------------------|-------|-------|--------|-------|-------|----|
| 1)  | *Bromochloromethane   | 11.47 | 924   | 168128 | 50.00 | UG/KG | 55 |
| 6)  | Methylene Chloride    | 6.11  | 383   | 26858  | 6.77  | UG/KG | 73 |
| 17) | 1,2-Dichloroethane-d4 | 13.27 | 1105  | 184586 | 49.47 | UG/KG | 73 |
| 20) | *1,4-Difluorobenzene  | 14.49 | 1228  | 206832 | 50.00 | UG/KG | 69 |
| 38) | *Chlorobenzene-d5     | 21.13 | 1898  | 524394 | 50.00 | UG/KG | 94 |
| 44) | Toluene-d8            | 18.03 | 1585  | 635182 | 50.46 | UG/KG | 89 |
| 49) | Bromofluorobenzene    | 23.51 | 2138  | 435417 | 45.02 | UG/KG | 98 |

\* Compound is ISID



Data File: >E1952::D2

Name: 95L-0626-10

Misc: 5.0GR/5.0ML

Quant Output File: >E1952::A1

Instrument ID: HPD0505

Id File: 10SSEE::DB

Title: HP VOA Standards for 5 Point Calibration Curve Rev. E

Last Calibration: 950220 15:43

Last Qual Time: <none>

Operator ID: LAURA

Quant time : 950307 00:21

Injected at: 950306 23:36



## QUANT REPORT

Page 1

Operator ID: LAURA  
 Output File: >E1953::A1  
 Data File: >E1953::D2  
 Name: 95L-0626-11  
 Misc: 5.UGR/5.UML

Quant Rev: / Quant Time: 950307 01:05  
 Injected at: 950307 00:19  
 Dilution Factor: 1.00000  
 Instrument ID: HP00505

ID File: IDSSEE::DB

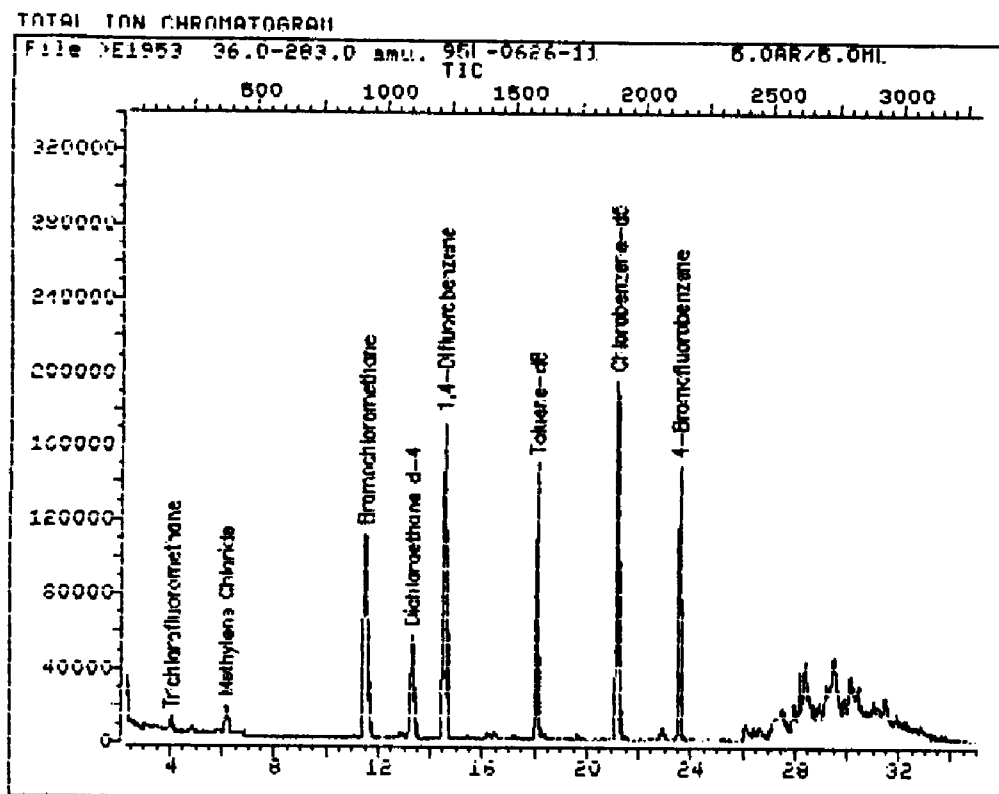
Title: HP UGA Standards for 5 Point Calibration Curve Rev. E

Last Calibration: 950220 15:43

Last Qual Time: <none>

|     | Compound               | R.T.  | Scan# | Area   | Conc  | Units | q  |
|-----|------------------------|-------|-------|--------|-------|-------|----|
| 1)  | *Bromochloromethane    | 11.47 | 924   | 169225 | 50.00 | UG/KG | 51 |
| 6)  | Methylene Chloride     | 6.13  | 385   | 30906  | 7.74  | UG/KG | 67 |
| 11) | Trichlorofluoromethane | 4.03  | 173   | 36071  | 4.76  | UG/KG | 90 |
| 17) | 1,2-Dichloroethane-d4  | 13.26 | 1104  | 153426 | 40.86 | UG/KG | 76 |
| 20) | *1,4-Difluorobenzene   | 14.49 | 1228  | 629124 | 50.00 | UG/KG | 69 |
| 38) | *Chlorobenzene-d5      | 21.12 | 1897  | 390965 | 50.00 | UG/KG | 96 |
| 44) | Toluene-d8             | 18.04 | 1586  | 391428 | 45.68 | UG/KG | 92 |
| 49) | Bromofluorobenzene     | 23.50 | 2137  | 200694 | 30.49 | UG/KG | 99 |

\* Compound is ISID



Data File: PE1953::D2  
Name: 95L-0626-11  
Misc: 5.UGR/5.UML

Quant Output File: PE1953::A1  
Instrument ID: HPDUS05

Id File: 1055EE::DE  
Title: HP VOA Standards for 5 Point Calibration Curve Rev. E  
Last Calibration: 950220 15:43 Last Qual Time: <none>

Operator ID: LAURA  
Quant Time: 950307 01:05  
Injected at: 950307 00:19

## QUANT REPORT

Page 1

Operator ID: LAURA  
 Output File: ^E1959::A1  
 Data File: ^E1959::D3  
 Name: 95L-U626-11R  
 Misc: 5.UGR/5.0ML

Quant Rev: / Quant Time: 950307 11:50  
 Injected at: 950307 11:04  
 Dilution Factor: 1.00000  
 Instrument ID: HPDUS05

ID File: IDSSEE::DB

Title: HP VOA Standards for 5 Point Calibration Curve Rev. E

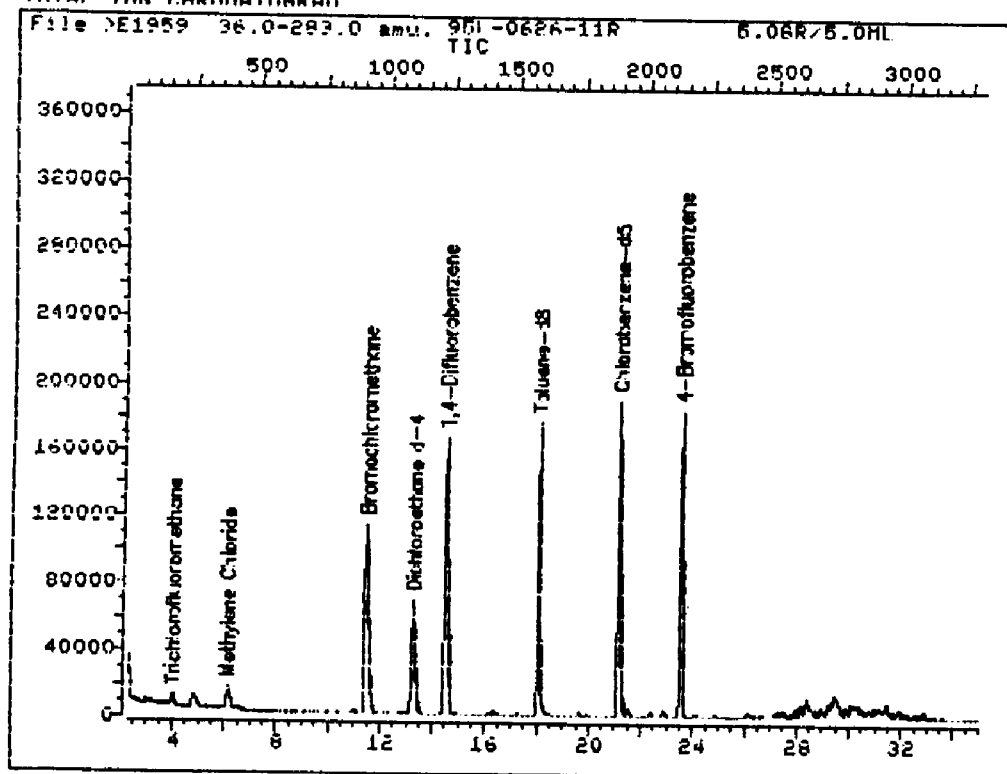
Last Calibration: 950220 15:43

Last Qcal Time: <none>

| Compound                   | R.T.  | Scan# | Area   | Conc  | Units | q  |
|----------------------------|-------|-------|--------|-------|-------|----|
| 1) *Bromochloromethane     | 11.46 | 922   | 169189 | 50.00 | UG/KG | 58 |
| 6) Methylene Chloride      | 6.11  | 383   | 27789  | 6.96  | UG/KG | 69 |
| 11) Trichlorofluoromethane | 3.99  | 169   | 29468  | 3.89  | UG/KG | 97 |
| 17) 1,2-Dichloroethane-d4  | 13.25 | 1103  | 182921 | 48.73 | UG/KG | 71 |
| 20) *1,4-Difluorobenzene   | 14.48 | 1227  | 611810 | 50.00 | UG/KG | 69 |
| 38) *Chlorobenzene-d5      | 21.11 | 1896  | 374156 | 50.00 | UG/KG | 98 |
| 44) Toluene-d8             | 18.02 | 1584  | 459930 | 56.09 | UG/KG | 91 |
| 49) Bromofluorobenzene     | 23.50 | 2137  | 249629 | 39.63 | UG/KG | 98 |

\* Compound is ISID

## TOTAL ION CHROMATOGRAM



Data File: &gt;E1959::D3

Name: 95L-0626-11R

Misc: 5.06R/5.0ML

Quant Output File: &gt;E1959::A1

Instrument ID: HPD0505

Id File: 10SSEE::DP

Title: HP UOA Standards for 5 Point Calibration Curve Rev. E

Last Calibration: 950220 15:43

Last Qual Time: &lt;none&gt;

Operator ID: LAURA

Quant Time : 950307 11:50

Injected at: 950307 11:04

## QUANT REPORT

Page 1

Operator ID: LAURA  
 Output File: >E1954::A1  
 Data File: >E1954::D2  
 Name: 95L-0626-12  
 Misc: 5.UGR/5.UML

Quant Rev: 7      Quant Time: 950307 01:50  
 Injected at: 950307 01:04  
 Dilution Factor: 1.00000  
 Instrument ID: HPD0505

ID File: IDSSEE::DB

Title: HP UOA Standards for 5 Point Calibration Curve Rev. E

Last Calibration: 950220 15:43

Last Qual Time: <none>

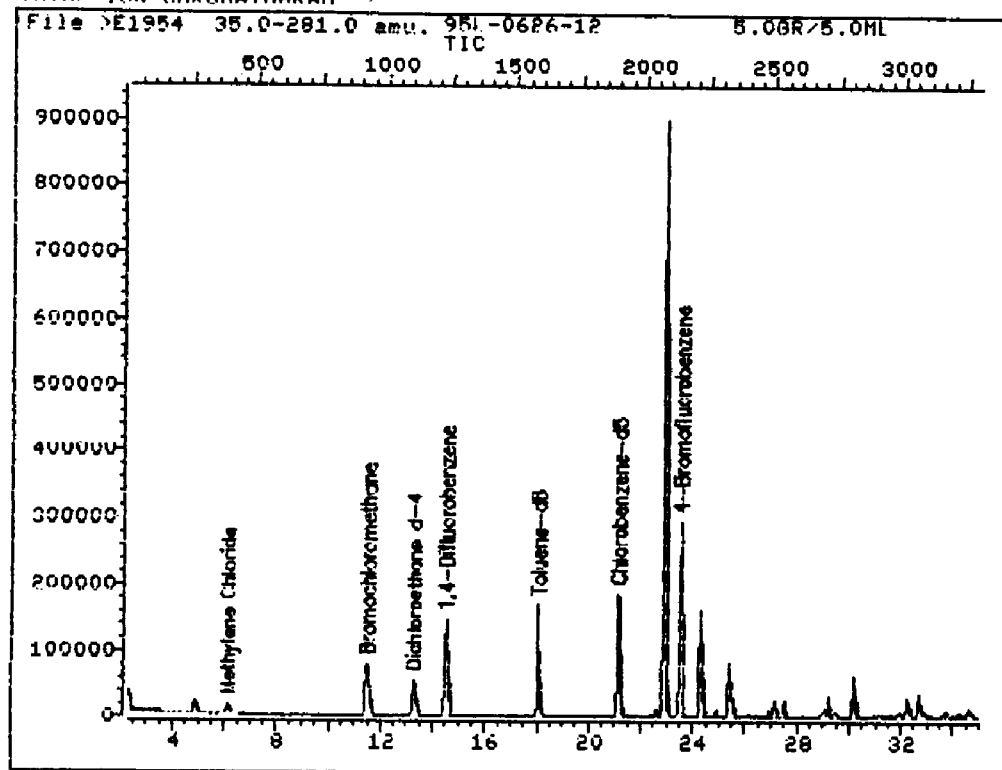
|     | Compound              | R.T.  | Scan# | Area   | Conc  | Units | q  |
|-----|-----------------------|-------|-------|--------|-------|-------|----|
| 1)  | *Bromochloromethane   | 11.48 | 925   | 123958 | 50.00 | UG/KG | 50 |
| 6)  | Methylene Chloride    | 6.13  | 385   | 23274  | 7.96  | UG/KG | 69 |
| 17) | 1,2-Dichloroethane-d4 | 13.26 | 1104  | 141960 | 51.61 | UG/KG | 71 |
| 20) | *1,4-Difluorobenzene  | 14.49 | 1228  | 512103 | 50.00 | UG/KG | 68 |
| 38) | *Chlorobenzene-d5     | 21.12 | 1897  | 372646 | 50.00 | UG/KG | 95 |
| 44) | Toluene-d8            | 18.03 | 1585  | 438060 | 53.64 | UG/KG | 90 |
| 49) | Bromofluorobenzene    | 23.52 | 2138  | 289975 | 46.22 | UG/KG | 97 |

\* Compound is ISTD

# FILE COPY

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TOTAL ION CHROMATOGRAM



Data File: &gt;E1954::D2

Name: 95L-0626-12

Misc: 5.06R/5.0ML

Quant Output File: ^E1954::A1

Instrument ID: HPD0505

Id File: 10SSEE::DB

Title: HP VOA Standards for 5 Point Calibration Curve Rev. E

Last Calibration: 950220 15:43

Last Qual Time: &lt;none&gt;

Operator ID: LAURA

Quant time : 950307 01:50

Injected at: 950307 01:04

## QUANT REPORT

Page 1

Operator ID: LAURA  
 Output File: ^E1960::A1  
 Data File: ^E1960::D3  
 Name: 95L-0626-13  
 Misc: 5.UGR/5.UML

Quant Rev: / Quant Time: 950307 12:49  
 Injected at: 950307 24:03  
 Dilution Factor: 1.00000  
 Instrument ID: HPD0505

ID File: IDSSEE::DB

Title: HP UOA Standards for 5 Point Calibration Curve Rev. E

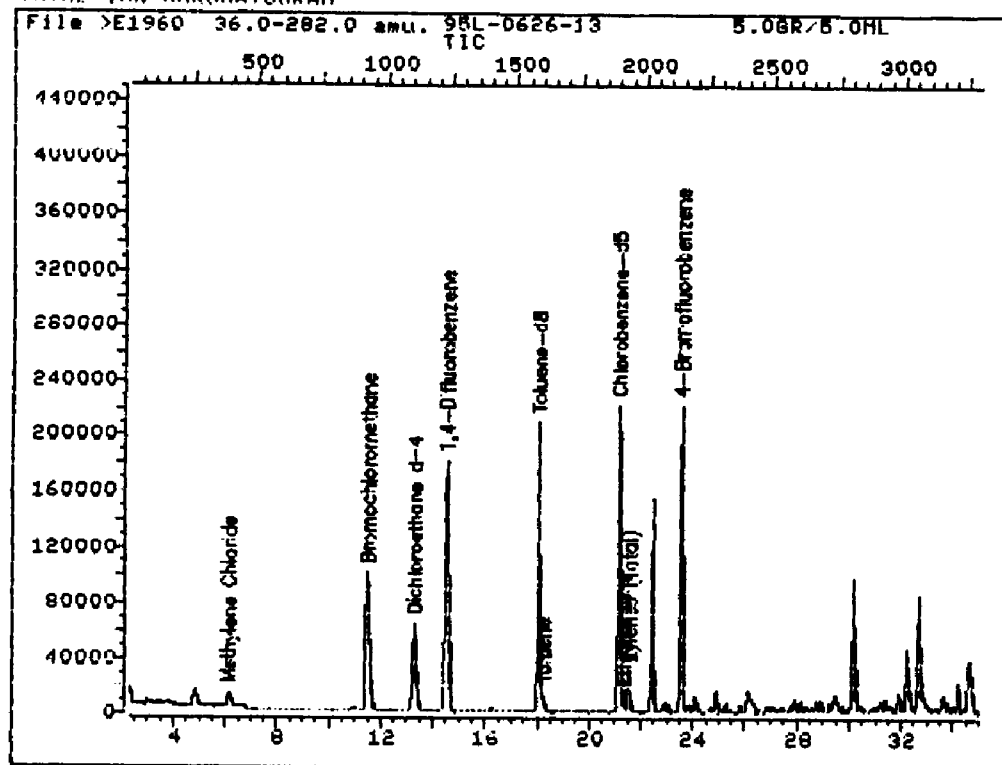
Last Calibration: 950220 15:43

Last Qcal Time: <none>

|     | Compound              | R.T.  | Scan# | Area   | Conc  | Units | q  |
|-----|-----------------------|-------|-------|--------|-------|-------|----|
| 1)  | *Bromochloromethane   | 11.47 | 923   | 151289 | 50.00 | UG/KG | 55 |
| 6)  | Methylene Chloride    | 6.10  | 382   | 20516  | 5.75  | UG/KG | 74 |
| 12) | 1,2-Dichloroethane-d4 | 13.26 | 1104  | 171640 | 51.12 | UG/KG | 74 |
| 20) | *1,4-Difluorobenzene  | 14.48 | 1227  | 660505 | 50.00 | UG/KG | 69 |
| 38) | *Chlorobenzene-d5     | 21.11 | 1896  | 441895 | 50.00 | UG/KG | 95 |
| 43) | Toluene               | 18.19 | 1601  | 19940  | 3.62  | UG/KG | 93 |
| 44) | Toluene-d8            | 18.02 | 1584  | 538224 | 55.57 | UG/KG | 91 |
| 46) | Ethylbenzene          | 21.35 | 1920  | 10232M | 2.82  | UG/KG |    |
| 48) | Xylenes (total)       | 21.52 | 1937  | 45531M | 9.93  | UG/KG | 88 |
| 49) | Bromofluorobenzene    | 23.51 | 2137  | 298355 | 40.10 | UG/KG | 96 |

\* Compound is ISID

## TOTAL ION CHROMATOGRAM



Data File: &gt;E1960::D3

Quant Output File: ^E1960::A1

Name: 95L-0626-13

Instrument ID: HPD0505

Misc: 5.06R/5.0ML

Id File: IDSSEE::DB

Title: HP VOA Standards for 5 Point Calibration Curve Rev. E

Last Calibration: 950220 15:43

Last Qual Time: &lt;none&gt;

Operator ID: LAURA

Quant Time : 950307 12:49

Injected at: 950307 24:03



## QUANT REPORT

Page 1

Operator ID: LAURA  
 Output File: ^E1962::A1  
 Data File: ^E1962::D3  
 Name: 95L-0626-14  
 Misc: 5.UGR/5.UML

Quant Rev: / Quant Time: 950307 14:34  
 Injected at: 950307 13:48  
 Dilution Factor: 1.00000  
 Instrument ID: HPDUS05

ID File: IDSSEE::DB

Title: HP VOA Standards for 5 Point Calibration Curve Rev. E

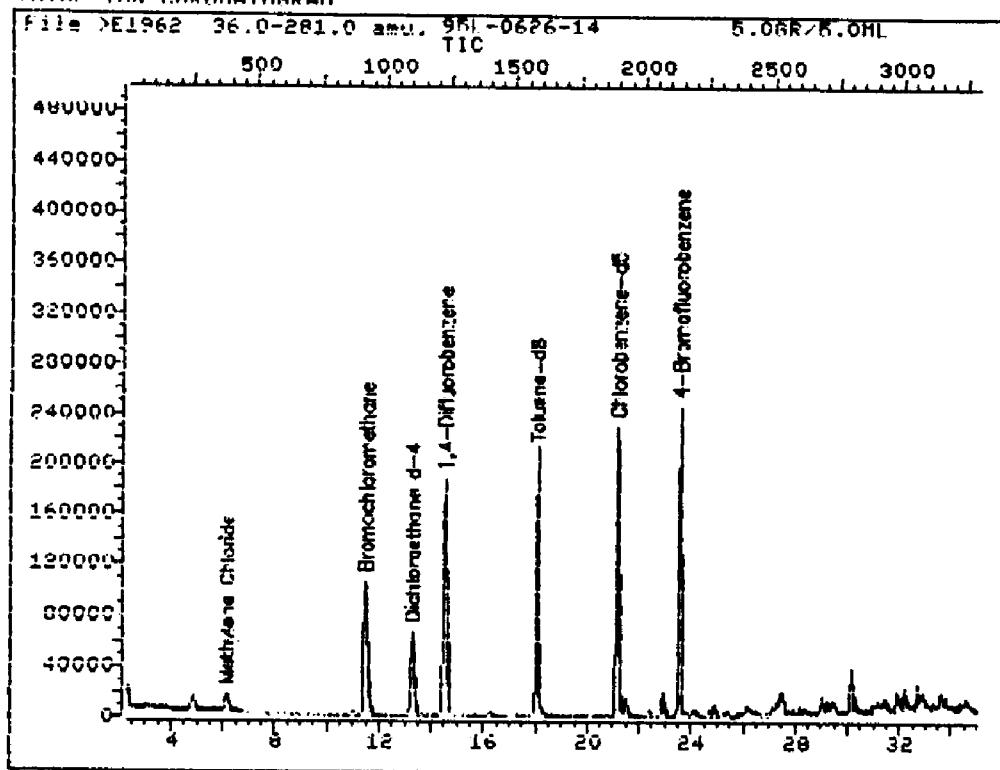
Last Calibration: 950220 15:43

Last Qual Time: <none>

| Compound                  | R.T.  | Scan# | Area   | Conc  | Units | q  |
|---------------------------|-------|-------|--------|-------|-------|----|
| 1) *Bromochloromethane    | 11.47 | 923   | 159827 | 50.00 | UG/KG | 55 |
| 6) Methylene Chloride     | 6.13  | 385   | 23703  | 6.29  | UG/KG | 64 |
| 17) 1,2-Dichloroethane-d4 | 13.25 | 1103  | 175173 | 49.39 | UG/KG | 75 |
| 20) *1,4-Difluorobenzene  | 14.48 | 1227  | 666520 | 50.00 | UG/KG | 69 |
| 38) *Chlorobenzene-d5     | 21.12 | 1897  | 459155 | 50.00 | UG/KG | 96 |
| 44) Toluene-d8            | 18.02 | 1584  | 551409 | 54.79 | UG/KG | 92 |
| 49) Bromofluorobenzene    | 23.51 | 2137  | 325009 | 42.04 | UG/KG | 98 |

\* Compound is ISID

## TOTAL ION CHROMATOGRAM



Data File: &gt;E1962::D3

Quant Output File: &gt;E1962::A1

Name: 95L-0626-14

Instrument ID: HPD0505

Misc: 5.0GR/5.0ML

Id File: IDS5EE::DB

Title: HP VOA Standards for 5 Point Calibration Curve Rev. E

Last Calibration: 950220 15:43

Last Cal Time: &lt;none&gt;

Operator ID: LAURA

Quant Time: 950307 14:34

Injected at: 950307 13:48

## QUANT REPORT

Page 1

Operator ID: LAURA  
 Output File: ^A8661::A1  
 Data File: >A8661::D1  
 Name: 95L-0626-15  
 Misc: 5.UGR/5.UML

Quant Rev: / Quant Time: 950308 21:10  
 Injected at: 950308 20:34  
 Dilution Factor: 1.00000  
 Instrument ID: INST A

ID File: IUSAAA::Q1

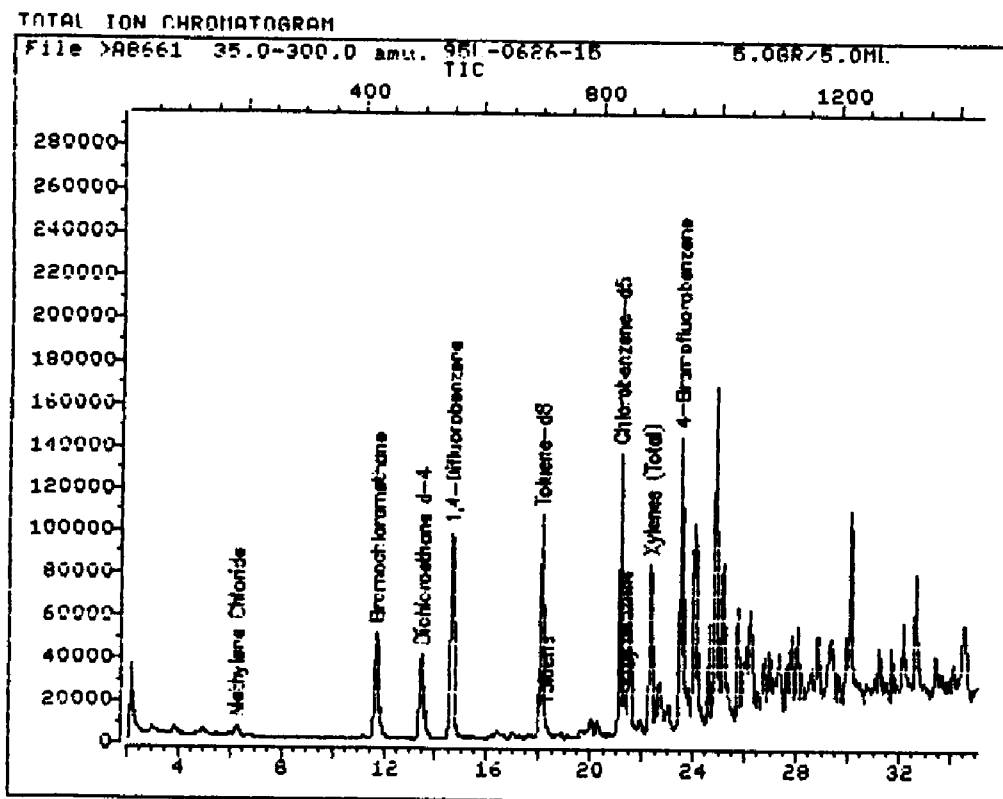
Title: HP VOA Standards For 5 Point Calibration Curve Rev. E

Last Calibration: 950308 17:35

Last Qual Time: <none>

|     | Compound              | R.T.  | Scan# | Area    | Conc  | Units | q  |
|-----|-----------------------|-------|-------|---------|-------|-------|----|
| 1)  | *Bromochloromethane   | 11.67 | 423   | 86115   | 50.00 | UG/KG | 87 |
| 6)  | Methylene Chloride    | 6.23  | 185   | 9159    | 4.51  | UG/KG | 68 |
| 17) | 1,2-Dichloroethane-d4 | 13.44 | 499   | 152257  | 48.44 | UG/KG | 95 |
| 20) | *1,4-Difluorobenzene  | 14.59 | 549   | 356148  | 50.00 | UG/KG | 68 |
| 36) | *Chlorobenzene-d5     | 21.11 | 833   | 250172  | 50.00 | UG/KG | 93 |
| 41) | Toluene               | 18.24 | 708   | 12421   | 3.85  | UG/KG | 97 |
| 42) | Toluene-d8            | 18.06 | 700   | 289658  | 53.11 | UG/KG | 95 |
| 44) | Ethylbenzene          | 21.32 | 842   | 9090    | 4.32  | UG/KG | 93 |
| 46) | Xylenes (Total)       | 22.31 | 885   | 142679M | 54.89 | UG/KG | 90 |
| 47) | Bromofluorobenzene    | 23.48 | 936   | 196035  | 46.66 | UG/KG | 90 |

\* Compound is ISID



Data File: >A8661::D1  
Name: 95L-0626-15  
Misc: 5.06R/5.0ML

Quant Output File: ^A8661::A1  
Instrument ID: INST A

Id File: 10SAAA::Q1  
Title: HP VOA Standards for 5 Point Calibration Curve Rev. E  
Last Calibration: 950308 17:35 Last Qual Time: <none>

Operator ID: LAURA  
Quant Time : 950308 21:10  
Injected at: 950308 20:34

## QUANT REPORT

Page 1

Operator ID: LAURA  
Output File: ^E1942::A1  
Data File: >E1942::D2  
Name: 95L-0626-16  
Misc: 5.UML

Quant Rev: 7      Quant Time: 950306 16:26  
                  Injected at: 950306 15:40  
Dilution Factor: 1.00000  
Instrument ID: HPD0505

ID File: ID\_SEE::DB

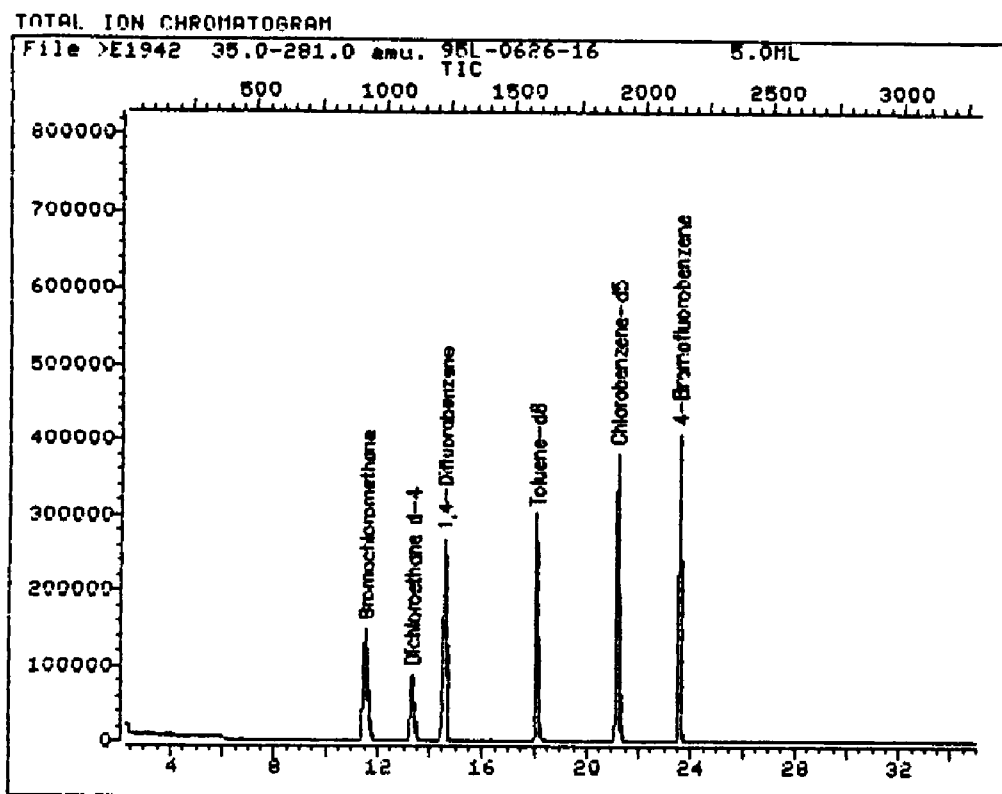
Title: HP UOA Standards for 5 Point Calibration Curve Rev. E

Last Calibration: 950220 15:41

Last Qcal Time: &lt;none&gt;

| Compound                  | R.T.  | Scan# | Area    | Conc  | Units | q  |
|---------------------------|-------|-------|---------|-------|-------|----|
| 1) *Bromochloromethane    | 11.52 | 929   | 230801  | 50.00 | ug/L  | 57 |
| 17) 1,2-Dichloroethane-d4 | 13.30 | 1108  | 230077  | 44.92 | ug/L  | 71 |
| 20) *1,4-Difluorobenzene  | 14.52 | 1231  | 987796  | 50.00 | ug/L  | 69 |
| 38) *Chlorobenzene-d5     | 21.14 | 1899  | 742165M | 50.00 | ug/L  | 97 |
| 44) Toluene-d8            | 18.05 | 1587  | 788792  | 48.49 | ug/L  | 90 |
| 49) Bromofluorobenzene    | 23.52 | 2139  | 542132  | 43.38 | ug/L  | 97 |

\* Compound is ISID



Data File: >E1942::D2  
Name: 95L-0626-16  
Misc: 5.0ML

Quant Output File: ^E1942::A1  
Instrument ID: HPD0505

Id File: ID\_SEE::DB  
Title: HP VOA Standards for 5 Point Calibration Curve Rev. E  
Last Calibration: 950220 15:41 Last Qcal Time: <none>

Operator ID: LAURA  
Quant Time : 950306 16:26  
Injected at: 950306 15:40

GC DATA PACKAGE BY FRACTION

## NORTHEASTERN ANALYTICAL CORPORATION

## METHOD BLANK RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES Date Analyzed: 08-MAR-95  
 NAC Job Number: L950626 Date Received: NA  
 Lab Sample ID: BLK#1 2100/ Client ID: BLANK  
 Date Extracted: 03-MAR-95

| PARAMETER    | RESULT | MDL | QUAL | UNITS |
|--------------|--------|-----|------|-------|
| Aroclor 1016 | ND     | 33  | U    | ug/kg |
| Aroclor 1221 | ND     | 67  | U    | ug/kg |
| Aroclor 1232 | ND     | 33  | U    | ug/kg |
| Aroclor 1242 | ND     | 33  | U    | ug/kg |
| Aroclor 1248 | ND     | 33  | U    | ug/kg |
| Aroclor 1254 | ND     | 33  | U    | ug/kg |
| Aroclor 1260 | ND     | 33  | U    | ug/kg |

Associated Samples: L950626-1 L950626-10 L950626-11 L950626-12 L950626-13  
 L950626-14 L950626-15 L950626-2 L950626-3 L950626-4  
 L950626-5 L950626-6 L950626-7 L950626-8 L950626-9  
 L950674-1 L950686-1 WGP2100-1 WGP2100-2 WGP2100-3  
 WGP2100-4

ND - Not detected at or below the MDL



```

=====
Software Version: 3.3 <4811>
Sample Name   : BLK #1 2100
Sample Number : 5
Operator      : KMW
Time          : 3/8/95 01:29 PM
Study         : PPPCB

Instrument     : HP5890
Channel       : A
A/D mV Range  : 1000
Vial          : 0/0
=====

```

```

Interface Serial # : 8055910402 Data Acquisition Time: 3/8/95 12:56 PM
Delay Time        : 0.00 min.
End Time          : 33.00 min.
Sampling Rate     : 1.0000 pts/sec

```

```

Raw Data File : C:\2700\HP5890\PA38005.RAW
Result File   : C:\2700\HP5890\PA38005.RST
Instrument File: c:\2700\methseqs\HPPESTB.ins
Process File  : HPPESTA
Sample File   : PESTA058
Sequence File  : C:\2700\METHSEQS\0308PCB.SEQ

```

```

Inj. Volume   : 1 ul
Sample Amount : 1.0000
Area Reject   : 200.000000
Dilution Factor : 1.00

```

```

Instrument Control Method:
Instrument name : HP5890

```

Channel Parameters:

Inlet Parameters:

Inlet A : Inlet B :

Detector Parameters:

Detector A : Detector B :

Heated Zones:

Temperature Program:

tal run time : 33.00 min

Timed Events:

There are no timed events in the method

### HP 5890 REPORT FOR PEST/PCB ANALYSIS

\*\*\*\*\*  
NORTHEASTERN ANALYTICAL CORP. GAS CHROMATOGRAPHY LAB.  
\*\*\*\*\*

| Peak # | Component Name | Time [min] | Area [uV*sec] | Height [uV] | Raw Amount | Adjusted Amount | Calibration Factor | Delta RT [s] | Cal. Range |
|--------|----------------|------------|---------------|-------------|------------|-----------------|--------------------|--------------|------------|
| 1      |                | 1.105      | 878693.32     | 119532.24   | 30.7890    | 30.7890         | 878693             | -----        |            |
| 2      |                | 1.376      | 709559.26     | 82661.12    | 25.5064    | 25.5064         | 709559             | -----        |            |
| 3      |                | 1.522      | 59650.42      | 15794.17    | 5.2078     | 5.2078          | 59650              | -----        |            |
| 4      |                | 1.625      | 1572999.50    | 303924.62   | 52.4743    | 52.4743         | 1573000            | -----        |            |
| 5      |                | 1.938      | 1638691.00    | 421254.73   | 54.5260    | 54.5260         | 1638691            | -----        |            |
| 6      |                | 2.219      | 36737.50      | 14298.82    | 4.4921     | 4.4921          | 36737              | -----        |            |
| 7      |                | 2.359      | 15308.00      | 4844.21     | 3.8228     | 3.8228          | 15308              | -----        |            |
| 8      |                | 2.439      | 5611.00       | 3087.13     | 3.5199     | 3.5199          | 5611               | -----        |            |
| 9      |                | 2.498      | 8228.00       | 5300.88     | 3.6017     | 3.6017          | 8228               | -----        |            |
| 10     |                | 2.634      | 36281.50      | 8765.42     | 4.4779     | 4.4779          | 36282              | -----        |            |
| 11     |                | 2.791      | 7095.00       | 2161.98     | 3.5663     | 3.5663          | 7095               | -----        |            |
| 12     |                | 2.914      | 9098.50       | 1693.98     | 3.6289     | 3.6289          | 9098               | -----        |            |
| 13     |                | 3.019      | 5470.00       | 2330.41     | 3.5155     | 3.5155          | 5470               | -----        |            |
| 14     |                | 3.133      | 32129.00      | 9982.21     | 4.3482     | 4.3482          | 32129              | -----        |            |
|        |                | 3.251      | 13948.00      | 2945.36     | 3.7803     | 3.7803          | 13948              | -----        |            |
|        |                | 3.513      | 16163.00      | 3010.60     | 3.8495     | 3.8495          | 16163              | -----        |            |
| 17     |                | 3.714      | 8366.00       | 2360.84     | 3.6060     | 3.6060          | 8366               | -----        |            |
| 18     |                | 3.781      | 4369.00       | 1837.88     | 3.4811     | 3.4811          | 4369               | -----        |            |
| 19     |                | 4.157      | 10951.00      | 1655.24     | 3.6867     | 3.6867          | 10951              | -----        |            |
| 20     |                | 4.315      | 7646.00       | 2237.46     | 3.5835     | 3.5835          | 7646               | -----        |            |

| Peak # | Component Name      | Time [min]  | Area [uV*sec] | Height [uV] | Raw Amount | Adjusted Amount | Calibration Factor | Delta RT [%] | Cal. Range |
|--------|---------------------|-------------|---------------|-------------|------------|-----------------|--------------------|--------------|------------|
| 21     |                     | 4.944       | 13524.00      | 1747.76     | 3.7671     | 3.7671          | 13524              | -----        |            |
| 22     |                     | 6.246       | 146003.00     | 34370.49    | 7.9048     | 7.9048          | 146003             | -----        |            |
| 23     | TCMX                | 7.576       | 1965370.00    | 456636.36   | 92.2261    | 0.0000          | 1965370            | 0.3262       |            |
|        |                     | 8.145       | 5974.00       | 1450.16     | 3.5313     | 3.5313          | 5974               | -----        |            |
|        |                     | 8.311       | 12544.50      | 3026.67     | 3.7365     | 3.7365          | 12545              | -----        |            |
| 26     |                     | 8.706       | 14256.00      | 3127.68     | 3.7900     | 3.7900          | 14256              | -----        |            |
| 27     |                     | 9.147       | 21109.00      | 4969.29     | 4.0040     | 4.0040          | 21109              | -----        |            |
| 28     |                     | 10.219      | 6161.00       | 1317.31     | 3.5371     | 3.5371          | 6161               | -----        |            |
| 0      | APLHA BHC           | 10.797      | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 29     |                     | 11.676      | 4075.00       | 794.67      | 2.8100     | 2.8100          | 4075               | -----        |            |
| 30     |                     | 11.816      | 26544.50      | 6618.75     | 3.5489     | 3.5489          | 26544              | -----        |            |
| 0      | GAMMA BHC           | 12.257      | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 0      | HEPTACHLOR          | 12.914      | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 31     |                     | 13.247      | 5804.00       | 1299.08     | 1.1394     | 1.1394          | 5804               | -----        |            |
| 0      | ALDRIN              | 13.842      | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 32     |                     | 14.885      | 52287.00      | 10164.93    | 3.9804     | 3.9804          | 52287              | -----        |            |
| 0      | BETA BHC            | 15.144      | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 0      | DELTA BHC           | 15.903      | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 0      | HEPTACHLOR EXPOXIDE | 16.381      | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 0      | ENDOSULFAN I        | 17.321      | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 0      | GAMMA CHLORDANE     | 17.568      | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 0      | ALPHA CHLORDANE     | 17.786      | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 0      | DDE                 | 18.101      | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 0      | DIELDRIN            | 18.601      | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 0      | ENDRIN              | 19.336      | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 0      | DDD                 | 20.925      | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 0      | ENDOSULFAN II       | 21.090      | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 0      | DDT                 | 21.451      | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 33     |                     | 21.952      | 16073.00      | 2760.17     | 7.8586     | 7.8586          | 16073              | -----        |            |
| 0      | ENDRIN ALDEHYDE     | 22.603      | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 34     |                     | 23.265      | 7273.50       | 1316.92     | -11.4065   | -11.4065        | 7274               | -----        |            |
| 35     |                     | 23.516      | 25269.00      | 4068.68     | -6.9746    | -6.9746         | 25269              | -----        |            |
| 36     | METHOXYCHLOR        | 23.640      | 23528.50      | 5028.79     | -7.4033    | -7.4033         | 23528              | 0.0614       | -          |
| 0      | ENDOSULFAN SULFATE  | 23.726      | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 37     | DBC                 | 23.940      | 3159601.50    | 593576.41   | 224.2231   | 224.2231        | 3159601            | 0.1502       | +          |
| 0      | ENDRIN KETONE       | 25.019      | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 0      | DCB                 | 28.203      | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
|        |                     | 10582392.50 | 2.142e+06     | 565.7366    | 473.5105   |                 |                    |              |            |

## Missing Component Report

| Component           | Expected Retention (Sample File) |
|---------------------|----------------------------------|
| APLHA BHC           | 10.797                           |
| GAMMA BHC           | 12.257                           |
| HEPTACHLOR          | 12.914                           |
| ALDRIN              | 13.842                           |
| BETA BHC            | 15.144                           |
| DELTA BHC           | 15.903                           |
| HEPTACHLOR EXPOXIDE | 16.381                           |
| ENDOSULFAN I        | 17.321                           |
| GAMMA CHLORDANE     | 17.568                           |
| ALPHA CHLORDANE     | 17.786                           |
| DDE                 | 18.101                           |
| DIELDRIN            | 18.601                           |
| ENDRIN              | 19.336                           |
| DDD                 | 20.925                           |
| ENDOSULFAN II       | 21.090                           |
| DDT                 | 21.451                           |
| ENDRIN ALDEHYDE     | 22.603                           |
| ENDOSULFAN SULFATE  | 23.726                           |
| ENDRIN KETONE       | 25.019                           |
| DCB                 | 28.203                           |

\*\*\*\*\*  
HP5890 DETECTOR A  
\*\*\*\*\*

c Stored in ASCII File: C:\2700\HP5890\PA38005.TX0

## Chromatogram

250

Sample Name : BLK #1 2100

FileName : c:\2700\hp5890\PA38005.raw

Method : HPPEST8.ins

Start Time : 0.00 min

End Time : 33.00 min

Scale Factor : -1.0

Plot Offset : -6 mV

Sample #: 5

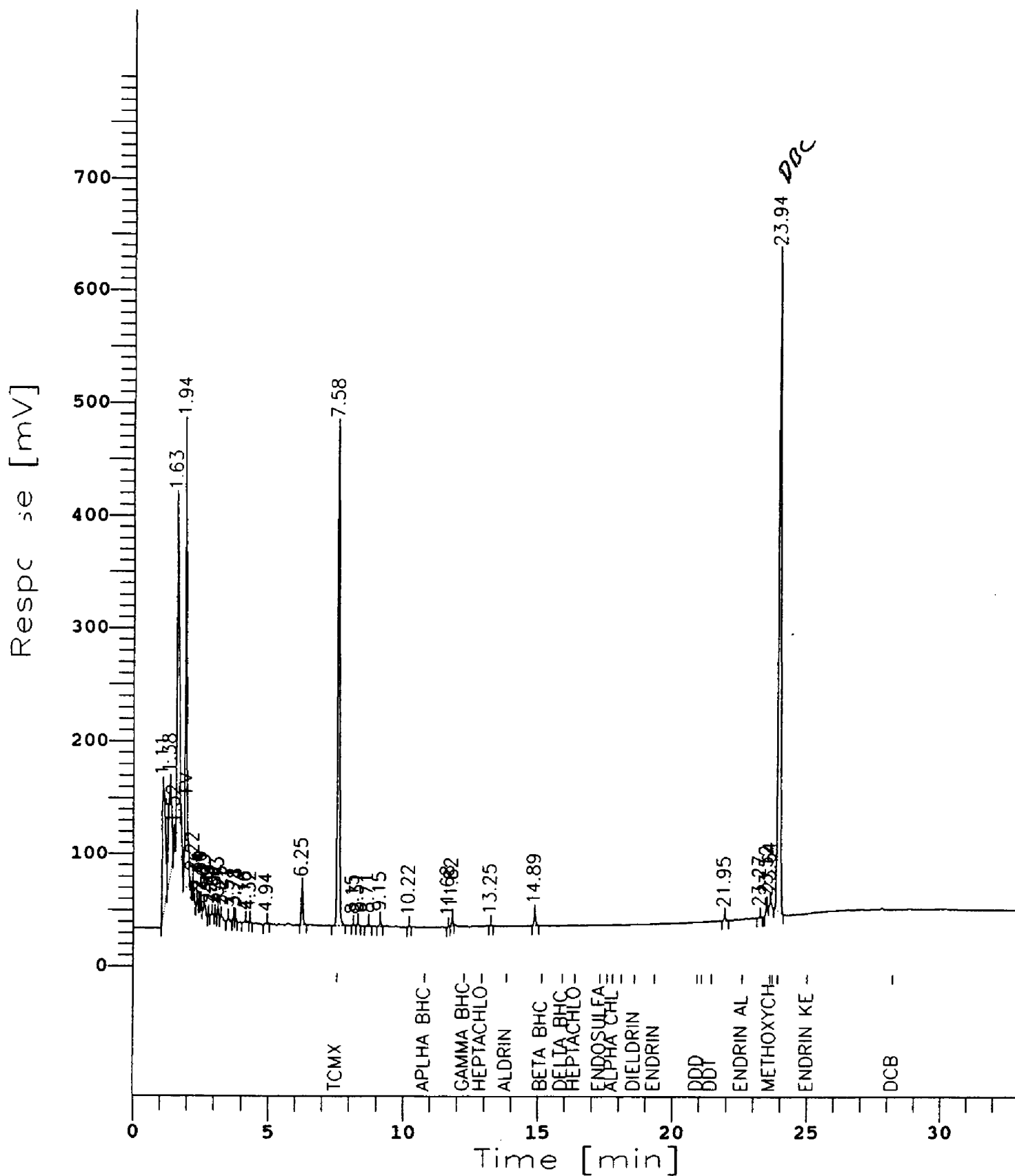
Date : 3/8/95 01:29 PM

Time of Injection: 3/8/95 12:56 PM

Low Point : -6.03 mV

High Point : 793.97 mV

Plot Scale: 800.0 mV



\*\*\*\*\*

Software Version: 3.3 &lt;4811&gt;

Sample Name : BLK #1 2100

Time : 3/8/95 01:29 PM

Sample Number: 5

Study : PPPCB

Operator : KMW

Instrument : HP5890

Channel : 8 A/D mV Range : 1000

InSampler : NONE

Vial : 0/0

Interface Serial # : 8055910402 Data Acquisition Time: 3/8/95 12:56 PM

Delay Time : 0.00 min.

End Time : 33.00 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\HP5890\PB38005.RAW

Result File : C:\2700\HP5890\PB38005.RST

Instrument File: c:\2700\methseqs\HPPESTB.ins

Process File : HPPESTB

Sample File : PESTB058

Sequence File : C:\2700\METHSEQS\0308PCB.SEQ

Inj. Volume : 1 ul

Area Reject : 200.000000

Sample Amount : 1.0000

Dilution Factor : 1.00

Instrument Control Method:

Instrument name : HP5890

Channel Parameters:

Inlet Parameters:

Inlet A :

Inlet B :

Detector Parameters:

Detector A :

Detector B :

Heated Zones:

Temperature Program:

Total run time : 33.00 min

Timed Events:

There are no timed events in the method

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## HP5890 REPORT FOR PEST/PCB ANALYSIS

\*\*\*\*\*  
NORTHEASTERN ANALYTICAL CORP. GAS CHROMATOGRAPHY LAB.  
\*\*\*\*\*

| Peak # | Component Name | Time [min] | Area [uV*sec] | Height [uV] | Raw Amount | Adjusted Amount | Calibration Factor | Cal. Range |
|--------|----------------|------------|---------------|-------------|------------|-----------------|--------------------|------------|
| 1      |                | 1.126      | 433025.29     | 57412.40    | 27.2266    | 27.2266         | 433025             |            |
| 2      |                | 1.297      | 651096.92     | 86691.95    | 43.4408    | 43.4408         | 651097             |            |
| 3      |                | 1.409      | 431072.47     | 94941.69    | 27.0814    | 27.0814         | 431072             |            |
| 4      |                | 1.542      | 1472210.13    | 333478.01   | 104.4928   | 104.4928        | 1472210            |            |
| 5      |                | 1.636      | 1523492.68    | 337379.93   | 108.3058   | 108.3058        | 1523493            |            |
| 6      |                | 1.875      | 35073.00      | 11191.82    | -2.3622    | -2.3622         | 35073              |            |
| 7      |                | 1.974      | 54586.00      | 20315.59    | -0.9114    | -0.9114         | 54586              |            |
| 8      |                | 2.150      | 21365.00      | 7233.10     | -3.3814    | -3.3814         | 21365              |            |
| 9      |                | 2.360      | 65393.00      | 14250.63    | -0.1079    | -0.1079         | 65393              |            |
| 10     |                | 2.598      | 23851.00      | 9671.68     | -3.1966    | -3.1966         | 23851              |            |
| 11     |                | 2.751      | 56499.00      | 10047.19    | -0.7691    | -0.7691         | 56499              |            |
| 12     |                | 3.106      | 19113.00      | 2627.15     | -3.5489    | -3.5489         | 19113              |            |
| 13     |                | 3.286      | 16668.50      | 3854.15     | -3.7306    | -3.7306         | 16668              |            |
| 14     |                | 3.449      | 2228.00       | 1060.30     | -4.8043    | -4.8043         | 2228               |            |
| 15     |                | 3.571      | 15100.00      | 4014.09     | -3.8473    | -3.8473         | 15100              |            |
| 16     |                | 4.468      | 3662.50       | 1277.94     | -4.6977    | -4.6977         | 3662               |            |
| 17     |                | 4.588      | 50230.50      | 10459.59    | -1.2352    | -1.2352         | 50230              |            |
| 18     |                | 4.877      | 2519.00       | 613.67      | -4.7827    | -4.7827         | 2519               |            |
| 19     |                | 5.444      | 3084.00       | 915.19      | -4.7407    | -4.7407         | 3084               |            |
| 20     |                | 6.042      | 2318.50       | 881.16      | -4.7976    | -4.7976         | 2318               |            |
| 21     |                | 6.195      | 5793.00       | 667.49      | -4.5393    | -4.5393         | 5793               |            |

| Peak # | Component Name       | Time [min] | Area [uV*sec] | Height [uV] | Raw Amount | Adjusted Amount | Calibration Factor | Cal. Range |
|--------|----------------------|------------|---------------|-------------|------------|-----------------|--------------------|------------|
| 22     |                      | 7.031      | 7143.00       | 1629.46     | -4.4389    | -4.4389         | 7143               |            |
| 23     | TCMX                 | 8.260      | 1456933.00    | 320571.52   | 103.3569   | 103.3569        | 1456933            |            |
| 4      |                      | 8.798      | 10712.00      | 1926.76     | -4.1735    | -4.1735         | 10712              |            |
|        |                      | 9.616      | 11582.50      | 2894.23     | 1.8201     | 1.8201          | 11582              |            |
|        |                      | 9.766      | 19628.00      | 4485.42     | 2.1694     | 2.1694          | 19628              |            |
| 6      |                      | 10.064     | 6076.00       | 1266.77     | 1.5811     | 1.5811          | 6076               |            |
| 0      | ALPHA BHC            | 10.753     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 28     |                      | 11.986     | 22667.00      | 3843.72     | 1.7780     | 1.7780          | 22667              |            |
| 0      | BETA BHC             | 12.324     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 29     |                      | 12.750     | 9246.50       | 1336.01     | 1.1531     | 1.1531          | 9246               |            |
| 30     |                      | 13.070     | 11074.00      | 2271.99     | -0.2336    | -0.2336         | 11074              |            |
| 31     | GAMMA BHC            | 13.320     | 14518.00      | 2990.90     | -0.1053    | -0.1053         | 14518              | -          |
| 0      | DELTA BHC            | 14.214     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 32     | HEPTACHLOR           | 14.697     | 10837.00      | 2139.95     | 1.7238     | 1.7238          | 10837              | -          |
| 0      | ALDRIN               | 16.123     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 0      | HEPTACHLOR EPOXIDE   | 16.791     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 0      | GAMMA CHLORDANE      | 17.459     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 33     | ALPHA CHLORDANE/ENDO | 18.004     | 12001.00      | 1609.76     | -0.8025    | -0.8025         | 12001              | -          |
| 0      | DIELDRIN             | 18.924     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 0      | DDE                  | 19.286     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 0      | ENDRIN               | 20.520     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 0      | ENDOSULFAN II        | 21.081     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 0      | DDD                  | 21.479     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 0      | ENDRIN ALDEHYDE      | 22.091     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 34     |                      | 22.722     | 5455.00       | 1100.94     | 0.3190     | 0.3190          | 5455               |            |
| 35     | ENDOSULFAN SULFATE   | 22.861     | 17232.00      | 3388.63     | 1.5531     | 1.5531          | 17232              | -          |
| 36     | DDT                  | 23.082     | 27284.50      | 4808.22     | 1.5550     | 1.5550          | 27285              | -          |
| 37     | ENDRIN KETONE        | 23.891     | 2040640.00    | 359572.18   | 164.3604   | 164.3604        | 2040640            | +          |
| 0      | METHOXYCHLOR         | 25.263     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 0      | DBC                  | 25.626     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 0      | DCB                  | 31.152     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| <hr/>  |                      |            |               |             |            |                 |                    |            |
|        |                      | 8571411.00 | 1.725e+06     | 530.7104    | 530.7104   | 8571411         |                    |            |

## Missing Component Report

| Component          | Expected Retention (Sample File) |
|--------------------|----------------------------------|
| BHC                | 10.753                           |
| BETA BHC           | 12.324                           |
| DELTA BHC          | 14.214                           |
| ALDRIN             | 16.123                           |
| HEPTACHLOR EPOXIDE | 16.791                           |
| GAMMA CHLORDANE    | 17.459                           |
| DIELDRIN           | 18.924                           |
| DDE                | 19.286                           |
| ENDRIN             | 20.520                           |
| ENDOSULFAN II      | 21.081                           |
| DDD                | 21.479                           |
| ENDRIN ALDEHYDE    | 22.091                           |
| METHOXYCHLOR       | 25.263                           |
| DBC                | 25.626                           |
| DCB                | 31.152                           |

\*\*\*\*\*  
 HP5890 DETECTOR B  
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Report Stored in ASCII File: C:\2700\HP5890\PB38005.TXT

## Chromatogram

253

Sample Name : BLK #1 2100

FileName : c:\2700\hp5890\PB38005.raw

Method : HPPESTB.ins

Start Time : 0.00 min

Scale Factor: -1.0

End Time : 33.00 min

Plot Offset: -17 mV

Sample #: 5

Date : 3/8/95 01:29 PM

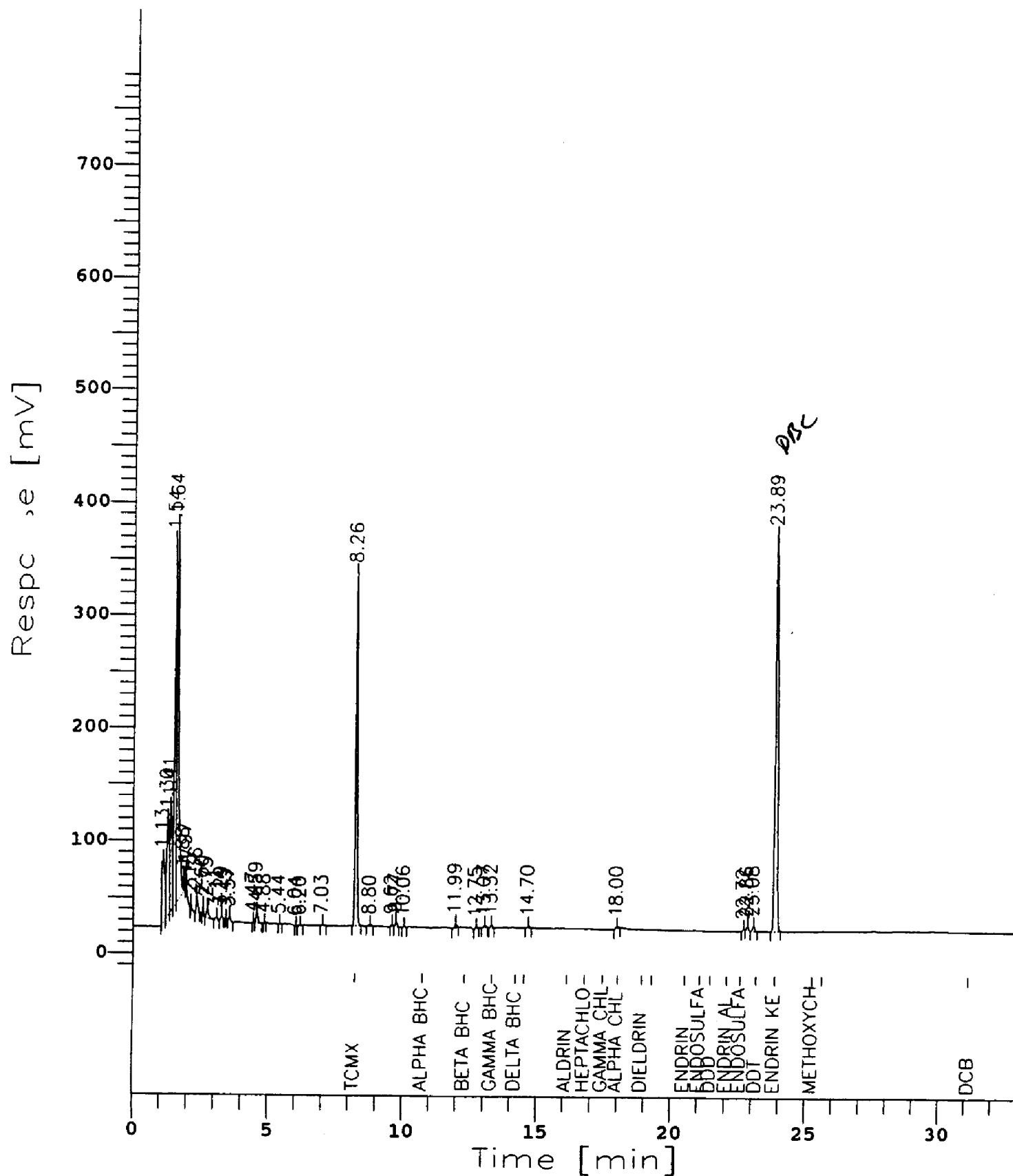
Time of Injection: 3/8/95 12:56 PM

Low Point : -17.06 mV

Plot Scale: 800.0 mV

Page 1 of 1

High Point : 782.94 mV



## NORTHEASTERN ANALYTICAL CORPORATION

## METHOD BLANK RESULTS

Client: KENNETH L. WOODRUFF ASSOCIATES Date Analyzed: 01-MAR-95  
NAC Job Number: L950626 Date Received: NA  
Lab Sample ID: BLK#4 2082/ Client ID: BLANK  
Date Extracted: 01-MAR-95

| PARAMETER    | RESULT | MDL | QUAL | UNITS |
|--------------|--------|-----|------|-------|
| Aroclor 1016 | ND     | 1   | U    | ug/l  |
| Aroclor 1221 | ND     | 2   | U    | ug/l  |
| Aroclor 1232 | ND     | 1   | U    | ug/l  |
| Aroclor 1242 | ND     | 1   | U    | ug/l  |
| Aroclor 1248 | ND     | 1   | U    | ug/l  |
| Aroclor 1254 | ND     | 1   | U    | ug/l  |
| Aroclor 1260 | ND     | 1   | U    | ug/l  |

Associated Samples: L950626-16 WGP2082-6

ND - Not detected at or below the MDL

=====

Software Version: 3.3 <4811>

Sample Name : BLK #2082

Sample Number: 9

Operator : KMW

Time : 3/14/95 11:20 AM

Study : PPPEST

Instrument : HP5890

Channel : A A/D mV Range : 1000

AutoSampler : NONE

Vial : 0/0

Interface Serial # : 8055910402 Data Acquisition Time: 3/1/95 02:00 PM

Delay Time : 0.00 min.

End Time : 33.00 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\HP5890\PA31009.RAW

Result File : C:\2700\HP5890\PA31009.RST

Instrument File: c:\2700\methseqs\HPPESTB.ins

Process File : HPPESTA

Sample File : PESTA058

Sequence File : C:\2700\METHSEQS\0301PST.seq

Inj. Volume : 1 ul

Area Reject : 200.000000

Sample Amount : 1.0000

Dilution Factor : 1.00

Instrument Control Method:

Instrument name : HP5890

Channel Parameters:

Inlet Parameters:

Inlet A :

Inlet B :

Detector Parameters:

Detector A :

Detector B :

Heated Zones:

Temperature Program:

total run time : 33.00 min

Timed Events:

There are no timed events in the method

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## HP 5890 REPORT FOR PEST/PCB ANALYSIS

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NORTHEASTERN ANALYTICAL CORP. GAS CHROMATOGRAPHY LAB.

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| Peak # | Component Name | Time [min] | Area [uV*sec] | Height [uV] | Raw Amount | Adjusted Amount | Calibration Factor | Delta RT [%] | Cal. Range |
|--------|----------------|------------|---------------|-------------|------------|-----------------|--------------------|--------------|------------|
| 1      |                | 1.090      | 2178328.89    | 392638.42   | 71.3805    | 71.3805         | 2178329            | -----        |            |
| 2      |                | 1.375      | 249294.56     | 52504.72    | 11.1309    | 11.1309         | 249295             | -----        |            |
| 3      |                | 1.628      | 90723.05      | 17214.38    | 6.1782     | 6.1782          | 90723              | -----        |            |
| 4      |                | 1.766      | 71574.50      | 24262.18    | 5.5802     | 5.5802          | 71574              | -----        |            |
| 5      |                | 2.011      | 12090.00      | 4137.27     | 3.7223     | 3.7223          | 12090              | -----        |            |
| 6      |                | 2.217      | 4304.00       | 1820.36     | 3.4791     | 3.4791          | 4304               | -----        |            |
| 7      |                | 2.319      | 2576.00       | 1199.63     | 3.4251     | 3.4251          | 2576               | -----        |            |
| 8      |                | 2.419      | 7826.00       | 2025.95     | 3.5891     | 3.5891          | 7826               | -----        |            |
| 9      |                | 3.233      | 15396.00      | 4704.47     | 3.8256     | 3.8256          | 15396              | -----        |            |
| 10     |                | 3.673      | 12523.00      | 3735.95     | 3.7358     | 3.7358          | 12523              | -----        |            |
| 11     |                | 4.286      | 12870.00      | 2607.55     | 3.7467     | 3.7467          | 12870              | -----        |            |
| 12     |                | 4.921      | 8463.00       | 1568.85     | 3.6090     | 3.6090          | 8463               | -----        |            |
| 13     |                | 5.684      | 5991.00       | 1218.80     | 3.5318     | 3.5318          | 5991               | -----        |            |
| 14     |                | 6.220      | 68870.00      | 16587.49    | 5.4957     | 5.4957          | 68870              | -----        |            |
|        | TCMX           | 7.543      | 2060100.00    | 488788.39   | 96.8284    | 0.0000          | 2060100            | -0.1002      |            |
|        |                | 8.327      | 21372.00      | 3811.18     | 4.0122     | 4.0122          | 21372              | -----        |            |
| 17     |                | 8.675      | 7559.00       | 1732.53     | 3.5808     | 3.5808          | 7559               | -----        |            |
| 18     |                | 9.113      | 26974.50      | 5520.44     | 4.1872     | 4.1872          | 26974              | -----        |            |
| 0      | APLX BHD       | 10.797     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 19     |                | 11.890     | 9135.00       | 2029.79     | 2.9764     | 2.9764          | 9135               | -----        |            |



| Peak # | Component Name      | Time [min] | Area [uV*sec] | Height [uV] | Raw Amount | Adjusted Amount | Calibration Factor | Delta RT [%] | Cal. Range |
|--------|---------------------|------------|---------------|-------------|------------|-----------------|--------------------|--------------|------------|
| 0      | GAMMA BHC           | 12.257     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 0      | HEPTACHLOR          | 12.914     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 20     | ALDRIN              | 13.107     | 221249.00     | 31846.07    | 9.6625     | 9.6625          | 221249             | -----        |            |
|        |                     | 13.842     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
|        |                     | 14.842     | 17708.00      | 3477.00     | 1.4922     | 1.4922          | 17708              | -----        |            |
|        | BETA BHC            | 15.144     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 0      | DELTA BHC           | 15.903     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 0      | HEPTACHLOR EXPOXIDE | 16.381     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 0      | ENDOSULFAN I        | 17.321     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 0      | GAMMA CHLORDANE     | 17.568     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 0      | ALPHA CHLORDANE     | 17.786     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 0      | DOE                 | 18.101     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 0      | DIELDRIN            | 18.601     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 0      | ENDRIN              | 19.336     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 0      | DDD                 | 20.925     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 0      | ENDOSULFAN II       | 21.090     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 0      | DDT                 | 21.451     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 22     | ENDRIN ALDEHYDE     | 21.906     | 13359.00      | 2362.68     | 7.6769     | 7.6769          | 13359              | -----        |            |
| 23     |                     | 22.691     | 5304.00       | 1025.87     | 2.1620     | 2.1620          | 5304               | 0.3903       | -          |
| 24     |                     | 23.223     | 8197.00       | 1421.86     | -11.1791   | -11.1791        | 8197               | -----        |            |
| 25     | METHOXYCHLOR        | 23.471     | 23854.00      | 4194.56     | -7.3231    | -7.3231         | 23854              | -0.6511      | -          |
| 26     | ENDOSULFAN SULFATE  | 23.599     | 11694.50      | 2498.01     | -1.0026    | -1.0026         | 11694              | -0.5347      | -          |
| 27     | DBC                 | 23.899     | 3408563.00    | 637343.83   | 241.8471   | 241.8471        | 3408563            | -0.0192      | +          |
| 0      | ENDRIN KETONE       | 25.019     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 0      | DCB                 | 28.203     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| -----  |                     |            |               |             |            |                 |                    |              |            |
|        |                     | 8575899.00 | 1.712e+06     | 487.3511    | 390.5226   |                 |                    |              |            |

## Missing Component Report

| Component       | Expected Retention (Sample File) |
|-----------------|----------------------------------|
| ALPHA BHC       | 10.797                           |
| GAMMA BHC       | 12.257                           |
| HEPTACHLOR      | 12.914                           |
| ALDRIN          | 13.842                           |
| BETA BHC        | 15.144                           |
| DELTA BHC       | 15.903                           |
| CHLOR EXPOXIDE  | 16.381                           |
| ENDOSULFAN I    | 17.321                           |
| GAMMA CHLORDANE | 17.568                           |
| ALPHA CHLORDANE | 17.786                           |
| DOE             | 18.101                           |
| DIELDRIN        | 18.601                           |
| ENDRIN          | 19.336                           |
| DDD             | 20.925                           |
| ENDOSULFAN II   | 21.090                           |
| DDT             | 21.451                           |
| ENDRIN KETONE   | 25.019                           |
| DCB             | 28.203                           |

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HP5890 DETECTOR A

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Report Stored in ASCII File: C:\2700\HP5890\PA31009.TXT

## Chromatogram

257

Sample Name : BLK # 2082

FileName : C:\2700\HP5890\PA31009.raw

Method : HPPEST8.ins

Start Time : 0.00 min

Scale Factor : 1.0

End Time : 33.00 min

Plot Offset : -7 mV

Sample #: 9

Date : 3/14/95 11:20 AM

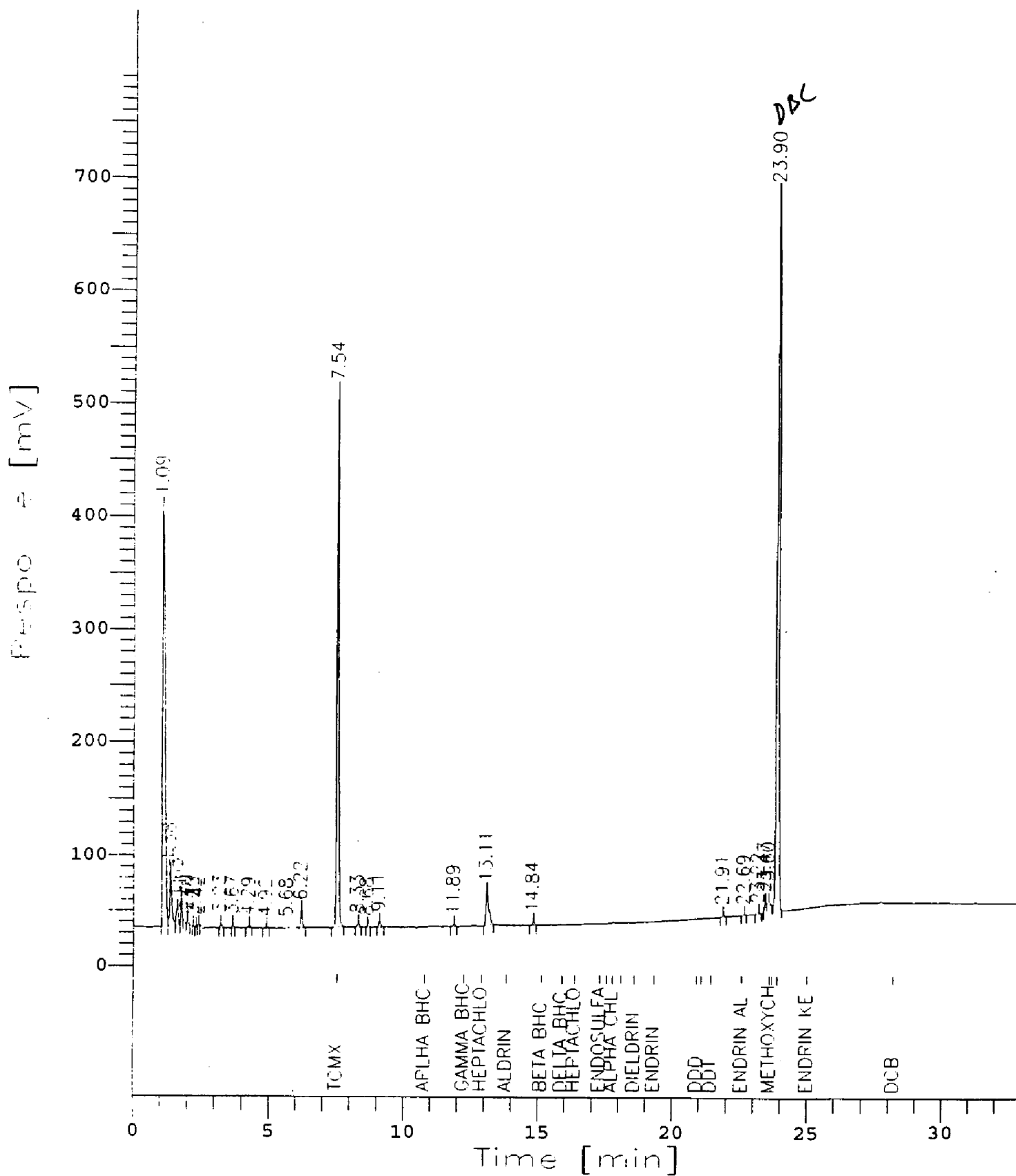
Time of Injection: 3/1/95 02:00 PM

Low Point : -6.65 mV

Plot Scale: 800.0 mV

Page 1 of 1

High Point : 793.35 mV



Software Version: 3.3 <4811>  
 Sample Name : BLK # 2082  
 Sample Number: 9  
 Operator : KMW  
 Time : 3/14/95 11:21 AM  
 Study : PPPEST  
 Instrument : HP5890  
 Channel : B A/D mV Range : 1000  
 Sampler : NONE  
 Fial : 0/0

Interface Serial # : 8055910402 Data Acquisition Time: 3/1/95 02:00 PM  
 Delay Time : 0.00 min.  
 End Time : 33.00 min.  
 Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\HP5890\PB31009.RAW  
 Result File : C:\2700\HP5890\PB31009.RST  
 Instrument File: c:\2700\methseqs\HPPESTB.ins  
 Process File : HPPESTB  
 Sample File : PESTB058  
 Sequence File : C:\2700\METHSEQS\0301PST.seq

Inj. Volume : 1 ul Area Reject : 200.000000  
 Sample Amount : 1.0000 Dilution Factor : 1.00

Instrument Control Method:  
 Instrument name : HP5890

Channel Parameters:

Inlet Parameters:  
 Inlet A : Inlet B :

Detector Parameters:  
 Detector A : Detector B :

Heated Zones:

Temperature Program:

cal run time : 33.00 min

Timed Events:  
 There are no timed events in the method

### HP5890 REPORT FOR PEST/PCB ANALYSIS

NORTHEASTERN ANALYTICAL CORP. GAS CHROMATOGRAPHY LAB.

| Peak # | Component Name | Time [min] | Area [uv*sec] | Height [uv] | Raw Amount | Adjusted Amount | Calibration Factor | Cal. Range |
|--------|----------------|------------|---------------|-------------|------------|-----------------|--------------------|------------|
| 1      |                | 1.090      | 1105087.77    | 181838.74   | 77.1962    | 77.1962         | 1105088            |            |
| 2      |                | 1.300      | 143749.38     | 37378.18    | 5.7182     | 5.7182          | 143749             |            |
| 3      |                | 1.409      | 92401.86      | 24684.19    | 1.9003     | 1.9003          | 92402              |            |
| 4      |                | 1.555      | 82977.00      | 23048.88    | 1.1996     | 1.1996          | 82977              |            |
| 5      |                | 1.808      | 6332.50       | 2530.37     | -4.4992    | -4.4992         | 6332               |            |
| 6      |                | 1.946      | 18057.50      | 3598.82     | -3.6274    | -3.6274         | 18058              |            |
| 7      |                | 2.046      | 3292.00       | 1801.37     | -4.7252    | -4.7252         | 3292               |            |
| 8      |                | 2.314      | 3417.00       | 966.26      | -4.7159    | -4.7159         | 3417               |            |
| 9      |                | 2.481      | 16520.00      | 5457.44     | -3.7417    | -3.7417         | 16520              |            |
| 10     |                | 2.770      | 12639.00      | 3641.58     | -4.0303    | -4.0303         | 12639              |            |
| 11     |                | 4.091      | 4829.50       | 1443.14     | -4.6109    | -4.6109         | 4830               |            |
| 12     |                | 4.577      | 34683.00      | 6249.26     | -2.3912    | -2.3912         | 34683              |            |
| 13     | TCMX           | 8.246      | 1444142.00    | 320494.71   | 102.4058   | 102.4058        | 1444142            |            |
| 14     |                | 9.600      | 8451.00       | 2013.05     | 1.6842     | 1.6842          | 8451               |            |
| 15     |                | 9.764      | 31143.00      | 5505.94     | 2.6693     | 2.6693          | 31143              |            |
|        |                | 10.278     | 6995.00       | 589.11      | 1.6210     | 1.6210          | 6995               |            |
|        | ALPHA BHC      | 10.753     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 0      | BETA BHC       | 12.324     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 17     |                | 13.059     | 37053.50      | 7170.45     | 0.7342     | 0.7342          | 37054              |            |
| 0      | GAMMA BHC      | 13.331     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 18     |                | 13.832     | 144261.00     | 25794.16    | 8.2165     | 8.2165          | 144261             |            |

259

| Peak # | Component Name       | Time [min] | Area [uV*sec] | Height [uV] | Raw Amount | Adjusted Amount | Calibration Factor | Cal. Range |
|--------|----------------------|------------|---------------|-------------|------------|-----------------|--------------------|------------|
| 0      | DELTA BHC            | 14.214     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 19     | HEPTACHLOR           | 14.685     | 5840.00       | 1264.55     | 1.4751     | 1.4751          | 5840               | -          |
| 0      | ALDRIN               | 16.123     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 0      | HEPTACHLOR EPOXIDE   | 16.791     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 0      | GAMMA CHLORDANE      | 17.459     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 0      | ALPHA CHLORDANE/ENDO | 18.019     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 0      | DIELDRIN             | 18.924     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 0      | DDE                  | 19.286     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 0      | ENDRIN               | 20.520     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 0      | ENDOSULFAN           | 21.081     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 0      | DDD                  | 21.479     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 0      | ENDRIN ALDEHYDE      | 22.091     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 0      | ENDOSULFAN SULFATE   | 22.599     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 20     |                      | 22.845     | 22327.00      | 2047.19     | 1.1269     | 1.1269          | 22327              |            |
| 21     | DDT                  | 23.067     | 27592.50      | 4827.23     | 1.5816     | 1.5816          | 27592              | -          |
| 22     | ENDRIN KETONE        | 23.876     | 2137196.00    | 372871.28   | 172.1691   | 172.1691        | 2137196            | +          |
| 0      | METHOXYCHLOR         | 25.263     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 0      | DBC                  | 25.626     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 0      | DCB                  | 31.152     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| <hr/>  |                      |            |               |             |            |                 |                    |            |
|        |                      |            | 5388987.50    | 1.035e+06   | 347.3561   | 347.3561        | 5388988            |            |

## Missing Component Report

Component Expected Retention (Sample File)

|                      |        |
|----------------------|--------|
| ALPHA BHC            | 10.753 |
| BETA BHC             | 12.324 |
| GAMMA BHC            | 13.331 |
| DELTA BHC            | 14.214 |
| ALDRIN               | 16.123 |
| HEPTACHLOR EPOXIDE   | 16.791 |
| GAMMA CHLORDANE      | 17.459 |
| ALPHA CHLORDANE/ENDO | 18.019 |
| DIELDRIN             | 18.924 |
| DDE                  | 19.286 |
| ENDRIN               | 20.520 |
| ENDOSULFAN           | 21.081 |
| DDD                  | 21.479 |
| ENDRIN ALDEHYDE      | 22.091 |
| ENDOSULFAN SULFATE   | 22.599 |
| METHOXYCHLOR         | 25.263 |
| DBC                  | 25.626 |
| DCB                  | 31.152 |

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HP5890 DETECTOR B

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Report Stored in ASCII File: C:\2700\HP5890\PB31009.TXT

## Chromatogram

260

Sample Name : BLK # 2082

FileName : C:\2700\HP5890\PB31009.raw

Method : HPPEST8.ins

Start Time : 0.00 min

Scale Factor : 1.0

End Time : 33.00 min

Plot Offset : -18 mV

Sample #: 9

Date : 3/14/95 11:21 AM

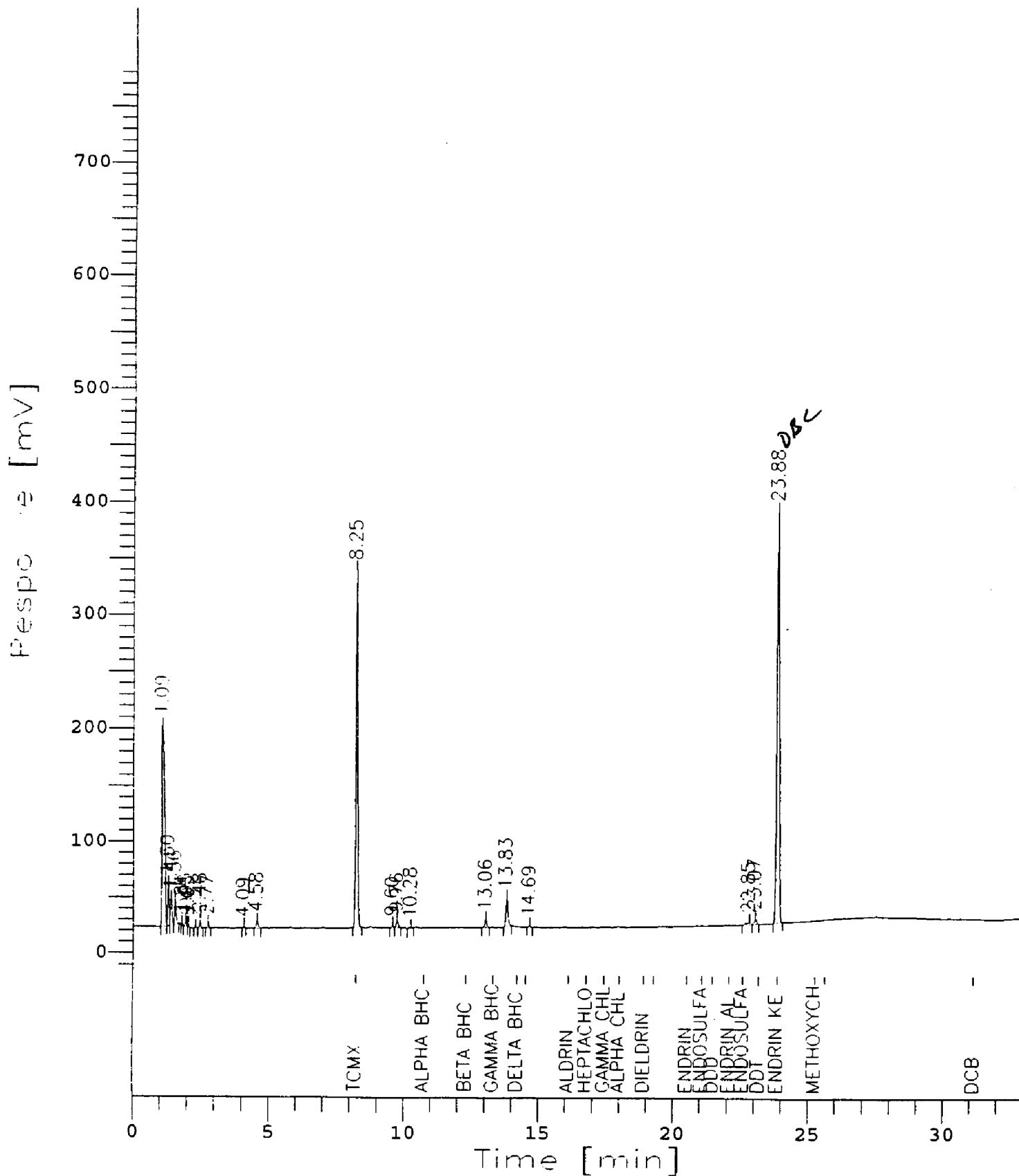
Time of Injection: 3/1/95 02:00 PM

Low Point : -18.38 mV

Plot Scale: 800.0 mV

Page 1 of 1

High Point : 781.62 mV



# NAC GC INSTRUMENT LOGBOOK

Instrument ID: 4P5890  
 Inst. Channel: A/B  
 Method File Name: \_\_\_\_\_

Calibration File Name: \_\_\_\_\_  
 GC Column 1: R4S-1701  
 GC Column 2: R4S-1701

| Sample Name   | Run/<br>ALS# | Injection / Purge<br>Date Time | Initial/Final<br>Vol(ml) Wt.(g) | DF | Column 1 %D<br>Surr-1 Surr-2 | Column 2 %D<br>Surr-1 Surr-2 | Comments / Standard Info. |
|---------------|--------------|--------------------------------|---------------------------------|----|------------------------------|------------------------------|---------------------------|
| A1660 C/2     | 1            | 8-8-95 10:24                   |                                 |    |                              |                              |                           |
| A1221/A1254/4 | 2            |                                | 11:06                           |    |                              |                              |                           |
| A1232 C/4     | 3            |                                | 11:13                           |    |                              |                              |                           |
| ABLK H2 2091  | 4            |                                | 12:14                           |    |                              |                              |                           |
| BKH 12:00     | 5            |                                | 12:56                           |    |                              |                              |                           |
| LC5 2100      | 6            | V                              | 01:32                           |    |                              |                              |                           |
| L950557-1 R3  | 7            | 3/2/05                         | 02:09                           |    |                              |                              |                           |
| L950561-3     | 8            |                                | 02:41                           |    |                              |                              |                           |
| L950561-2     | 9            |                                | 03:22                           |    |                              |                              |                           |
| L950561-1     | 10           |                                | 03:58                           |    |                              |                              |                           |
| L950556-1     | 11           |                                | 04:35                           |    |                              |                              |                           |
| L950626-16    | 12           |                                | 05:11                           |    |                              |                              |                           |
| A1221/A1254/4 | 13           |                                | 05:48                           |    |                              |                              |                           |
| L950626-80    | 14           |                                | 06:24                           |    |                              |                              |                           |
| L95062670     | 15           |                                | 07:01                           |    |                              |                              |                           |
| L950626-4     | 16           |                                | 07:30                           |    |                              |                              |                           |
| L950626-4     | 17           | V                              | 08:14                           |    |                              |                              |                           |

Pesticide/PCB: Surr 1 = DBC/DCB, Surr 2 = TCX (cap.col.criteria ± 0.3%)

Herbicides: Surr 1 = DCAA

Volatiles: Surr 1 = fluorobenzene, Surr 2 = chloro-2-bromopropane

Analyst Signature: 

Supervisor Review: \_\_\_\_\_

Date: \_\_\_\_\_

## NAC GC INSTRUMENT LOGBOOK

Instrument ID: HP5890  
Inst. Channel: A/B  
Method File Name: 102.

Calibration File Name: \_\_\_\_\_

GC Column 1: \_\_\_\_\_

GC Column 2: \_\_\_\_\_

Rtx-1201  
Rtx-50

| Sample Name | Run/<br>ALS# | Injection / Purge |       | Initial/Final<br>Vol(mL) Wt(g) | DF  | Column 1 %D |        | Column 2 %D |        | Comments / Standard Info. |
|-------------|--------------|-------------------|-------|--------------------------------|-----|-------------|--------|-------------|--------|---------------------------|
|             |              | Date              | Time  |                                |     | Surr-1      | Surr-2 | Surr-1      | Surr-2 |                           |
| 1450626-8ms | 18           | 3/8/95            | 08:50 |                                |     |             |        |             |        |                           |
| 1450626-3ms | 19           |                   | 09:26 |                                |     |             |        |             |        |                           |
| 1450626-1   | 20           |                   | 10:02 |                                |     |             |        |             |        |                           |
| 1450626-1   | 21           |                   | 10:38 |                                |     |             |        |             |        |                           |
| 1450626-1   | 22           | 3/8/95            | 11:14 |                                |     |             |        |             |        |                           |
| 1450626-1   | 23           |                   | 11:50 |                                |     |             |        |             |        |                           |
| 1450626-1   | 24           | 3/9/95            | 12:26 |                                |     |             |        |             |        |                           |
| 1450626-1   | 25           |                   | 01:02 |                                | X5  |             |        |             |        |                           |
| 1450626-1   | 26           |                   | 01:38 |                                | X5  |             |        |             |        |                           |
| 1450626-1   | 27           |                   | 02:14 |                                | X5  |             |        |             |        |                           |
| 1450626-1   | 28           |                   | 02:51 |                                | X5  |             |        |             |        |                           |
| 1450626-1   | 29           |                   | 03:27 |                                | X5  |             |        |             |        |                           |
| 1450626-1   | 30           |                   | 04:03 |                                | X5  |             |        |             |        |                           |
| 1450626-1   | 31           | 3/9/95            | 04:39 |                                | X5  |             |        |             |        |                           |
| 1450626-1   | 32           |                   | 05:15 |                                |     |             |        |             |        |                           |
| 1450626-1   | 33           |                   | 05:57 |                                |     |             |        |             |        |                           |
| 1450626-1   | 34           |                   | 06:21 |                                | 1.5 |             |        |             |        |                           |

Pesticide/PCB: Surr 1 = DBC/DCB, Surr 2 = TCX (cap.col.criteria  $\pm$  0.3%)

Herbicides: Surr 1 = DCAA

Volatiles: Surr 1 = fluorebenzene, Surr 2 = chloro-2-bromopropane

Date:



Analyst Signature: 

Supervisor Review: \_\_\_\_\_

Date: \_\_\_\_\_

## NAC GC INSTRUMENT LOGBOOK

Instrument ID:

HP5890

Inst. Channel:

A/B

Method File Name:

Pest / Pest

Calibration File Name:

GC Column 1:

RTL-1701

GC Column 2:


RTL-50

| Sample Name   | Run/<br>ALS# | Injection / Purge<br>Date Time | Initial/Final<br>Vol(mL) Wt.(g) | DF  | Column 1 %D<br>Surr-1 Surr-2 | Column 2 %D<br>Surr-1 Surr-2 | Comments / Standard Info.       |
|---------------|--------------|--------------------------------|---------------------------------|-----|------------------------------|------------------------------|---------------------------------|
| C450626-6     | 18           | 3/10/95 10:33am                |                                 | 1:2 |                              |                              |                                 |
| C450626-7     | 19           | 10:58                          |                                 | 1:2 |                              |                              |                                 |
| C450626-9     | 20           | 11:35                          |                                 | 1:2 |                              |                              |                                 |
| C450626-11    | 21           |                                |                                 | X5  |                              |                              |                                 |
| C450626-11    | 22           |                                |                                 | X2  |                              |                              |                                 |
| C450626-15    | 23           |                                |                                 | X26 |                              |                              |                                 |
| C450626-15    | 24           | See<br>Comment                 |                                 | X76 |                              |                              | has - not to<br>be used<br>more |
| A1721/A175444 | 25           | 3/10/95 1:25                   |                                 |     |                              |                              |                                 |
| A1721/A175444 | 26           | 3/10/95 11:21am                |                                 |     |                              |                              | Run 3/13/95                     |
| C450626-11    | 27           | 11:57am                        |                                 | 1:2 |                              |                              |                                 |
| C450626-15    | 28           | 12:34pm                        |                                 | X26 |                              |                              | 1:2                             |
| C450626-15    | 29           | 01:47                          |                                 | X10 |                              |                              | LOST BY SYSTEM                  |
| C450626-4     | 30           | 01:47                          |                                 | X5  |                              |                              |                                 |
| C450626-15    | 31           | 02:28                          |                                 | X10 |                              |                              |                                 |
| C450626-7     | 32           | 03:04                          |                                 |     |                              |                              |                                 |
| -6            | 33           | 03:41                          |                                 | 1:2 |                              |                              |                                 |
| C450626-9     | 34           | 04:17                          |                                 |     |                              |                              |                                 |

Pesticide/PCB: Surr 1 = DBC/DCB, Surr 2 = TCX (cap.col.criteria  $\pm$  0.3%)

Herbicides: Surr 1 = DCAA

Volatiles: Surr 1 = fluorobenzene, Surr 2 = chloro-2-bromopropane



### Supervisor Review

Date:

# NAC GC INSTRUMENT LOGBOOK

Instrument ID: 14P5840  
Inst. Channel: A/B  
Method File Name: PC6

Calibration File Name: \_\_\_\_\_  
GC Column 1: Rtx-1701  
GC Column 2: Rtx-50

[illegible]Pesticide/PCB: Surr 1 = DBC/LX.B, Surr 2 = ICX (cap.col.criteria  $\pm 0.3\%$ )

Herbicides: Surr 1 = DCAA    Volatiles: Surr 1 = fluorobenzene, Surr 2 = chloro-2-bromopropane

LABORATORY NAME: NAC  
CAL PERFORMED BY: KMW  
ANALYSIS DATE: 01/06/95  
ANALYSIS TIME: 22:49  
LABORATORY ID: A1260

GC COLUMN: RTX-1701  
INSTRUMENT: HP5890  
METHOD: 8080

## Pesticide/PCB Initial Calibration

## Calibration Factor Summary

| STANDARD    | LEVEL 1 | LEVEL 2 | LEVEL 3 | LEVEL 4 | LEVEL 5 | STD   |      |       |
|-------------|---------|---------|---------|---------|---------|-------|------|-------|
| AMOUNT, PPB | 25      | 50      | 100     | 250     | 500     | MEAN  | DEV. | %RSD  |
| ANALYTE (S) |         |         |         |         |         |       |      |       |
| A1260       | 9580    | 9757    | 9531    | 9507    | 13659   | 10407 | 1628 | 15.65 |

FILE: 54220

LABORATORY NAME: NAC  
CAL PERFORMED BY: KMW  
ANALYSIS DATE: 02/20/95  
ANALYSIS TIME: 15:51  
LABORATORY ID: A1254

GC COLUMN: RTX-1701  
INSTRUMENT: HP5890  
METHOD: 8080

## Pesticide/PCB Initial Calibration

## Calibration Factor Summary

| STANDARD    | LEVEL 1 | LEVEL 2 | LEVEL 3 | LEVEL 4 | LEVEL 5 | STD  |      |      |
|-------------|---------|---------|---------|---------|---------|------|------|------|
| AMOUNT, PPB | 25      | 50      | 100     | 250     | 500     | MEAN | DEV. | %RSD |
| ANALYTE (S) |         |         |         |         |         |      |      |      |
| A1254       | 7277    | 7261    | 6767    | 5975    | 5990    | 6654 | 578  | 8.69 |

FILE: PCBORV

|                   |                       |                 |          |
|-------------------|-----------------------|-----------------|----------|
| LABORATORY NAME:  | NAC                   | GC COLUMN:      | RTX-1701 |
| CAL PERFORMED BY: | KMW                   | QUANT/CONF.:    | QUANT    |
| INIT. CAL. DATE:  | 02/20/95              | GC INSTRUMENT:  | HP5890   |
| INIT. CAL. TIME:  | 15:51                 | CHK. CAL. DATE: | 3/08/95  |
| ANALYTE:          | A1254                 | CHK. CAL. TIME: | 11:06    |
| INIT. CAL. CONC:  | 25/50/100/250/500 PPB | CHK. CAL. CONC: | 250PPB   |

## DAILY CALIBRATION CHECK

|         | MEAN<br>CAL. FACT | CHK. CAL<br>FACT. | %<br>DIFF. | ALLOWED<br>% DIFF | INIT. CAL<br>1ST PK. RT | RT<br>+/- | RT WINDOW<br>FROM TO | CAL. CHK<br>RT |
|---------|-------------------|-------------------|------------|-------------------|-------------------------|-----------|----------------------|----------------|
| A1254 : | 6654              | 6422              | 3.5        | 15.0              | 16.20                   | 0.081     | 16.119 16.281        | 16.22          |

LABORATORY NAME: NAC  
CAL PERFORMED BY: KMW  
INIT. CAL. DATE: 02/20/95  
INIT. CAL. TIME: 15:51  
ANALYTE: A1254  
INIT. CAL. CONC: 25/50/100/250/500 PPB

GC COLUMN: RTX-1701  
QUANT/CONF.: QUANT  
GC INSTRUMENT: HP5890  
CHK. CAL. DATE: 3/08/95  
CHK. CAL. TIME: 17:48  
CHK. CAL. CONC: 250PPB

## DAILY CALIBRATION CHECK

|       |   | MEAN      | CHK. CAL | %     | ALLOWED | INIT. CAL  | RT    | RT WINDOW |        | CAL. CHK |
|-------|---|-----------|----------|-------|---------|------------|-------|-----------|--------|----------|
|       |   | CAL. FACT | FACT.    | DIFF. | % DIFF  | 1ST PK. RT | +/-   | FROM      | TO     | RT       |
| A1254 | : | 6654      | 7019     | -5.5  | 15.0    | 16.20      | 0.081 | 16.119    | 16.281 | 16.213   |

|                   |                       |                 |          |
|-------------------|-----------------------|-----------------|----------|
| LABORATORY NAME:  | NAC                   | GC COLUMN:      | RTX-1701 |
| CAL PERFORMED BY: | KMW                   | QUANT/CONF.:    | QUANT    |
| INIT. CAL. DATE:  | 02/20/95              | GC INSTRUMENT:  | HP5890   |
| INIT. CAL. TIME:  | 15:51                 | CHK. CAL. DATE: | 3/08/95  |
| ANALYTE:          | A1254                 | CHK. CAL. TIME: | 22:50    |
| INIT. CAL. CONC:  | 25/50/100/250/500 PPB | CHK. CAL. CONC: | 250PPB   |

## DAILY CALIBRATION CHECK

|         | MEAN<br>CAL. FACT | CHK. CAL<br>FACT. | %<br>DIFF. | ALLOWED<br>% DIFF | INIT. CAL<br>1ST PK. RT | RT<br>+/- | RT WINDOW<br>FROM TO | CAL. CHK<br>RT |
|---------|-------------------|-------------------|------------|-------------------|-------------------------|-----------|----------------------|----------------|
| A1254 : | 5975              | 5268              | 11.8       | 15.0              | 16.20                   | 0.081     | 16.119 16.281        | 16.21          |

LABORATORY NAME: NAC  
CAL PERFORMED BY: KMW  
INIT. CAL. DATE: 01/06/95  
INIT. CAL. TIME: 22:49  
ANALYTE: A1260  
INIT. CAL. CONC: 25/50/100/250/500 PPB

GC COLUMN: RTX-1701  
QUANT/CONF.: QUANT  
GC INSTRUMENT: HP5890  
CHK. CAL. DATE: 3/09/95  
CHK. CAL. TIME: 05:51  
CHK. CAL. CONC: 50PPB

## DAILY CALIBRATION CHECK

|         | MEAN<br>CAL. FACT | CHK. CAL<br>FACT. | %<br>DIFF. | ALLOWED<br>% DIFF | INIT. CAL<br>1ST PK. RT | RT<br>+/- | RT WINDOW<br>FROM TO | CAL. CHK<br>RT |
|---------|-------------------|-------------------|------------|-------------------|-------------------------|-----------|----------------------|----------------|
| A1260 : | 9757              | 8366              | 14.3       | 15.0              | 18.54                   | 0.092     | 18.448 18.632        | 18.513         |



|                   |                       |                 |          |
|-------------------|-----------------------|-----------------|----------|
| LABORATORY NAME:  | NAC                   | GC COLUMN:      | RTX-1701 |
| CAL PERFORMED BY: | KMW                   | QUANT/CONF.:    | QUANT    |
| INIT. CAL. DATE:  | 02/20/95              | GC INSTRUMENT:  | HP5890   |
| INIT. CAL. TIME:  | 15:51                 | CHK. CAL. DATE: | 3/09/95  |
| ANALYTE:          | A1254                 | CHK. CAL. TIME: | 09:29    |
| INIT. CAL. CONC:  | 25/50/100/250/500 PPB | CHK. CAL. CONC: | 250PPB   |

## DAILY CALIBRATION CHECK

|         | MEAN<br>CAL. FACT | CHK. CAL<br>FACT. | %<br>DIFF. | ALLOWED<br>% DIFF | INIT. CAL<br>1ST PK. RT | RT<br>+/- | RT WINDOW<br>FROM TO | CAL. CHK<br>RT |
|---------|-------------------|-------------------|------------|-------------------|-------------------------|-----------|----------------------|----------------|
| A1254 : | 5975              | 5590              | 6.4        | 15.0              | 16.20                   | 0.081     | 16.119 16.281        | 16.215         |

LABORATORY NAME: NAC  
 CAL PERFORMED BY: KMW  
 INIT. CAL. DATE: 02/20/95  
 INIT. CAL. TIME: 15:51  
 ANALYTE: A1254  
 INIT. CAL. CONC: 25/50/100/250/500 PPB

GC COLUMN: RTX-1701  
 QUANT/CONF.: QUANT  
 GC INSTRUMENT: HP5890  
 CHK. CAL. DATE: 3/13/95  
 CHK. CAL. TIME: 11:21  
 CHK. CAL. CONC: 250PPB

## DAILY CALIBRATION CHECK

|         | MEAN<br>CAL. FACT | CHK. CAL<br>FACT. | %<br>DIFF. | ALLOWED<br>% DIFF | INIT. CAL<br>1ST PK. RT | RT<br>+/- | RT WINDOW<br>FROM TO | CAL. CHK<br>RT |
|---------|-------------------|-------------------|------------|-------------------|-------------------------|-----------|----------------------|----------------|
| A1254 : | 5975              | 5752              | 3.7        | 15.0              | 16.20                   | 0.081     | 16.119 16.281        | 16.28          |

|                   |                       |                 |          |
|-------------------|-----------------------|-----------------|----------|
| LABORATORY NAME:  | NAC                   | GC COLUMN:      | RTX-1701 |
| CAL PERFORMED BY: | KMW                   | QUANT/CONF.:    | QUANT    |
| INIT. CAL. DATE:  | 02/20/95              | GC INSTRUMENT:  | HP5890   |
| INIT. CAL. TIME:  | 15:51                 | CHK. CAL. DATE: | 3/13/95  |
| ANALYTE:          | A1254                 | CHK. CAL. TIME: | 18:48    |
| INIT. CAL. CONC:  | 25/50/100/250/500 PPB | CHK. CAL. CONC: | 250PPB   |

## DAILY CALIBRATION CHECK

|         | MEAN<br>CAL. FACT | CHK. CAL<br>FACT. | %<br>DIFF. | ALLOWED<br>% DIFF | INIT. CAL<br>1ST PK. RT | RT<br>+/- | RT WINDOW<br>FROM TO | CAL. CHK<br>RT |
|---------|-------------------|-------------------|------------|-------------------|-------------------------|-----------|----------------------|----------------|
| A1254 : | 5975              | 5342              | 10.6       | 15.0              | 16.20                   | 0.081     | 16.119 16.281        | 16.25          |

LABORATORY NAME: NAC  
CAL PERFORMED BY: KMW  
ANALYSIS DATE: 02/20/95  
ANALYSIS TIME: 15:51  
LABORATORY ID: A1254

GC COLUMN: RTX-1701  
INSTRUMENT: HP5890  
METHOD: 8080

## Pesticide/PCB Initial Calibration

## Calibration Factor Summary

| STANDARD    | LEVEL 1 | LEVEL 2 | LEVEL 3 | LEVEL 4 | LEVEL 5 | STD  |      |      |
|-------------|---------|---------|---------|---------|---------|------|------|------|
| AMOUNT, PPB | 25      | 50      | 100     | 250     | 500     | MEAN | DEV. | %RSD |
| ANALYTE (S) |         |         |         |         |         |      |      |      |
| A1254       | 7277    | 7261    | 6767    | 5975    | 5990    | 6654 | 578  | 8.69 |

FILE: PCBCRV

LABORATORY NAME: NAC  
CAL PERFORMED BY: KMW  
INIT. CAL. DATE: 02/20/95  
INIT. CAL. TIME: 15:51  
ANALYTE: A1254  
INIT. CAL. CONC: 25/50/100/250/500 PPB

GC COLUMN: RTX-1701  
QUANT/CONF.: QUANT  
GC INSTRUMENT: HP5890  
CHK. CAL. DATE: 3/08/95  
CHK. CAL. TIME: 11:06  
CHK. CAL. CONC: 250PPB

## DAILY CALIBRATION CHECK

|         | MEAN<br>CAL. FACT | CHK. CAL<br>FACT. | %<br>DIFF. | ALLOWED<br>% DIFF | INIT. CAL<br>1ST PK. RT | RT<br>+/- | RT WINDOW<br>FROM TO | CAL. CHK<br>RT |
|---------|-------------------|-------------------|------------|-------------------|-------------------------|-----------|----------------------|----------------|
| A1254 : | 6654              | 6422              | 3.5        | 15.0              | 16.20                   | 0.081     | 16.119 16.281        | 16.22          |

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LABORATORY NAME: NAC  
CAL PERFORMED BY: KMW  
INIT. CAL. DATE: 02/20/95  
INIT. CAL. TIME: 15:51  
ANALYTE: A1254  
INIT. CAL. CONC: 25/50/100/250/500 PPB

GC COLUMN: RTX-1701  
QUANT/CONF.: QUANT  
GC INSTRUMENT: HP5890  
CHK. CAL. DATE: 3/08/95  
CHK. CAL. TIME: 17:48  
CHK. CAL. CONC: 250PPB

## DAILY CALIBRATION CHECK

|         | MEAN<br>CAL. FACT | CHK. CAL<br>FACT. | %<br>DIFF. | ALLOWED<br>% DIFF | INIT. CAL<br>1ST PK. RT | RT<br>+/- | RT WINDOW<br>FROM TO | CAL. CHK<br>RT |
|---------|-------------------|-------------------|------------|-------------------|-------------------------|-----------|----------------------|----------------|
| A1254 : | 6654              | 7019              | -5.5       | 15.0              | 16.20                   | 0.081     | 16.119 16.281        | 16.213         |

## NORTHEASTERN ANALYTICAL CORPORATION

## REPORT OF QUALITY CONTROL RESULTS

NAC JOB #L950626

| PARAMETER    | MTX | LCS<br>REC | MS<br>REC | MSD<br>REC | SX<br>CONC | LCS 2nd shift<br>REPL.<br>CONC | RPD  |
|--------------|-----|------------|-----------|------------|------------|--------------------------------|------|
| Aroclor 1260 | Aq  | 138.       |           |            |            | 124.                           | 10.7 |
| Aroclor 1016 | S   | 70.        | 62.       | 65.        |            |                                | 4.72 |
| Aroclor 1260 | S   | 65.        | 45.       | 45.        |            |                                | 0    |

Associated Samples: L950626-1 L950626-10 L950626-11 L950626-12 L950626-13  
 L950626-14 L950626-15 L950626-2 L950626-3 L950626-4  
 L950626-5 L950626-6 L950626-7 L950626-8 L950626-9  
 L950674-1 L950686-1

Sample used for Spike Analysis: L950626-8

Sample used for Duplicate Analysis: Not Applicable

NR - No Recovery  
 NC - Not calculated, values below RDL  
 HA - Interference due to high analyte  
 ND - Not detected above the MDL  
 MI - Matrix interference

NORTHEASTERN ANALYTICAL CORPORATION  
REPORT OF PCB RESULTS SOIL SURROGATE RESULTS

NAC JOB #L950626

| LAB SAMPLE ID       | DBC<br>%RECOVERY<br>20-150 | TCMX<br>%RECOVERY<br>60-150 |
|---------------------|----------------------------|-----------------------------|
| L950626-1           | D                          | 79                          |
| L950626-2           | 48                         | 84                          |
| L950626-3           | D                          | 72                          |
| L950626-4           | 60                         | 85                          |
| L950626-5           | D                          | 74                          |
| L950626-6           | 57                         | 90                          |
| L950626-7           | 84                         | 93                          |
| L950626-8           | 50                         | 90                          |
| L950626-9           | 59                         | 83                          |
| L950626-10          | 54                         | 90                          |
| L950626-11          | 48                         | 96                          |
| L950626-12          | 37                         | 84                          |
| L950626-13          | 35                         | 79                          |
| L950626-14          | 65                         | 91                          |
| L950626-15          | 112                        | 107                         |
| QCSPK/03-03-95      | 124                        | 94                          |
| BLK#1 2100/03-03-95 | 88                         | 88                          |
| L950626-8MS         | 64                         | 117                         |
| L950626-8MSD        | 65                         | 88                          |

MI - Surrogate was not recovered due to matrix interference  
 HA - Surrogate was not recovered due to high analyte  
 D - Surrogate was diluted out



NORTHEASTERN ANALYTICAL CORPORATION  
REPORT OF PCB RESULTS AQUEOUS SURROGATE RESULTS

NAC JOB #L950626

| LAB SAMPLE ID       | DBC<br>%RECOVERY<br>24-154 | TCMX<br>%RECOVERY |
|---------------------|----------------------------|-------------------|
| BLK#1 2082/02-16-95 | 118                        | 92                |
| QCSPK/02-16-95      | 118                        | 94                |

MI - Surrogate was not recovered due to matrix interference  
HA - Surrogate was not recovered due to high analyte  
D - Surrogate was diluted out

```

=====
Software Version: 3.3 <4811>
Sample Name : L950626-1 1:5
Sample Number: 26
Operator : KMW
Time : 3/9/95 02:12 AM
Study : PPPCB

Instrument : HP5890
AutoSampler : NONE
k/Vial : 0/0
Channel : A A/D mV Range : 1000
=====

```

```

Interface Serial # : 8055910402 Data Acquisition Time: 3/9/95 01:38 AM
Delay Time : 0.00 min.
End Time : 33.00 min.
Sampling Rate : 1.0000 pts/sec

```

```

Raw Data File : C:\2700\HP5890\PA38026.RAW
Result File : C:\2700\HP5890\PA38026.RST
Instrument File: c:\2700\methseqs\HPPESTB.ins
Process File : HPPESTA
Sample File : PESTA058
Sequence File : C:\2700\METHSEQS\0308PCB.SEQ

```

```

Inj. Volume : 1 ul
Sample Amount : 1.0000
Area Reject : 200.000000
Dilution Factor : 1.00

```

```

Instrument Control Method:
Instrument name : HP5890

```

Channel Parameters:

```

Inlet Parameters:
Inlet A :
Inlet B :

```

```

Detector Parameters:
Detector A :
Detector B :

```

Heated Zones:

Temperature Program:

Total run time : 33.00 min

```

Timed Events:
There are no timed events in the method

```

# HP 5890 REPORT FOR PEST/PCB ANALYSIS

NORTHEASTERN ANALYTICAL CORP. GAS CHROMATOGRAPHY LAB.

| Peak # | Component Name | Time [min] | Area [uV*sec] | Height [uV] | Raw Amount | Adjusted Amount | Calibration Factor | Delta RT [%] | Cal. Range |
|--------|----------------|------------|---------------|-------------|------------|-----------------|--------------------|--------------|------------|
| 1      |                | 1.135      | 1030666.50    | 128645.96   | 35.5355    | 35.5355         | 1030666            | -----        |            |
| 2      |                | 1.313      | 62003.00      | 16809.48    | 5.2812     | 5.2812          | 62003              | -----        |            |
| 3      |                | 1.623      | 527147.00     | 140553.02   | 19.8091    | 19.8091         | 527147             | -----        |            |
| 4      |                | 2.031      | 8134.00       | 3153.03     | 3.5987     | 3.5987          | 8134               | -----        |            |
| 5      |                | 2.156      | 18611.00      | 3503.16     | 3.9260     | 3.9260          | 18611              | -----        |            |
| 6      |                | 2.382      | 8642.00       | 1704.80     | 3.6146     | 3.6146          | 8642               | -----        |            |
| 7      |                | 2.642      | 31550.00      | 6571.25     | 4.3301     | 4.3301          | 31550              | -----        |            |
| 8      |                | 2.908      | 5420.50       | 1737.85     | 3.5140     | 3.5140          | 5420               | -----        |            |
| 9      |                | 3.010      | 26335.00      | 7196.28     | 4.1672     | 4.1672          | 26335              | -----        |            |
| 10     |                | 4.569      | 12545.00      | 3626.79     | 3.7365     | 3.7365          | 12545              | -----        |            |
| 11     |                | 5.386      | 69356.50      | 19331.97    | 5.5109     | 5.5109          | 69356              | -----        |            |
| 12     |                | 5.760      | 5894.50       | 1069.54     | 3.5288     | 3.5288          | 5894               | -----        |            |
| 13     |                | 6.212      | 18595.50      | 2852.50     | 3.9255     | 3.9255          | 18596              | -----        |            |
| 14     |                | 6.510      | 35358.50      | 8509.04     | 4.4490     | 4.4490          | 35358              | -----        |            |
| 15     | TCMX           | 7.572      | 353444.00     | 85556.33    | 13.9120    | 0.0000          | 353444             | 0.2741       |            |
| 16     |                | 9.220      | 12895.00      | 2586.43     | 3.7474     | 3.7474          | 12895              | -----        |            |
| 17     |                | 9.359      | 13068.00      | 3205.37     | 3.7528     | 3.7528          | 13068              | -----        |            |
| 18     |                | 9.554      | 27461.00      | 5924.10     | 4.2024     | 4.2024          | 27461              | -----        |            |
| 19     |                | 9.789      | 191237.00     | 44147.86    | 9.3176     | 9.3176          | 191237             | -----        |            |
| 20     |                | 10.025     | 5224.00       | 1241.23     | 3.5079     | 3.5079          | 5224               | -----        |            |

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| Peak # | Component Name      | Time [min] | Area [uV*sec] | Height [uV] | Raw Amount | Adjusted Amount | Calibration Factor | Delta RT [%] | Cal. Range |
|--------|---------------------|------------|---------------|-------------|------------|-----------------|--------------------|--------------|------------|
| 21     |                     | 10.368     | 25806.00      | 5506.06     | 4.1507     | 4.1507          | 25806              | -----        |            |
| 22     | APLHA BHC           | 10.814     | 11848.50      | 2910.78     | 3.7148     | 3.7148          | 11848              | 0.1575       | -          |
| 23     |                     | 10.987     | 253533.00     | 53754.52    | 11.2633    | 11.2633         | 253533             | -----        |            |
| 24     |                     | 11.303     | 4123.00       | 1160.76     | 3.4735     | 3.4735          | 4123               | -----        |            |
| 25     |                     | 11.322     | 43661.00      | 9564.96     | 4.7084     | 4.7084          | 43661              | -----        |            |
| 26     |                     | 11.886     | 104949.00     | 22512.46    | 6.1271     | 6.1271          | 104949             | -----        |            |
| 27     |                     | 11.882     | 92916.00      | 19953.28    | 5.7314     | 5.7314          | 92916              | -----        |            |
| 28     | GAMMA BHC           | 12.302     | 97788.50      | 14561.61    | 5.8916     | 5.8916          | 97788              | 0.3632       | -          |
| 29     |                     | 12.604     | 528532.00     | 95744.26    | 20.0560    | 20.0560         | 528532             | -----        |            |
| 30     | HEPTACHLOR          | 12.914     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 31     |                     | 13.096     | 221361.00     | 29649.50    | 9.6669     | 9.6669          | 221361             | -----        |            |
| 32     | ALDRIN              | 13.477     | 189427.00     | 23324.71    | 8.6590     | 8.6590          | 189427             | -----        |            |
| 33     |                     | 13.841     | 130538.00     | 27862.62    | 6.6380     | 6.6380          | 130538             | -0.0091      | -          |
| 34     | BETA BHC            | 14.775     | 482109.00     | 73481.40    | 34.9088    | 34.9088         | 482109             | -----        |            |
| 35     |                     | 15.117     | 381587.00     | 54976.78    | 27.6756    | 27.6756         | 381587             | -0.1771      | -          |
| 36     | DELTA BHC           | 15.720     | 22708.00      | 5051.73     | 4.4028     | 4.4028          | 22708              | -----        |            |
| 37     |                     | 15.805     | 54049.00      | 15188.40    | 5.4948     | 5.4948          | 54049              | -0.6184      | -          |
| 38     |                     | 16.217     | 845042.00     | 90196.79    | 32.3137    | 32.3137         | 845042             | -----        |            |
| 39     | HEPTACHLOR EXPOXIDE | 16.381     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 40     |                     | 16.643     | 64597.00      | 13669.77    | 3.0085     | 3.0085          | 64597              | -----        |            |
| 41     |                     | 16.837     | 230606.50     | 52309.48    | 9.2420     | 9.2420          | 230607             | -----        |            |
| 42     |                     | 16.956     | 37392.50      | 11237.49    | 2.1779     | 2.1779          | 37392              | -----        |            |
| 43     |                     | 17.073     | 18279.50      | 6492.04     | 1.4601     | 1.4601          | 18280              | -----        |            |
| 44     |                     | 17.151     | 21565.00      | 7726.89     | 1.5834     | 1.5834          | 21565              | -----        |            |
| 45     | ENDOSULFAN I        | 17.321     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 46     | GAMMA CHLORDANE     | 17.600     | 45404.00      | 9605.44     | 2.2510     | 2.2510          | 45404              | 0.1797       | -          |
| 47     | ALPHA CHLORDANE     | 17.790     | 172555.50     | 29516.53    | 6.8741     | 6.8741          | 172556             | 0.0233       | -          |
| 48     | DDE                 | 18.063     | 125466.50     | 27732.67    | 6.0161     | 6.0161          | 125466             | -0.2113      | -          |
| 49     | DIELDRIN            | 18.472     | 546250.00     | 89768.88    | 23.8366    | 23.8366         | 546250             | -0.6952      | -          |
| 50     |                     | 18.634     | 2985.00       | 1451.82     | 2.5154     | 2.5154          | 2985               | -----        |            |
| 51     |                     | 18.731     | 40103.00      | 10284.49    | 3.9722     | 3.9722          | 40103              | -----        |            |
| 52     | ENDRIN              | 19.005     | 516168.00     | 90375.50    | 29.4013    | 29.4013         | 516168             | -----        |            |
| 53     |                     | 19.302     | 343088.50     | 66489.44    | 20.1983    | 20.1983         | 343088             | -0.1746      | -          |
| 54     |                     | 19.566     | 110585.00     | 18938.14    | 7.8355     | 7.8355          | 110585             | -----        |            |
| 55     |                     | 19.780     | 607110.50     | 116566.00   | 34.2369    | 34.2369         | 607111             | -----        |            |
| 56     |                     | 20.225     | 258294.00     | 41345.59    | 18.2844    | 18.2844         | 258294             | -----        |            |
| 57     |                     | 20.400     | 143650.00     | 34225.47    | 11.5750    | 11.5750         | 143650             | -----        |            |
| 58     |                     | 20.515     | 81206.50      | 21623.47    | 7.9206     | 7.9206          | 81207              | -----        |            |
| 59     | DDD                 | 20.808     | 13402.00      | 2803.51     | 3.9524     | 3.9524          | 13402              | -----        |            |
| 60     |                     | 21.003     | 833103.50     | 136508.50   | 51.9245    | 51.9245         | 833104             | 0.3728       | -          |
| 61     | ENDOSULFAN II       | 21.203     | 272628.00     | 61007.39    | 15.3377    | 15.3377         | 272628             | 0.5369       | -          |
| 62     | DDT                 | 21.344     | 127423.50     | 31242.87    | 15.3155    | 15.3155         | 127424             | -0.4981      | -          |
| 63     |                     | 21.480     | 12217.00      | 4013.52     | 7.6004     | 7.6004          | 12217              | -----        |            |
| 64     |                     | 21.896     | 154856.50     | 13473.07    | 12.5837    | 12.5837         | 154856             | -----        |            |
| 65     |                     | 22.247     | 384653.50     | 73996.20    | 28.5972    | 28.5972         | 384654             | -----        |            |
| 66     | ENDRIN ALDEHYDE     | 22.447     | 132640.50     | 29089.85    | 11.0355    | 11.0355         | 132640             | -0.6915      | -          |
| 67     |                     | 22.571     | 32087.00      | 9478.11     | 4.0284     | 4.0284          | 32087              | -----        |            |
| 68     |                     | 22.982     | 147019.00     | 27304.72    | 12.0375    | 12.0375         | 147019             | -----        |            |
| 69     |                     | 23.225     | 833695.00     | 153509.61   | 192.1219   | 192.1219        | 833695             | -----        |            |
| 70     | METHOXYCHLOR        | 23.625     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 71     | ENDOSULFAN SULFATE  | 23.726     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 72     | DBC                 | 23.937     | 238748.00     | 43610.18    | 17.4556    | 17.4556         | 238748             | 0.1360       | -          |
| 73     |                     | 24.144     | 7387.00       | 1644.01     | 1.0775     | 1.0775          | 7387               | -----        |            |
| 74     |                     | 24.299     | 138243.00     | 30572.83    | 10.3408    | 10.3408         | 138243             | -----        |            |
| 75     |                     | 24.456     | 552838.00     | 110811.22   | 39.6900    | 39.6900         | 552838             | -----        |            |
| 76     | ENDRIN KETONE       | 24.976     | 37897.00      | 3920.09     | 3.0222     | 3.0222          | 37897              | -0.1712      | -          |
| 77     |                     | 25.256     | 7616.00       | 1442.68     | 1.6239     | 1.6239          | 7616               | -----        |            |
| 78     |                     | 25.535     | 7204.00       | 1519.05     | 1.6048     | 1.6048          | 7204               | -----        |            |
| 79     |                     | 25.693     | 59781.00      | 12415.01    | 4.0329     | 4.0329          | 59781              | -----        |            |
| 80     |                     | 25.825     | 27045.00      | 6325.44     | 2.5211     | 2.5211          | 27045              | -----        |            |
| 81     |                     | 26.562     | 340948.00     | 41930.28    | 17.0174    | 17.0174         | 340948             | -----        |            |
| 82     |                     | 27.664     | 190897.00     | 16522.88    | -3.5736    | -3.5736         | 190897             | -----        |            |
| 83     | DCB                 | 28.203     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 84     |                     | 29.476     | 256492.00     | 8727.62     | -0.4021    | -0.4021         | 256492             | -----        |            |
| 85     |                     | 30.584     | 200653.50     | 10256.26    | -3.1019    | -3.1019         | 200654             | -----        |            |
| 86     |                     | 31.325     | 145863.00     | 7789.42     | -5.7510    | -5.7510         | 145863             | -----        |            |
| 87     |                     | 32.118     | 388684.50     | 12988.97    | 5.9894     | 5.9894          | 388684             | -----        |            |

14862895.50 2.536e+06 976.7146 962.8025

## sing Component Report

| Component           | Expected Retention (Sample File) |
|---------------------|----------------------------------|
| HEPTACHLOR          | 12.914                           |
| HEPTACHLOR EXPOXIDE | 16.381                           |
| ENDOSULFAN I        | 17.321                           |

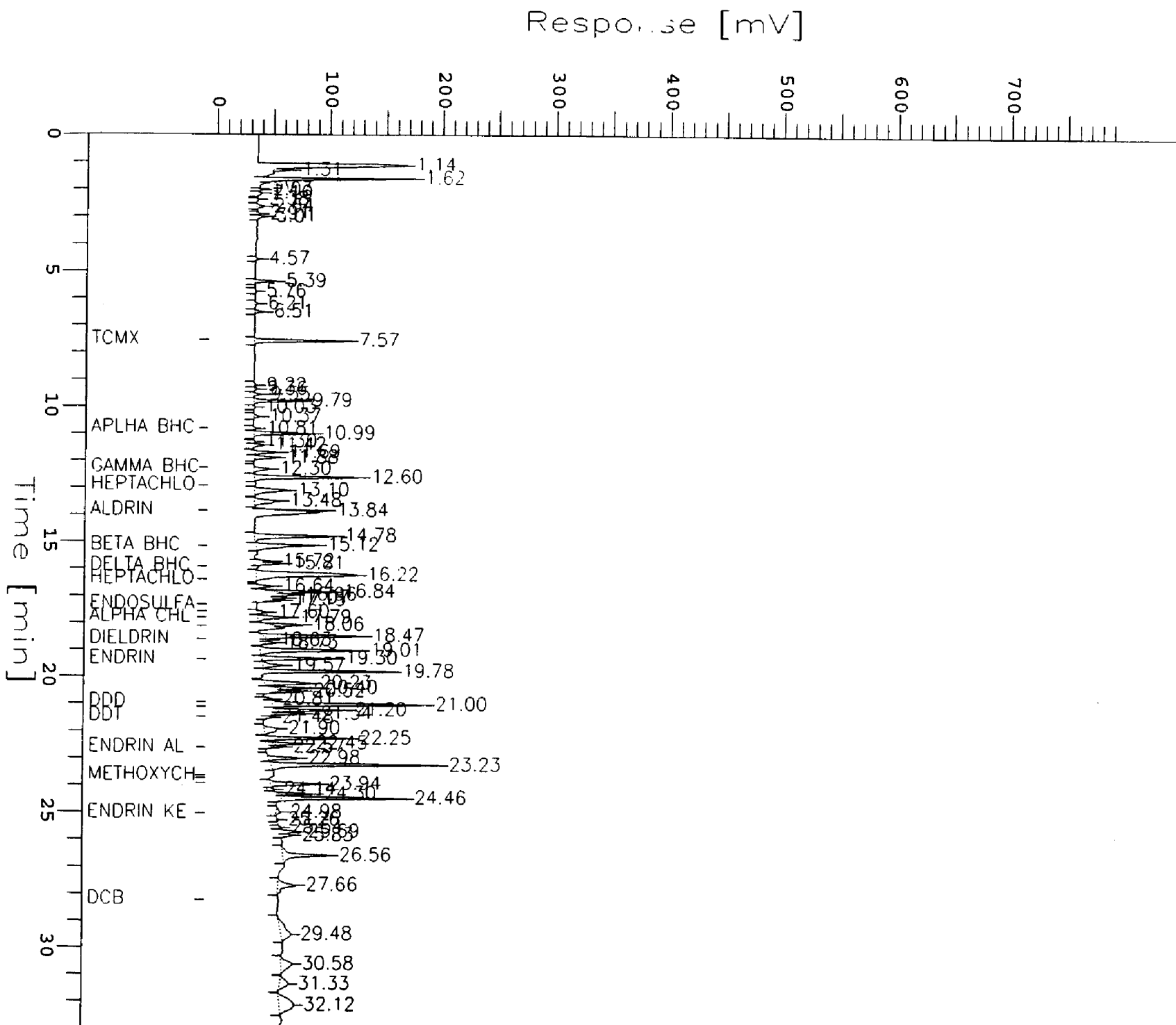
# Chromatogram

Sample Name : L950626-1 1:5  
 FileName : c:\2700\hps890\PA38026.raw  
 Method : HPPEST8.ins  
 Start Time : 0.00 min  
 Scale Factor: -1.0  
 End Time : 33.00 min  
 Plot Offset: -7 mV

Sample #: 26  
 Date : 3/9/95 02:12 AM  
 Time of Injection: 3/9/95 01:38 AM  
 Low Point : -7.10 mV  
 Plot Scale: 800.0 mV  
 High Point : 792.90 mV

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TIERRA-B-012669



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Software Version: 3.3 <4811>

Sample Name : L950626-1 1:5                      Time : 3/9/95 02:12 AM

Sample Number: 26                                      Study : PPPCB

Operator : KMW

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Instrument : HP5890                                      Channel : B                      A/D mV Range : 1000

AutoSampler : NONE

  : k/Vial : 0/0

Interface Serial # : 8055910402      Data Acquisition Time: 3/9/95 01:38 AM

Delay Time : 0.00 min.

End Time : 33.00 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\HP5890\PB38026.RAW

Result File : C:\2700\HP5890\PB38026.RST

Instrument File: c:\2700\methseqs\HPPESTB.ins

Process File : HPPESTB

Sample File : PESTB058

Sequence File : C:\2700\METHSEQS\0308PCB.SEQ

Inj. Volume : 1 ul                                      Area Reject : 200.000000

Sample Amount : 1.0000                                  Dilution Factor : 1.00

Instrument Control Method:

  Instrument name : HP5890

Channel Parameters:

Inlet Parameters:

  Inlet A :    Inlet B :

Detector Parameters:

  Detector A :    Detector B :

Heated Zones:

Temperature Program:

Total run time : 33.00 min

Timed Events:

  There are no timed events in the method

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**HP5890 REPORT FOR PEST/PCB ANALYSIS**

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NORTHEASTERN ANALYTICAL CORP. GAS CHROMATOGRAPHY LAB.

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| Peak # | Component Name | Time [min] | Area [uV*sec] | Height [uV] | Raw Amount | Adjusted Amount | Calibration Factor | Cal. Range |
|--------|----------------|------------|---------------|-------------|------------|-----------------|--------------------|------------|
| 1      |                | 1.137      | 403456.16     | 53322.14    | 25.0280    | 25.0280         | 403456             |            |
| 2      |                | 1.288      | 111604.78     | 25027.77    | 3.3281     | 3.3281          | 111605             |            |
| 3      |                | 1.403      | 73240.54      | 17956.01    | 0.4756     | 0.4756          | 73241              |            |
| 4      |                | 1.542      | 396293.51     | 108908.58   | 24.4955    | 24.4955         | 396294             |            |
| 5      |                | 2.066      | 3686.00       | 1549.71     | -4.6959    | -4.6959         | 3686               |            |
| 6      |                | 2.399      | 8592.00       | 2042.55     | -4.3312    | -4.3312         | 8592               |            |
| 7      |                | 2.701      | 17498.50      | 5147.70     | -3.6689    | -3.6689         | 17498              |            |
| 8      |                | 3.103      | 25321.00      | 5383.34     | -3.0873    | -3.0873         | 25321              |            |
| 9      |                | 3.453      | 5522.00       | 1558.83     | -4.5594    | -4.5594         | 5522               |            |
| 10     |                | 4.921      | 10077.00      | 2720.55     | -4.2207    | -4.2207         | 10077              |            |
| 11     |                | 5.449      | 3302.00       | 863.74      | -4.7245    | -4.7245         | 3302               |            |
| 12     |                | 6.080      | 82448.00      | 20874.36    | 1.1602     | 1.1602          | 82448              |            |
| 13     |                | 6.966      | 36617.00      | 7324.69     | -2.2474    | -2.2474         | 36617              |            |
| 14     |                | 7.970      | 8012.00       | 1598.61     | -4.3743    | -4.3743         | 8012               |            |
| 15     | TCMX           | 8.261      | 268713.00     | 61452.17    | 15.0095    | 15.0095         | 268713             |            |
|        |                | 9.303      | 4082.00       | 1063.64     | -4.6665    | -4.6665         | 4082               |            |
| 17     |                | 10.481     | 16793.00      | 4036.58     | 2.0463     | 2.0463          | 16793              |            |
| 18     |                | 10.618     | 152531.00     | 31438.94    | 7.9394     | 7.9394          | 152531             |            |
| 19     | ALPHA BHC      | 10.753     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 19     |                | 11.729     | 16086.00      | 3305.20     | 1.4716     | 1.4716          | 16086              |            |
| 20     |                | 11.956     | 17330.50      | 3733.38     | 1.5295     | 1.5295          | 17330              |            |

| Peak # | Component Name       | Time [min] | Area [uV*sec] | Height [uV] | Raw Amount | Adjusted Amount | Calibration Factor | Cal. Range |
|--------|----------------------|------------|---------------|-------------|------------|-----------------|--------------------|------------|
| 21     |                      | 12.103     | 163877.00     | 33019.56    | 8.3535     | 8.3535          | 163877             |            |
| 22     | BETA BHC             | 12.371     | 22533.00      | 4767.84     | 1.7718     | 1.7718          | 22533              | -          |
| 23     |                      | 12.504     | 9790.00       | 2641.99     | 1.1784     | 1.1784          | 9790               |            |
| 24     |                      | 12.733     | 7973.50       | 1879.28     | 1.0938     | 1.0938          | 7974               |            |
| 5      |                      | 12.880     | 66784.00      | 14514.40    | 1.8418     | 1.8418          | 66784              |            |
| 26     |                      | 13.158     | 119332.00     | 16010.73    | 3.7994     | 3.7994          | 119332             |            |
| 0      | GAMMA BHC            | 13.331     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 27     |                      | 13.562     | 322473.00     | 64066.54    | 11.3670    | 11.3670         | 322473             |            |
| 28     | DELTA BHC            | 14.122     | 49250.00      | 10692.99    | 3.7432     | 3.7432          | 49250              | -          |
| 29     |                      | 14.331     | 26329.00      | 4453.25     | 2.6641     | 2.6641          | 26329              |            |
| 30     |                      | 14.474     | 3323.00       | 952.37      | 1.3498     | 1.3498          | 3323               |            |
| 31     | HEPTACHLOR           | 14.596     | 60678.00      | 12535.94    | 4.2043     | 4.2043          | 60678              | -          |
| 32     |                      | 14.849     | 118659.00     | 26482.54    | 7.0899     | 7.0899          | 118659             |            |
| 33     |                      | 14.989     | 131603.00     | 25545.10    | 7.7341     | 7.7341          | 131603             |            |
| 34     |                      | 15.168     | 33852.00      | 7910.51     | 2.8692     | 2.8692          | 33852              |            |
| 35     |                      | 15.430     | 28039.50      | 4602.49     | 76.5710    | 76.5710         | 28040              |            |
| 36     |                      | 15.970     | 289282.00     | 40012.16    | -73.6725   | -73.6725        | 289282             |            |
| 0      | ALDRIN               | 16.123     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 37     |                      | 16.277     | 38858.50      | 8903.76     | 70.3489    | 70.3489         | 38859              |            |
| 38     |                      | 16.420     | 77046.50      | 18211.10    | 48.3865    | 48.3865         | 77046              |            |
| 39     |                      | 16.832     | 76088.50      | 13846.04    | 3.9277     | 3.9277          | 76088              |            |
| 40     | HEPTACHLOR EPOXIDE   | 17.070     | 149069.00     | 32726.33    | 8.0345     | 8.0345          | 149069             |            |
| 41     |                      | 17.206     | 82140.50      | 20541.92    | 4.2683     | 4.2683          | 82141              |            |
| 42     | GAMMA CHLORDANE      | 17.499     | 131839.50     | 27067.12    | 6.7590     | 6.7590          | 131839             |            |
| 43     |                      | 17.618     | 9826.00       | 3740.31     | 0.2283     | 0.2283          | 9826               |            |
| 44     | ALPHA CHLORDANE/ENDO | 17.837     | 175988.50     | 33431.04    | 8.6434     | 8.6434          | 175988             | -          |
| 45     |                      | 18.021     | 71110.00      | 15464.18    | 2.6023     | 2.6023          | 71110              |            |
| 46     |                      | 18.189     | 94731.50      | 19770.67    | 3.9629     | 3.9629          | 94732              |            |
| 47     |                      | 18.639     | 50389.00      | 10106.32    | 4.1436     | 4.1436          | 50389              |            |
| 48     |                      | 18.790     | 6342.00       | 1647.35     | 1.3638     | 1.3638          | 6342               |            |
| 49     | DIELDRIN             | 18.996     | 68845.00      | 11835.80    | 5.3084     | 5.3084          | 68845              | -          |
| 50     | DDE                  | 19.262     | 87711.00      | 19147.94    | 5.4460     | 5.4460          | 87711              | -          |
| 51     |                      | 19.410     | 28647.50      | 6994.65     | 1.8124     | 1.8124          | 28647              |            |
| 52     |                      | 19.657     | 162089.00     | 34797.37    | 10.0216    | 10.0216         | 162089             |            |
| 53     |                      | 19.954     | 14335.50      | 3504.52     | 0.9320     | 0.9320          | 14335              |            |
| 54     |                      | 20.292     | 337926.00     | 38021.14    | 28.8164    | 28.8164         | 337926             |            |
| 55     |                      | 20.512     | 23579.00      | 5994.19     | 2.0094     | 2.0094          | 23579              |            |
| 5      | ENDRIN               | 20.741     | 255879.00     | 48307.82    | 21.8196    | 21.8196         | 255879             |            |
| 58     |                      | 20.946     | 10235.00      | 2613.20     | 1.6988     | 1.6988          | 10235              |            |
| 59     | ENDOSULFAN II        | 21.098     | 12110.00      | 2890.29     | 1.8401     | 1.8401          | 12110              | -          |
| 60     |                      | 21.480     | 86605.00      | 17547.37    | 5.4114     | 5.4114          | 86605              |            |
| 60     | DDD                  | 21.728     | 217008.00     | 21846.23    | 15.3648    | 15.3648         | 217008             |            |
| 61     | ENDRIN ALDEHYDE      | 22.200     | 471465.00     | 54661.03    | 49.5317    | 49.5317         | 471465             |            |
| 62     | ENDOSULFAN SULFATE   | 22.440     | 125112.00     | 24573.78    | 12.8576    | 12.8576         | 125112             |            |
| 63     |                      | 22.627     | 89561.00      | 13424.60    | 9.1323     | 9.1323          | 89561              |            |
| 64     | DDT                  | 23.214     | 24267.00      | 4143.34     | 1.2944     | 1.2944          | 24267              | -          |
| 65     |                      | 23.622     | 196235.50     | 35007.18    | 15.2006    | 15.2006         | 196236             |            |
| 66     | ENDRIN KETONE        | 23.898     | 281576.50     | 37246.99    | 22.1022    | 22.1022         | 281576             |            |
| 67     |                      | 24.252     | 344033.00     | 60738.60    | 27.1532    | 27.1532         | 344033             |            |
| 68     |                      | 25.037     | 9503.50       | 1779.87     | -2.2336    | -2.2336         | 9504               |            |
| 0      | METHOXYCHLOR         | 25.263     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 69     |                      | 25.579     | 63344.00      | 12984.43    | 6.2863     | 6.2863          | 63344              |            |
| 70     | DBC                  | 25.767     | 250332.50     | 39111.80    | 23.7549    | 23.7549         | 250332             |            |
| 71     |                      | 27.498     | 28871.00      | 4752.40     | 3.0658     | 3.0658          | 28871              |            |
| 72     |                      | 27.867     | 144211.00     | 17143.88    | 13.8410    | 13.8410         | 144211             |            |
| 73     |                      | 29.641     | 31708.00      | 4147.44     | -10.4193   | -10.4193        | 31708              |            |
| 0      | DCB                  | 31.152     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 74     |                      | 32.440     | 45804.00      | 3491.76     | -9.1737    | -9.1737         | 45804              |            |
| <hr/>  |                      |            |               |             |            |                 |                    |            |
|        |                      | 7489407.50 | 1.362e+06     | 529.4103    | 529.4103   | 7489407         |                    |            |

## Missing Component Report

| Component    | Expected Retention (Sample File) |
|--------------|----------------------------------|
| ALPHA BHC    | 10.753                           |
| GAMMA BHC    | 13.331                           |
| ALDRIN       | 16.123                           |
| METHOXYCHLOR | 25.263                           |
| DCB          | 31.152                           |

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HP5890 DETECTOR B

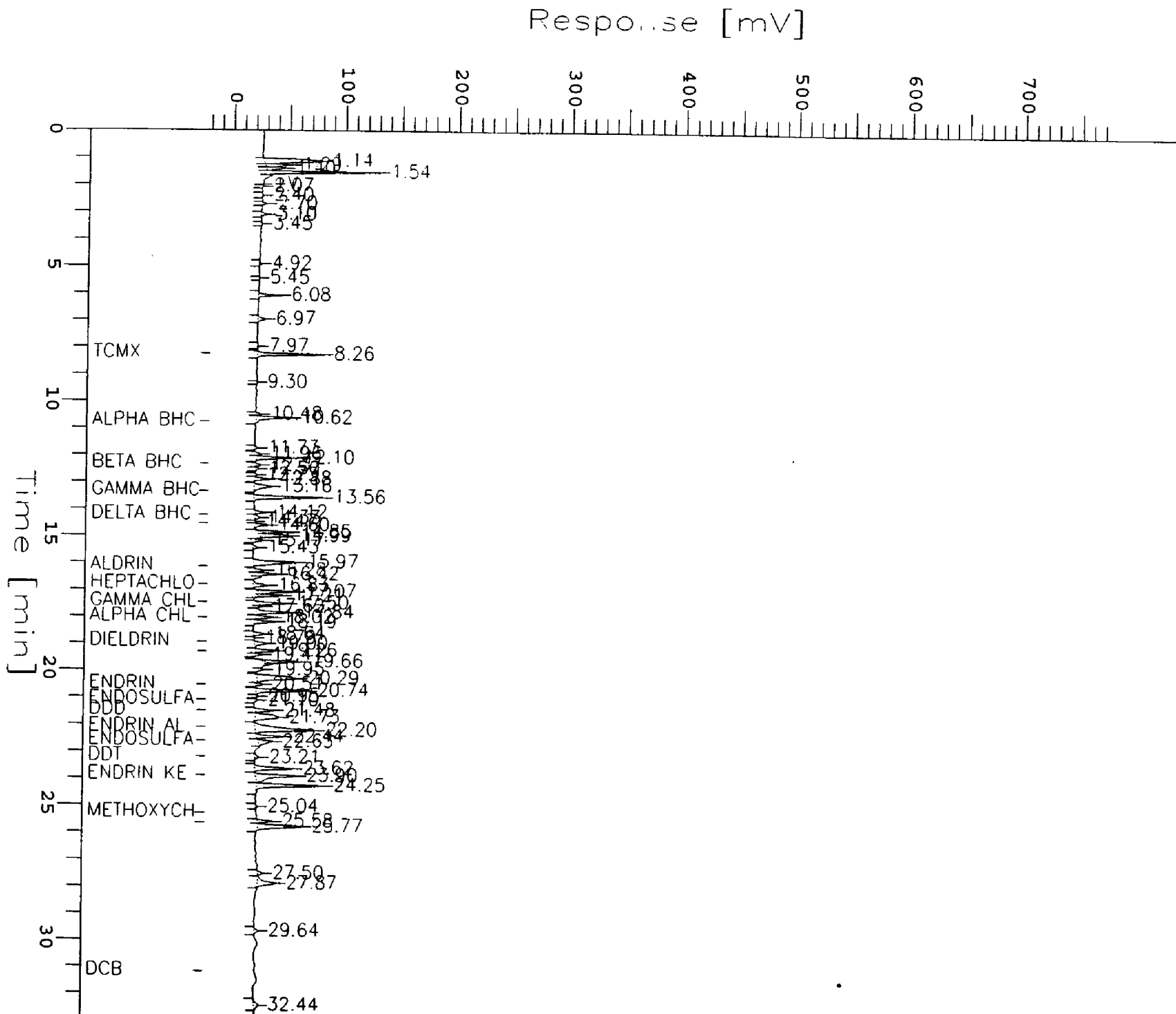
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# Chromatogram

Sample Name : L950626-1 1:5  
 File Name : c:\2700\hps890\p838026.raw  
 Method : HPPEST8.ins  
 Start Time : 0.00 min  
 Scale Factor: -1.0  
 End Time : 33.00 min  
 Plot Offset: -20 mV

Sample #: 26  
 Date : 3/9/95 02:12 AM  
 Time of Injection: 3/9/95 01:38 AM  
 Low Point : -20.04 mV  
 Plot Scale: 800.0 mV  
 High Point : 779.96 mV

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Software Version: 3.3 <4811>

Sample Name : L950626-2

Time : 3/8/95 08:10 PM

Sample Number: 16

Study : PPPCB

Operator : KMW

Instrument : HP5890

Channel : A A/D mV Range : 1000

AutoSampler : NONE

Wick/Vial : 0/0

Interface Serial # : 8055910402 Data Acquisition Time: 3/8/95 07:37 PM

Delay Time : 0.00 min.

End Time : 33.00 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\HP5890\PA38016.RAW

Result File : C:\2700\HP5890\PA38016.RST

Instrument File: c:\2700\methseqs\HPPESTB.ins

Process File : HPPESTA

Sample File : PESTA058

Sequence File : C:\2700\METHSEQS\0308PCB.SEQ

Inj. Volume : 1 ul

Area Reject : 200.000000

Sample Amount : 1.0000

Dilution Factor : 1.00

Instrument Control Method:

Instrument name : HP5890

Channel Parameters:

Inlet Parameters:

Inlet A :

Inlet B :

Detector Parameters:

Detector A :

Detector B :

Heated Zones:

Temperature Program:

Total run time : 33.00 min

Timed Events:

There are no timed events in the method

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## HP 5890 REPORT FOR PEST/PCB ANALYSIS

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NORTHEASTERN ANALYTICAL CORP. GAS CHROMATOGRAPHY LAB.

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| Peak # | Component Name | Time [min] | Area [uV*sec] | Height [uV] | Raw Amount | Adjusted Amount | Calibration Factor | Delta RT [%] | Cal. Range |
|--------|----------------|------------|---------------|-------------|------------|-----------------|--------------------|--------------|------------|
| 1      |                | 1.099      | 1929361.37    | 248356.80   | 63.6045    | 63.6045         | 1929361            | -----        |            |
| 2      |                | 1.328      | 154483.00     | 33883.04    | 8.1697     | 8.1697          | 154483             | -----        |            |
| 3      |                | 1.429      | 114719.13     | 25953.29    | 6.9277     | 6.9277          | 114719             | -----        |            |
| 4      |                | 1.624      | 1555292.00    | 383382.25   | 51.9212    | 51.9212         | 1555292            | -----        |            |
| 5      |                | 2.037      | 25311.00      | 9396.60     | 4.1352     | 4.1352          | 25311              | -----        |            |
| 6      |                | 2.158      | 13384.00      | 4043.59     | 3.7627     | 3.7627          | 13384              | -----        |            |
| 7      |                | 2.228      | 6586.00       | 3160.06     | 3.5504     | 3.5504          | 6586               | -----        |            |
| 8      |                | 2.426      | 29529.00      | 4313.00     | 4.2670     | 4.2670          | 29529              | -----        |            |
| 9      |                | 2.565      | 2862.50       | 1237.04     | 3.4341     | 3.4341          | 2862               | -----        |            |
| 10     |                | 2.661      | 11762.00      | 4120.35     | 3.7121     | 3.7121          | 11762              | -----        |            |
| 11     |                | 2.782      | 1829.00       | 860.49      | 3.4018     | 3.4018          | 1829               | -----        |            |
| 12     |                | 2.906      | 11064.00      | 2858.38     | 3.6903     | 3.6903          | 11064              | -----        |            |
| 13     |                | 3.029      | 10264.00      | 1376.71     | 3.6653     | 3.6653          | 10264              | -----        |            |
| 14     |                | 3.492      | 5891.00       | 1448.08     | 3.5287     | 3.5287          | 5891               | -----        |            |
| 15     |                | 3.714      | 6307.00       | 1315.19     | 3.5417     | 3.5417          | 6307               | -----        |            |
| 16     |                | 4.306      | 9508.00       | 2448.67     | 3.6417     | 3.6417          | 9508               | -----        |            |
| 17     |                | 4.569      | 11275.00      | 2887.61     | 3.6968     | 3.6968          | 11275              | -----        |            |
| 18     |                | 4.937      | 4185.00       | 1082.43     | 3.4754     | 3.4754          | 4185               | -----        |            |
| 19     |                | 5.263      | 2457.00       | 665.48      | 3.4214     | 3.4214          | 2457               | -----        |            |
| 20     |                | 5.385      | 11926.00      | 3387.99     | 3.7172     | 3.7172          | 11926              | -----        |            |



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| Peak # | Component Name      | Time (min)  | Area [uV*sec] | Height [uV] | Raw Amount | Adjusted Amount | Calibration Factor | Delta RT [%] | Cal. Range |
|--------|---------------------|-------------|---------------|-------------|------------|-----------------|--------------------|--------------|------------|
| 21     |                     | 5.988       | 4939.00       | 1178.49     | 3.4990     | 3.4990          | 4939               | -----        |            |
| 22     |                     | 6.315       | 89775.50      | 17068.30    | 6.1487     | 6.1487          | 89776              | -----        |            |
| 23     |                     | 6.510       | 12506.00      | 3530.27     | 3.7353     | 3.7353          | 12506              | -----        |            |
| 24     |                     | 7.284       | 7113.00       | 1808.38     | 3.5669     | 3.5669          | 7113               | -----        |            |
| 25     | TCMX                | 7.570       | 1890160.00    | 452732.47   | 88.5721    | 0.0000          | 1890160            | 0.2550       |            |
| 26     |                     | 8.308       | 13301.00      | 3121.43     | 3.7601     | 3.7601          | 13301              | -----        |            |
| 27     |                     | 9.146       | 30627.00      | 4118.19     | 4.3013     | 4.3013          | 30627              | -----        |            |
| 28     |                     | 9.379       | 11436.50      | 2167.46     | 3.7019     | 3.7019          | 11436              | -----        |            |
| 29     |                     | 9.637       | 7691.00       | 879.85      | 3.5849     | 3.5849          | 7691               | -----        |            |
| 30     |                     | 9.788       | 139703.00     | 31823.09    | 7.7080     | 7.7080          | 139703             | -----        |            |
| 31     |                     | 10.000      | 6897.00       | 1708.99     | 3.5601     | 3.5601          | 6897               | -----        |            |
| 32     |                     | 10.349      | 29632.00      | 1791.54     | 4.2702     | 4.2702          | 29632              | -----        |            |
| 33     | APLMA BHC           | 10.865      | 10274.50      | 1309.27     | 3.6656     | 3.6656          | 10274              | 0.6303       | -          |
| 34     |                     | 10.988      | 30027.00      | 6284.14     | 4.2825     | 4.2825          | 30027              | -----        |            |
| 35     |                     | 11.429      | 10537.00      | 2114.19     | 3.6738     | 3.6738          | 10537              | -----        |            |
| 36     |                     | 11.683      | 21524.50      | 4256.88     | 3.3838     | 3.3838          | 21524              | -----        |            |
| 37     |                     | 11.897      | 36153.00      | 5039.11     | 3.8648     | 3.8648          | 36153              | -----        |            |
| 38     | GAMMA BHC           | 12.257      | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 39     | HEPTACHLOR          | 12.602      | 92223.00      | 14679.20    | 4.5582     | 4.5582          | 92223              | -----        |            |
| 40     |                     | 12.914      | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 41     |                     | 13.097      | 31449.50      | 3638.90     | 2.1540     | 2.1540          | 31450              | -----        |            |
| 42     | ALDRIN              | 13.477      | 23276.50      | 3341.06     | 2.9569     | 2.9569          | 23276              | -----        |            |
| 43     |                     | 13.845      | 63880.50      | 6007.40     | 4.3504     | 4.3504          | 63880              | 0.0243       | -          |
| 44     | BETA BHC            | 14.778      | 61047.50      | 7127.08     | 4.6107     | 4.6107          | 61048              | -----        |            |
| 45     |                     | 15.144      | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 46     | DELTA BHC           | 15.381      | 1781306.00    | 333258.10   | 128.3942   | 128.3942        | 1781306            | -----        |            |
| 47     |                     | 15.805      | 7660.00       | 1577.60     | 3.8784     | 3.8784          | 7660               | -0.6189      | -          |
| 48     | HEPTACHLOR EXPOXIDE | 16.227      | 81437.00      | 8267.55     | 3.6408     | 3.6408          | 81437              | -----        |            |
| 49     |                     | 16.381      | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 50     |                     | 16.641      | 4759.00       | 949.90      | 0.7616     | 0.7616          | 4759               | -----        |            |
| 51     |                     | 16.838      | 15756.00      | 3691.61     | 1.1745     | 1.1745          | 15756              | -----        |            |
| 52     | ENDOSULFAN I        | 16.972      | 27206.50      | 2190.75     | 1.7953     | 1.7953          | 27206              | -----        |            |
| 53     |                     | 17.321      | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 54     | GAMMA CHLORDANE     | 17.596      | 9813.00       | 1798.53     | 0.9039     | 0.9039          | 9813               | 0.1595       | -          |
| 55     | ALPHA CHLORDANE     | 17.797      | 13588.00      | 2518.76     | 0.8984     | 0.8984          | 13588              | 0.0608       | -          |
| 56     | DDE                 | 18.137      | 32517.00      | 3195.67     | 2.3462     | 2.3462          | 32517              | 0.1964       | -          |
| 57     | DIELDRIN            | 18.469      | 42504.00      | 7243.77     | 4.0664     | 4.0664          | 42504              | -0.7087      | -          |
| 58     |                     | 19.005      | 34206.00      | 6725.28     | 3.7743     | 3.7743          | 34206              | -----        |            |
| 59     | ENDRIN              | 19.297      | 29678.00      | 5189.33     | 3.5335     | 3.5335          | 29678              | -0.2014      | -          |
| 60     |                     | 19.780      | 39781.00      | 7766.69     | 4.0707     | 4.0707          | 39781              | -----        |            |
| 61     |                     | 20.225      | 15725.50      | 2596.54     | 4.0884     | 4.0884          | 15726              | -----        |            |
| 62     |                     | 20.399      | 7781.50       | 1914.48     | 3.6234     | 3.6234          | 7782               | -----        |            |
| 63     | DDD                 | 20.516      | 6117.50       | 1525.98     | 3.5261     | 3.5261          | 6118               | -----        |            |
| 64     | ENDOSULFAN I        | 20.993      | 77964.00      | 11549.57    | 7.7308     | 7.7308          | 77964              | 0.3268       | -          |
| 65     | DDT                 | 21.203      | 23237.00      | 5277.66     | 1.6150     | 1.6150          | 23237              | 0.5355       | -          |
| 66     |                     | 21.341      | 6466.00       | 1727.99     | 7.2153     | 7.2153          | 6466               | -0.5134      | -          |
| 67     |                     | 21.478      | 4435.50       | 1187.94     | 7.0793     | 7.0793          | 4436               | -----        |            |
| 68     | ENDREN ALDEHYDE     | 22.245      | 25111.50      | 4908.86     | 3.5423     | 3.5423          | 25112              | -----        |            |
| 69     |                     | 22.457      | 49247.00      | 6999.27     | 5.2242     | 5.2242          | 49247              | -0.6443      | -          |
| 70     |                     | 22.979      | 9196.00       | 1748.37     | 2.4332     | 2.4332          | 9196               | -----        |            |
| 71     | METHOXYCHLOR        | 23.224      | 51342.00      | 9617.89     | -0.5535    | -0.5535         | 51342              | -----        |            |
| 72     | ENDOSULFAN SULFATE  | 23.524      | 64283.00      | 7882.56     | 2.6336     | 2.6336          | 64283              | -0.4262      | -          |
| 73     | DBC                 | 23.726      | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 74     |                     | 23.935      | 1699672.00    | 325139.04   | 120.8745   | 120.8745        | 1699672            | 0.1296       |            |
| 75     |                     | 24.297      | 9195.00       | 1992.51     | 1.2055     | 1.2055          | 9195               | -----        |            |
| 76     |                     | 24.454      | 35400.00      | 7057.03     | 3.0605     | 3.0605          | 35400              | -----        |            |
| 77     | ENDRIN KETONE       | 25.019      | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 78     |                     | 25.408      | 28996.00      | 5627.65     | 2.6112     | 2.6112          | 28996              | -----        |            |
| 79     |                     | 25.823      | 7450.00       | 1457.37     | 1.6162     | 1.6162          | 7450               | -----        |            |
| 80     | DCB                 | 26.557      | 14008.00      | 2170.26     | 1.9190     | 1.9190          | 14008              | -----        |            |
| 81     |                     | 28.203      | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| -----  |                     |             |               |             |            |                 |                    |              |            |
|        |                     | 10798009.00 | 2.097e+06     | 701.8573    | 613.2852   |                 |                    |              |            |

## Missing Component Report

| Component           | Expected Retention (Sample File) |
|---------------------|----------------------------------|
| GAMMA BHC           | 12.257                           |
| HEPTACHLOR          | 12.914                           |
| BETA BHC            | 15.144                           |
| HEPTACHLOR EXPOXIDE | 16.381                           |
| ENDOSULFAN I        | 17.321                           |
| ENDOSULFAN SULFATE  | 23.726                           |
| ENDRIN KETONE       | 25.019                           |
| DCB                 | 28.203                           |

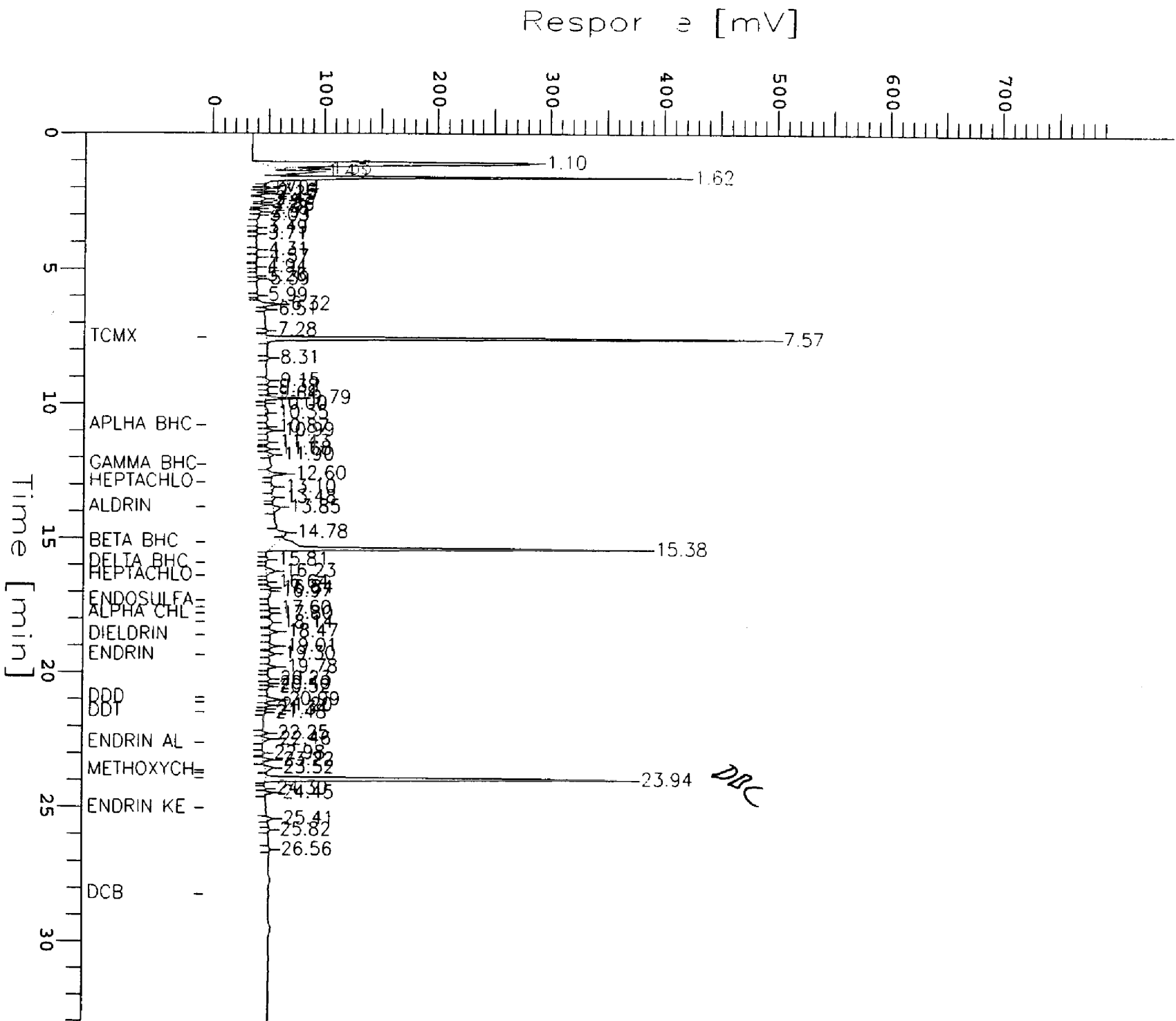
# Chromatogram

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Sample Name : L950626-2  
 FileName : c:\2700\hps890\PA38016.raw  
 Method : HPESTB.ins  
 Start Time : 0.00 min  
 Rate Factor: -1.0  
 End Time : 33.00 min  
 Plot Offset: -5 mV

Sample #: 16  
 Date : 3/8/95 08:10 PM  
 Time of Injection: 3/8/95 07:37 PM  
 Low Point : -5.10 mV  
 Plot Scale: 800.0 mV  
 High Point : 794.90 mV

Page 1 of 1



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Software Version: 3.3 <4811>

Sample Name : L950626-2

Sample Number: 16

Operator : KMW

Time : 3/8/95 08:11 PM

Study : PPPCB

Instrument : HP5890

Channel : B A/D mV Range : 1000

AutoSampler : NONE

k/Vial : 0/0

Interface Serial # : 8055910402 Data Acquisition Time: 3/8/95 07:37 PM

Delay Time : 0.00 min.

End Time : 33.00 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\HP5890\PB38016.RAW

Result File : C:\2700\HP5890\PB38016.RST

Instrument File: c:\2700\methseqs\HPPESTB.ins

Process File : HPPESTB

Sample File : PESTB058

Sequence File : C:\2700\METHSEQS\0308PCB.SEQ

Inj. Volume : 1 ul

Area Reject : 200.000000

Sample Amount : 1.0000

Dilution Factor : 1.00

Instrument Control Method:

Instrument name : HP5890

Channel Parameters:

Inlet Parameters:

Inlet A :

Inlet B :

Detector Parameters:

Detector A :

Detector B :

Heated Zones:

Temperature Program:

Total run time : 33.00 min

Timed Events:

There are no timed events in the method

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## HP5890 REPORT FOR PEST/PCB ANALYSIS

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NORTHEASTERN ANALYTICAL CORP. GAS CHROMATOGRAPHY LAB.

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| Peak # | Component Name | Time [min] | Area [uV*sec] | Height [uV] | Raw Amount | Adjusted Amount | Calibration Factor | Cal. Range |
|--------|----------------|------------|---------------|-------------|------------|-----------------|--------------------|------------|
| 1      |                | 1.124      | 934288.08     | 111617.64   | 64.4968    | 64.4968         | 934288             |            |
| 2      |                | 1.287      | 243907.00     | 49184.79    | 13.1651    | 13.1651         | 243907             |            |
| 3      |                | 1.397      | 298040.67     | 55667.89    | 17.1901    | 17.1901         | 298041             |            |
| 4      |                | 1.541      | 1133180.25    | 280009.95   | 79.2850    | 79.2850         | 1133180            |            |
| 5      |                | 1.679      | 122978.00     | 24695.76    | 4.1737     | 4.1737          | 122978             |            |
| 6      |                | 1.922      | 12504.00      | 3179.84     | -4.0403    | -4.0403         | 12504              |            |
| 7      |                | 2.068      | 39302.00      | 8762.87     | -2.0478    | -2.0478         | 39302              |            |
| 8      |                | 2.249      | 4831.00       | 2002.94     | -4.6108    | -4.6108         | 4831               |            |
| 9      |                | 2.417      | 92953.00      | 14265.67    | 1.9413     | 1.9413          | 92953              |            |
| 10     |                | 2.697      | 13988.00      | 3906.13     | -3.9299    | -3.9299         | 13988              |            |
| 11     |                | 2.831      | 3300.00       | 1301.53     | -4.7246    | -4.7246         | 3300               |            |
| 12     |                | 3.093      | 11831.00      | 2350.37     | -4.0903    | -4.0903         | 11831              |            |
| 13     |                | 3.322      | 8171.00       | 1184.03     | -4.3625    | -4.3625         | 8171               |            |
| 14     |                | 3.927      | 12939.00      | 2555.48     | -4.0079    | -4.0079         | 12939              |            |
| 15     |                | 4.061      | 23249.50      | 3643.61     | -3.2413    | -3.2413         | 23250              |            |
| 16     |                | 4.303      | 6018.00       | 1846.92     | -4.5225    | -4.5225         | 6018               |            |
| 17     |                | 4.549      | 9680.00       | 1814.40     | -4.2503    | -4.2503         | 9680               |            |
| 18     |                | 4.691      | 3575.00       | 1163.35     | -4.7042    | -4.7042         | 3575               |            |
| 19     |                | 4.923      | 7142.00       | 2091.66     | -4.4390    | -4.4390         | 7142               |            |
| 20     |                | 5.082      | 6250.00       | 1359.52     | -4.5053    | -4.5053         | 6250               |            |
| 21     |                | 6.080      | 19590.00      | 4694.37     | -3.5134    | -3.5134         | 19590              |            |

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| Peak # | Component Name       | Time [min] | Area [uV*sec] | Height [uV] | Raw Amount | Adjusted Amount | Calibration Factor | Cal. Range |
|--------|----------------------|------------|---------------|-------------|------------|-----------------|--------------------|------------|
| 22     |                      | 6.967      | 25966.00      | 3717.92     | -3.0394    | -3.0394         | 25966              |            |
| 23     |                      | 7.586      | 8982.50       | 1940.78     | -4.3021    | -4.3021         | 8982               |            |
| 24     |                      | 7.877      | 4716.00       | 1247.44     | -4.6193    | -4.6193         | 4716               |            |
|        |                      | 7.970      | 4245.50       | 1205.54     | -4.6543    | -4.6543         | 4246               |            |
| J      | TCMX                 | 8.260      | 1380395.00    | 304492.75   | 97.6661    | 97.6661         | 1380395            |            |
| 27     |                      | 9.093      | 10352.00      | 2356.75     | -4.2003    | -4.2003         | 10352              |            |
| 28     |                      | 9.295      | 243804.00     | 42105.99    | 13.1575    | 13.1575         | 243804             |            |
| 29     |                      | 9.607      | 6801.00       | 1961.01     | 1.6125     | 1.6125          | 6801               |            |
| 30     |                      | 9.764      | 15179.00      | 3698.84     | 1.9763     | 1.9763          | 15179              |            |
| 31     |                      | 9.918      | 3727.00       | 870.15      | 1.4791     | 1.4791          | 3727               |            |
| 32     |                      | 10.057     | 7327.00       | 1671.98     | 1.6354     | 1.6354          | 7327               |            |
| 33     |                      | 10.263     | 7102.00       | 1048.08     | 1.6256     | 1.6256          | 7102               |            |
| 34     |                      | 10.465     | 11389.00      | 2312.98     | 1.8117     | 1.8117          | 11389              |            |
| 35     |                      | 10.616     | 118855.50     | 25737.41    | 6.4774     | 6.4774          | 118856             |            |
| 0      | ALPHA BHC            | 10.753     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 36     |                      | 11.157     | 19966.00      | 1686.71     | 2.1841     | 2.1841          | 19966              |            |
| 37     |                      | 11.450     | 5539.50       | 1087.08     | 1.5578     | 1.5578          | 5539               |            |
| 38     |                      | 11.972     | 10603.00      | 1443.67     | 1.2162     | 1.2162          | 10603              |            |
| 39     |                      | 12.102     | 24661.00      | 5028.91     | 1.8709     | 1.8709          | 24661              |            |
| 0      | BETA BHC             | 12.324     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 40     |                      | 12.877     | 32140.50      | 2541.13     | 0.5512     | 0.5512          | 32141              |            |
| 41     |                      | 13.157     | 14873.50      | 1709.45     | -0.0921    | -0.0921         | 14874              |            |
| 0      | GAMMA BHC            | 13.331     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 42     |                      | 13.560     | 58265.00      | 10929.79    | 1.5244     | 1.5244          | 58265              |            |
| 43     | DELTA BHC            | 14.118     | 13879.00      | 2792.48     | 2.0779     | 2.0779          | 13879              | -          |
| 44     | HEPTACHLOR           | 14.598     | 8394.00       | 1895.87     | 1.6022     | 1.6022          | 8394               | -          |
| 45     |                      | 14.851     | 11934.50      | 2727.61     | 1.7784     | 1.7784          | 11935              |            |
| 46     |                      | 15.075     | 205409.50     | 30708.31    | 11.4074    | 11.4074         | 205410             |            |
| 47     |                      | 15.456     | 12779.00      | 1546.36     | 85.3475    | 85.3475         | 12779              |            |
| 48     |                      | 15.972     | 34457.50      | 4707.47     | 72.8799    | 72.8799         | 34458              |            |
| 0      | ALDRIN               | 16.123     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 49     |                      | 16.420     | 12720.50      | 1691.69     | 85.3811    | 85.3811         | 12720              |            |
| 50     |                      | 16.825     | 6498.50       | 1201.16     | 0.0118     | 0.0118          | 6498               |            |
| 51     | HEPTACHLOR EPOXIDE   | 17.069     | 16635.50      | 3445.58     | 0.5822     | 0.5822          | 16635              | -          |
| 52     |                      | 17.210     | 9970.50       | 2202.24     | 0.2071     | 0.2071          | 9970               |            |
| 53     | GAMMA CHLORDANE      | 17.498     | 12370.00      | 2484.81     | 0.3644     | 0.3644          | 12370              | -          |
| 54     | ALPHA CHLORDANE/ENDO | 17.844     | 10191.00      | 2021.60     | -0.9068    | -0.9068         | 10191              | -          |
|        |                      | 18.022     | 6447.50       | 1369.50     | -1.1224    | -1.1224         | 6448               |            |
| J      |                      | 18.191     | 10225.50      | 1984.43     | -0.9048    | -0.9048         | 10226              |            |
| 57     |                      | 18.640     | 20902.00      | 1612.97     | 2.2827     | 2.2827          | 20902              |            |
| 58     | DIELDRIN             | 18.964     | 7962.00       | 1201.98     | 1.4661     | 1.4661          | 7962               | -          |
| 0      | DDE                  | 19.286     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 59     |                      | 19.656     | 13830.50      | 3001.68     | 0.9009     | 0.9009          | 13830              |            |
| 60     |                      | 20.106     | 1052395.50    | 210640.96   | 89.7454    | 89.7454         | 1052395            |            |
| 61     | ENDRIN               | 20.739     | 17142.50      | 3495.19     | 1.4605     | 1.4605          | 17143              | -          |
| 62     | ENDOSULFAN II        | 21.097     | 11235.00      | 2519.19     | 1.7742     | 1.7742          | 11235              | -          |
| 0      | DDD                  | 21.479     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 63     | ENDRIN ALDEHYDE      | 22.190     | 43912.00      | 5281.51     | 9.4732     | 9.4732          | 43912              | -          |
| 64     | ENDOSULFAN SULFATE   | 22.436     | 9118.00       | 1884.80     | 0.7029     | 0.7029          | 9118               | -          |
| 65     | DDT                  | 23.076     | 15211.00      | 2799.00     | 0.5124     | 0.5124          | 15211              | -          |
| 66     |                      | 23.619     | 14169.00      | 2713.13     | 0.4766     | 0.4766          | 14169              |            |
| 67     | ENDRIN KETONE        | 23.888     | 1062573.00    | 193632.85   | 85.2626    | 85.2626         | 1062573            |            |
| 68     |                      | 24.251     | 23763.00      | 4375.23     | 1.2525     | 1.2525          | 23763              |            |
| 0      | METHOXYCHLOR         | 25.263     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 69     | DBC                  | 25.766     | 16706.50      | 2693.03     | 1.9294     | 1.9294          | 16706              | -          |
| 0      | DCB                  | 31.152     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| <hr/>  |                      |            |               |             |            |                 |                    |            |
|        |                      |            | 7703440.00    | 1.493e+06   | 690.6458   | 690.6458        | 7703440            |            |

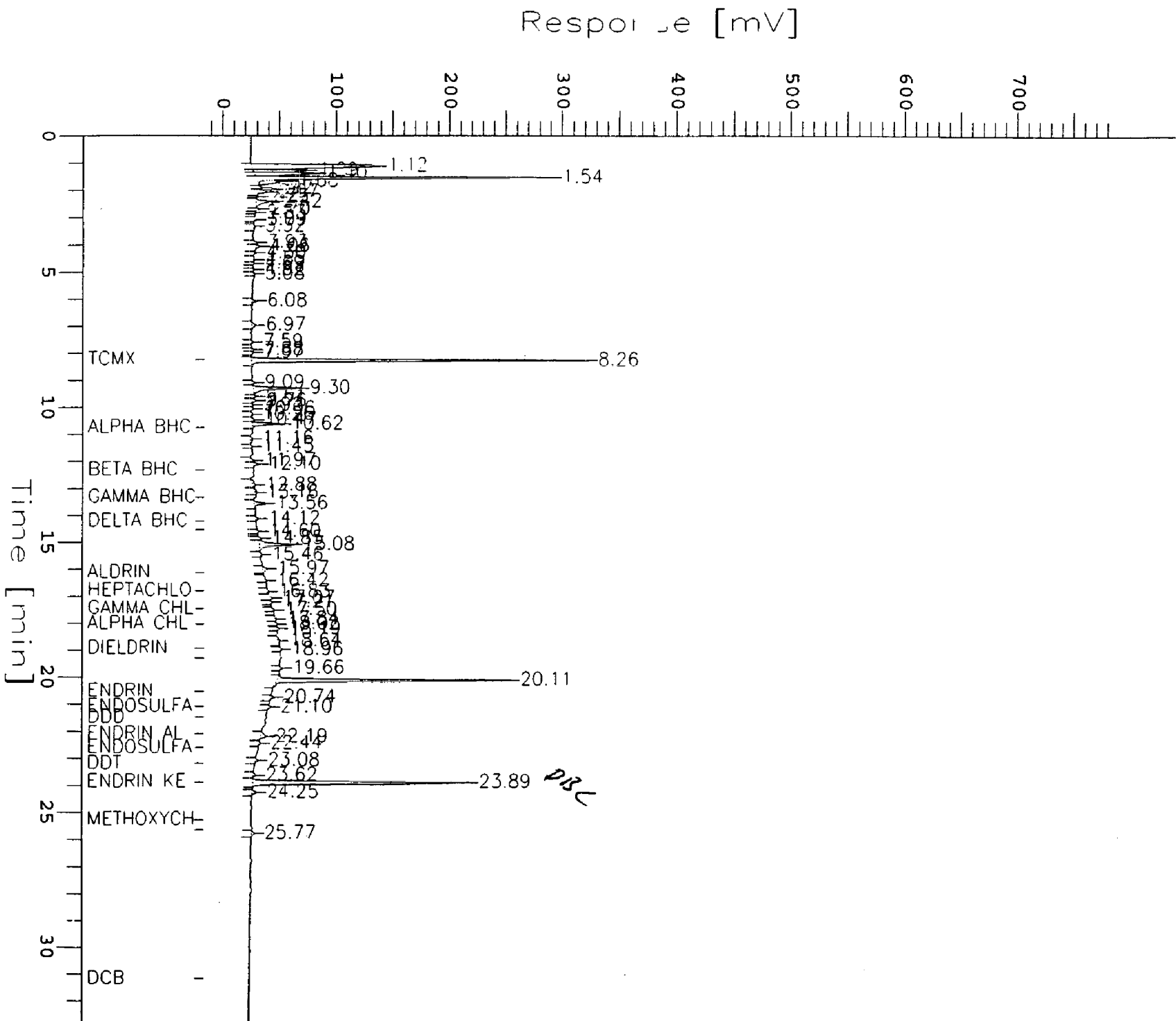
## Missing Component Report

| Component    | Expected Retention (Sample File) |
|--------------|----------------------------------|
| ALPHA BHC    | 10.753                           |
| BETA BHC     | 12.324                           |
| GAMMA BHC    | 13.331                           |
| ALDRIN       | 16.123                           |
| DDE          | 19.286                           |
| DDD          | 21.479                           |
| METHOXYCHLOR | 25.263                           |
| DCB          | 31.152                           |

HP5890 DETECTOR 8

Sample Name : L950626-2  
FileName : c:\2700\hps890\p838016.raw  
Method : HPPEST8.ins  
Start Time : 0.00 min  
Scale Factor : -1.0  
End Time : 33.00 min  
Plot Offset : -16 mV

Sample #: 16  
Date : 3/8/95 08:11 PM  
Time of Injection: 3/8/95 07:37 PM  
Low Point : -16.10 mV  
Plot Scale: 800.0 mV  
High Point : 783.90 mV



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Software Version: 3.3 <4811>  
 Sample Name : L950626-3 1:5 PCB SOIL Time : 3/9/95 02:48 AM  
 Sample Number: 27 Study : PPPCB  
 Operator : KMW

Instrument : HP5890 Channel : A A/D mV Range : 1000  
 AutoSampler : NONE  
 k/Vial : 0/0

Interface Serial # : 8055910402 Data Acquisition Time: 3/9/95 02:14 AM  
 Delay Time : 0.00 min.  
 End Time : 33.00 min.  
 Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\HP5890\PA38027.RAW  
 Result File : C:\2700\HP5890\PA38027.RST  
 Instrument File: c:\2700\methseqs\HPPESTB.ins  
 Process File : HPPESTA  
 Sample File : PESTA058  
 Sequence File : C:\2700\METHSEQS\0308PCB.SEQ

Inj. Volume : 1 ul Area Reject : 200.000000  
 Sample Amount : 1.0000 Dilution Factor : 1.00

Instrument Control Method:  
 Instrument name : HP5890

Channel Parameters:

Inlet Parameters:  
 Inlet A : Inlet B :

Detector Parameters:  
 Detector A : Detector B :

Heated Zones:

Temperature Program:

Total run time : 33.00 min

Timed Events:  
 There are no timed events in the method

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## HP 5890 REPORT FOR PEST/PCB ANALYSIS

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NORTHEASTERN ANALYTICAL CORP. GAS CHROMATOGRAPHY LAB.

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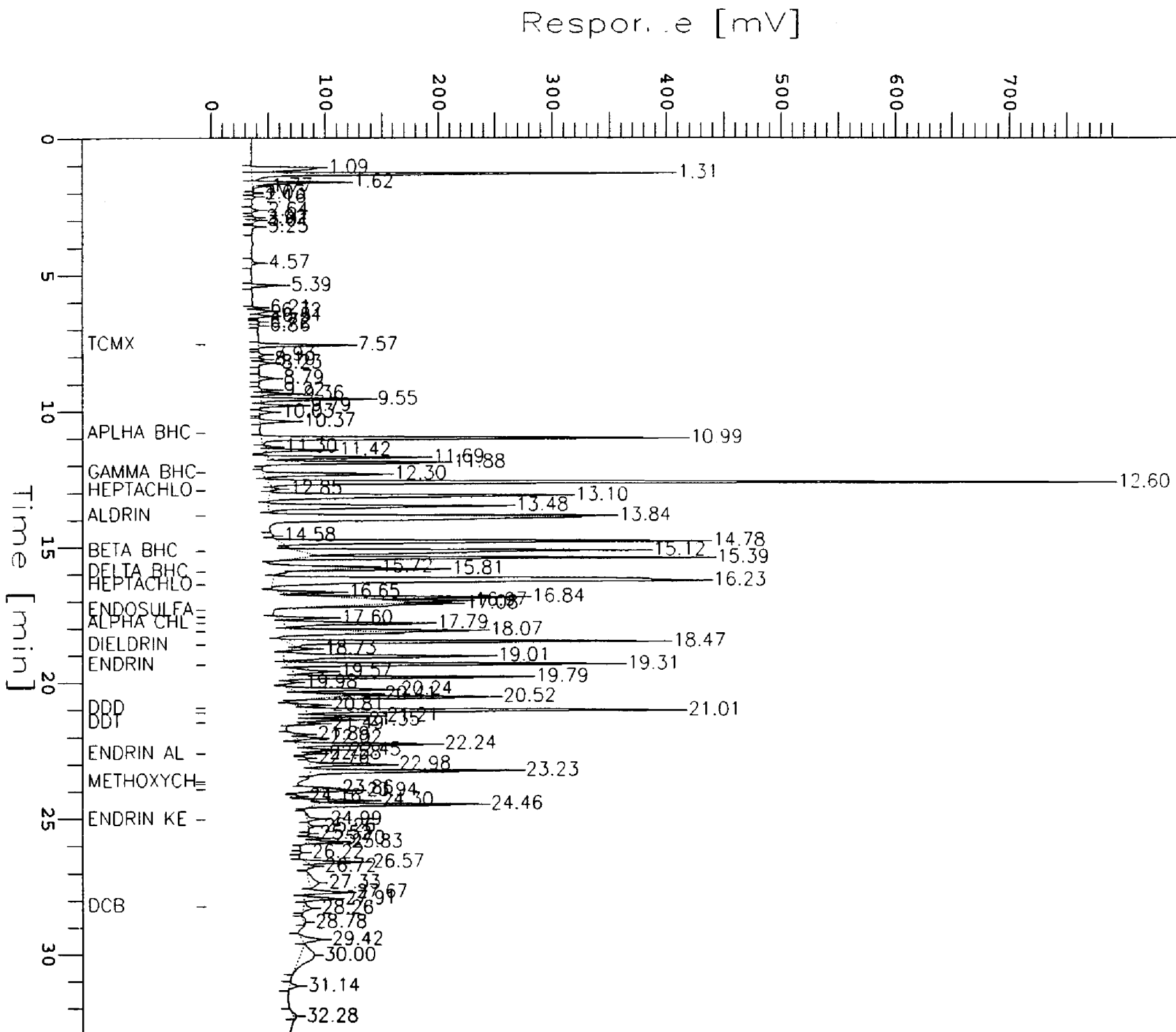
| Peak # | Component Name | Time [min] | Area [uV*sec] | Height [uV] | Raw Amount | Adjusted Amount | Calibration Factor | Delta RT [%] | Cal. Range |
|--------|----------------|------------|---------------|-------------|------------|-----------------|--------------------|--------------|------------|
| 1      |                | 1.094      | 458817.70     | 59154.83    | 17.6750    | 17.6750         | 458818             | -----        |            |
| 2      |                | 1.306      | 1694692.85    | 376450.38   | 56.2751    | 56.2751         | 1694693            | -----        |            |
| 3      |                | 1.624      | 354335.45     | 84487.30    | 14.4117    | 14.4117         | 354335             | -----        |            |
| 4      |                | 1.769      | 24166.00      | 6802.55     | 4.0995     | 4.0995          | 24166              | -----        |            |
| 5      |                | 2.026      | 5225.50       | 1956.17     | 3.5079     | 3.5079          | 5226               | -----        |            |
| 6      |                | 2.159      | 8584.50       | 2231.03     | 3.6128     | 3.6128          | 8584               | -----        |            |
| 7      |                | 2.639      | 26936.00      | 6015.57     | 4.1860     | 4.1860          | 26936              | -----        |            |
| 8      |                | 2.915      | 6879.00       | 2130.09     | 3.5595     | 3.5595          | 6879               | -----        |            |
| 9      |                | 3.011      | 12663.00      | 3498.26     | 3.7402     | 3.7402          | 12663              | -----        |            |
| 10     |                | 3.245      | 19873.00      | 4674.57     | 3.9654     | 3.9654          | 19873              | -----        |            |
| 11     |                | 4.565      | 30778.00      | 6394.79     | 4.3060     | 4.3060          | 30778              | -----        |            |
| 12     |                | 5.385      | 93339.00      | 25904.29    | 6.2600     | 6.2600          | 93339              | -----        |            |
| 13     |                | 6.205      | 16218.50      | 4639.00     | 3.8512     | 3.8512          | 16219              | -----        |            |
| 14     |                | 6.320      | 51767.00      | 11941.74    | 4.9615     | 4.9615          | 51767              | -----        |            |
| 15     |                | 6.510      | 45451.00      | 12157.25    | 4.7643     | 4.7643          | 45451              | -----        |            |
| 16     |                | 6.724      | 6230.50       | 1558.19     | 3.5393     | 3.5393          | 6230               | -----        |            |
| 17     |                | 6.864      | 4862.50       | 1198.99     | 3.4966     | 3.4966          | 4862               | -----        |            |
| 18     | TCMX           | 7.571      | 324520.00     | 79313.63    | 12.5068    | 0.0000          | 324520             | 0.2620       |            |
| 19     |                | 7.928      | 23937.50      | 4835.31     | 4.0923     | 4.0923          | 23938              | -----        |            |
| 20     |                | 8.100      | 14950.50      | 4156.66     | 3.8116     | 3.8116          | 14950              | -----        |            |

| Peak # | Component Name      | Time [min] | Area [uV*sec] | Height [uV] | Raw Amount | Adjusted Amount | Calibration Factor | Delta RT [%] | Cal. Range |
|--------|---------------------|------------|---------------|-------------|------------|-----------------|--------------------|--------------|------------|
| 21     |                     | 8.226      | 43008.00      | 10390.13    | 4.6880     | 4.6880          | 43008              | -----        |            |
| 22     |                     | 8.786      | 61178.00      | 12682.37    | 5.2555     | 5.2555          | 61178              | -----        |            |
| 23     |                     | 9.222      | 44449.50      | 11355.14    | 4.7330     | 4.7330          | 44450              | -----        |            |
| 24     |                     | 9.355      | 116221.00     | 28407.91    | 6.9746     | 6.9746          | 116221             | -----        |            |
| 25     |                     | 9.553      | 437643.00     | 94711.07    | 17.0136    | 17.0136         | 437643             | -----        |            |
| 26     |                     | 9.789      | 147612.00     | 35453.38    | 7.9551     | 7.9551          | 147612             | -----        |            |
| 27     |                     | 10.028     | 50033.00      | 10692.83    | 4.9074     | 4.9074          | 50033              | -----        |            |
| 28     |                     | 10.368     | 134568.00     | 29423.21    | 7.5477     | 7.5477          | 134568             | -----        |            |
| 0      | ALPHA BHC           | 10.797     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 29     |                     | 10.986     | 1743991.00    | 369424.37   | 57.8148    | 57.8148         | 1743991            | -----        |            |
| 30     |                     | 11.304     | 25751.00      | 7163.93     | 4.1490     | 4.1490          | 25751              | -----        |            |
| 31     |                     | 11.421     | 244858.00     | 55262.22    | 10.9924    | 10.9924         | 244858             | -----        |            |
| 32     |                     | 11.688     | 631722.00     | 137692.42   | 23.4492    | 23.4492         | 631722             | -----        |            |
| 33     |                     | 11.881     | 705904.00     | 153709.48   | 25.8886    | 25.8886         | 705904             | -----        |            |
| 34     | GAMMA BHC           | 12.303     | 679371.00     | 107110.36   | 25.0161    | 25.0161         | 679371             | 0.3738       |            |
| 35     |                     | 12.603     | 3976736.50    | 739800.73   | 158.2312   | 158.2312        | 3976736            | -----        |            |
| 36     | HEPTACHLOR          | 12.849     | 27828.50      | 7423.55     | 2.0107     | 2.0107          | 27828              | -0.5001      |            |
| 37     |                     | 13.102     | 1730215.00    | 261703.70   | 69.3578    | 69.3578         | 1730215            | -----        |            |
| 38     |                     | 13.476     | 1417488.00    | 214451.44   | 50.8049    | 50.8049         | 1417488            | -----        |            |
| 39     | ALDRIN              | 13.842     | 584605.50     | 119568.95   | 22.2212    | 22.2212         | 584605             | 0.0010       |            |
| 40     |                     | 14.575     | 7430.00       | 1227.09     | 0.7526     | 0.7526          | 7430               | -----        |            |
| 41     |                     | 14.777     | 2357477.00    | 377371.30   | 169.8534   | 169.8534        | 2357477            | -----        |            |
| 42     | BETA BHC            | 15.119     | 2082931.50    | 305115.75   | 150.0981   | 150.0981        | 2082931            | -0.1645      |            |
| 43     |                     | 15.387     | 1576061.00    | 361904.00   | 113.6255   | 113.6255        | 1576061            | -----        |            |
| 44     |                     | 15.724     | 106756.00     | 22706.53    | 7.3312     | 7.3312          | 106756             | -----        |            |
| 45     | DELTA BHC           | 15.806     | 350270.00     | 96676.28    | 15.8159    | 15.8159         | 350270             | -0.6105      |            |
| 46     |                     | 16.227     | 3797482.00    | 382804.46   | 143.1760   | 143.1760        | 3797482            | -----        |            |
| 0      | HEPTACHLOR EXPOXIDE | 16.381     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 47     |                     | 16.648     | 243638.50     | 50848.99    | 9.7314     | 9.7314          | 243638             | -----        |            |
| 48     |                     | 16.840     | 693320.50     | 161402.91   | 26.6167    | 26.6167         | 693320             | -----        |            |
| 49     |                     | 16.972     | 249760.00     | 60125.73    | 10.1538    | 10.1538         | 249760             | -----        |            |
| 50     |                     | 17.075     | 356179.00     | 61572.95    | 14.1505    | 14.1505         | 356179             | -----        |            |
| 0      | ENDOSULFAN I        | 17.321     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 51     | GAMMA CHLORDANE     | 17.603     | 213851.00     | 45933.78    | 8.6264     | 8.6264          | 213851             | 0.2010       |            |
| 52     | ALPHA CHLORDANE     | 17.794     | 762405.50     | 128029.57   | 29.0468    | 29.0468         | 762406             | 0.0460       |            |
| 53     | DDE                 | 18.066     | 514584.50     | 114897.53   | 21.3795    | 21.3795         | 514584             | -0.1934      |            |
| 54     | DIELDRIN            | 18.469     | 1852935.50    | 333183.49   | 75.1194    | 75.1194         | 1852936            | -0.7101      |            |
| 55     |                     | 18.733     | 80531.00      | 19335.96    | 5.5588     | 5.5588          | 80531              | -----        |            |
| 56     |                     | 19.010     | 1162053.50    | 184702.97   | 63.7445    | 63.7445         | 1162054            | -----        |            |
| 57     | ENDRIN              | 19.305     | 1499394.00    | 294876.34   | 81.6817    | 81.6817         | 1499394            | -0.1608      |            |
| 58     |                     | 19.574     | 220022.00     | 33613.38    | 13.6545    | 13.6545         | 220022             | -----        |            |
| 59     |                     | 19.785     | 1034256.50    | 207244.20   | 56.9493    | 56.9493         | 1034257            | -----        |            |
| 60     |                     | 19.979     | 34463.00      | 8317.34     | 3.7879     | 3.7879          | 34463              | -----        |            |
| 61     |                     | 20.235     | 474858.50     | 88677.05    | 30.9586    | 30.9586         | 474858             | -----        |            |
| 62     |                     | 20.406     | 166260.50     | 40141.17    | 12.8983    | 12.8983         | 166261             | -----        |            |
| 63     |                     | 20.519     | 660442.50     | 145706.88   | 41.8197    | 41.8197         | 660442             | -----        |            |
| 64     |                     | 20.809     | 97998.50      | 21718.46    | 8.9033     | 8.9033          | 97999              | -----        |            |
| 65     | DDD                 | 21.009     | 2006194.00    | 334633.79   | 120.5784   | 120.5784        | 2006194            | 0.3994       |            |
| 66     | ENDOSULFAN II       | 21.208     | 273355.00     | 64289.55    | 15.3777    | 15.3777         | 273355             | 0.5610       |            |
| 67     | DDT                 | 21.354     | 197979.50     | 46814.35    | 20.0405    | 20.0405         | 197980             | -0.4544      |            |
| 68     |                     | 21.486     | 72166.00      | 20470.99    | 11.6150    | 11.6150         | 72166              | -----        |            |
| 69     |                     | 21.888     | 47790.50      | 10180.70    | 9.9827     | 9.9827          | 47791              | -----        |            |
| 70     |                     | 22.019     | 92654.00      | 19826.53    | 8.2490     | 8.2490          | 92654              | -----        |            |
| 71     |                     | 22.244     | 651538.00     | 122068.09   | 47.1953    | 47.1953         | 651538             | -----        |            |
| 72     | ENDRIN ALDEHYDE     | 22.451     | 120028.00     | 27398.35    | 10.1566    | 10.1566         | 120028             | -0.6718      |            |
| 73     |                     | 22.578     | 33414.00      | 10367.44    | 4.1209     | 4.1209          | 33414              | -----        |            |
| 74     |                     | 22.762     | 8781.50       | 1701.00     | 2.4043     | 2.4043          | 8781               | -----        |            |
| 75     |                     | 22.984     | 370740.00     | 70628.38    | 27.6277    | 27.6277         | 370740             | -----        |            |
| 76     |                     | 23.230     | 1008562.00    | 183541.03   | 235.1876   | 235.1876        | 1008562            | -----        |            |
| 0      | METHOXYCHLOR        | 23.625     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 77     | ENDOSULFAN SULFATE  | 23.856     | 31691.00      | 4249.17     | 8.2639     | 8.2639          | 31691              | 0.5478       |            |
| 78     | DBC                 | 23.938     | 142532.00     | 36203.40    | 10.6444    | 10.6444         | 142532             | 0.1431       |            |
| 79     |                     | 24.159     | 9840.00       | 1945.67     | 1.2511     | 1.2511          | 9840               | -----        |            |
| 80     |                     | 24.304     | 239178.50     | 52420.09    | 17.4860    | 17.4860         | 239178             | -----        |            |
| 81     |                     | 24.461     | 768844.00     | 148969.06   | 54.9811    | 54.9811         | 768844             | -----        |            |
| 82     | ENDRIN KETONE       | 24.989     | 83579.00      | 12035.94    | 5.1319     | 5.1319          | 83579              | -0.1185      |            |
| 83     |                     | 25.258     | 32926.00      | 5032.36     | 2.7927     | 2.7927          | 32926              | -----        |            |
| 84     |                     | 25.523     | 8084.00       | 2256.89     | 1.6455     | 1.6455          | 8084               | -----        |            |
| 85     |                     | 25.696     | 46751.00      | 11059.12    | 3.4311     | 3.4311          | 46751              | -----        |            |
| 86     |                     | 25.831     | 148128.00     | 28589.24    | 8.1128     | 8.1128          | 148128             | -----        |            |
| 87     |                     | 26.217     | 8414.00       | 2005.57     | 1.6607     | 1.6607          | 8414               | -----        |            |
| 88     |                     | 26.567     | 277142.00     | 49998.36    | 14.0708    | 14.0708         | 277142             | -----        |            |
| 89     |                     | 26.720     | 19714.00      | 3929.96     | -11.8503   | -11.8503        | 19714              | -----        |            |
| 90     |                     | 27.329     | 162801.00     | 8493.16     | -4.9321    | -4.9321         | 162801             | -----        |            |
| 91     |                     | 27.669     | 217725.00     | 35084.58    | -2.2765    | -2.2765         | 217725             | -----        |            |
| 92     |                     | 27.906     | 175752.00     | 28110.41    | -4.3059    | -4.3059         | 175752             | -----        |            |
| 93     | DCB                 | 28.261     | 72705.00      | 7632.41     | -9.2882    | -9.2882         | 72705              | 0.2047       |            |

Sample Name : L950626-3 1:5 PCB SOIL  
FileName : c:\2700\hps5890\PA38027.raw  
Method : HPPEST8.ins  
Start Time : 0.00 min  
Scale Factor: -1.0

End Time : 33.00 min  
Plot Offset: -5 mV

Sample #: 27  
Date : 3/9/95 02:48 AM  
Time of Injection: 3/9/95 02:14 AM  
Low Point : -5.23 mV  
Plot Scale: 800.0 mV  
High Point : 794.77 mV





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Software Version: 3.3 <4811>

Sample Name : L950626-3 1:5 PCB SOIL Time : 3/9/95 02:48 AM

Sample Number: 27 Study : PPPCB

Operator : KMW

Instrument : HP5890 Channel : B A/D mV Range : 1000

AutoSampler : NONE

k/Vial : 0/0

Interface Serial # : 8055910402 Data Acquisition Time: 3/9/95 02:14 AM

Delay Time : 0.00 min.

End Time : 33.00 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\HP5890\PB38027.RAW

Result File : C:\2700\HP5890\PB38027.RST

Instrument File: c:\2700\methseqs\HPPESTB.ins

Process File : HPPESTB

Sample File : PESTB058

Sequence File : C:\2700\METHSEQS\0308PCB.SEQ

Inj. Volume : 1 ul Area Reject : 200.000000

Sample Amount : 1.0000 Dilution Factor : 1.00

Instrument Control Method:

Instrument name : HP5890

Channel Parameters:

Inlet Parameters:

Inlet A : Inlet B :

Detector Parameters:

Detector A : Detector B :

Heated Zones:

Temperature Program:

Total run time : 33.00 min

Timed Events:

There are no timed events in the method

# HP5890 REPORT FOR PEST/PCB ANALYSIS

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NORTHEASTERN ANALYTICAL CORP. GAS CHROMATOGRAPHY LAB.

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| Peak # | Component Name | Time [min] | Area [uV*sec] | Height [uV] | Raw Amount | Adjusted Amount | Calibration Factor | Cal. Range |
|--------|----------------|------------|---------------|-------------|------------|-----------------|--------------------|------------|
| 1      |                | 1.088      | 31609.00      | 7645.83     | -2.6198    | -2.6198         | 31609              |            |
| 2      |                | 1.289      | 1104754.00    | 262380.75   | 77.1714    | 77.1714         | 1104754            |            |
| 3      |                | 1.544      | 238764.00     | 62595.69    | 12.7827    | 12.7827         | 238764             |            |
| 4      |                | 2.068      | 3443.00       | 1010.71     | -4.7140    | -4.7140         | 3443               |            |
| 5      |                | 2.419      | 5853.50       | 1148.99     | -4.5348    | -4.5348         | 5854               |            |
| 6      |                | 2.600      | 7304.50       | 1372.93     | -4.4269    | -4.4269         | 7304               |            |
| 7      |                | 2.701      | 12641.00      | 4067.02     | -4.0301    | -4.0301         | 12641              |            |
| 8      |                | 3.081      | 37680.50      | 7880.76     | -2.1683    | -2.1683         | 37680              |            |
| 9      |                | 3.463      | 4354.00       | 878.03      | -4.6463    | -4.6463         | 4354               |            |
| 10     |                | 3.806      | 3693.00       | 1057.83     | -4.6954    | -4.6954         | 3693               |            |
| 11     |                | 4.088      | 10548.00      | 1055.02     | -4.1857    | -4.1857         | 10548              |            |
| 12     |                | 4.790      | 7542.00       | 1981.08     | -4.4092    | -4.4092         | 7542               |            |
| 13     |                | 4.922      | 15137.50      | 4118.18     | -3.8445    | -3.8445         | 15138              |            |
| 14     |                | 6.080      | 104793.50     | 26544.78    | 2.8217     | 2.8217          | 104794             |            |
| 15     |                | 6.965      | 69659.00      | 11987.89    | 0.2093     | 0.2093          | 69659              |            |
| 16     |                | 7.967      | 11508.00      | 2141.49     | -4.1143    | -4.1143         | 11508              |            |
| 17     | TCMX           | 8.261      | 245364.50     | 56167.84    | 13.2735    | 13.2735         | 245364             |            |
| 18     |                | 9.304      | 204939.00     | 32454.59    | 10.2678    | 10.2678         | 204939             |            |
| 19     |                | 9.726      | 46113.00      | 5901.81     | 3.3193     | 3.3193          | 46113              |            |
| 20     |                | 10.252     | 67745.50      | 14564.92    | 4.2584     | 4.2584          | 67746              |            |
| 21     |                | 10.485     | 271558.00     | 61325.37    | 13.1069    | 13.1069         | 271558             |            |

| Peak # | Component Name       | Time [min] | Area [uV*sec] | Height [uV] | Raw Amount | Adjusted Amount | Calibration Factor | Cal. Range |
|--------|----------------------|------------|---------------|-------------|------------|-----------------|--------------------|------------|
| 22     |                      | 10.620     | 112314.50     | 20416.10    | 6.1934     | 6.1934          | 112315             |            |
| 0      | ALPHA BHC            | 10.753     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 23     |                      | 10.965     | 20016.00      | 4202.87     | 2.1863     | 2.1863          | 20016              |            |
|        |                      | 11.731     | 83925.00      | 17334.99    | 4.6305     | 4.6305          | 83925              |            |
|        |                      | 11.954     | 41967.00      | 9700.10     | 2.6767     | 2.6767          | 41967              |            |
| 26     |                      | 12.103     | 1135158.50    | 225000.58   | 53.5819    | 53.5819         | 1135158            |            |
| 27     | BETA BHC             | 12.374     | 115189.00     | 24291.94    | 6.0864     | 6.0864          | 115189             |            |
| 28     |                      | 12.506     | 52067.00      | 14517.39    | 3.1470     | 3.1470          | 52067              |            |
| 29     |                      | 12.603     | 7113.00       | 2987.05     | 1.0537     | 1.0537          | 7113               |            |
| 30     |                      | 12.725     | 4087.00       | 1419.17     | 0.9128     | 0.9128          | 4087               |            |
| 31     |                      | 12.882     | 427396.00     | 90200.68    | 15.2758    | 15.2758         | 427396             |            |
| 32     |                      | 13.160     | 882183.50     | 118717.26   | 32.2181    | 32.2181         | 882184             |            |
| 0      | GAMMA BHC            | 13.331     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 33     |                      | 13.563     | 2492451.00    | 493328.57   | 92.2060    | 92.2060         | 2492451            |            |
| 34     | DELTA BHC            | 14.124     | 605241.00     | 127993.43   | 29.9199    | 29.9199         | 605241             |            |
| 35     |                      | 14.273     | 20387.50      | 4698.69     | 2.3844     | 2.3844          | 20387              |            |
| 36     |                      | 14.330     | 23957.00      | 9179.27     | 2.5524     | 2.5524          | 23957              |            |
| 37     |                      | 14.480     | 10496.00      | 2907.22     | 1.7068     | 1.7068          | 10496              |            |
| 38     | HEPTACHLOR           | 14.598     | 568919.00     | 123324.19   | 29.4988    | 29.4988         | 568919             |            |
| 39     |                      | 14.852     | 558731.50     | 126109.00   | 28.9917    | 28.9917         | 558731             |            |
| 40     |                      | 14.994     | 748072.00     | 130736.88   | 38.4150    | 38.4150         | 748072             |            |
| 41     |                      | 15.171     | 121613.00     | 34209.36    | 7.2370     | 7.2370          | 121613             |            |
| 42     |                      | 15.431     | 128162.50     | 22743.40    | 18.9891    | 18.9891         | 128162             |            |
| 43     |                      | 15.626     | 10548.00      | 2070.48     | 86.6306    | 86.6306         | 10548              |            |
| 44     |                      | 15.974     | 1576636.00    | 216006.04   | -814.0440  | -814.0440       | 1576636            |            |
| 0      | ALDRIN               | 16.123     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 45     |                      | 16.281     | 225234.00     | 50939.91    | -36.8377   | -36.8377        | 225234             |            |
| 46     |                      | 16.423     | 441881.50     | 103206.12   | -161.4341  | -161.4341       | 441882             |            |
| 47     |                      | 16.532     | 48564.00      | 18719.50    | 64.7671    | 64.7671         | 48564              |            |
| 48     |                      | 16.836     | 477599.00     | 86882.19    | 26.5216    | 26.5216         | 477599             |            |
| 49     | HEPTACHLOR EPOXIDE   | 17.074     | 816513.00     | 179457.94   | 45.5930    | 45.5930         | 816513             |            |
| 50     | GAMMA CHLORDANE      | 17.208     | 459409.00     | 113982.84   | 24.2922    | 24.2922         | 459409             |            |
| 51     |                      | 17.502     | 462170.00     | 95617.67    | 24.4400    | 24.4400         | 462170             |            |
| 52     |                      | 17.624     | 43485.00      | 15165.76    | 2.0299     | 2.0299          | 43485              |            |
| 53     |                      | 17.841     | 575832.00     | 108510.45   | 31.6751    | 31.6751         | 575832             |            |
| 54     |                      | 18.025     | 304124.00     | 66749.69    | 16.0242    | 16.0242         | 304124             |            |
| 55     | ALPHA CHLORDANE/ENDO | 18.193     | 599361.50     | 125483.33   | 33.0304    | 33.0304         | 599361             |            |
|        |                      | 18.510     | 10385.00      | 2301.31     | -0.8956    | -0.8956         | 10385              |            |
|        |                      | 18.643     | 194567.50     | 40513.14    | 13.2427    | 13.2427         | 194568             |            |
| 58     |                      | 18.799     | 29619.00      | 7543.19     | 2.8328     | 2.8328          | 29619              |            |
| 59     | DIELDRIN             | 18.999     | 269526.00     | 50130.84    | 17.9733    | 17.9733         | 269526             |            |
| 60     |                      | 19.143     | 10243.50      | 3233.86     | 0.6803     | 0.6803          | 10244              |            |
| 61     | DOE                  | 19.267     | 378024.00     | 83598.30    | 23.3057    | 23.3057         | 378024             |            |
| 62     |                      | 19.415     | 140395.00     | 33979.25    | 8.6870     | 8.6870          | 140395             |            |
| 63     |                      | 19.662     | 1009796.00    | 177727.57   | 62.1715    | 62.1715         | 1009796            |            |
| 64     |                      | 19.964     | 8576.00       | 2381.84     | 0.5777     | 0.5777          | 8576               |            |
| 65     |                      | 20.114     | 572592.00     | 138385.65   | 48.8284    | 48.8284         | 572592             |            |
| 66     |                      | 20.223     | 310455.00     | 66335.01    | 26.4738    | 26.4738         | 310455             |            |
| 67     |                      | 20.395     | 15529.50      | 7468.75     | 1.3229     | 1.3229          | 15530              |            |
| 68     |                      | 20.515     | 27218.50      | 8375.47     | 2.3197     | 2.3197          | 27219              |            |
| 69     | ENDRIN               | 20.747     | 437324.50     | 83015.35    | 37.2930    | 37.2930         | 437325             |            |
| 70     |                      | 20.951     | 14537.50      | 4566.75     | 2.0231     | 2.0231          | 14538              |            |
| 71     | ENDOSULFAN II        | 21.104     | 70013.00      | 16323.18    | 6.2044     | 6.2044          | 70013              |            |
| 72     |                      | 21.485     | 136051.50     | 28392.76    | 9.1856     | 9.1856          | 136051             |            |
| 73     | DDD                  | 21.656     | 714177.00     | 87498.43    | 53.3123    | 53.3123         | 714177             |            |
| 74     | ENDRIN ALDEHYDE      | 22.207     | 1126899.50    | 136427.31   | 110.9411   | 110.9411        | 1126899            |            |
| 75     | ENDOSULFAN SULFATE   | 22.445     | 128982.50     | 26008.39    | 13.2632    | 13.2632         | 128983             |            |
| 76     |                      | 22.645     | 143093.50     | 21311.70    | 14.7419    | 14.7419         | 143094             |            |
| 77     | DDT                  | 23.132     | 14800.00      | 3203.43     | 0.4769     | 0.4769          | 14800              |            |
| 78     |                      | 23.219     | 5676.00       | 1821.41     | -0.3111    | -0.3111         | 5676               |            |
| 79     |                      | 23.629     | 364658.00     | 65225.09    | 28.8212    | 28.8212         | 364658             |            |
| 80     | ENDRIN KETONE        | 23.902     | 156829.00     | 32861.90    | 12.0137    | 12.0137         | 156829             |            |
| 81     |                      | 24.013     | 42479.00      | 11931.87    | 2.7660     | 2.7660          | 42479              |            |
| 82     |                      | 24.258     | 402043.00     | 71834.47    | 31.8445    | 31.8445         | 402043             |            |
| 83     |                      | 24.643     | 22809.00      | 5031.00     | 1.1753     | 1.1753          | 22809              |            |
| 84     |                      | 24.777     | 6438.00       | 1342.32     | -2.9724    | -2.9724         | 6438               |            |
| 85     |                      | 25.043     | 20463.00      | 2987.15     | 0.4077     | 0.4077          | 20463              |            |
| 86     | METHOXYCHLOR         | 25.387     | 9317.00       | 1781.58     | -2.2786    | -2.2786         | 9317               |            |
| 87     |                      | 25.580     | 123656.00     | 24216.95    | 11.9207    | 11.9207         | 123656             |            |
| 88     | D8C                  | 25.774     | 264411.00     | 45780.39    | 25.0701    | 25.0701         | 264411             |            |
| 89     |                      | 25.912     | 12582.00      | 5159.25     | 1.5441     | 1.5441          | 12582              |            |
|        |                      | 26.468     | 13154.00      | 1582.68     | 1.5975     | 1.5975          | 13154              |            |
| 91     |                      | 26.765     | 32452.00      | 4717.61     | 3.4003     | 3.4003          | 32452              |            |
| 92     |                      | 26.979     | 22817.50      | 4074.39     | 2.5003     | 2.5003          | 22818              |            |
| 93     |                      | 27.189     | 12351.50      | 1876.63     | 1.5225     | 1.5225          | 12352              |            |
| 94     |                      | 27.502     | 32338.00      | 5401.38     | 3.3897     | 3.3897          | 32338              |            |
| 95     |                      | 27.875     | 183910.00     | 23219.93    | 17.5497    | 17.5497         | 183910             |            |

| Peak<br># | Component<br>Name | Time<br>[min] | Area<br>[uV*sec] | Height<br>[uV] | Raw<br>Amount | Adjusted<br>Amount | Calibration<br>Factor | Cal.<br>Range |
|-----------|-------------------|---------------|------------------|----------------|---------------|--------------------|-----------------------|---------------|
| 96        |                   | 29.644        | 156117.00        | 17140.78       | 0.5740        | 0.5740             | 156117                |               |
| 97        |                   | 30.182        | 15625.00         | 2125.59        | -11.8405      | -11.8405           | 15625                 |               |
| 0         | DCB               | 31.152        | 0.00             | 0.00           | 0.0000        | 0.0000             | 0                     |               |
| 9         |                   | 31.555        | 122719.00        | 13335.51       | -2.3772       | -2.3772            | 122719                |               |
| <hr/>     |                   |               |                  |                |               |                    |                       |               |
|           |                   | 24491459.50   | 4.727e+06        | 392.6530       | 392.6530      | 24491460           |                       |               |

## Missing Component Report

| Component | Expected Retention (Sample File) |
|-----------|----------------------------------|
|-----------|----------------------------------|

|           |        |
|-----------|--------|
| ALPHA BHC | 10.753 |
| GAMMA BHC | 13.331 |
| ALDRIN    | 16.123 |
| DCB       | 31.152 |

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HP5890 DETECTOR B

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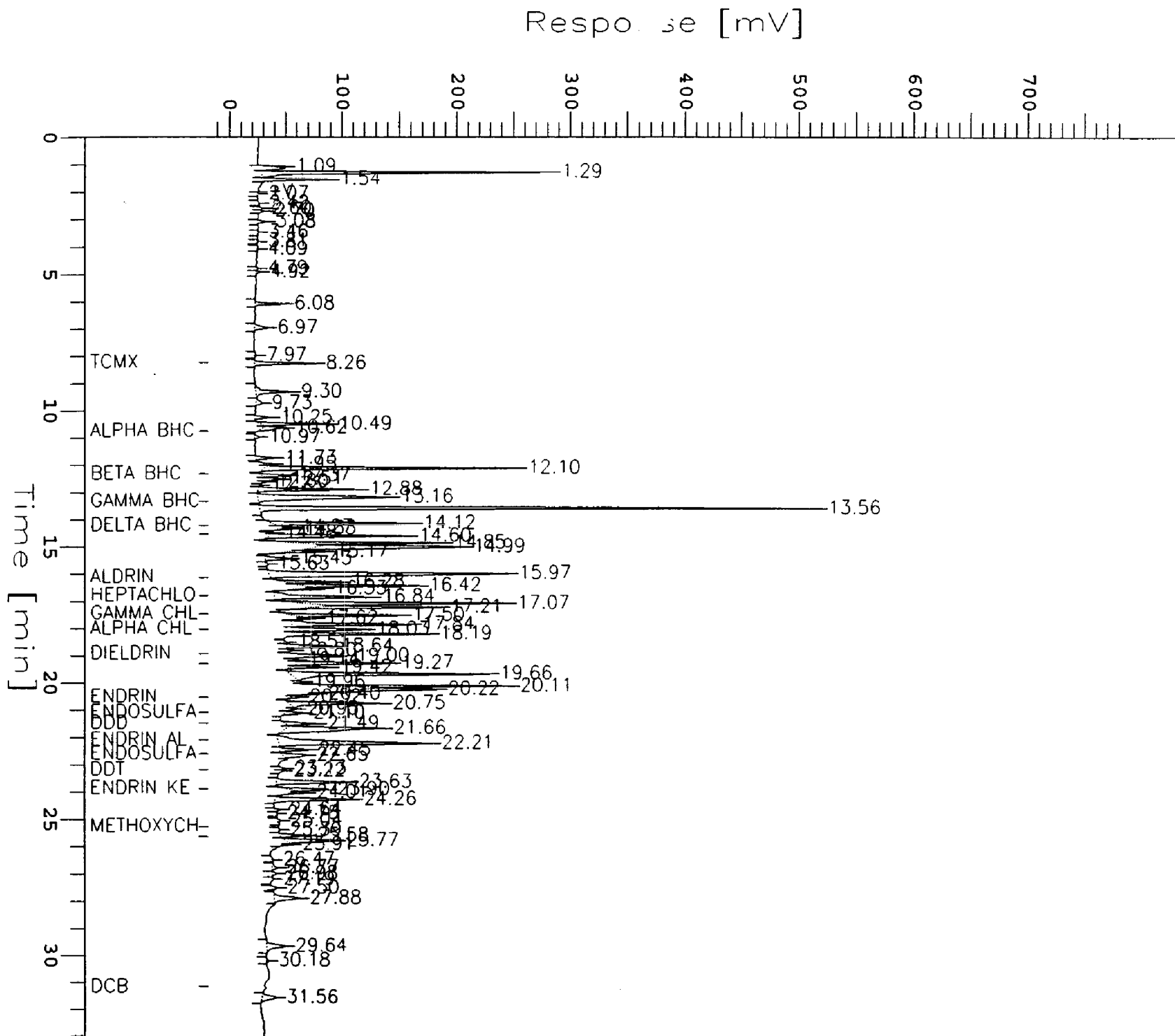
Report Stored in ASCII File: C:\2700\HP5890\PB38027.TX0

# Chromatogram

Sample Name : L950626-3 1:5 PCB SOIL  
 FileName : c:\2700\hps890\p838027.raw  
 Method : HPPEST8.ins  
 Start Time : 0.00 min  
 Scale Factor : -1.0  
 End Time : 33.00 min  
 Plot Offset: -18 mV

Sample #: 27  
 Date : 3/9/95 02:48 AM  
 Time of Injection: 3/9/95 02:14 AM  
 Low Point : -18.38 mV  
 Plot Scale: 800.0 mV  
 High Point : 781.62 mV

Page 1 of 1  
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Software Version: 3.3 <4811>  
 Sample Name : L950626-4 / 5- Time : 3/13/95 02:22 PM  
 Sample Number: 30 Study : 515.1  
 Operator : KMW  
 Instrument : HP5890 Channel : A A/D mV Range : 1000  
 AutoSampler : NONE  
 k/Vial : 0/0

Interface Serial # : 8055910402 Data Acquisition Time: 3/13/95 01:47 PM  
 Delay Time : 0.00 min.  
 End Time : 35.00 min.  
 Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\HP5890\HA30030.RAW  
 Result File : C:\2700\HP5890\HA30030.RST  
 Instrument File: c:\2700\methseqs\515A.ins  
 Process File : 515A  
 Sample File : HB515A2  
 Sequence File : C:\2700\METHSEQS\0310HB.seq

Inj. Volume : 1 ul Area Reject : 0.000000  
 Sample Amount : 1.0000 Dilution Factor : 1.00

# DEFAULT REPORT

| Peak # | Time [min] | Area [uV*sec] | Height [uV] | Area [%] | Norm. Area [%] | Area BL | Area/Height [sec] |
|--------|------------|---------------|-------------|----------|----------------|---------|-------------------|
| 1      | 0.218      | 907.50        | 100.49      | 3e-03    | 2.9320e-03     | B       | 9.0310            |
| 2      | 1.132      | 1614310.90    | 228068.97   | 5.22     | 5.22           | B       | 7.0782            |
| 3      | 1.308      | 6271188.60    | 995711.50   | 20.26    | 20.26          | V       | 6.2982            |
| 4      | 1.631      | 541269.44     | 128112.97   | 1.75     | 1.75           | B       | 4.2249            |
| 5      | 1.783      | 36434.00      | 12195.72    | 0.12     | 0.12           | E       | 2.9874            |
| 6      | 1.889      | 37539.56      | 9964.10     | 0.12     | 0.12           | V       | 3.7675            |
| 7      | 2.039      | 3625.00       | 1669.16     | 0.01     | 0.01           | B       | 2.1717            |
| 8      | 2.104      | 3607.00       | 1387.81     | 0.01     | 0.01           | B       | 2.5991            |
| 9      | 2.386      | 8414.00       | 1983.67     | 0.03     | 0.03           | B       | 4.2416            |
|        | 2.656      | 30731.28      | 5686.35     | 0.10     | 0.10           | B       | 5.4044            |
| 11     | 2.793      | 2580.00       | 960.84      | 8e-03    | 8.3357e-03     | E       | 2.6851            |
| 12     | 2.916      | 14849.75      | 2372.72     | 0.05     | 0.05           | V       | 6.2585            |
| 13     | 3.022      | 21222.60      | 3526.59     | 0.07     | 0.07           | V       | 6.0179            |
| 14     | 3.258      | 13638.60      | 3425.41     | 0.04     | 0.04           | V       | 3.9816            |
| 15     | 3.365      | 3137.26       | 832.90      | 0.01     | 0.01           | V       | 3.7667            |
| 16     | 3.504      | 1698.00       | 544.75      | 5e-03    | 5.4861e-03     | B       | 3.1170            |
| 17     | 3.721      | 3755.00       | 805.36      | 0.01     | 0.01           | B       | 4.6625            |
| 18     | 3.830      | 1729.00       | 551.67      | 6e-03    | 5.5862e-03     | V       | 3.1341            |
| 19     | 3.915      | 1565.00       | 434.38      | 5e-03    | 5.0563e-03     | V       | 3.6029            |
| 20     | 4.054      | 1669.00       | 502.57      | 5e-03    | 5.3924e-03     | B       | 3.3209            |
| 21     | 4.315      | 1993.72       | 497.97      | 6e-03    | 6.4415e-03     | B       | 4.0037            |
| 22     | 4.584      | 40080.28      | 6809.75     | 0.13     | 0.13           | V       | 5.8857            |
| 23     | 4.744      | 1936.00       | 525.95      | 6e-03    | 6.2550e-03     | E       | 3.6809            |
| 24     | 5.096      | 5329.98       | 580.22      | 0.02     | 0.02           | B       | 9.1862            |
| 25     | 5.280      | 5070.81       | 1115.96     | 0.02     | 0.02           | V       | 4.5439            |
| 26     | 5.406      | 15706.29      | 3931.82     | 0.05     | 0.05           | V       | 3.9947            |
| 27     | 5.703      | 3169.55       | 624.84      | 0.01     | 0.01           | V       | 5.0726            |
| 28     | 5.792      | 5191.88       | 835.08      | 0.02     | 0.02           | V       | 6.2172            |
| 29     | 6.060      | 3276.38       | 499.49      | 0.01     | 0.01           | B       | 6.5595            |
| 30     | 6.237      | 28812.51      | 5915.09     | 0.09     | 0.09           | V       | 4.8710            |
| 31     | 6.340      | 14435.71      | 2997.34     | 0.05     | 0.05           | V       | 4.8162            |
| 32     | 6.534      | 7631.90       | 1738.32     | 0.02     | 0.02           | V       | 4.3904            |
| 33     | 6.751      | 4533.26       | 822.64      | 0.01     | 0.01           | B       | 5.5107            |
| 34     | 6.877      | 7556.24       | 1308.03     | 0.02     | 0.02           | V       | 5.7768            |
| 35     | 7.191      | 1446.02       | 267.88      | 5e-03    | 4.6719e-03     | B       | 5.3980            |
| 36     | 7.305      | 2878.07       | 539.78      | 9e-03    | 9.2987e-03     | V       | 5.3319            |
| 37     | 7.603      | 368166.33     | 81915.26    | 1.19     | 1.19           | V       | 4.4945            |
| 38     | 7.955      | 11132.46      | 2131.88     | 0.04     | 0.04           | V       | 5.2219            |
| 39     | 8.127      | 9582.87       | 2089.84     | 0.03     | 0.03           | V       | 4.5855            |
| 40     | 8.253      | 29653.25      | 5609.82     | 0.10     | 0.10           | V       | 5.2860            |
| 41     | 8.816      | 45912.50      | 8406.81     | 0.15     | 0.15           | B       | 5.4613            |
| 42     | 9.257      | 35737.00      | 6855.18     | 0.12     | 0.12           | B       | 5.2131            |
| 43     | 9.382      | 63709.18      | 13449.56    | 0.21     | 0.21           | V       | 4.7369            |
| 44     | 9.584      | 282253.29     | 55531.78    | 0.91     | 0.91           | V       | 5.0827            |
| 45     | 9.819      | 47909.29      | 9256.38     | 0.15     | 0.15           | V       | 5.1758            |
| 46     | 10.062     | 28155.29      | 5090.01     | 0.09     | 0.09           | V       | 5.5315            |
| 47     | 10.397     | 62643.96      | 11898.46    | 0.20     | 0.20           | V       | 5.2649            |
| 48     | 10.574     | 2402.00       | 419.13      | 8e-03    | 7.7606e-03     | E       | 5.7309            |
| 49     | 10.838     | 1424.00       | 316.25      | 5e-03    | 4.6008e-03     | B       | 4.5028            |

1732

2764474.28

| Peak # | Time [min] | Area [uV*sec] | Height [uV] | Area [%] | Norm. Area [%] | BL | Area/Height [sec] |
|--------|------------|---------------|-------------|----------|----------------|----|-------------------|
| 50     | 11.017     | 711770.00     | 148044.09   | 2.30     | 2.30           | B  | 4.8078            |
| 51     | 11.335     | 14782.43      | 3850.31     | 0.05     | 0.05           | B  | 3.8393            |
| 52     | 11.454     | 116030.57     | 22622.03    | 0.37     | 0.37           | V  | 5.1291            |
| 53     | 11.719     | 267158.00     | 52464.62    | 0.86     | 0.86           | B  | 5.0922            |
| 54     | 11.911     | 332907.00     | 63521.78    | 1.08     | 1.08           | V  | 5.2408            |
| 55     | 12.336     | 291347.32     | 43682.66    | 0.94     | 0.94           | B  | 6.6696            |
| 56     | 12.636     | 1710450.99    | 295998.75   | 5.53     | 5.53           | V  | 5.7786            |
| 57     | 12.885     | 33450.00      | 5068.88     | 0.11     | 0.11           | E  | 6.5991            |
| 58     | 13.136     | 761977.19     | 112013.54   | 2.46     | 2.46           | V  | 6.8025            |
| 59     | 13.509     | 581993.00     | 86312.83    | 1.88     | 1.88           | B  | 6.7428            |
| 60     | 13.874     | 238578.00     | 48995.16    | 0.77     | 0.77           | B  | 4.8694            |
| 61     | 14.615     | 3746.25       | 683.83      | 0.01     | 0.01           | B  | 5.4783            |
| 62     | 14.808     | 968248.04     | 147695.16   | 3.13     | 3.13           | V  | 6.5557            |
| 63     | 15.150     | 931475.71     | 118125.19   | 3.01     | 3.01           | V  | 7.8855            |
| 64     | 15.439     | 80132.00      | 11335.46    | 0.26     | 0.26           | E  | 7.0691            |
| 65     | 15.752     | 186862.06     | 34153.42    | 0.60     | 0.60           | B  | 5.4713            |
| 66     | 15.841     | 331833.44     | 59480.61    | 1.07     | 1.07           | V  | 5.5789            |
| 67     | 16.254     | 1528856.00    | 149976.94   | 4.94     | 4.94           | B  | 10.1939           |
| 68     | 16.679     | 131272.27     | 23443.62    | 0.42     | 0.42           | B  | 5.5995            |
| 69     | 16.873     | 516680.43     | 93695.79    | 1.67     | 1.67           | V  | 5.5144            |
| 70     | 17.002     | 1453278.71    | 68572.92    | 1.46     | 1.46           | V  | 6.6102            |
| 71     | 17.106     | 1475454.59    | 60780.66    | 1.54     | 1.54           | V  | 7.8225            |
| 72     | 17.396     | 1138.00       | 320.94      | 4e-03    | 3.6768e-03     | E  | 3.5458            |
| 73     | 17.633     | 71446.03      | 13776.23    | 0.23     | 0.23           | B  | 5.1862            |
| 74     | 17.822     | 282722.97     | 48529.86    | 0.91     | 0.91           | V  | 5.8258            |
| 75     | 18.097     | 207719.50     | 45151.72    | 0.67     | 0.67           | B  | 4.6005            |
| 76     | 18.500     | 802566.06     | 133305.17   | 2.59     | 2.59           | B  | 6.0205            |
| 77     | 18.763     | 75574.00      | 12249.49    | 0.24     | 0.24           | E  | 6.1696            |
| 78     | 19.039     | 502744.90     | 78280.32    | 1.62     | 1.62           | V  | 6.4224            |
| 79     | 19.338     | 622942.27     | 114128.40   | 2.01     | 2.01           | V  | 5.4583            |
| 80     | 19.603     | 138178.50     | 16380.54    | 0.45     | 0.45           | V  | 8.4355            |
| 81     | 19.817     | 469721.77     | 85796.33    | 1.52     | 1.52           | V  | 5.4748            |
| 82     | 20.013     | 13389.00      | 2894.62     | 0.04     | 0.04           | E  | 4.6255            |
| 83     | 20.265     | 239750.81     | 38400.22    | 0.77     | 0.77           | B  | 6.2435            |
| 84     | 20.434     | 168095.86     | 30016.31    | 0.54     | 0.54           | V  | 5.6002            |
| 85     | 20.551     | 368929.32     | 65122.60    | 1.19     | 1.19           | V  | 5.6652            |
| 86     | 20.841     | 57893.57      | 11055.35    | 0.19     | 0.19           | B  | 5.2367            |
| 87     | 21.038     | 829297.37     | 133913.82   | 2.68     | 2.68           | V  | 6.1928            |
| 88     | 21.235     | 108184.56     | 24496.12    | 0.35     | 0.35           | V  | 4.4164            |
| 89     | 21.383     | 80889.56      | 17437.20    | 0.26     | 0.26           | B  | 4.6389            |
| 90     | 21.513     | 31021.94      | 8112.27     | 0.10     | 0.10           | V  | 3.8241            |
| 91     | 21.921     | 31210.30      | 5131.17     | 0.10     | 0.10           | B  | 6.0825            |
| 92     | 22.051     | 50289.20      | 8307.58     | 0.16     | 0.16           | V  | 6.0534            |
| 93     | 22.272     | 270627.56     | 47923.65    | 0.87     | 0.87           | B  | 5.6471            |
| 94     | 22.482     | 128673.78     | 19484.05    | 0.42     | 0.42           | V  | 6.6041            |
| 95     | 22.606     | 51693.17      | 9247.19     | 0.17     | 0.17           | V  | 5.5901            |
| 96     | 22.769     | 11708.37      | 2169.67     | 0.04     | 0.04           | V  | 5.3964            |
| 97     | 23.013     | 183900.14     | 27449.61    | 0.59     | 0.59           | V  | 6.6996            |
| 98     | 23.260     | 428572.55     | 67481.33    | 1.38     | 1.38           | V  | 6.3510            |
| 99     | 23.563     | 50259.00      | 5167.21     | 0.16     | 0.16           | E  | 9.7265            |
| 100    | 23.961     | 308279.41     | 49073.92    | 1.00     | 1.00           | V  | 6.2819            |
| 101    | 24.183     | 11368.13      | 2103.56     | 0.04     | 0.04           | V  | 5.4042            |
| 102    | 24.331     | 127313.61     | 21748.90    | 0.41     | 0.41           | V  | 5.8538            |
| 103    | 24.488     | 363795.73     | 58133.57    | 1.18     | 1.18           | V  | 6.2579            |
| 104    | 25.013     | 176544.54     | 9216.39     | 0.57     | 0.57           | V  | 19.1555           |
| 105    | 25.289     | 79008.14      | 6761.88     | 0.26     | 0.26           | V  | 11.7190           |
| 106    | 25.433     | 61017.00      | 7360.54     | 0.20     | 0.20           | V  | 8.2897            |
| 107    | 25.551     | 47012.81      | 6366.27     | 0.15     | 0.15           | V  | 7.3847            |
| 108    | 25.727     | 64929.30      | 9988.32     | 0.21     | 0.21           | V  | 6.5005            |
| 109    | 25.851     | 142650.07     | 17839.69    | 0.46     | 0.46           | V  | 7.9962            |
| 110    | 26.110     | 18177.22      | 2706.17     | 0.06     | 0.06           | V  | 6.7170            |
| 111    | 26.241     | 23804.07      | 2609.36     | 0.08     | 0.08           | V  | 9.1226            |
| 112    | 26.600     | 165351.45     | 19481.02    | 0.53     | 0.53           | V  | 8.4878            |
| 113    | 26.744     | 59198.52      | 6746.00     | 0.19     | 0.19           | V  | 8.7753            |
| 114    | 27.019     | 15499.44      | 1630.45     | 0.05     | 0.05           | V  | 9.5062            |
| 115    | 27.709     | 100229.98     | 12405.70    | 0.32     | 0.32           | B  | 8.0793            |
| 116    | 27.942     | 67215.52      | 8824.59     | 0.22     | 0.22           | V  | 7.6168            |
| 117    | 28.296     | 10240.50      | 1735.69     | 0.03     | 0.03           | B  | 5.9000            |
| 118    | 28.678     | 7830.00       | 985.56      | 0.03     | 0.03           | B  | 7.9447            |
| 119    | 29.473     | 126162.00     | 6983.13     | 0.41     | 0.41           | B  | 18.0667           |
| 120    | 30.137     | 21130.04      | 814.79      | 0.07     | 0.07           | B  | 25.9333           |
| 121    | 30.678     | 255711.80     | 7847.79     | 0.83     | 0.83           | V  | 32.5839           |
| 122    | 31.218     | 500727.96     | 16290.07    | 1.62     | 1.62           | V  | 30.7382           |
| 123    | 32.266     | 915697.57     | 19575.14    | 2.96     | 2.96           | V  | 46.7786           |
| 124    | 32.841     | 577329.64     | 19550.72    | 1.87     | 1.87           | V  | 29.5298           |
| 125    | 34.318     | 5439.00       | 1328.44     | 0.02     | 0.02           | B  | 4.0943            |
| 126    | 34.923     | 505.50        | 180.61      | 2e-03    | 1.6332e-03     | B  | 2.7989            |

4300342.13

302

| Peak<br># | Time<br>[min] | Area<br>[uV*sec] | Height<br>[uV] | Area<br>[%] | Norm. Area BL<br>[%] | Area/Height<br>[sec] |
|-----------|---------------|------------------|----------------|-------------|----------------------|----------------------|
|-----------|---------------|------------------|----------------|-------------|----------------------|----------------------|

|  |             |           |        |  |        |  |
|--|-------------|-----------|--------|--|--------|--|
|  | 30951194.50 | 4.671e+06 | 100.00 |  | 100.00 |  |
|--|-------------|-----------|--------|--|--------|--|

## Processing Component Report

| Component | Expected Retention (Sample File) |
|-----------|----------------------------------|
|-----------|----------------------------------|

|        |        |
|--------|--------|
| 2,4-DB | 15.350 |
|--------|--------|

# Chromatogram

303

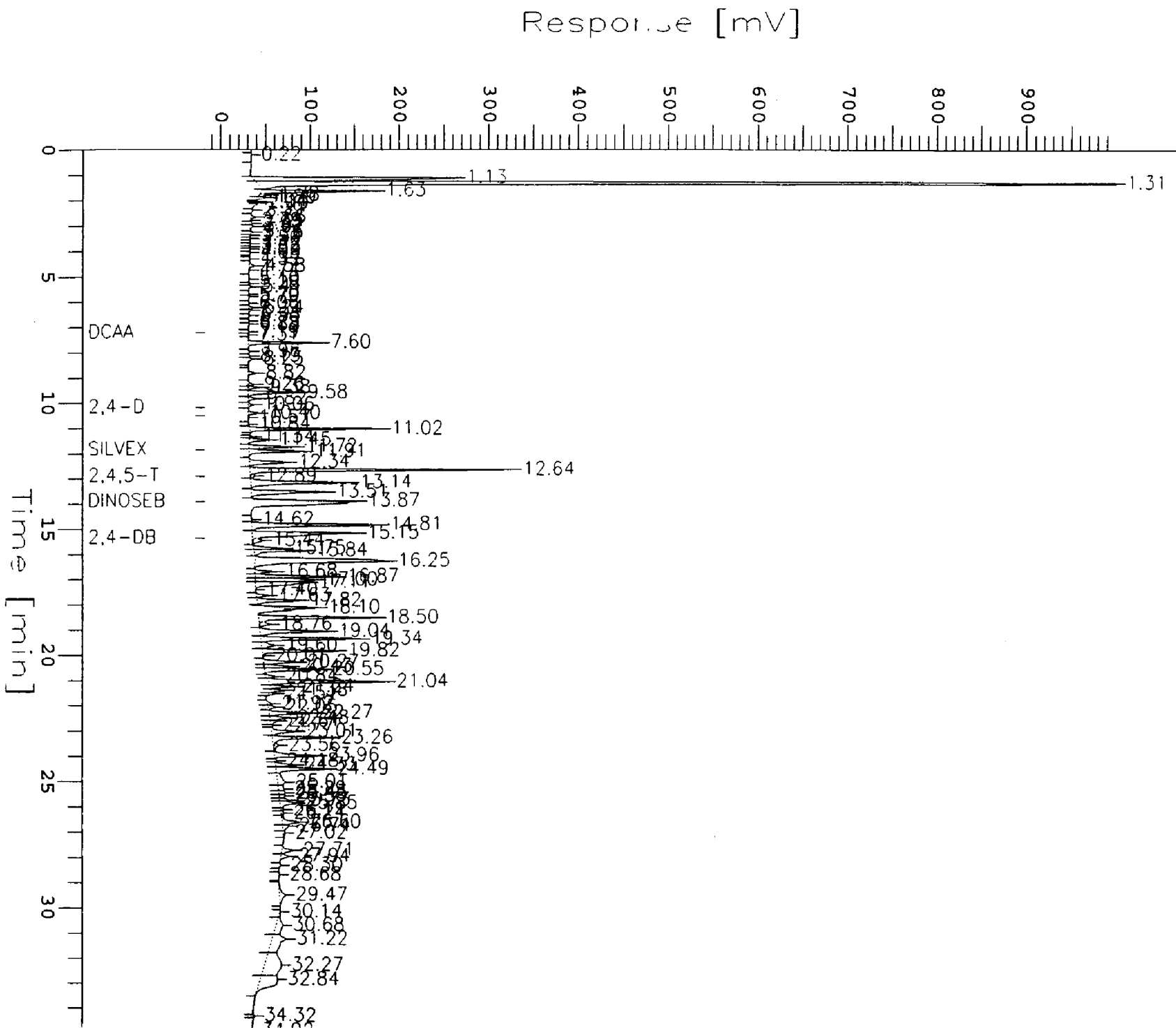
Sample Name : L950626-4 / 5  
 File Name : c:\2700\hp5890\MS30030.raw  
 Method : 515A.ins  
 Start Time : 0.00 min  
 Scale Factor: 1.0

End Time : 35.00 min  
 Plot Offset: -18 mV

Sample #: 30  
 Date : 3/13/95 02:22 PM  
 Time of Injection: 3/13/95  
 Low Point : -17.63 mV  
 Plot Scale: 1017.6 mV

Page 1 of 1  
 01:47 PM  
 High Point : 1000.00 mV

TIERRA-B-012689





=====

Software Version: 3.3 <4811>  
 Sample Name : L950626-4 / . S Time : 3/13/95 02:22 PM  
 Sample Number: 30 Study : 515.1  
 Operator : KMW

Instrument : HP5890 Channel : 8 A/D mV Range : 1000  
 AutoSampler : NONE  
 Inlet/Vial : 0/0

Interface Serial # : 8055910402 Data Acquisition Time: 3/13/95 01:47 PM  
 Delay Time : 0.00 min.  
 End Time : 35.00 min.  
 Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\HP5890\HB30030.RAW  
 Result File : C:\2700\HP5890\HB30030.RST  
 Instrument File: c:\2700\methseqs\515A.ins  
 Process File : 515B  
 Sample File : HB515B  
 Sequence File : C:\2700\METHSEQS\0310HB.seq

Inj. Volume : 1 ul Area Reject : 200.000000  
 Sample Amount : 1.0000 Dilution Factor : 1.00

Instrument Control Method:  
 Instrument name : HP5890

Channel Parameters:

Inlet Parameters:  
 Inlet A : Inlet B :

Detector Parameters:  
 Detector A : Detector B :

Heated Zones:

Temperature Program:

Total run time : 35.00 min

Timed Events:  
 There are no timed events in the method

=====

HP5890 REPORT FOR 515.1 HERBICIDES DRINKING WATER ANALYSIS.

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NORTHEASTERN ANALYTICAL CORP. GAS CHROMATOGRAPHY LAB.

| Peak # | Time [min] | Component Name | Area [uV*sec] | Height [uV] | Raw Amount | Adjusted Amount | Calibration Factor |
|--------|------------|----------------|---------------|-------------|------------|-----------------|--------------------|
| 1      | 1.136      |                | 581108.96     | 82610.08    | 1.1622     | 1.1622          | 5.8111e+05         |
| 2      | 1.292      |                | 4911862.67    | 1.034e+06   | 9.8237     | 9.8237          | 4.9119e+06         |
| 3      | 1.548      |                | 371821.38     | 96650.18    | 0.7436     | 0.7436          | 3.7182e+05         |
| 4      | 2.257      |                | 3354.00       | 1128.87     | 0.0067     | 0.0067          | 3354.0000          |
| 5      | 2.405      |                | 7569.00       | 1803.33     | 0.0151     | 0.0151          | 7569.0000          |
| 6      | 2.565      |                | 20677.00      | 4686.64     | 0.0414     | 0.0414          | 20677.0000         |
| 7      | 2.711      |                | 14341.00      | 3835.25     | 0.0287     | 0.0287          | 14341.0000         |
| 8      | 3.099      |                | 23727.00      | 4837.51     | 0.0475     | 0.0475          | 23727.0000         |
| 9      | 4.808      |                | 10684.50      | 2707.90     | 0.0214     | 0.0214          | 10684.5000         |
| 10     | 4.940      |                | 12038.50      | 3519.56     | 0.0241     | 0.0241          | 12038.5000         |
| 11     | 6.099      |                | 16797.50      | 4026.95     | 0.0336     | 0.0336          | 16797.5000         |
| 12     | 6.944      |                | 21962.50      | 3223.76     | 0.0439     | 0.0439          | 21962.5000         |
| 0      | 7.480      | DCAA           | 0.00          | 0.00        | 0.0000     | 0.0000          | 0.0000             |
| 13     | 7.995      |                | 5842.00       | 1179.86     | 0.0117     | 0.0117          | 5842.0000          |
| 14     | 8.290      |                | 254795.00     | 56337.15    | 0.5096     | 0.5096          | 2.5480e+05         |
| 15     | 9.329      |                | 21297.00      | 4826.57     | 0.0426     | 0.0426          | 21297.0000         |
| 16     | 9.753      |                | 32926.00      | 3632.60     | 0.0659     | 0.0659          | 32926.0000         |
| 17     | 10.279     | 2,4-D          | 37854.00      | 7947.26     | 10.7319    | 10.7319         | 37854.0000         |
| 18     | 10.514     |                | 158800.00     | 34292.73    | 0.3176     | 0.3176          | 1.5880e+05         |
| 19     | 10.650     |                | 14903.50      | 3930.56     | 0.0298     | 0.0298          | 14903.5000         |
| 20     | 10.997     |                | 8412.00       | 1693.33     | 0.0168     | 0.0168          | 8412.0000          |

| Peak # | Time [min] | Component Name    | Area [uV*sec] | Height [uV] | Raw Amount | Adjusted Amount | Calibration Factor |
|--------|------------|-------------------|---------------|-------------|------------|-----------------|--------------------|
| 0      | 11.320     | PENTACHLOROPHENOL | 0.00          | 0.00        | 0.0000     | 0.0000          | 0.0000             |
| 21     | 11.756     | SILVEX            | 30745.00      | 6324.04     | 1.9546     | 1.9546          | 30745.0000         |
| 22     | 11.993     |                   | 17915.00      | 3836.29     | 0.0358     | 0.0358          | 17915.0000         |
|        | 12.131     |                   | 436251.50     | 85757.43    | 0.8725     | 0.8725          | 4.3625e+05         |
|        | 12.404     |                   | 32438.00      | 6808.08     | 0.0649     | 0.0649          | 32438.0000         |
| 25     | 12.533     |                   | 25367.00      | 5278.26     | 0.0507     | 0.0507          | 25367.0000         |
| 26     | 12.911     |                   | 157211.00     | 32548.59    | 9.0369     | 9.0369          | 1.5721e+05         |
| 27     | 13.188     |                   | 346077.50     | 44646.98    | 0.6922     | 0.6922          | 3.4608e+05         |
| 28     | 13.595     | DINOSEB           | 985969.00     | 191377.03   | 130.4136   | 130.4136        | 9.8597e+05         |
| 0      | 13.920     | 2,4-DB            | 0.00          | 0.00        | 0.0000     | 0.0000          | 0.0000             |
| 29     | 14.155     |                   | 260896.00     | 54114.38    | 0.5218     | 0.5218          | 2.6090e+05         |
| 30     | 14.358     |                   | 42590.50      | 7032.81     | 0.0852     | 0.0852          | 42590.5000         |
| 31     | 14.507     |                   | 4630.50       | 1299.00     | 0.0093     | 0.0093          | 4630.5000          |
| 32     | 14.628     |                   | 218120.00     | 47402.62    | 0.4362     | 0.4362          | 2.1812e+05         |
| 33     | 14.882     |                   | 211118.00     | 46637.19    | 0.4222     | 0.4222          | 2.1112e+05         |
| 34     | 15.022     |                   | 258552.00     | 49857.11    | 0.5171     | 0.5171          | 2.5855e+05         |
| 35     | 15.202     |                   | 70762.00      | 16266.23    | 0.1415     | 0.1415          | 70762.0000         |
| 36     | 15.459     |                   | 42070.00      | 7536.23     | 0.0841     | 0.0841          | 42070.0000         |
| 37     | 15.656     |                   | 4836.00       | 1000.50     | 0.0097     | 0.0097          | 4836.0000          |
| 38     | 16.004     |                   | 581455.50     | 77589.84    | 1.1629     | 1.1629          | 5.8146e+05         |
| 39     | 16.310     |                   | 76848.00      | 17524.48    | 0.1537     | 0.1537          | 76848.0000         |
| 40     | 16.453     |                   | 153433.00     | 36033.30    | 0.3069     | 0.3069          | 1.5343e+05         |
| 41     | 16.560     |                   | 12733.00      | 5636.77     | 0.0255     | 0.0255          | 12733.0000         |
| 42     | 16.868     |                   | 175055.50     | 31475.90    | 0.3501     | 0.3501          | 1.7506e+05         |
| 43     | 17.105     |                   | 290220.00     | 63263.85    | 0.5804     | 0.5804          | 2.9022e+05         |
| 44     | 17.240     |                   | 159022.00     | 39441.63    | 0.3180     | 0.3180          | 1.5902e+05         |
| 45     | 17.533     |                   | 170398.50     | 35168.33    | 0.3408     | 0.3408          | 1.7040e+05         |
| 46     | 17.653     |                   | 11684.00      | 4442.84     | 0.0234     | 0.0234          | 11684.0000         |
| 47     | 17.872     |                   | 225339.50     | 42262.27    | 0.4507     | 0.4507          | 2.2534e+05         |
| 48     | 18.057     |                   | 101823.00     | 22362.93    | 0.2036     | 0.2036          | 1.0182e+05         |
| 49     | 18.224     |                   | 205918.50     | 42912.22    | 0.4118     | 0.4118          | 2.0592e+05         |
| 50     | 18.672     |                   | 75907.00      | 15701.15    | 0.1518     | 0.1518          | 75907.0000         |
| 51     | 18.827     |                   | 12289.00      | 2985.74     | 0.0246     | 0.0246          | 12289.0000         |
| 52     | 19.029     |                   | 87135.00      | 16992.36    | 0.1743     | 0.1743          | 87135.0000         |
| 53     | 19.162     |                   | 9140.00       | 2974.36     | 0.0183     | 0.0183          | 9140.0000          |
| 54     | 19.296     |                   | 131655.00     | 29299.69    | 0.2633     | 0.2633          | 1.3166e+05         |
| 55     | 19.445     |                   | 48000.00      | 11645.33    | 0.0960     | 0.0960          | 48000.0000         |
|        | 19.692     |                   | 376207.00     | 64519.17    | 0.7524     | 0.7524          | 3.7621e+05         |
|        | 19.994     |                   | 4847.50       | 1329.48     | 0.0097     | 0.0097          | 4847.5000          |
| 58     | 20.257     |                   | 380521.50     | 46301.83    | 0.7610     | 0.7610          | 3.8052e+05         |
| 59     | 20.548     |                   | 12150.00      | 3571.66     | 0.0243     | 0.0243          | 12150.0000         |
| 60     | 20.778     |                   | 169927.50     | 31837.51    | 0.3399     | 0.3399          | 1.6993e+05         |
| 61     | 20.978     |                   | 5868.00       | 1900.13     | 0.0117     | 0.0117          | 5868.0000          |
| 62     | 21.130     |                   | 14541.00      | 3488.80     | 0.0291     | 0.0291          | 14541.0000         |
| 63     | 21.515     |                   | 48426.00      | 9968.81     | 0.0969     | 0.0969          | 48426.0000         |
| 64     | 21.690     |                   | 246434.50     | 28715.26    | 0.4929     | 0.4929          | 2.4643e+05         |
| 65     | 22.237     |                   | 407389.00     | 50350.40    | 0.8148     | 0.8148          | 4.0739e+05         |
| 66     | 22.475     |                   | 46038.00      | 9133.22     | 0.0921     | 0.0921          | 46038.0000         |
| 67     | 22.676     |                   | 46801.00      | 7010.71     | 0.0936     | 0.0936          | 46801.0000         |
| 68     | 23.169     |                   | 18440.00      | 2011.19     | 0.0369     | 0.0369          | 18440.0000         |
| 69     | 23.658     |                   | 129449.00     | 22808.54    | 0.2589     | 0.2589          | 1.2945e+05         |
| 70     | 23.924     |                   | 129062.00     | 25152.43    | 0.2581     | 0.2581          | 1.2906e+05         |
| 71     | 24.289     |                   | 141992.00     | 24505.58    | 0.2840     | 0.2840          | 1.4199e+05         |
| 72     | 24.676     |                   | 6639.00       | 1484.50     | 0.0133     | 0.0133          | 6639.0000          |
| 73     | 25.610     |                   | 35049.00      | 6825.59     | 0.0701     | 0.0701          | 35049.0000         |
| 74     | 25.801     |                   | 106408.00     | 16399.01    | 0.2128     | 0.2128          | 1.0641e+05         |
| 75     | 27.023     |                   | 6297.50       | 1099.04     | 0.0126     | 0.0126          | 6297.5000          |
| 76     | 27.534     |                   | 11607.00      | 1828.89     | 0.0232     | 0.0232          | 11607.0000         |
| 77     | 27.915     |                   | 41052.00      | 5937.73     | 0.0821     | 0.0821          | 41052.0000         |
| 78     | 29.693     |                   | 31159.00      | 3934.24     | 0.0623     | 0.0623          | 31159.0000         |
| 79     | 31.613     |                   | 33829.50      | 3351.88     | 0.0677     | 0.0677          | 33829.5000         |
| 80     | 34.295     |                   | 4530.00       | 1198.15     | 0.0091     | 0.0091          | 4530.0000          |
|        |            |                   | 14659044.00   | 2.837e+06   | 179.0314   | 179.0314        | 1.4659e+07         |

## Missing Component Report

| Component         | Expected Retention (Sample File) |
|-------------------|----------------------------------|
| DCAA              | 7.480                            |
| PENTACHLOROPHENOL | 11.320                           |
| -DB               | 13.920                           |

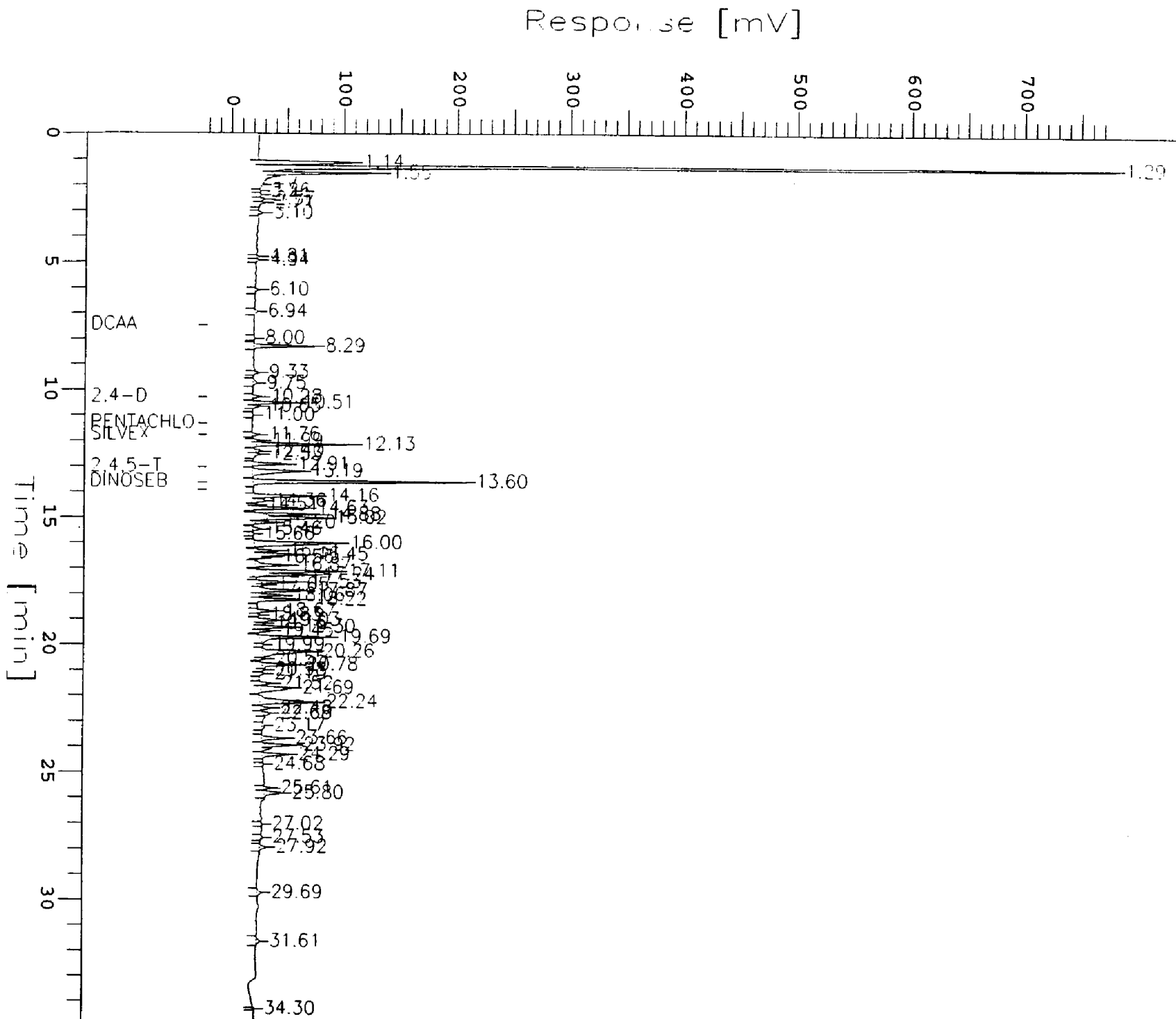
HP5890 DETECTOR B

Sample Name : L950626-4  
FileName : c:\2700\hps5890\H830030.raw  
Method : 515A.ins  
Start Time : 0.00 min  
Scale Factor: -1.0

End Time : 35.00 min  
Plot Offset: -21 mV

Sample #: 30  
Date : 3/13/95 02:23 PM  
Time of Injection: 3/13/95  
Low Point : -20.86 mV  
Plot Scale: 800.0 mV

Page 1 of 1  
01:47 PM  
High Point : 779.14 mV



```

=====
Software Version: 3.3 <4811>
Sample Name   : L950626-5 1:5 PCB SOIL   Time       : 3/9/95 03:24 AM
Sample Number : 28                        Study        : PPCB
Operator      : KMW

Instrument    : HP5890                    Channel : A      A/D mV Range : 1000
toSampler    : NONE
k/Vial       : 0/0

```

```

Interface Serial # : 8055910402   Data Acquisition Time: 3/9/95 02:51 AM
Delay Time        : 0.00 min.
End Time          : 33.00 min.
Sampling Rate     : 1.0000 pts/sec

```

```

Raw Data File : C:\2700\HP5890\PA38028.RAW
Result File   : C:\2700\HP5890\PA38028.RST
Instrument File: c:\2700\methseqs\HPPEST8.ins
Process File  : HPPESTA
Sample File   : PESTA058
Sequence File : C:\2700\METHSEQS\0308PCB.SEQ

```

```

Inj. Volume    : 1 ul                Area Reject    : 200.000000
Sample Amount  : 1.0000              Dilution Factor : 1.00

```

```

Instrument Control Method:
Instrument name : HP5890

```

Channel Parameters:

```

Inlet Parameters:
Inlet A :                               Inlet B :

```

```

Detector Parameters:
Detector A :                           Detector B :

```

Heated Zones:

Temperature Program:

Total run time : 33.00 min

```

Timed Events:
There are no timed events in the method

```

# HP 5890 REPORT FOR PEST/PCB ANALYSIS

```

=====
NORTHEASTERN ANALYTICAL CORP. GAS CHROMATOGRAPHY LAB.
=====

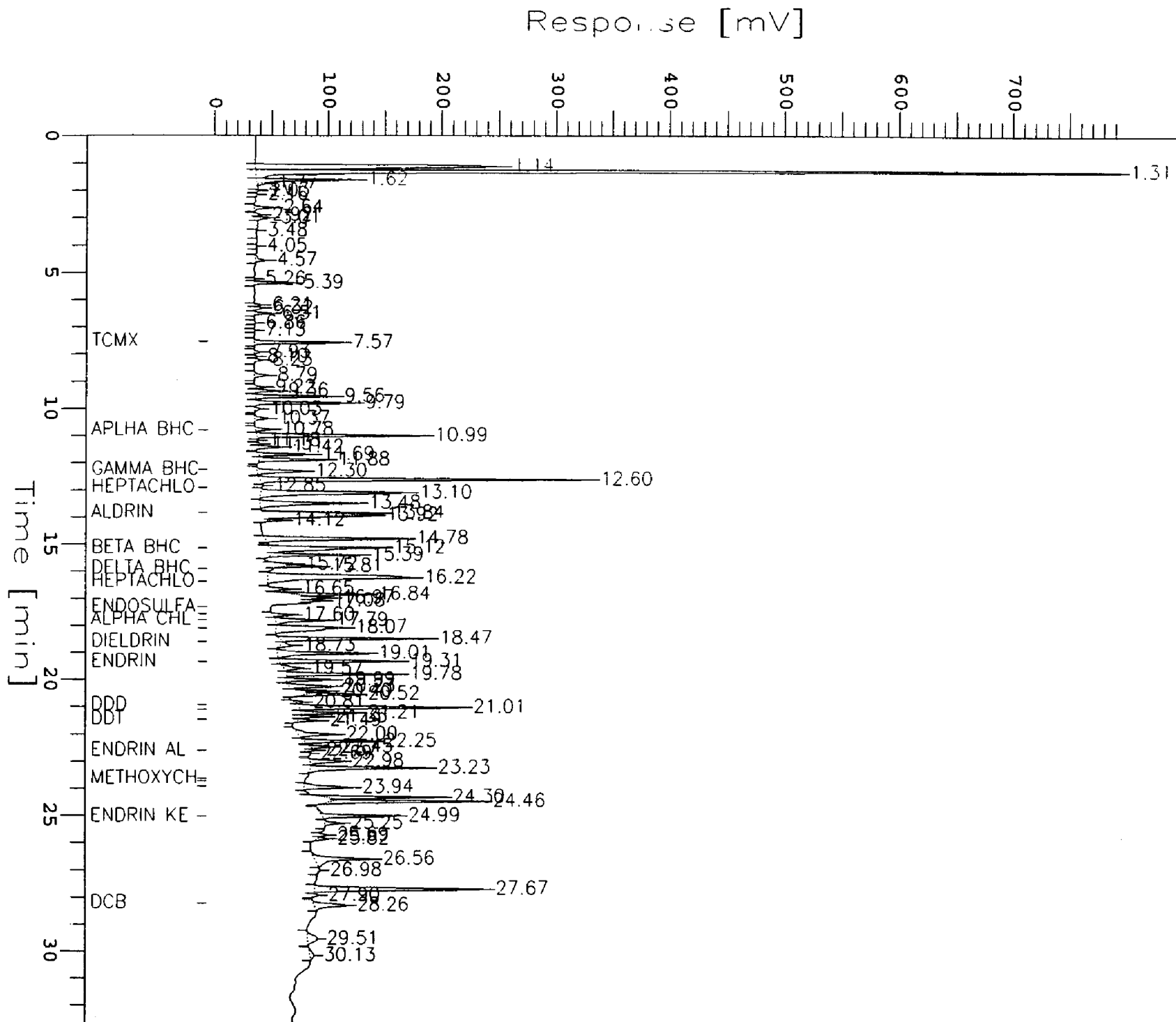
```

| Peak # | Component Name | Time [min] | Area [uV*sec] | Height [uV] | Raw Amount | Adjusted Amount | Calibration Factor | Delta RT [%] | Cal. Range |
|--------|----------------|------------|---------------|-------------|------------|-----------------|--------------------|--------------|------------|
| 1      |                | 1.137      | 1647419.96    | 218167.47   | 54.7986    | 54.7986         | 1647420            | -----        |            |
| 2      |                | 1.308      | 4985149.03    | 993527.17   | 159.0461   | 159.0461        | 4985149            | -----        |            |
| 3      |                | 1.624      | 398952.01     | 93901.82    | 15.8052    | 15.8052         | 398952             | -----        |            |
| 4      |                | 1.767      | 25143.00      | 7850.32     | 4.1300     | 4.1300          | 25143              | -----        |            |
| 5      |                | 2.030      | 5687.50       | 2236.04     | 3.5223     | 3.5223          | 5688               | -----        |            |
| 6      |                | 2.161      | 8740.00       | 1763.19     | 3.6177     | 3.6177          | 8740               | -----        |            |
| 7      |                | 2.638      | 65991.00      | 17163.74    | 5.4058     | 5.4058          | 65991              | -----        |            |
| 8      |                | 2.918      | 11668.00      | 2478.24     | 3.7091     | 3.7091          | 11668              | -----        |            |
| 9      |                | 3.010      | 35523.00      | 9732.67     | 4.4542     | 4.4542          | 35523              | -----        |            |
| 11     |                | 4.046      | 4338.50       | 754.46      | 3.4802     | 3.4802          | 4338               | -----        |            |
| 12     |                | 4.565      | 55291.00      | 10047.45    | 5.0716     | 5.0716          | 55291              | -----        |            |
| 13     |                | 5.257      | 3736.50       | 1068.32     | 3.4614     | 3.4614          | 3736               | -----        |            |
| 14     |                | 5.387      | 123133.00     | 34832.67    | 7.1905     | 7.1905          | 123133             | -----        |            |
|        |                | 6.206      | 21860.00      | 5939.43     | 4.0274     | 4.0274          | 21860              | -----        |            |
|        |                | 6.318      | 20791.50      | 5984.94     | 3.9941     | 3.9941          | 20791              | -----        |            |
| 17     |                | 6.512      | 57848.00      | 14901.82    | 5.1515     | 5.1515          | 57848              | -----        |            |
| 18     |                | 6.860      | 4422.00       | 1100.06     | 3.4828     | 3.4828          | 4422               | -----        |            |
| 19     |                | 7.133      | 5065.00       | 1061.75     | 3.5029     | 3.5029          | 5065               | -----        |            |
| 20     | TCMX           | 7.573      | 331501.00     | 80461.26    | 12.8459    | 0.0000          | 331501             | 0.2923       |            |
| 21     |                | 7.929      | 25717.00      | 5250.80     | 4.1479     | 4.1479          | 25717              | -----        |            |

| Peak # | Component Name      | Time [min] | Area [uv*sec] | Height [uv] | Raw Amount | Adjusted Amount | Calibration Factor | Delta RT [X] | Cal. Range |
|--------|---------------------|------------|---------------|-------------|------------|-----------------|--------------------|--------------|------------|
| 22     |                     | 8.104      | 9162.00       | 2255.13     | 3.6308     | 3.6308          | 9162               | -----        |            |
| 23     |                     | 8.228      | 25182.50      | 6198.69     | 4.1312     | 4.1312          | 25183              | -----        |            |
| 24     |                     | 8.787      | 60520.00      | 11780.05    | 5.2349     | 5.2349          | 60520              | -----        |            |
|        |                     | 9.224      | 35621.50      | 8803.34     | 4.4573     | 4.4573          | 35622              | -----        |            |
|        |                     | 9.356      | 83410.00      | 20198.91    | 5.9498     | 5.9498          | 83410              | -----        |            |
| 27     |                     | 9.555      | 330334.00     | 70795.83    | 13.6620    | 13.6620         | 330334             | -----        |            |
| 28     |                     | 9.791      | 392477.00     | 91025.36    | 15.6029    | 15.6029         | 392477             | -----        |            |
| 29     |                     | 10.025     | 23276.00      | 4635.31     | 4.0717     | 4.0717          | 23276              | -----        |            |
| 30     |                     | 10.370     | 53810.00      | 11511.65    | 5.0253     | 5.0253          | 53810              | -----        |            |
| 31     | APLHA BHC           | 10.776     | 74718.00      | 15067.33    | 5.6784     | 5.6784          | 74718              | -0.1953      | -          |
| 32     |                     | 10.987     | 704813.00     | 150598.68   | 25.3581    | 25.3581         | 704813             | -----        |            |
| 33     |                     | 11.179     | 4029.00       | 1275.94     | 3.4705     | 3.4705          | 4029               | -----        |            |
| 34     |                     | 11.306     | 10762.00      | 3165.98     | 3.6808     | 3.6808          | 10762              | -----        |            |
| 35     |                     | 11.424     | 98733.50      | 21953.02    | 6.4284     | 6.4284          | 98733              | -----        |            |
| 36     |                     | 11.689     | 222270.00     | 48736.06    | 9.9850     | 9.9850          | 222270             | -----        |            |
| 37     |                     | 11.883     | 286283.00     | 60688.63    | 12.0900    | 12.0900         | 286283             | -----        |            |
| 38     | GAMMA BHC           | 12.304     | 281244.00     | 42701.83    | 11.9243    | 11.9243         | 281244             | 0.3867       | -          |
| 39     |                     | 12.604     | 1586366.50    | 293531.96   | 63.6671    | 63.6671         | 1586366            | -----        |            |
| 40     | HEPTACHLOR          | 12.845     | 4969.00       | 1704.28     | 1.1064     | 1.1064          | 4969               | -0.5344      | -          |
| 41     |                     | 13.098     | 896521.00     | 132086.10   | 36.3766    | 36.3766         | 896521             | -----        |            |
| 42     |                     | 13.477     | 570831.00     | 89020.00    | 21.7485    | 21.7485         | 570831             | -----        |            |
| 43     | ALDRIN              | 13.843     | 209791.00     | 42060.18    | 9.3579     | 9.3579          | 209791             | 0.0102       | -          |
| 44     |                     | 13.915     | 148050.00     | 21232.43    | 7.2390     | 7.2390          | 148050             | -----        |            |
| 45     |                     | 14.117     | 42521.00      | 12787.94    | 3.6174     | 3.6174          | 42521              | -----        |            |
| 46     |                     | 14.778     | 794484.00     | 126389.48   | 57.3861    | 57.3861         | 794484             | -----        |            |
| 47     | BETA BHC            | 15.121     | 709897.50     | 101312.08   | 51.2996    | 51.2996         | 709897             | -0.1543      | -          |
| 48     |                     | 15.389     | 356789.00     | 81487.99    | 25.8912    | 25.8912         | 356789             | -----        |            |
| 49     |                     | 15.724     | 31877.00      | 6811.79     | 4.7222     | 4.7222          | 31877              | -----        |            |
| 50     | DELTA BHC           | 15.807     | 118943.00     | 32514.44    | 7.7558     | 7.7558          | 118943             | -0.6015      | -          |
| 51     |                     | 16.221     | 1278026.00    | 130120.96   | 48.5720    | 48.5720         | 1278026            | -----        |            |
| 0      | HEPTACHLOR EXPOXIDE | 16.381     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 52     |                     | 16.647     | 89112.00      | 18506.13    | 3.9290     | 3.9290          | 89112              | -----        |            |
| 53     |                     | 16.840     | 285334.50     | 66023.25    | 11.2970    | 11.2970         | 285334             | -----        |            |
| 54     |                     | 16.966     | 77931.00      | 20703.91    | 3.7004     | 3.7004          | 77931              | -----        |            |
| 55     |                     | 17.077     | 38345.00      | 13122.50    | 2.2137     | 2.2137          | 38345              | -----        |            |
| 0      | ENDOSULFAN I        | 17.321     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 56     | GAMMA CHLORDANE     | 17.603     | 88652.00      | 18025.74    | 3.8878     | 3.8878          | 88652              | 0.1999       | -          |
|        | ALPHA CHLORDANE     | 17.794     | 272061.00     | 45804.94    | 10.6145    | 10.6145         | 272061             | 0.0462       | -          |
| 57     | DDE                 | 18.067     | 555914.50     | 61785.83    | 23.0113    | 23.0113         | 555914             | -0.1871      | -          |
| 59     | DIELDRIN            | 18.469     | 746493.50     | 134034.22   | 31.6955    | 31.6955         | 746494             | -0.7090      | -          |
| 60     |                     | 18.730     | 73617.00      | 12292.07    | 5.2875     | 5.2875          | 73617              | -----        |            |
| 61     |                     | 19.008     | 501336.50     | 83563.35    | 28.6127    | 28.6127         | 501336             | -----        |            |
| 62     | ENDRIN              | 19.305     | 558709.00     | 108382.82   | 31.6633    | 31.6633         | 558709             | -0.1629      | -          |
| 63     |                     | 19.570     | 101165.00     | 15898.33    | 7.3346     | 7.3346          | 101165             | -----        |            |
| 64     |                     | 19.784     | 511176.00     | 100936.70   | 29.1359    | 29.1359         | 511176             | -----        |            |
| 65     |                     | 19.985     | 200927.00     | 42289.96    | 12.6392    | 12.6392         | 200927             | -----        |            |
| 66     |                     | 20.233     | 217872.50     | 39631.62    | 15.9188    | 15.9188         | 217872             | -----        |            |
| 67     |                     | 20.404     | 90090.00      | 21908.89    | 8.4405     | 8.4405          | 90090              | -----        |            |
| 68     |                     | 20.517     | 199049.50     | 45825.20    | 14.8172    | 14.8172         | 199050             | -----        |            |
| 69     |                     | 20.810     | 34438.00      | 7471.50     | 5.1835     | 5.1835          | 34438              | -----        |            |
| 70     | DDD                 | 21.005     | 878134.50     | 146207.85   | 54.5599    | 54.5599         | 878134             | 0.3830       | -          |
| 71     | ENDOSULFAN II       | 21.205     | 226318.00     | 51387.56    | 12.7895    | 12.7895         | 226318             | 0.5450       | -          |
| 72     | DDT                 | 21.350     | 86341.00      | 21888.05    | 12.5643    | 12.5643         | 86341              | -0.4697      | -          |
| 73     |                     | 21.485     | 75811.00      | 19473.25    | 11.8591    | 11.8591         | 75811              | -----        |            |
| 74     |                     | 21.998     | 230515.50     | 33612.09    | 17.8560    | 17.8560         | 230516             | -----        |            |
| 75     |                     | 22.245     | 333852.50     | 62802.81    | 25.0571    | 25.0571         | 333852             | -----        |            |
| 76     | ENDRIN ALDEHYDE     | 22.451     | 87884.00      | 18258.98    | 7.9166     | 7.9166          | 87884              | -0.6738      | -          |
| 77     |                     | 22.574     | 12064.00      | 4190.36     | 2.6331     | 2.6331          | 12064              | -----        |            |
| 78     |                     | 22.690     | 8303.00       | 1349.99     | 2.3710     | 2.3710          | 8303               | -----        |            |
| 79     |                     | 22.981     | 162550.00     | 28946.53    | 13.1198    | 13.1198         | 162550             | -----        |            |
| 80     |                     | 23.228     | 590125.50     | 105824.98   | 132.1364   | 132.1364        | 590125             | -----        |            |
| 0      | METHOXYCHLOR        | 23.625     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 0      | ENDOSULFAN SULFATE  | 23.726     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 81     | DBC                 | 23.937     | 254250.50     | 43297.01    | 18.5530    | 18.5530         | 254250             | 0.1372       | -          |
| 82     |                     | 24.300     | 495358.50     | 103944.35   | 35.6211    | 35.6211         | 495358             | -----        |            |
| 83     |                     | 24.457     | 656612.00     | 137039.38   | 47.0362    | 47.0362         | 656612             | -----        |            |
| 84     | ENDRIN KETONE       | 24.987     | 381397.00     | 67992.36    | 18.8853    | 18.8853         | 381397             | -0.1296      | -          |
| 85     |                     | 25.253     | 82679.00      | 15015.21    | 5.0903     | 5.0903          | 82679              | -----        |            |
| 86     |                     | 25.690     | 24867.50      | 5869.43     | 2.4205     | 2.4205          | 24868              | -----        |            |
| 87     |                     | 25.823     | 41068.50      | 8889.46     | 3.1687     | 3.1687          | 41068              | -----        |            |
| 89     |                     | 26.563     | 430489.00     | 52251.92    | 21.1524    | 21.1524         | 430489             | -----        |            |
|        |                     | 26.981     | 14198.00      | 1945.78     | -12.1170   | -12.1170        | 14198              | -----        |            |
| 90     |                     | 27.666     | 1009525.50    | 151762.86   | 36.0071    | 36.0071         | 1009526            | -----        |            |
| 91     |                     | 27.898     | 22624.00      | 4733.07     | -11.7096   | -11.7096        | 22624              | -----        |            |
| 92     | DCB                 | 28.262     | 235346.00     | 29548.79    | -1.4245    | -1.4245         | 235346             | 0.2097       | -          |
| 93     |                     | 29.508     | 149790.00     | 8297.61     | -5.5612    | -5.5612         | 149790             | -----        |            |
| 94     |                     | 30.125     | 59447.00      | 3592.32     | -9.9293    | -9.9293         | 59447              | -----        |            |

Sample Name : L950626-5 1:5 PCB SOIL  
FileName : c:\2700\hps890\PA38028.raw  
Method : HPPEST8.ins  
Start Time : 0.00 min  
Scale Factor: -1.0  
End Time : 33.00 min  
Plot Offset: -6 mV

Sample #: 28  
Date : 3/9/95 03:24 AM  
Time of Injection: 3/9/95 02:51 AM  
Low Point : -5.98 mV  
Plot Scale: 800.0 mV  
High Point : 794.02 mV



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Software Version: 3.3 &lt;4811&gt;

Sample Name : L950626-5 1:5 PCB SOIL Time : 3/9/95 03:25 AM

Sample Number: 28 Study : PPPCB

Operator : KMW

Instrument : HP5890 Channel : B A/D mV Range : 1000

AutoSampler : NONE

:Vial : 0/0

Interface Serial # : 8055910402 Data Acquisition Time: 3/9/95 02:51 AM

Delay Time : 0.00 min.

End Time : 33.00 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\HP5890\PB38028.RAW

Result File : C:\2700\HP5890\PB38028.RST

Instrument File: c:\2700\methseqs\HPPEST8.ins

Process File : HPPEST8

Sample File : PEST8058

Sequence File : C:\2700\METHSEQS\0308PCB.SEQ

Inj. Volume : 1 ul

Area Reject : 200.000000

Sample Amount : 1.0000

Dilution Factor : 1.00

Instrument Control Method:

Instrument name : HP5890

Channel Parameters:

Inlet Parameters:

Inlet A :

Inlet B :

Detector Parameters:

Detector A :

Detector B :

Heated Zones:

Temperature Program:

Total run time : 33.00 min

Timed Events:

There are no timed events in the method

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## HP5890 REPORT FOR PEST/PCB ANALYSIS

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NORTHEASTERN ANALYTICAL CORP. GAS CHROMATOGRAPHY LAB.

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| Peak # | Component Name | Time [min] | Area [uV*sec] | Height [uV] | Raw Amount | Adjusted Amount | Calibration Factor | Cal. Range |
|--------|----------------|------------|---------------|-------------|------------|-----------------|--------------------|------------|
| 1      |                | 1.139      | 619493.43     | 85010.15    | 41.0910    | 41.0910         | 619493             |            |
| 2      |                | 1.288      | 3466779.36    | 819396.80   | 252.7943   | 252.7943        | 3466779            |            |
| 3      |                | 1.541      | 267957.21     | 71103.05    | 14.9533    | 14.9533         | 267957             |            |
| 4      |                | 1.980      | 8741.50       | 1425.98     | -4.3200    | -4.3200         | 8742               |            |
| 5      |                | 2.252      | 3246.00       | 963.64      | -4.7286    | -4.7286         | 3246               |            |
| 6      |                | 2.344      | 3317.00       | 832.44      | -4.7234    | -4.7234         | 3317               |            |
| 7      |                | 2.614      | 36739.00      | 5438.84     | -2.2384    | -2.2384         | 36739              |            |
| 8      |                | 2.699      | 31935.00      | 10754.46    | -2.5955    | -2.5955         | 31935              |            |
| 9      |                | 3.101      | 32977.00      | 7531.72     | -2.5181    | -2.5181         | 32977              |            |
| 10     |                | 3.300      | 9839.50       | 1875.39     | -4.2384    | -4.2384         | 9840               |            |
| 11     |                | 3.467      | 13531.00      | 2409.33     | -3.9639    | -3.9639         | 13531              |            |
| 12     |                | 3.804      | 24056.00      | 2463.11     | -3.1814    | -3.1814         | 24056              |            |
| 13     |                | 4.019      | 6775.00       | 1240.27     | -4.4663    | -4.4663         | 6775               |            |
| 14     |                | 4.599      | 8104.00       | 2654.27     | -4.3674    | -4.3674         | 8104               |            |
| 15     |                | 4.692      | 4974.00       | 1810.00     | -4.6002    | -4.6002         | 4974               |            |
| 16     |                | 4.788      | 11856.00      | 3354.88     | -4.0885    | -4.0885         | 11856              |            |
| 17     |                | 4.920      | 18136.00      | 5687.41     | -3.6215    | -3.6215         | 18136              |            |
| 18     |                | 5.313      | 31987.00      | 3611.85     | -2.5917    | -2.5917         | 31987              |            |
| 19     |                | 5.532      | 3741.00       | 861.42      | -4.6918    | -4.6918         | 3741               |            |
| 20     |                | 6.078      | 142993.00     | 36159.35    | 5.6619     | 5.6619          | 142993             |            |
| 21     |                | 6.964      | 72981.00      | 13171.98    | 0.4563     | 0.4563          | 72981              |            |

| Peak # | Component Name       | Time [min] | Area [uV*sec] | Height [uV] | Raw Amount | Adjusted Amount | Calibration Factor | Cal. Range |
|--------|----------------------|------------|---------------|-------------|------------|-----------------|--------------------|------------|
| 22     |                      | 7.499      | 5561.00       | 1352.93     | -4.5565    | -4.5565         | 5561               |            |
| 23     |                      | 7.967      | 132341.00     | 23220.96    | 4.8699     | 4.8699          | 132341             |            |
| 24     | TCMX                 | 8.260      | 244713.00     | 56739.06    | 13.2251    | 13.2251         | 244713             |            |
|        |                      | 9.301      | 77024.00      | 13643.91    | 0.7569     | 0.7569          | 77024              |            |
|        |                      | 9.727      | 46689.50      | 5321.07     | 3.3443     | 3.3443          | 46690              |            |
| 27     |                      | 10.252     | 50864.50      | 10895.94    | 3.5255     | 3.5255          | 50864              |            |
| 28     |                      | 10.485     | 178686.00     | 42038.81    | 9.0749     | 9.0749          | 178686             |            |
| 29     |                      | 10.618     | 245264.00     | 55879.10    | 11.9654    | 11.9654         | 245264             |            |
| 0      | ALPHA BHC            | 10.753     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 30     |                      | 10.964     | 6244.50       | 1175.86     | 1.5884     | 1.5884          | 6244               |            |
| 31     |                      | 11.358     | 10290.00      | 1827.72     | 1.7640     | 1.7640          | 10290              |            |
| 32     |                      | 11.732     | 39746.00      | 8189.47     | 2.5733     | 2.5733          | 39746              |            |
| 33     |                      | 11.950     | 269861.00     | 58017.49    | 13.2888    | 13.2888         | 269861             |            |
| 34     |                      | 12.102     | 376282.00     | 83298.64    | 18.2443    | 18.2443         | 376282             |            |
| 35     | BETA BHC             | 12.374     | 154759.00     | 31258.02    | 7.9290     | 7.9290          | 154759             |            |
| 36     |                      | 12.503     | 9195.00       | 3388.28     | 1.1507     | 1.1507          | 9195               |            |
| 37     |                      | 12.721     | 8955.00       | 2302.53     | 1.1395     | 1.1395          | 8955               |            |
| 38     |                      | 12.881     | 152780.00     | 33049.67    | 5.0454     | 5.0454          | 152780             |            |
| 39     |                      | 13.159     | 346567.50     | 46959.17    | 12.2646    | 12.2646         | 346568             |            |
| 0      | GAMMA BHC            | 13.331     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 40     |                      | 13.563     | 978108.00     | 194701.00   | 35.7916    | 35.7916         | 978108             |            |
| 41     | DELTA BHC            | 14.124     | 278589.00     | 58759.69    | 14.5408    | 14.5408         | 278589             |            |
| 42     |                      | 14.269     | 6429.50       | 1755.61     | 1.7272     | 1.7272          | 6430               |            |
| 43     | HEPTACHLOR           | 14.598     | 258966.00     | 51229.76    | 14.0728    | 14.0728         | 258966             |            |
| 44     |                      | 14.851     | 198915.50     | 44865.03    | 11.0842    | 11.0842         | 198916             |            |
| 45     |                      | 14.993     | 238732.00     | 43993.10    | 13.0658    | 13.0658         | 238732             |            |
| 46     |                      | 15.173     | 24574.50      | 7087.45     | 2.4075     | 2.4075          | 24574              |            |
| 47     |                      | 15.460     | 89442.00      | 15131.90    | 41.2577    | 41.2577         | 89442              |            |
| 48     |                      | 15.974     | 538935.00     | 72683.06    | -217.2507  | -217.2507       | 538935             |            |
| 0      | ALDRIN               | 16.123     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 49     |                      | 16.279     | 70934.00      | 15777.40    | 51.9019    | 51.9019         | 70934              |            |
| 50     |                      | 16.422     | 140598.50     | 32966.78    | 11.8371    | 11.8371         | 140599             |            |
| 51     |                      | 16.530     | 14533.00      | 5845.19     | 84.3387    | 84.3387         | 14533              |            |
| 52     |                      | 16.835     | 155740.50     | 28183.00    | 8.4099     | 8.4099          | 155741             |            |
| 53     | HEPTACHLOR EPOXIDE   | 17.073     | 252146.00     | 55512.74    | 13.8349    | 13.8349         | 252146             |            |
| 54     |                      | 17.207     | 127742.50     | 32191.73    | 6.8344     | 6.8344          | 127742             |            |
| 55     | GAMMA CHLORDANE      | 17.500     | 181786.00     | 37687.28    | 9.4324     | 9.4324          | 181786             |            |
|        |                      | 17.621     | 15458.00      | 5527.73     | 0.5297     | 0.5297          | 15458              |            |
|        | ALPHA CHLORDANE/ENDO | 17.840     | 221527.50     | 41962.79    | 11.2666    | 11.2666         | 221528             |            |
| 58     |                      | 18.024     | 110643.00     | 24101.44    | 4.8794     | 4.8794          | 110643             |            |
| 59     |                      | 18.192     | 155265.00     | 33263.19    | 7.4497     | 7.4497          | 155265             |            |
| 60     |                      | 18.495     | 10819.00      | 1985.72     | 1.6464     | 1.6464          | 10819              |            |
| 61     |                      | 18.643     | 63378.00      | 13575.23    | 4.9634     | 4.9634          | 63378              |            |
| 62     |                      | 18.798     | 12995.00      | 3104.71     | 1.7837     | 1.7837          | 12995              |            |
| 63     | DIELDRIN             | 18.992     | 110765.50     | 18998.60    | 7.9540     | 7.9540          | 110766             |            |
| 64     | DDE                  | 19.264     | 145512.00     | 29684.50    | 9.0018     | 9.0018          | 145512             |            |
| 65     |                      | 19.413     | 43339.50      | 10677.41    | 2.7163     | 2.7163          | 43340              |            |
| 66     |                      | 19.660     | 307907.00     | 60496.55    | 18.9922    | 18.9922         | 307907             |            |
| 67     |                      | 19.869     | 32431.00      | 6452.33     | 2.0452     | 2.0452          | 32431              |            |
| 68     |                      | 20.113     | 114586.00     | 27969.78    | 9.7703     | 9.7703          | 114586             |            |
| 69     |                      | 20.223     | 196847.50     | 29820.66    | 16.7855    | 16.7855         | 196847             |            |
| 70     |                      | 20.515     | 15294.00      | 4295.77     | 1.3028     | 1.3028          | 15294              |            |
| 71     | ENDRIN               | 20.744     | 210485.50     | 39924.24    | 17.9485    | 17.9485         | 210485             |            |
| 72     |                      | 20.951     | 16082.00      | 4181.86     | 2.1395     | 2.1395          | 16082              |            |
| 73     | ENDOSULFAN I         | 21.102     | 33017.00      | 7764.65     | 3.4159     | 3.4159          | 33017              |            |
| 74     |                      | 21.483     | 64382.50      | 13202.21    | 3.7153     | 3.7153          | 64382              |            |
| 75     | DDD                  | 21.655     | 241151.00     | 26245.95    | 17.2075    | 17.2075         | 241151             |            |
| 76     | ENDRIN ALDEHYDE      | 22.204     | 528787.00     | 58811.99    | 54.9024    | 54.9024         | 528787             |            |
| 77     |                      | 22.444     | 106161.00     | 20554.41    | 10.8718    | 10.8718         | 106161             |            |
| 78     | ENDOSULFAN SULFATE   | 22.662     | 199882.50     | 34579.90    | 20.6927    | 20.6927         | 199882             |            |
| 79     | DDT                  | 23.219     | 11641.00      | 2502.66     | 0.2041     | 0.2041          | 11641              |            |
| 80     |                      | 23.622     | 210741.00     | 30874.34    | 16.3737    | 16.3737         | 210741             |            |
| 81     | ENDRIN KETONE        | 23.897     | 234725.00     | 32980.12    | 18.3133    | 18.3133         | 234725             |            |
| 82     |                      | 24.254     | 241066.00     | 42409.19    | 18.8261    | 18.8261         | 241066             |            |
| 83     |                      | 24.800     | 9729.00       | 0.00        | -2.1793    | -2.1793         | 9729               |            |
| 84     |                      | 25.037     | 16265.00      | 2989.92     | -0.6041    | -0.6041         | 16265              |            |
| 85     |                      | 25.200     | 5759.00       | 878.89      | -3.1361    | -3.1361         | 5759               |            |
| 86     | METHOXYCHLOR         | 25.367     | 7625.50       | 1664.38     | -2.6863    | -2.6863         | 7626               |            |
| 87     |                      | 25.578     | 227750.00     | 43093.71    | 21.6452    | 21.6452         | 227750             |            |
| 88     | DBC                  | 25.781     | 312100.00     | 51988.76    | 29.5253    | 29.5253         | 312100             |            |
| 89     |                      | 26.764     | 169204.00     | 26714.68    | 16.1758    | 16.1758         | 169204             |            |
|        |                      | 26.983     | 6318.50       | 1144.15     | 0.9589     | 0.9589          | 6318               |            |
|        |                      | 27.188     | 37827.00      | 6108.57     | 3.9025     | 3.9025          | 37827              |            |
| 92     |                      | 27.495     | 20655.00      | 3406.97     | 2.2983     | 2.2983          | 20655              |            |
| 93     |                      | 27.869     | 140357.00     | 19123.48    | 13.4809    | 13.4809         | 140357             |            |
| 94     |                      | 29.640     | 571213.50     | 65499.48    | 37.2538    | 37.2538         | 571214             |            |
| 95     | DCB                  | 31.200     | 96023.00      | 10681.02    | -4.7362    | -4.7362         | 96023              |            |



| Peak<br># | Component<br>Name | Time<br>[min] | Area<br>[uV*sec] | Height<br>[uV] | Raw<br>Amount | Adjusted<br>Amount | Calibration<br>Factor | Cal.<br>Range |
|-----------|-------------------|---------------|------------------|----------------|---------------|--------------------|-----------------------|---------------|
| 96        |                   | 31.545        | 29271.50         | 3172.65        | -10.6346      | -10.6346           | 29272                 |               |
|           |                   |               | 16037141.50      | 3.117e+06      | 851.4634      | 851.4634           | 16037141              |               |

## Missing Component Report

| Component | Expected Retention (Sample File) |
|-----------|----------------------------------|
| ALPHA BHC | 10.753                           |
| GAMMA BHC | 13.331                           |
| ALDRIN    | 16.123                           |

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HP5890 DETECTOR B

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Report Stored in ASCII File: C:\2700\HP5890\PB38028.TX0

# Chromatogram

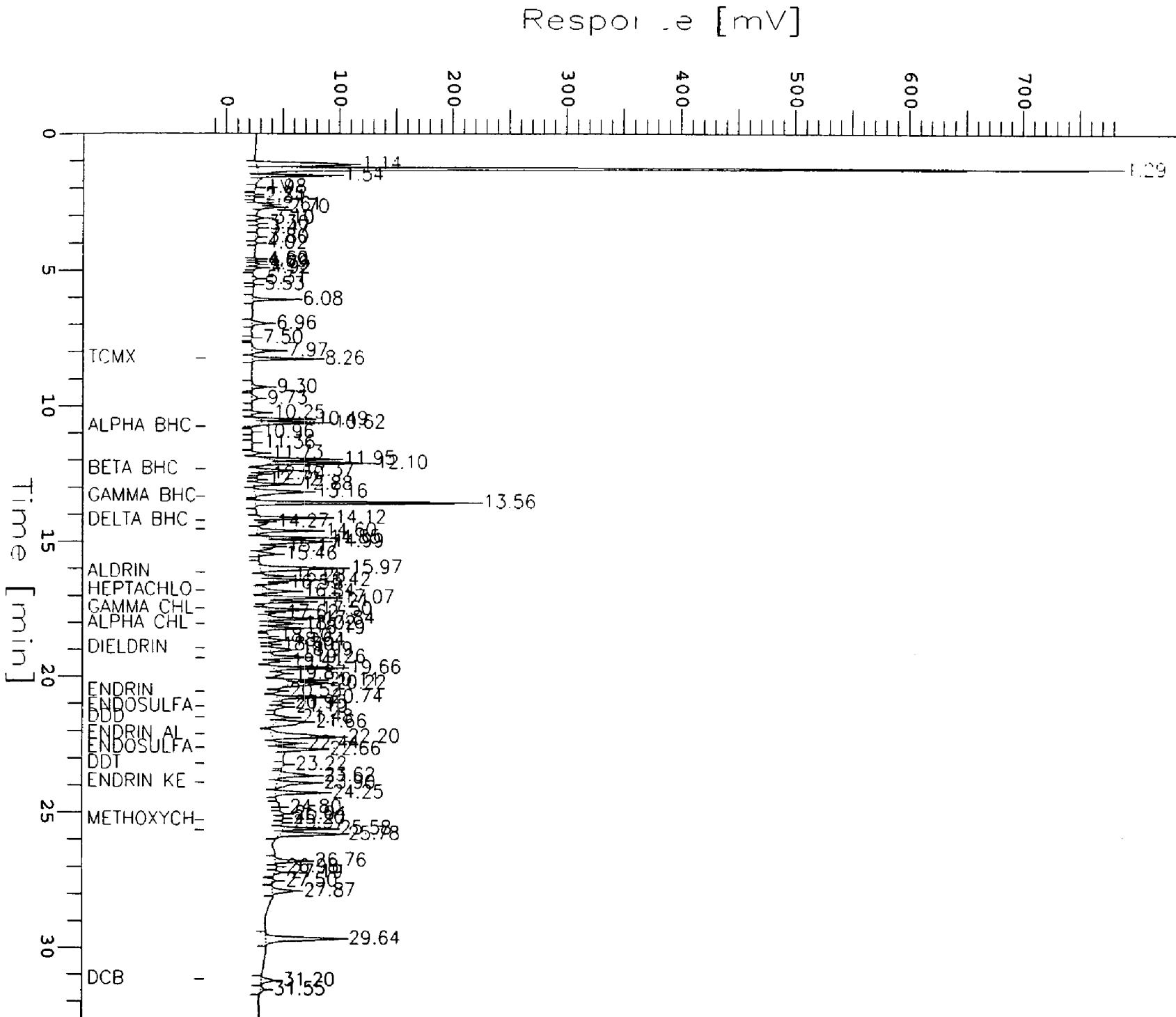
313

Sample Name : L950626-5 1:5 PCB SOIL  
 FileName : c:\2700\hps890\p838028.raw  
 Method : HPPESTB.ins  
 Start Time : 0.00 min  
 Scale Factor: -1.0

End Time : 33.00 min  
 Plot Offset: -18 mV

Sample #: 28  
 Date : 3/9/95 03:25 AM  
 Time of Injection: 3/9/95  
 Low Point : -18.24 mV  
 Plot Scale: 800.0 mV

Page 1 of 1  
 02:51 AM  
 High Point : 781.76 mV



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Software Version: 3.3 <4811>

Sample Name : L950626-6 STRT Time : 3/13/95 06:41 PM

Sample Number: 36 Study : 515.1

Operator : KMW

Instrument : HP5890 Channel : A A/D mV Range : 1000

Injection Sampler : NONE

Injection Volume : 0.00

Interface Serial # : 8055910402 Data Acquisition Time: 3/13/95 06:06 PM

Delay Time : 0.00 min.

End Time : 35.00 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\HP5890\RA33036.RAW

Result File : C:\2700\HP5890\RA33036.RST

Instrument File: c:\2700\methseqs\515A.ins

Process File : 515A

Sample File : HB515A2

Sequence File : C:\2700\METHSEQS\0310H8.seq

Inj. Volume : 1 ul Area Reject : 0.000000

Sample Amount : 1.0000 Dilution Factor : 1.00

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DEFAULT REPORT

| Peak # | Time [min] | Area [uV*sec] | Height [uV] | Area [%] | Norm. Area [%] | BL | Area/Height [sec] |
|--------|------------|---------------|-------------|----------|----------------|----|-------------------|
| 1      | 0.236      | 965.50        | 85.84       | 5e-03    | 4.7577e-03     | B  | 11.2481           |
| 2      | 1.103      | 2571148.30    | 463803.10   | 12.67    | 12.67          | B  | 5.5436            |
| 3      | 1.313      | 727311.70     | 166693.97   | 3.58     | 3.58           | V  | 4.3632            |
| 4      | 1.634      | 1348227.00    | 333034.22   | 6.64     | 6.64           | B  | 4.0483            |
| 5      | 1.936      | 10323.00      | 3687.30     | 0.05     | 0.05           | B  | 2.7996            |
| 6      | 2.050      | 28748.83      | 9274.81     | 0.14     | 0.14           | B  | 3.0997            |
| 7      | 2.169      | 24741.57      | 5489.75     | 0.12     | 0.12           | V  | 4.5069            |
| 8      | 2.244      | 20352.10      | 6441.57     | 0.10     | 0.10           | V  | 3.1595            |
| 9      | 2.404      | 4427.50       | 1296.26     | 0.02     | 0.02           | B  | 3.4156            |
|        | 2.575      | 4640.71       | 1572.65     | 0.02     | 0.02           | B  | 2.9509            |
|        | 2.674      | 23498.29      | 6438.59     | 0.12     | 0.12           | V  | 3.6496            |
| 12     | 2.804      | 1312.50       | 588.02      | 6e-03    | 6.4677e-03     | B  | 2.2321            |
| 13     | 2.930      | 18355.25      | 4255.65     | 0.09     | 0.09           | B  | 4.3132            |
| 14     | 3.036      | 6998.19       | 1777.91     | 0.03     | 0.03           | V  | 3.9362            |
| 15     | 3.134      | 14947.33      | 4190.06     | 0.07     | 0.07           | V  | 3.5673            |
| 16     | 3.379      | 8812.22       | 2119.30     | 0.04     | 0.04           | V  | 4.1581            |
| 17     | 3.518      | 6590.31       | 1854.30     | 0.03     | 0.03           | B  | 3.5541            |
| 18     | 3.600      | 2764.19       | 647.74      | 0.01     | 0.01           | V  | 4.2674            |
| 19     | 3.788      | 15309.57      | 2002.32     | 0.08     | 0.08           | B  | 7.6459            |
| 20     | 3.931      | 10136.43      | 1905.63     | 0.05     | 0.05           | V  | 5.3192            |
| 21     | 4.134      | 6328.54       | 901.42      | 0.03     | 0.03           | B  | 7.0206            |
| 22     | 4.332      | 51753.84      | 5500.61     | 0.26     | 0.26           | V  | 9.4087            |
| 23     | 4.606      | 17369.16      | 3969.76     | 0.09     | 0.09           | V  | 4.3754            |
| 24     | 4.762      | 6188.46       | 1240.37     | 0.03     | 0.03           | V  | 4.9892            |
| 25     | 4.970      | 4935.00       | 1070.98     | 0.02     | 0.02           | B  | 4.6079            |
| 26     | 5.302      | 1589.03       | 358.90      | 8e-03    | 7.8303e-03     | B  | 4.4275            |
| 27     | 5.431      | 40802.63      | 9907.63     | 0.20     | 0.20           | V  | 4.1183            |
| 28     | 5.506      | 68562.67      | 9940.75     | 0.34     | 0.34           | V  | 6.8971            |
| 29     | 5.784      | 63869.93      | 8323.10     | 0.31     | 0.31           | V  | 7.6738            |
| 30     | 6.258      | 57381.85      | 7891.49     | 0.28     | 0.28           | V  | 7.2714            |
| 31     | 6.562      | 224925.39     | 53063.60    | 1.11     | 1.11           | V  | 4.2388            |
| 32     | 6.847      | 4746.00       | 663.20      | 0.02     | 0.02           | E  | 7.1562            |
| 33     | 7.332      | 14091.86      | 1752.82     | 0.07     | 0.07           | B  | 8.0395            |
| 34     | 7.628      | 1947317.43    | 431861.24   | 9.60     | 9.60           | V  | 4.5091            |
| 35     | 7.986      | 6424.00       | 820.85      | 0.03     | 0.03           | E  | 7.8260            |
| 36     | 8.169      | 4473.67       | 848.60      | 0.02     | 0.02           | V  | 5.2719            |
| 37     | 8.364      | 30090.03      | 4745.83     | 0.15     | 0.15           | V  | 6.3403            |
| 38     | 8.836      | 3904.11       | 729.44      | 0.02     | 0.02           | B  | 5.3522            |
| 39     | 9.011      | 10093.16      | 2047.33     | 0.05     | 0.05           | V  | 4.9299            |
| 40     | 9.087      | 10424.16      | 2535.56     | 0.05     | 0.05           | V  | 4.1112            |
| 41     | 9.206      | 20091.65      | 4482.54     | 0.10     | 0.10           | V  | 4.4822            |
| 42     | 9.283      | 33251.11      | 7136.56     | 0.16     | 0.16           | V  | 4.6593            |
| 43     | 9.423      | 18467.92      | 3334.24     | 0.09     | 0.09           | V  | 5.5389            |
|        | 9.612      | 34980.92      | 5909.92     | 0.17     | 0.17           | V  | 5.9190            |
|        | 9.848      | 1233797.70    | 272205.91   | 6.08     | 6.08           | V  | 4.5326            |
| 46     | 10.070     | 6521.00       | 1328.76     | 0.03     | 0.03           | E  | 4.9076            |
| 47     | 10.338     | 21313.27      | 2471.08     | 0.11     | 0.11           | V  | 8.6251            |
| 48     | 10.678     | 1604.76       | 255.15      | 8e-03    | 7.9078e-03     | B  | 6.2894            |
| 49     | 10.830     | 22111.56      | 4140.59     | 0.11     | 0.11           | V  | 5.3402            |

TCMx

231836.25

A1232

| Peak # | Time [min] | Area [uV*sec] | Height [uV] | Area [%] | Norm. Area [%] | Area BL | Area/Height [sec] |
|--------|------------|---------------|-------------|----------|----------------|---------|-------------------|
| 50     | 11.044     | 60650.19      | 12833.82    | 0.30     | 0.30           | V       | 4.7258            |
| 51     | 11.354     | 5340.50       | 724.47      | 0.03     | 0.03           | B       | 7.3716            |
| 52     | 11.482     | 9310.50       | 1800.45     | 0.05     | 0.05           | V       | 5.1712            |
| 53     | 11.615     | 1105.00       | 334.11      | 5e-03    | 5.4452e-03     | E       | 3.3073            |
| 54     | 11.746     | 19000.33      | 3779.01     | 0.09     | 0.09           | V       | 5.0279            |
| 55     | 11.942     | 38015.67      | 5392.80     | 0.19     | 0.19           | V       | 7.0493            |
| 56     | 12.351     | 38056.00      | 3612.99     | 0.19     | 0.19           | B       | 10.5331           |
| 57     | 12.663     | 136205.14     | 24495.57    | 0.67     | 0.67           | B       | 5.5604            |
| 58     | 12.923     | 4354.88       | 623.40      | 0.02     | 0.02           | V       | 6.9853            |
| 59     | 13.158     | 68785.75      | 9512.07     | 0.34     | 0.34           | V       | 7.2314            |
| 60     | 13.534     | 48073.82      | 6515.43     | 0.24     | 0.24           | V       | 7.3785            |
| 61     | 13.704     | 7436.75       | 1585.49     | 0.04     | 0.04           | V       | 4.6905            |
| 62     | 13.905     | 46210.14      | 11068.37    | 0.23     | 0.23           | V       | 4.1750            |
| 63     | 13.968     | 93066.11      | 12136.98    | 0.46     | 0.46           | V       | 7.6680            |
| 64     | 14.181     | 4105.00       | 945.92      | 0.02     | 0.02           | E       | 4.3397            |
| 65     | 14.323     | 6119.61       | 975.70      | 0.03     | 0.03           | V       | 6.2720            |
| 66     | 14.511     | 3578.00       | 753.78      | 0.02     | 0.02           | B       | 4.7467            |
| 67     | 14.645     | 2524.00       | 632.86      | 0.01     | 0.01           | B       | 3.9883            |
| 68     | 14.835     | 83910.50      | 10667.49    | 0.41     | 0.41           | B       | 7.8660            |
| 69     | 15.177     | 41071.36      | 8254.06     | 0.20     | 0.20           | B       | 4.9759            |
| 70     | 15.275     | 63741.09      | 9871.05     | 0.31     | 0.31           | V       | 6.4574            |
| 71     | 15.461     | 227904.55     | 45182.55    | 1.12     | 1.12           | V       | 5.0441            |
| 72     | 15.767     | 16007.09      | 2763.62     | 0.08     | 0.08           | B       | 5.7921            |
| 73     | 15.869     | 27908.27      | 4458.41     | 0.14     | 0.14           | V       | 6.2597            |
| 74     | 16.021     | 11081.31      | 1839.44     | 0.05     | 0.05           | V       | 6.0243            |
| 75     | 16.278     | 171877.02     | 17846.29    | 0.85     | 0.85           | V       | 9.6310            |
| 76     | 16.699     | 20217.07      | 3122.92     | 0.10     | 0.10           | V       | 6.4738            |
| 77     | 16.898     | 68505.95      | 11879.12    | 0.34     | 0.34           | V       | 5.7669            |
| 78     | 17.019     | 71338.69      | 10732.81    | 0.35     | 0.35           | V       | 6.6468            |
| 79     | 17.198     | 59439.82      | 6729.05     | 0.29     | 0.29           | V       | 8.8333            |
| 80     | 17.396     | 3853.78       | 668.80      | 0.02     | 0.02           | V       | 5.7623            |
| 81     | 17.654     | 37755.40      | 6359.22     | 0.19     | 0.19           | B       | 5.9371            |
| 82     | 17.857     | 73618.70      | 9194.38     | 0.36     | 0.36           | V       | 8.0069            |
| 83     | 18.195     | 96272.30      | 8832.31     | 0.47     | 0.47           | V       | 10.9000           |
| 84     | 18.527     | 176563.10     | 25235.22    | 0.87     | 0.87           | V       | 6.9967            |
| 85     | 18.786     | 16796.00      | 3330.67     | 0.08     | 0.08           | E       | 5.0428            |
| 86     | 19.063     | 127709.24     | 22813.58    | 0.63     | 0.63           | B       | 5.5979            |
| 87     | 19.360     | 67358.76      | 12310.51    | 0.33     | 0.33           | V       | 5.4716            |
| 88     | 19.633     | 42711.53      | 5430.40     | 0.21     | 0.21           | B       | 7.8653            |
| 89     | 19.839     | 189294.44     | 28123.96    | 0.93     | 0.93           | V       | 6.7307            |
| 90     | 20.045     | 27349.00      | 4016.17     | 0.13     | 0.13           | E       | 6.8097            |
| 91     | 20.281     | 92625.01      | 13150.59    | 0.46     | 0.46           | V       | 7.0434            |
| 92     | 20.456     | 60694.08      | 10667.82    | 0.30     | 0.30           | V       | 5.6895            |
| 93     | 20.574     | 48861.34      | 7904.00     | 0.24     | 0.24           | V       | 6.1818            |
| 94     | 20.870     | 18278.50      | 3466.36     | 0.09     | 0.09           | V       | 5.2731            |
| 95     | 21.057     | 310859.74     | 41986.10    | 1.53     | 1.53           | V       | 7.4039            |
| 96     | 21.256     | 148398.52     | 27886.04    | 0.73     | 0.73           | V       | 5.3216            |
| 97     | 21.401     | 61659.56      | 10990.63    | 0.30     | 0.30           | V       | 5.6102            |
| 98     | 21.536     | 78904.97      | 15050.72    | 0.39     | 0.39           | V       | 5.2426            |
| 99     | 21.939     | 24387.26      | 3339.84     | 0.12     | 0.12           | V       | 7.3019            |
| 100    | 22.061     | 16356.54      | 2786.95     | 0.08     | 0.08           | V       | 5.8690            |
| 101    | 22.300     | 111150.08     | 20094.10    | 0.55     | 0.55           | B       | 5.5315            |
| 102    | 22.504     | 132049.23     | 16449.70    | 0.65     | 0.65           | V       | 8.0275            |
| 103    | 22.800     | 3235.00       | 613.26      | 0.02     | 0.02           | E       | 5.2751            |
| 104    | 23.038     | 48865.81      | 7575.10     | 0.24     | 0.24           | V       | 6.4509            |
| 105    | 23.283     | 235849.81     | 40196.42    | 1.16     | 1.16           | V       | 5.8674            |
| 106    | 23.561     | 178328.09     | 12422.29    | 0.88     | 0.88           | V       | 14.3555           |
| 107    | 23.985     | 1461639.02    | 267377.67   | 7.20     | 7.20           | V       | 5.4666            |
| 108    | 24.193     | 10385.00      | 1933.76     | 0.05     | 0.05           | E       | 5.3704            |
| 109    | 24.354     | 70561.42      | 12335.49    | 0.35     | 0.35           | V       | 5.7202            |
| 110    | 24.511     | 205680.30     | 33553.96    | 1.01     | 1.01           | V       | 6.1298            |
| 111    | 25.042     | 78464.79      | 4607.15     | 0.39     | 0.39           | V       | 17.0311           |
| 112    | 25.317     | 54110.05      | 4455.16     | 0.27     | 0.27           | V       | 12.1455           |
| 113    | 25.458     | 134598.60     | 13946.68    | 0.66     | 0.66           | V       | 9.6509            |
| 114    | 25.758     | 95600.05      | 7840.05     | 0.47     | 0.47           | V       | 12.1938           |
| 115    | 25.987     | 66680.70      | 5433.31     | 0.33     | 0.33           | V       | 12.2726           |
| 116    | 26.268     | 39091.75      | 3851.20     | 0.19     | 0.19           | V       | 10.1505           |
| 117    | 26.529     | 382007.01     | 47404.98    | 1.88     | 1.88           | V       | 8.0584            |
| 118    | 26.743     | 120900.34     | 16983.55    | 0.60     | 0.60           | V       | 7.1187            |
| 119    | 27.100     | 2272.97       | 242.70      | 0.01     | 0.01           | V       | 9.3653            |
| 120    | 27.740     | 103613.80     | 7141.41     | 0.51     | 0.51           | B       | 14.5089           |
| 121    | 28.334     | 51847.14      | 3512.84     | 0.26     | 0.26           | V       | 14.7593           |
| 122    | 28.562     | 45508.88      | 4409.78     | 0.22     | 0.22           | V       | 10.3200           |
| 123    | 28.916     | 333408.15     | 17880.67    | 1.64     | 1.64           | V       | 18.6463           |
| 124    | 29.529     | 195144.80     | 10031.47    | 0.96     | 0.96           | V       | 19.4533           |
| 125    | 29.728     | 263263.02     | 12487.30    | 1.30     | 1.30           | V       | 21.0825           |
| 126    | 30.240     | 350751.66     | 18201.03    | 1.73     | 1.73           | V       | 19.2710           |

A1232

797997.31

DPC

| Peak<br># | Time<br>[min] | Area<br>[uV*sec] | Height<br>[uV] | Area<br>[%] | Norm. Area<br>[%] | Area BL | Area/Height<br>[sec] |
|-----------|---------------|------------------|----------------|-------------|-------------------|---------|----------------------|
| 127       | 30.480        | 638799.89        | 18236.98       | 3.15        | 3.15              | V       | 35.0277              |
| 128       | 31.222        | 526068.34        | 24154.84       | 2.59        | 2.59              | V       | 21.7790              |
| 129       | 31.544        | 444773.49        | 20036.18       | 2.19        | 2.19              | V       | 22.1985              |
|           | 32.308        | 1206076.26       | 23646.11       | 5.94        | 5.94              | V       | 51.0053              |
|           | 32.926        | 694250.58        | 24736.05       | 3.42        | 3.42              | V       | 28.0664              |
| 132       | 34.310        | 15580.00         | 2323.75        | 0.08        | 0.08              | B       | 6.7047               |
| 133       | 34.930        | 402.00           | 160.43         | 2e-03       | 1.9810e-03        | B       | 2.5057               |
|           |               | 20293227.00      | 3.065e+06      | 100.00      | 100.00            |         |                      |

## Missing Component Report

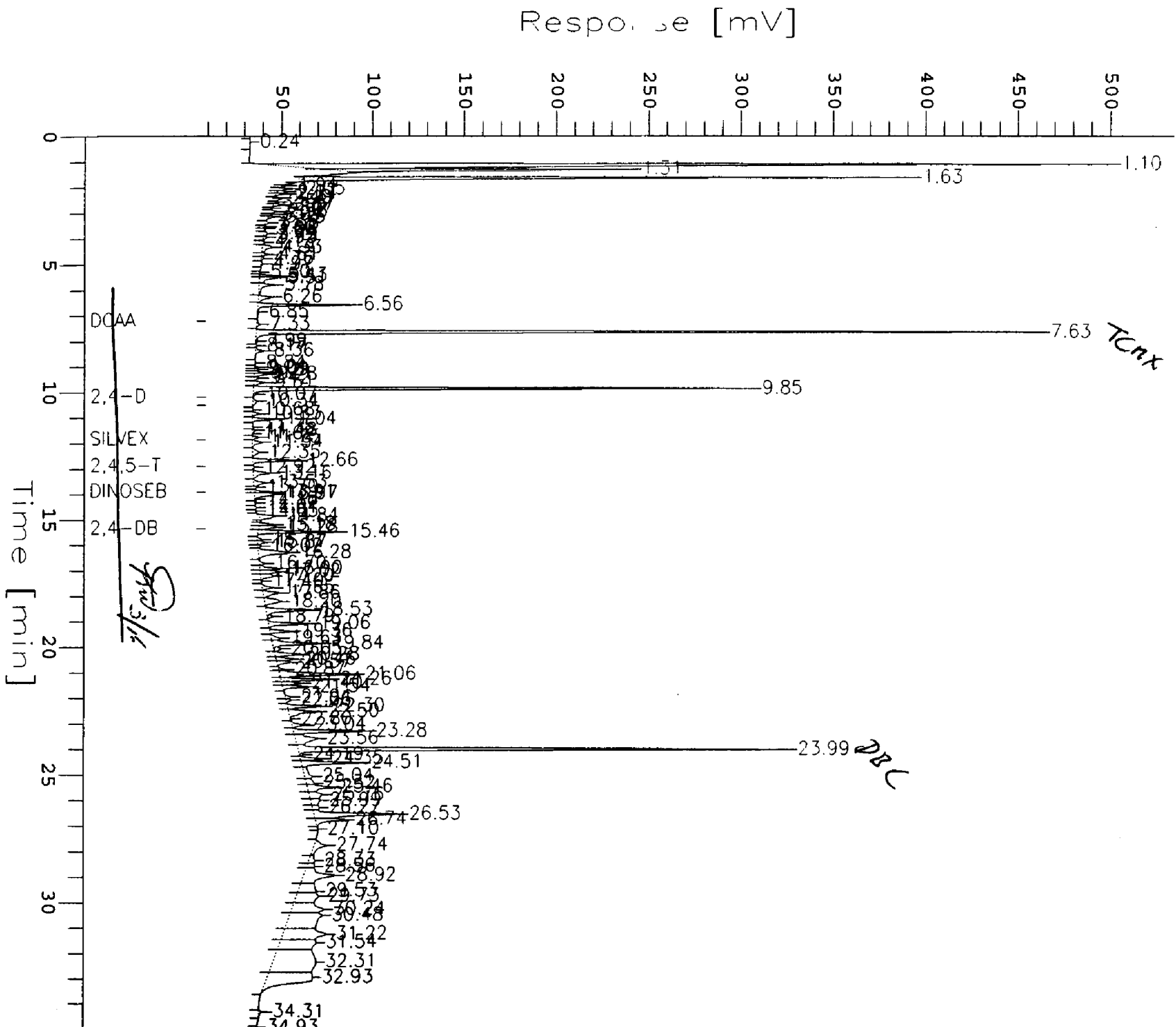
| Component | Expected Retention (Sample File) |
|-----------|----------------------------------|
| DINOSEB   | 13.900                           |
| 2,4-DB    | 15.350                           |

Sample Name : L950626-6 STR1  
 FileName : c:\2700\hp5890\RA33036.raw  
 Method : S15A.ins  
 Start Time : 0.00 min  
 Scale Factor: 1.0

End Time : 35.00 min  
 Plot Offset: 9 mV

Sample #: 36  
 Date : 3/13/95 06:41 PM  
 Time of Injection: 3/13/95  
 Low Point : 8.87 mV  
 Plot Scale: 491.6 mV

Page 1 of 1  
 06:06 PM  
 High Point : 500.52 mV



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Software Version: 3.3 <4811>  
 Sample Name : L950626-6 STRT Time : 3/13/95 06:42 PM  
 Sample Number: 36 Study : 515.1  
 Operator : KMW

Instrument : HP5890 Channel : 8 A/D mV Range : 1000  
 NoSampler : NONE  
 /Vial : 0/0

Interface Serial # : 8055910402 Data Acquisition Time: 3/13/95 06:06 PM  
 Delay Time : 0.00 min.  
 End Time : 35.00 min.  
 Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\HP5890\RB33036.RAW  
 Result File : C:\2700\HP5890\RB33036.RST  
 Instrument File: c:\2700\methseqs\515A.ins  
 Process File : 515B  
 Sample File : HB515B  
 Sequence File : C:\2700\METHSEQS\0310HB.seq

Inj. Volume : 1 ul Area Reject : 200.000000  
 Sample Amount : 1.0000 Dilution Factor : 1.00

Instrument Control Method:  
 Instrument name : HP5890

Channel Parameters:

Inlet Parameters:  
 Inlet A : Inlet B :

Detector Parameters:  
 Detector A : Detector B :

Heated Zones:

Temperature Program:

Total run time : 35.00 min

Timed Events:  
 There are no timed events in the method

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8080 PCB Iw 3/14/95

**HP5890 REPORT FOR 515.1 ~~HERBICIDES DRINKING WATER ANALYSIS~~**

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NORTHEASTERN ANALYTICAL CORP. GAS CHROMATOGRAPHY LAB.

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| Peak # | Time (min) | Component Name | Area [uV*sec] | Height [uV] | Raw Amount | Adjusted Amount | Calibration Factor |
|--------|------------|----------------|---------------|-------------|------------|-----------------|--------------------|
| 1      | 1.091      |                | 797817.00     | 146260.24   | 1.5956     | 1.5956          | 7.9782e+05         |
| 2      | 1.292      |                | 396738.00     | 106702.42   | 0.7935     | 0.7935          | 3.9674e+05         |
| 3      | 1.549      |                | 835090.43     | 223926.69   | 1.6702     | 1.6702          | 8.3509e+05         |
| 4      | 1.684      |                | 68288.57      | 17922.82    | 0.1366     | 0.1366          | 68288.5714         |
| 5      | 2.078      |                | 28736.00      | 6749.20     | 0.0575     | 0.0575          | 28736.0000         |
| 6      | 2.254      |                | 4649.00       | 2061.18     | 0.0093     | 0.0093          | 4649.0000          |
| 7      | 2.425      |                | 39933.00      | 7094.13     | 0.0799     | 0.0799          | 39933.0000         |
| 8      | 2.620      |                | 10786.00      | 2542.31     | 0.0216     | 0.0216          | 10786.0000         |
| 9      | 2.704      |                | 11499.50      | 4036.01     | 0.0230     | 0.0230          | 11499.5000         |
| 10     | 2.944      |                | 92275.50      | 17592.31    | 0.1846     | 0.1846          | 92275.5000         |
| 11     | 3.331      |                | 3229.00       | 1006.46     | 0.0065     | 0.0065          | 3229.0000          |
| 12     | 3.516      |                | 67296.50      | 10479.15    | 0.1346     | 0.1346          | 67296.5000         |
| 13     | 3.930      |                | 3725.50       | 918.09      | 0.0075     | 0.0075          | 3725.5000          |
| 14     | 4.565      |                | 12839.00      | 1506.55     | 0.0257     | 0.0257          | 12839.0000         |
| -      | 4.713      |                | 11862.50      | 3457.74     | 0.0237     | 0.0237          | 11862.5000         |
| -      | 4.941      |                | 6161.00       | 1999.95     | 0.0123     | 0.0123          | 6161.0000          |
| 17     | 5.457      |                | 17171.00      | 4956.16     | 0.0343     | 0.0343          | 17171.0000         |
| 18     | 5.828      |                | 6421.00       | 1629.23     | 0.0128     | 0.0128          | 6421.0000          |
| 19     | 6.102      |                | 64883.00      | 12202.48    | 0.1298     | 0.1298          | 64883.0000         |
| 20     | 7.001      |                | 191886.00     | 39413.55    | 0.3838     | 0.3838          | 1.9189e+05         |
| 0      | 7.480      | DCAA           | 0.00          | 0.00        | 0.0000     | 0.0000          | 0.0000             |

| Peak # | Time [min] | Component Name    | Area [uV*sec] | Height [uV] | Raw Amount | Adjusted Amount | Calibration Factor |
|--------|------------|-------------------|---------------|-------------|------------|-----------------|--------------------|
| 21     | 7.788      |                   | 5072.00       | 1368.92     | 0.0101     | 0.0101          | 5072.0000          |
| 22     | 8.001      |                   | 298979.00     | 60532.67    | 0.5980     | 0.5980          | 2.9898e+05         |
| 23     | 8.300      |                   | 1288103.00    | 277920.21   | 2.5762     | 2.5762          | 1.2881e+06         |
|        | 9.141      |                   | 10191.00      | 1805.31     | 0.0204     | 0.0204          | 10191.0000         |
|        | 9.346      |                   | 3811.00       | 760.53      | 0.0076     | 0.0076          | 3811.0000          |
| 26     | 9.655      |                   | 16891.00      | 3831.88     | 0.0338     | 0.0338          | 16891.0000         |
| 27     | 9.810      |                   | 10634.00      | 2495.33     | 0.0213     | 0.0213          | 10634.0000         |
| 0      | 10.300     | 2,4-D             | 0.00          | 0.00        | 0.0000     | 0.0000          | 0.0000             |
| 28     | 10.519     |                   | 18460.00      | 4521.19     | 0.0369     | 0.0369          | 18460.0000         |
| 29     | 10.661     |                   | 748344.50     | 159780.87   | 1.4967     | 1.4967          | 7.4834e+05         |
| 0      | 11.320     | PENTACHLOROPHENOL | 0.00          | 0.00        | 0.0000     | 0.0000          | 0.0000             |
| 0      | 11.780     | SILVEX            | 0.00          | 0.00        | 0.0000     | 0.0000          | 0.0000             |
| 30     | 11.992     |                   | 190505.00     | 37435.20    | 0.3810     | 0.3810          | 1.9050e+05         |
| 31     | 12.143     |                   | 14494.00      | 4349.79     | 0.0290     | 0.0290          | 14494.0000         |
| 32     | 12.417     |                   | 8410.00       | 1729.17     | 0.0168     | 0.0168          | 8410.0000          |
| 33     | 12.923     | 2,4,5-T           | 10400.50      | 2208.22     | 0.5978     | 0.5978          | 10400.5000         |
| 34     | 13.198     |                   | 18472.00      | 2430.72     | 0.0369     | 0.0369          | 18472.0000         |
| 35     | 13.611     | DINOSEB           | 70129.50      | 14042.25    | 9.2760     | 9.2760          | 70129.5000         |
| 0      | 13.920     | 2,4-DB            | 0.00          | 0.00        | 0.0000     | 0.0000          | 0.0000             |
| 36     | 14.168     |                   | 21838.00      | 4342.66     | 0.0437     | 0.0437          | 21838.0000         |
| 37     | 14.641     |                   | 15924.50      | 3255.86     | 0.0318     | 0.0318          | 15924.5000         |
| 38     | 14.899     |                   | 17791.00      | 3934.21     | 0.0356     | 0.0356          | 17791.0000         |
| 39     | 15.038     |                   | 17702.50      | 3453.42     | 0.0354     | 0.0354          | 17702.5000         |
| 40     | 15.517     |                   | 16635.50      | 2209.14     | 0.0333     | 0.0333          | 16635.5000         |
| 41     | 16.021     |                   | 43151.50      | 5658.64     | 0.0863     | 0.0863          | 43151.5000         |
| 42     | 16.322     |                   | 4876.50       | 1115.11     | 0.0098     | 0.0098          | 4876.5000          |
| 43     | 16.467     |                   | 13758.00      | 2748.52     | 0.0275     | 0.0275          | 13758.0000         |
| 44     | 16.882     |                   | 13387.50      | 2443.41     | 0.0268     | 0.0268          | 13387.5000         |
| 45     | 17.122     |                   | 19701.50      | 4297.47     | 0.0394     | 0.0394          | 19701.5000         |
| 46     | 17.259     |                   | 11036.00      | 2552.56     | 0.0221     | 0.0221          | 11036.0000         |
| 47     | 17.547     |                   | 35805.00      | 7040.78     | 0.0716     | 0.0716          | 35805.0000         |
| 48     | 17.892     |                   | 21280.00      | 4534.81     | 0.0426     | 0.0426          | 21280.0000         |
| 49     | 18.071     |                   | 18543.50      | 3810.04     | 0.0371     | 0.0371          | 18543.5000         |
| 50     | 18.238     |                   | 8352.00       | 1956.02     | 0.0167     | 0.0167          | 8352.0000          |
| 51     | 18.687     |                   | 8547.50       | 1827.22     | 0.0171     | 0.0171          | 8547.5000          |
| 52     | 19.034     |                   | 32078.00      | 4022.71     | 0.0642     | 0.0642          | 32078.0000         |
| 53     | 19.310     |                   | 12346.00      | 2792.25     | 0.0247     | 0.0247          | 12346.0000         |
|        | 19.458     |                   | 4576.50       | 1130.70     | 0.0092     | 0.0092          | 4576.5000          |
|        | 19.708     |                   | 45144.50      | 9209.49     | 0.0903     | 0.0903          | 45144.5000         |
| 56     | 20.165     |                   | 49347.00      | 11530.13    | 0.0987     | 0.0987          | 49347.0000         |
| 57     | 20.344     |                   | 37929.00      | 7039.82     | 0.0759     | 0.0759          | 37929.0000         |
| 58     | 20.564     |                   | 5531.50       | 1371.22     | 0.0111     | 0.0111          | 5531.5000          |
| 59     | 20.794     |                   | 48107.00      | 9158.04     | 0.0962     | 0.0962          | 48107.0000         |
| 60     | 20.998     |                   | 5462.50       | 1294.27     | 0.0109     | 0.0109          | 5462.5000          |
| 61     | 21.150     |                   | 20649.00      | 4380.60     | 0.0413     | 0.0413          | 20649.0000         |
| 62     | 21.532     |                   | 14577.00      | 2915.12     | 0.0292     | 0.0292          | 14577.0000         |
| 63     | 21.777     |                   | 44195.50      | 5319.59     | 0.0884     | 0.0884          | 44195.5000         |
| 64     | 22.228     |                   | 183626.00     | 17974.86    | 0.3673     | 0.3673          | 1.8363e+05         |
| 65     | 22.492     |                   | 31002.00      | 6032.88     | 0.0620     | 0.0620          | 31002.0000         |
| 66     | 22.688     |                   | 26188.50      | 3864.06     | 0.0524     | 0.0524          | 26188.5000         |
| 67     | 23.134     |                   | 8711.00       | 1495.20     | 0.0174     | 0.0174          | 8711.0000          |
| 68     | 23.675     |                   | 50213.50      | 8599.24     | 0.1004     | 0.1004          | 50213.5000         |
| 69     | 23.937     |                   | 775416.00     | 136082.20   | 1.5508     | 1.5508          | 7.7542e+05         |
| 70     | 24.308     |                   | 83785.00      | 14674.31    | 0.1676     | 0.1676          | 83785.0000         |
| 71     | 25.631     |                   | 19292.00      | 3827.33     | 0.0386     | 0.0386          | 19292.0000         |
| 72     | 25.822     |                   | 66341.00      | 10255.90    | 0.1327     | 0.1327          | 66341.0000         |
| 73     | 26.815     |                   | 7502.00       | 1275.80     | 0.0150     | 0.0150          | 7502.0000          |
| 74     | 27.880     |                   | 191094.00     | 23055.60    | 0.3822     | 0.3822          | 1.9109e+05         |
| 75     | 29.726     |                   | 5960.00       | 912.24      | 0.0119     | 0.0119          | 5960.0000          |
| 76     | 29.882     |                   | 12072.00      | 1816.57     | 0.0241     | 0.0241          | 12072.0000         |
| 77     | 30.432     |                   | 25241.00      | 2847.79     | 0.0505     | 0.0505          | 25241.0000         |
| 78     | 31.517     |                   | 58525.00      | 5122.27     | 0.1171     | 0.1171          | 58525.0000         |
| 79     | 32.122     |                   | 19985.00      | 2147.05     | 0.0400     | 0.0400          | 19985.0000         |
| 80     | 34.289     |                   | 4446.50       | 1267.34     | 0.0089     | 0.0089          | 4446.5000          |
|        |            |                   | 7561858.50    | 1.544e+06   | 24.8365    | 24.8365         | 7.5619e+06         |

## Missing Component Report

| Component         | Expected Retention (Sample File) |
|-------------------|----------------------------------|
| 2,4-D             | 7.480                            |
| PENTACHLOROPHENOL | 10.300                           |
| SILVEX            | 11.320                           |
| 2,4-DB            | 11.780                           |
|                   | 13.920                           |

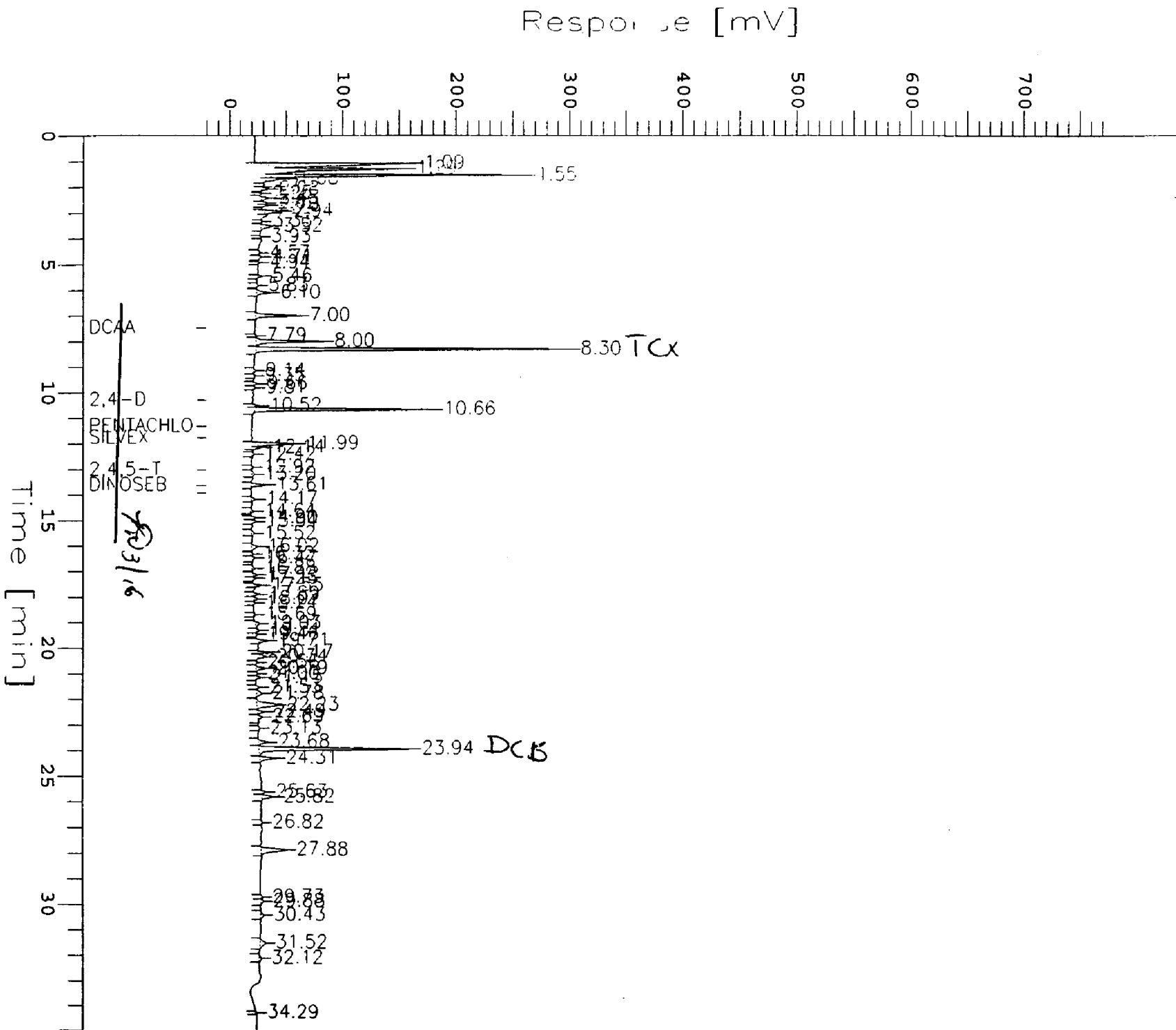


Sample Name : L950626-6 STRT  
FileName : c:\2700\hps690\RB33036.raw  
Method : 515A.ins  
Start Time : 0.00 min  
Scale Factor: -1.0

End Time : 35.00 min  
Plot Offset: -21 mV

Sample #: 36  
Date : 3/13/95 06:42 PM  
Time of Injection: 3/13/95  
Low Point : -20.91 mV  
Plot Scale: 800.0 mV

Page 1 of 1  
06:06 PM  
High Point : 779.09 mV



Software Version: 3.3 <4811>

Sample Name : L950626-7

Time : 3/13/95 03:39 PM

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Sample Number: 3132

Study : 515.1

Operator : KMW

Instrument : HP5890

Channel : A A/D mV Range : 1000

AutoSampler : NONE

k/Vial : 0/0

Interface Serial #: 8055910402 Data Acquisition Time: 3/13/95 03:04 PM

Delay Time : 0.00 min.

End Time : 35.00 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\HP5890\HA30031A.RAW

Result File : C:\2700\HP5890\HA30031A.RST

Instrument File: c:\2700\methseqs\515A.ins

Process File : 515A

Sample File : HB515A2

Sequence File : C:\2700\METHSEQS\0310HB.seq

Inj. Volume : 1 ul

Area Reject : 0.000000

Sample Amount : 1.0000

Dilution Factor : 1.00

# DEFAULT REPORT

| Peak # | Time [min] | Area [uV*sec] | Height [uV] | Area [%] | Norm. Area [%] | BL | Area/Height [sec] |
|--------|------------|---------------|-------------|----------|----------------|----|-------------------|
| 1      | 0.205      | 840.00        | 93.99       | 2e-03    | 1.9925e-03     | B  | 8.9372            |
| 2      | 1.104      | 1947652.55    | 346932.94   | 4.62     | 4.62           | B  | 5.6139            |
| 3      | 1.317      | 862159.57     | 164358.35   | 2.05     | 2.05           | V  | 5.2456            |
| 4      | 1.435      | 248161.88     | 66310.37    | 0.59     | 0.59           | V  | 3.7424            |
| 5      | 1.632      | 2514839.00    | 593947.65   | 5.97     | 5.97           | B  | 4.2341            |
| 6      | 1.932      | 12097.00      | 4979.13     | 0.03     | 0.03           | B  | 2.4295            |
| 7      | 2.046      | 52920.50      | 18736.50    | 0.13     | 0.13           | B  | 2.8245            |
| 8      | 2.240      | 23388.00      | 7990.42     | 0.06     | 0.06           | B  | 2.9270            |
| 9      | 2.432      | 35221.00      | 7140.68     | 0.08     | 0.08           | B  | 4.9324            |
|        | 2.566      | 4716.50       | 2202.13     | 0.01     | 0.01           | B  | 2.1418            |
|        | 2.670      | 36892.50      | 10773.26    | 0.09     | 0.09           | B  | 3.4244            |
| 12     | 2.920      | 24860.22      | 6582.53     | 0.06     | 0.06           | B  | 3.7767            |
| 13     | 3.032      | 19647.78      | 6143.98     | 0.05     | 0.05           | V  | 3.1979            |
| 14     | 3.257      | 1562.54       | 519.38      | 4e-03    | 3.7064e-03     | B  | 3.0085            |
| 15     | 3.349      | 7027.96       | 1520.51     | 0.02     | 0.02           | V  | 4.6221            |
| 16     | 3.504      | 9091.00       | 3006.01     | 0.02     | 0.02           | B  | 3.0243            |
| 17     | 3.726      | 10980.20      | 2420.13     | 0.03     | 0.03           | B  | 4.5370            |
| 18     | 3.854      | 3745.80       | 573.82      | 9e-03    | 8.8851e-03     | V  | 6.5278            |
| 19     | 4.128      | 977.00        | 200.29      | 2e-03    | 2.3175e-03     | B  | 4.8780            |
| 20     | 4.322      | 10208.00      | 2808.83     | 0.02     | 0.02           | B  | 3.6343            |
| 21     | 4.466      | 3890.62       | 965.00      | 9e-03    | 9.2287e-03     | B  | 4.0317            |
| 22     | 4.587      | 21497.54      | 5431.25     | 0.05     | 0.05           | V  | 3.9581            |
| 23     | 4.751      | 7315.85       | 1792.51     | 0.02     | 0.02           | V  | 4.0813            |
| 24     | 4.962      | 10952.26      | 1455.54     | 0.03     | 0.03           | B  | 7.5246            |
| 25     | 5.116      | 4430.74       | 724.24      | 0.01     | 0.01           | V  | 6.1178            |
| 26     | 5.290      | 4102.32       | 846.87      | 1e-02    | 9.7308e-03     | B  | 4.8441            |
| 27     | 5.410      | 59271.18      | 14921.11    | 0.14     | 0.14           | V  | 3.9723            |
| 28     | 5.768      | 24619.00      | 3512.69     | 0.06     | 0.06           | B  | 7.0086            |
| 29     | 6.039      | 5734.67       | 777.18      | 0.01     | 0.01           | B  | 7.3788            |
| 30     | 6.236      | 60035.30      | 13701.33    | 0.14     | 0.14           | V  | 4.3817            |
| 31     | 6.344      | 80870.70      | 14009.01    | 0.19     | 0.19           | V  | 5.7728            |
| 32     | 6.540      | 363586.00     | 85646.45    | 0.86     | 0.86           | V  | 4.2452            |
| 33     | 6.822      | 24232.00      | 2089.54     | 0.06     | 0.06           | E  | 11.5968           |
| 34     | 7.011      | 8698.19       | 1311.93     | 0.02     | 0.02           | V  | 6.6301            |
| 35     | 7.191      | 11125.42      | 1598.61     | 0.03     | 0.03           | V  | 6.9594            |
| 36     | 7.312      | 22120.69      | 3490.26     | 0.05     | 0.05           | V  | 6.3378            |
| 37     | 7.605      | 2000376.86    | 456062.80   | 4.74     | 4.74           | V  | 4.3862            |
| 38     | 7.957      | 17373.00      | 2442.33     | 0.04     | 0.04           | E  | 7.1133            |
| 39     | 8.135      | 10050.93      | 1615.83     | 0.02     | 0.02           | V  | 6.2203            |
| 40     | 8.340      | 34231.00      | 4566.18     | 0.08     | 0.08           | V  | 7.4966            |
| 41     | 8.546      | 1486.25       | 312.48      | 4e-03    | 3.5254e-03     | V  | 4.7563            |
| 42     | 8.816      | 15822.50      | 2946.67     | 0.04     | 0.04           | B  | 5.3696            |
| 43     | 9.261      | 77232.40      | 13047.96    | 0.18     | 0.18           | B  | 5.9191            |
|        | 9.392      | 47256.00      | 9837.75     | 0.11     | 0.11           | V  | 4.8035            |
| 45     | 9.587      | 108816.00     | 22117.60    | 0.26     | 0.26           | V  | 4.9199            |
| 46     | 9.823      | 1293005.70    | 289129.53   | 3.07     | 3.07           | V  | 4.4721            |
| 47     | 10.054     | 27256.00      | 4253.47     | 0.06     | 0.06           | V  | 6.4079            |
| 48     | 10.317     | 21820.40      | 4090.39     | 0.05     | 0.05           | V  | 5.3346            |
| 49     | 10.395     | 22786.00      | 4706.47     | 0.05     | 0.05           | V  | 4.8414            |

906337.16

TCM

A122

322

| Peak # | Time [min] | Area [uV*sec] | Height [uV] | Area [%] | Norm. Area [%] | BL | Area/Height [sec] |
|--------|------------|---------------|-------------|----------|----------------|----|-------------------|
| 50     | 10.844     | 10852.60      | 1687.45     | 0.03     | 0.03           | B  | 6.4314            |
| 51     | 11.020     | 240636.05     | 50406.61    | 0.57     | 0.57           | V  | 4.7739            |
| 52     | 11.199     | 2217.00       | 496.98      | 5e-03    | 5.2588e-03     | E  | 4.4609            |
|        | 11.340     | 6889.42       | 1497.46     | 0.02     | 0.02           | V  | 4.6007            |
|        | 11.458     | 39720.93      | 7552.76     | 0.09     | 0.09           | V  | 5.2591            |
| 55     | 11.723     | 83540.75      | 16429.99    | 0.20     | 0.20           | B  | 5.0846            |
| 56     | 11.915     | 122705.25     | 20839.17    | 0.29     | 0.29           | V  | 5.8882            |
| 57     | 12.333     | 116246.41     | 15076.04    | 0.28     | 0.28           | B  | 7.7107            |
| 58     | 12.639     | 556885.11     | 100699.30   | 1.32     | 1.32           | V  | 5.5302            |
| 59     | 12.900     | 5926.00       | 1214.92     | 0.01     | 0.01           | E  | 4.8777            |
| 60     | 12.967     | 4594.97       | 1234.56     | 0.01     | 0.01           | V  | 3.7220            |
| 61     | 13.138     | 260131.51     | 40499.31    | 0.62     | 0.62           | V  | 6.4231            |
| 62     | 13.512     | 187542.50     | 27921.50    | 0.44     | 0.44           | B  | 6.7168            |
| 63     | 13.883     | 173004.17     | 38808.09    | 0.41     | 0.41           | B  | 4.4579            |
| 64     | 13.944     | 282223.83     | 41058.76    | 0.67     | 0.67           | V  | 6.8737            |
| 65     | 14.305     | 2182.00       | 424.82      | 5e-03    | 5.1758e-03     | B  | 5.1363            |
| 66     | 14.496     | 3749.00       | 795.62      | 9e-03    | 8.8927e-03     | B  | 4.7121            |
| 67     | 14.813     | 292821.00     | 44454.97    | 0.69     | 0.69           | B  | 6.5869            |
| 68     | 15.015     | 4821.00       | 1569.01     | 0.01     | 0.01           | E  | 3.0726            |
| 69     | 15.155     | 99015.00      | 22845.41    | 0.23     | 0.23           | B  | 4.3341            |
| 70     | 15.437     | 1159817.00    | 253170.37   | 2.75     | 2.75           | B  | 4.5812            |
| 71     | 15.753     | 48196.50      | 9103.05     | 0.11     | 0.11           | B  | 5.2945            |
| 72     | 15.844     | 84624.50      | 17507.93    | 0.20     | 0.20           | V  | 4.8335            |
| 73     | 16.257     | 496617.00     | 50822.97    | 1.18     | 1.18           | B  | 9.7715            |
| 74     | 16.682     | 29341.50      | 6322.38     | 0.07     | 0.07           | B  | 4.6409            |
| 75     | 16.876     | 126790.75     | 26777.33    | 0.30     | 0.30           | B  | 4.7350            |
| 76     | 17.004     | 74679.00      | 13860.11    | 0.18     | 0.18           | V  | 5.3881            |
| 77     | 17.111     | 21931.25      | 5989.16     | 0.05     | 0.05           | V  | 3.6618            |
| 78     | 17.386     | 2409.00       | 595.79      | 6e-03    | 5.7142e-03     | B  | 4.0434            |
| 79     | 17.635     | 65837.67      | 12090.55    | 0.16     | 0.16           | B  | 5.4454            |
| 80     | 17.832     | 150477.00     | 21372.99    | 0.36     | 0.36           | V  | 7.0405            |
| 81     | 18.108     | 113405.00     | 23058.98    | 0.27     | 0.27           | V  | 4.9180            |
| 82     | 18.171     | 142226.33     | 24279.05    | 0.34     | 0.34           | V  | 5.8580            |
| 83     | 18.504     | 311987.00     | 53529.69    | 0.74     | 0.74           | B  | 5.8283            |
| 84     | 18.767     | 17566.00      | 4460.51     | 0.04     | 0.04           | B  | 3.9381            |
| 85     | 19.042     | 254401.50     | 41762.08    | 0.60     | 0.60           | B  | 6.0917            |
| 86     | 19.339     | 226000.68     | 39795.95    | 0.54     | 0.54           | V  | 5.6790            |
| 87     | 19.608     | 89510.61      | 11280.35    | 0.21     | 0.21           | V  | 7.9351            |
| 88     | 19.819     | 326973.39     | 52782.14    | 0.78     | 0.78           | V  | 6.1948            |
| 89     | 20.019     | 32424.00      | 4131.73     | 0.08     | 0.08           | E  | 7.8476            |
| 90     | 20.263     | 181566.38     | 24303.87    | 0.43     | 0.43           | V  | 7.4707            |
| 91     | 20.438     | 145064.60     | 23421.37    | 0.34     | 0.34           | V  | 6.1937            |
| 92     | 20.553     | 179137.03     | 25792.16    | 0.42     | 0.42           | V  | 6.9454            |
| 93     | 20.849     | 73830.43      | 10760.72    | 0.18     | 0.18           | V  | 6.8611            |
| 94     | 21.037     | 686012.68     | 86389.07    | 1.63     | 1.63           | V  | 7.9410            |
| 95     | 21.241     | 211031.81     | 34891.14    | 0.50     | 0.50           | V  | 6.0483            |
| 96     | 21.384     | 160405.72     | 25697.04    | 0.38     | 0.38           | V  | 6.2422            |
| 97     | 21.518     | 258315.64     | 35044.93    | 0.61     | 0.61           | V  | 7.3710            |
| 98     | 21.730     | 48341.85      | 9708.13     | 0.11     | 0.11           | V  | 4.9795            |
| 99     | 21.920     | 166079.30     | 15531.17    | 0.39     | 0.39           | V  | 10.6933           |
| 100    | 22.050     | 140513.75     | 15830.54    | 0.33     | 0.33           | V  | 8.8761            |
| 101    | 22.281     | 357770.26     | 45654.76    | 0.85     | 0.85           | V  | 7.8364            |
| 102    | 22.486     | 279174.97     | 33848.68    | 0.66     | 0.66           | V  | 8.2477            |
| 103    | 22.605     | 166661.03     | 21634.06    | 0.40     | 0.40           | V  | 7.7036            |
| 104    | 22.772     | 94307.26      | 15838.56    | 0.22     | 0.22           | V  | 5.9543            |
| 105    | 23.020     | 381967.89     | 29814.57    | 0.91     | 0.91           | V  | 12.8115           |
| 106    | 23.264     | 680796.67     | 80042.72    | 1.61     | 1.61           | V  | 8.5054            |
| 107    | 23.540     | 560678.02     | 30763.98    | 1.33     | 1.33           | V  | 18.2251           |
| 108    | 23.968     | 2169127.64    | 342929.43   | 5.15     | 5.15           | V  | 6.3253            |
| 109    | 24.181     | 143273.00     | 22082.23    | 0.34     | 0.34           | E  | 6.4882            |
| 110    | 24.337     | 295485.92     | 36892.29    | 0.70     | 0.70           | V  | 8.0094            |
| 111    | 24.495     | 604593.60     | 69994.32    | 1.43     | 1.43           | V  | 8.6378            |
| 112    | 25.027     | 746122.76     | 27754.92    | 1.77     | 1.77           | V  | 26.8825           |
| 113    | 25.452     | 673765.29     | 32250.27    | 1.60     | 1.60           | V  | 20.8918           |
| 114    | 25.564     | 216340.22     | 31236.22    | 0.51     | 0.51           | V  | 6.9259            |
| 115    | 25.739     | 341838.94     | 36639.63    | 0.81     | 0.81           | V  | 9.3298            |
| 116    | 25.852     | 309746.83     | 35666.22    | 0.73     | 0.73           | V  | 8.6846            |
| 117    | 25.982     | 388504.64     | 33131.38    | 0.92     | 0.92           | V  | 11.7262           |
| 118    | 26.249     | 416591.40     | 32695.02    | 0.99     | 0.99           | V  | 12.7417           |
| 119    | 26.513     | 983755.28     | 84115.42    | 2.33     | 2.33           | V  | 11.6953           |
|        | 26.724     | 668473.21     | 48469.46    | 1.59     | 1.59           | V  | 13.7916           |
|        | 27.062     | 1079014.51    | 33787.68    | 2.56     | 2.56           | V  | 31.9352           |
| 122    | 27.722     | 1150607.87    | 38189.70    | 2.73     | 2.73           | V  | 30.1288           |
| 123    | 28.344     | 559883.26     | 32584.32    | 1.33     | 1.33           | V  | 17.1826           |
| 124    | 28.714     | 786451.67     | 36152.37    | 1.87     | 1.87           | V  | 21.7538           |
| 125    | 28.893     | 1454255.58    | 42764.06    | 3.45     | 3.45           | V  | 34.0065           |
| 126    | 29.688     | 929719.84     | 35678.15    | 2.21     | 2.21           | V  | 26.0585           |

18474/08.11

323

| Peak # | Time [min] | Area [uV*sec] | Height [uV] | Area [%] | Norm. Area [%] | Area BL | Area/Height [sec] |
|--------|------------|---------------|-------------|----------|----------------|---------|-------------------|
| 127    | 30.225     | 1013005.37    | 40176.43    | 2.40     | 2.40           | V       | 25.2139           |
| 128    | 30.457     | 448983.74     | 37792.59    | 1.07     | 1.07           | V       | 11.8802           |
| 29     | 30.665     | 1076677.85    | 37817.81    | 2.55     | 2.55           | V       | 28.4701           |
|        | 31.179     | 539741.22     | 34367.74    | 1.28     | 1.28           | V       | 15.7049           |
|        | 31.523     | 984754.74     | 34189.60    | 2.34     | 2.34           | V       | 28.8028           |
| 132    | 32.313     | 1707798.88    | 36130.39    | 4.05     | 4.05           | V       | 47.2677           |
| 133    | 32.913     | 1174267.65    | 33530.51    | 2.79     | 2.79           | V       | 35.0209           |
| 134    | 34.321     | 25769.61      | 2485.12     | 0.06     | 0.06           | V       | 10.3696           |
| 135    | 34.593     | 8999.58       | 855.11      | 0.02     | 0.02           | V       | 10.5244           |
| 136    | 34.921     | 888.43        | 245.65      | 2e-03    | 2.1074e-03     | V       | 3.6167            |
|        |            | 42157998.50   | 5.198e+06   | 100.00   | 100.00         |         |                   |

## Missing Component Report

| Component | Expected Retention (Sample File) |
|-----------|----------------------------------|
| 2,4-DB    | 15.350                           |



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Software Version: 3.3 <4B11>  
Sample Name : L950626-7  
Sample Number: 31-32 *HW*  
Operator : KMW *3/14*

Time : 3/13/95 03:40 PM  
Study : 515.1

325

Instrument : HP5890  
AutoSampler : NONE  
ck/Vial : 0/0

Channel : B A/D mV Range : 1000

Interface Serial # : 8055910402 Data Acquisition Time: 3/13/95 03:04 PM  
Delay Time : 0.00 min.  
End Time : 35.00 min.  
Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\HP5890\HB30031A.RAW  
Result File : C:\2700\HP5890\HB30031A.RST  
Instrument File: c:\2700\methseqs\515A.ins  
Process File : 515B  
Sample File : HB515B  
Sequence File : C:\2700\METHSEQS\0310HB.seq

Inj. Volume : 1 ul  
Sample Amount : 1.0000

Area Reject : 200.000000  
Dilution Factor : 1.00

Instrument Control Method:  
Instrument name : HP5890

Channel Parameters:

Inlet Parameters:

Inlet A :

Inlet B :

Detector Parameters:

Detector A :

Detector B :

Heated Zones:

Temperature Program:

Total run time : 35.00 min

Timed Events:

There are no timed events in the method

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*8090 PCB I am 3/16/95*

HP5890 REPORT FOR ~~515.1~~ *HERBICIDES* DRINKING WATER ANALYSIS.

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NORTHEASTERN ANALYTICAL CORP. GAS CHROMATOGRAPHY LAB.

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| Peak # | Time [min] | Component Name | Area [uV*sec] | Height [uV] | Raw Amount | Adjusted Amount | Calibration Factor |
|--------|------------|----------------|---------------|-------------|------------|-----------------|--------------------|
| 1      | 1.092      |                | 466097.00     | 87591.88    | 0.9322     | 0.9322          | 4.6610e+05         |
| 2      | 1.292      |                | 358540.50     | 105976.41   | 0.7171     | 0.7171          | 3.5854e+05         |
| 3      | 1.550      |                | 1594168.55    | 419075.00   | 3.1883     | 3.1883          | 1.5942e+06         |
| 4      | 1.685      |                | 206540.45     | 46423.64    | 0.4131     | 0.4131          | 2.0654e+05         |
| 5      | 1.930      |                | 42991.50      | 8492.36     | 0.0860     | 0.0860          | 42991.5000         |
| 6      | 2.079      |                | 23065.00      | 8326.37     | 0.0461     | 0.0461          | 23065.0000         |
| 7      | 2.258      |                | 13979.00      | 5294.87     | 0.0280     | 0.0280          | 13979.0000         |
| 8      | 2.410      |                | 39217.00      | 8600.98     | 0.0784     | 0.0784          | 39217.0000         |
| 9      | 2.555      |                | 2118.00       | 792.54      | 0.0042     | 0.0042          | 2118.0000          |
| 10     | 2.708      |                | 35901.00      | 8764.80     | 0.0718     | 0.0718          | 35901.0000         |
| 11     | 2.840      |                | 5112.50       | 2151.76     | 0.0102     | 0.0102          | 5112.5000          |
| 12     | 2.922      |                | 13781.00      | 3760.00     | 0.0276     | 0.0276          | 13781.0000         |
| 13     | 3.105      |                | 21576.00      | 4375.74     | 0.0432     | 0.0432          | 21576.0000         |
| 14     | 3.328      |                | 7771.00       | 1958.30     | 0.0155     | 0.0155          | 7771.0000          |
| 15     | 3.470      |                | 17620.00      | 3988.15     | 0.0352     | 0.0352          | 17620.0000         |
|        | 4.050      |                | 9954.00       | 1190.10     | 0.0199     | 0.0199          | 9954.0000          |
| 17     | 4.620      |                | 152258.00     | 46281.44    | 0.3045     | 0.3045          | 1.5226e+05         |
| 18     | 4.940      |                | 9583.50       | 3221.83     | 0.0192     | 0.0192          | 9583.5000          |
| 19     | 5.074      |                | 6843.00       | 2033.01     | 0.0137     | 0.0137          | 6843.0000          |
| 20     | 5.272      |                | 9019.50       | 1269.28     | 0.0180     | 0.0180          | 9019.5000          |
| 21     | 5.453      |                | 4727.00       | 1896.33     | 0.0095     | 0.0095          | 4727.0000          |

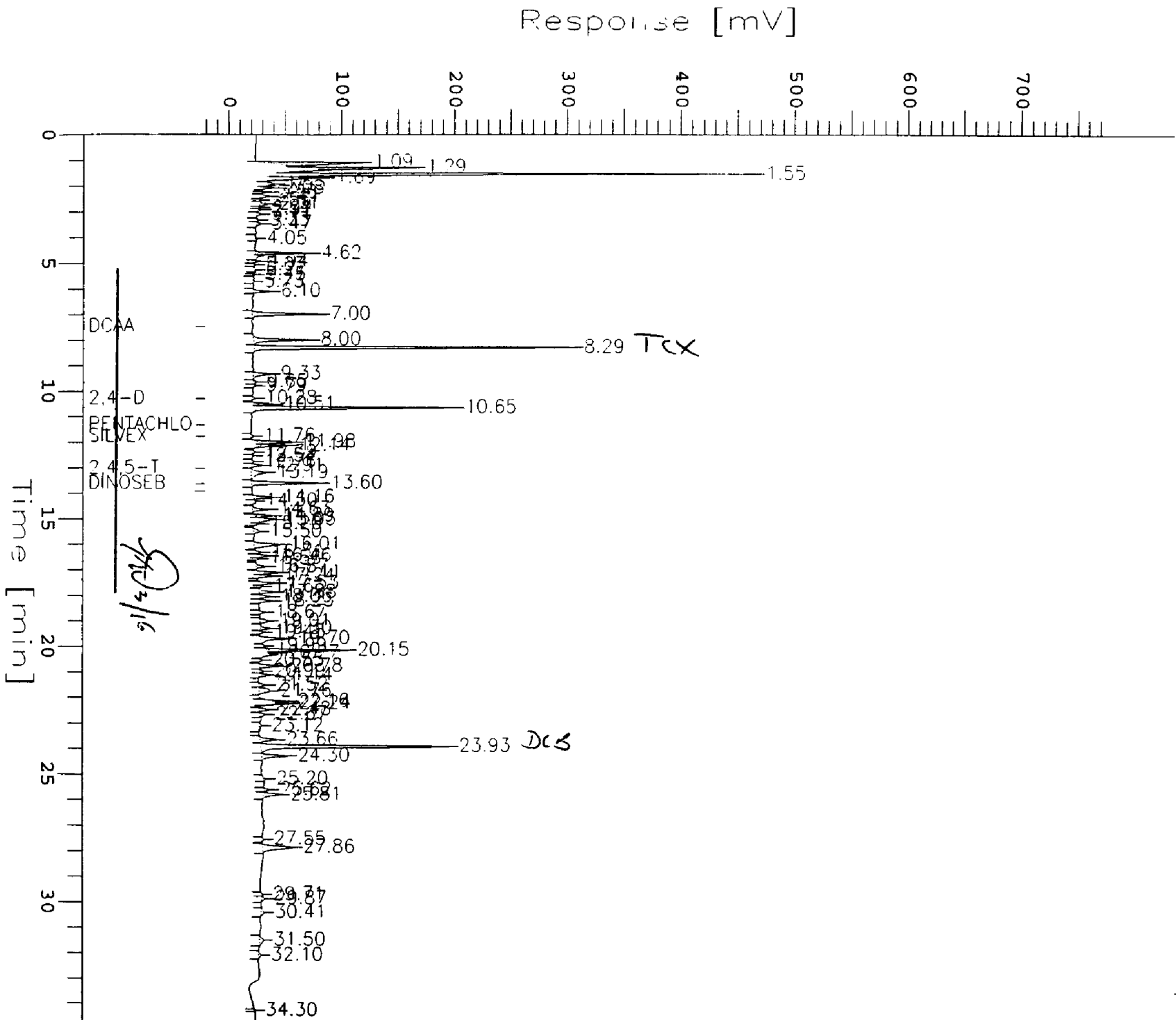
| Peak # | Time [min] | Component Name    | Area [uV*sec] | Height [uV] | Raw Amount | Adjusted Amount | Calibration Factor |
|--------|------------|-------------------|---------------|-------------|------------|-----------------|--------------------|
| 22     | 5.726      |                   | 12488.00      | 1009.88     | 0.0250     | 0.0250          | 12488.0000         |
| 23     | 6.102      |                   | 62363.00      | 15480.69    | 0.1247     | 0.1247          | 62363.0000         |
| 24     | 6.996      |                   | 292701.00     | 60950.27    | 0.5854     | 0.5854          | 2.9270e+05         |
| 0      | 7.480      | DCAA              | 0.00          | 0.00        | 0.0000     | 0.0000          | 0.0000             |
| 25     | 7.997      |                   | 263999.00     | 51015.18    | 0.5280     | 0.5280          | 2.6400e+05         |
| 26     | 8.293      |                   | 1321384.00    | 289538.75   | 2.6428     | 2.6428          | 1.3214e+06         |
| 27     | 9.331      |                   | 93347.00      | 15858.31    | 0.1867     | 0.1867          | 93347.0000         |
| 28     | 9.647      |                   | 14555.00      | 3153.26     | 0.0291     | 0.0291          | 14555.0000         |
| 29     | 9.794      |                   | 10144.50      | 2666.85     | 0.0203     | 0.0203          | 10144.5000         |
| 30     | 10.284     | 2,4-D             | 15102.00      | 3206.41     | 4.2815     | 4.2815          | 15102.0000         |
| 31     | 10.513     |                   | 59263.00      | 14439.45    | 0.1185     | 0.1185          | 59263.0000         |
| 32     | 10.651     |                   | 800864.00     | 174340.96   | 1.6017     | 1.6017          | 8.0086e+05         |
| 0      | 11.320     | PENTACHLOROPHENOL | 0.00          | 0.00        | 0.0000     | 0.0000          | 0.0000             |
| 33     | 11.761     | SILVEX            | 12307.00      | 2372.90     | 0.7824     | 0.7824          | 12307.0000         |
| 34     | 11.984     |                   | 153241.50     | 31916.26    | 0.3065     | 0.3065          | 1.5324e+05         |
| 35     | 12.135     |                   | 110813.00     | 25421.69    | 0.2216     | 0.2216          | 1.1081e+05         |
| 36     | 12.391     |                   | 11683.50      | 2380.55     | 0.0234     | 0.0234          | 11683.5000         |
| 37     | 12.537     |                   | 5858.00       | 1508.61     | 0.0117     | 0.0117          | 5858.0000          |
| 38     | 12.763     |                   | 9491.50       | 2182.35     | 0.0190     | 0.0190          | 9491.5000          |
| 39     | 12.914     | 2,4,5-TV          | 43100.00      | 9496.54     | 2.4775     | 2.4775          | 43100.0000         |
| 40     | 13.191     |                   | 118799.00     | 13850.93    | 0.2376     | 0.2376          | 1.1880e+05         |
| 41     | 13.598     | DINSEB            | 309061.00     | 61441.30    | 40.8793    | 40.8793         | 3.0906e+05         |
| 0      | 13.920     | 2,4-DB            | 0.00          | 0.00        | 0.0000     | 0.0000          | 0.0000             |
| 42     | 14.158     |                   | 87329.00      | 17961.79    | 0.1747     | 0.1747          | 87329.0000         |
| 43     | 14.300     |                   | 12738.00      | 1482.62     | 0.0255     | 0.0255          | 12738.0000         |
| 44     | 14.631     |                   | 71171.00      | 14623.01    | 0.1423     | 0.1423          | 71171.0000         |
| 45     | 14.886     |                   | 65041.50      | 14589.70    | 0.1301     | 0.1301          | 65041.5000         |
| 46     | 15.028     |                   | 82227.50      | 13507.77    | 0.1645     | 0.1645          | 82227.5000         |
| 47     | 15.198     |                   | 5081.00       | 2053.10     | 0.0102     | 0.0102          | 5081.0000          |
| 48     | 15.502     |                   | 43246.00      | 5781.02     | 0.0865     | 0.0865          | 43246.0000         |
| 49     | 16.007     |                   | 171640.00     | 23145.24    | 0.3433     | 0.3433          | 1.7164e+05         |
| 50     | 16.313     |                   | 20937.50      | 4832.39     | 0.0419     | 0.0419          | 20937.5000         |
| 51     | 16.455     |                   | 46873.00      | 10913.41    | 0.0937     | 0.0937          | 46873.0000         |
| 52     | 16.564     |                   | 3819.00       | 1583.04     | 0.0076     | 0.0076          | 3819.0000          |
| 53     | 16.871     |                   | 53549.00      | 9852.64     | 0.1071     | 0.1071          | 53549.0000         |
| 54     | 17.109     |                   | 84803.00      | 18398.68    | 0.1696     | 0.1696          | 84803.0000         |
| 55     | 17.244     |                   | 48521.50      | 11954.03    | 0.0970     | 0.0970          | 48521.5000         |
| 56     | 17.533     |                   | 76587.00      | 15556.97    | 0.1532     | 0.1532          | 76587.0000         |
| 57     | 17.657     |                   | 7395.00       | 2509.84     | 0.0148     | 0.0148          | 7395.0000          |
| 58     | 17.878     |                   | 68772.00      | 13807.08    | 0.1375     | 0.1375          | 68772.0000         |
| 59     | 18.059     |                   | 45281.00      | 9562.03     | 0.0906     | 0.0906          | 45281.0000         |
| 60     | 18.226     |                   | 53734.50      | 11698.60    | 0.1075     | 0.1075          | 53734.5000         |
| 61     | 18.674     |                   | 24885.50      | 5154.28     | 0.0498     | 0.0498          | 24885.5000         |
| 62     | 19.008     |                   | 55161.00      | 8356.26     | 0.1103     | 0.1103          | 55161.0000         |
| 63     | 19.298     |                   | 42997.50      | 8987.20     | 0.0860     | 0.0860          | 42997.5000         |
| 64     | 19.447     |                   | 15355.50      | 3685.78     | 0.0307     | 0.0307          | 15355.5000         |
| 65     | 19.695     |                   | 143343.00     | 24586.91    | 0.2867     | 0.2867          | 1.4334e+05         |
| 66     | 19.985     |                   | 9312.50       | 2348.40     | 0.0186     | 0.0186          | 9312.5000          |
| 67     | 20.150     |                   | 308701.00     | 68973.86    | 0.6174     | 0.6174          | 3.0870e+05         |
| 68     | 20.266     |                   | 3195.00       | 1243.47     | 0.0064     | 0.0064          | 3195.0000          |
| 69     | 20.552     |                   | 9809.00       | 2525.26     | 0.0196     | 0.0196          | 9809.0000          |
| 70     | 20.781     |                   | 98419.00      | 19045.69    | 0.1968     | 0.1968          | 98419.0000         |
| 71     | 20.989     |                   | 13163.00      | 3164.58     | 0.0263     | 0.0263          | 13163.0000         |
| 72     | 21.137     |                   | 46888.00      | 10296.26    | 0.0938     | 0.0938          | 46888.0000         |
| 73     | 21.519     |                   | 30159.00      | 6142.54     | 0.0603     | 0.0603          | 30159.0000         |
| 74     | 21.758     |                   | 97108.00      | 9716.24     | 0.1942     | 0.1942          | 97108.0000         |
| 75     | 22.157     |                   | 47711.00      | 9470.20     | 0.0954     | 0.0954          | 47711.0000         |
| 76     | 22.236     |                   | 30838.00      | 9896.87     | 0.0617     | 0.0617          | 30838.0000         |
| 77     | 22.479     |                   | 46072.00      | 9091.93     | 0.0921     | 0.0921          | 46072.0000         |
| 78     | 22.669     |                   | 30260.00      | 5130.52     | 0.0605     | 0.0605          | 30260.0000         |
| 79     | 23.116     |                   | 18107.00      | 1987.85     | 0.0362     | 0.0362          | 18107.0000         |
| 80     | 23.662     |                   | 82986.00      | 14667.87    | 0.1660     | 0.1660          | 82986.0000         |
| 81     | 23.925     |                   | 985404.00     | 170474.18   | 1.9708     | 1.9708          | 9.8540e+05         |
| 82     | 24.295     |                   | 134755.00     | 23382.23    | 0.2695     | 0.2695          | 1.3476e+05         |
| 83     | 25.199     |                   | 13996.00      | 2588.71     | 0.0280     | 0.0280          | 13996.0000         |
| 84     | 25.618     |                   | 27022.50      | 5438.09     | 0.0540     | 0.0540          | 27022.5000         |
| 85     | 25.807     |                   | 95479.00      | 14905.42    | 0.1910     | 0.1910          | 95479.0000         |
| 86     | 27.552     |                   | 10830.00      | 1663.64     | 0.0217     | 0.0217          | 10830.0000         |
| 87     | 27.864     |                   | 230926.00     | 27286.92    | 0.4619     | 0.4619          | 2.3093e+05         |
| 88     | 29.708     |                   | 5906.00       | 933.55      | 0.0118     | 0.0118          | 5906.0000          |
| 9      | 29.870     |                   | 18149.00      | 2687.69     | 0.0363     | 0.0363          | 18149.0000         |
| 9      | 30.411     |                   | 29132.00      | 3247.11     | 0.0583     | 0.0583          | 29132.0000         |
| 91     | 31.504     |                   | 44061.00      | 3560.86     | 0.0881     | 0.0881          | 44061.0000         |
| 92     | 32.099     |                   | 19881.00      | 2146.49     | 0.0398     | 0.0398          | 19881.0000         |
| 93     | 34.295     |                   | 3873.00       | 1092.71     | 0.0077     | 0.0077          | 3873.0000          |
|        |            |                   | 10584060.50   | 2.241e+06   | 68.8297    | 68.8297         | 1.0584e+07         |

Sample Name : L950626-7  
FileName : c:\2700\hp5890\H830031A.raw  
Method : 515A.ins  
Start Time : 0.00 min  
Scale Factor: -1.0

End Time : 35.00 min  
Plot Offset: -21 mV

Sample #: 31  
Date : 3/13/95 03:40 PM  
Time of Injection: 3/13/95  
Low Point: -20.75 mV  
Plot Scale: 800.0 mV

Page 1 of 1  
03:04 PM  
High Point : 779.25 mV





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Software Version: 3.3 <4811>

Sample Name : L95626-8 PCB

Sample Number: 14

Operator : KMW

Time : 3/8/95 06:58 PM

Study : PPPCB

Instrument : HP5890

Channel : A A/D mV Range : 1000

AutoSampler : NONE

Vial : 0/0

Interface Serial # : 8055910402 Data Acquisition Time: 3/8/95 06:24 PM

Delay Time : 0.00 min.

End Time : 33.00 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\HP5890\PA38014.RAW

Result File : C:\2700\HP5890\PA38014.RST

Instrument File: c:\2700\methseqs\HPPESTB.ins

Process File : HPPESTA

Sample File : PESTA058

Sequence File : C:\2700\METHSEQS\0308PCB.SEQ

Inj. Volume : 1 ul

Area Reject : 200.000000

Sample Amount : 1.0000

Dilution Factor : 1.00

Instrument Control Method:

Instrument name : HP5890

Channel Parameters:

Inlet Parameters:

Inlet A :

Inlet B :

Detector Parameters:

Detector A :

Detector B :

Heated Zones:

Temperature Program:

Total run time : 33.00 min

Timed Events:

There are no timed events in the method

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## HP 5890 REPORT FOR PEST/PCB ANALYSIS

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NORTHEASTERN ANALYTICAL CORP. GAS CHROMATOGRAPHY LAB.

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| Peak # | Component Name | Time [min] | Area [uV*sec] | Height [uV] | Raw Amount | Adjusted Amount | Calibration Factor | Delta RT [%] | Cal. Range |
|--------|----------------|------------|---------------|-------------|------------|-----------------|--------------------|--------------|------------|
| 1      |                | 1.094      | 1956533.63    | 281019.60   | 64.4532    | 64.4532         | 1956534            | -----        |            |
| 2      |                | 1.328      | 304264.00     | 58639.19    | 12.8478    | 12.8478         | 304264             | -----        |            |
| 3      |                | 1.431      | 454766.00     | 59550.65    | 17.5484    | 17.5484         | 454766             | -----        |            |
| 4      |                | 1.625      | 1857882.37    | 434199.73   | 61.3720    | 61.3720         | 1857882            | -----        |            |
| 5      |                | 2.039      | 28781.00      | 10642.55    | 4.2436     | 4.2436          | 28781              | -----        |            |
| 6      |                | 2.233      | 45802.00      | 7838.47     | 4.7752     | 4.7752          | 45802              | -----        |            |
| 7      |                | 2.429      | 40624.00      | 6286.24     | 4.6135     | 4.6135          | 40624              | -----        |            |
| 8      |                | 2.665      | 14329.00      | 4857.72     | 3.7922     | 3.7922          | 14329              | -----        |            |
| 9      |                | 2.910      | 13250.00      | 3370.98     | 3.7585     | 3.7585          | 13250              | -----        |            |
| 10     |                | 3.036      | 12333.00      | 1613.53     | 3.7299     | 3.7299          | 12333              | -----        |            |
| 11     |                | 3.497      | 5146.50       | 1474.00     | 3.5054     | 3.5054          | 5146               | -----        |            |
| 12     |                | 3.718      | 9812.00       | 1638.02     | 3.6512     | 3.6512          | 9812               | -----        |            |
| 13     |                | 4.310      | 11264.00      | 2632.72     | 3.6965     | 3.6965          | 11264              | -----        |            |
| 14     |                | 4.573      | 5668.00       | 1491.67     | 3.5217     | 3.5217          | 5668               | -----        |            |
| 15     |                | 4.942      | 4994.00       | 1227.06     | 3.5007     | 3.5007          | 4994               | -----        |            |
| 16     |                | 5.268      | 20141.50      | 5286.92     | 3.9738     | 3.9738          | 20142              | -----        |            |
| 17     |                | 5.387      | 4289.00       | 958.57      | 3.4787     | 3.4787          | 4289               | -----        |            |
| 18     |                | 5.992      | 12822.00      | 2562.85     | 3.7452     | 3.7452          | 12822              | -----        |            |
| 19     |                | 6.318      | 60947.00      | 10667.11    | 5.2483     | 5.2483          | 60947              | -----        |            |
| 20     |                | 7.289      | 11679.00      | 2806.45     | 3.7095     | 3.7095          | 11679              | -----        |            |

| Peak # | Component Name      | Time [min]  | Area [uV*sec] | Height [uV] | Raw Amount | Adjusted Amount | Calibration Factor | Delta RT [%] | Cal. Range |
|--------|---------------------|-------------|---------------|-------------|------------|-----------------|--------------------|--------------|------------|
| 21     | TCMX                | 7.575       | 2018274.00    | 478720.26   | 94.7964    | 0.0000          | 2018274            | 0.3176       |            |
| 22     |                     | 8.313       | 13335.50      | 2975.82     | 3.7612     | 3.7612          | 13336              | -----        |            |
| 23     |                     | 9.149       | 6365.50       | 1831.26     | 3.5435     | 3.5435          | 6366               | -----        |            |
| 24     |                     | 9.392       | 19081.00      | 4040.47     | 3.9407     | 3.9407          | 19081              | -----        |            |
| 25     |                     | 9.646       | 48373.50      | 9376.84     | 4.8555     | 4.8555          | 48374              | -----        |            |
| 26     |                     | 9.918       | 22720.50      | 5148.40     | 4.0543     | 4.0543          | 22720              | -----        |            |
| 27     |                     | 10.289      | 6430.00       | 1297.03     | 3.5455     | 3.5455          | 6430               | -----        |            |
| 28     |                     | 10.592      | 23174.50      | 4354.86     | 4.0685     | 4.0685          | 23174              | -----        |            |
| 29     | APLHA BHC           | 10.877      | 25941.00      | 5477.96     | 4.1549     | 4.1549          | 25941              | 0.7371       | -          |
| 30     |                     | 11.688      | 6788.00       | 1342.08     | 2.8992     | 2.8992          | 6788               | -----        |            |
| 31     |                     | 11.867      | 37211.00      | 5570.44     | 3.8996     | 3.8996          | 37211              | -----        |            |
| 32     | GAMMA BHC           | 12.228      | 6142.50       | 1219.32     | 2.8780     | 2.8780          | 6142               | -0.2376      | -          |
| 33     |                     | 12.621      | 22639.00      | 2347.54     | 1.8054     | 1.8054          | 22639              | -----        |            |
| 0      | HEPTACHLOR          | 12.914      | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 0      | ALDRIN              | 13.842      | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 34     |                     | 14.887      | 26005.50      | 1887.80     | 2.0893     | 2.0893          | 26006              | -----        |            |
| 0      | BETA BHC            | 15.144      | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 35     |                     | 15.387      | 811128.00     | 164288.86   | 58.5838    | 58.5838         | 811128             | -----        |            |
| 0      | DELTA BHC           | 15.903      | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 36     | HEPTACHLOR EXPOXIDE | 16.280      | 16327.00      | 2250.26     | 1.1960     | 1.1960          | 16327              | -0.6143      | -          |
| 37     |                     | 16.978      | 9127.00       | 1691.65     | 1.1163     | 1.1163          | 9127               | -----        |            |
| 0      | ENDOSULFAN I        | 17.321      | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 0      | GAMMA CHLORDANE     | 17.568      | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 38     | ALPHA CHLORDANE     | 17.821      | 5672.00       | 951.49      | 0.6009     | 0.6009          | 5672               | 0.1960       | -          |
| 0      | DDE                 | 18.101      | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 0      | DIELDRIN            | 18.601      | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 39     |                     | 19.012      | 5902.50       | 1268.64     | 2.2693     | 2.2693          | 5902               | -----        |            |
| 0      | ENDRIN              | 19.336      | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 40     | DDD                 | 20.974      | 15099.00      | 2340.93     | 4.0517     | 4.0517          | 15099              | 0.2327       | -          |
| 0      | ENDOSULFAN II       | 21.090      | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 0      | DDT                 | 21.451      | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 41     | ENDRIN ALDEHYDE     | 22.469      | 50606.50      | 7043.10     | 5.3189     | 5.3189          | 50606              | -0.5919      | -          |
| 42     |                     | 23.237      | 11314.00      | 2007.91     | -10.4114   | -10.4114        | 11314              | -----        |            |
| 0      | METHOXYCHLOR        | 23.531      | 80990.00      | 9330.83     | 6.7481     | 6.7481          | 80990              | -0.3976      | -          |
| 0      | ENDOSULFAN SULFATE  | 23.726      | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 44     | DBC                 | 23.938      | 1779073.00    | 339122.12   | 126.4953   | 126.4953        | 1779073            | 0.1432       |            |
| 45     |                     | 24.460      | 5847.00       | 1175.83     | 0.9685     | 0.9685          | 5847               | -----        |            |
| 0      | ENDRIN KETONE       | 25.019      | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 6      |                     | 27.476      | 161569.00     | 5453.38     | -4.9916    | -4.9916         | 161569             | -----        |            |
| 0      | DCB                 | 28.203      | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| <hr/>  |                     |             |               |             |            |                 |                    |              |            |
|        |                     | 10110464.50 | 1.961e+06     | 551.4029    | 456.6066   |                 |                    |              |            |

## Missing Component Report

| Component          | Expected Retention (Sample File) |
|--------------------|----------------------------------|
| HEPTACHLOR         | 12.914                           |
| ALDRIN             | 13.842                           |
| BETA BHC           | 15.144                           |
| DELTA BHC          | 15.903                           |
| ENDOSULFAN I       | 17.321                           |
| GAMMA CHLORDANE    | 17.568                           |
| DDE                | 18.101                           |
| DIELDRIN           | 18.601                           |
| ENDRIN             | 19.336                           |
| ENDOSULFAN II      | 21.090                           |
| DDT                | 21.451                           |
| ENDOSULFAN SULFATE | 23.726                           |
| ENDRIN KETONE      | 25.019                           |
| DCB                | 28.203                           |

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HP5890 DETECTOR A

=====

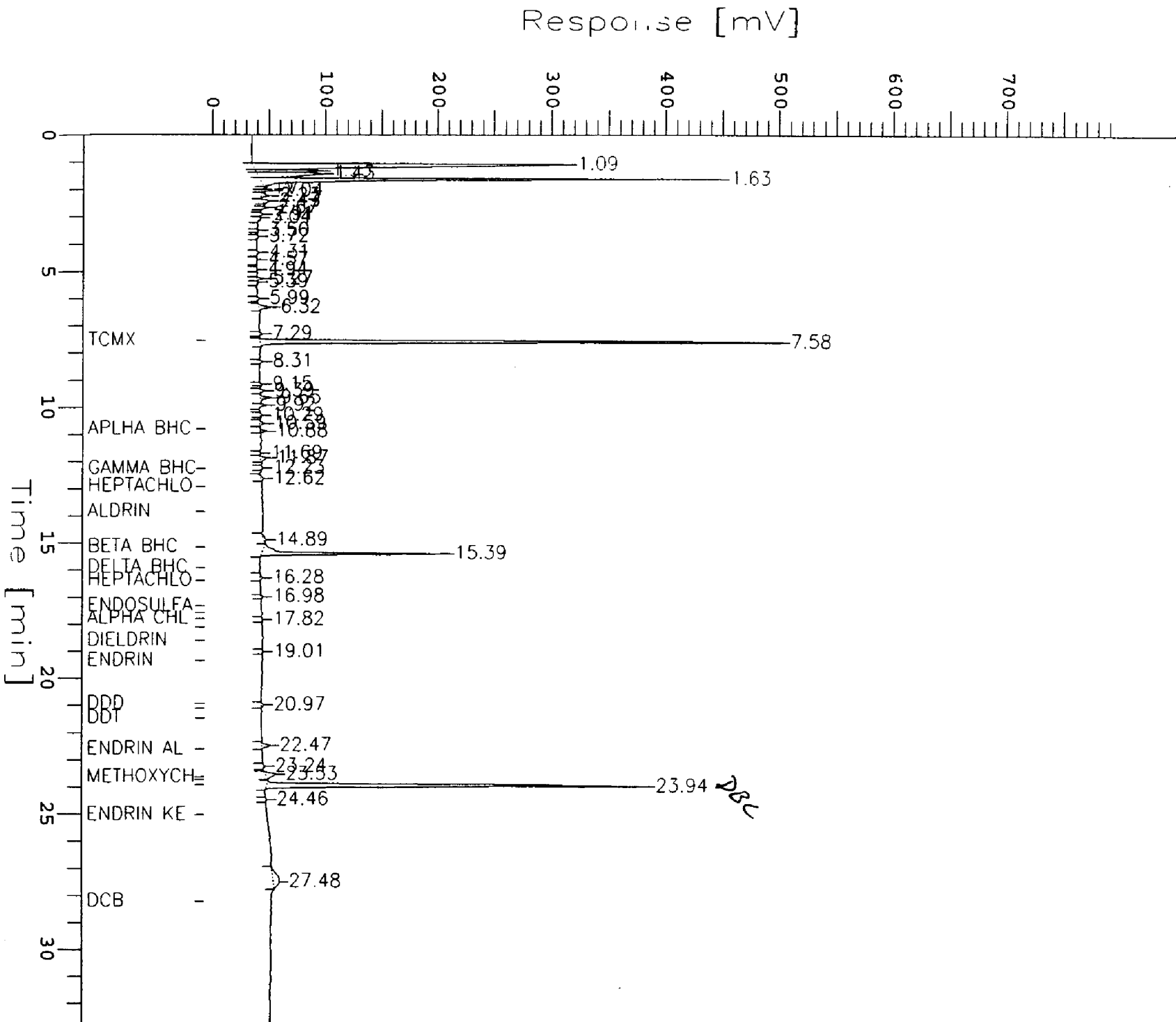
Report Stored in ASCII File: C:\2700\HP5890\PA38014.TXT

Sample Name : L95626-8 PCB  
FileName : c:\2700\hps5890\PA38014.raw  
Method : HPPEST8A.ins  
Start Time : 0.00 min  
Scale Factor: -1.0

End Time : 33.00 min  
Plot Offset: -5 mV

Sample #: 14  
Date : 3/8/95 06:58 PM  
Time of Injection: 3/8/95  
Low Point : -5.44 mV  
Plot Scale: 800.0 mV

High Point : 794.57 mV



```

=====
Software Version: 3.3 <4811>
Sample Name : L95626-8 PCB
Sample Number: 14
Operator : KMW
Time : 3/8/95 06:58 PM
Study : PPPCB

```

```

Instrument : HP5890
AutoSampler : NONE
Inlet/Vial : 0/0
Channel : B A/D mV Range : 1000

```

```

Interface Serial # : 8055910402 Data Acquisition Time: 3/8/95 06:24 PM
Delay Time : 0.00 min.
End Time : 33.00 min.
Sampling Rate : 1.0000 pts/sec

```

```

Raw Data File : C:\2700\HP5890\PB38014.RAW
Result File : C:\2700\HP5890\PB38014.RST
Instrument File: c:\2700\methseqs\HPPESTB.ins
Process File : HPPESTB
Sample File : PESTB058
Sequence File : C:\2700\METHSEQS\0308PCB.SEQ

```

```

Inj. Volume : 1 ul
Sample Amount : 1.0000
Area Reject : 200.000000
Dilution Factor : 1.00

```

```

Instrument Control Method:
Instrument name : HP5890

```

Channel Parameters:

Inlet Parameters:

Inlet A : Inlet B :

Detector Parameters:

Detector A : Detector B :

Heated Zones:

Temperature Program:

Total run time : 33.00 min

Timed Events:

There are no timed events in the method

## HP5890 REPORT FOR PEST/PCB ANALYSIS

NORTHEASTERN ANALYTICAL CORP. GAS CHROMATOGRAPHY LAB.

| Peak # | Component Name | Time [min] | Area [uV*sec] | Height [uV] | Raw Amount | Adjusted Amount | Calibration Factor | Cal. Range |
|--------|----------------|------------|---------------|-------------|------------|-----------------|--------------------|------------|
| 1      |                | 1.091      | 754132.16     | 102281.53   | 51.1017    | 51.1017         | 754132             |            |
| 2      |                | 1.288      | 196205.49     | 41193.07    | 9.6184     | 9.6184          | 196205             |            |
| 3      |                | 1.397      | 225943.27     | 48055.85    | 11.8295    | 11.8295         | 225943             |            |
| 4      |                | 1.541      | 1062611.29    | 294262.44   | 74.0380    | 74.0380         | 1062611            |            |
| 5      |                | 1.680      | 32675.29      | 15044.13    | -2.5405    | -2.5405         | 32675              |            |
| 6      |                | 1.922      | 16702.00      | 3771.20     | -3.7282    | -3.7282         | 16702              |            |
| 7      |                | 2.068      | 58563.00      | 11795.33    | -0.6157    | -0.6157         | 58563              |            |
| 8      |                | 2.249      | 5291.50       | 2295.25     | -4.5766    | -4.5766         | 5292               |            |
| 9      |                | 2.418      | 123392.00     | 18911.81    | 4.2045     | 4.2045          | 123392             |            |
| 10     |                | 2.695      | 13325.00      | 3966.55     | -3.9792    | -3.9792         | 13325              |            |
| 11     |                | 2.831      | 2783.00       | 1183.37     | -4.7631    | -4.7631         | 2783               |            |
| 12     |                | 2.921      | 6604.00       | 1997.17     | -4.4790    | -4.4790         | 6604               |            |
| 13     |                | 3.095      | 10325.00      | 2322.80     | -4.2023    | -4.2023         | 10325              |            |
| 14     |                | 3.322      | 5771.50       | 1002.28     | -4.5409    | -4.5409         | 5772               |            |
| 15     |                | 3.927      | 25206.50      | 4834.26     | -3.0958    | -3.0958         | 25207              |            |
|        |                | 4.059      | 38024.00      | 5994.00     | -2.1428    | -2.1428         | 38024              |            |
|        |                | 4.550      | 11156.00      | 1912.14     | -4.1405    | -4.1405         | 11156              |            |
| 18     |                | 5.074      | 25301.50      | 4779.65     | -3.0888    | -3.0888         | 25302              |            |
| 19     |                | 5.763      | 14853.00      | 3255.69     | -3.8656    | -3.8656         | 14853              |            |
| 20     |                | 6.080      | 14335.00      | 2950.40     | -3.9041    | -3.9041         | 14335              |            |
| 21     |                | 7.591      | 19156.00      | 3765.94     | -3.5457    | -3.5457         | 19156              |            |

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| Peak # | Component Name       | Time [min] | Area [uV*sec] | Height [uV] | Raw Amount | Adjusted Amount | Calibration Factor | Cal. Range |
|--------|----------------------|------------|---------------|-------------|------------|-----------------|--------------------|------------|
| 22     |                      | 7.981      | 9852.00       | 1726.24     | -4.2375    | -4.2375         | 9852               |            |
| 23     | TCMX                 | 8.260      | 1504822.00    | 330867.11   | 106.9175   | 106.9175        | 1504822            |            |
| 24     |                      | 8.830      | 19509.50      | 3725.69     | -3.5194    | -3.5194         | 19510              |            |
| 25     |                      | 9.094      | 58835.50      | 12568.29    | -0.5954    | -0.5954         | 58836              |            |
| 6      |                      | 9.300      | 217187.50     | 33003.25    | 11.1785    | 11.1785         | 217188             |            |
| 27     |                      | 9.616      | 12876.00      | 3082.43     | 1.8763     | 1.8763          | 12876              |            |
| 28     |                      | 9.770      | 10953.00      | 2886.40     | 1.7928     | 1.7928          | 10953              |            |
| 29     |                      | 10.466     | 12945.00      | 2414.41     | 1.8793     | 1.8793          | 12945              |            |
| 30     |                      | 10.634     | 21570.00      | 4174.21     | 2.2537     | 2.2537          | 21570              |            |
| 0      | ALPHA BHC            | 10.753     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 31     |                      | 10.950     | 28465.50      | 6255.32     | 2.5531     | 2.5531          | 28466              |            |
| 32     |                      | 11.137     | 9473.00       | 1671.81     | 1.7285     | 1.7285          | 9473               |            |
| 33     |                      | 11.476     | 19813.00      | 2250.10     | 2.1775     | 2.1775          | 19813              |            |
| 34     |                      | 11.976     | 13074.00      | 1459.29     | 1.3313     | 1.3313          | 13074              |            |
| 0      | BETA BHC             | 12.324     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 35     |                      | 12.576     | 27148.00      | 4893.43     | 1.9867     | 1.9867          | 27148              |            |
| 36     |                      | 12.842     | 20131.00      | 1552.56     | 0.1038     | 0.1038          | 20131              |            |
| 37     |                      | 13.067     | 5679.00       | 1316.01     | -0.4346    | -0.4346         | 5679               |            |
| 38     | GAMMA BHC            | 13.302     | 15098.50      | 2454.30     | -0.0837    | -0.0837         | 15099              | -          |
| 0      | DELTA BHC            | 14.214     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 0      | HEPTACHLOR           | 14.534     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 39     |                      | 15.078     | 136773.00     | 19333.45    | 7.9915     | 7.9915          | 136773             |            |
| 40     |                      | 15.478     | 24711.50      | 2372.58     | 78.4850    | 78.4850         | 24712              |            |
| 41     |                      | 15.800     | 11439.00      | 1051.85     | 86.1181    | 86.1181         | 11439              |            |
| 0      | ALDRIN               | 16.123     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 0      | HEPTACHLOR EPOXIDE   | 16.791     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 42     | GAMMA CHLORDANE      | 17.503     | 5153.00       | 1033.35     | -0.0219    | -0.0219         | 5153               | -          |
| 43     | ALPHA CHLORDANE/ENDO | 18.621     | 15573.00      | 1297.77     | -0.5967    | -0.5967         | 15573              | -          |
| 0      | DIELDRIN             | 18.924     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 0      | DDE                  | 19.286     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 44     |                      | 20.109     | 733486.50     | 148228.46   | 62.5493    | 62.5493         | 733487             |            |
| 0      | ENDRIN               | 20.520     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 0      | ENDOSULFAN II        | 21.081     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 0      | DDD                  | 21.479     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 0      | ENDRIN ALDEHYDE      | 22.091     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 0      | ENDOSULFAN SULFATE   | 22.599     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 45     | DDT                  | 23.079     | 17363.50      | 3125.10     | 0.6982     | 0.6982          | 17363              | -          |
| 6      | ENDRIN KETONE        | 23.889     | 1140565.50    | 204222.57   | 91.5700    | 91.5700         | 1140566            |            |
| J      | METHOXYCHLOR         | 25.263     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 0      | DBC                  | 25.626     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 0      | DCB                  | 31.152     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| <hr/>  |                      |            |               |             |            |                 |                    |            |
|        |                      | 6754854.00 | 1.373e+06     | 547.2853    | 547.2853   | 6754854         |                    |            |

## Missing Component Report

| Component          | Expected Retention (Sample File) |
|--------------------|----------------------------------|
| ALPHA BHC          | 10.753                           |
| BETA BHC           | 12.324                           |
| DELTA BHC          | 14.214                           |
| HEPTACHLOR         | 14.534                           |
| ALDRIN             | 16.123                           |
| HEPTACHLOR EPOXIDE | 16.791                           |
| DIELDRIN           | 18.924                           |
| DDE                | 19.286                           |
| ENDRIN             | 20.520                           |
| ENDOSULFAN II      | 21.081                           |
| DDD                | 21.479                           |
| ENDRIN ALDEHYDE    | 22.091                           |
| ENDOSULFAN SULFATE | 22.599                           |
| METHOXYCHLOR       | 25.263                           |
| DBC                | 25.626                           |
| DCB                | 31.152                           |

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HP5890 DETECTOR B

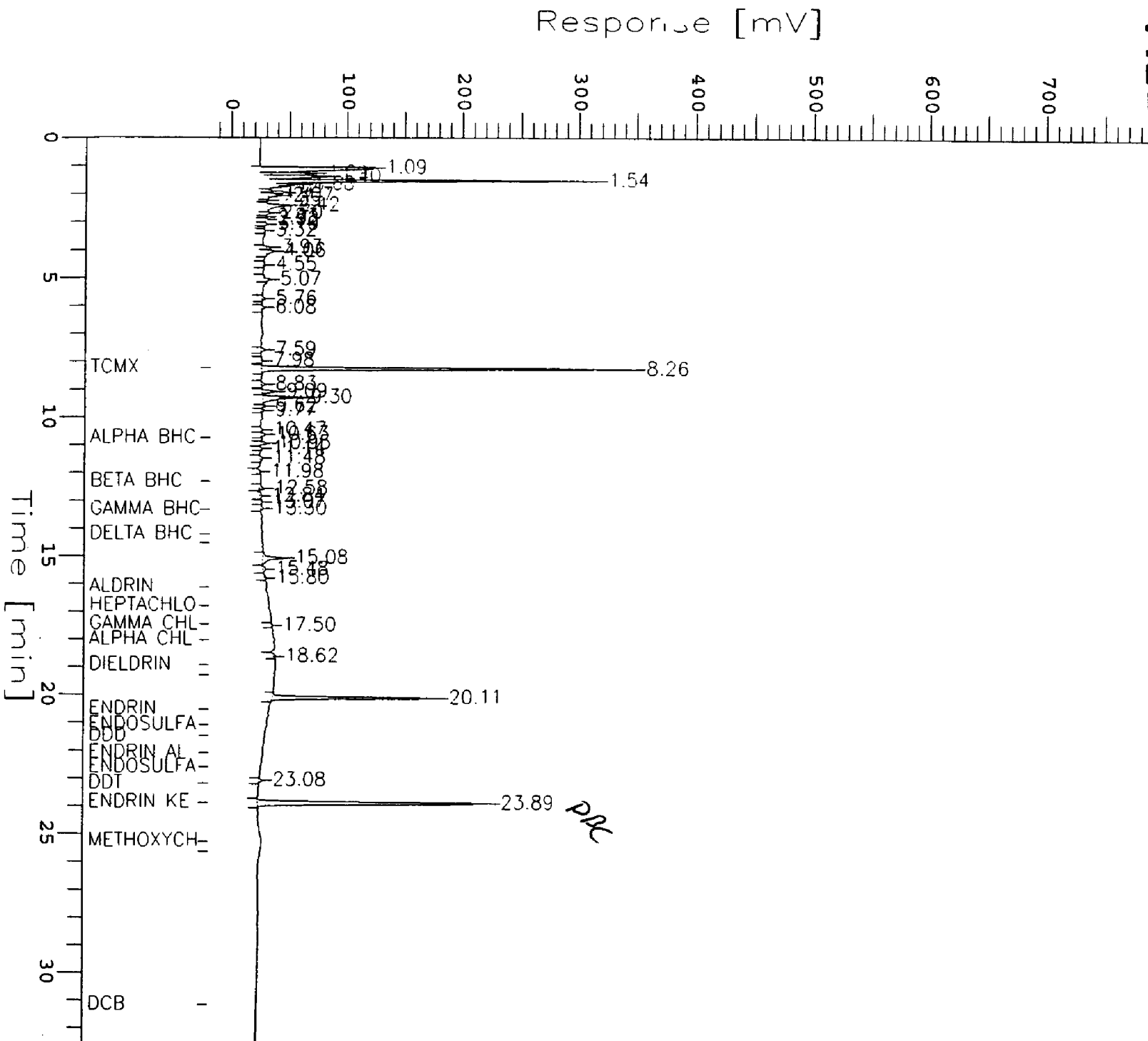
=====

port Stored in ASCII File: C:\2700\HP5890\PB38014.TX0

Sample Name : L95626-8 PCB  
FileName : c:\2700\hps5890\p838014.raw  
Method : HPPEST8.ins  
Start Time : 0.00 min  
Scale Factor: -1.0  
End Time : 33.00 min  
Plot Offset: -17 mV

Sample #: 14  
Date : 3/8/95 06:58 PM  
Time of Injection: 3/8/95 06:24 PM  
Low Point : -16.90 mV  
Plot Scale: 800.0 mV  
High Point : 783.10 mV

FILE COPY



Software Version: 3.3 <4811>

Sample Name : L950626-9

Sample Number: 33-4811

Operator : KMW

Time : 3/13/95 04:52 PM

Study : 515.1

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Instrument : HP5890

Channel : A A/D mV Range : 1000

AutoSampler : NONE

ick/Vial : 0/0

Interface Serial # : 8055910402 Data Acquisition Time: 3/13/95 04:17 PM

Delay Time : 0.00 min.

End Time : 35.00 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\HP5890\HA30033.RAW

Result File : C:\2700\HP5890\HA30033.RST

Instrument File: c:\2700\methseqs\515A.ins

Process File : 515A

Sample File : HB515A2

Sequence File : C:\2700\METHSEQS\0310HB.seq

Inj. Volume : 1 ul

Area Reject : 0.000000

Sample Amount : 1.0000

Dilution Factor : 1.00

# DEFAULT REPORT

| Peak # | Time [min] | Area [uV*sec] | Height [uV] | Area [%] | Norm. Area [%] | Area BL | Area/Height [sec] |
|--------|------------|---------------|-------------|----------|----------------|---------|-------------------|
| 1      | 0.215      | 935.00        | 97.70       | 5e-03    | 5.4138e-03     | B       | 9.5705            |
| 2      | 1.105      | 2837977.98    | 441173.24   | 16.43    | 16.43          | B       | 6.4328            |
| 3      | 1.313      | 359384.00     | 60223.01    | 2.08     | 2.08           | E       | 5.9676            |
| 4      | 1.429      | 159721.88     | 26871.75    | 0.92     | 0.92           | V       | 5.9439            |
| 5      | 1.631      | 994876.25     | 220934.47   | 5.76     | 5.76           | V       | 4.5030            |
| 6      | 1.939      | 17879.00      | 3699.07     | 0.10     | 0.10           | E       | 4.8334            |
| 7      | 2.042      | 16686.89      | 5359.80     | 0.10     | 0.10           | V       | 3.1133            |
| 8      | 2.241      | 7161.00       | 2202.72     | 0.04     | 0.04           | B       | 3.2510            |
| 9      | 2.392      | 10588.33      | 2307.85     | 0.06     | 0.06           | B       | 4.5880            |
| 10     | 2.496      | 1822.00       | 792.97      | 0.01     | 0.01           | V       | 2.2977            |
| 11     | 2.563      | 1336.67       | 662.55      | 8e-03    | 7.7395e-03     | V       | 2.0175            |
| 12     | 2.667      | 15251.00      | 4071.77     | 0.09     | 0.09           | B       | 3.7455            |
| 13     | 2.920      | 6454.80       | 1803.62     | 0.04     | 0.04           | B       | 3.5788            |
| 14     | 3.031      | 6090.20       | 2057.02     | 0.04     | 0.04           | V       | 2.9607            |
| 15     | 3.348      | 1944.50       | 429.59      | 0.01     | 0.01           | B       | 4.5264            |
| 16     | 3.500      | 2809.36       | 988.83      | 0.02     | 0.02           | B       | 2.8411            |
| 17     | 3.628      | 2015.20       | 453.19      | 0.01     | 0.01           | V       | 4.4467            |
| 18     | 3.724      | 4347.43       | 883.69      | 0.03     | 0.03           | V       | 4.9196            |
| 19     | 3.909      | 2221.00       | 382.55      | 0.01     | 0.01           | B       | 5.8058            |
| 20     | 4.053      | 438.50        | 117.85      | 3e-03    | 2.5390e-03     | B       | 3.7210            |
| 21     | 4.131      | 701.00        | 200.76      | 4e-03    | 4.0589e-03     | B       | 3.4917            |
| 22     | 4.323      | 13374.76      | 2814.53     | 0.08     | 0.08           | B       | 4.7520            |
| 23     | 4.464      | 4147.95       | 738.17      | 0.02     | 0.02           | V       | 5.6192            |
| 24     | 4.587      | 13167.97      | 3019.16     | 0.08     | 0.08           | V       | 4.3615            |
| 25     | 4.746      | 4975.32       | 1142.77     | 0.03     | 0.03           | V       | 4.3537            |
| 26     | 4.955      | 7841.75       | 1074.86     | 0.05     | 0.05           | B       | 7.2956            |
| 27     | 5.107      | 3963.25       | 652.53      | 0.02     | 0.02           | V       | 6.0737            |
| 28     | 5.412      | 73658.27      | 16868.88    | 0.43     | 0.43           | B       | 4.3665            |
| 29     | 5.769      | 24257.93      | 3588.74     | 0.14     | 0.14           | V       | 6.7595            |
| 30     | 6.052      | 2270.80       | 377.82      | 0.01     | 0.01           | V       | 6.0102            |
| 31     | 6.238      | 28774.00      | 6629.93     | 0.17     | 0.17           | B       | 4.3400            |
| 32     | 6.537      | 5354.31       | 3053.63     | 0.03     | 0.03           | B       | 1.7534            |
| 33     | 6.983      | 4974.81       | -3.62e-12   | 0.03     | 0.03           | V       | -1.3755e+15       |
| 34     | 7.314      | 14585.59      | 2501.13     | 0.08     | 0.08           | B       | 5.8316            |
| 35     | 7.607      | 1798148.86    | 406713.18   | 10.41    | 10.41          | V       | 4.4212            |
| 36     | 7.960      | 6774.00       | 911.30      | 0.04     | 0.04           | E       | 7.4333            |
| 37     | 8.132      | 4378.64       | 861.42      | 0.03     | 0.03           | V       | 5.0830            |
| 38     | 8.342      | 29689.41      | 4653.25     | 0.17     | 0.17           | V       | 6.3804            |
| 39     | 8.819      | 11851.00      | 2533.22     | 0.07     | 0.07           | B       | 4.6782            |
| 40     | 9.185      | 17275.62      | 3976.04     | 0.10     | 0.10           | B       | 4.3449            |
| 41     | 9.261      | 24866.85      | 5638.59     | 0.14     | 0.14           | V       | 4.4101            |
| 42     | 9.394      | 32443.38      | 6597.40     | 0.19     | 0.19           | V       | 4.9176            |
| 43     | 9.588      | 93744.00      | 18697.31    | 0.54     | 0.54           | V       | 5.0138            |
| 44     | 9.826      | 286523.00     | 63420.20    | 1.66     | 1.66           | V       | 4.5179            |
| 45     | 10.059     | 5294.15       | 1088.55     | 0.03     | 0.03           | V       | 4.8635            |
| 46     | 10.401     | 20802.50      | 3416.75     | 0.12     | 0.12           | B       | 6.0884            |
| 47     | 10.778     | 2131.00       | 237.27      | 0.01     | 0.01           | B       | 8.9812            |
| 48     | 11.022     | 202889.50     | 42338.16    | 1.17     | 1.17           | B       | 4.7921            |
| 49     | 11.339     | 4066.00       | 956.45      | 0.02     | 0.02           | B       | 4.2511            |

TC+HX

774271.38

A1232

335

| Peak # | Time [min] | Area [uV*sec] | Height [uV] | Area [%] | Norm. Area [%] | Area BL | Area/Height [sec] |
|--------|------------|---------------|-------------|----------|----------------|---------|-------------------|
| 50     | 11.460     | 31089.00      | 5992.75     | 0.18     | 0.18           | V       | 5.1878            |
| 51     | 11.723     | 65463.75      | 13382.67    | 0.38     | 0.38           | B       | 4.8917            |
| 52     | 11.917     | 97372.25      | 17654.34    | 0.56     | 0.56           | V       | 5.5155            |
| 3      | 12.340     | 79702.62      | 11481.32    | 0.46     | 0.46           | B       | 6.9419            |
| 54     | 12.641     | 477637.88     | 82819.60    | 2.77     | 2.77           | V       | 5.7672            |
| 55     | 12.971     | 7429.00       | 891.27      | 0.04     | 0.04           | E       | 8.3353            |
| 56     | 13.143     | 206214.12     | 31622.22    | 1.19     | 1.19           | V       | 6.5212            |
| 57     | 13.515     | 152171.38     | 23257.30    | 0.88     | 0.88           | V       | 6.5430            |
| 58     | 13.946     | 392507.50     | 36248.26    | 2.27     | 2.27           | B       | 10.8283           |
| 59     | 14.813     | 227549.00     | 35667.16    | 1.32     | 1.32           | B       | 6.3798            |
| 60     | 15.013     | 2332.00       | 749.08      | 0.01     | 0.01           | E       | 3.1132            |
| 61     | 15.155     | 82473.00      | 19089.80    | 0.48     | 0.48           | B       | 4.3203            |
| 62     | 15.439     | 745669.00     | 159108.94   | 4.32     | 4.32           | B       | 4.6865            |
| 63     | 15.755     | 38864.82      | 7677.14     | 0.23     | 0.23           | B       | 5.0624            |
| 64     | 15.847     | 83819.44      | 15936.84    | 0.49     | 0.49           | V       | 5.2595            |
| 65     | 15.982     | 5603.00       | 1339.53     | 0.03     | 0.03           | E       | 4.1828            |
| 66     | 16.259     | 415610.75     | 43023.49    | 2.41     | 2.41           | V       | 9.6601            |
| 67     | 16.683     | 25426.00      | 5341.25     | 0.15     | 0.15           | B       | 4.7603            |
| 68     | 16.877     | 95626.26      | 19393.61    | 0.55     | 0.55           | B       | 4.9308            |
| 69     | 17.009     | 47178.91      | 9033.02     | 0.27     | 0.27           | V       | 5.2229            |
| 70     | 17.112     | 20285.83      | 5433.83     | 0.12     | 0.12           | V       | 3.7332            |
| 71     | 17.404     | 515.50        | 136.94      | 3e-03    | 2.9848e-03     | B       | 3.7644            |
| 72     | 17.635     | 40020.62      | 7343.86     | 0.23     | 0.23           | B       | 5.4495            |
| 73     | 17.830     | 103185.94     | 15290.23    | 0.60     | 0.60           | V       | 6.7485            |
| 74     | 18.104     | 95214.53      | 16716.89    | 0.55     | 0.55           | V       | 5.6957            |
| 75     | 18.176     | 79328.91      | 14506.96    | 0.46     | 0.46           | V       | 5.4683            |
| 76     | 18.506     | 233601.00     | 40047.05    | 1.35     | 1.35           | B       | 5.8332            |
| 77     | 18.766     | 13175.00      | 3303.64     | 0.08     | 0.08           | B       | 3.9880            |
| 78     | 19.043     | 184617.72     | 31364.25    | 1.07     | 1.07           | B       | 5.8862            |
| 79     | 19.342     | 145288.95     | 26700.58    | 0.84     | 0.84           | V       | 5.4414            |
| 80     | 19.608     | 42864.66      | 6260.55     | 0.25     | 0.25           | V       | 6.8468            |
| 81     | 19.820     | 206022.17     | 35534.47    | 1.19     | 1.19           | V       | 5.7978            |
| 82     | 20.019     | 2259.00       | 558.09      | 0.01     | 0.01           | E       | 4.0477            |
| 83     | 20.264     | 96094.38      | 15561.70    | 0.56     | 0.56           | B       | 6.1751            |
| 84     | 20.438     | 75078.27      | 13430.17    | 0.43     | 0.43           | V       | 5.5903            |
| 85     | 20.555     | 82513.35      | 15143.14    | 0.48     | 0.48           | V       | 5.4489            |
| 86     | 20.850     | 20433.16      | 4037.41     | 0.12     | 0.12           | B       | 5.0610            |
| 87     | 21.041     | 386997.09     | 56012.47    | 2.24     | 2.24           | V       | 6.9091            |
| 88     | 21.241     | 108988.11     | 20482.09    | 0.63     | 0.63           | V       | 5.3210            |
| 89     | 21.384     | 67861.93      | 12494.88    | 0.39     | 0.39           | V       | 5.4312            |
| 90     | 21.518     | 94436.71      | 19419.61    | 0.55     | 0.55           | V       | 4.8630            |
| 91     | 21.921     | 21760.89      | 3453.29     | 0.13     | 0.13           | B       | 6.3015            |
| 92     | 22.051     | 31758.75      | 4270.57     | 0.18     | 0.18           | V       | 7.4367            |
| 93     | 22.281     | 154346.22     | 25423.77    | 0.89     | 0.89           | V       | 6.0709            |
| 94     | 22.484     | 92775.17      | 13690.89    | 0.54     | 0.54           | V       | 6.7764            |
| 95     | 22.608     | 41132.40      | 6749.01     | 0.24     | 0.24           | V       | 6.0946            |
| 96     | 22.766     | 14088.96      | 2412.37     | 0.08     | 0.08           | V       | 5.8403            |
| 97     | 23.019     | 86402.83      | 10974.35    | 0.50     | 0.50           | V       | 7.8732            |
| 98     | 23.264     | 279355.90     | 45614.89    | 1.62     | 1.62           | V       | 6.1242            |
| 99     | 23.530     | 94488.43      | 8064.17     | 0.55     | 0.55           | V       | 11.7171           |
| 100    | 23.967     | 1510883.72    | 268658.52   | 8.75     | 8.75           | V       | 5.6238            |
| 101    | 24.172     | 11688.00      | 2012.38     | 0.07     | 0.07           | E       | 5.8080            |
| 102    | 24.335     | 73390.36      | 12852.64    | 0.42     | 0.42           | V       | 5.7101            |
| 103    | 24.493     | 210886.87     | 35528.19    | 1.22     | 1.22           | V       | 5.9358            |
| 104    | 25.029     | 71793.12      | 3686.68     | 0.42     | 0.42           | V       | 19.4736           |
| 105    | 25.312     | 43218.11      | 3819.52     | 0.25     | 0.25           | V       | 11.3151           |
| 106    | 25.566     | 85402.50      | 5433.15     | 0.49     | 0.49           | V       | 15.7188           |
| 107    | 25.732     | 58541.42      | 7916.62     | 0.34     | 0.34           | V       | 7.3947            |
| 108    | 25.857     | 106659.78     | 11006.34    | 0.62     | 0.62           | V       | 9.6908            |
| 109    | 26.250     | 19122.44      | 1872.03     | 0.11     | 0.11           | V       | 10.2148           |
| 110    | 26.603     | 89777.62      | 10435.06    | 0.52     | 0.52           | V       | 8.6035            |
| 111    | 27.074     | 9228.37       | 482.20      | 0.05     | 0.05           | B       | 19.1380           |
| 112    | 27.714     | 32414.13      | 4629.04     | 0.19     | 0.19           | V       | 7.0023            |
| 113    | 27.947     | 1837.00       | 450.27      | 0.01     | 0.01           | E       | 4.0797            |
| 114    | 28.690     | 309645.55     | 9380.91     | 1.79     | 1.79           | B       | 33.0081           |
| 115    | 30.238     | 44336.35      | 2617.28     | 0.26     | 0.26           | V       | 16.9399           |
| 116    | 30.473     | 82926.10      | 3075.23     | 0.48     | 0.48           | V       | 26.9658           |
| 117    | 31.492     | 38276.16      | 558.05      | 0.22     | 0.22           | B       | 68.5896           |
| 118    | 31.978     | 124166.48     | 6073.20     | 0.72     | 0.72           | V       | 20.4450           |
| 119    | 32.919     | 946005.87     | 19541.24    | 5.48     | 5.48           | V       | 48.4107           |
| 1      | 34.320     | 12616.00      | 1876.70     | 0.07     | 0.07           | B       | 6.7224            |
|        | 34.918     | 448.50        | 169.16      | 3e-03    | 2.5969e-03     | B       | 2.6513            |

17270761.11 2.812e+06 100.00 100.00

Missing Component Report

1277/29.05

DPC.



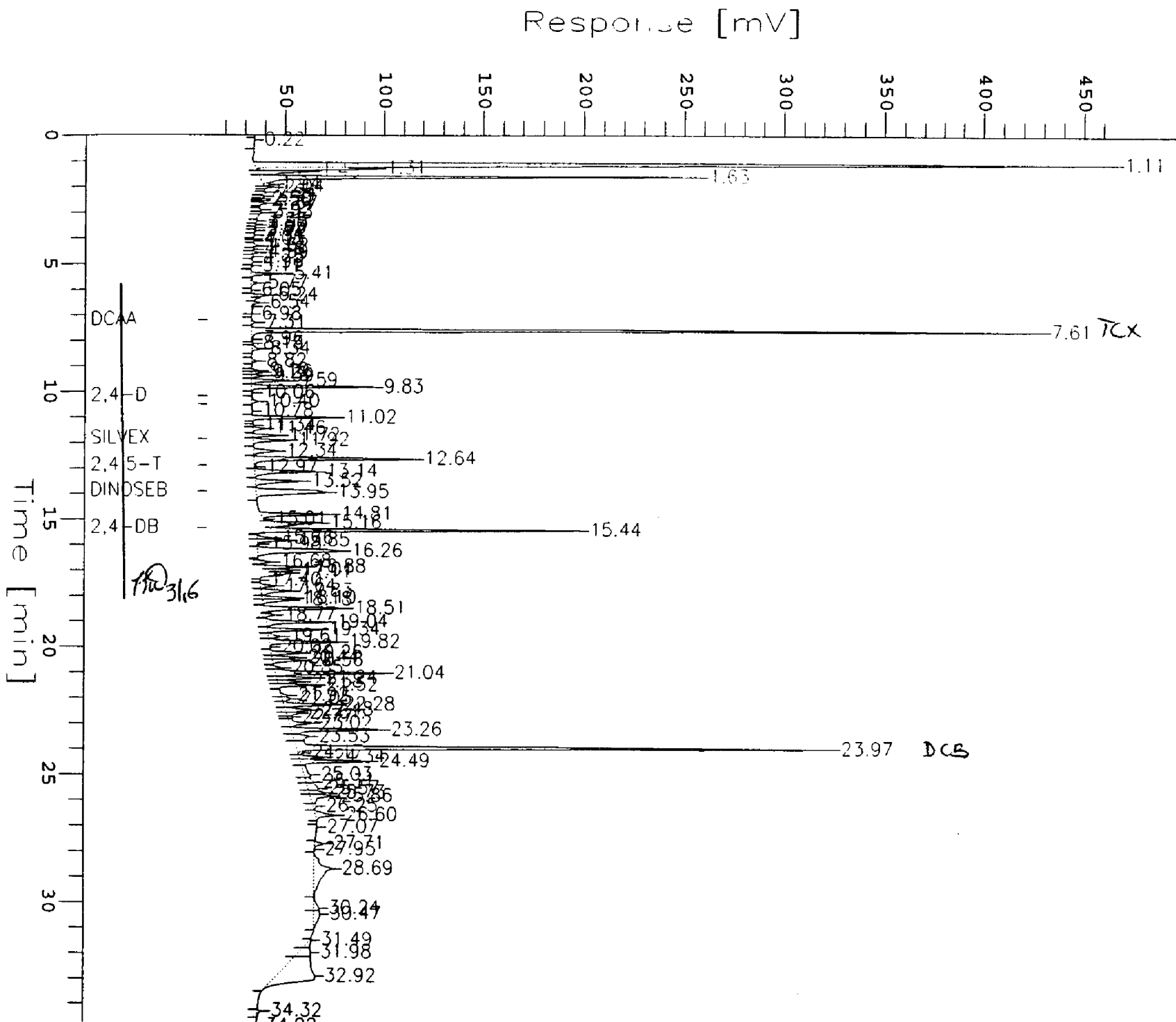
| Component         | Expected Retention (Sample File) |
|-------------------|----------------------------------|
| PENTACHLOROPHENOL | 10.500                           |
| DINOSEB           | 13.900                           |
| 2,4-DB            | 15.350                           |

# Chromatogram

337

Sample Name : L950626-9  
 FileName : c:\2700\hps5890\HA30033.raw  
 Method : 515A.ins  
 Start Time : 0.00 min  
 Scale Factor : 1.0  
 End Time : 35.00 min  
 Plot Offset: 11 mV

Sample #: 33  
 Date : 3/13/95 04:53 PM  
 Time of Injection: 3/13/95  
 Low Point : 11.23 mV  
 Plot Scale: 453.9 mV  
 High Point : 465.13 mV



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Software Version: 3.3 <4811>  
 Sample Name : L950626-2  
 Sample Number: *35 34 31*  
 Operator : KMW

Time : 3/13/95 04:53 PM  
 Study : 515.1

Instrument : HP5890 Channel : B A/D mV Range : 1000  
 AutoSampler : NONE  
 ck/Vial : 0/0

Interface Serial # : 8055910402 Data Acquisition Time: 3/13/95 04:17 PM  
 Delay Time : 0.00 min.  
 End Time : 35.00 min.  
 Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\HP5890\HB30033.RAW  
 Result File : C:\2700\HP5890\HB30033.RST  
 Instrument File: c:\2700\methseqs\515A.ins  
 Process File : 515B  
 Sample File : HB515B  
 Sequence File : C:\2700\METHSEQS\0310HB.seq

Inj. Volume : 1 ul Area Reject : 200.000000  
 Sample Amount : 1.0000 Dilution Factor : 1.00

Instrument Control Method:  
 Instrument name : HP5890

Channel Parameters:

Inlet Parameters:

Inlet A :

Inlet B :

Detector Parameters:

Detector A :

Detector B :

Heated Zones:

Temperature Program:

Total run time : 35.00 min

Timed Events:

There are no timed events in the method

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*8060 9CB 2u 3/14/95*

**HP5890 REPORT FOR ~~515.1~~ HERBICIDES DRINKING WATER ANALYSIS**

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NORTHEASTERN ANALYTICAL CORP. GAS CHROMATOGRAPHY LAB.

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| Peak # | Time [min] | Component Name | Area [uV*sec] | Height [uV] | Raw Amount | Adjusted Amount | Calibration Factor |
|--------|------------|----------------|---------------|-------------|------------|-----------------|--------------------|
| 1      | 1.115      |                | 1079957.47    | 147297.18   | 2.1599     | 2.1599          | 1.0800e+06         |
| 2      | 1.290      |                | 112510.53     | 33526.16    | 0.2250     | 0.2250          | 1.1251e+05         |
| 3      | 1.549      |                | 594367.00     | 154415.30   | 1.1887     | 1.1887          | 5.9437e+05         |
| 4      | 1.683      |                | 46749.00      | 11907.44    | 0.0935     | 0.0935          | 46749.0000         |
| 5      | 1.940      |                | 12063.00      | 2474.33     | 0.0241     | 0.0241          | 12063.0000         |
| 6      | 2.076      |                | 5727.00       | 2177.82     | 0.0115     | 0.0115          | 5727.0000          |
| 7      | 2.255      |                | 4401.00       | 1660.01     | 0.0088     | 0.0088          | 4401.0000          |
| 8      | 2.409      |                | 10809.00      | 2489.66     | 0.0216     | 0.0216          | 10809.0000         |
| 9      | 2.616      |                | 3638.00       | 786.50      | 0.0073     | 0.0073          | 3638.0000          |
| 10     | 2.707      |                | 10022.00      | 2886.70     | 0.0200     | 0.0200          | 10022.0000         |
| 11     | 2.936      |                | 16084.00      | 3754.72     | 0.0322     | 0.0322          | 16084.0000         |
| 12     | 3.484      |                | 8141.00       | 1631.29     | 0.0163     | 0.0163          | 8141.0000          |
| 13     | 4.569      |                | 9020.00       | 1709.99     | 0.0180     | 0.0180          | 9020.0000          |
| 14     | 4.712      |                | 4505.00       | 1087.04     | 0.0090     | 0.0090          | 4505.0000          |
| 15     | 4.940      |                | 4968.00       | 1594.55     | 0.0099     | 0.0099          | 4968.0000          |
|        | 5.453      |                | 7269.00       | 2364.83     | 0.0145     | 0.0145          | 7269.0000          |
| 17     | 6.103      |                | 65217.00      | 15898.30    | 0.1304     | 0.1304          | 65217.0000         |
| 18     | 6.951      |                | 46327.00      | 5664.08     | 0.0927     | 0.0927          | 46327.0000         |
| 0      | 7.480      | DCAA           | 0.00          | 0.00        | 0.0000     | 0.0000          | 0.0000             |
| 19     | 7.996      |                | 25945.00      | 4855.23     | 0.0519     | 0.0519          | 25945.0000         |
| 20     | 8.295      |                | 1159189.50    | 252874.20   | 2.3184     | 2.3184          | 1.1592e+06         |

| Peak # | Time [min] | Component Name    | Area [uv*sec] | Height [uv] | Raw Amount | Adjusted Amount | Calibration Factor |
|--------|------------|-------------------|---------------|-------------|------------|-----------------|--------------------|
| 21     | 9.338      |                   | 23426.50      | 3700.60     | 0.0469     | 0.0469          | 23426.5000         |
| 22     | 9.651      |                   | 16514.00      | 3630.83     | 0.0330     | 0.0330          | 16514.0000         |
| 23     | 9.794      |                   | 8961.00       | 2340.89     | 0.0179     | 0.0179          | 8961.0000          |
| 4      | 10.284     | 2,4-D             | 11770.00      | 2523.87     | 3.3369     | 3.3369          | 11770.0000         |
| 5      | 10.516     |                   | 46096.50      | 10889.31    | 0.0922     | 0.0922          | 46096.5000         |
| 26     | 10.653     |                   | 166133.50     | 37888.16    | 0.3323     | 0.3323          | 1.6613e+05         |
| 0      | 11.320     | PENTACHLOROPHENOL | 0.00          | 0.00        | 0.0000     | 0.0000          | 0.0000             |
| 27     | 11.761     | SILVEX            | 9674.00       | 1882.18     | 0.6150     | 0.6150          | 9674.0000          |
| 28     | 11.988     |                   | 40387.50      | 8642.52     | 0.0808     | 0.0808          | 40387.5000         |
| 29     | 12.135     |                   | 107709.00     | 22773.85    | 0.2154     | 0.2154          | 1.0771e+05         |
| 30     | 12.538     |                   | 5388.00       | 1362.77     | 0.0108     | 0.0108          | 5388.0000          |
| 31     | 12.915     | 2,4,5-T           | 38598.00      | 8068.03     | 2.2187     | 2.2187          | 38598.0000         |
| 32     | 13.191     |                   | 88692.00      | 11396.62    | 0.1774     | 0.1774          | 88692.0000         |
| 33     | 13.599     | DINOSEB           | 257682.00     | 50734.43    | 34.0835    | 34.0835         | 2.5768e+05         |
| 0      | 13.920     | 2,4-DB            | 0.00          | 0.00        | 0.0000     | 0.0000          | 0.0000             |
| 34     | 14.159     |                   | 72483.00      | 15040.99    | 0.1450     | 0.1450          | 72483.0000         |
| 35     | 14.630     |                   | 61739.00      | 12660.24    | 0.1235     | 0.1235          | 61739.0000         |
| 36     | 14.886     |                   | 53537.00      | 11629.55    | 0.1071     | 0.1071          | 53537.0000         |
| 37     | 15.027     |                   | 59038.00      | 11227.91    | 0.1181     | 0.1181          | 59038.0000         |
| 38     | 15.202     |                   | 10417.00      | 2882.24     | 0.0208     | 0.0208          | 10417.0000         |
| 39     | 15.511     |                   | 40445.00      | 6332.07     | 0.0809     | 0.0809          | 40445.0000         |
| 40     | 16.008     |                   | 134690.00     | 17932.29    | 0.2694     | 0.2694          | 1.3469e+05         |
| 41     | 16.313     |                   | 17457.00      | 3937.04     | 0.0349     | 0.0349          | 17457.0000         |
| 42     | 16.457     |                   | 36242.00      | 8415.39     | 0.0725     | 0.0725          | 36242.0000         |
| 43     | 16.871     |                   | 43427.00      | 8092.66     | 0.0869     | 0.0869          | 43427.0000         |
| 44     | 17.110     |                   | 71806.00      | 15580.21    | 0.1436     | 0.1436          | 71806.0000         |
| 45     | 17.244     |                   | 41011.00      | 10078.52    | 0.0820     | 0.0820          | 41011.0000         |
| 46     | 17.535     |                   | 55165.00      | 11168.43    | 0.1103     | 0.1103          | 55165.0000         |
| 47     | 17.657     |                   | 4246.00       | 1517.28     | 0.0085     | 0.0085          | 4246.0000          |
| 48     | 17.880     |                   | 43721.00      | 9436.07     | 0.0874     | 0.0874          | 43721.0000         |
| 49     | 18.060     |                   | 28885.00      | 6288.97     | 0.0578     | 0.0578          | 28885.0000         |
| 50     | 18.228     |                   | 48560.00      | 10284.15    | 0.0971     | 0.0971          | 48560.0000         |
| 51     | 18.674     |                   | 19993.00      | 4096.94     | 0.0400     | 0.0400          | 19993.0000         |
| 52     | 19.023     |                   | 33015.00      | 5247.96     | 0.0660     | 0.0660          | 33015.0000         |
| 53     | 19.299     |                   | 29958.00      | 6495.58     | 0.0599     | 0.0599          | 29958.0000         |
| 54     | 19.447     |                   | 11076.50      | 2661.64     | 0.0222     | 0.0222          | 11076.5000         |
| 55     | 19.696     |                   | 107557.00     | 18273.60    | 0.2151     | 0.2151          | 1.0756e+05         |
| 5      | 20.151     |                   | 191645.50     | 43374.92    | 0.3833     | 0.3833          | 1.9165e+05         |
| 57     | 20.323     |                   | 29229.00      | 5680.94     | 0.0585     | 0.0585          | 29229.0000         |
| 58     | 20.550     |                   | 6987.00       | 1819.54     | 0.0140     | 0.0140          | 6987.0000          |
| 59     | 20.781     |                   | 69311.00      | 13325.09    | 0.1386     | 0.1386          | 69311.0000         |
| 60     | 20.988     |                   | 9476.00       | 2210.96     | 0.0190     | 0.0190          | 9476.0000          |
| 61     | 21.137     |                   | 12522.50      | 2772.26     | 0.0250     | 0.0250          | 12522.5000         |
| 62     | 21.518     |                   | 20358.50      | 4174.87     | 0.0407     | 0.0407          | 20358.5000         |
| 63     | 21.756     |                   | 71149.50      | 7206.77     | 0.1423     | 0.1423          | 71149.5000         |
| 64     | 22.156     |                   | 34664.00      | 6740.58     | 0.0693     | 0.0693          | 34664.0000         |
| 65     | 22.237     |                   | 22315.00      | 7019.44     | 0.0446     | 0.0446          | 22315.0000         |
| 66     | 22.477     |                   | 33334.00      | 6635.75     | 0.0667     | 0.0667          | 33334.0000         |
| 67     | 22.666     |                   | 20767.00      | 3638.41     | 0.0415     | 0.0415          | 20767.0000         |
| 68     | 23.118     |                   | 8197.50       | 1414.50     | 0.0164     | 0.0164          | 8197.5000          |
| 69     | 23.660     |                   | 56948.00      | 10263.49    | 0.1139     | 0.1139          | 56948.0000         |
| 70     | 23.924     |                   | 797418.00     | 138742.06   | 1.5948     | 1.5948          | 7.9742e+05         |
| 71     | 24.293     |                   | 91339.00      | 16233.39    | 0.1827     | 0.1827          | 91339.0000         |
| 72     | 25.616     |                   | 19560.00      | 3961.71     | 0.0391     | 0.0391          | 19560.0000         |
| 73     | 25.807     |                   | 68126.00      | 10709.74    | 0.1363     | 0.1363          | 68126.0000         |
| 74     | 27.914     |                   | 38650.00      | 4518.23     | 0.0773     | 0.0773          | 38650.0000         |
| 75     | 29.704     |                   | 6875.00       | 1007.32     | 0.0138     | 0.0138          | 6875.0000          |
| 76     | 34.295     |                   | 8134.50       | 1323.29     | 0.0163     | 0.0163          | 8134.5000          |
|        |            |                   | 6689417.00    | 1.309e+06   | 52.9974    | 52.9974         | 6.6894e+06         |

## Missing Component Report

| Component         | Expected Retention (Sample File) |
|-------------------|----------------------------------|
| DCAA              | 7.480                            |
| PENTACHLOROPHENOL | 11.320                           |
| 2,4-DB            | 13.920                           |

=====

HP5890 DETECTOR B

=====

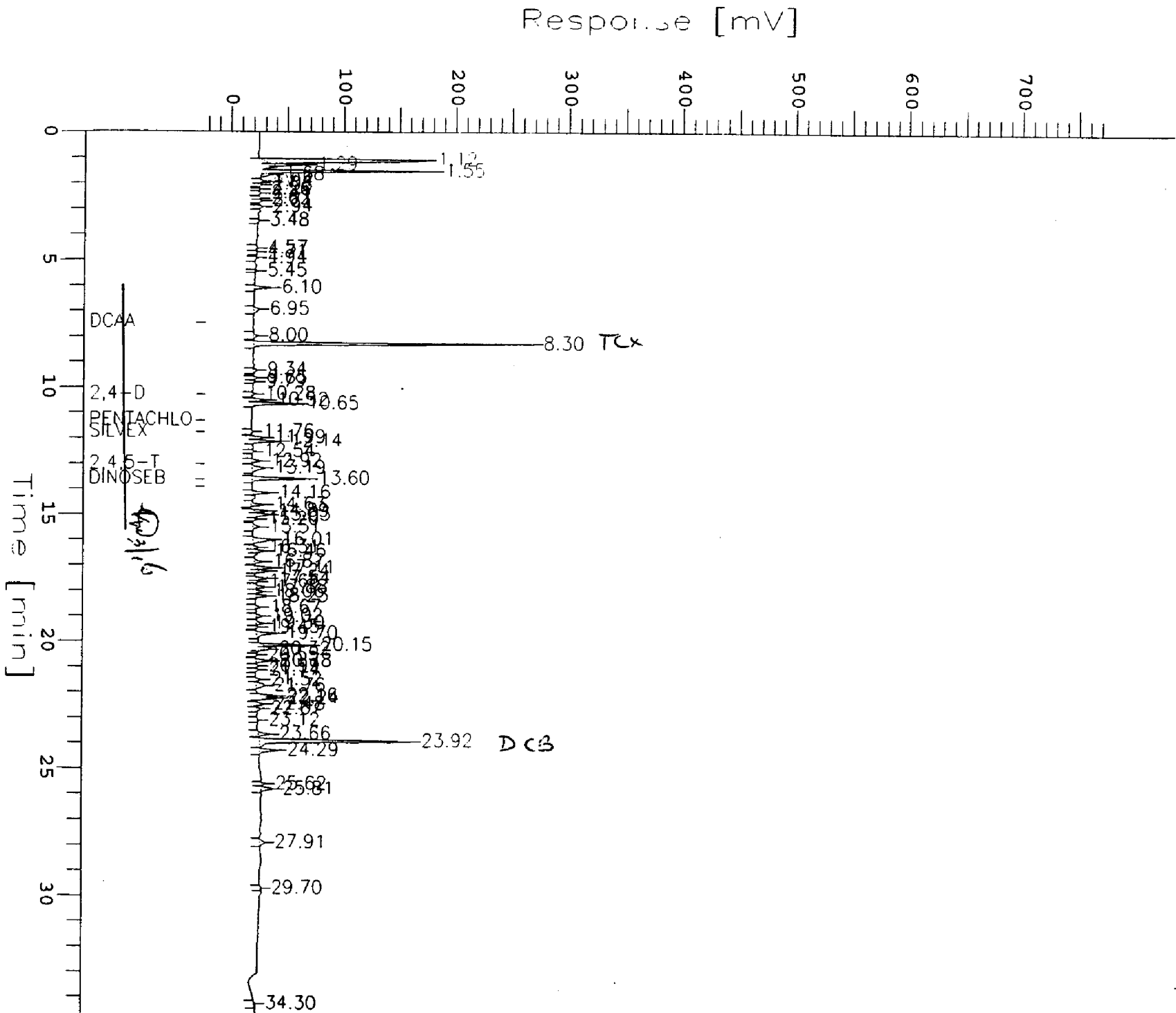
Report Stored in ASCII File: C:\2700\HP5890\H830033.TX0

Sample Name : L950626-9  
 FileName : c:\2700\hp5890\H830033.raw  
 Method : 515A.ins  
 Start Time : 0.00 min  
 Scale Factor: -1.0

End Time : 35.00 min  
 Plot Offset: -22 mV

Sample #: 33  
 Date : 3/13/95 04:53 PM  
 Time of Injection: 3/13/95  
 Low Point : -22.35 mV  
 Plot Scale: 800.0 mV

Page 1 of 1  
 04:17 PM  
 High Point : 777.65 mV



Software Version: 3.3 <4811>  
 Sample Name : L950626-10 Time : 3/8/95 07:34 PM  
 Sample Number: 15 Study : PPPCB  
 Operator : KMW  
 Instrument : HP5890 Channel : A A/D mV Range : 1000  
 AutoSampler : NONE  
 Vial : 0/0

Interface Serial # : 8055910402 Data Acquisition Time: 3/8/95 07:01 PM  
 Delay Time : 0.00 min.  
 End Time : 33.00 min.  
 Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\HP5890\PA38015.RAW  
 Result File : C:\2700\HP5890\PA38015.RST  
 Instrument File: c:\2700\methseqs\HPPESTB.ins  
 Process File : HPPESTA  
 Sample File : PESTA058  
 Sequence File : C:\2700\METHSEQS\0308PCB.SEQ

Inj. Volume : 1 ul Area Reject : 200.000000  
 Sample Amount : 1.0000 Dilution Factor : 1.00

Instrument Control Method:  
 Instrument name : HP5890

Channel Parameters:

Inlet Parameters:  
 Inlet A : Inlet B :

Detector Parameters:  
 Detector A : Detector B :

Heated Zones:

Temperature Program:

Total run time : 33.00 min

Timed Events:

There are no timed events in the method

## HP 5890 REPORT FOR PEST/PCB ANALYSIS

NORTHEASTERN ANALYTICAL CORP. GAS CHROMATOGRAPHY LAB.

| Peak # | Component Name | Time [min] | Area [uV*sec] | Height [uV] | Raw Amount | Adjusted Amount | Calibration Factor | Delta RT [%] | Cal. Range |
|--------|----------------|------------|---------------|-------------|------------|-----------------|--------------------|--------------|------------|
| 1      |                | 1.094      | 2012389.98    | 282919.50   | 66.1978    | 66.1978         | 2012390            | -----        |            |
| 2      |                | 1.323      | 499378.53     | 89299.80    | 18.9418    | 18.9418         | 499379             | -----        |            |
| 3      |                | 1.429      | 551014.00     | 75822.28    | 20.5545    | 20.5545         | 551014             | -----        |            |
| 4      |                | 1.624      | 2036397.49    | 485544.70   | 66.9476    | 66.9476         | 2036397            | -----        |            |
| 5      |                | 2.038      | 27309.00      | 10330.49    | 4.1976     | 4.1976          | 27309              | -----        |            |
| 6      |                | 2.166      | 12101.00      | 2374.83     | 3.7226     | 3.7226          | 12101              | -----        |            |
| 7      |                | 2.228      | 11816.00      | 4612.02     | 3.7137     | 3.7137          | 11816              | -----        |            |
| 8      |                | 2.424      | 54101.00      | 8745.96     | 5.0344     | 5.0344          | 54101              | -----        |            |
| 9      |                | 2.564      | 3194.00       | 1491.07     | 3.4445     | 3.4445          | 3194               | -----        |            |
| 10     |                | 2.663      | 11817.00      | 4383.64     | 3.7138     | 3.7138          | 11817              | -----        |            |
| 11     |                | 2.905      | 12111.50      | 3028.71     | 3.7230     | 3.7230          | 12112              | -----        |            |
| 12     |                | 3.036      | 9674.00       | 1196.72     | 3.6468     | 3.6468          | 9674               | -----        |            |
| 13     |                | 3.493      | 6600.00       | 1593.61     | 3.5508     | 3.5508          | 6600               | -----        |            |
| 14     |                | 3.714      | 6938.00       | 1383.17     | 3.5614     | 3.5614          | 6938               | -----        |            |
|        |                | 4.306      | 10663.00      | 2665.81     | 3.6777     | 3.6777          | 10663              | -----        |            |
| 16     |                | 4.569      | 6874.00       | 1196.11     | 3.5594     | 3.5594          | 6874               | -----        |            |
| 17     |                | 4.936      | 4129.00       | 1024.23     | 3.4737     | 3.4737          | 4129               | -----        |            |
| 18     |                | 5.076      | 5583.50       | 1430.71     | 3.5191     | 3.5191          | 5584               | -----        |            |
| 19     |                | 5.268      | 15634.00      | 3784.88     | 3.8330     | 3.8330          | 15634              | -----        |            |
| 20     |                | 5.445      | 11497.00      | 2042.47     | 3.7038     | 3.7038          | 11497              | -----        |            |

| Peak # | Component Name      | Time [min]  | Area [uV*sec] | Height [uV] | Raw Amount | Adjusted Amount | Calibration Factor | Delta RT [%] | Cal. Range |
|--------|---------------------|-------------|---------------|-------------|------------|-----------------|--------------------|--------------|------------|
| 21     |                     | 6.045       | 6824.00       | 1034.22     | 3.5578     | 3.5578          | 6824               | -----        |            |
| 22     |                     | 6.314       | 102720.00     | 15752.06    | 6.5530     | 6.5530          | 102720             | -----        |            |
| 23     |                     | 7.285       | 12798.00      | 3095.48     | 3.7444     | 3.7444          | 12798              | -----        |            |
| 24     | TCMX                | 7.572       | 2020413.00    | 477258.40   | 94.9003    | 0.0000          | 2020413            | 0.2760       |            |
| 25     |                     | 8.309       | 21297.00      | 4884.99     | 4.0099     | 4.0099          | 21297              | -----        |            |
| 26     |                     | 9.147       | 23511.50      | 3680.65     | 4.0790     | 4.0790          | 23512              | -----        |            |
| 27     |                     | 9.386       | 21403.00      | 4388.07     | 4.0132     | 4.0132          | 21403              | -----        |            |
| 28     |                     | 9.642       | 48129.50      | 8415.21     | 4.8479     | 4.8479          | 48130              | -----        |            |
| 29     |                     | 9.784       | 4671.00       | 1527.08     | 3.4906     | 3.4906          | 4671               | -----        |            |
| 30     |                     | 9.915       | 17550.00      | 4465.17     | 3.8928     | 3.8928          | 17550              | -----        |            |
| 31     |                     | 10.585      | 14842.00      | 3129.38     | 3.8083     | 3.8083          | 14842              | -----        |            |
| 32     | APLHA BHC           | 10.869      | 14286.00      | 3541.59     | 3.7909     | 3.7909          | 14286              | 0.6631       | -          |
| 33     |                     | 10.991      | 32120.00      | 7763.45     | 4.3479     | 4.3479          | 32120              | -----        |            |
| 34     |                     | 11.212      | 11502.50      | 1783.12     | 3.7040     | 3.7040          | 11502              | -----        |            |
| 35     |                     | 11.428      | 6163.00       | 1186.91     | 3.5372     | 3.5372          | 6163               | -----        |            |
| 36     |                     | 11.691      | 17717.00      | 3445.85     | 3.2586     | 3.2586          | 17717              | -----        |            |
| 37     |                     | 11.888      | 35143.00      | 5190.89     | 3.8316     | 3.8316          | 35143              | -----        |            |
| 38     | GAMMA BHC           | 12.257      | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 39     | HEPTACHLOR          | 12.605      | 117545.00     | 18675.82    | 5.5599     | 5.5599          | 117545             | -----        |            |
| 40     |                     | 12.914      | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 41     |                     | 13.100      | 21301.00      | 4284.30     | 1.7525     | 1.7525          | 21301              | -----        |            |
| 42     | ALDRIN              | 13.480      | 31940.00      | 4448.03     | 3.2542     | 3.2542          | 31940              | -----        |            |
| 43     |                     | 13.842      | 93595.00      | 10875.08    | 5.3702     | 5.3702          | 93595              | -0.0026      | -          |
| 44     | BETA BHC            | 14.778      | 69679.00      | 9967.00     | 5.2318     | 5.2318          | 69679              | -----        |            |
| 45     |                     | 15.128      | 14418.50      | 2956.50     | 1.2555     | 1.2555          | 14418              | -0.1072      | -          |
| 46     | DELTA BHC           | 15.385      | 1053592.00    | 229776.99   | 76.0306    | 76.0306         | 1053592            | -----        |            |
| 47     |                     | 15.810      | 21918.00      | 3227.57     | 4.3752     | 4.3752          | 21918              | -0.5876      | -          |
| 48     |                     | 16.216      | 164714.00     | 17742.38    | 6.7678     | 6.7678          | 164714             | -----        |            |
| 49     | HEPTACHLOR EXPOXIDE | 16.381      | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 50     |                     | 16.644      | 15105.50      | 3179.56     | 1.1501     | 1.1501          | 15106              | -----        |            |
| 51     |                     | 16.841      | 51084.00      | 11800.82    | 2.5011     | 2.5011          | 51084              | -----        |            |
| 52     |                     | 16.956      | 11570.00      | 3296.20     | 1.2081     | 1.2081          | 11570              | -----        |            |
| 53     |                     | 17.160      | 12275.50      | 3348.54     | 1.2346     | 1.2346          | 12275              | -----        |            |
| 54     | ENDOSULFAN I        | 17.321      | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 55     | GAMMA CHLORDANE     | 17.599      | 8168.00       | 1620.72     | 0.8416     | 0.8416          | 8168               | 0.1770       | -          |
| 56     | ALPHA CHLORDANE     | 17.789      | 34233.00      | 6575.13     | 1.6745     | 1.6745          | 34233              | 0.0144       | -          |
| 57     | DDE                 | 18.066      | 77502.00      | 9446.29     | 4.1224     | 4.1224          | 77502              | -0.1957      | -          |
| 58     | DIELDRIN            | 18.469      | 108804.50     | 20097.15    | 6.6685     | 6.6685          | 108804             | -0.7107      | -          |
| 59     |                     | 18.730      | 7070.00       | 1359.06     | 2.6758     | 2.6758          | 7070               | -----        |            |
| 60     |                     | 19.009      | 66366.50      | 11779.07    | 5.4843     | 5.4843          | 66366              | -----        |            |
| 61     | ENDRIN              | 19.305      | 88861.00      | 16534.57    | 6.6804     | 6.6804          | 88861              | -0.1603      | -          |
| 62     |                     | 19.571      | 9895.00       | 1782.03     | 2.4816     | 2.4816          | 9895               | -----        |            |
| 63     |                     | 19.784      | 59679.00      | 11994.67    | 5.1287     | 5.1287          | 59679              | -----        |            |
| 64     |                     | 20.235      | 26165.00      | 5067.80     | 4.6993     | 4.6993          | 26165              | -----        |            |
| 65     |                     | 20.402      | 8738.50       | 2203.77     | 3.6794     | 3.6794          | 8738               | -----        |            |
| 66     |                     | 20.520      | 30216.00      | 6293.77     | 4.9364     | 4.9364          | 30216              | -----        |            |
| 67     |                     | 20.808      | 5144.00       | 1154.73     | 3.4691     | 3.4691          | 5144               | -----        |            |
| 68     | DDT                 | 21.006      | 124081.00     | 19950.91    | 10.4297    | 10.4297         | 124081             | 0.3865       | -          |
| 69     | ENDOSULFAN II       | 21.205      | 14616.50      | 3443.73     | 1.1407     | 1.1407          | 14616              | 0.5466       | -          |
| 70     | DDT                 | 21.352      | 8016.00       | 1899.99     | 7.3191     | 7.3191          | 8016               | -0.4624      | -          |
| 71     |                     | 22.239      | 29747.50      | 5690.87     | 3.8654     | 3.8654          | 29748              | -----        |            |
| 72     | ENDRIN ALDEHYDE     | 22.463      | 50434.00      | 7021.17     | 5.3069     | 5.3069          | 50434              | -0.6202      | -          |
| 73     |                     | 22.981      | 17156.00      | 3171.70     | 2.9879     | 2.9879          | 17156              | -----        |            |
| 74     |                     | 23.230      | 32159.50      | 6037.65     | -5.2777    | -5.2777         | 32160              | -----        |            |
| 75     | METHOXYCHLOR        | 23.525      | 74348.00      | 8931.86     | 5.1124     | 5.1124          | 74348              | -0.4214      | -          |
| 76     | ENDOSULFAN SULFATE  | 23.726      | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 77     | DBC                 | 23.937      | 1920398.00    | 365599.78   | 136.4998   | 136.4998        | 1920398            | 0.1376       |            |
| 78     |                     | 24.301      | 4871.00       | 1036.95     | 0.8994     | 0.8994          | 4871               | -----        |            |
| 79     |                     | 24.456      | 24049.50      | 4651.11     | 2.2570     | 2.2570          | 24050              | -----        |            |
| 80     | ENDRIN KETONE       | 25.019      | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 81     |                     | 25.410      | 16541.00      | 3156.61     | 2.0360     | 2.0360          | 16541              | -----        |            |
| 82     | OCB                 | 28.203      | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| -----  |                     |             |               |             |            |                 |                    |              |            |
|        |                     | 12246310.50 | 2.385e+06     | 732.8945    | 637.9942   |                 |                    |              |            |

## Missing Component Report

| Component           | Expected Retention (Sample File) |
|---------------------|----------------------------------|
| GAMMA BHC           | 12.257                           |
| HEPTACHLOR          | 12.914                           |
| HEPTACHLOR EXPOXIDE | 16.381                           |
| ENDOSULFAN I        | 17.321                           |
| ENDOSULFAN SULFATE  | 23.726                           |
| ENDRIN KETONE       | 25.019                           |
| OCB                 | 28.203                           |

=====

HP5890 DETECTOR A

=====

Report Stored in ASCII File: C:\2700\HP5890\PA38015.TX0

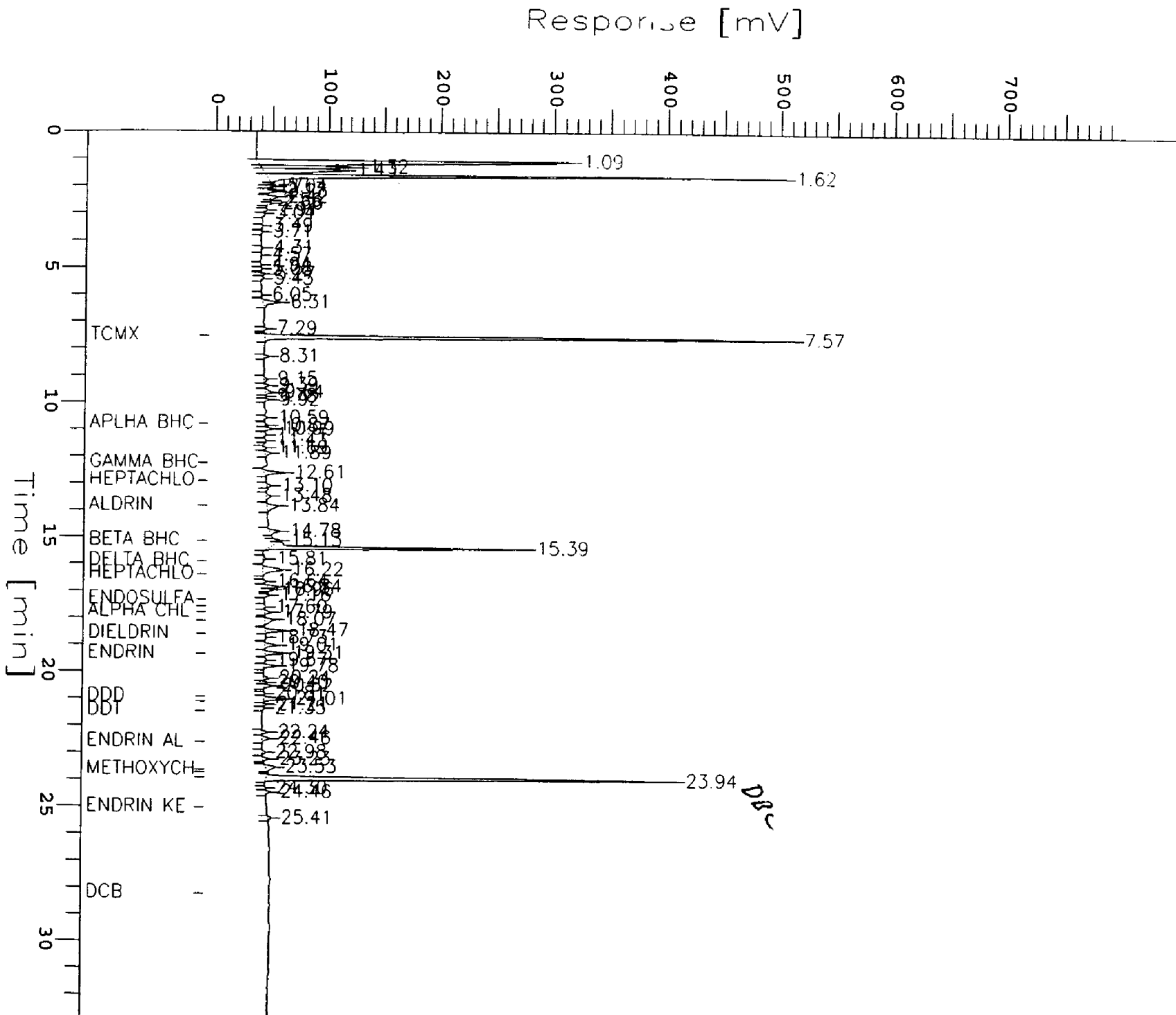


# Chromatogram

34

Sample Name : L950626-10  
 File Name : c:\2700\hps890\PA38015.raw  
 Method : HPPEST8.ins  
 Start Time : 0.00 min  
 Scale Factor : -1.0  
 End Time : 33.00 min  
 Plot Offset : -5 mV

Sample #: 15  
 Date : 3/8/95 07:34 PM  
 Time of Injection: 3/8/95 07:01 PM  
 Low Point : -5.27 mV  
 Plot Scale: 800.0 mV  
 High Point : 794.73 mV



```

=====
Software Version: 3.3 <4811>
Sample Name : L950626-10      Time       : 3/8/95  07:35 PM
Sample Number: 15              Study      : PPCB
Operator    : KMW

Instrument   : HP5890          Channel : B      A/D mV Range : 1000
AutoSampler : NONE
Ink/Vial    : 0/0

```

```

Interface Serial # : 8055910402  Data Acquisition Time: 3/8/95  07:01 PM
Delay Time       : 0.00 min.
End Time        : 33.00 min.
Sampling Rate    : 1.0000 pts/sec

```

```

Raw Data File   : C:\2700\HP5890\PB38015.RAW
Result File     : C:\2700\HP5890\PB38015.RST
Instrument File  : c:\2700\methseqs\HPPESTB.ins
Process File    : HPPESTB
Sample File     : PESTB058
Sequence File   : C:\2700\METHSEQS\0308PCB.SEO

```

```

Inj. Volume    : 1 ul          Area Reject : 200.000000
Sample Amount   : 1.0000      Dilution Factor : 1.00

```

```

Instrument Control Method:
Instrument name : HP5890

```

Channel Parameters:

```

Inlet Parameters:
Inlet A :                      Inlet B :

```

```

Detector Parameters:
Detector A :                  Detector B :

```

Heated Zones:

Temperature Program:

Total run time : 33.00 min

```

Timed Events:
There are no timed events in the method

```

# HP5890 REPORT FOR PEST/PCB ANALYSIS

```

=====
NORTHEASTERN ANALYTICAL CORP. GAS CHROMATOGRAPHY LAB.
=====

```

| Peak # | Component Name | Time [min] | Area [uV*sec] | Height [uV] | Raw Amount | Adjusted Amount | Calibration Factor | Cal. Range |
|--------|----------------|------------|---------------|-------------|------------|-----------------|--------------------|------------|
| 1      |                | 1.090      | 1013827.85    | 138051.48   | 70.4108    | 70.4108         | 1013828            |            |
| 2      |                | 1.287      | 325921.78     | 69106.16    | 19.2632    | 19.2632         | 325922             |            |
| 3      |                | 1.395      | 278322.83     | 57731.80    | 15.7241    | 15.7241         | 278323             |            |
| 4      |                | 1.540      | 1186747.27    | 328050.74   | 83.2678    | 83.2678         | 1186747            |            |
| 5      |                | 1.677      | 28021.27      | 12993.49    | -2.8865    | -2.8865         | 28021              |            |
| 6      |                | 1.920      | 15001.00      | 3872.14     | -3.8546    | -3.8546         | 15001              |            |
| 7      |                | 2.065      | 76208.50      | 14026.37    | 0.6963     | 0.6963          | 76208              |            |
| 8      |                | 2.246      | 4416.00       | 2073.20     | -4.6417    | -4.6417         | 4416               |            |
| 9      |                | 2.414      | 163578.00     | 24402.08    | 7.1925     | 7.1925          | 163578             |            |
| 10     |                | 2.692      | 12028.00      | 3600.03     | -4.0757    | -4.0757         | 12028              |            |
| 11     |                | 3.089      | 13423.00      | 2693.19     | -3.9720    | -3.9720         | 13423              |            |
| 12     |                | 3.318      | 10859.00      | 1472.99     | -4.1626    | -4.1626         | 10859              |            |
| 13     |                | 3.924      | 25439.00      | 5013.35     | -3.0785    | -3.0785         | 25439              |            |
| 14     |                | 4.057      | 50484.00      | 7058.70     | -1.2164    | -1.2164         | 50484              |            |
| 15     |                | 4.547      | 13243.00      | 1859.92     | -3.9853    | -3.9853         | 13243              |            |
| 16     |                | 4.778      | 4912.50       | 1421.39     | -4.6047    | -4.6047         | 4912               |            |
| 17     |                | 4.971      | 9694.00       | 2498.53     | -4.2492    | -4.2492         | 9694               |            |
| 18     |                | 5.087      | 5563.00       | 1293.16     | -4.5564    | -4.5564         | 5563               |            |
| 19     |                | 5.202      | 6634.00       | 2011.49     | -4.4767    | -4.4767         | 6634               |            |
| 20     |                | 6.078      | 16162.00      | 3828.33     | -3.7683    | -3.7683         | 16162              |            |
| 21     |                | 6.396      | 4611.00       | 1156.56     | -4.6272    | -4.6272         | 4611               |            |

| Peak # | Component Name       | Time [min] | Area [uV*sec] | Height [uV] | Raw Amount | Adjusted Amount | Calibration Factor | Cal. Range |
|--------|----------------------|------------|---------------|-------------|------------|-----------------|--------------------|------------|
| 22     |                      | 7.029      | 9448.00       | 2314.76     | -4.2675    | -4.2675         | 9448               |            |
| 23     |                      | 7.601      | 15724.00      | 3266.51     | -3.8009    | -3.8009         | 15724              |            |
| 24     | TCMX                 | 8.256      | 1515353.50    | 333143.53   | 107.7006   | 107.7006        | 1515354            |            |
| 25     |                      | 8.827      | 18931.00      | 3674.86     | -3.5624    | -3.5624         | 18931              |            |
| 26     |                      | 9.092      | 54837.00      | 11679.30    | -0.8927    | -0.8927         | 54837              |            |
| 27     |                      | 9.295      | 251961.50     | 38573.79    | 13.7640    | 13.7640         | 251962             |            |
| 28     |                      | 9.615      | 22266.00      | 5229.64     | 2.2839     | 2.2839          | 22266              |            |
| 29     |                      | 9.764      | 12330.50      | 3276.13     | 1.8526     | 1.8526          | 12331              |            |
| 30     |                      | 10.257     | 8369.00       | 1547.66     | 1.6806     | 1.6806          | 8369               |            |
| 31     |                      | 10.472     | 24818.00      | 4702.23     | 2.3947     | 2.3947          | 24818              |            |
| 32     |                      | 10.628     | 23198.00      | 4430.13     | 2.3244     | 2.3244          | 23198              |            |
| 0      | ALPHA BHC            | 10.753     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 33     |                      | 10.949     | 24372.50      | 5081.56     | 2.3754     | 2.3754          | 24372              |            |
| 34     |                      | 11.140     | 12139.50      | 2031.04     | 1.8443     | 1.8443          | 12140              |            |
| 35     |                      | 11.478     | 15578.50      | 1842.01     | 1.9936     | 1.9936          | 15578              |            |
| 36     |                      | 12.101     | 67819.00      | 7275.11     | 3.8805     | 3.8805          | 67819              |            |
| 0      | BETA BHC             | 12.324     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 37     |                      | 12.873     | 45204.00      | 3547.22     | 1.0379     | 1.0379          | 45204              |            |
| 38     |                      | 13.154     | 23289.00      | 2340.58     | 0.2214     | 0.2214          | 23289              |            |
| 0      | GAMMA BHC            | 13.331     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 39     |                      | 13.561     | 73654.00      | 13605.67    | 2.0977     | 2.0977          | 73654              |            |
| 40     | DELTA BHC            | 14.118     | 20454.00      | 4187.01     | 2.3875     | 2.3875          | 20454              |            |
| 41     | HEPTACHLOR           | 14.594     | 15749.00      | 3164.77     | 1.9683     | 1.9683          | 15749              |            |
| 42     |                      | 14.851     | 25080.50      | 5637.17     | 2.4327     | 2.4327          | 25080              |            |
| 43     |                      | 15.076     | 140347.00     | 18636.86    | 8.1693     | 8.1693          | 140347             |            |
| 44     |                      | 15.444     | 22855.00      | 2307.04     | 79.5527    | 79.5527         | 22855              |            |
| 45     |                      | 15.971     | 41031.00      | 6292.59     | 69.0994    | 69.0994         | 41031              |            |
| 0      | ALDRIN               | 16.123     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 46     |                      | 16.290     | 3349.50       | 740.18      | 90.7705    | 90.7705         | 3349               |            |
| 47     |                      | 16.420     | 11732.00      | 2254.81     | 85.9496    | 85.9496         | 11732              |            |
| 48     |                      | 16.825     | 8804.50       | 1833.85     | 0.1415     | 0.1415          | 8804               |            |
| 49     | HEPTACHLOR EPOXIDE   | 17.070     | 29499.00      | 6192.24     | 1.3061     | 1.3061          | 29499              |            |
| 50     |                      | 17.209     | 12091.00      | 2858.07     | 0.3265     | 0.3265          | 12091              |            |
| 51     | GAMMA CHLORDANE      | 17.501     | 30175.50      | 6342.65     | 1.3175     | 1.3175          | 30176              |            |
| 52     |                      | 17.627     | 2703.00       | 856.50      | -0.1530    | -0.1530         | 2703               |            |
| 53     | ALPHA CHLORDANE/ENDO | 17.839     | 40802.50      | 8056.29     | 0.8565     | 0.8565          | 40802              |            |
| 54     |                      | 18.023     | 16232.00      | 3504.10     | -0.5588    | -0.5588         | 16232              |            |
| 5      |                      | 18.190     | 13005.00      | 2618.15     | -0.7447    | -0.7447         | 13005              |            |
| 56     |                      | 18.637     | 26463.00      | 3311.46     | 2.6337     | 2.6337          | 26463              |            |
| 57     | DIELDRIN             | 18.994     | 16301.50      | 2961.63     | 1.9924     | 1.9924          | 16302              |            |
| 58     | DDE                  | 19.263     | 23378.50      | 4916.27     | 1.4883     | 1.4883          | 23378              |            |
| 59     |                      | 19.410     | 5635.50       | 1446.81     | 0.3968     | 0.3968          | 5635               |            |
| 60     |                      | 19.657     | 56790.00      | 10871.09    | 3.5437     | 3.5437          | 56790              |            |
| 61     |                      | 20.107     | 800479.00     | 152788.74   | 68.2623    | 68.2623         | 800479             |            |
| 62     | ENDRIN               | 20.742     | 27769.50      | 5595.73     | 2.3667     | 2.3667          | 27770              |            |
| 63     | ENDOSULFAN II        | 21.094     | 7005.00       | 1626.30     | 1.4553     | 1.4553          | 7005               |            |
| 64     |                      | 21.476     | 7731.00       | 1677.38     | -0.6088    | -0.6088         | 7731               |            |
| 65     | DDD                  | 21.656     | 40273.50      | 4236.81     | 1.8751     | 1.8751          | 40274              |            |
| 66     | ENDRIN ALDEHYDE      | 22.199     | 65293.50      | 9907.48     | 11.4765    | 11.4765         | 65294              |            |
| 0      | ENDOSULFAN SULFATE   | 22.599     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 67     | DDT                  | 23.078     | 18747.00      | 3362.09     | 0.8177     | 0.8177          | 18747              |            |
| 68     |                      | 23.619     | 18526.50      | 3680.29     | 0.8290     | 0.8290          | 18527              |            |
| 69     | ENDRIN KETONE        | 23.887     | 1232533.00    | 219250.44   | 99.0076    | 99.0076         | 1232533            |            |
| 70     |                      | 24.254     | 15881.00      | 2709.28     | 0.6150     | 0.6150          | 15881              |            |
| 0      | METHOXYCHLOR         | 25.263     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 71     | DBC                  | 25.762     | 10681.00      | 1815.11     | 1.3665     | 1.3665          | 10681              |            |
| 0      | DCB                  | 31.152     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
|        |                      | 8291789.00 | 1.637e+06     | 811.6664    | 811.6664   | 8291789         |                    |            |

## Missing Component Report

| Component          | Expected Retention (Sample File) |
|--------------------|----------------------------------|
| ALPHA BHC          | 10.753                           |
| BETA BHC           | 12.324                           |
| GAMMA BHC          | 13.331                           |
| ALDRIN             | 16.123                           |
| ENDOSULFAN SULFATE | 22.599                           |
| METHOXYCHLOR       | 25.263                           |
| 8                  | 31.152                           |

HP5890 DETECTOR B

# Chromatogram

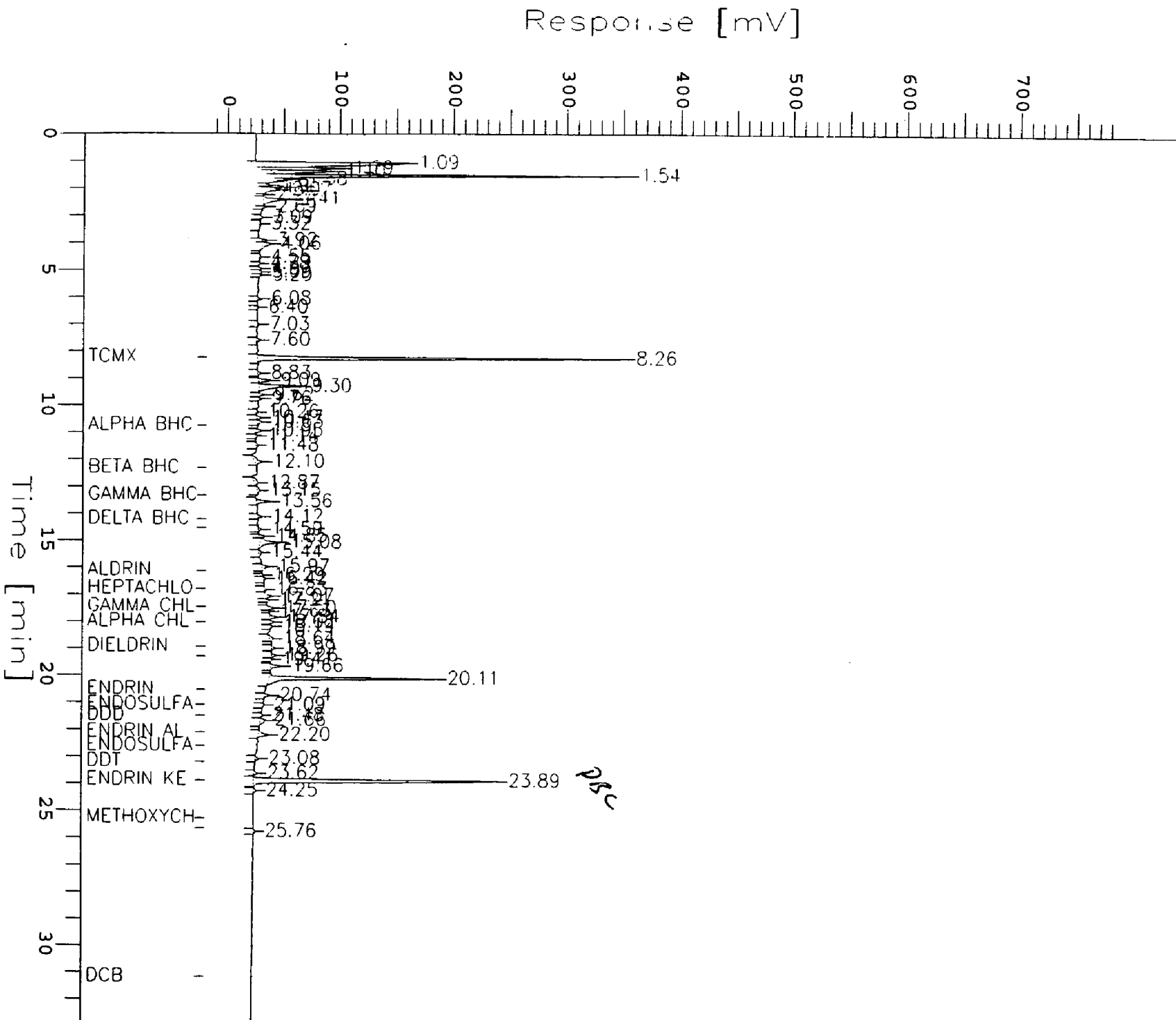
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Sample Name : L950626-10  
 File Name : c:\2700\hps5890\p838015.raw  
 Method : HPPEST8-1.ms  
 Start Time : 0.00 min  
 Scale Factor: -1.0

End Time : 33.00 min  
 Plot Offset: -18 mV

Sample #: 15  
 Date : 3/8/95 07:35 PM  
 Time of Injection: 3/8/95  
 Low Point : -17.86 mV  
 Plot Scale: 800.0 mV

Page 1 of 1  
 High Point : 782.14 mV



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Software Version: 3.3 <4811>

Sample Name : L950626-11 1:2      Time : 3/13/95 01:09 PM

Sample Number: 28      Study : 515.1

Operator : KMW

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Instrument : HP5890      Channel : A      A/D mV Range : 1000

AutoSampler : NONE

ck/Vial : 0/0

Interface Serial # : 8055910402      Data Acquisition Time: 3/13/95 12:34 PM

Delay Time : 0.00 min.

End Time : 35.00 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\HP5890\HA30028.RAW

Result File : C:\2700\HP5890\HA30028.RST

Instrument File: c:\2700\methseqs\515A.ins

Process File : 515A

Sample File : HB515A2

Sequence File : C:\2700\METHSEQS\0310HB.seq

Inj. Volume : 1 ul      Area Reject : 0.000000

Sample Amount : 1.0000      Dilution Factor : 1.00

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DEFAULT REPORT

| Peak # | Time [min] | Area [uV*sec] | Height [uV] | Area [%] | Norm. Area [%] | BL | Area/Height [sec] |
|--------|------------|---------------|-------------|----------|----------------|----|-------------------|
| 1      | 0.207      | 4456.76       | 141.20      | 0.02     | 0.02           | B  | 31.5632           |
| 2      | 0.744      | 2710.24       | 310.19      | 0.01     | 0.01           | V  | 8.7375            |
| 3      | 1.105      | 2434029.28    | 422452.52   | 12.34    | 12.34          | B  | 5.7617            |
| 4      | 1.313      | 554305.00     | 63282.22    | 2.81     | 2.81           | E  | 8.7593            |
| 5      | 1.635      | 782775.42     | 144979.37   | 3.97     | 3.97           | V  | 5.3992            |
| 6      | 1.933      | 56663.00      | 8422.17     | 0.29     | 0.29           | E  | 6.7278            |
| 7      | 2.046      | 84265.87      | 9247.17     | 0.43     | 0.43           | V  | 9.1126            |
| 8      | 2.244      | 26159.07      | 5721.83     | 0.13     | 0.13           | V  | 4.5718            |
| 9      | 2.310      | 17478.45      | 4694.32     | 0.09     | 0.09           | V  | 3.7233            |
| 10     | 2.448      | 92863.50      | 16743.51    | 0.47     | 0.47           | V  | 5.5462            |
| 11     | 2.662      | 16917.42      | 3846.86     | 0.09     | 0.09           | V  | 4.3977            |
| 12     | 2.923      | 5235.89       | 1289.22     | 0.03     | 0.03           | B  | 4.0613            |
| 13     | 3.040      | 166104.11     | 26396.78    | 0.84     | 0.84           | V  | 6.2926            |
| 14     | 3.512      | 8227.54       | 1354.44     | 0.04     | 0.04           | B  | 6.0745            |
| 15     | 3.631      | 4146.18       | 948.43      | 0.02     | 0.02           | V  | 4.3716            |
| 16     | 3.725      | 3494.86       | 957.71      | 0.02     | 0.02           | V  | 3.6492            |
| 17     | 3.874      | 39587.63      | 7659.83     | 0.20     | 0.20           | V  | 5.1682            |
| 18     | 4.133      | 3236.00       | 537.91      | 0.02     | 0.02           | E  | 6.0159            |
| 19     | 4.328      | 12344.39      | 1717.75     | 0.06     | 0.06           | V  | 7.1864            |
| 20     | 4.596      | 110496.21     | 27843.42    | 0.56     | 0.56           | V  | 3.9685            |
| 21     | 4.952      | 7884.81       | 1013.12     | 0.04     | 0.04           | V  | 7.7827            |
| 22     | 5.035      | 10487.70      | 2016.91     | 0.05     | 0.05           | V  | 5.1999            |
| 23     | 5.278      | 574.68        | 213.83      | 3e-03    | 2.9133e-03     | V  | 2.6876            |
| 24     | 5.414      | 32847.16      | 8470.32     | 0.17     | 0.17           | B  | 3.8779            |
| 25     | 5.595      | 1047.70       | 254.73      | 5e-03    | 5.3112e-03     | V  | 4.1130            |
| 26     | 5.773      | 14513.64      | 2671.06     | 0.07     | 0.07           | V  | 5.4337            |
| 27     | 6.011      | 930.00        | 244.98      | 5e-03    | 4.7145e-03     | B  | 3.7962            |
| 28     | 6.238      | 133024.11     | 28459.87    | 0.67     | 0.67           | B  | 4.6741            |
| 29     | 6.540      | 34269.32      | 7878.83     | 0.17     | 0.17           | V  | 4.3495            |
| 30     | 6.880      | 6702.57       | 891.40      | 0.03     | 0.03           | V  | 7.5191            |
| 31     | 7.313      | 9950.90       | 1638.97     | 0.05     | 0.05           | B  | 6.0714            |
| 32     | 7.442      | 1579.75       | 367.58      | 8e-03    | 8.0084e-03     | V  | 4.2977            |
| 33     | 7.608      | 1039674.76    | 236916.58   | 5.27     | 5.27           | V  | 4.3884            |
| 34     | 8.020      | 22516.82      | 4497.02     | 0.11     | 0.11           | V  | 5.0071            |
| 35     | 8.148      | 8109.88       | 1512.43     | 0.04     | 0.04           | V  | 5.3621            |
| 36     | 8.256      | 4273.94       | 1156.03     | 0.02     | 0.02           | V  | 3.6971            |
| 37     | 8.365      | 22344.64      | 2684.58     | 0.11     | 0.11           | V  | 8.3233            |
| 38     | 8.725      | 4895.51       | 1043.05     | 0.02     | 0.02           | V  | 4.6935            |
| 39     | 8.816      | 5511.09       | 1104.57     | 0.03     | 0.03           | V  | 4.9894            |
| 40     | 8.967      | 1842.71       | 276.53      | 9e-03    | 9.3414e-03     | V  | 6.6637            |
| 41     | 9.263      | 41403.75      | 7607.70     | 0.21     | 0.21           | B  | 5.4423            |
| 42     | 9.400      | 20036.00      | 3850.52     | 0.10     | 0.10           | V  | 5.2035            |
| 43     | 9.591      | 42973.25      | 8203.61     | 0.22     | 0.22           | V  | 5.2383            |
| 44     | 9.828      | 460422.00     | 103649.71   | 2.33     | 2.33           | V  | 4.4421            |
| 45     | 10.058     | 7792.75       | 1406.92     | 0.04     | 0.04           | V  | 5.5389            |
| 46     | 10.313     | 18946.25      | 3519.63     | 0.10     | 0.10           | V  | 5.3830            |
| 47     | 10.401     | 29975.75      | 5613.30     | 0.15     | 0.15           | V  | 5.3401            |
| 48     | 10.768     | 6303.25       | 833.77      | 0.03     | 0.03           | V  | 7.5599            |
| 49     | 11.023     | 149746.25     | 30361.77    | 0.76     | 0.76           | B  | 4.9321            |

Tunk

Ar32

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| Peak # | Time [min] | Area [uv*sec] | Height [uv] | Area [%] | Norm. Area [%] | BL | Area/Height [sec] |
|--------|------------|---------------|-------------|----------|----------------|----|-------------------|
| 50     | 11.342     | 5637.08       | 1116.07     | 0.03     | 0.03           | V  | 5.0509            |
| 51     | 11.460     | 40846.67      | 7153.56     | 0.21     | 0.21           | V  | 5.7100            |
| 52     | 11.724     | 66589.19      | 13131.80    | 0.34     | 0.34           | B  | 5.0708            |
| 53     | 11.918     | 65987.81      | 11945.82    | 0.33     | 0.33           | V  | 5.5239            |
| 54     | 12.334     | 75015.00      | 8907.40     | 0.38     | 0.38           | B  | 8.4217            |
| 55     | 12.644     | 328142.00     | 57857.16    | 1.66     | 1.66           | B  | 5.6716            |
| 56     | 12.786     | 10697.00      | 3299.37     | 0.05     | 0.05           | E  | 3.2421            |
| 57     | 13.138     | 110926.50     | 19484.24    | 0.56     | 0.56           | B  | 5.6931            |
| 58     | 13.519     | 71396.90      | 14495.54    | 0.36     | 0.36           | B  | 4.9254            |
| 59     | 13.583     | 69905.35      | 14123.40    | 0.35     | 0.35           | V  | 4.9496            |
| 60     | 13.881     | 508684.19     | 49422.46    | 2.58     | 2.58           | V  | 10.2926           |
| 61     | 14.122     | 313528.45     | 60082.56    | 1.59     | 1.59           | V  | 5.2183            |
| 62     | 14.312     | 18321.10      | 3899.36     | 0.09     | 0.09           | V  | 4.6985            |
| 63     | 14.603     | 434.50        | 116.24      | 2e-03    | 2.2026e-03     | B  | 3.7380            |
| 64     | 14.815     | 385147.43     | 54669.52    | 1.95     | 1.95           | B  | 7.0450            |
| 65     | 15.031     | 19640.00      | 4143.70     | 0.10     | 0.10           | E  | 4.7397            |
| 66     | 15.156     | 266944.29     | 37765.07    | 1.35     | 1.35           | V  | 7.0685            |
| 67     | 15.438     | 252957.29     | 49131.76    | 1.28     | 1.28           | V  | 5.1485            |
| 68     | 15.747     | 90498.53      | 13780.36    | 0.46     | 0.46           | B  | 6.5672            |
| 69     | 15.845     | 50317.47      | 11609.52    | 0.26     | 0.26           | V  | 4.3342            |
| 70     | 16.012     | 28871.03      | 6291.65     | 0.15     | 0.15           | B  | 4.5888            |
| 71     | 16.254     | 494416.97     | 57418.40    | 2.51     | 2.51           | V  | 8.6108            |
| 72     | 16.686     | 59642.58      | 10115.73    | 0.30     | 0.30           | B  | 5.8960            |
| 73     | 16.881     | 266358.36     | 49184.30    | 1.35     | 1.35           | V  | 5.4155            |
| 74     | 17.002     | 309552.00     | 55240.72    | 1.57     | 1.57           | V  | 5.6037            |
| 75     | 17.115     | 57896.56      | 15195.34    | 0.29     | 0.29           | V  | 3.8102            |
| 76     | 17.189     | 75585.49      | 15310.47    | 0.38     | 0.38           | V  | 4.9369            |
| 77     | 17.415     | 359.00        | 106.70      | 2e-03    | 1.8199e-03     | E  | 3.3646            |
| 78     | 17.637     | 39267.73      | 7534.06     | 0.20     | 0.20           | B  | 5.2120            |
| 79     | 17.831     | 119698.27     | 18902.42    | 0.61     | 0.61           | V  | 6.3324            |
| 80     | 18.105     | 131516.78     | 24352.13    | 0.67     | 0.67           | B  | 5.4006            |
| 81     | 18.183     | 133445.69     | 20178.30    | 0.68     | 0.68           | V  | 6.6133            |
| 82     | 18.513     | 606351.90     | 61135.51    | 3.07     | 3.07           | V  | 9.9182            |
| 83     | 18.672     | 33959.00      | 7856.40     | 0.17     | 0.17           | E  | 4.3225            |
| 84     | 18.768     | 56402.13      | 11306.69    | 0.29     | 0.29           | V  | 4.9884            |
| 85     | 19.044     | 373790.50     | 66299.62    | 1.89     | 1.89           | B  | 5.6379            |
| 86     | 19.344     | 200859.22     | 37225.31    | 1.02     | 1.02           | B  | 5.3958            |
| 87     | 19.610     | 97719.78      | 13865.27    | 0.50     | 0.50           | V  | 7.0478            |
| 88     | 19.821     | 522263.56     | 90223.36    | 2.65     | 2.65           | V  | 5.7886            |
| 89     | 20.019     | 5339.00       | 1195.17     | 0.03     | 0.03           | E  | 4.4671            |
| 90     | 20.260     | 213627.67     | 31605.77    | 1.08     | 1.08           | V  | 6.7591            |
| 91     | 20.439     | 187018.00     | 35532.33    | 0.95     | 0.95           | V  | 5.2633            |
| 92     | 20.554     | 103751.78     | 18498.03    | 0.53     | 0.53           | V  | 5.6088            |
| 93     | 21.039     | 775537.93     | 105924.66   | 3.93     | 3.93           | B  | 7.3216            |
| 94     | 21.241     | 423157.05     | 80738.16    | 2.15     | 2.15           | V  | 5.2411            |
| 95     | 21.383     | 176843.89     | 32964.65    | 0.90     | 0.90           | V  | 5.3647            |
| 96     | 21.521     | 209861.12     | 43231.39    | 1.06     | 1.06           | V  | 4.8544            |
| 97     | 21.917     | 59415.76      | 9410.86     | 0.30     | 0.30           | B  | 6.3135            |
| 98     | 22.044     | 43939.46      | 7365.82     | 0.22     | 0.22           | V  | 5.9653            |
| 99     | 22.286     | 308362.02     | 56470.12    | 1.56     | 1.56           | V  | 5.4606            |
| 100    | 22.485     | 186583.73     | 31284.79    | 0.95     | 0.95           | V  | 5.9640            |
| 101    | 22.609     | 69955.15      | 13772.05    | 0.35     | 0.35           | V  | 5.0795            |
| 102    | 23.021     | 146609.95     | 20133.74    | 0.74     | 0.74           | V  | 7.2818            |
| 103    | 23.264     | 759037.15     | 125848.15   | 3.85     | 3.85           | V  | 6.0314            |
| 104    | 23.512     | 47767.00      | 5867.07     | 0.24     | 0.24           | E  | 8.1415            |
| 105    | 23.651     | 28577.14      | 4137.72     | 0.14     | 0.14           | V  | 6.9065            |
| 106    | 23.968     | 622433.38     | 107690.77   | 3.16     | 3.16           | V  | 5.7798            |
| 107    | 24.183     | 21688.00      | 3601.72     | 0.11     | 0.11           | E  | 6.0216            |
| 108    | 24.336     | 184920.32     | 32704.44    | 0.94     | 0.94           | V  | 5.6543            |
| 109    | 24.494     | 598648.54     | 95884.49    | 3.03     | 3.03           | V  | 6.2434            |
| 110    | 25.022     | 84530.00      | 5759.55     | 0.43     | 0.43           | E  | 14.6765           |
| 111    | 25.295     | 57921.20      | 5143.39     | 0.29     | 0.29           | V  | 11.2613           |
| 112    | 25.439     | 67477.41      | 8650.80     | 0.34     | 0.34           | V  | 7.8001            |
| 113    | 25.563     | 39627.41      | 6164.40     | 0.20     | 0.20           | V  | 6.4284            |
| 114    | 25.729     | 113636.30     | 16250.53    | 0.58     | 0.58           | V  | 6.9928            |
| 115    | 25.856     | 49530.22      | 7632.86     | 0.25     | 0.25           | V  | 6.4891            |
| 116    | 26.083     | 52581.56      | 4929.81     | 0.27     | 0.27           | V  | 10.6660           |
| 117    | 26.255     | 184080.50     | 23836.79    | 0.93     | 0.93           | V  | 7.7225            |
| 118    | 26.604     | 211448.21     | 30053.03    | 1.07     | 1.07           | V  | 7.0358            |
| 119    | 26.835     | 19760.90      | 2508.51     | 0.10     | 0.10           | V  | 7.8775            |
| 120    | 27.039     | 6485.47       | 618.37      | 0.03     | 0.03           | V  | 10.4880           |
| 121    | 27.359     | 2051.20       | 234.24      | 0.01     | 0.01           | V  | 8.7566            |
| 122    | 27.714     | 67381.14      | 9499.37     | 0.34     | 0.34           | B  | 7.0932            |
| 123    | 27.944     | 8865.00       | 1636.78     | 0.04     | 0.04           | E  | 5.4161            |
| 124    | 28.305     | 8562.86       | 1071.67     | 0.04     | 0.04           | V  | 7.9902            |
| 125    | 28.681     | 1596.67       | 191.83      | 8e-03    | 8.0941e-03     | B  | 8.3234            |
| 126    | 28.914     | 5787.33       | 436.84      | 0.03     | 0.03           | V  | 13.2482           |

520861.5

2386718.02

03c

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| Peak #      | Time [min] | Area [uV*sec] | Height [uV] | Area [%]  | Norm. Area [%] | Area BL | Area/Height [sec] |
|-------------|------------|---------------|-------------|-----------|----------------|---------|-------------------|
| 127         | 29.364     | 595.50        | 96.26       | 3e-03     | 3.0188e-03     | B       | 6.1861            |
| 128         | 29.663     | 1694.76       | 202.57      | 9e-03     | 8.5914e-03     | B       | 8.3664            |
| 129         | 30.132     | 32041.67      | 1714.30     | 0.16      | 0.16           | V       | 18.6908           |
| 130         | 30.490     | 124557.02     | 5742.15     | 0.63      | 0.63           | V       | 21.6917           |
| 131         | 31.180     | 28600.06      | 1748.81     | 0.14      | 0.14           | V       | 16.3540           |
| 132         | 31.935     | 3115.00       | 342.78      | 0.02      | 0.02           | B       | 9.0875            |
| 133         | 32.331     | 92109.16      | 2892.30     | 0.47      | 0.47           | B       | 31.8464           |
| 134         | 32.932     | 357205.34     | 11774.24    | 1.81      | 1.81           | V       | 30.3379           |
| 135         | 34.318     | 5951.00       | 1350.78     | 0.03      | 0.03           | B       | 4.4056            |
| 136         | 34.926     | 349.00        | 139.90      | 2e-03     | 1.7692e-03     | B       | 2.4947            |
| 19726267.00 |            |               |             | 3.235e+06 | 100.00         |         | 100.00            |

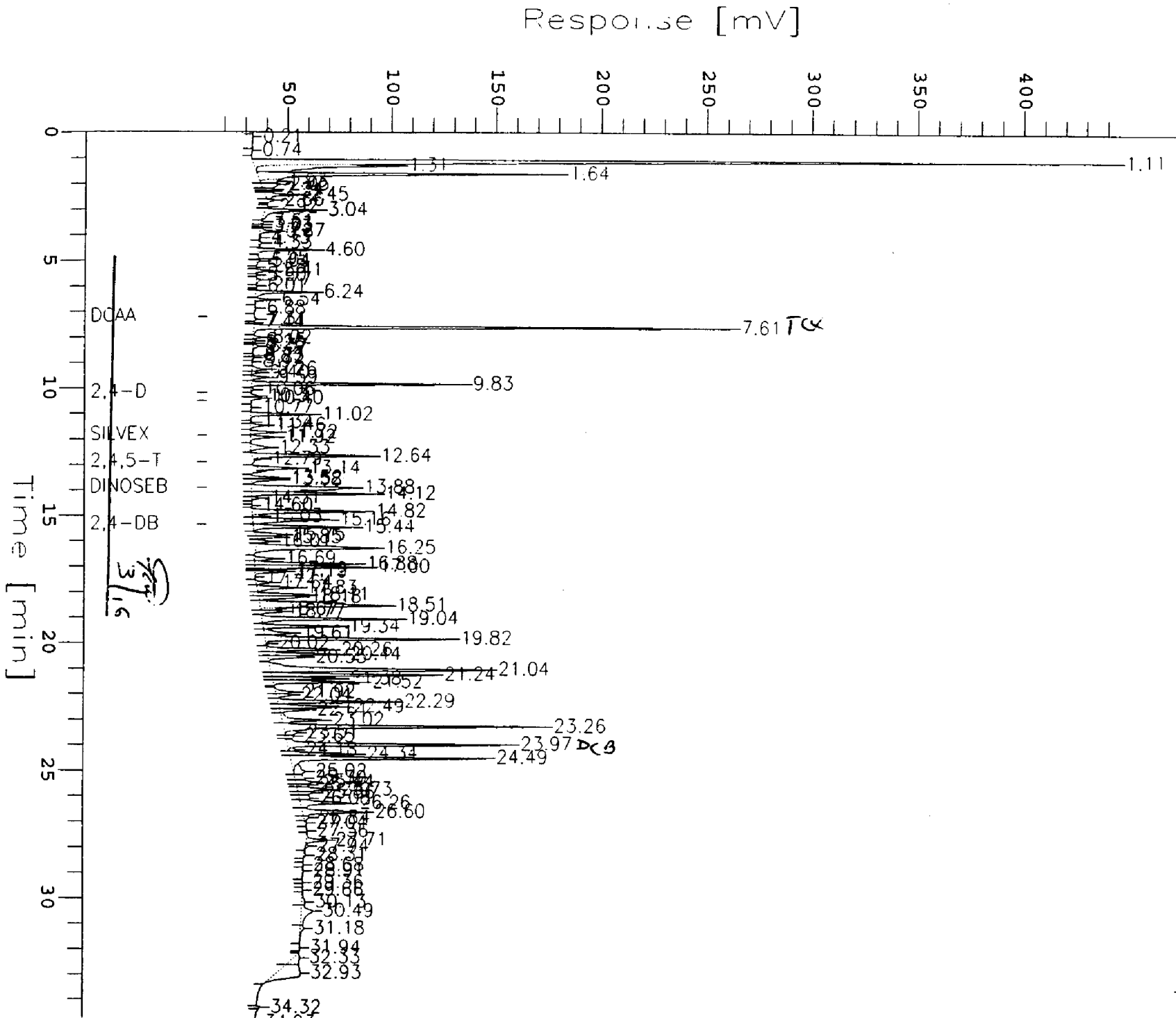
## Missing Component Report

| Component         | Expected Retention (Sample File) |
|-------------------|----------------------------------|
| PENTACHLOROPHENOL | 10.500                           |
| DINOSEB           | 13.900                           |
| 2,4-DB            | 15.350                           |

Sample Name : L050626-11 1:2  
FileName : c:\2700\hps5890\HA30028.raw  
Method : 515A.ins  
Start Time : 0.00 min  
Scale Factor: 1.0

End Time : 35.00 min  
Plot Offset: 12 mV

Sample #: 28  
Date : 3/13/95 01:09 PM  
Time of Injection: 3/13/95  
Low Point : 12.00 mV  
Plot Scale: 431.3 mV  
High Point : 443.30 mV





```

=====
Software Version: 3.3 <4811>
Sample Name   : L950626-11 1:2      Time       : 3/13/95  01:09 PM
Sample Number : 28                  Study        : 515.1
Operator      : KMW

Instrument    : HP5890                Channel : B      A/D mV Range : 1000
AutoSampler  : NONE
Vial/Vial    : 0/0

```

```

Interface Serial # : 8055910402   Data Acquisition Time: 3/13/95  12:34 PM
Delay Time       : 0.00 min.
End Time        : 35.00 min.
Sampling Rate    : 1.0000 pts/sec

```

```

Raw Data File   : C:\2700\HP5890\HB30028.RAW
Result File     : C:\2700\HP5890\HB30028.RST
Instrument File  : c:\2700\methseqs\515A.ins
Process File    : 515B
Sample File     : HB515B
Sequence File   : C:\2700\METHSEQS\0310HB.seq

```

```

Inj. Volume    : 1 ul                Area Reject   : 200.000000
Sample Amount   : 1.0000             Dilution Factor : 1.00

```

```

Instrument Control Method:
Instrument name : HP5890

```

Channel Parameters:

Inlet Parameters:

```

Inlet A :                               Inlet B :

```

Detector Parameters:

```

Detector A :                             Detector B :

```

Heated Zones:

Temperature Program:

Total run time : 35.00 min

Timed Events:

There are no timed events in the method

*8080 PCB run 3/14/95*  
**HP5890 REPORT FOR 515.1 HERBICIDES DRINKING WATER ANALYSIS.**

NORTHEASTERN ANALYTICAL CORP. GAS CHROMATOGRAPHY LAB.

| Peak # | Time [min] | Component Name | Area [uV*sec] | Height [uV] | Raw Amount | Adjusted Amount | Calibration Factor |
|--------|------------|----------------|---------------|-------------|------------|-----------------|--------------------|
| 1      | 1.094      |                | 723812.25     | 115320.95   | 1.4476     | 1.4476          | 7.2381e+05         |
| 2      | 1.294      |                | 274345.11     | 47109.11    | 0.5487     | 0.5487          | 2.7435e+05         |
| 3      | 1.552      |                | 417659.64     | 99855.67    | 0.8353     | 0.8353          | 4.1766e+05         |
| 4      | 1.684      |                | 24686.00      | 5728.26     | 0.0494     | 0.0494          | 24686.0000         |
| 5      | 2.076      |                | 5366.00       | 1566.26     | 0.0107     | 0.0107          | 5366.0000          |
| 6      | 2.259      |                | 3764.00       | 1012.71     | 0.0075     | 0.0075          | 3764.0000          |
| 7      | 2.714      |                | 10226.50      | 2510.32     | 0.0205     | 0.0205          | 10226.5000         |
| 8      | 2.925      |                | 45758.00      | 12140.07    | 0.0915     | 0.0915          | 45758.0000         |
| 9      | 3.119      |                | 5944.50       | 1701.56     | 0.0119     | 0.0119          | 5944.5000          |
| 10     | 3.476      |                | 111717.00     | 20524.71    | 0.2234     | 0.2234          | 1.1172e+05         |
| 11     | 4.018      |                | 24992.50      | 4955.05     | 0.0500     | 0.0500          | 24992.5000         |
| 12     | 4.948      |                | 74349.00      | 19233.07    | 0.1487     | 0.1487          | 74349.0000         |
| 13     | 5.458      |                | 6516.00       | 2036.91     | 0.0130     | 0.0130          | 6516.0000          |
| 14     | 6.106      |                | 32155.50      | 7556.57     | 0.0643     | 0.0643          | 32155.5000         |
| 15     | 6.549      |                | 6678.50       | 1508.40     | 0.0134     | 0.0134          | 6678.5000          |
|        | 6.949      |                | 101205.00     | 17420.96    | 0.2024     | 0.2024          | 1.0120e+05         |
| J      | 7.480      | DCAA           | 0.00          | 0.00        | 0.0000     | 0.0000          | 0.0000             |
| 17     | 8.296      |                | 697411.00     | 153306.31   | 1.3948     | 1.3948          | 6.9741e+05         |
| 18     | 9.079      |                | 13468.00      | 2894.66     | 0.0269     | 0.0269          | 13468.0000         |
| 19     | 9.339      |                | 6897.00       | 1503.30     | 0.0138     | 0.0138          | 6897.0000          |
| 20     | 9.642      |                | 12423.50      | 2425.41     | 0.0248     | 0.0248          | 12423.5000         |

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| Peak # | Time [min] | Component Name    | Area [uV*sec] | Height [uV] | Raw Amount | Adjusted Amount | Calibration Factor |
|--------|------------|-------------------|---------------|-------------|------------|-----------------|--------------------|
| 21     | 9.820      |                   | 9092.50       | 1735.46     | 0.0182     | 0.0182          | 9092.5000          |
| 22     | 10.288     | 2,4-D             | 3983.00       | 883.95      | 1.1292     | 1.1292          | 3983.0000          |
| 23     | 10.513     |                   | 26276.00      | 6351.51     | 0.0526     | 0.0526          | 26276.0000         |
| 24     | 10.654     |                   | 298722.00     | 65910.97    | 0.5974     | 0.5974          | 2.9872e+05         |
| 25     | 11.320     | PENTACHLOROPHENOL | 0.00          | 0.00        | 0.0000     | 0.0000          | 0.0000             |
| 26     | 11.763     | SILVEX            | 18057.00      | 3339.10     | 1.1480     | 1.1480          | 18057.0000         |
| 27     | 12.000     |                   | 10527.00      | 2209.76     | 0.0211     | 0.0211          | 10527.0000         |
| 28     | 12.139     |                   | 88946.00      | 17489.33    | 0.1779     | 0.1779          | 88946.0000         |
| 29     | 12.541     |                   | 11820.00      | 2467.52     | 0.0236     | 0.0236          | 11820.0000         |
| 30     | 12.772     |                   | 11990.00      | 2596.85     | 0.0240     | 0.0240          | 11990.0000         |
| 31     | 12.916     | 2,4,5-T           | 32416.00      | 7386.31     | 1.8633     | 1.8633          | 32416.0000         |
| 32     | 13.184     |                   | 248541.00     | 40023.03    | 0.4971     | 0.4971          | 2.4854e+05         |
| 33     | 13.601     | DINOSEB           | 184359.00     | 36374.62    | 24.3851    | 24.3851         | 1.8436e+05         |
| 34     | 13.920     | 2,4-DB            | 0.00          | 0.00        | 0.0000     | 0.0000          | 0.0000             |
| 35     | 14.159     |                   | 48391.00      | 8264.01     | 0.0968     | 0.0968          | 48391.0000         |
| 36     | 14.366     |                   | 28771.00      | 5658.95     | 0.0575     | 0.0575          | 28771.0000         |
| 37     | 14.522     |                   | 3809.00       | 956.40      | 0.0076     | 0.0076          | 3809.0000          |
| 38     | 14.631     |                   | 22793.00      | 6110.55     | 0.0456     | 0.0456          | 22793.0000         |
| 39     | 14.887     |                   | 84529.00      | 18168.95    | 0.1691     | 0.1691          | 84529.0000         |
| 40     | 15.030     |                   | 97836.00      | 18686.96    | 0.1957     | 0.1957          | 97836.0000         |
| 41     | 15.246     |                   | 118078.00     | 23018.45    | 0.2362     | 0.2362          | 1.1808e+05         |
| 42     | 15.460     |                   | 31043.50      | 4969.32     | 0.0621     | 0.0621          | 31043.5000         |
| 43     | 16.007     |                   | 201920.00     | 27838.14    | 0.4038     | 0.4038          | 2.0192e+05         |
| 44     | 16.316     |                   | 25158.50      | 5720.56     | 0.0503     | 0.0503          | 25158.5000         |
| 45     | 16.459     |                   | 68007.00      | 12356.21    | 0.1360     | 0.1360          | 68007.0000         |
| 46     | 16.873     |                   | 37220.00      | 6729.98     | 0.0744     | 0.0744          | 37220.0000         |
| 47     | 17.112     |                   | 61294.00      | 14320.78    | 0.1226     | 0.1226          | 61294.0000         |
| 48     | 17.236     |                   | 139081.00     | 30960.88    | 0.2782     | 0.2782          | 1.3908e+05         |
| 49     | 17.543     |                   | 152507.50     | 23276.71    | 0.3050     | 0.3050          | 1.5251e+05         |
| 50     | 17.881     |                   | 97888.00      | 19910.21    | 0.1958     | 0.1958          | 97888.0000         |
| 51     | 18.062     |                   | 42637.00      | 9191.23     | 0.0853     | 0.0853          | 42637.0000         |
| 52     | 18.230     |                   | 37844.00      | 8133.52     | 0.0757     | 0.0757          | 37844.0000         |
| 53     | 18.677     |                   | 28153.50      | 5754.36     | 0.0563     | 0.0563          | 28153.5000         |
| 54     | 19.025     |                   | 47710.00      | 7452.40     | 0.0954     | 0.0954          | 47710.0000         |
| 55     | 19.301     |                   | 46883.00      | 10203.42    | 0.0938     | 0.0938          | 46883.0000         |
| 56     | 19.449     |                   | 16116.00      | 3925.56     | 0.0322     | 0.0322          | 16116.0000         |
| 57     | 19.698     |                   | 81859.50      | 17931.08    | 0.1637     | 0.1637          | 81859.5000         |
| 58     | 19.987     |                   | 8977.00       | 2428.73     | 0.0180     | 0.0180          | 8977.0000          |
| 59     | 20.154     |                   | 41091.00      | 10618.01    | 0.0822     | 0.0822          | 41091.0000         |
| 60     | 20.332     |                   | 146203.00     | 22991.62    | 0.2924     | 0.2924          | 1.4620e+05         |
| 61     | 20.553     |                   | 17082.50      | 4114.94     | 0.0342     | 0.0342          | 17082.5000         |
| 62     | 20.782     |                   | 176540.50     | 33469.81    | 0.3531     | 0.3531          | 1.7654e+05         |
| 63     | 20.992     |                   | 26537.00      | 5808.70     | 0.0531     | 0.0531          | 26537.0000         |
| 64     | 21.141     |                   | 27929.00      | 6319.01     | 0.0559     | 0.0559          | 27929.0000         |
| 65     | 21.519     |                   | 58659.00      | 11987.39    | 0.1173     | 0.1173          | 58659.0000         |
| 66     | 21.769     |                   | 126427.50     | 14235.96    | 0.2529     | 0.2529          | 1.2643e+05         |
| 67     | 22.218     |                   | 497538.00     | 47058.47    | 0.9951     | 0.9951          | 4.9754e+05         |
| 68     | 22.480     |                   | 94155.00      | 18536.50    | 0.1883     | 0.1883          | 94155.0000         |
| 69     | 22.666     |                   | 55797.00      | 10379.47    | 0.1116     | 0.1116          | 55797.0000         |
| 70     | 23.252     |                   | 17093.00      | 2934.02     | 0.0342     | 0.0342          | 17093.0000         |
| 71     | 23.659     |                   | 134323.00     | 23591.99    | 0.2686     | 0.2686          | 1.3432e+05         |
| 72     | 23.929     |                   | 400878.50     | 62741.69    | 0.8018     | 0.8018          | 4.0088e+05         |
| 73     | 24.292     |                   | 250889.00     | 45542.40    | 0.5018     | 0.5018          | 2.5089e+05         |
| 74     | 25.077     |                   | 3840.00       | 786.83      | 0.0077     | 0.0077          | 3840.0000          |
| 75     | 25.201     |                   | 8326.00       | 1687.13     | 0.0167     | 0.0167          | 8326.0000          |
| 76     | 25.617     |                   | 50656.50      | 10066.63    | 0.1013     | 0.1013          | 50656.5000         |
| 77     | 25.806     |                   | 186038.00     | 28822.06    | 0.3721     | 0.3721          | 1.8604e+05         |
| 78     | 27.645     |                   | 86413.00      | 8270.92     | 0.1728     | 0.1728          | 86413.0000         |
| 79     | 27.922     |                   | 71496.00      | 10543.46    | 0.1430     | 0.1430          | 71496.0000         |
| 80     | 29.699     |                   | 27320.50      | 3401.38     | 0.0546     | 0.0546          | 27320.5000         |
| 81     | 34.288     |                   | 3458.00       | 1025.93     | 0.0069     | 0.0069          | 3458.0000          |
|        |            |                   | 7581302.00    | 1.384e+06   | 43.2106    | 43.2106         | 7.5813e+06         |

## Missing Component Report

| Component         | Expected Retention (Sample File) |
|-------------------|----------------------------------|
| DCAA              | 7.480                            |
| PENTACHLOROPHENOL | 11.320                           |
| 2,4-DB            | 13.920                           |

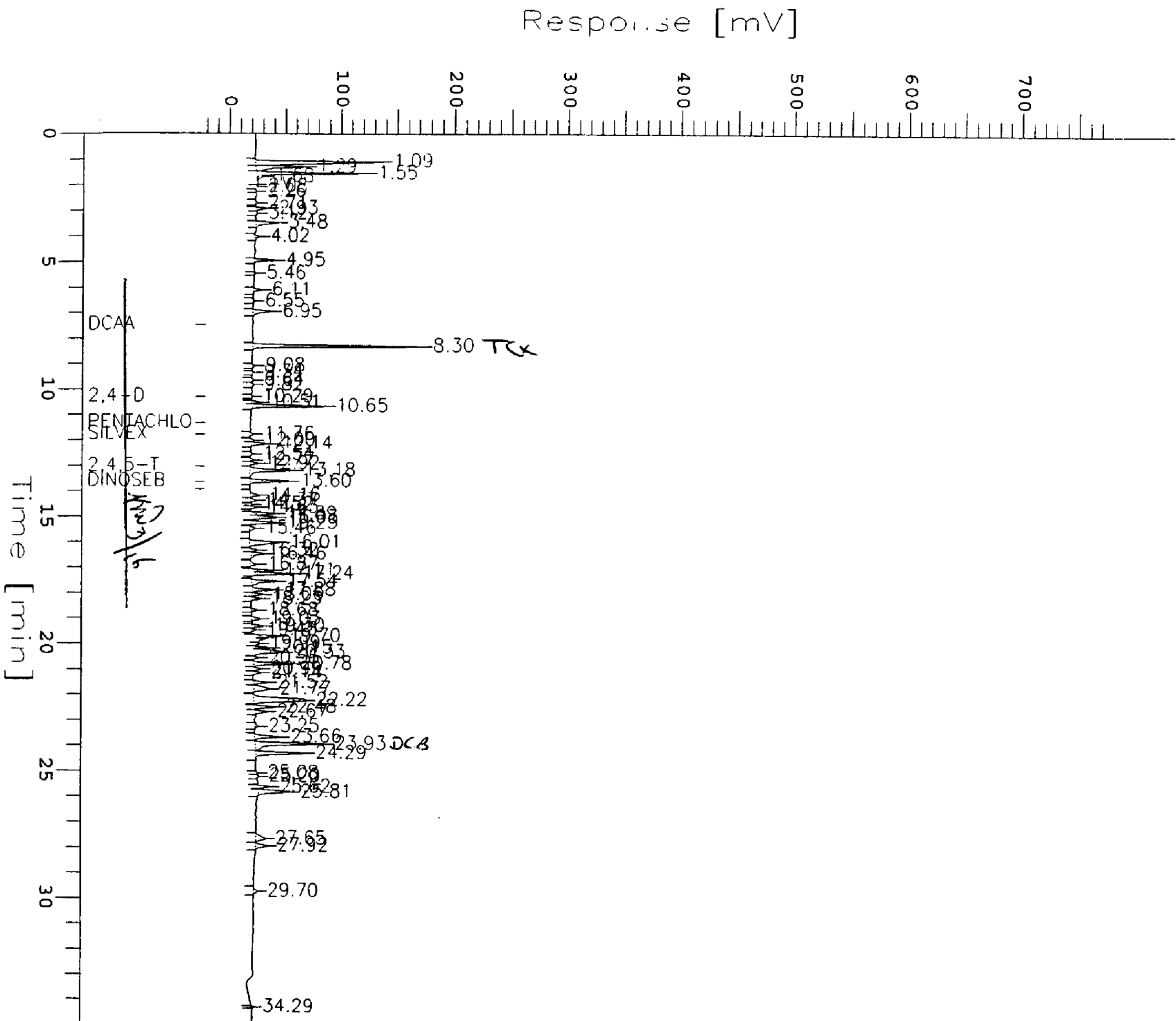
HP5890 DETECTOR 8

Sample Name : L950626-11 1:2  
FileName : c:\2700\hp5890\H830028.raw  
Method : 515A.ins  
Start Time : 0.00 min  
Scale Factor: -1.0

End Time : 35.00 min  
Plot Offset: -21 mV

Sample #: 28  
Date : 3/13/95 01:10 PM  
Time of Injection: 3/13/95  
Low Point : -21.08 mV  
Plot Scale: 800.0 mV

Page 1 of 1  
12:34 PM  
High Point : 778.92 mV



Software Version: 3.3 <4811>  
 Sample Name : L950626-12 1:5 PCB SOIL Time : 3/9/95 07:01 AM  
 Sample Number: 34 Study : PPCB  
 Operator : KMW  
 Instrument : HP5890 Channel : A A/D mV Range : 1000  
 toSampler : NONE  
 k/Vial : 0/0

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Interface Serial # : 8055910402 Data Acquisition Time: 3/9/95 06:27 AM  
 Delay Time : 0.00 min.  
 End Time : 33.00 min.  
 Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\HP5890\PA38034.RAW  
 Result File : C:\2700\HP5890\PA38034.RST  
 Instrument File: c:\2700\methseqs\HPPESTB.ins  
 Process File : HPPESTA  
 Sample File : PESTA058  
 Sequence File : C:\2700\METHSEQS\0308PCB.SEQ

Inj. Volume : 1 ul Area Reject : 200.000000  
 Sample Amount : 1.0000 Dilution Factor : 1.00

Instrument Control Method:  
 Instrument name : HP5890

Channel Parameters:

Inlet Parameters:  
 Inlet A : Inlet B :

Detector Parameters:  
 Detector A : Detector B :

Heated Zones:

Temperature Program:

Total run time : 33.00 min

Timed Events:  
 There are no timed events in the method

# HP 5890 REPORT FOR PEST/PCB ANALYSIS

NORTHEASTERN ANALYTICAL CORP. GAS CHROMATOGRAPHY LAB.

| Peak # | Component Name | Time [min] | Area [uV*sec] | Height [uV] | Raw Amount | Adjusted Amount | Calibration Factor | Delta RT [%] | Cal. Range |
|--------|----------------|------------|---------------|-------------|------------|-----------------|--------------------|--------------|------------|
| 1      |                | 1.092      | 788120.94     | 129355.54   | 27.9601    | 27.9601         | 788121             | -----        |            |
| 2      |                | 1.304      | 161166.41     | 25692.82    | 8.3784     | 8.3784          | 161166             | -----        |            |
| 3      |                | 1.623      | 259504.15     | 62190.92    | 11.4498    | 11.4498         | 259504             | -----        |            |
| 4      |                | 1.769      | 18644.00      | 6033.03     | 3.9270     | 3.9270          | 18644              | -----        |            |
| 5      |                | 2.020      | 3976.00       | 1406.14     | 3.4689     | 3.4689          | 3976               | -----        |            |
| 6      |                | 2.156      | 5629.00       | 1421.89     | 3.5205     | 3.5205          | 5629               | -----        |            |
| 7      |                | 2.637      | 48290.50      | 11234.68    | 4.8530     | 4.8530          | 48290              | -----        |            |
| 8      |                | 3.009      | 44315.00      | 8886.55     | 4.7288     | 4.7288          | 44315              | -----        |            |
| 9      |                | 3.818      | 15721.00      | 3993.45     | 3.8357     | 3.8357          | 15721              | -----        |            |
| 10     |                | 4.293      | 18084.00      | 972.97      | 3.9095     | 3.9095          | 18084              | -----        |            |
| 11     |                | 4.569      | 223745.50     | 63293.34    | 10.3329    | 10.3329         | 223746             | -----        |            |
| 12     |                | 5.092      | 16731.50      | 2199.50     | 3.8673     | 3.8673          | 16732              | -----        |            |
| 13     |                | 5.385      | 113471.00     | 26244.73    | 6.8887     | 6.8887          | 113471             | -----        |            |
|        |                | 5.666      | 10138.00      | 1169.78     | 3.6613     | 3.6613          | 10138              | -----        |            |
|        |                | 5.812      | 9013.00       | 1195.94     | 3.6262     | 3.6262          | 9013               | -----        |            |
| 16     |                | 6.005      | 6657.00       | 1219.79     | 3.5526     | 3.5526          | 6657               | -----        |            |
| 17     |                | 6.204      | 127008.00     | 35943.41    | 7.3115     | 7.3115          | 127008             | -----        |            |
| 18     |                | 6.322      | 65893.00      | 13825.81    | 5.4027     | 5.4027          | 65893              | -----        |            |
| 19     |                | 6.518      | 6988.00       | 2052.56     | 3.5629     | 3.5629          | 6988               | -----        |            |
| 20     |                | 6.737      | 14442.00      | 2263.46     | 3.7958     | 3.7958          | 14442              | -----        |            |

| Peak # | Component Name      | Time [min] | Area [uV*sec] | Height [uV] | Raw Amount | Adjusted Amount | Calibration Factor | Delta RT [%] | Cal. Range |
|--------|---------------------|------------|---------------|-------------|------------|-----------------|--------------------|--------------|------------|
| 21     |                     | 6.984      | 14492.00      | 1986.61     | 3.7973     | 3.7973          | 14492              | -----        |            |
| 22     |                     | 7.166      | 20541.50      | 2227.88     | 3.9863     | 3.9863          | 20542              | -----        |            |
| 23     | TCMX                | 7.572      | 376856.00     | 88812.91    | 15.0495    | 0.0000          | 376856             | 0.2842       |            |
|        |                     | 7.935      | 84158.50      | 11256.81    | 5.9732     | 5.9732          | 84158              | -----        |            |
|        |                     | 8.101      | 13213.00      | 3171.18     | 3.7574     | 3.7574          | 13213              | -----        |            |
| 26     |                     | 8.230      | 9847.00       | 3142.46     | 3.6522     | 3.6522          | 9847               | -----        |            |
| 27     |                     | 8.508      | 22289.50      | 1584.28     | 4.0409     | 4.0409          | 22290              | -----        |            |
| 28     |                     | 8.785      | 16088.00      | 2940.73     | 3.8472     | 3.8472          | 16088              | -----        |            |
| 29     |                     | 9.224      | 39909.00      | 9067.20     | 4.5912     | 4.5912          | 39909              | -----        |            |
| 30     |                     | 9.359      | 43612.00      | 11239.35    | 4.7068     | 4.7068          | 43612              | -----        |            |
| 31     |                     | 9.555      | 104063.00     | 23750.55    | 6.5949     | 6.5949          | 104063             | -----        |            |
| 32     |                     | 9.791      | 77470.00      | 14404.44    | 5.7643     | 5.7643          | 77470              | -----        |            |
| 33     |                     | 10.030     | 73441.00      | 12063.24    | 5.6385     | 5.6385          | 73441              | -----        |            |
| 34     |                     | 10.370     | 63386.00      | 11091.85    | 5.3244     | 5.3244          | 63386              | -----        |            |
| 35     | APLHA BHC           | 10.756     | 6817.50       | 1077.29     | 3.5576     | 3.5576          | 6818               | -0.3765      |            |
| 36     |                     | 10.988     | 647564.00     | 137650.03   | 23.5701    | 23.5701         | 647564             | -----        |            |
| 37     |                     | 11.308     | 9677.00       | 2393.73     | 3.6469     | 3.6469          | 9677               | -----        |            |
| 38     |                     | 11.424     | 82171.00      | 18296.04    | 5.9111     | 5.9111          | 82171              | -----        |            |
| 39     |                     | 11.691     | 240080.50     | 48854.63    | 10.5707    | 10.5707         | 240080             | -----        |            |
| 40     |                     | 11.884     | 247344.00     | 51590.43    | 10.8095    | 10.8095         | 247344             | -----        |            |
| 41     | GAMMA BHC           | 12.303     | 228996.50     | 34485.20    | 10.2062    | 10.2062         | 228996             | 0.3758       |            |
| 42     |                     | 12.605     | 1445563.00    | 270607.44   | 50.2112    | 50.2112         | 1445563            | -----        |            |
| 43     |                     | 12.854     | 36635.00      | 8585.64     | 2.3591     | 2.3591          | 36635              | -----        |            |
| 44     | HEPTACHLOR          | 13.076     | 992621.50     | 145543.93   | 40.1783    | 40.1783         | 992622             | 1.2565       |            |
| 45     |                     | 13.479     | 512437.50     | 68354.49    | 19.7444    | 19.7444         | 512438             | -----        |            |
| 46     | ALDRIN              | 13.846     | 265792.50     | 52621.16    | 11.2798    | 11.2798         | 265793             | 0.0315       |            |
| 47     |                     | 14.113     | 11693.50      | 3129.25     | 2.5594     | 2.5594          | 11694              | -----        |            |
| 48     |                     | 14.579     | 24441.50      | 2339.81     | 1.9767     | 1.9767          | 24441              | -----        |            |
| 49     |                     | 14.779     | 1073185.00    | 174294.08   | 77.4404    | 77.4404         | 1073185            | -----        |            |
| 50     | BETA BHC            | 15.122     | 877522.00     | 132477.21   | 63.3612    | 63.3612         | 877522             | -0.1457      |            |
| 51     |                     | 15.388     | 1757898.00    | 394870.29   | 126.7099   | 126.7099        | 1757898            | -----        |            |
| 52     | DELTA BHC           | 15.807     | 476808.00     | 63630.64    | 20.2248    | 20.2248         | 476808             | -0.6021      |            |
| 53     |                     | 15.934     | 9897.00       | 3737.54     | 3.9564     | 3.9564          | 9897               | -----        |            |
| 54     |                     | 16.226     | 1916565.00    | 202689.20   | 72.5487    | 72.5487         | 1916565            | -----        |            |
| 55     | HEPTACHLOR EXPOXIDE | 16.381     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 56     |                     | 16.649     | 131153.00     | 27725.75    | 5.5076     | 5.5076          | 131153             | -----        |            |
|        |                     | 16.843     | 429585.00     | 100223.25   | 16.7136    | 16.7136         | 429585             | -----        |            |
|        |                     | 16.969     | 95397.00      | 25574.55    | 4.3564     | 4.3564          | 95397              | -----        |            |
|        |                     | 17.082     | 454218.00     | 85030.33    | 17.8326    | 17.8326         | 454218             | -----        |            |
| 59     | ENDOSULFAN I        | 17.388     | 6819.00       | 1433.69     | 1.0296     | 1.0296          | 6819               | 0.3866       |            |
| 60     | GAMMA CHLORDANE     | 17.605     | 121603.00     | 25011.27    | 5.1350     | 5.1350          | 121603             | 0.2118       |            |
| 61     | ALPHA CHLORDANE     | 17.795     | 358028.50     | 66777.68    | 13.8461    | 13.8461         | 358028             | 0.0509       |            |
| 62     | DDE                 | 18.066     | 271232.00     | 61129.10    | 11.7713    | 11.7713         | 271232             | -0.1945      |            |
| 63     | DIELDRIN            | 18.471     | 1119395.00    | 198065.28   | 46.3305    | 46.3305         | 1119395            | -0.6974      |            |
| 64     |                     | 18.734     | 70203.00      | 14345.35    | 5.1535     | 5.1535          | 70203              | -----        |            |
| 65     |                     | 19.010     | 818507.00     | 135652.63   | 45.4774    | 45.4774         | 818507             | -----        |            |
| 66     | ENDRIN              | 19.305     | 834968.00     | 166618.84   | 46.3526    | 46.3526         | 834968             | -0.1601      |            |
| 67     |                     | 19.564     | 262745.00     | 33108.96    | 15.9262    | 15.9262         | 262745             | -----        |            |
| 68     |                     | 19.786     | 909251.00     | 174914.94   | 50.3024    | 50.3024         | 909251             | -----        |            |
| 69     |                     | 20.233     | 352003.50     | 62093.95    | 23.7687    | 23.7687         | 352004             | -----        |            |
| 70     |                     | 20.404     | 159331.50     | 39398.10    | 12.4927    | 12.4927         | 159331             | -----        |            |
| 71     |                     | 20.517     | 308936.50     | 72670.31    | 21.2482    | 21.2482         | 308936             | -----        |            |
| 72     |                     | 20.810     | 44116.00      | 9731.83     | 5.7499     | 5.7499          | 44116              | -----        |            |
| 73     | DDD                 | 21.007     | 1425701.00    | 234121.94   | 86.6057    | 86.6057         | 1425701            | 0.3918       |            |
| 74     | ENDOSULFAN II       | 21.208     | 323927.50     | 73669.75    | 18.1605    | 18.1605         | 323927             | 0.5584       |            |
| 75     | DDT                 | 21.351     | 195615.50     | 44970.42    | 19.8822    | 19.8822         | 195615             | -0.4660      |            |
| 76     |                     | 21.883     | 32208.00      | 8078.49     | 8.9391     | 8.9391          | 32208              | -----        |            |
| 77     |                     | 22.015     | 75197.50      | 15711.82    | 7.0326     | 7.0326          | 75197              | -----        |            |
| 78     |                     | 22.248     | 542420.00     | 103353.33   | 39.5913    | 39.5913         | 542420             | -----        |            |
| 79     | ENDRIN ALCOHYDE     | 22.451     | 159150.00     | 33507.90    | 12.8829    | 12.8829         | 159150             | -0.6746      |            |
| 80     |                     | 22.573     | 26904.00      | 9175.00     | 3.6672     | 3.6672          | 26904              | -----        |            |
| 81     |                     | 22.746     | 76669.00      | 14268.76    | 7.1351     | 7.1351          | 76669              | -----        |            |
| 82     |                     | 22.985     | 263339.00     | 47949.29    | 20.1433    | 20.1433         | 263339             | -----        |            |
| 83     |                     | 23.229     | 1111941.00    | 195125.47   | 260.6474   | 260.6474        | 1111941            | -----        |            |
| 84     | METHOXYCHLOR        | 23.710     | 52028.00      | 8763.81     | -0.3845    | -0.3845         | 52028              | 0.3617       |            |
| 85     | ENDOSULFAN SULFATE  | 23.726     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 86     | DBC                 | 23.939     | 262831.00     | 52190.74    | 19.1604    | 19.1604         | 262831             | 0.1463       |            |
| 87     |                     | 24.157     | 8008.00       | 1548.24     | 1.1215     | 1.1215          | 8008               | -----        |            |
| 88     |                     | 24.303     | 266769.00     | 58395.35    | 19.4392    | 19.4392         | 266769             | -----        |            |
| 89     |                     | 24.459     | 777997.50     | 154802.29   | 55.6291    | 55.6291         | 777998             | -----        |            |
| 90     | ENDRIN KETONE       | 24.983     | 198282.00     | 14430.12    | 10.4289    | 10.4289         | 198282             | -0.1429      |            |
|        |                     | 25.166     | 52382.00      | 7013.09     | 3.6912     | 3.6912          | 52382              | -----        |            |
|        |                     | 25.409     | 41113.50      | 4538.34     | 3.1708     | 3.1708          | 41113              | -----        |            |
| 92     |                     | 25.692     | 85019.00      | 18028.24    | 5.1984     | 5.1984          | 85019              | -----        |            |
| 93     |                     | 25.815     | 10047.00      | 3061.91     | 1.7361     | 1.7361          | 10047              | -----        |            |
| 94     |                     | 26.078     | 23678.00      | 2970.46     | 2.3656     | 2.3656          | 23678              | -----        |            |
| 95     |                     | 26.384     | 11153.50      | 2147.48     | 1.7872     | 1.7872          | 11153              | -----        |            |

| Peak<br># | Component<br>Name | Time<br>[min] | Area<br>[uV*sec] | Height<br>[uV] | Raw<br>Amount | Adjusted<br>Amount | Calibration<br>Factor | Delta RT<br>[%] | Cal.<br>Range |
|-----------|-------------------|---------------|------------------|----------------|---------------|--------------------|-----------------------|-----------------|---------------|
| 96        |                   | 26.567        | 333213.00        | 57081.92       | 16.6602       | 16.6602            | 333213                | -----           |               |
| 97        |                   | 26.820        | 16182.00         | 2966.91        | -12.0211      | -12.0211           | 16182                 | -----           |               |
| 98        |                   | 27.002        | 27175.50         | 4004.09        | -11.4896      | -11.4896           | 27176                 | -----           |               |
|           |                   | 27.315        | 53644.00         | 3985.95        | -10.2098      | -10.2098           | 53644                 | -----           |               |
| 101       |                   | 27.479        | 14052.00         | 3092.76        | -12.1241      | -12.1241           | 14052                 | -----           |               |
|           |                   | 27.665        | 207842.00        | 36796.95       | -2.7543       | -2.7543            | 207842                | -----           |               |
| 0         | DCB               | 28.203        | 0.00             | 0.00           | 0.0000        | 0.0000             | 0                     | -----           |               |
| 102       |                   | 29.406        | 633406.00        | 61188.49       | 17.8217       | 17.8217            | 633406                | -----           |               |
| 103       |                   | 30.073        | 57338.00         | 3026.67        | -10.0312      | -10.0312           | 57338                 | -----           |               |
| -----     |                   |               |                  |                |               |                    |                       |                 |               |
|           |                   | 27893340.00   | 4.994e+06        | 1698.4575      | 1683.4080     |                    |                       |                 |               |

## Missing Component Report

| Component           | Expected Retention (Sample File) |
|---------------------|----------------------------------|
| HEPTACHLOR EXPOXIDE | 16.381                           |
| ENDOSULFAN SULFATE  | 23.726                           |
| DCB                 | 28.203                           |

=====

HP5890 DETECTOR A

=====

Report Stored in ASCII File: C:\2700\HP5890\PA38034.TXT

# Chromatogram

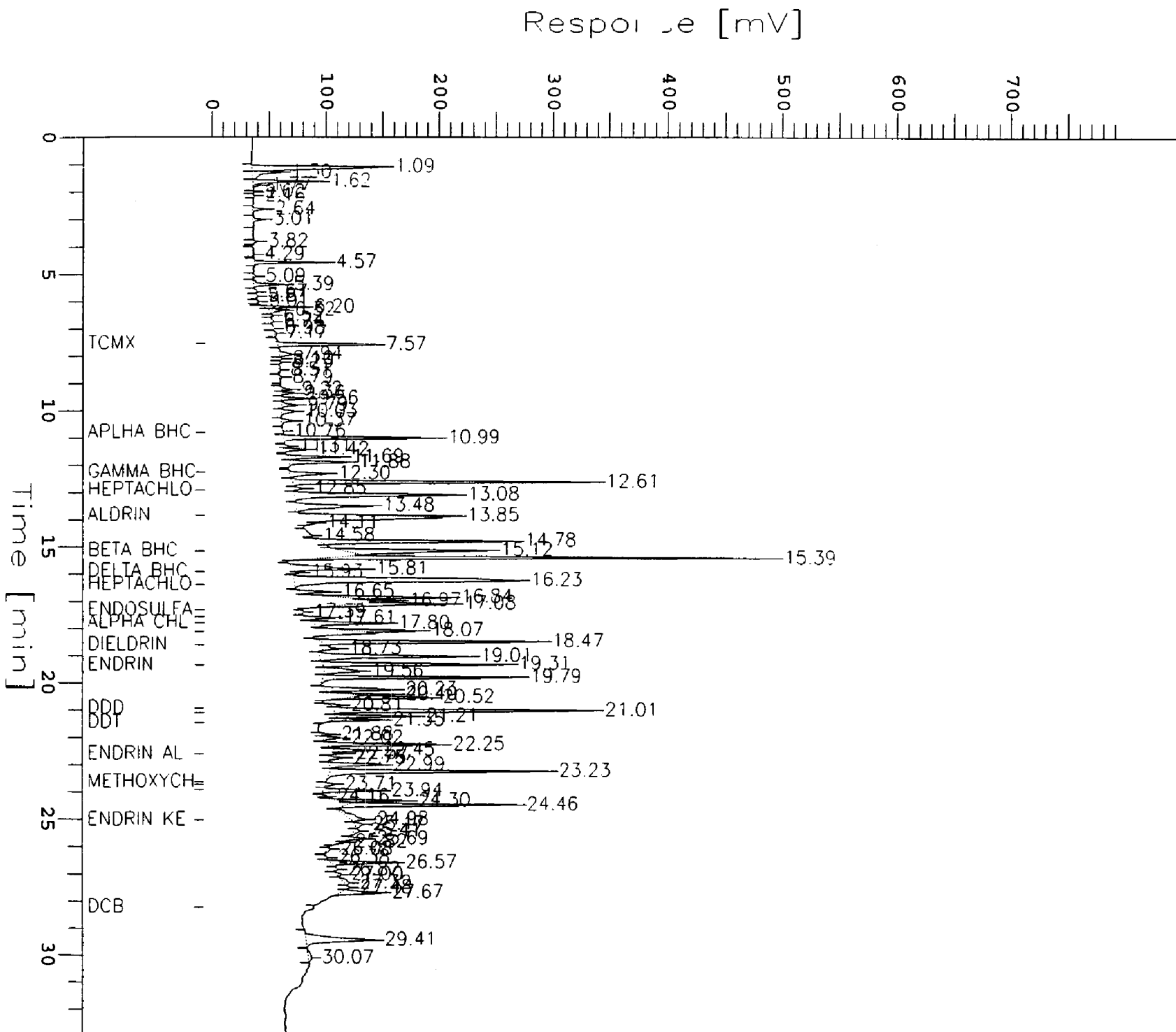
3.58

Sample Name : L950626-12 1:5 PCB SOIL  
 FileName : c:\2700\hps5890\PA38034.raw  
 Method : HPPEST8.ins  
 Start Time : 0.00 min  
 Scale Factor: -1.0

End Time : 33.00 min  
 Plot Offset: -5 mV

Sample #: 34  
 Date : 3/9/95 07:01 AM  
 Time of Injection: 3/9/95  
 Low Point : -5.41 mV  
 Plot Scale: 800.0 mV

Page 1 of 1  
 06:27 AM  
 High Point : 794.59 mV



```

=====
Software Version: 3.3 <4811>
Sample Name : L950626-12 1:5 PCB SOIL Time : 3/9/95 07:01 AM
Sample Number: 34 Study : PPPCB
Operator : KMW

Instrument : HP5890 Channel : B A/D mV Range : 1000
AutoSampler : NONE
Ink/Vial : 0/0

```

```

Interface Serial # : 8055910402 Data Acquisition Time: 3/9/95 06:27 AM
Delay Time : 0.00 min.
End Time : 33.00 min.
Sampling Rate : 1.0000 pts/sec

```

```

Raw Data File : C:\2700\HP5890\PB38034.RAW
Result File : C:\2700\HP5890\PB38034.RST
Instrument File: c:\2700\methseqs\HPPESTB.ins
Process File : HPPESTB
Sample File : PESTB058
Sequence File : C:\2700\METHSEQS\0308PCB.SEQ

```

```

Inj. Volume : 1 ul Area Reject : 200.000000
Sample Amount : 1.0000 Dilution Factor : 1.00

```

```

Instrument Control Method:
Instrument name : HP5890

```

Channel Parameters:

```

Inlet Parameters:
Inlet A : Inlet B :

```

```

Detector Parameters:
Detector A : Detector B :

```

Heated Zones:

Temperature Program:

Total run time : 33.00 min

```

Timed Events:
There are no timed events in the method

```

### HP5890 REPORT FOR PEST/PCB ANALYSIS

NORTHEASTERN ANALYTICAL CORP. GAS CHROMATOGRAPHY LAB.

| Peak # | Component Name | Time [min] | Area [uV*sec] | Height [uV] | Raw Amount | Adjusted Amount | Calibration Factor | Cal. Range |
|--------|----------------|------------|---------------|-------------|------------|-----------------|--------------------|------------|
| 1      |                | 1.119      | 289245.86     | 36247.32    | 16.5362    | 16.5362         | 289246             |            |
| 2      |                | 1.288      | 87305.17      | 21234.95    | 1.5214     | 1.5214          | 87305              |            |
| 3      |                | 1.409      | 46832.50      | 10909.72    | -1.4879    | -1.4879         | 46832              |            |
| 4      |                | 1.544      | 179927.48     | 46623.02    | 8.4081     | 8.4081          | 179927             |            |
| 5      |                | 1.930      | 4309.50       | 1209.94     | -4.6496    | -4.6496         | 4310               |            |
| 6      |                | 2.446      | 9373.00       | 1409.33     | -4.2731    | -4.2731         | 9373               |            |
| 7      |                | 2.702      | 44097.00      | 8858.22     | -1.6913    | -1.6913         | 44097              |            |
| 8      |                | 3.105      | 26260.00      | 6354.61     | -3.0175    | -3.0175         | 26260              |            |
| 9      |                | 3.458      | 5610.00       | 1204.67     | -4.5529    | -4.5529         | 5610               |            |
| 10     |                | 4.090      | 31398.00      | 4499.13     | -2.6355    | -2.6355         | 31398              |            |
| 11     |                | 4.369      | 9132.00       | 1158.88     | -4.2910    | -4.2910         | 9132               |            |
| 12     |                | 4.698      | 10483.50      | 3155.93     | -4.1905    | -4.1905         | 10483              |            |
| 13     |                | 4.922      | 179081.50     | 47644.35    | 8.3452     | 8.3452          | 179082             |            |
| 14     |                | 5.328      | 41266.00      | 3201.86     | -1.9018    | -1.9018         | 41266              |            |
| 15     |                | 5.680      | 19955.50      | 1609.60     | -3.4862    | -3.4862         | 19956              |            |
| 16     |                | 6.080      | 102973.00     | 25780.02    | 2.6863     | 2.6863          | 102973             |            |
| 17     |                | 6.486      | 6853.00       | 1218.99     | -4.4605    | -4.4605         | 6853               |            |
| 18     |                | 6.916      | 129737.00     | 27574.22    | 4.6763     | 4.6763          | 129737             |            |
| 19     |                | 7.167      | 10199.00      | 1975.92     | -4.2117    | -4.2117         | 10199              |            |
| 20     |                | 7.370      | 14398.00      | 2188.28     | -3.8995    | -3.8995         | 14398              |            |
| 21     |                | 7.552      | 12028.00      | 1445.40     | -4.0757    | -4.0757         | 12028              |            |



360

| Peak # | Component Name       | Time [min] | Area [uV*sec] | Height [uV] | Raw Amount | Adjusted Amount | Calibration Factor | Cal. Range |
|--------|----------------------|------------|---------------|-------------|------------|-----------------|--------------------|------------|
| 22     |                      | 7.881      | 2641.00       | 678.97      | -4.7736    | -4.7736         | 2641               |            |
| 23     |                      | 7.977      | 8257.50       | 1768.03     | -4.3560    | -4.3560         | 8257               |            |
| 24     | TCMX                 | 8.264      | 276008.00     | 61579.45    | 15.5519    | 15.5519         | 276008             |            |
|        |                      | 8.804      | 6971.50       | 1195.20     | -4.4516    | -4.4516         | 6972               |            |
|        |                      | 9.303      | 421934.50     | 61426.23    | 26.4020    | 26.4020         | 421934             |            |
| 27     |                      | 10.251     | 18301.00      | 4218.51     | 2.1118     | 2.1118          | 18301              |            |
| 28     |                      | 10.485     | 85628.00      | 19204.26    | 5.0348     | 5.0348          | 85628              |            |
| 29     |                      | 10.626     | 10210.00      | 2603.18     | 1.7605     | 1.7605          | 10210              |            |
| 30     | ALPHA BHC            | 10.698     | 14556.50      | 5182.83     | 1.9492     | 1.9492          | 14556              |            |
| 31     |                      | 10.973     | 13832.00      | 2751.09     | 1.9178     | 1.9178          | 13832              |            |
| 32     |                      | 11.734     | 40187.50      | 7364.61     | 2.5939     | 2.5939          | 40188              |            |
| 33     |                      | 11.958     | 23644.00      | 5500.01     | 1.8235     | 1.8235          | 23644              |            |
| 34     |                      | 12.105     | 409345.50     | 83342.02    | 19.7839    | 19.7839         | 409346             |            |
| 35     | BETA BHC             | 12.378     | 418726.00     | 80703.02    | 20.2208    | 20.2208         | 418726             |            |
| 36     |                      | 12.727     | 13601.00      | 3557.00     | 1.3558     | 1.3558          | 13601              |            |
| 37     |                      | 12.883     | 153840.00     | 34279.41    | 5.0849     | 5.0849          | 153840             |            |
| 38     |                      | 13.165     | 340594.00     | 45218.62    | 12.0421    | 12.0421         | 340594             |            |
| 0      | GAMMA BHC            | 13.331     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 39     |                      | 13.565     | 915347.00     | 183028.01   | 33.4536    | 33.4536         | 915347             |            |
| 40     |                      | 13.821     | 11944.00      | 3116.04     | 1.9868     | 1.9868          | 11944              |            |
| 41     | DELTA BHC            | 14.126     | 176541.00     | 35996.07    | 9.7362     | 9.7362          | 176541             |            |
| 42     |                      | 14.336     | 56086.00      | 9281.76     | 4.0651     | 4.0651          | 56086              |            |
| 43     |                      | 14.481     | 6862.00       | 1999.67     | 1.5260     | 1.5260          | 6862               |            |
| 44     | HEPTACHLOR           | 14.601     | 180989.50     | 38175.82    | 10.1920    | 10.1920         | 180989             |            |
| 45     |                      | 14.853     | 274077.50     | 62229.47    | 14.8249    | 14.8249         | 274078             |            |
| 46     |                      | 15.068     | 811069.00     | 85585.77    | 41.5502    | 41.5502         | 811069             |            |
| 47     |                      | 15.426     | 50905.50      | 9189.90     | 63.4205    | 63.4205         | 50906              |            |
| 48     |                      | 15.976     | 718699.00     | 97038.32    | -320.6349  | -320.6349       | 718699             |            |
| 0      | ALDRIN               | 16.123     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 49     |                      | 16.280     | 83896.50      | 19239.52    | 44.4470    | 44.4470         | 83896              |            |
| 50     |                      | 16.424     | 201322.50     | 45807.16    | -23.0860   | -23.0860        | 201323             |            |
| 51     |                      | 16.533     | 16804.00      | 6527.35     | 83.0327    | 83.0327         | 16804              |            |
| 52     |                      | 16.838     | 221475.00     | 37365.04    | 12.1090    | 12.1090         | 221475             |            |
| 53     | HEPTACHLOR EPOXIDE   | 17.076     | 381668.00     | 84135.97    | 21.1234    | 21.1234         | 381668             |            |
| 54     | GAMMA CHLORDANE      | 17.211     | 224387.50     | 55007.86    | 11.7127    | 11.7127         | 224387             |            |
| 55     |                      | 17.504     | 259280.00     | 53496.55    | 13.5803    | 13.5803         | 259280             |            |
| 56     |                      | 17.628     | 23959.00      | 8025.02     | -0.1137    | -0.1137         | 23959              |            |
|        | ALPHA CHLORDANE/ENDO | 17.846     | 330935.50     | 64589.94    | 17.5686    | 17.5686         | 330936             |            |
|        |                      | 18.028     | 161283.00     | 35465.71    | 7.7964     | 7.7964          | 161283             |            |
| 59     |                      | 18.196     | 258693.00     | 55078.89    | 13.4073    | 13.4073         | 258693             |            |
| 60     |                      | 18.517     | 169862.00     | 37210.54    | 11.6835    | 11.6835         | 169862             |            |
| 61     |                      | 18.647     | 63078.00      | 16248.29    | 4.9444     | 4.9444          | 63078              |            |
| 62     |                      | 18.801     | 17746.00      | 4192.45     | 2.0835     | 2.0835          | 17746              |            |
| 63     | DIELDRIN             | 19.001     | 145188.00     | 26419.33    | 10.1264    | 10.1264         | 145188             |            |
| 64     | DDE                  | 19.269     | 211826.50     | 43540.08    | 13.0814    | 13.0814         | 211826             |            |
| 65     |                      | 19.417     | 71510.00      | 17307.50    | 4.4493     | 4.4493          | 71510              |            |
| 66     |                      | 19.665     | 414266.00     | 87974.09    | 25.5352    | 25.5352         | 414266             |            |
| 67     |                      | 19.955     | 7380.00       | 2483.15     | 0.5041     | 0.5041          | 7380               |            |
| 68     |                      | 20.116     | 1472508.50    | 321417.12   | 125.5721   | 125.5721        | 1472509            |            |
| 69     |                      | 20.519     | 21375.00      | 5964.84     | 1.8214     | 1.8214          | 21375              |            |
| 70     | ENDRIN               | 20.748     | 351071.00     | 67248.54    | 29.9374    | 29.9374         | 351071             |            |
| 71     |                      | 20.953     | 10432.00      | 2731.80     | 1.7136     | 1.7136          | 10432              |            |
| 72     | ENDOSULFAN I         | 21.106     | 73278.00      | 14479.19    | 6.4505     | 6.4505          | 73278              |            |
| 73     |                      | 21.482     | 121143.50     | 23722.72    | 8.0477     | 8.0477          | 121144             |            |
| 74     | DDD                  | 21.657     | 398746.50     | 43904.74    | 29.2364    | 29.2364         | 398746             |            |
| 75     | ENDRIN ALDEHYDE      | 22.208     | 693080.00     | 90368.90    | 70.2954    | 70.2954         | 693080             |            |
| 76     | ENDOSULFAN SULFATE   | 22.445     | 149359.50     | 29595.95    | 15.3985    | 15.3985         | 149359             |            |
| 77     |                      | 22.641     | 180054.00     | 20501.17    | 18.6149    | 18.6149         | 180054             |            |
| 78     |                      | 22.963     | 4651.00       | 1498.38     | -0.3996    | -0.3996         | 4651               |            |
| 79     | DDT                  | 23.215     | 47455.00      | 6621.15     | 3.2968     | 3.2968          | 47455              |            |
| 80     |                      | 23.629     | 272228.00     | 50143.28    | 21.3462    | 21.3462         | 272228             |            |
| 81     | ENDRIN KETONE        | 23.902     | 323032.50     | 44947.63    | 25.4548    | 25.4548         | 323032             |            |
| 82     |                      | 24.257     | 399251.00     | 73661.40    | 31.6187    | 31.6187         | 399251             |            |
| 83     |                      | 24.641     | 51768.00      | 8906.24     | 3.5173     | 3.5173          | 51768              |            |
| 84     |                      | 24.825     | 8360.00       | 1365.97     | -2.5092    | -2.5092         | 8360               |            |
| 85     |                      | 25.034     | 48109.00      | 6926.07     | 7.0706     | 7.0706          | 48109              |            |
| 86     |                      | 25.228     | 7048.00       | 1196.38     | -2.8254    | -2.8254         | 7048               |            |
| 87     |                      | 25.351     | 28466.00      | 5517.52     | 2.3365     | 2.3365          | 28466              |            |
| 88     | METHOXYCHLOR         | 25.578     | 160759.00     | 28654.69    | 34.2200    | 34.2200         | 160759             |            |
| 89     | DBC                  | 25.775     | 325725.50     | 51775.83    | 30.7982    | 30.7982         | 325725             |            |
|        |                      | 26.774     | 31502.00      | 4074.34     | 3.3116     | 3.3116          | 31502              |            |
|        |                      | 27.033     | 23807.00      | 2771.61     | 2.5927     | 2.5927          | 23807              |            |
|        |                      | 27.501     | 50189.00      | 7705.80     | 5.0573     | 5.0573          | 50189              |            |
| 93     |                      | 27.706     | 3829.00       | 844.55      | 0.7264     | 0.7264          | 3829               |            |
| 94     |                      | 27.876     | 139570.50     | 21371.72    | 13.4074    | 13.4074         | 139571             |            |
| 95     |                      | 29.647     | 139718.00     | 16792.28    | -0.8751    | -0.8751         | 139718             |            |
| 0      | DCB                  | 31.152     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |

| Peak<br># | Component<br>Name | Time<br>[min] | Area<br>[uV*sec] | Height<br>[uV] | Raw<br>Amount | Adjusted<br>Amount | Calibration<br>Factor | Cal.<br>Range |
|-----------|-------------------|---------------|------------------|----------------|---------------|--------------------|-----------------------|---------------|
| 96        |                   | 32.834        | 24439.00         | 2714.52        | -11.0616      | -11.0616           | 24439                 |               |
|           |                   |               | 15546779.50      | 2.859e+06      | 701.6783      | 701.6783           | 15546780              |               |

## Missing Component Report

| Component | Expected Retention (Sample File) |
|-----------|----------------------------------|
|-----------|----------------------------------|

|           |        |
|-----------|--------|
| GAMMA BHC | 13.331 |
| ALDRIN    | 16.123 |
| DCB       | 31.152 |

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HP5890 DETECTOR B

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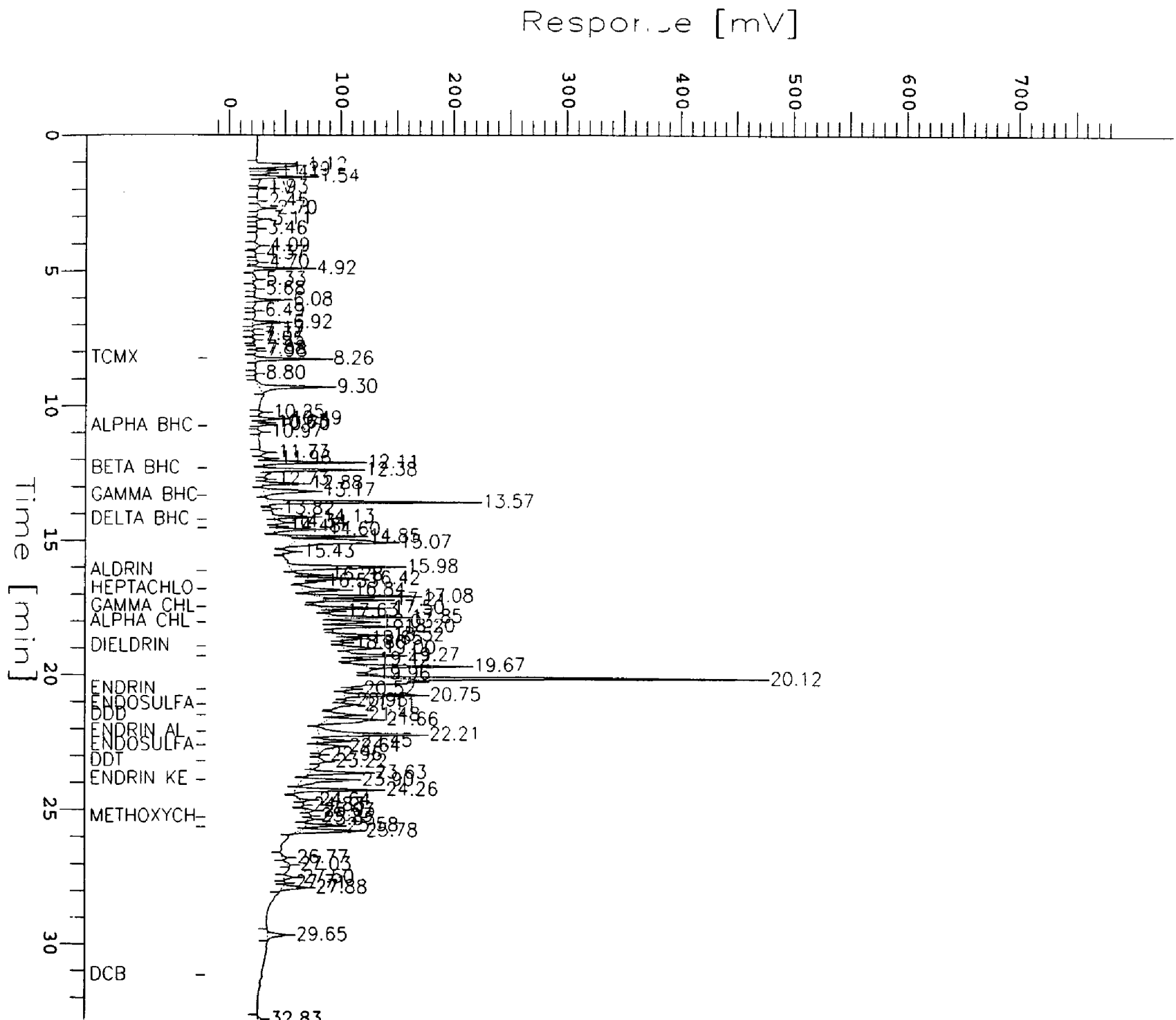
Report Stored in ASCII File: C:\2700\HP5890\PB38034.TXT

# Chromatogram

362

Sample Name : L950626-12\_1:5 PCB SOIL  
 Filename : c:\2700\hps890\p836034.raw  
 Method : HPPEST8.ins  
 Start Time : 0.00 min  
 Scale Factor: -1.0  
 End Time : 33.00 min  
 Plot Offset: -19 mV

Sample #: 34  
 Date : 3/9/95 07:02 AM  
 Time of Injection: 3/9/95  
 Low Point: -19.16 mV  
 Plot Scale: 800.0 mV  
 High Point : 780.84 mV



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Software Version: 3.3 <4811>  
 Sample Name : L950626-13 1:5 PCB SOIL Time : 3/9/95 07:37 AM  
 Sample Number: 35 Study : PPPCB  
 Operator : KMW

Instrument : HP5890 Channel : A A/D mV Range : 1000  
 Inlet Sampler : NONE  
 k/Vial : 0/0

Interface Serial # : 8055910402 Data Acquisition Time: 3/9/95 07:03 AM  
 Delay Time : 0.00 min.  
 End Time : 33.00 min.  
 Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\HP5890\PA38035.RAW  
 Result File : C:\2700\HP5890\PA38035.RST  
 Instrument File: c:\2700\methseqs\HPPESTB.ins  
 Process File : HPPESTA  
 Sample File : PESTA058  
 Sequence File : C:\2700\METHSEQS\0308PCB.SEQ

Inj. Volume : 1 ul Area Reject : 200.000000  
 Sample Amount : 1.0000 Dilution Factor : 1.00

Instrument Control Method:  
 Instrument name : HP5890

Channel Parameters:

Inlet Parameters:  
 Inlet A : Inlet B :

Detector Parameters:  
 Detector A : Detector B :

Heated Zones:

Temperature Program:

Total run time : 33.00 min

Timed Events:  
 There are no timed events in the method

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### HP 5890 REPORT FOR PEST/PCB ANALYSIS

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NORTHEASTERN ANALYTICAL CORP. GAS CHROMATOGRAPHY LAB.

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| Peak # | Component Name | Time [min] | Area [uV*sec] | Height [uV] | Raw Amount | Adjusted Amount | Calibration Factor | Delta RT [%] | Cal. Range |
|--------|----------------|------------|---------------|-------------|------------|-----------------|--------------------|--------------|------------|
| 1      |                | 1.095      | 673162.41     | 103431.41   | 24.3696    | 24.3696         | 673162             | -----        |            |
| 2      |                | 1.307      | 267168.67     | 41001.21    | 11.6892    | 11.6892         | 267169             | -----        |            |
| 3      |                | 1.624      | 400777.93     | 99275.89    | 15.8622    | 15.8622         | 400778             | -----        |            |
| 4      |                | 1.769      | 23267.00      | 6846.58     | 4.0714     | 4.0714          | 23267              | -----        |            |
| 5      |                | 2.027      | 7173.00       | 2158.63     | 3.5687     | 3.5687          | 7173               | -----        |            |
| 6      |                | 2.151      | 7101.00       | 1249.87     | 3.5665     | 3.5665          | 7101               | -----        |            |
| 7      |                | 2.429      | 9848.00       | 2420.94     | 3.6523     | 3.6523          | 9848               | -----        |            |
| 8      |                | 2.645      | 15873.00      | 2994.52     | 3.8405     | 3.8405          | 15873              | -----        |            |
| 9      |                | 3.016      | 37328.00      | 6960.12     | 4.5106     | 4.5106          | 37328              | -----        |            |
| 10     |                | 3.893      | 11703.00      | 1738.80     | 3.7102     | 3.7102          | 11703              | -----        |            |
| 11     |                | 4.296      | 17704.50      | 856.40      | 3.8977     | 3.8977          | 17704              | -----        |            |
| 12     |                | 4.565      | 15684.00      | 4458.91     | 3.8346     | 3.8346          | 15684              | -----        |            |
| 13     |                | 5.087      | 15819.00      | 2087.63     | 3.8388     | 3.8388          | 15819              | -----        |            |
|        |                | 5.385      | 76424.50      | 16442.12    | 5.7317     | 5.7317          | 76424              | -----        |            |
|        |                | 5.662      | 8252.00       | 959.09      | 3.6024     | 3.6024          | 8252               | -----        |            |
| 16     |                | 6.010      | 4195.50       | 816.39      | 3.4757     | 3.4757          | 4196               | -----        |            |
| 17     |                | 6.203      | 12725.50      | 3691.04     | 3.7421     | 3.7421          | 12726              | -----        |            |
| 18     |                | 6.319      | 41541.00      | 9882.39     | 4.6421     | 4.6421          | 41541              | -----        |            |
| 19     |                | 6.512      | 47330.00      | 10717.98    | 4.8230     | 4.8230          | 47330              | -----        |            |
| 20     |                | 6.983      | 10330.00      | 1304.26     | 3.6673     | 3.6673          | 10330              | -----        |            |

| Peak # | Component Name      | Time [min] | Area [uV*sec] | Height [uV] | Raw Amount | Adjusted Amount | Calibration Factor | Delta RT [%] | Cal. Range |
|--------|---------------------|------------|---------------|-------------|------------|-----------------|--------------------|--------------|------------|
| 21     |                     | 7.159      | 7144.00       | 1073.64     | 3.5678     | 3.5678          | 7144               | -----        |            |
| 22     | TCMX                | 7.574      | 356375.50     | 85024.70    | 14.0544    | 0.0000          | 356376             | 0.2984       |            |
| 23     |                     | 7.943      | 85784.00      | 11846.04    | 6.0240     | 6.0240          | 85784              | -----        |            |
|        |                     | 8.230      | 4689.00       | 1558.22     | 3.4911     | 3.4911          | 4689               | -----        |            |
|        |                     | 8.785      | 12058.00      | 2597.68     | 3.7213     | 3.7213          | 12058              | -----        |            |
| 26     |                     | 9.224      | 29170.00      | 6825.81     | 4.2558     | 4.2558          | 29170              | -----        |            |
| 27     |                     | 9.359      | 32758.00      | 8361.37     | 4.3678     | 4.3678          | 32758              | -----        |            |
| 28     |                     | 9.556      | 74394.00      | 16269.27    | 5.6682     | 5.6682          | 74394              | -----        |            |
| 29     |                     | 9.791      | 212254.00     | 46369.42    | 9.9740     | 9.9740          | 212254             | -----        |            |
| 30     |                     | 10.023     | 29797.00      | 4699.51     | 4.2753     | 4.2753          | 29797              | -----        |            |
| 31     |                     | 10.370     | 37837.00      | 7837.79     | 4.5265     | 4.5265          | 37837              | -----        |            |
| 0      | ALPHA BHC           | 10.797     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 32     |                     | 10.988     | 303547.00     | 62500.05    | 12.8254    | 12.8254         | 303547             | -----        |            |
| 33     |                     | 11.309     | 5554.00       | 1203.74     | 3.5182     | 3.5182          | 5554               | -----        |            |
| 34     |                     | 11.424     | 61146.00      | 13378.72    | 5.2545     | 5.2545          | 61146              | -----        |            |
| 35     |                     | 11.689     | 130223.00     | 26558.85    | 6.9582     | 6.9582          | 130223             | -----        |            |
| 36     |                     | 11.885     | 122469.00     | 24461.77    | 6.7032     | 6.7032          | 122469             | -----        |            |
| 37     | GAMMA BHC           | 12.304     | 114964.00     | 17889.91    | 6.4564     | 6.4564          | 114964             | 0.3803       |            |
| 38     |                     | 12.606     | 686585.50     | 127731.65   | 25.2533    | 25.2533         | 686586             | -----        |            |
| 39     |                     | 12.855     | 8908.00       | 2280.20     | 1.2622     | 1.2622          | 8908               | -----        |            |
| 40     | HEPTACHLOR          | 13.076     | 506491.00     | 73394.62    | 20.9468    | 20.9468         | 506491             | 1.2557       |            |
| 41     |                     | 13.479     | 69966.00      | 16106.76    | 4.5592     | 4.5592          | 69966              | -----        |            |
| 42     | ALDRIN              | 13.845     | 153334.50     | 30616.48    | 7.4204     | 7.4204          | 153335             | 0.0202       |            |
| 43     |                     | 14.119     | 21533.50      | 4710.30     | 2.8971     | 2.8971          | 21533              | -----        |            |
| 44     |                     | 14.778     | 630585.00     | 98279.94    | 45.5926    | 45.5926         | 630585             | -----        |            |
| 45     | BETA BHC            | 15.120     | 473064.00     | 70090.27    | 34.2579    | 34.2579         | 473064             | -0.1578      |            |
| 46     |                     | 15.389     | 447962.00     | 102768.24   | 32.4517    | 32.4517         | 447962             | -----        |            |
| 47     |                     | 15.723     | 30824.00      | 7233.19     | 4.6855     | 4.6855          | 30824              | -----        |            |
| 48     | DELTA BHC           | 15.806     | 54683.00      | 16180.73    | 5.5168     | 5.5168          | 54683              | -0.6071      |            |
| 49     |                     | 15.934     | 5925.00       | 2163.83     | 3.8180     | 3.8180          | 5925               | -----        |            |
| 50     |                     | 16.222     | 982542.00     | 104056.77   | 37.4767    | 37.4767         | 982542             | -----        |            |
| 0      | HEPTACHLOR EXPOXIDE | 16.381     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 51     |                     | 16.647     | 74688.00      | 15773.62    | 3.3874     | 3.3874          | 74688              | -----        |            |
| 52     |                     | 16.842     | 254232.00     | 57313.99    | 10.1292    | 10.1292         | 254232             | -----        |            |
| 53     |                     | 16.961     | 41479.00      | 12974.84    | 2.3314     | 2.3314          | 41479              | -----        |            |
| 54     |                     | 17.084     | 312064.00     | 55429.25    | 12.4937    | 12.4937         | 312064             | -----        |            |
| 0      | ENDOSULFAN I        | 17.321     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
|        | GAMMA CHLORDANE     | 17.602     | 64438.00      | 13031.02    | 2.9714     | 2.9714          | 64438              | 0.1913       |            |
|        | ALPHA CHLORDANE     | 17.793     | 192060.00     | 35494.63    | 7.6073     | 7.6073          | 192060             | 0.0392       |            |
| 57     | DDE                 | 18.067     | 127130.00     | 28842.12    | 6.0818     | 6.0818          | 127130             | -0.1901      |            |
| 58     | DIELDRIN            | 18.470     | 611352.50     | 105711.93   | 26.3917    | 26.3917         | 611352             | -0.7042      |            |
| 59     |                     | 18.734     | 31328.00      | 7502.79     | 3.6278     | 3.6278          | 31328              | -----        |            |
| 60     |                     | 19.009     | 418513.00     | 67777.36    | 24.2088    | 24.2088         | 418513             | -----        |            |
| 61     | ENDRIN              | 19.305     | 429778.50     | 85367.44    | 24.8078    | 24.8078         | 429778             | -0.1620      |            |
| 62     |                     | 19.556     | 141546.50     | 15830.43    | 9.4818     | 9.4818          | 141546             | -----        |            |
| 63     |                     | 19.785     | 441764.00     | 83037.38    | 25.4451    | 25.4451         | 441764             | -----        |            |
| 64     |                     | 20.234     | 173115.50     | 31241.81    | 13.2994    | 13.2994         | 173116             | -----        |            |
| 65     |                     | 20.404     | 67312.50      | 16570.56    | 7.1074     | 7.1074          | 67313              | -----        |            |
| 66     |                     | 20.517     | 150769.00     | 34711.03    | 11.9916    | 11.9916         | 150769             | -----        |            |
| 67     |                     | 20.808     | 29004.50      | 6521.66     | 4.8655     | 4.8655          | 29005              | -----        |            |
| 68     | DDD                 | 21.006     | 717707.00     | 118833.37   | 45.1711    | 45.1711         | 717707             | 0.3868       |            |
| 69     | ENDOSULFAN II       | 21.206     | 110488.50     | 25742.04    | 6.4160     | 6.4160          | 110488             | 0.5518       |            |
| 70     |                     | 21.352     | 62777.00      | 15325.49    | 10.9863    | 10.9863         | 62777              | -----        |            |
| 71     | DDT                 | 21.486     | 148743.00     | 36162.25    | 16.7432    | 16.7432         | 148743             | 0.1628       |            |
| 72     |                     | 21.888     | 17175.00      | 3332.88     | 7.9324     | 7.9324          | 17175              | -----        |            |
| 73     |                     | 22.017     | 24913.00      | 5627.10     | 8.4506     | 8.4506          | 24913              | -----        |            |
| 74     |                     | 22.245     | 225330.50     | 42857.37    | 17.4947    | 17.4947         | 225330             | -----        |            |
| 75     |                     | 22.452     | 62595.00      | 13189.03    | 6.1544     | 6.1544          | 62595              | -----        |            |
| 76     |                     | 22.568     | 8243.00       | 2982.54     | 2.3668     | 2.3668          | 8243               | -----        |            |
| 77     | ENDRIN ALDEHYDE     | 22.747     | 68632.50      | 13472.89    | 6.5751     | 6.5751          | 68632              | 0.6364       |            |
| 78     |                     | 22.979     | 123409.50     | 22344.19    | 10.3923    | 10.3923         | 123410             | -----        |            |
| 79     |                     | 23.228     | 379395.00     | 68792.37    | 28.2308    | 28.2308         | 379395             | -----        |            |
| 80     |                     | 23.543     | 7572.00       | 1412.14     | -11.3330   | -11.3330        | 7572               | -----        |            |
| 81     | METHOXYCHLOR        | 23.718     | 25862.00      | 4312.48     | -6.8286    | -6.8286         | 25862              | 0.3916       |            |
| 0      | ENDOSULFAN SULFATE  | 23.726     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 82     | DBC                 | 23.938     | 249326.00     | 46728.65    | 18.2044    | 18.2044         | 249326             | 0.1425       |            |
| 83     |                     | 24.301     | 69364.00      | 15304.03    | 5.4649     | 5.4649          | 69364              | -----        |            |
| 84     |                     | 24.458     | 267502.00     | 51949.63    | 19.4911    | 19.4911         | 267502             | -----        |            |
| 85     | ENDRIN KETONE       | 24.986     | 15888.00      | 2772.86     | 2.0059     | 2.0059          | 15888              | -0.1338      |            |
| 86     |                     | 25.270     | 4597.00       | 758.36      | 1.4844     | 1.4844          | 4597               | -----        |            |
| 87     |                     | 25.534     | 13172.00      | 1725.65     | 1.8804     | 1.8804          | 13172              | -----        |            |
|        |                     | 25.696     | 19311.00      | 4306.18     | 2.1639     | 2.1639          | 19311              | -----        |            |
|        |                     | 25.826     | 14672.00      | 3690.55     | 1.9497     | 1.9497          | 14672              | -----        |            |
| 90     |                     | 25.973     | 21422.50      | 4863.44     | 2.2614     | 2.2614          | 21422              | -----        |            |
| 91     |                     | 26.219     | 327204.00     | 55552.55    | 16.3827    | 16.3827         | 327204             | -----        |            |
| 92     |                     | 26.564     | 98351.00      | 16162.71    | 5.8141     | 5.8141          | 98351              | -----        |            |
| 93     |                     | 27.666     | 54142.50      | 8499.11     | -10.1857   | -10.1857        | 54142              | -----        |            |

| Peak<br># | Component<br>Name | Time<br>[min] | Area<br>(uV*sec) | Height<br>[uV] | Raw<br>Amount | Adjusted<br>Amount | Calibration<br>Factor | Delta RT<br>[%] | Cal.<br>Range |
|-----------|-------------------|---------------|------------------|----------------|---------------|--------------------|-----------------------|-----------------|---------------|
| 94        |                   | 27.894        | 15359.00         | 2644.39        | -12.0609      | -12.0609           | 15359                 | -----           |               |
| 95        | DC8               | 28.445        | 7803.50          | 1279.22        | -12.4262      | -12.4262           | 7804                  | 0.8572          | -             |
| '5        |                   | 29.407        | 1215793.00       | 98485.58       | 45.9802       | 45.9802            | 1215793               | -----           |               |
| ,         |                   | 29.961        | 66875.00         | 6884.95        | -9.5701       | -9.5701            | 66875                 | -----           |               |
| 98        |                   | 30.963        | 8352.00          | 1123.10        | -12.3997      | -12.3997           | 8352                  | -----           |               |
|           |                   | 15408527.50   | 2.684e+06        | 863.2983       | 849.2438      |                    |                       |                 |               |

## Missing Component Report

Component Expected Retention (Sample File)

|                     |        |
|---------------------|--------|
| APLHA BHC           | 10.797 |
| HEPTACHLOR EXPOXIDE | 16.381 |
| ENDOSULFAN I        | 17.321 |
| ENDOSULFAN SULFATE  | 23.726 |

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HP5890 DETECTOR A

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Report Stored in ASCII File: C:\2700\HP5890\PA38035.TX0

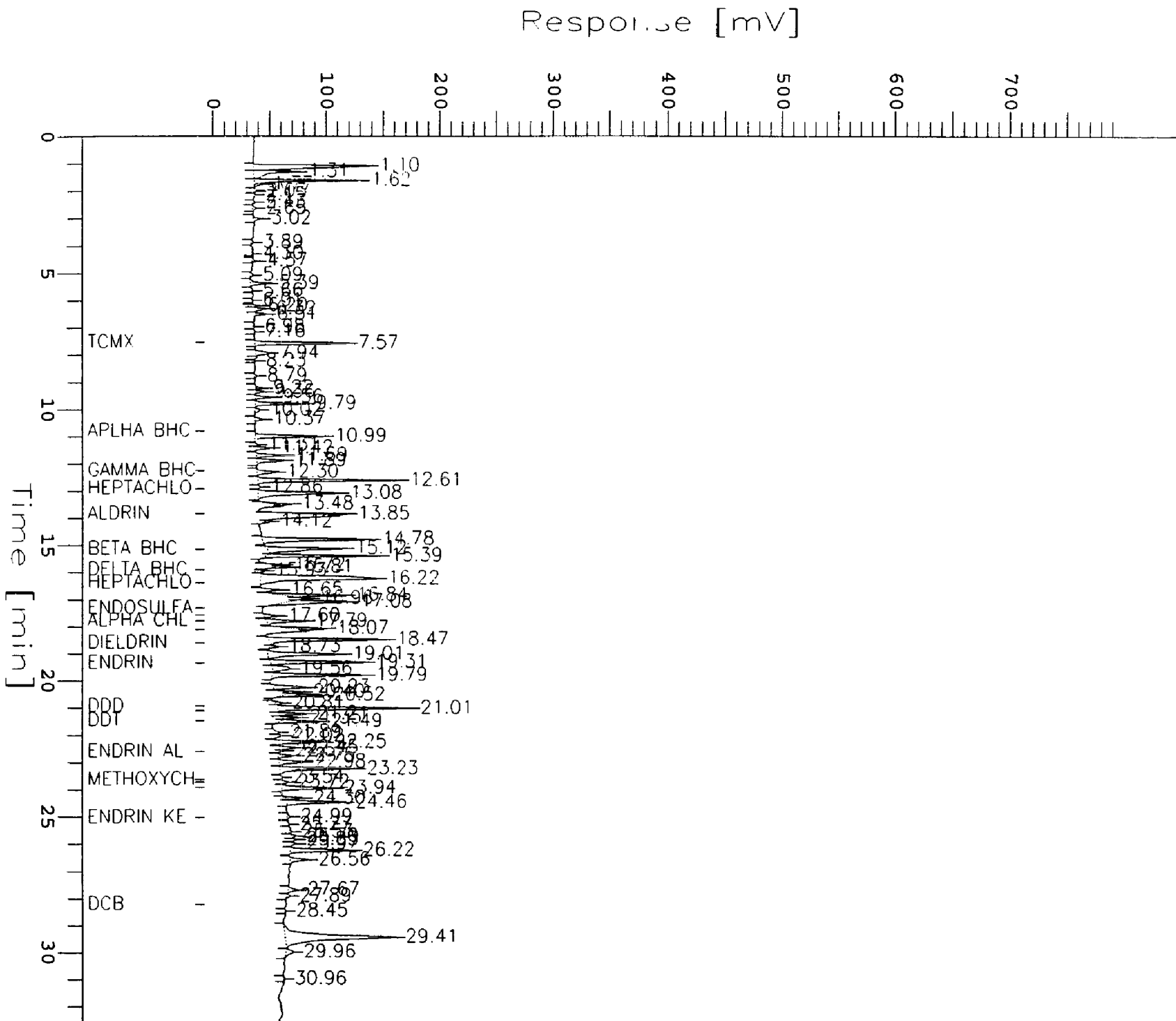
# Chromatogram

366

Sample Name : L950626-13 1:5 PCB SOIL  
 FileName : c:\2700\hps690\PA38035.raw  
 Method : HPPEST8.ims  
 Start Time : 0.00 min  
 Scale Factor: -1.0  
 End Time : 33.00 min  
 Plot Offset: -7 mV

Sample #: 35  
 Date : 3/9/95 07:37 AM  
 Time of Injection: 3/9/95 07:03 AM  
 Low Point : -7.08 mV  
 Plot Scale: 800.0 mV  
 High Point : 792.92 mV

Page 1 of 1



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Software Version: 3.3 <4811>

Sample Name : L950626-13 1:5 PCB SOIL Time : 3/9/95 07:38 AM

Sample Number: 35 Study : PPCB

Operator : KMW

Instrument : HP5890 Channel : B A/D mV Range : 1000

AutoSampler : NONE

:k/Vial : 0/0

Interface Serial # : 8055910402 Data Acquisition Time: 3/9/95 07:03 AM

Delay Time : 0.00 min.

End Time : 33.00 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\HP5890\PB38035.RAW

Result File : C:\2700\HP5890\PB38035.RST

Instrument File: c:\2700\methseqs\HPPESTB.ins

Process File : HPPESTB

Sample File : PESTB058

Sequence File : C:\2700\METHSEQS\0308PCB.SEQ

Inj. Volume : 1 ul Area Reject : 200.000000

Sample Amount : 1.0000 Dilution Factor : 1.00

Instrument Control Method:

Instrument name : HP5890

Channel Parameters:

Inlet Parameters:

Inlet A : Inlet B :

Detector Parameters:

Detector A : Detector B :

Heated Zones:

Temperature Program:

Total run time : 33.00 min

Timed Events:

There are no timed events in the method

# HP5890 REPORT FOR PEST/PCB ANALYSIS

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NORTHEASTERN ANALYTICAL CORP. GAS CHROMATOGRAPHY LAB.

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| Peak # | Component Name | Time [min] | Area [uV*sec] | Height [uV] | Raw Amount | Adjusted Amount | Calibration Factor | Cal. Range |
|--------|----------------|------------|---------------|-------------|------------|-----------------|--------------------|------------|
| 1      |                | 1.090      | 237735.57     | 32506.12    | 12.7063    | 12.7063         | 237736             |            |
| 2      |                | 1.288      | 135378.92     | 33700.66    | 5.0958     | 5.0958          | 135379             |            |
| 3      |                | 1.405      | 58482.75      | 13965.59    | -0.6216    | -0.6216         | 58483              |            |
| 4      |                | 1.543      | 280672.76     | 73632.04    | 15.8988    | 15.8988         | 280673             |            |
| 5      |                | 2.696      | 40731.50      | 4156.12     | -1.9415    | -1.9415         | 40732              |            |
| 6      |                | 2.907      | 9046.50       | 2080.02     | -4.2974    | -4.2974         | 9046               |            |
| 7      |                | 3.102      | 13450.50      | 2466.97     | -3.9699    | -3.9699         | 13450              |            |
| 8      |                | 3.452      | 12922.00      | 3073.94     | -4.0092    | -4.0092         | 12922              |            |
| 9      |                | 4.124      | 40395.00      | 2772.74     | -1.9665    | -1.9665         | 40395              |            |
| 10     |                | 4.595      | 20519.00      | 795.57      | -3.4444    | -3.4444         | 20519              |            |
| 11     |                | 4.920      | 10689.50      | 3435.74     | -4.1752    | -4.1752         | 10689              |            |
| 12     |                | 5.326      | 46173.50      | 3467.11     | -1.5369    | -1.5369         | 46174              |            |
| 13     |                | 5.653      | 26303.00      | 2184.91     | -3.0143    | -3.0143         | 26303              |            |
| 14     |                | 5.833      | 3975.50       | 1020.35     | -4.6744    | -4.6744         | 3976               |            |
| 15     |                | 6.080      | 67792.00      | 16344.36    | 0.0705     | 0.0705          | 67792              |            |
| 16     |                | 6.491      | 8172.50       | 1558.17     | -4.3623    | -4.3623         | 8172               |            |
| 17     |                | 6.966      | 64186.00      | 11522.29    | -0.1976    | -0.1976         | 64186              |            |
| 18     |                | 7.159      | 11144.00      | 1993.02     | -4.1414    | -4.1414         | 11144              |            |
| 19     |                | 7.368      | 15431.50      | 2365.64     | -3.8226    | -3.8226         | 15431              |            |
| 20     |                | 7.540      | 5522.00       | 1206.46     | -4.5594    | -4.5594         | 5522               |            |
| 21     |                | 7.981      | 14619.00      | 2524.93     | -3.8830    | -3.8830         | 14619              |            |



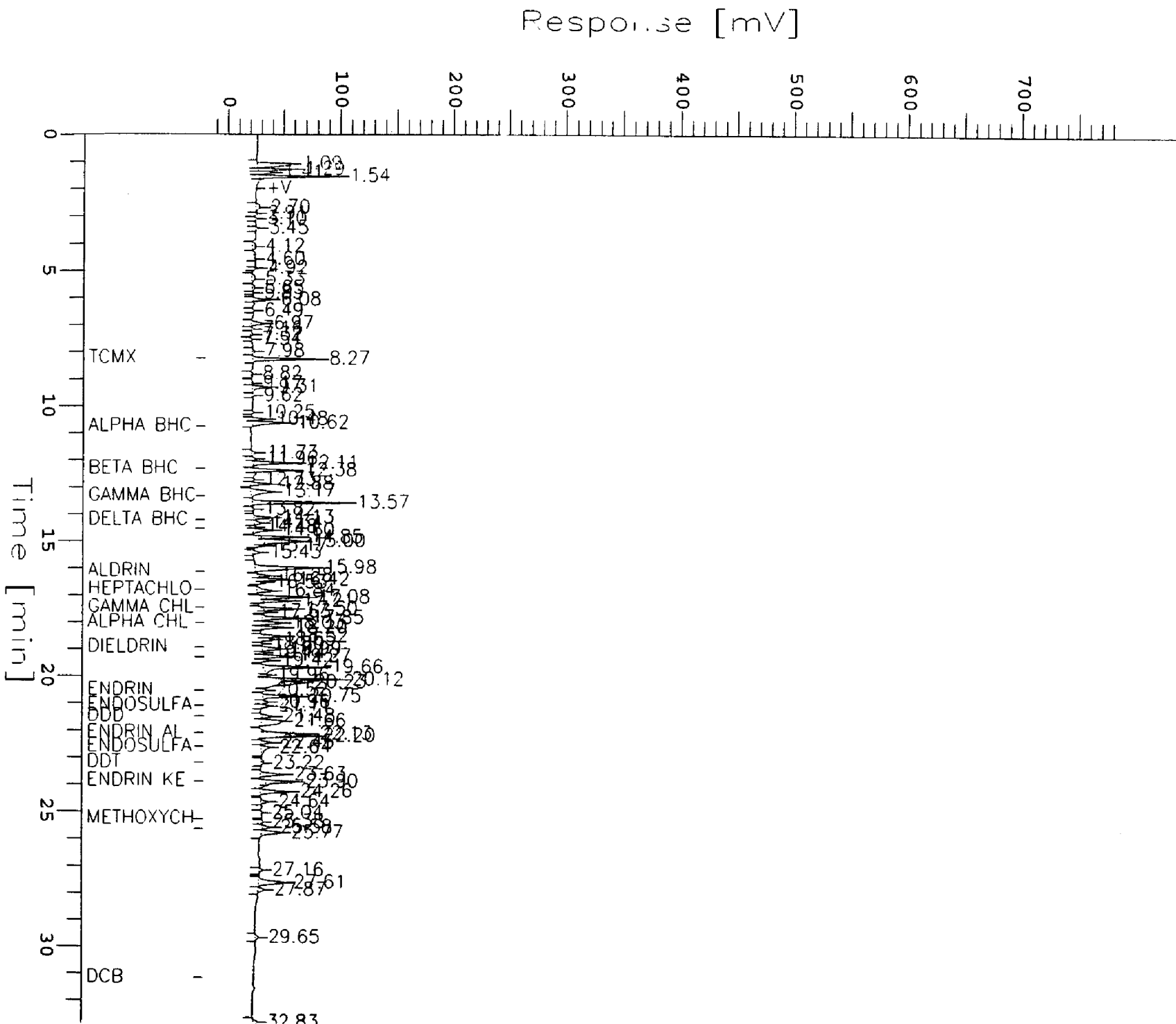
| Peak # | Component Name       | Time [min] | Area [uV*sec] | Height [uV] | Raw Amount | Adjusted Amount | Calibration Factor | Cal. Range |
|--------|----------------------|------------|---------------|-------------|------------|-----------------|--------------------|------------|
| 22     | TCMX                 | 8.265      | 268657.00     | 59668.13    | 15.0054    | 15.0054         | 268657             |            |
| 23     |                      | 8.819      | 14128.50      | 1935.25     | -3.9195    | -3.9195         | 14128              |            |
| 24     |                      | 9.170      | 5687.50       | 815.03      | -4.5471    | -4.5471         | 5688               |            |
| 25     |                      | 9.305      | 86074.00      | 15152.10    | 1.4298     | 1.4298          | 86074              |            |
| 6      |                      | 9.617      | 8197.00       | 1355.14     | 1.6731     | 1.6731          | 8197               |            |
| 27     |                      | 10.248     | 9251.00       | 2329.76     | 1.7189     | 1.7189          | 9251               |            |
| 28     |                      | 10.484     | 50558.50      | 11897.87    | 3.5123     | 3.5123          | 50559              |            |
| 29     |                      | 10.622     | 149182.00     | 30527.66    | 7.7940     | 7.7940          | 149182             |            |
| 0      | ALPHA BHC            | 10.753     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 30     |                      | 11.734     | 26943.50      | 4981.57     | 1.9771     | 1.9771          | 26944              |            |
| 31     |                      | 11.959     | 12023.50      | 2673.78     | 1.2824     | 1.2824          | 12023              |            |
| 32     |                      | 12.105     | 194759.00     | 38985.96    | 9.7916     | 9.7916          | 194759             |            |
| 33     | BETA BHC             | 12.379     | 189228.00     | 37296.98    | 9.5340     | 9.5340          | 189228             |            |
| 34     |                      | 12.731     | 9513.00       | 2410.27     | 1.1655     | 1.1655          | 9513               |            |
| 35     |                      | 12.882     | 83308.50      | 19124.74    | 2.4574     | 2.4574          | 83308              |            |
| 36     |                      | 13.167     | 166522.00     | 20928.85    | 5.5574     | 5.5574          | 166522             |            |
| 0      | GAMMA BHC            | 13.331     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 37     |                      | 13.565     | 424939.50     | 84517.20    | 15.1843    | 15.1843         | 424940             |            |
| 38     |                      | 13.818     | 6211.00       | 1533.37     | 1.7169     | 1.7169          | 6211               |            |
| 39     | DELTA BHC            | 14.126     | 80012.00      | 17204.88    | 5.1915     | 5.1915          | 80012              |            |
| 40     |                      | 14.335     | 36771.00      | 6413.49     | 3.1557     | 3.1557          | 36771              |            |
| 41     |                      | 14.478     | 4954.00       | 1433.11     | 1.4310     | 1.4310          | 4954               |            |
| 42     | HEPTACHLOR           | 14.601     | 83058.00      | 16855.95    | 5.3181     | 5.3181          | 83058              |            |
| 43     |                      | 14.853     | 157700.50     | 35949.68    | 9.0330     | 9.0330          | 157700             |            |
| 44     |                      | 15.001     | 206849.50     | 34014.25    | 11.4791    | 11.4791         | 206849             |            |
| 45     |                      | 15.171     | 15539.00      | 5158.74     | 1.9578     | 1.9578          | 15539              |            |
| 46     |                      | 15.426     | 34984.00      | 6347.76     | 72.5771    | 72.5771         | 34984              |            |
| 47     |                      | 15.976     | 398992.00     | 54029.05    | -136.7679  | -136.7679       | 398992             |            |
| 0      | ALDRIN               | 16.123     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 48     |                      | 16.279     | 50526.00      | 11404.04    | 63.6388    | 63.6388         | 50526              |            |
| 49     |                      | 16.424     | 102157.50     | 23482.94    | 33.9449    | 33.9449         | 102157             |            |
| 50     |                      | 16.532     | 8195.00       | 3215.85     | 87.9838    | 87.9838         | 8195               |            |
| 51     |                      | 16.837     | 92287.00      | 15398.12    | 4.8393     | 4.8393          | 92287              |            |
| 52     | HEPTACHLOR EPOXIDE   | 17.075     | 186220.00     | 40412.62    | 10.1251    | 10.1251         | 186220             |            |
| 53     |                      | 17.211     | 101921.50     | 24976.68    | 5.3814     | 5.3814          | 101922             |            |
| 54     | GAMMA CHLORDANE      | 17.503     | 144659.00     | 29806.42    | 7.4452     | 7.4452          | 144659             |            |
| 55     |                      | 17.626     | 12847.00      | 4496.91     | 0.3900     | 0.3900          | 12847              |            |
| 5      | ALPHA CHLORDANE/ENDO | 17.846     | 184716.00     | 35806.61    | 9.1462     | 9.1462          | 184716             |            |
| 7      |                      | 18.028     | 86602.00      | 18778.77    | 3.4946     | 3.4946          | 86602              |            |
| 58     |                      | 18.196     | 104001.00     | 22298.16    | 4.4968     | 4.4968          | 104001             |            |
| 59     |                      | 18.517     | 91597.00      | 19950.01    | 6.7443     | 6.7443          | 91597              |            |
| 60     |                      | 18.645     | 34299.00      | 9132.07     | 3.1282     | 3.1282          | 34299              |            |
| 61     |                      | 18.798     | 7119.00       | 1894.71     | 1.4129     | 1.4129          | 7119               |            |
| 62     | DELDRIN              | 18.993     | 97876.50      | 16286.23    | 7.1406     | 7.1406          | 97876              | -          |
| 63     |                      | 19.141     | 3833.00       | 1217.99     | 0.2859     | 0.2859          | 3833               |            |
| 64     | DOE                  | 19.268     | 105347.00     | 23285.60    | 6.5309     | 6.5309          | 105347             | -          |
| 65     |                      | 19.416     | 36882.50      | 9007.48     | 2.3191     | 2.3191          | 36883              |            |
| 66     |                      | 19.663     | 309328.00     | 52432.62    | 19.0796    | 19.0796         | 309328             |            |
| 67     |                      | 19.958     | 4959.00       | 1550.76     | 0.3552     | 0.3552          | 4959               |            |
| 68     |                      | 20.116     | 228441.00     | 54636.20    | 19.4797    | 19.4797         | 228441             |            |
| 69     |                      | 20.225     | 93852.00      | 16583.49    | 8.0021     | 8.0021          | 93852              |            |
| 70     |                      | 20.517     | 11832.50      | 3477.77     | 1.0076     | 1.0076          | 11833              |            |
| 71     | ENDRIN               | 20.747     | 171064.00     | 32937.04    | 14.5867    | 14.5867         | 171064             |            |
| 72     |                      | 20.959     | 21079.00      | 4718.24     | 2.5161     | 2.5161          | 21079              |            |
| 73     | ENDOSULFAN II        | 21.105     | 27836.00      | 6474.13     | 3.0254     | 3.0254          | 27836              | -          |
| 74     |                      | 21.483     | 52595.00      | 10684.88    | 2.8156     | 2.8156          | 52595              |            |
| 75     | DDO                  | 21.658     | 198256.50     | 20698.86    | 13.9335    | 13.9335         | 198256             |            |
| 76     |                      | 22.125     | 80348.50      | 16217.93    | 12.8870    | 12.8870         | 80348              |            |
| 77     | ENDRIN ALDEHYDE      | 22.202     | 54648.00      | 17151.54    | 10.4791    | 10.4791         | 54648              | -          |
| 78     | ENDOSULFAN SULFATE   | 22.447     | 53289.00      | 10748.50    | 5.3315     | 5.3315          | 53289              | -          |
| 79     |                      | 22.635     | 71433.50      | 7978.11     | 7.2328     | 7.2328          | 71434              |            |
| 80     | DDT                  | 23.215     | 21278.50      | 2099.07     | 1.0363     | 1.0363          | 21278              | -          |
| 81     |                      | 23.629     | 125706.50     | 22259.55    | 9.4968     | 9.4968          | 125706             |            |
| 82     | ENDRIN KETONE        | 23.899     | 152166.00     | 28871.60    | 11.6366    | 11.6366         | 152166             |            |
| 83     |                      | 24.257     | 157878.00     | 28029.43    | 12.0985    | 12.0985         | 157878             |            |
| 84     |                      | 24.637     | 40475.00      | 7516.73     | 2.6040     | 2.6040          | 40475              |            |
| 85     |                      | 25.044     | 8671.00       | 1120.69     | -2.4343    | -2.4343         | 8671               |            |
| 86     |                      | 25.384     | 5412.00       | 1142.87     | -3.2197    | -3.2197         | 5412               |            |
| 87     | METHOXYCHLOR         | 25.576     | 43694.50      | 7963.83     | 6.0066     | 6.0066          | 43694              | -          |
| 88     | DBC                  | 25.770     | 115248.00     | 18282.64    | 11.1352    | 11.1352         | 115248             | -          |
| 89     |                      | 27.158     | 20724.50      | 3160.38     | 2.3048     | 2.3048          | 20724              |            |
| 1      |                      | 27.607     | 183449.00     | 23357.47    | 17.5066    | 17.5066         | 183449             |            |
| 1      |                      | 27.874     | 40021.00      | 6189.81     | 4.1074     | 4.1074          | 40021              |            |
| 92     |                      | 29.645     | 25547.00      | 3300.47     | -10.9637   | -10.9637        | 25547              |            |
| 0      | DCB                  | 31.152     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 93     |                      | 32.830     | 35621.00      | 3784.24     | -10.0736   | -10.0736        | 35621              |            |

# Chromatogram

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Sample Name : L950626-13 1-5 PC8 SOIL  
 File Name : c:\2700\hps890\p838035.raw  
 Method : HPPEST8.ins  
 Start Time : 0.00 min  
 Scale Factor : -1.0  
 End Time : 33.00 min  
 Plot Offset : -20 mV

Sample #: 35  
 Date : 3/9/95 07:38 AM  
 Time of Injection: 3/9/95 07:03 AM  
 Low Point : -19.71 mV  
 Plot Scale: 800.0 mV  
 High Point : 780.29 mV



```

=====
Software Version: 3.3 <4811>
Sample Name   : L950626-14 1:5      Time       : 3/9/95  01:36 AM
Sample Number : 25                   Study        : PPPCB
Operator      : KMW

Instrument    : HP5890                Channel : A      A/D mV Range : 1000
AutoSampler  : NONE
      k/Vial   : 0/0

```

```

Interface Serial # : 8055910402   Data Acquisition Time: 3/9/95  01:02 AM
Delay Time        : 0.00   min.
End Time          : 33.00   min.
Sampling Rate     : 1.0000   pts/sec

```

```

Raw Data File  : C:\2700\HP5890\PA38025.RAW
Result File    : C:\2700\HP5890\PA38025.RST
Instrument File : c:\2700\methseqs\HPPESTB.ins
Process File   : HPPESTA
Sample File    : PESTA058
Sequence File  : C:\2700\METHSEQS\0308PCB.SEQ

```

```

Inj. Volume   : 1 ul                Area Reject   : 200.000000
Sample Amount : 1.0000              Dilution Factor : 1.00

```

```

Instrument Control Method:
Instrument name : HP5890

```

Channel Parameters:

```

Inlet Parameters:
Inlet A :                               Inlet B :

```

```

Detector Parameters:
Detector A :                               Detector B :

```

Heated Zones:

Temperature Program:

Total run time : 33.00 min

```

Timed Events:
There are no timed events in the method

```

# HP 5890 REPORT FOR PEST/PCB ANALYSIS

NORTHEASTERN ANALYTICAL CORP. GAS CHROMATOGRAPHY LAB.

| Peak # | Component Name | Time [min] | Area [uV*sec] | Height [uV] | Raw Amount | Adjusted Amount | Calibration Factor | Delta RT [%] | Cal. Range |
|--------|----------------|------------|---------------|-------------|------------|-----------------|--------------------|--------------|------------|
| 1      |                | 1.141      | 877742.73     | 109506.35   | 30.7593    | 30.7593         | 877743             | -----        |            |
| 2      |                | 1.305      | 373237.58     | 77057.48    | 15.0020    | 15.0020         | 373238             | -----        |            |
| 3      |                | 1.623      | 275750.69     | 68327.70    | 11.9572    | 11.9572         | 275751             | -----        |            |
| 4      |                | 1.770      | 23829.00      | 7460.93     | 4.0889     | 4.0889          | 23829              | -----        |            |
| 5      |                | 2.021      | 8055.00       | 1844.33     | 3.5963     | 3.5963          | 8055               | -----        |            |
| 6      |                | 2.158      | 25355.00      | 5105.34     | 4.1366     | 4.1366          | 25355              | -----        |            |
| 7      |                | 2.636      | 50487.00      | 11581.89    | 4.9216     | 4.9216          | 50487              | -----        |            |
| 8      |                | 3.006      | 42196.00      | 9994.30     | 4.6626     | 4.6626          | 42196              | -----        |            |
| 9      |                | 3.813      | 11992.50      | 2460.85     | 3.7193     | 3.7193          | 11992              | -----        |            |
| 10     |                | 4.567      | 49509.00      | 13849.35    | 4.8910     | 4.8910          | 49509              | -----        |            |
| 11     |                | 5.382      | 23289.00      | 5882.12     | 4.0721     | 4.0721          | 23289              | -----        |            |
| 12     |                | 6.202      | 76055.00      | 18235.43    | 5.7201     | 5.7201          | 76055              | -----        |            |
| 13     |                | 6.505      | 11771.50      | 2860.54     | 3.7124     | 3.7124          | 11772              | -----        |            |
| 14     | TCMX           | 7.569      | 394383.00     | 96006.05    | 15.9010    | 0.0000          | 394383             | 0.2428       |            |
|        |                | 7.924      | 23286.00      | 5047.88     | 4.0720     | 4.0720          | 23286              | -----        |            |
| 16     |                | 8.096      | 9577.00       | 2557.14     | 3.6438     | 3.6438          | 9577               | -----        |            |
| 17     |                | 8.224      | 24617.00      | 5646.10     | 4.1136     | 4.1136          | 24617              | -----        |            |
| 18     |                | 8.784      | 28002.00      | 5054.72     | 4.2193     | 4.2193          | 28002              | -----        |            |
| 19     |                | 9.220      | 51914.00      | 12386.40    | 4.9661     | 4.9661          | 51914              | -----        |            |
| 20     |                | 9.351      | 30070.50      | 7890.89     | 4.2839     | 4.2839          | 30070              | -----        |            |

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| Peak # | Component Name      | Time [min] | Area [uV*sec] | Height [uV] | Raw Amount | Adjusted Amount | Calibration Factor | Delta RT [%] | Cal. Range |
|--------|---------------------|------------|---------------|-------------|------------|-----------------|--------------------|--------------|------------|
| 21     |                     | 9.552      | 167185.00     | 36080.78    | 8.5664     | 8.5664          | 167185             | -----        |            |
| 22     |                     | 9.786      | 45227.00      | 10400.84    | 4.7573     | 4.7573          | 45227              | -----        |            |
| 23     |                     | 10.025     | 37071.00      | 7556.45     | 4.5025     | 4.5025          | 37071              | -----        |            |
|        |                     | 10.367     | 99013.00      | 19776.04    | 6.4372     | 6.4372          | 99013              | -----        |            |
|        | APLHA BHC           | 10.773     | 4495.00       | 1098.16     | 3.4851     | 3.4851          | 4495               | -0.2180      |            |
| 26     |                     | 10.985     | 840297.00     | 177499.63   | 29.5897    | 29.5897         | 840297             | -----        |            |
| 27     |                     | 11.303     | 10395.50      | 3045.26     | 3.6694     | 3.6694          | 10396              | -----        |            |
| 28     |                     | 11.419     | 124151.00     | 28131.90    | 7.2223     | 7.2223          | 124151             | -----        |            |
| 29     |                     | 11.687     | 356255.50     | 75160.51    | 14.3909    | 14.3909         | 356256             | -----        |            |
| 30     |                     | 11.880     | 323796.50     | 70480.82    | 13.3235    | 13.3235         | 323796             | -----        |            |
| 31     | GAMMA BHC           | 12.302     | 314078.00     | 48067.49    | 13.0040    | 13.0040         | 314078             | 0.3652       |            |
| 32     |                     | 12.602     | 1872157.00    | 345117.07   | 74.9731    | 74.9731         | 1872157            | -----        |            |
| 33     | HEPTACHLOR          | 12.849     | 22892.50      | 5732.33     | 1.8154     | 1.8154          | 22892              | -0.5017      |            |
| 34     |                     | 13.093     | 879936.50     | 121001.52   | 35.7205    | 35.7205         | 879936             | -----        |            |
| 35     |                     | 13.475     | 714057.50     | 93046.72    | 26.6638    | 26.6638         | 714058             | -----        |            |
| 36     | ALDRIN              | 13.839     | 441601.00     | 96098.52    | 17.3134    | 17.3134         | 441601             | -0.0181      |            |
| 37     |                     | 14.565     | 8078.00       | 1516.26     | 0.7993     | 0.7993          | 8078               | -----        |            |
| 38     |                     | 14.774     | 1552279.50    | 247338.70   | 111.9143   | 111.9143        | 1552280            | -----        |            |
| 39     | BETA BHC            | 15.117     | 1289457.00    | 188127.50   | 93.0026    | 93.0026         | 1289457            | -0.1801      |            |
| 40     |                     | 15.451     | 25958.00      | 6451.56     | 2.0858     | 2.0858          | 25958              | -----        |            |
| 41     |                     | 15.722     | 74251.00      | 16155.86    | 6.1986     | 6.1986          | 74251              | -----        |            |
| 42     | DELTA BHC           | 15.804     | 185154.00     | 52377.80    | 10.0628    | 10.0628         | 185154             | -0.6230      |            |
| 43     |                     | 15.928     | 6632.00       | 3022.27     | 3.8426     | 3.8426          | 6632               | -----        |            |
| 44     |                     | 16.218     | 2714075.00    | 291384.38   | 102.4947   | 102.4947        | 2714075            | -----        |            |
| 45     | HEPTACHLOR EXPOXIDE | 16.381     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 46     |                     | 16.644     | 235846.00     | 49546.13    | 9.4388     | 9.4388          | 235846             | -----        |            |
| 47     |                     | 16.838     | 716895.50     | 165315.23   | 27.5019    | 27.5019         | 716896             | -----        |            |
| 48     |                     | 16.954     | 182278.50     | 51663.48    | 7.6194     | 7.6194          | 182278             | -----        |            |
| 49     |                     | 17.075     | 60842.50      | 21454.17    | 3.0586     | 3.0586          | 60843              | -----        |            |
| 50     | ENDOSULFAN I        | 17.154     | 102848.50     | 34004.03    | 4.6362     | 4.6362          | 102849             | -----        |            |
| 51     | GAMMA CHLORDANE     | 17.321     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 52     | ALPHA CHLORDANE     | 17.602     | 138826.00     | 29512.38    | 5.7868     | 5.7868          | 138826             | 0.1909       |            |
| 53     | DDE                 | 17.788     | 630126.00     | 115948.80   | 24.0744    | 24.0744         | 630126             | 0.0094       |            |
| 54     | DIELDRIN            | 18.063     | 529594.00     | 117125.54   | 21.9721    | 21.9721         | 529594             | -0.2080      |            |
| 55     |                     | 18.466     | 1830554.00    | 335488.41   | 74.2410    | 74.2410         | 1830554            | -0.7268      |            |
| 56     |                     | 18.637     | 3534.00       | 1576.62     | 2.5370     | 2.5370          | 3534               | -----        |            |
| 57     |                     | 18.731     | 91592.50      | 20860.41    | 5.9930     | 5.9930          | 91593              | -----        |            |
| 58     | ENDRIN              | 19.006     | 1151610.00    | 193412.61   | 63.1892    | 63.1892         | 1151610            | -----        |            |
| 59     |                     | 19.302     | 1437341.50    | 279818.35   | 78.3822    | 78.3822         | 1437341            | -0.1776      |            |
| 60     |                     | 19.569     | 259607.00     | 39484.72    | 15.7594    | 15.7594         | 259607             | -----        |            |
| 61     |                     | 19.781     | 1153446.00    | 226249.98   | 63.2868    | 63.2868         | 1153446            | -----        |            |
| 62     |                     | 20.231     | 522410.00     | 94527.30    | 33.7415    | 33.7415         | 522410             | -----        |            |
| 63     |                     | 20.401     | 180455.50     | 45359.53    | 13.7290    | 13.7290         | 180456             | -----        |            |
| 64     | DDD                 | 20.515     | 576864.00     | 128383.78   | 36.9284    | 36.9284         | 576864             | -----        |            |
| 65     | ENDOSULFAN II       | 20.805     | 83314.50      | 18688.35    | 8.0439     | 8.0439          | 83314              | -----        |            |
| 66     | DDT                 | 21.004     | 2058403.00    | 345751.09   | 123.6339   | 123.6339        | 2058403            | 0.3768       |            |
| 67     |                     | 21.203     | 423333.00     | 97568.08    | 23.6303    | 23.6303         | 423333             | 0.5364       |            |
| 68     |                     | 21.349     | 243237.00     | 55743.27    | 23.0713    | 23.0713         | 243237             | -0.4754      |            |
| 69     |                     | 21.881     | 31291.50      | 7402.34     | 8.8778     | 8.8778          | 31291              | -----        |            |
| 70     | ENDRIN ALDEHYDE     | 22.004     | 169174.00     | 33956.01    | 13.5814    | 13.5814         | 169174             | -----        |            |
| 71     |                     | 22.240     | 759155.00     | 142572.38   | 54.6946    | 54.6946         | 759155             | -----        |            |
| 72     |                     | 22.448     | 149313.00     | 33235.68    | 12.1974    | 12.1974         | 149313             | -0.6853      |            |
| 73     |                     | 22.572     | 36020.00      | 11028.12    | 4.3025     | 4.3025          | 36020              | -----        |            |
| 74     |                     | 22.752     | 5537.00       | 1384.79     | 2.1782     | 2.1782          | 5537               | -----        |            |
| 75     | METHOXYCHLOR        | 22.979     | 377079.00     | 71705.72    | 28.0694    | 28.0694         | 377079             | -----        |            |
| 76     | ENDOSULFAN SULFATE  | 23.226     | 1348418.00    | 231196.78   | 318.8862   | 318.8862        | 1348418            | -----        |            |
| 77     | DBC                 | 23.713     | 3381.50       | 1038.58     | -12.3650   | -12.3650        | 3382               | 0.3713       |            |
| 78     |                     | 23.726     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 79     |                     | 23.936     | 336256.50     | 60925.33    | 24.3582    | 24.3582         | 336256             | 0.1340       |            |
| 80     | ENDRIN KETONE       | 24.144     | 15476.50      | 3747.36     | 1.6502     | 1.6502          | 15477              | -----        |            |
| 81     |                     | 24.298     | 651421.00     | 140140.31   | 46.6687    | 46.6687         | 651421             | -----        |            |
| 82     |                     | 24.455     | 1154082.00    | 238691.04   | 82.2522    | 82.2522         | 1154082            | -----        |            |
| 83     |                     | 24.985     | 199444.00     | 36350.28    | 10.4826    | 10.4826         | 199444             | -0.1347      |            |
| 84     |                     | 25.253     | 95403.50      | 17360.14    | 5.6779     | 5.6779          | 95404              | -----        |            |
| 85     |                     | 25.522     | 17498.00      | 3617.30     | 2.0802     | 2.0802          | 17498              | -----        |            |
| 86     |                     | 25.691     | 100822.00     | 21721.90    | 5.9282     | 5.9282          | 100822             | -----        |            |
| 87     |                     | 25.820     | 21225.50      | 5506.37     | 2.2523     | 2.2523          | 21226              | -----        |            |
| 88     |                     | 26.213     | 38315.50      | 6785.60     | 3.0416     | 3.0416          | 38316              | -----        |            |
| 89     |                     | 26.562     | 674581.00     | 116287.64   | 32.4248    | 32.4248         | 674581             | -----        |            |
| 90     |                     | 26.785     | 8404.00       | 1899.92     | -12.3972   | -12.3972        | 8404               | -----        |            |
| 91     | DCB                 | 27.664     | 934741.00     | 140987.50   | 32.3913    | 32.3913         | 934741             | -----        |            |
| 92     |                     | 27.891     | 17501.00      | 3517.92     | -11.9573   | -11.9573        | 17501              | -----        |            |
| 93     |                     | 28.254     | 77243.00      | 11920.95    | -9.0688    | -9.0688         | 77243              | 0.1808       |            |
| 94     |                     | 28.625     | 17678.00      | 2312.53     | -11.9488   | -11.9488        | 17678              | -----        |            |
| 95     |                     | 29.412     | 395129.50     | 26899.87    | 6.3010     | 6.3010          | 395130             | -----        |            |
| 96     |                     | 31.120     | 36699.00      | 4010.34     | -11.0291   | -11.0291        | 36699              | -----        |            |
| 97     |                     | 32.232     | 31705.00      | 3042.55     | -11.2706   | -11.2706        | 31705              | -----        |            |

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| Peak<br># | Component<br>Name | Time<br>(min) | Area<br>[uV*sec] | Height<br>[uV] | Raw<br>Amount | Adjusted<br>Amount | Calibration<br>Factor | Delta RT<br>[%] | Cal.<br>Range |
|-----------|-------------------|---------------|------------------|----------------|---------------|--------------------|-----------------------|-----------------|---------------|
| 95        |                   | 32.790        | 46329.50         | 3746.18        | -10.5635      | -10.5635           | 46330                 | -----           |               |
|           |                   |               | 34881896.50      | 6.264e+06      | 2016.2256     | 2000.3246          |                       |                 |               |

## Missing Component Report

| Component           | Expected Retention (Sample File) |
|---------------------|----------------------------------|
| HEPTACHLOR EXPOXIDE | 16.381                           |
| ENDOSULFAN I        | 17.321                           |
| ENDOSULFAN SULFATE  | 23.726                           |

=====

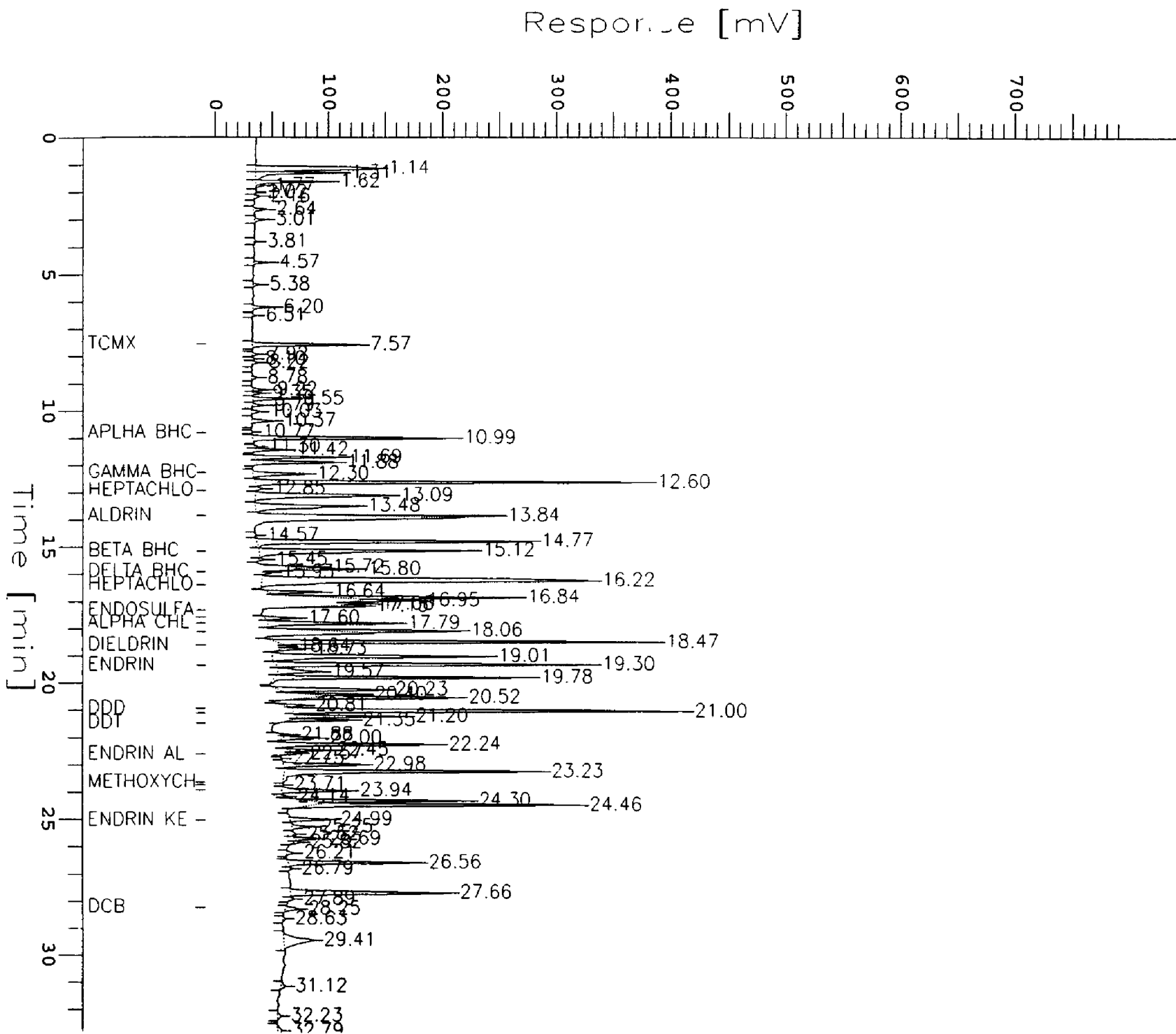
HP5890 DETECTOR A

=====

Report Stored in ASCII File: C:\2700\HP5890\PA38025.TXT

Sample Name : L950626-14.1:5  
FileName : c:\2700\hps5890\PA38025.raw  
Method : HPPEST8.ins  
Start Time : 0.00 min  
Scale Factor : -1.0  
End Time : 33.00 min  
Plot Offset: -8 mV

Sample #: 25  
Date : 3/9/95 01:36 AM  
Time of Injection: 3/9/95 01:02 AM  
Low Point : -7.74 mV  
Plot Scale: 800.0 mV  
High Point : 792.26 mV



```

=====
Software Version: 3.3 <4811>
Sample Name : L950626-14 1:5      Time       : 3/9/95  01:36 AM
Sample Number: 25                  Study      : PPCB
Operator    : KMW

```

```

Instrument : HP5890                Channel : B      A/D mV Range : 1000
AutoSampler : NONE
Ink/Vial   : 0/0

```

```

Interface Serial # : 8055910402   Data Acquisition Time: 3/9/95  01:02 AM
Delay Time       : 0.00 min.
End Time        : 33.00 min.
Sampling Rate    : 1.0000 pts/sec

```

```

Raw Data File : C:\2700\HP5890\PB38025.RAW
Result File   : C:\2700\HP5890\PB38025.RST
Instrument File: c:\2700\methseqs\HPPESTB.ins
Process File  : HPPESTB
Sample File   : PESTB058
Sequence File : C:\2700\METHSEQS\0308PCB.SEQ

```

```

Inj. Volume   : 1 ul                Area Reject : 200.000000
Sample Amount : 1.0000              Dilution Factor : 1.00

```

```

Instrument Control Method:
Instrument name : HP5890

```

Channel Parameters:

```

Inlet Parameters:
Inlet A :                      Inlet B :

```

```

Detector Parameters:
Detector A :                  Detector B :

```

Heated Zones:

Temperature Program:

Total run time : 33.00 min

```

Timed Events:
There are no timed events in the method

```

# HP5890 REPORT FOR PEST/PCB ANALYSIS

```

=====
NORTHEASTERN ANALYTICAL CORP. GAS CHROMATOGRAPHY LAB.
=====

```

| Peak # | Component Name | Time [min] | Area [uV*sec] | Height [uV] | Raw Amount | Adjusted Amount | Calibration Factor | Cal. Range |
|--------|----------------|------------|---------------|-------------|------------|-----------------|--------------------|------------|
| 1      |                | 1.135      | 340162.67     | 46418.39    | 20.3220    | 20.3220         | 340163             |            |
| 2      |                | 1.288      | 176085.33     | 52827.78    | 8.1224     | 8.1224          | 176085             |            |
| 3      |                | 1.543      | 187028.00     | 50949.38    | 8.9360     | 8.9360          | 187028             |            |
| 4      |                | 2.410      | 4410.50       | 872.05      | -4.6421    | -4.6421         | 4410               |            |
| 5      |                | 2.588      | 5937.00       | 1235.79     | -4.5286    | -4.5286         | 5937               |            |
| 6      |                | 2.701      | 25562.50      | 7861.72     | -3.0694    | -3.0694         | 25562              |            |
| 7      |                | 3.104      | 29043.00      | 7452.08     | -2.8106    | -2.8106         | 29043              |            |
| 8      |                | 3.455      | 3644.00       | 978.84      | -4.6991    | -4.6991         | 3644               |            |
| 9      |                | 4.085      | 16462.00      | 2374.58     | -3.7460    | -3.7460         | 16462              |            |
| 10     |                | 4.308      | 3900.00       | 1049.71     | -4.6800    | -4.6800         | 3900               |            |
| 11     |                | 4.697      | 125998.50     | 30470.02    | 4.3983     | 4.3983          | 125998             |            |
| 12     |                | 4.920      | 37123.50      | 10568.14    | -2.2098    | -2.2098         | 37124              |            |
| 13     |                | 6.076      | 25570.00      | 6244.66     | -3.0688    | -3.0688         | 25570              |            |
| 14     |                | 6.913      | 62206.50      | 12048.35    | -0.3448    | -0.3448         | 62206              |            |
| 15     |                | 7.876      | 195476.50     | 29724.39    | 9.5642     | 9.5642          | 195476             |            |
|        | TCMX           | 8.259      | 290342.00     | 66677.96    | 16.6177    | 16.6177         | 290342             |            |
|        |                | 9.272      | 186177.00     | 28379.02    | 8.8728     | 8.8728          | 186177             |            |
| 18     |                | 9.654      | 24021.00      | 2315.12     | 2.3601     | 2.3601          | 24021              |            |
| 19     |                | 10.249     | 33631.00      | 7080.77     | 2.7774     | 2.7774          | 33631              |            |
| 20     |                | 10.481     | 123091.50     | 26614.47    | 6.6613     | 6.6613          | 123092             |            |
| 21     |                | 10.617     | 21411.00      | 5751.16     | 2.2468     | 2.2468          | 21411              |            |



| Peak # | Component Name       | Time [min] | Area [uV*sec] | Height [uV] | Raw Amount | Adjusted Amount | Calibration Factor | Cal. Range |
|--------|----------------------|------------|---------------|-------------|------------|-----------------|--------------------|------------|
| 0      | ALPHA BHC            | 10.753     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 22     |                      | 10.964     | 12315.50      | 2565.22     | 1.8519     | 1.8519          | 12316              |            |
| 23     |                      | 11.729     | 55209.00      | 11340.81    | 3.2934     | 3.2934          | 55209              |            |
|        |                      | 11.949     | 376312.00     | 79094.45    | 18.2457    | 18.2457         | 376312             |            |
|        |                      | 12.101     | 411337.00     | 93782.94    | 19.8767    | 19.8767         | 411337             |            |
| 26     | BETA BHC             | 12.373     | 119524.50     | 25030.81    | 6.2882     | 6.2882          | 119525             |            |
| 27     |                      | 12.504     | 30488.00      | 7804.62     | 2.1422     | 2.1422          | 30488              |            |
| 28     |                      | 12.726     | 6919.00       | 1930.48     | 1.0447     | 1.0447          | 6919               |            |
| 29     |                      | 12.880     | 229794.00     | 48896.05    | 7.9144     | 7.9144          | 229794             |            |
| 30     |                      | 13.159     | 414292.50     | 55809.39    | 14.7876    | 14.7876         | 414292             |            |
| 0      | GAMMA BHC            | 13.331     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 31     |                      | 13.561     | 1160269.00    | 228249.83   | 42.5777    | 42.5777         | 1160269            |            |
| 32     | DELTA BHC            | 14.122     | 236708.50     | 48394.73    | 12.5690    | 12.5690         | 236708             |            |
| 33     |                      | 14.332     | 83562.00      | 14538.86    | 5.3587     | 5.3587          | 83562              |            |
| 34     |                      | 14.476     | 10303.00      | 2951.87     | 1.6972     | 1.6972          | 10303              |            |
| 35     | HEPTACHLOR           | 14.596     | 239434.50     | 52927.01    | 13.1008    | 13.1008         | 239434             |            |
| 36     |                      | 14.850     | 409088.50     | 91720.98    | 21.5442    | 21.5442         | 409089             |            |
| 37     |                      | 14.990     | 439032.50     | 85063.50    | 23.0345    | 23.0345         | 439033             |            |
| 38     |                      | 15.170     | 99059.00      | 23159.48    | 6.1145     | 6.1145          | 99059              |            |
| 39     |                      | 15.429     | 74683.00      | 12805.61    | 49.7458    | 49.7458         | 74683              |            |
| 40     |                      | 15.971     | 976748.00     | 137017.10   | -469.0418  | -469.0418       | 976748             |            |
| 0      | ALDRIN               | 16.123     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 41     |                      | 16.278     | 128146.50     | 29624.72    | 18.9984    | 18.9984         | 128146             |            |
| 42     |                      | 16.420     | 270182.00     | 62980.81    | -62.6878   | -62.6878        | 270182             |            |
| 43     |                      | 16.528     | 18940.00      | 8107.57     | 81.8042    | 81.8042         | 18940              |            |
| 44     |                      | 16.833     | 273570.00     | 48019.57    | 15.0405    | 15.0405         | 273570             |            |
| 45     | HEPTACHLOR EPOXIDE   | 17.071     | 499549.00     | 110618.86   | 27.7568    | 27.7568         | 499549             |            |
| 46     |                      | 17.206     | 270190.00     | 67714.60    | 14.8503    | 14.8503         | 270190             |            |
| 47     | GAMMA CHLORDANE      | 17.500     | 428816.00     | 88702.96    | 22.6548    | 22.6548         | 428816             |            |
| 48     |                      | 17.619     | 31155.00      | 11755.17    | 1.3699     | 1.3699          | 31155              |            |
| 49     | ALPHA CHLORDANE/ENDO | 17.838     | 607411.50     | 113558.20   | 33.4941    | 33.4941         | 607412             |            |
| 50     |                      | 18.023     | 282413.50     | 61131.66    | 14.7737    | 14.7737         | 282414             |            |
| 51     |                      | 18.190     | 305105.00     | 65127.81    | 16.0808    | 16.0808         | 305105             |            |
| 52     |                      | 18.507     | 6807.00       | 1536.69     | 1.3932     | 1.3932          | 6807               |            |
| 53     |                      | 18.640     | 199466.00     | 41306.64    | 13.5518    | 13.5518         | 199466             |            |
| 54     |                      | 18.792     | 29703.00      | 7558.84     | 2.8381     | 2.8381          | 29703              |            |
| 55     | DIELDRIN             | 18.996     | 248177.00     | 47585.05    | 16.6260    | 16.6260         | 248177             |            |
|        |                      | 19.134     | 9925.00       | 3521.25     | 0.6607     | 0.6607          | 9925               |            |
|        | DDE                  | 19.262     | 370257.00     | 81744.48    | 22.8279    | 22.8279         | 370257             |            |
| 58     |                      | 19.411     | 133332.00     | 32426.90    | 8.2525     | 8.2525          | 133332             |            |
| 59     |                      | 19.658     | 1019761.00    | 177724.85   | 62.7846    | 62.7846         | 1019761            |            |
| 60     |                      | 19.957     | 39690.00      | 7067.99     | 2.4918     | 2.4918          | 39690              |            |
| 61     |                      | 20.220     | 1025691.50    | 127287.24   | 87.4681    | 87.4681         | 1025691            |            |
| 62     |                      | 20.512     | 31133.00      | 9453.46     | 2.6536     | 2.6536          | 31133              |            |
| 63     | ENDRIN               | 20.741     | 474734.00     | 90919.29    | 40.4832    | 40.4832         | 474734             |            |
| 64     |                      | 20.941     | 11965.00      | 3477.20     | 1.8292     | 1.8292          | 11965              |            |
| 65     | ENDOSULFAN II        | 21.100     | 72999.00      | 16580.79    | 6.4295     | 6.4295          | 72999              |            |
| 66     |                      | 21.480     | 150011.00     | 31228.17    | 10.2511    | 10.2511         | 150011             |            |
| 67     | DDD                  | 21.654     | 696726.50     | 77961.35    | 51.9804    | 51.9804         | 696727             |            |
| 68     | ENDRIN ALDEHYDE      | 22.202     | 1094525.00    | 144455.36   | 107.9078   | 107.9078        | 1094525            |            |
| 69     | ENDOSULFAN SULFATE   | 22.440     | 196616.00     | 38792.68    | 20.3504    | 20.3504         | 196616             |            |
| 70     |                      | 22.631     | 117208.00     | 18389.74    | 12.0294    | 12.0294         | 117208             |            |
| 71     |                      | 22.789     | 7965.00       | 2835.42     | 0.5820     | 0.5820          | 7965               |            |
| 72     | DDT                  | 23.216     | 47733.00      | 5875.14     | 3.3208     | 3.3208          | 47733              |            |
| 73     |                      | 23.622     | 423084.50     | 70526.63    | 33.5462    | 33.5462         | 423084             |            |
| 74     | ENDRIN KETONE        | 23.896     | 192644.00     | 39480.51    | 14.9101    | 14.9101         | 192644             |            |
| 75     |                      | 24.006     | 35482.00      | 10181.07    | 2.2002     | 2.2002          | 35482              |            |
| 76     |                      | 24.252     | 488694.00     | 88515.47    | 38.8521    | 38.8521         | 488694             |            |
| 77     |                      | 24.638     | 12442.50      | 2811.07     | 0.3369     | 0.3369          | 12442              |            |
| 78     |                      | 24.833     | 5820.50       | 893.95      | -3.1213    | -3.1213         | 5820               |            |
| 79     |                      | 25.036     | 32307.00      | 5801.52     | 3.2622     | 3.2622          | 32307              |            |
| 80     | METHOXYCHLOR         | 25.387     | 20206.00      | 3896.24     | 0.3457     | 0.3457          | 20206              |            |
| 81     |                      | 25.576     | 309294.00     | 59837.08    | 70.0180    | 70.0180         | 309294             |            |
| 82     | DBC                  | 25.778     | 560892.50     | 88150.19    | 52.7677    | 52.7677         | 560893             |            |
| 83     |                      | 26.400     | 12883.00      | 1738.46     | 1.5722     | 1.5722          | 12883              |            |
| 84     |                      | 26.762     | 92449.00      | 14848.96    | 9.0053     | 9.0053          | 92449              |            |
| 85     |                      | 26.973     | 8362.00       | 1617.02     | 1.1498     | 1.1498          | 8362               |            |
| 86     |                      | 27.186     | 44860.00      | 6921.71     | 4.5595     | 4.5595          | 44860              |            |
| 87     |                      | 27.496     | 82690.00      | 9969.09     | 8.0936     | 8.0936          | 82690              |            |
| 88     |                      | 27.867     | 324034.00     | 47036.89    | 30.6402    | 30.6402         | 324034             |            |
| 89     |                      | 29.635     | 518507.00     | 60922.48    | 32.5964    | 32.5964         | 518507             |            |
|        | DCB                  | 31.194     | 45018.50      | 4979.48     | -9.2431    | -9.2431         | 45018              |            |
| <hr/>  |                      |            |               |             |            |                 |                    |            |
|        |                      |            | 19611937.00   | 3.574e+06   | 791.5648   | 791.5648        | 19611937           |            |

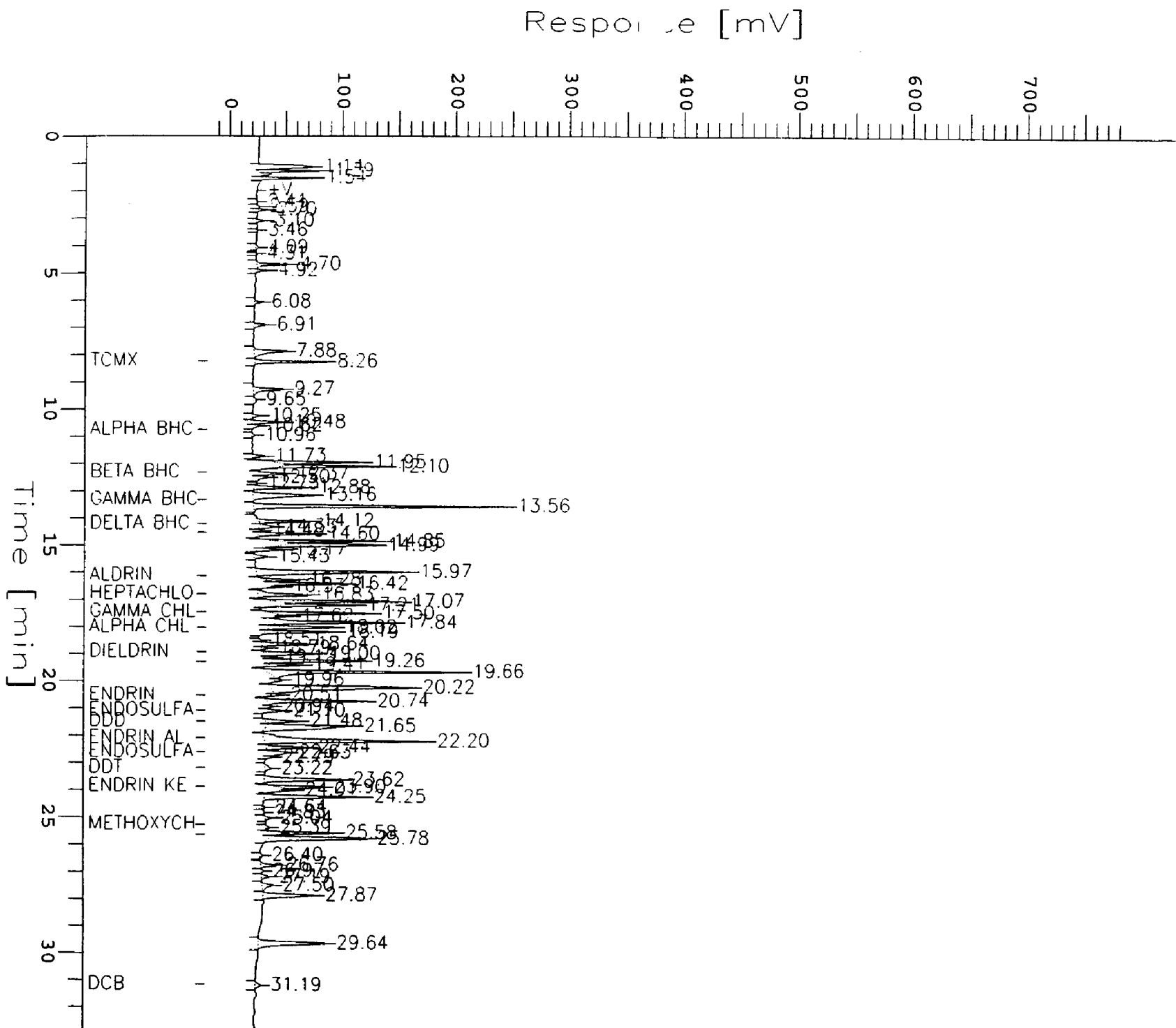
Missing Component Report

# Chromatogram

376

Sample Name : L950626-14 1:5  
 FileName : c:\2700\hp5890\p838025.raw  
 Method : HPPEST8.ins  
 Start Time : 0.00 min  
 Scale Factor : -1.0  
 End Time : 33.00 min  
 Plot Offset: -19 mV

Sample #: 25  
 Date : 3/9/95 01:36 AM  
 Time of Injection: 3/9/95 01:02 AM  
 Low Point : -19.34 mV  
 Plot Scale: 800.0 mV  
 High Point : 780.66 mV



Software Version: 3.3 <4811>  
 Sample Name : ~~1950626-9~~ 450626-1.5-1.20 Time : 3/13/95 05:52 PM  
 Sample Number: 34 35 Study : 515.1  
 Operator : KMW

377

Instrument : HP5890 Channel : A A/D mV Range : 1000  
 AutoSampler : NONE  
 k/Vial : 0/0

Interface Serial # : 8055910402 Data Acquisition Time: 3/13/95 05:17 PM  
 Delay Time : 0.00 min.  
 End Time : 35.00 min.  
 Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\HP5890\HA30033A.RAW  
 Result File : C:\2700\HP5890\HA30033A.RST  
 Instrument File: c:\2700\methseqs\515A.ins  
 Process File : 515A  
 Sample File : HB515A2  
 Sequence File : C:\2700\METHSEQS\Q310HB.seq

Inj. Volume : 1 ul Area Reject : 0.000000  
 Sample Amount : 1.0000 Dilution Factor : 1.00

# DEFAULT REPORT

| Peak # | Time [min] | Area [uV*sec] | Height [uV] | Area [%] | Norm. Area [%] | Area/Height [sec] |
|--------|------------|---------------|-------------|----------|----------------|-------------------|
| 1      | 0.225      | 729.50        | 79.31       | 2e-03    | 1.9983e-03     | B 9.1982          |
| 2      | 1.131      | 1133941.00    | 154687.86   | 3.11     | 3.11           | B 7.3305          |
| 3      | 1.513      | 2569.50       | 1148.93     | 7e-03    | 7.0385e-03     | B 2.2364          |
| 4      | 1.634      | 105241.62     | 26465.08    | 0.29     | 0.29           | B 3.9766          |
| 5      | 1.788      | 38935.42      | 10746.89    | 0.11     | 0.11           | V 3.6229          |
| 6      | 1.898      | 29865.96      | 7883.41     | 0.08     | 0.08           | V 3.7885          |
| 7      | 2.029      | 2070.54       | 695.09      | 6e-03    | 5.6717e-03     | V 2.9788          |
| 8      | 2.108      | 20568.96      | 5051.65     | 0.06     | 0.06           | V 4.0717          |
| 9      | 2.324      | 4308.00       | 1105.88     | 0.01     | 0.01           | B 3.8955          |
|        | 2.566      | 767.60        | 269.53      | 2e-03    | 2.1027e-03     | B 2.8479          |
|        | 2.656      | 15889.90      | 4352.40     | 0.04     | 0.04           | V 3.6508          |
| 12     | 2.936      | 25655.38      | 4185.50     | 0.07     | 0.07           | B 6.1296          |
| 13     | 3.031      | 17617.62      | 3896.76     | 0.05     | 0.05           | V 4.5211          |
| 14     | 3.255      | 1919.43       | 571.53      | 5e-03    | 5.2578e-03     | B 3.3584          |
| 15     | 3.367      | 2333.07       | 605.40      | 6e-03    | 6.3909e-03     | V 3.8537          |
| 16     | 3.519      | 1460.50       | 377.12      | 4e-03    | 4.0007e-03     | B 3.8728          |
| 17     | 3.730      | 4055.11       | 701.63      | 0.01     | 0.01           | B 5.7796          |
| 18     | 3.884      | 7115.39       | 1273.06     | 0.02     | 0.02           | V 5.5892          |
| 19     | 4.069      | 1111.00       | 345.01      | 3e-03    | 3.0433e-03     | B 3.2202          |
| 20     | 4.320      | 2813.84       | 520.52      | 8e-03    | 7.7078e-03     | B 5.4058          |
| 21     | 4.605      | 28598.16      | 6253.22     | 0.08     | 0.08           | V 4.5733          |
| 22     | 4.924      | 378.50        | 101.23      | 1e-03    | 1.0368e-03     | B 3.7390          |
| 23     | 5.178      | 4164.88       | 499.94      | 0.01     | 0.01           | B 8.3307          |
| 24     | 5.298      | 6033.51       | 1714.86     | 0.02     | 0.02           | V 3.5184          |
| 25     | 5.430      | 135990.61     | 36570.00    | 0.37     | 0.37           | V 3.7186          |
| 26     | 5.705      | 3853.65       | 835.25      | 0.01     | 0.01           | B 4.6137          |
| 27     | 5.806      | 6151.35       | 849.94      | 0.02     | 0.02           | V 7.2374          |
| 28     | 6.045      | 2800.50       | 523.68      | 8e-03    | 7.6713e-03     | B 5.3477          |
| 29     | 6.257      | 30788.36      | 6969.28     | 0.08     | 0.08           | B 4.4177          |
| 30     | 6.368      | 98994.78      | 17273.28    | 0.27     | 0.27           | V 5.7311          |
| 31     | 6.558      | 51260.72      | 8308.10     | 0.14     | 0.14           | V 6.1700          |
| 32     | 6.771      | 7751.14       | 1325.04     | 0.02     | 0.02           | V 5.8497          |
| 33     | 6.900      | 8343.00       | 1673.82     | 0.02     | 0.02           | V 4.9844          |
| 34     | 7.209      | 573.00        | 136.63      | 2e-03    | 1.5696e-03     | B 4.1937          |
| 35     | 7.436      | 1224.68       | 295.78      | 3e-03    | 3.3547e-03     | B 4.1406          |
| 36     | 7.627      | 116199.32     | 26032.42    | 0.32     | 0.32           | V 4.4636          |
| 37     | 7.982      | 22159.77      | 3946.06     | 0.06     | 0.06           | B 5.6157          |
| 38     | 8.151      | 16434.70      | 3906.69     | 0.05     | 0.05           | V 4.2068          |
| 39     | 8.277      | 48139.04      | 9975.18     | 0.13     | 0.13           | V 4.8259          |
| 40     | 8.408      | 5723.00       | 1544.49     | 0.02     | 0.02           | E 3.7054          |
| 41     | 8.840      | 75626.00      | 14793.18    | 0.21     | 0.21           | B 5.1122          |
| 42     | 9.283      | 53953.95      | 11619.41    | 0.15     | 0.15           | B 4.6434          |
| 43     | 9.411      | 179336.66     | 38242.88    | 0.49     | 0.49           | V 4.6894          |
|        | 9.607      | 485761.53     | 97784.95    | 1.33     | 1.33           | V 4.9677          |
| 45     | 9.846      | 176477.66     | 37449.03    | 0.48     | 0.48           | V 4.7125          |
| 46     | 10.087     | 29419.13      | 5240.78     | 0.08     | 0.08           | V 5.6135          |
| 47     | 10.420     | 107997.58     | 21278.35    | 0.30     | 0.30           | V 5.0755          |
| 48     | 10.808     | 1553.00       | 279.00      | 4e-03    | 4.2541e-03     | B 5.5663          |
| 49     | 11.040     | 1100343.77    | 224144.57   | 3.01     | 3.01           | B 4.9091          |

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| Peak # | Time [min] | Area [uV*sec] | Height [uV] | Area [%] | Norm. Area [%] | Area BL | Area/Height [sec] |
|--------|------------|---------------|-------------|----------|----------------|---------|-------------------|
| 50     | 11.359     | 34909.00      | 7313.04     | 0.10     | 0.10           | V       | 4.7735            |
| 51     | 11.476     | 189987.82     | 36204.76    | 0.52     | 0.52           | V       | 5.2476            |
| 52     | 11.742     | 408234.75     | 81473.05    | 1.12     | 1.12           | V       | 5.0107            |
|        | 11.933     | 486097.66     | 94230.07    | 1.33     | 1.33           | V       | 5.1586            |
| 54     | 12.359     | 392102.27     | 59094.05    | 1.07     | 1.07           | B       | 6.6352            |
| 55     | 12.659     | 2333734.86    | 408508.45   | 6.39     | 6.39           | V       | 5.7128            |
| 56     | 12.911     | 45126.00      | 7270.59     | 0.13     | 0.13           | E       | 6.3442            |
| 57     | 13.144     | 1445666.45    | 197108.32   | 3.96     | 3.96           | V       | 7.3344            |
| 58     | 13.531     | 828827.86     | 118598.08   | 2.27     | 2.27           | V       | 6.9885            |
| 59     | 13.897     | 2032538.55    | 177539.34   | 5.57     | 5.57           | V       | 11.4484           |
| 60     | 14.637     | 65894.00      | 4380.76     | 0.18     | 0.18           | E       | 15.0417           |
| 61     | 14.830     | 1461147.43    | 209720.05   | 4.00     | 4.00           | V       | 6.9671            |
| 62     | 15.172     | 1353663.31    | 169713.58   | 3.71     | 3.71           | V       | 7.9762            |
| 63     | 15.456     | 1590289.77    | 310433.38   | 4.36     | 4.36           | V       | 5.1228            |
| 64     | 15.771     | 258552.70     | 48028.15    | 0.71     | 0.71           | B       | 5.3834            |
| 65     | 15.863     | 445065.61     | 81242.96    | 1.22     | 1.22           | V       | 5.4782            |
| 66     | 16.011     | 60671.00      | 12510.67    | 0.17     | 0.17           | E       | 4.8495            |
| 67     | 16.277     | 2228695.68    | 218895.15   | 6.10     | 6.10           | V       | 10.1816           |
| 68     | 16.699     | 145647.00     | 30683.53    | 0.40     | 0.40           | B       | 4.7467            |
| 69     | 16.894     | 623658.91     | 121573.37   | 1.71     | 1.71           | B       | 5.1299            |
| 70     | 17.020     | 321361.70     | 62015.68    | 0.88     | 0.88           | V       | 5.1819            |
| 71     | 17.127     | 118905.39     | 32300.10    | 0.33     | 0.33           | V       | 3.6813            |
| 72     | 17.425     | 1198.50       | 375.92      | 3e-03    | 3.2830e-03     | B       | 3.1882            |
| 73     | 17.654     | 89871.14      | 17519.76    | 0.25     | 0.25           | B       | 5.1297            |
| 74     | 17.842     | 424462.86     | 74888.50    | 1.16     | 1.16           | V       | 5.6679            |
| 75     | 18.118     | 329288.00     | 71728.48    | 0.90     | 0.90           | B       | 4.5908            |
| 76     | 18.520     | 1130872.00    | 207338.53   | 3.10     | 3.10           | B       | 5.4542            |
| 77     | 18.784     | 43548.50      | 10464.26    | 0.12     | 0.12           | B       | 4.1616            |
| 78     | 19.060     | 685236.50     | 109708.29   | 1.88     | 1.88           | B       | 6.2460            |
| 79     | 19.360     | 1015910.81    | 189465.93   | 2.78     | 2.78           | B       | 5.3620            |
| 80     | 19.627     | 181829.84     | 22462.39    | 0.50     | 0.50           | V       | 8.0949            |
| 81     | 19.838     | 680513.36     | 123109.95   | 1.86     | 1.86           | V       | 5.5277            |
| 82     | 20.286     | 316649.56     | 54504.38    | 0.87     | 0.87           | B       | 5.8096            |
| 83     | 20.457     | 214490.98     | 41978.31    | 0.59     | 0.59           | V       | 5.1096            |
| 84     | 20.571     | 652940.94     | 112806.64   | 1.79     | 1.79           | V       | 5.7881            |
| 85     | 20.864     | 115078.62     | 18330.12    | 0.32     | 0.32           | V       | 6.2781            |
| 86     | 21.062     | 1329097.76    | 205719.17   | 3.64     | 3.64           | V       | 6.4607            |
|        | 21.257     | 220691.63     | 40262.96    | 0.60     | 0.60           | V       | 5.4813            |
| 88     | 21.406     | 182460.12     | 31177.25    | 0.50     | 0.50           | V       | 5.8523            |
| 89     | 21.533     | 92629.88      | 18606.85    | 0.25     | 0.25           | V       | 4.9783            |
| 90     | 21.947     | 48638.82      | 6958.46     | 0.13     | 0.13           | B       | 6.9899            |
| 91     | 22.078     | 83605.40      | 13043.01    | 0.23     | 0.23           | V       | 6.4100            |
| 92     | 22.294     | 406685.67     | 69032.09    | 1.11     | 1.11           | V       | 5.8913            |
| 93     | 22.501     | 155587.89     | 22261.27    | 0.43     | 0.43           | V       | 6.9892            |
| 94     | 22.628     | 74701.99      | 12478.11    | 0.20     | 0.20           | V       | 5.9866            |
| 95     | 22.828     | 35036.35      | 5322.18     | 0.10     | 0.10           | V       | 6.5831            |
| 96     | 23.035     | 329752.36     | 44846.91    | 0.90     | 0.90           | V       | 7.3528            |
| 97     | 23.282     | 642181.33     | 89555.97    | 1.76     | 1.76           | V       | 7.1707            |
| 98     | 23.782     | 32204.00      | 3780.92     | 0.09     | 0.09           | E       | 8.5175            |
| 99     | 23.981     | 144461.07     | 18755.68    | 0.40     | 0.40           | V       | 7.7023            |
| 100    | 24.353     | 168466.19     | 23265.53    | 0.46     | 0.46           | V       | 7.2410            |
| 101    | 24.511     | 450639.99     | 70387.31    | 1.23     | 1.23           | V       | 6.4023            |
| 102    | 24.731     | 30118.00      | 5482.45     | 0.08     | 0.08           | E       | 5.4935            |
| 103    | 25.038     | 157730.17     | 9604.92     | 0.43     | 0.43           | V       | 16.4218           |
| 104    | 25.457     | 349463.01     | 22651.15    | 0.96     | 0.96           | V       | 15.4280           |
| 105    | 25.745     | 92771.25      | 12711.55    | 0.25     | 0.25           | V       | 7.2982            |
| 106    | 25.872     | 93390.86      | 12963.47    | 0.26     | 0.26           | V       | 7.2042            |
| 107    | 26.023     | 81056.19      | 9187.59     | 0.22     | 0.22           | V       | 8.8224            |
| 108    | 26.274     | 213512.47     | 28017.27    | 0.58     | 0.58           | V       | 7.6207            |
| 109    | 26.623     | 205591.61     | 20869.96    | 0.56     | 0.56           | V       | 9.8511            |
| 110    | 27.034     | 20241.19      | 1809.05     | 0.06     | 0.06           | V       | 11.1888           |
| 111    | 27.239     | 4242.30       | 760.50      | 0.01     | 0.01           | V       | 5.5783            |
| 112    | 27.415     | 3880.89       | 298.35      | 0.01     | 0.01           | V       | 13.0077           |
| 113    | 27.732     | 62385.20      | 9192.42     | 0.17     | 0.17           | B       | 6.7866            |
| 114    | 27.965     | 20950.80      | 3350.44     | 0.06     | 0.06           | V       | 6.2532            |
| 115    | 28.326     | 10647.05      | 1488.88     | 0.03     | 0.03           | B       | 7.1511            |
| 116    | 28.508     | 22327.15      | 2368.26     | 0.06     | 0.06           | V       | 9.4276            |
| 117    | 28.702     | 63855.27      | 3807.31     | 0.17     | 0.17           | V       | 16.7718           |
| 118    | 29.006     | 53235.04      | 3710.03     | 0.15     | 0.15           | V       | 14.3489           |
| 119    | 29.497     | 254757.71     | 9916.87     | 0.70     | 0.70           | V       | 25.6893           |
| 120    | 30.074     | 275825.93     | 10026.68    | 0.76     | 0.76           | V       | 27.5092           |
| 121    | 30.540     | 645442.67     | 14701.26    | 1.77     | 1.77           | V       | 43.9039           |
| 122    | 31.227     | 647663.82     | 17499.10    | 1.77     | 1.77           | V       | 37.0113           |
| 123    | 31.834     | 230114.41     | 16371.32    | 0.63     | 0.63           | V       | 14.0559           |
| 124    | 32.364     | 719773.84     | 20304.34    | 1.97     | 1.97           | V       | 35.4493           |
| 125    | 32.908     | 860932.61     | 24650.22    | 2.36     | 2.36           | V       | 34.9260           |
| 126    | 34.322     | 10418.50      | 1836.31     | 0.03     | 0.03           | B       | 5.6736            |

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B/C

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| Peak<br># | Time<br>[min] | Area<br>[uV*sec] | Height<br>[uV] | Area<br>[%] | Norm. Area<br>[%] | Area BL<br>[sec] | Area/Height |
|-----------|---------------|------------------|----------------|-------------|-------------------|------------------|-------------|
| 127       | 34.926        | 395.00           | 155.83         | 1e-03       | 1.0820e-03        | 8                | 2.5348      |
|           |               | 36506234.00      | 5.287e+06      | 100.00      | 100.00            |                  |             |

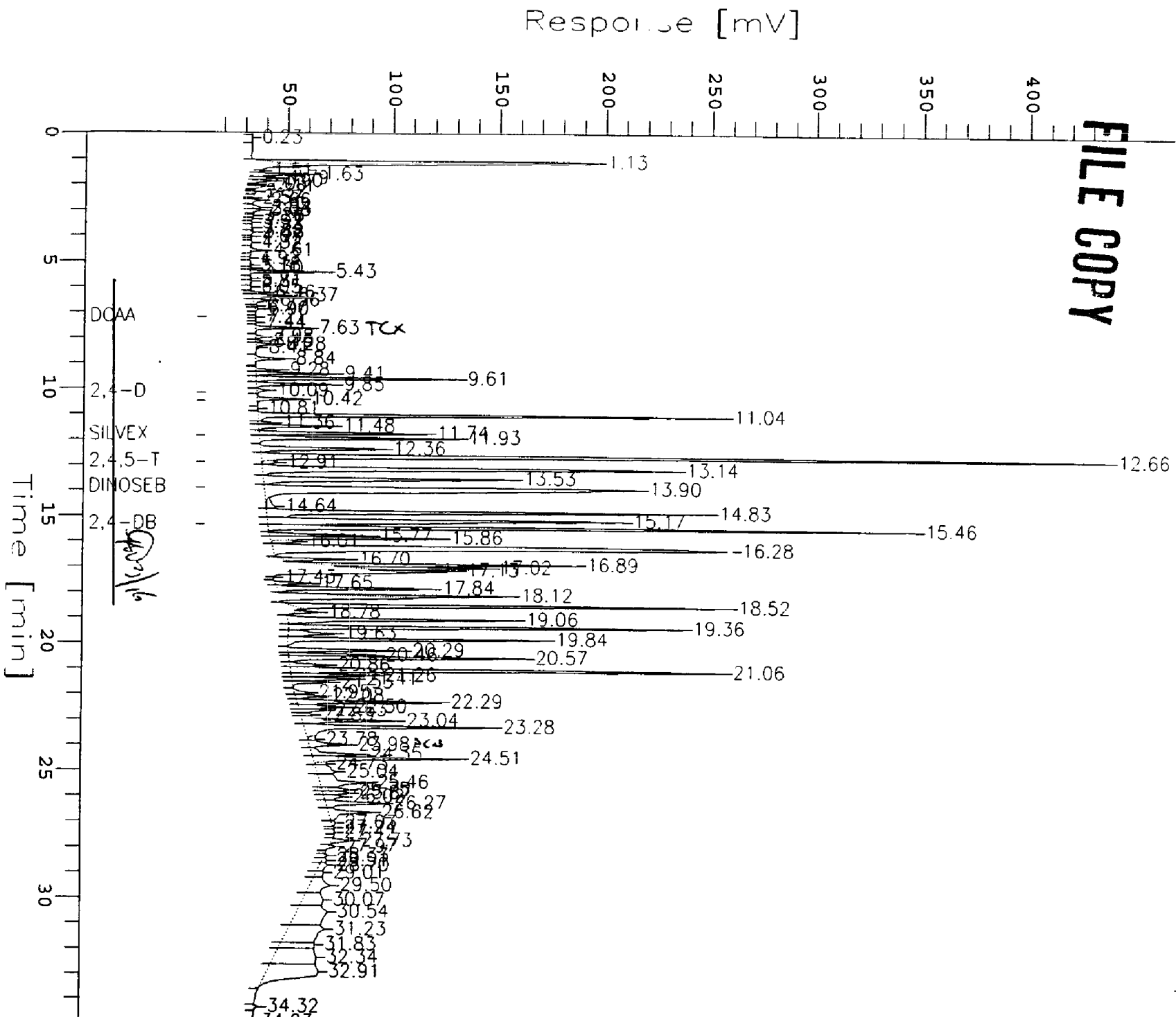
## Missing Component Report

| Component | Expected Retention (Sample File) |
|-----------|----------------------------------|
| 2,4-DB    | 15.350                           |

Sample Name : L950626-95 XALC  
Filename : c:\2700\hp5890\HA30033A.raw  
Method : 515A.ins  
Start Time : 0.00 min  
Scale Factor : 1.0  
End Time : 35.00 min  
Plot Offset: 12 mV

Sample #: 3435  
Date : 3/13/95 05:52 PM  
Time of Injection: 3/13/95 05:17 PM  
Low Point : 11.78 mV  
Plot Scale: 426.9 mV  
High Point : 438.65 mV

FILE COPY



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Software Version: 3.3 <4811>

Sample Name : L950626-95 X20 Time : 3/13/95 05:52 PM

Sample Number: 3435 Study : 515.1

Operator : KMW

Instrument : HP5890 Channel : B A/D mV Range : 1000

AutoSampler : NONE

nk/Vial : 0/0

Interface Serial # : 8055910402 Data Acquisition Time: 3/13/95 05:17 PM

Delay Time : 0.00 min.

End Time : 35.00 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\HP5890\HB30033A.RAW

Result File : C:\2700\HP5890\HB30033A.RST

Instrument File: c:\2700\methseqs\515A.ins

Process File : 515B

Sample File : HB515B

Sequence File : C:\2700\METHSEQS\0310HB.seq

Inj. Volume : 1 ul Area Reject : 200.000000

Sample Amount : 1.0000 Dilution Factor : 1.00

Instrument Control Method:

Instrument name : HP5890

Channel Parameters:

Inlet Parameters:

Inlet A : Inlet B :

Detector Parameters:

Detector A : Detector B :

Heated Zones:

Temperature Program:

Total run time : 35.00 min

Timed Events:

There are no timed events in the method

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8090 PCB In 316K

HP5890 REPORT FOR 515.1 ~~HERBICIDES DRINKING WATER ANALYSIS.~~

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NORTHEASTERN ANALYTICAL CORP. GAS CHROMATOGRAPHY LAB.

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| Peak # | Time [min] | Component Name | Area [uV*sec] | Height [uV] | Raw Amount | Adjusted Amount | Calibration Factor |
|--------|------------|----------------|---------------|-------------|------------|-----------------|--------------------|
| 1      | 1.139      |                | 421421.80     | 56240.69    | 0.8428     | 0.8428          | 4.2142e+05         |
| 2      | 1.288      |                | 58097.90      | 14977.69    | 0.1162     | 0.1162          | 58097.9000         |
| 3      | 1.414      |                | 13801.80      | 4291.61     | 0.0276     | 0.0276          | 13801.8000         |
| 4      | 1.551      |                | 59997.50      | 17366.01    | 0.1200     | 0.1200          | 59997.5000         |
| 5      | 1.828      |                | 8513.00       | 3101.27     | 0.0170     | 0.0170          | 8513.0000          |
| 6      | 1.961      |                | 5018.00       | 1212.67     | 0.0100     | 0.0100          | 5018.0000          |
| 7      | 2.619      |                | 23145.50      | 2980.12     | 0.0463     | 0.0463          | 23145.5000         |
| 8      | 3.084      |                | 16148.00      | 2767.64     | 0.0323     | 0.0323          | 16148.0000         |
| 9      | 3.316      |                | 5371.00       | 1058.30     | 0.0107     | 0.0107          | 5371.0000          |
| 10     | 4.037      |                | 7772.00       | 1080.91     | 0.0155     | 0.0155          | 7772.0000          |
| 11     | 4.615      |                | 3613.50       | 982.89      | 0.0072     | 0.0072          | 3613.5000          |
| 12     | 4.813      |                | 4284.00       | 1115.93     | 0.0086     | 0.0086          | 4284.0000          |
| 13     | 4.944      |                | 12687.00      | 3604.71     | 0.0254     | 0.0254          | 12687.0000         |
| 14     | 5.355      |                | 8610.00       | 1255.70     | 0.0172     | 0.0172          | 8610.0000          |
| *5     | 6.105      |                | 145814.00     | 36207.85    | 0.2916     | 0.2916          | 1.4581e+05         |
|        | 6.990      |                | 40427.00      | 6367.76     | 0.0809     | 0.0809          | 40427.0000         |
| 0      | 7.480      | DCAA           | 0.00          | 0.00        | 0.0000     | 0.0000          | 0.0000             |
| 17     | 7.998      |                | 9969.00       | 1888.83     | 0.0199     | 0.0199          | 9969.0000          |
| 18     | 8.298      |                | 81872.50      | 18024.85    | 0.1637     | 0.1637          | 81872.5000         |
| 19     | 9.336      |                | 142846.00     | 23346.73    | 0.2857     | 0.2857          | 1.4285e+05         |
| 20     | 9.759      |                | 50053.50      | 6039.58     | 0.1001     | 0.1001          | 50053.5000         |

| Peak # | Time [min] | Component Name    | Area [uV*sec] | Height [uV] | Raw Amount | Adjusted Amount | Calibration Factor |
|--------|------------|-------------------|---------------|-------------|------------|-----------------|--------------------|
| 21     | 10.287     | 2,4-D             | 61849.00      | 13077.16    | 17.5346    | 17.5346         | 61849.0000         |
| 22     | 10.521     |                   | 257099.00     | 57616.19    | 0.5142     | 0.5142          | 2.5710e+05         |
| 23     | 10.660     |                   | 36384.00      | 10026.77    | 0.0728     | 0.0728          | 36384.0000         |
|        | 10.728     |                   | 14027.00      | 6353.56     | 0.0281     | 0.0281          | 14027.0000         |
| 25     | 11.005     |                   | 7550.50       | 1540.22     | 0.0151     | 0.0151          | 7550.5000          |
| 26     | 11.320     | PENTACHLOROPHENOL | 0.00          | 0.00        | 0.0000     | 0.0000          | 0.0000             |
|        | 11.765     | SILVEX            | 54926.00      | 11242.13    | 3.4920     | 3.4920          | 54926.0000         |
| 27     | 11.987     |                   | 11457.00      | 2679.96     | 0.0229     | 0.0229          | 11457.0000         |
| 28     | 12.140     |                   | 668506.00     | 129577.93   | 1.3370     | 1.3370          | 6.6851e+05         |
| 29     | 12.419     |                   | 335128.00     | 66217.22    | 0.6703     | 0.6703          | 3.3513e+05         |
| 30     | 12.920     | 2,4,5-T           | 231209.00     | 48233.82    | 13.2904    | 13.2904         | 2.3121e+05         |
| 31     | 13.196     |                   | 479411.00     | 63062.48    | 0.9588     | 0.9588          | 4.7941e+05         |
| 32     | 13.604     | DINOSEB           | 1310487.00    | 256071.28   | 173.3374   | 173.3374        | 1.3105e+06         |
| 33     | 13.920     | 2,4-DB            | 0.00          | 0.00        | 0.0000     | 0.0000          | 0.0000             |
|        | 14.165     |                   | 332117.00     | 69578.87    | 0.6642     | 0.6642          | 3.3212e+05         |
| 34     | 14.367     |                   | 62924.00      | 10480.50    | 0.1258     | 0.1258          | 62924.0000         |
| 35     | 14.518     |                   | 6982.50       | 1969.40     | 0.0140     | 0.0140          | 6982.5000          |
| 36     | 14.639     |                   | 285206.50     | 61323.23    | 0.5704     | 0.5704          | 2.8521e+05         |
| 37     | 14.893     |                   | 287799.50     | 64762.69    | 0.5756     | 0.5756          | 2.8780e+05         |
| 38     | 15.034     |                   | 350394.00     | 64678.20    | 0.7008     | 0.7008          | 3.5039e+05         |
| 39     | 15.212     |                   | 57757.50      | 15739.81    | 0.1155     | 0.1155          | 57757.5000         |
| 40     | 15.470     |                   | 55862.00      | 10007.62    | 0.1117     | 0.1117          | 55862.0000         |
| 41     | 15.669     |                   | 4318.50       | 931.07      | 0.0086     | 0.0086          | 4318.5000          |
| 42     | 16.014     |                   | 781089.00     | 105818.54   | 1.5622     | 1.5622          | 7.8109e+05         |
| 43     | 16.321     |                   | 104870.00     | 23785.26    | 0.2097     | 0.2097          | 1.0487e+05         |
| 44     | 16.465     |                   | 206445.00     | 48622.75    | 0.4129     | 0.4129          | 2.0644e+05         |
| 45     | 16.570     |                   | 20354.00      | 7821.05     | 0.0407     | 0.0407          | 20354.0000         |
| 46     | 16.880     |                   | 234460.50     | 41209.65    | 0.4689     | 0.4689          | 2.3446e+05         |
| 47     | 17.118     |                   | 399251.00     | 88763.73    | 0.7985     | 0.7985          | 3.9925e+05         |
| 48     | 17.252     |                   | 234907.00     | 57809.18    | 0.4698     | 0.4698          | 2.3491e+05         |
| 49     | 17.547     |                   | 263283.50     | 52921.11    | 0.5266     | 0.5266          | 2.6328e+05         |
| 50     | 17.664     |                   | 10969.50      | 4801.85     | 0.0219     | 0.0219          | 10969.5000         |
| 51     | 17.886     |                   | 353927.00     | 65378.36    | 0.7079     | 0.7079          | 3.5393e+05         |
| 52     | 18.071     |                   | 158362.00     | 34634.65    | 0.3167     | 0.3167          | 1.5836e+05         |
| 53     | 18.237     |                   | 282292.00     | 59132.34    | 0.5646     | 0.5646          | 2.8229e+05         |
| 54     | 18.556     |                   | 4308.00       | 845.39      | 0.0086     | 0.0086          | 4308.0000          |
| 55     | 18.684     |                   | 109385.00     | 23046.84    | 0.2188     | 0.2188          | 1.0938e+05         |
|        | 18.839     |                   | 15904.50      | 4120.68     | 0.0318     | 0.0318          | 15904.0000         |
| 57     | 19.042     |                   | 154903.50     | 28847.59    | 0.3098     | 0.3098          | 1.5490e+05         |
| 58     | 19.188     |                   | 4374.00       | 1403.52     | 0.0087     | 0.0087          | 4374.0000          |
| 59     | 19.310     |                   | 217791.50     | 47533.75    | 0.4356     | 0.4356          | 2.1779e+05         |
| 60     | 19.458     |                   | 77041.00      | 18665.33    | 0.1541     | 0.1541          | 77041.0000         |
| 61     | 19.706     |                   | 594830.00     | 103870.17   | 1.1897     | 1.1897          | 5.9483e+05         |
| 62     | 20.004     |                   | 4733.00       | 1427.53     | 0.0095     | 0.0095          | 4733.0000          |
| 63     | 20.162     |                   | 242185.00     | 58635.51    | 0.4844     | 0.4844          | 2.4218e+05         |
| 64     | 20.270     |                   | 216890.50     | 44751.63    | 0.4338     | 0.4338          | 2.1689e+05         |
| 65     | 20.562     |                   | 13933.00      | 4349.96     | 0.0279     | 0.0279          | 13933.0000         |
| 66     | 20.792     |                   | 235352.50     | 44772.08    | 0.4707     | 0.4707          | 2.3535e+05         |
| 67     | 20.991     |                   | 9479.00       | 2586.85     | 0.0190     | 0.0190          | 9479.0000          |
| 68     | 21.148     |                   | 33161.00      | 7655.48     | 0.0663     | 0.0663          | 33161.0000         |
| 69     | 21.530     |                   | 66416.00      | 14039.00    | 0.1328     | 0.1328          | 66416.0000         |
| 70     | 21.705     |                   | 405319.00     | 50797.62    | 0.8106     | 0.8106          | 4.0532e+05         |
| 71     | 22.251     |                   | 619333.00     | 76912.28    | 1.2387     | 1.2387          | 6.1933e+05         |
| 72     | 22.489     |                   | 51134.00      | 10420.39    | 0.1023     | 0.1023          | 51134.0000         |
| 73     | 22.690     |                   | 54334.00      | 8001.89     | 0.1087     | 0.1087          | 54334.0000         |
| 74     | 23.190     |                   | 9453.00       | 1786.52     | 0.0189     | 0.0189          | 9453.0000          |
| 75     | 23.674     |                   | 178926.00     | 32083.62    | 0.3579     | 0.3579          | 1.7893e+05         |
| 76     | 23.949     |                   | 47140.00      | 9650.05     | 0.0943     | 0.0943          | 47140.0000         |
| 77     | 24.064     |                   | 27966.00      | 6953.14     | 0.0559     | 0.0559          | 27966.0000         |
| 78     | 24.306     |                   | 175587.50     | 30255.55    | 0.3512     | 0.3512          | 1.7559e+05         |
| 79     | 24.696     |                   | 9914.00       | 2122.94     | 0.0198     | 0.0198          | 9914.0000          |
| 80     | 25.088     |                   | 4592.00       | 769.17      | 0.0092     | 0.0092          | 4592.0000          |
| 81     | 25.436     |                   | 11700.50      | 2101.45     | 0.0234     | 0.0234          | 11700.5000         |
| 82     | 25.627     |                   | 33115.00      | 6641.39     | 0.0662     | 0.0662          | 33115.0000         |
| 83     | 25.818     |                   | 129016.00     | 20593.68    | 0.2580     | 0.2580          | 1.2902e+05         |
| 84     | 26.812     |                   | 17886.00      | 2680.00     | 0.0358     | 0.0358          | 17886.0000         |
| 85     | 27.045     |                   | 5551.00       | 1046.69     | 0.0111     | 0.0111          | 5551.0000          |
| 86     | 27.211     |                   | 12474.00      | 1921.80     | 0.0249     | 0.0249          | 12474.0000         |
| 87     | 27.665     |                   | 81867.00      | 9425.15     | 0.1637     | 0.1637          | 81867.0000         |
| 88     | 27.939     |                   | 44118.50      | 6491.87     | 0.0882     | 0.0882          | 44118.5000         |
| 89     | 29.720     |                   | 27204.50      | 3399.20     | 0.0544     | 0.0544          | 27204.5000         |
| 90     | 34.299     |                   | 5396.00       | 1404.17     | 0.0108     | 0.0108          | 5396.0000          |
|        |            |                   | 13033782.50   | 2.452e+06   | 230.4050   | 230.4050        | 1.3034e+07         |

Missing Component Report



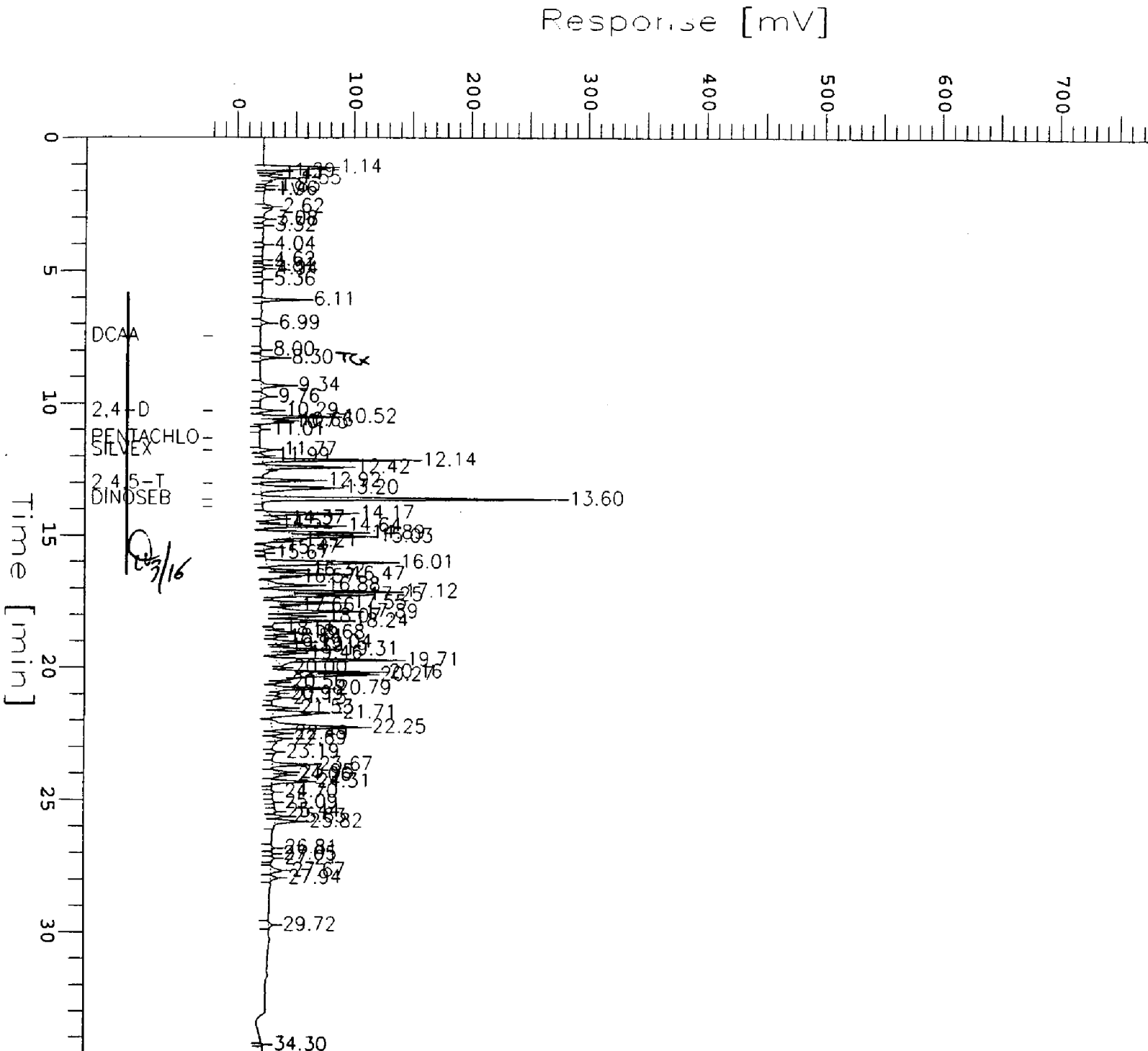
Sample Name : L950626-95 XZa  
 Filename : c:\2700\mp5890\H830033A.raw  
 Method : 515A.ins  
 Start Time : 0.00 min  
 Scale Factor: -1.0

End Time : 35.00 min  
 Plot Offset: -21 mV

Sample #: 2435  
 Date : 3/13/95 05:52 PM  
 Time of Injection: 3/13/95  
 Low Point : -20.63 mV  
 Plot Scale: 800.0 mV

Page 1 of 1  
 High Point : 779.37 mV

FILE COPY



Software Version: 3.3 <4811>  
 Sample Name : L950626-16  
 Sample Number: 12  
 Operator : KMW  
 Instrument : HP5890  
 AutoSampler : NONE  
 ck/Vial : 0/0

Time : 3/8/95 05:45 PM  
 Study : PPPCB

Channel : A A/D mV Range : 1000

Interface Serial # : 8055910402 Data Acquisition Time: 3/8/95 05:11 PM  
 Delay Time : 0.00 min.  
 End Time : 33.00 min.  
 Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\HP5890\PA38012.RAW  
 Result File : C:\2700\HP5890\PA38012.RST  
 Instrument File: c:\2700\methseqs\HPPESTB.ins  
 Process File : HPPESTA  
 Sample File : PESTA058  
 Sequence File : C:\2700\METHSEQS\0308PCB.SEQ

Inj. Volume : 1 ul  
 Sample Amount : 1.0000  
 Area Reject : 200.000000  
 Dilution Factor : 1.00

Instrument Control Method:  
 Instrument name : HP5890

Channel Parameters:

Inlet Parameters:

Inlet A : Inlet B :

Detector Parameters:

Detector A : Detector B :

Heated Zones:

Temperature Program:

Total run time : 33.00 min

Timed Events:

There are no timed events in the method

## HP 5890 REPORT FOR PEST/PCB ANALYSIS

NORTHEASTERN ANALYTICAL CORP. GAS CHROMATOGRAPHY LAB.

| Peak # | Component Name | Time [min] | Area [uV*sec] | Height [uV] | Raw Amount | Adjusted Amount | Calibration Factor | Delta RT [X] | Cal. Range |
|--------|----------------|------------|---------------|-------------|------------|-----------------|--------------------|--------------|------------|
| 1      |                | 1.097      | 1344458.39    | 183832.55   | 45.3362    | 45.3362         | 1344458            | -----        |            |
| 2      |                | 1.386      | 214824.73     | 47392.57    | 10.0543    | 10.0543         | 214825             | -----        |            |
| 3      |                | 1.638      | 158324.88     | 29322.72    | 8.2897     | 8.2897          | 158325             | -----        |            |
| 4      |                | 1.779      | 148556.50     | 48364.36    | 7.9846     | 7.9846          | 148556             | -----        |            |
| 5      |                | 2.024      | 17648.50      | 6003.26     | 3.8959     | 3.8959          | 17648              | -----        |            |
| 6      |                | 2.165      | 8393.00       | 2344.90     | 3.6068     | 3.6068          | 8393               | -----        |            |
| 7      |                | 2.324      | 7081.00       | 2056.74     | 3.5659     | 3.5659          | 7081               | -----        |            |
| 8      |                | 2.436      | 6756.00       | 2082.11     | 3.5557     | 3.5557          | 6756               | -----        |            |
| 9      |                | 3.018      | 8032.00       | 2199.29     | 3.5956     | 3.5956          | 8032               | -----        |            |
| 10     |                | 3.251      | 14192.50      | 4158.02     | 3.7880     | 3.7880          | 14192              | -----        |            |
| 11     |                | 3.695      | 15229.50      | 3892.12     | 3.8204     | 3.8204          | 15230              | -----        |            |
| 12     |                | 4.314      | 11980.00      | 2626.09     | 3.7189     | 3.7189          | 11980              | -----        |            |
| 13     |                | 4.949      | 19598.00      | 2225.18     | 3.9568     | 3.9568          | 19598              | -----        |            |
| 14     |                | 5.415      | 8792.00       | 999.24      | 3.6193     | 3.6193          | 8792               | -----        |            |
| 15     |                | 5.709      | 13336.50      | 2135.60     | 3.7612     | 3.7612          | 13336              | -----        |            |
| 16     |                | 6.247      | 422597.50     | 101134.22   | 16.5437    | 16.5437         | 422598             | -----        |            |
| 17     |                | 6.499      | 7791.00       | 1871.02     | 3.5880     | 3.5880          | 7791               | -----        |            |
| 18     |                | 7.238      | 4109.00       | 1265.63     | 3.4730     | 3.4730          | 4109               | -----        |            |
| 19     | TCMX           | 7.578      | 2087320.00    | 482060.37   | 98.1509    | 0.0000          | 2087320            | 0.3592       |            |
| 20     |                | 8.146      | 14000.00      | 3296.70     | 3.7820     | 3.7820          | 14000              | -----        |            |

385

| Peak # | Component Name      | Time [min] | Area [uV*sec] | Height [uV] | Raw Amount | Adjusted Amount | Calibration Factor | Delta RT [%] | Cal. Range |
|--------|---------------------|------------|---------------|-------------|------------|-----------------|--------------------|--------------|------------|
| 21     |                     | 8.314      | 9974.00       | 2105.12     | 3.6562     | 3.6562          | 9974               | -----        |            |
| 22     |                     | 8.707      | 29863.00      | 6100.84     | 4.2774     | 4.2774          | 29863              | -----        |            |
| 23     |                     | 9.152      | 36815.00      | 5707.33     | 4.4945     | 4.4945          | 36815              | -----        |            |
| 4      |                     | 9.718      | 18156.00      | 3780.92     | 3.9118     | 3.9118          | 18156              | -----        |            |
| 25     |                     | 10.010     | 4546.00       | 831.75      | 3.4867     | 3.4867          | 4546               | -----        |            |
| 26     |                     | 10.223     | 33873.00      | 6780.09     | 4.4026     | 4.4026          | 33873              | -----        |            |
| 27     | APLHA BHC           | 10.869     | 9549.00       | 843.23      | 3.6429     | 3.6429          | 9549               | 0.6622       | -          |
| 28     |                     | 11.661     | 10340.50      | 1381.58     | 3.0160     | 3.0160          | 10340              | -----        |            |
| 29     |                     | 11.932     | 18649.00      | 2473.38     | 3.2892     | 3.2892          | 18649              | -----        |            |
| 0      | GAMMA BHC           | 12.257     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 30     |                     | 12.619     | 5846.50       | 925.50      | 1.1411     | 1.1411          | 5846               | -----        |            |
| 0      | HEPTACHLOR          | 12.914     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 31     |                     | 13.149     | 59095.00      | 12363.20    | 3.2476     | 3.2476          | 59095              | -----        |            |
| 0      | ALDRIN              | 13.842     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 32     |                     | 14.883     | 104231.00     | 19719.03    | 7.7181     | 7.7181          | 104231             | -----        |            |
| 0      | BETA BHC            | 15.144     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 33     |                     | 15.547     | 6729.00       | 1131.68     | 3.8460     | 3.8460          | 6729               | -----        |            |
| 0      | DELTA BHC           | 15.903     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 34     |                     | 16.153     | 6435.00       | 1371.90     | 0.8245     | 0.8245          | 6435               | -----        |            |
| 0      | HEPTACHLOR EXPOXIDE | 16.381     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 0      | ENDOSULFAN I        | 17.321     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 0      | GAMMA CHLORDANE     | 17.568     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 35     | ALPHA CHLORDANE     | 17.869     | 18472.00      | 3346.15     | 1.0820     | 1.0820          | 18472              | 0.4661       | -          |
| 0      | DDE                 | 18.101     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 0      | DIELDRIN            | 18.601     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 36     | ENDRIN              | 19.570     | 8782.00       | 1607.78     | 2.4224     | 2.4224          | 8782               | 1.2101       | -          |
| 0      | DDD                 | 20.925     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 0      | ENDOSULFAN II       | 21.090     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 0      | DDT                 | 21.451     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 37     |                     | 21.946     | 307316.50     | 50439.25    | 27.3626    | 27.3626         | 307317             | -----        |            |
| 38     | ENDRIN ALDEHYDE     | 22.751     | 7980.00       | 1457.17     | 2.3485     | 2.3485          | 7980               | 0.6541       | -          |
| 39     | METHOXYCHLOR        | 23.636     | 241149.50     | 17146.29    | 46.1917    | 46.1917         | 241150             | 0.0469       | -          |
| 0      | ENDOSULFAN SULFATE  | 23.726     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
| 40     | DBC                 | 23.942     | 2571301.00    | 490023.50   | 182.5773   | 182.5773        | 2571301            | 0.1582       | -          |
| 41     | ENDRIN KETONE       | 25.046     | 6677.00       | 1181.85     | 1.5805     | 1.5805          | 6677               | 0.1089       | -          |
| 42     |                     | 26.531     | 10515.00      | 1672.27     | 1.7577     | 1.7577          | 10515              | -----        |            |
| 0      | DCB                 | 28.203     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  | -----        |            |
|        |                     |            | 8059316.00    | 1.562e+06   | 554.3642   | 456.2133        |                    |              |            |

## Missing Component Report

| Component           | Expected Retention (Sample File) |
|---------------------|----------------------------------|
| GAMMA BHC           | 12.257                           |
| HEPTACHLOR          | 12.914                           |
| ALDRIN              | 13.842                           |
| BETA BHC            | 15.144                           |
| DELTA BHC           | 15.903                           |
| HEPTACHLOR EXPOXIDE | 16.381                           |
| ENDOSULFAN I        | 17.321                           |
| GAMMA CHLORDANE     | 17.568                           |
| DDE                 | 18.101                           |
| DIELDRIN            | 18.601                           |
| DDD                 | 20.925                           |
| ENDOSULFAN II       | 21.090                           |
| DDT                 | 21.451                           |
| ENDOSULFAN SULFATE  | 23.726                           |
| DCB                 | 28.203                           |

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HP5890 DETECTOR A

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Report Stored in ASCII File: C:\2700\HP5890\PA38012.TXT

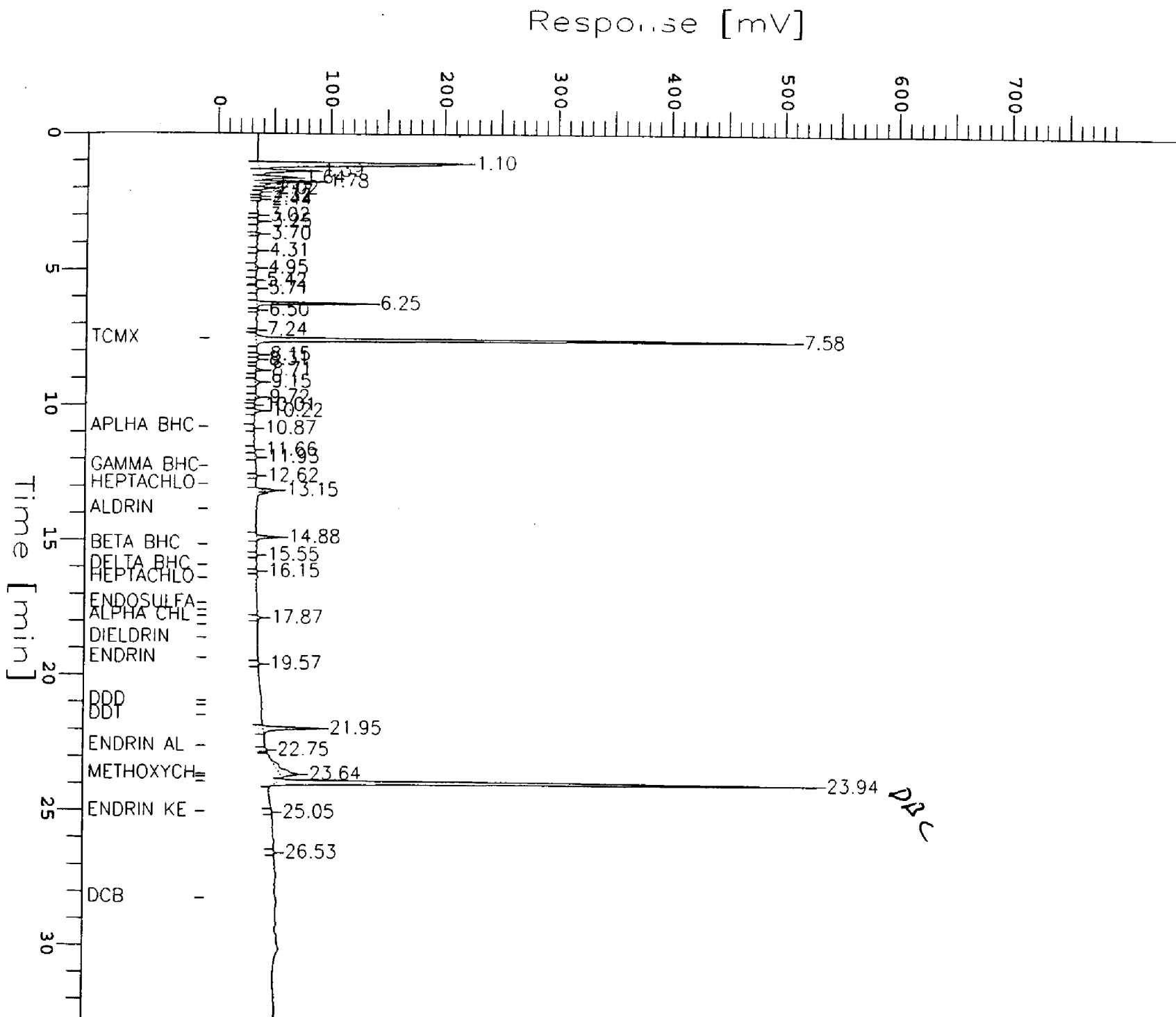
# Chromatogram

386

Sample Name : L950626-16  
 FileName : c:\2700\hp5890\PA38012.raw  
 Method : HPPEST8.ins  
 Start Time : 0.00 min  
 Scale Factor : -1.0  
 End Time : 33.00 min  
 Plot Offset : -7 mV

Sample #: 12  
 Date : 3/8/95 05:45 PM  
 Time of Injection: 3/8/95  
 Low Point : -7.18 mV  
 Plot Scale: 800.0 mV  
 High Point : 792.82 mV

Page 1 of 1



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Software Version: 3.3 <4811>

Sample Name : L950626-16

Time : 3/8/95 05:45 PM

Sample Number: 12

Study : PPPCB

Operator : KMW

Instrument : HP5890

Channel : 8 A/D mV Range : 1000

AutoSampler : NONE

nk/Vial : 0/0

Interface Serial # : 8055910402 Data Acquisition Time: 3/8/95 05:11 PM

Delay Time : 0.00 min.

End Time : 33.00 min.

Sampling Rate : 1.0000 pts/sec

Raw Data File : C:\2700\HP5890\PB38012.RAW

Result File : C:\2700\HP5890\PB38012.RST

Instrument File: c:\2700\methseqs\HPPESTB.ins

Process File : HPPESTB

Sample File : PESTB058

Sequence File : C:\2700\METHSEQS\0308PCB.SEQ

Inj. Volume : 1 ul

Area Reject : 200.000000

Sample Amount : 1.0000

Dilution Factor : 1.00

Instrument Control Method:

Instrument name : HP5890

Channel Parameters:

Inlet Parameters:

Inlet A :

Inlet B :

Detector Parameters:

Detector A :

Detector B :

Heated Zones:

Temperature Program:

Total run time : 33.00 min

Timed Events:

There are no timed events in the method

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## HP5890 REPORT FOR PEST/PCB ANALYSIS

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NORTHEASTERN ANALYTICAL CORP. GAS CHROMATOGRAPHY LAB.

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| Peak # | Component Name | Time [min] | Area [uV*sec] | Height [uV] | Raw Amount | Adjusted Amount | Calibration Factor | Cal. Range |
|--------|----------------|------------|---------------|-------------|------------|-----------------|--------------------|------------|
| 1      |                | 1.090      | 702474.51     | 97905.31    | 47.2609    | 47.2609         | 702475             |            |
| 2      |                | 1.303      | 150338.13     | 38177.68    | 6.2080     | 6.2080          | 150338             |            |
| 3      |                | 1.416      | 183545.95     | 43893.30    | 8.6771     | 8.6771          | 183546             |            |
| 4      |                | 1.563      | 195610.96     | 48541.80    | 9.5742     | 9.5742          | 195611             |            |
| 5      |                | 1.731      | 17516.00      | 5088.61     | -3.6676    | -3.6676         | 17516              |            |
| 6      |                | 1.817      | 14287.45      | 5129.06     | -3.9077    | -3.9077         | 14287              |            |
| 7      |                | 1.951      | 11036.00      | 2746.50     | -4.1494    | -4.1494         | 11036              |            |
| 8      |                | 2.049      | 4662.50       | 2349.31     | -4.6233    | -4.6233         | 4662               |            |
| 9      |                | 2.488      | 15436.00      | 5002.17     | -3.8223    | -3.8223         | 15436              |            |
| 10     |                | 2.780      | 11211.00      | 3362.16     | -4.1364    | -4.1364         | 11211              |            |
| 11     |                | 3.433      | 9860.50       | 1550.21     | -4.2368    | -4.2368         | 9861               |            |
| 12     |                | 3.959      | 11994.00      | 922.49      | -4.0782    | -4.0782         | 11994              |            |
| 13     |                | 4.592      | 151063.00     | 30260.48    | 6.2619     | 6.2619          | 151063             |            |
| 14     |                | 5.651      | 13849.00      | 2679.46     | -3.9403    | -3.9403         | 13849              |            |
| 15     |                | 6.239      | 6959.00       | 791.75      | -4.4526    | -4.4526         | 6959               |            |
| 16     |                | 6.349      | 2493.00       | 1052.20     | -4.7846    | -4.7846         | 2493               |            |
| 17     |                | 7.034      | 5821.00       | 1463.36     | -4.5372    | -4.5372         | 5821               |            |
| 18     |                | 8.069      | 9023.00       | 2143.41     | -4.2991    | -4.2991         | 9023               |            |
| 19     | TCMX           | 8.263      | 1461280.00    | 321650.53   | 103.6801   | 103.6801        | 1461280            |            |
| 20     |                | 8.802      | 41666.50      | 4584.80     | -1.8720    | -1.8720         | 41666              |            |
| 21     |                | 9.609      | 10913.00      | 2106.92     | 1.7911     | 1.7911          | 10913              |            |

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| Peak # | Component Name       | Time [min] | Area [uV*sec] | Height [uV] | Raw Amount | Adjusted Amount | Calibration Factor | Cal. Range |
|--------|----------------------|------------|---------------|-------------|------------|-----------------|--------------------|------------|
| 22     |                      | 9.782      | 32412.50      | 6122.77     | 2.7245     | 2.7245          | 32412              |            |
| 23     |                      | 10.304     | 31310.00      | 4904.77     | 2.6766     | 2.6766          | 31310              |            |
| 0      | ALPHA BHC            | 10.753     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 24     |                      | 11.264     | 18877.00      | 1592.42     | 2.1368     | 2.1368          | 18877              |            |
| 25     |                      | 11.562     | 8245.50       | 531.58      | 1.1065     | 1.1065          | 8246               |            |
| 26     |                      | 11.743     | 8817.00       | 1713.84     | 1.1331     | 1.1331          | 8817               |            |
| 0      | BETA BHC             | 12.324     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 27     |                      | 12.747     | 8834.00       | 1765.08     | 1.1339     | 1.1339          | 8834               |            |
| 28     |                      | 13.076     | 26476.00      | 4938.68     | 0.3402     | 0.3402          | 26476              |            |
| 29     | GAMMA BHC            | 13.325     | 16152.50      | 3320.66     | -0.0444    | -0.0444         | 16153              |            |
| 30     |                      | 13.854     | 101837.00     | 18219.31    | 6.2191     | 6.2191          | 101837             |            |
| 31     |                      | 14.103     | 8256.50       | 1795.86     | 1.8132     | 1.8132          | 8256               |            |
| 0      | DELTA BHC            | 14.214     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 32     | HEPTACHLOR           | 14.699     | 35558.50      | 6757.35     | 2.9541     | 2.9541          | 35558              |            |
| 0      | ALDRIN               | 16.123     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 0      | HEPTACHLOR EPOXIDE   | 16.791     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 0      | GAMMA CHLORDANE      | 17.459     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 33     | ALPHA CHLORDANE/ENDO | 17.990     | 25928.00      | 4280.79     | -0.0003    | -0.0003         | 25928              |            |
| 0      | DIELDRIN             | 18.924     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 0      | DDE                  | 19.286     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 0      | ENDRIN               | 20.520     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 0      | ENDOSULFAN II        | 21.081     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 0      | DDD                  | 21.479     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 0      | ENDRIN ALDEHYDE      | 22.091     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 34     | ENDOSULFAN SULFATE   | 22.714     | 149149.00     | 28209.04    | 15.3764    | 15.3764         | 149149             |            |
| 35     |                      | 22.860     | 14579.00      | 4093.55     | 1.2751     | 1.2751          | 14579              |            |
| 36     | DDT                  | 23.089     | 18517.00      | 2695.42     | 0.7978     | 0.7978          | 18517              |            |
| 37     | ENDRIN KETONE        | 23.892     | 1545871.50    | 277495.53   | 124.3477   | 124.3477        | 1545872            |            |
| 0      | METHOXYCHLOR         | 25.263     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 0      | DBC                  | 25.626     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
| 38     |                      | 27.821     | 59434.00      | 1880.68     | 5.9210     | 5.9210          | 59434              |            |
| 0      | DCB                  | 31.152     | 0.00          | 0.00        | 0.0000     | 0.0000          | 0                  |            |
|        |                      |            | 5141295.50    | 991718.84   | 296.8571   | 296.8571        | 5141296            |            |

## Missing Component Report

| Component          | Expected Retention (Sample File) |
|--------------------|----------------------------------|
| ALPHA BHC          | 10.753                           |
| BETA BHC           | 12.324                           |
| DELTA BHC          | 14.214                           |
| ALDRIN             | 16.123                           |
| HEPTACHLOR EPOXIDE | 16.791                           |
| GAMMA CHLORDANE    | 17.459                           |
| DIELDRIN           | 18.924                           |
| DDE                | 19.286                           |
| ENDRIN             | 20.520                           |
| ENDOSULFAN II      | 21.081                           |
| DDD                | 21.479                           |
| ENDRIN ALDEHYDE    | 22.091                           |
| METHOXYCHLOR       | 25.263                           |
| DBC                | 25.626                           |
| DCB                | 31.152                           |

HP5890 DETECTOR B

Report Stored in ASCII File: C:\2700\HP5890\PB38012.TXT



INORGANIC QUALITY CONTROL SECTION



## NORTHEASTERN ANALYTICAL CORPORATION

## REPORT OF QUALITY CONTROL RESULTS

NAC JOB #L950626

| PARAMETER | MTX | BLANK | BLANK | LCS  | MS   | MSD  | SAMP  | REPL. | SPRKE | DLP        | BATCH #    | ANAL. TYPE |
|-----------|-----|-------|-------|------|------|------|-------|-------|-------|------------|------------|------------|
|           |     | VALUE | UNITS | XREC | XREC | XREC | CONC  | CONC  | RPO   | SAMP#      | SAMP#      |            |
| Arsenic   | Aq  | ND    | mg/l  | 85.  |      |      |       |       | NA    | NA         | WG25510    | MET-AS-A   |
| Arsenic   | S   | ND    | mg/kg | 106. | 151. |      | 2.5   | 3.0   | 18.2  | L950626-1  | L950626-1  | MET-AS-S   |
| Mercury   | Aq  | ND    | mg/l  | 90.  | 87.  |      | ND    | ND    | NC    | L950604-2  | L950604-2  | MET-HG-A   |
| Mercury   | S   | ND    | mg/kg | 103. | 133. |      | 0.36  | 0.73  | 69.1  | L950626-1  | L950626-1  | MET-HG-S   |
| Silver    | Aq  | ND    | mg/l  | 92.  | 68.  | 64.  | ND    | ND    | 6.06  | L950638-17 | L950638-17 | MET-ICAP-A |
| Aluminum  | Aq  | ND    | mg/l  | 102. | 95.  | 84.  | ND    | ND    | 12.3  | L950638-17 | L950638-17 | MET-ICAP-A |
| Beryllium | Aq  | ND    | mg/l  | 103. | 91.  | 82.  | ND    | ND    | 10.4  | L950638-17 | L950638-17 | MET-ICAP-A |
| Calcium   | Aq  | ND    | mg/l  | 94.  | 102. | 74.  | 111.  | 113.  | 31.8  | L950638-17 | L950638-17 | MET-ICAP-A |
| Cadmium   | Aq  | ND    | mg/l  | 96.  | 84.  | 72.  | 0.013 | 0.014 | 15.4  | L950638-17 | L950638-17 | MET-ICAP-A |
| Chromium  | Aq  | ND    | mg/l  | 97.  | 87.  | 78.  | ND    | ND    | 10.9  | L950638-17 | L950638-17 | MET-ICAP-A |
| Copper    | Aq  | ND    | mg/l  | 105. | 93.  | 84.  | ND    | ND    | 10.2  | L950638-17 | L950638-17 | MET-ICAP-A |
| Iron      | Aq  | ND    | mg/l  | 95.  | HA   | 0.0  | 76.   | 76.   | NC    | L950638-17 | L950638-17 | MET-ICAP-A |
| Manganese | Aq  | ND    | mg/l  | 98.  | HA   | 20.  | 11.   | 11.   | NC    | L950638-17 | L950638-17 | MET-ICAP-A |
| Sodium    | Aq  | ND    | mg/l  | 104. | 126. | 72.  | 174.  | 172.  | 54.5  | L950638-17 | L950638-17 | MET-ICAP-A |
| Nickel    | Aq  | ND    | mg/l  | 86.  | 81.  | 72.  | ND    | ND    | 11.8  | L950638-17 | L950638-17 | MET-ICAP-A |
| Antimony  | Aq  | ND    | mg/l  | 88.  | 74.  | 70.  | ND    | ND    | 5.56  | L950638-17 | L950638-17 | MET-ICAP-A |
|           | Aq  | ND    | mg/l  | 106. | 90.  | 82.  | 0.087 | 0.080 | 9.3   | L950638-17 | L950638-17 | MET-ICAP-A |
| Silver    | S   | ND    | mg/kg | 96.  | 0.0  |      | ND    | ND    | NC    | L950626-1  | L950626-1  | MET-ICAP-S |
| Beryllium | S   | ND    | mg/kg | 98.  | 34.  |      | 2.5   | 2.8   | 12.4  | L950626-1  | L950626-1  | MET-ICAP-S |
| Cadmium   | S   | ND    | mg/kg | 96.  | 184. |      | 15.   | 21.   | 37.3  | L950626-1  | L950626-1  | MET-ICAP-S |
| Chromium  | S   | ND    | mg/kg | 97.  | 10.  |      | 74.   | 84.   | 12.8  | L950626-1  | L950626-1  | MET-ICAP-S |
| Copper    | S   | ND    | mg/kg | 97.  | HA   |      | 306.  | 358.  | 15.7  | L950626-1  | L950626-1  | MET-ICAP-S |
| Nickel    | S   | ND    | mg/kg | 96.  | 17.  |      | 97.   | 83.   | 15.7  | L950626-1  | L950626-1  | MET-ICAP-S |
| Lead      | S   | ND    | mg/kg | 90.  | 0.0  |      | 1000  | 724.  | 32    | L950626-1  | L950626-1  | MET-ICAP-S |
| Antimony  | S   | ND    | mg/kg | 109. | 29.  |      | 10.   | 8.5   | 20.7  | L950626-1  | L950626-1  | MET-ICAP-S |
| Zinc      | S   | ND    | mg/kg | 91.  | HA   |      | 590.  | 884.  | 39.9  | L950626-1  | L950626-1  | MET-ICAP-S |
| Lead      | Aq  | ND    | mg/l  | 111. | 110. |      | ND    | ND    | NC    | L950639-1  | L950639-1  | MET-PB-A   |

## Batch No Associated Samples

WG25489 L950626-1 L950626-2 L950626-3 L950626-4 L950626-5 L950626-6 L950626-7 L950626-8 L950626-9 L950626-10 L950626-11  
 WG25489 L950626-12 L950626-13 L950626-14 L950626-15  
 WG25509 L950626-16  
 WG25510 L950626-16  
 WG25511 L950626-16  
 WG25547 L950626-1 L950626-2 L950626-3 L950626-4 L950626-5 L950626-6 L950626-7 L950626-8 L950626-9 L950626-10 L950626-11  
 WG25547 L950626-12 L950626-13 L950626-14 L950626-15  
 WG25559 L950626-1 L950626-2 L950626-3 L950626-4 L950626-5 L950626-6 L950626-7 L950626-8 L950626-9 L950626-10 L950626-11  
 WG25559 L950626-12 L950626-13 L950626-14 L950626-15  
 WG25623 L950626-16

NR - Not Required

NC - Not calculated, values below RDL

HA - Interference due to a high concentration of analyte

ND - Not detected above the MDL

MI - Matrix interference

## NORTHEASTERN ANALYTICAL CORPORATION

## REPORT OF QUALITY CONTROL RESULTS

NAC JOB #L950626

| PARAMETER              | MTX | BLANK VALUE | BLANK UNITS | LCS ZREC | MS ZREC | MSD ZREC | SAMP CONC | REPL. CONC | RPD   | SPIKE SAMP# | DUP SAMP#  | BATCH # | ANAL. TYPE |
|------------------------|-----|-------------|-------------|----------|---------|----------|-----------|------------|-------|-------------|------------|---------|------------|
| Selenium               | Aq  | ND          | mg/l        | 82.      |         |          |           |            |       | NA          | NA         | WG25623 | MET-SE-A   |
| Selenium               | S   | ND          | mg/kg       | 84.      | 34.     |          | ND        | ND         | NC    | L950626-1   | L950626-1  | WG25490 | MET-SE-S   |
| Thallium               | Aq  | ND          | mg/l        | 101.     |         |          |           |            |       | NA          | NA         | WG25512 | MET-TL-A   |
| Thallium               | S   | ND          | mg/kg       | 110.     | 95.     |          | ND        | ND         | NC    | L950626-1   | L950626-1  | WG25491 | MET-TL-S   |
| Petroleum Hydrocarbons | Aq  | ND          | mg/l        | 121.     |         |          |           | 111.       | 8.62  | NA          | NA         | WG25406 | PHC-A      |
| Petroleum Hydrocarbons | S   | ND          | mg/kg       | 115.     | 77.     | 127.     |           |            | 49.5  | L950632-1   | NA         | WG25449 | PHC-S      |
| Total Solids           | S   | ND          | %           |          |         |          | 95.       | 95.        | 0.189 | NA          | L950626-2  | WG25454 | TS         |
| Total Solids           | S   | ND          | %           |          |         |          | 82.       | 82.        | 0.56  | NA          | L950626-12 | WG25455 | TS         |
| Total Solids           | S   | ND          | %           |          |         |          | 97.       | 97.        | 0.391 | NA          | L950627-1  | WG25456 | TS         |

## Batch No Associated Samples

|         |            |            |            |            |           |           |           |            |            |            |            |  |  |
|---------|------------|------------|------------|------------|-----------|-----------|-----------|------------|------------|------------|------------|--|--|
| 406     | L950626-16 |            |            |            |           |           |           |            |            |            |            |  |  |
| 5449    | L950626-1  | L950626-2  | L950626-3  | L950626-4  | L950626-5 | L950626-6 | L950626-7 | L950626-8  | L950626-9  | L950626-10 | L950626-11 |  |  |
| WG25449 | L950626-12 | L950626-13 | L950626-14 | L950626-15 |           |           |           |            |            |            |            |  |  |
| WG25454 | L950626-1  | L950626-2  |            |            |           |           |           |            |            |            |            |  |  |
| WG25455 | L950626-3  | L950626-4  | L950626-5  | L950626-6  | L950626-7 | L950626-8 | L950626-9 | L950626-10 | L950626-11 | L950626-12 |            |  |  |
| WG25456 | L950626-13 | L950626-14 | L950626-15 |            |           |           |           |            |            |            |            |  |  |
| WG25489 | L950626-1  | L950626-2  | L950626-3  | L950626-4  | L950626-5 | L950626-6 | L950626-7 | L950626-8  | L950626-9  | L950626-10 | L950626-11 |  |  |
| WG25489 | L950626-12 | L950626-13 | L950626-14 | L950626-15 |           |           |           |            |            |            |            |  |  |
| WG25490 | L950626-1  | L950626-2  | L950626-3  | L950626-4  | L950626-5 | L950626-6 | L950626-7 | L950626-8  | L950626-9  | L950626-10 | L950626-11 |  |  |
| WG25490 | L950626-12 | L950626-13 | L950626-14 | L950626-15 |           |           |           |            |            |            |            |  |  |
| WG25491 | L950626-1  | L950626-2  | L950626-3  | L950626-4  | L950626-5 | L950626-6 | L950626-7 | L950626-8  | L950626-9  | L950626-10 | L950626-11 |  |  |
| WG25491 | L950626-12 | L950626-13 | L950626-14 | L950626-15 |           |           |           |            |            |            |            |  |  |
| WG25501 | L950626-16 |            |            |            |           |           |           |            |            |            |            |  |  |
| WG25509 | L950626-16 |            |            |            |           |           |           |            |            |            |            |  |  |
| WG25510 | L950626-16 |            |            |            |           |           |           |            |            |            |            |  |  |
| WG25511 | L950626-16 |            |            |            |           |           |           |            |            |            |            |  |  |
| WG25512 | L950626-16 |            |            |            |           |           |           |            |            |            |            |  |  |
| WG25547 | L950626-1  | L950626-2  | L950626-3  | L950626-4  | L950626-5 | L950626-6 | L950626-7 | L950626-8  | L950626-9  | L950626-10 | L950626-11 |  |  |
| WG25547 | L950626-12 | L950626-13 | L950626-14 | L950626-15 |           |           |           |            |            |            |            |  |  |
| WG25559 | L950626-1  | L950626-2  | L950626-3  | L950626-4  | L950626-5 | L950626-6 | L950626-7 | L950626-8  | L950626-9  | L950626-10 | L950626-11 |  |  |
| WG25559 | L950626-12 | L950626-13 | L950626-14 | L950626-15 |           |           |           |            |            |            |            |  |  |
| WG25623 | L950626-16 |            |            |            |           |           |           |            |            |            |            |  |  |
| WGP2082 | L950626-16 |            |            |            |           |           |           |            |            |            |            |  |  |
| WGP2100 | L950626-1  | L950626-2  | L950626-3  | L950626-4  | L950626-5 | L950626-6 | L950626-7 | L950626-8  | L950626-9  | L950626-10 | L950626-11 |  |  |
| WGP2100 | L950626-12 | L950626-13 | L950626-14 | L950626-15 |           |           |           |            |            |            |            |  |  |

NR - Not Required

NC - Not calculated, values below RDL

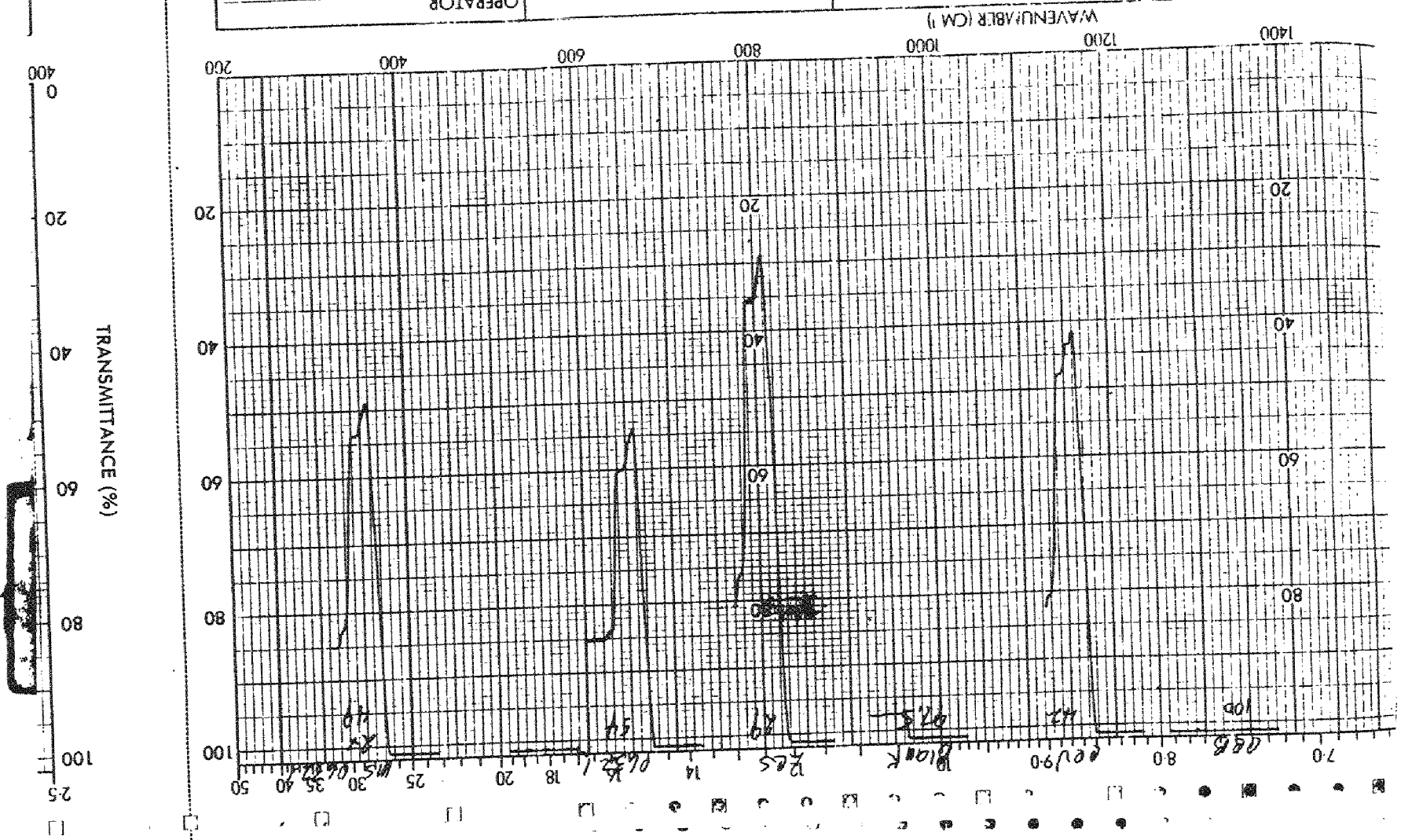
NA - Interference due to a high concentration of analyte

ND - Not detected above the MDL

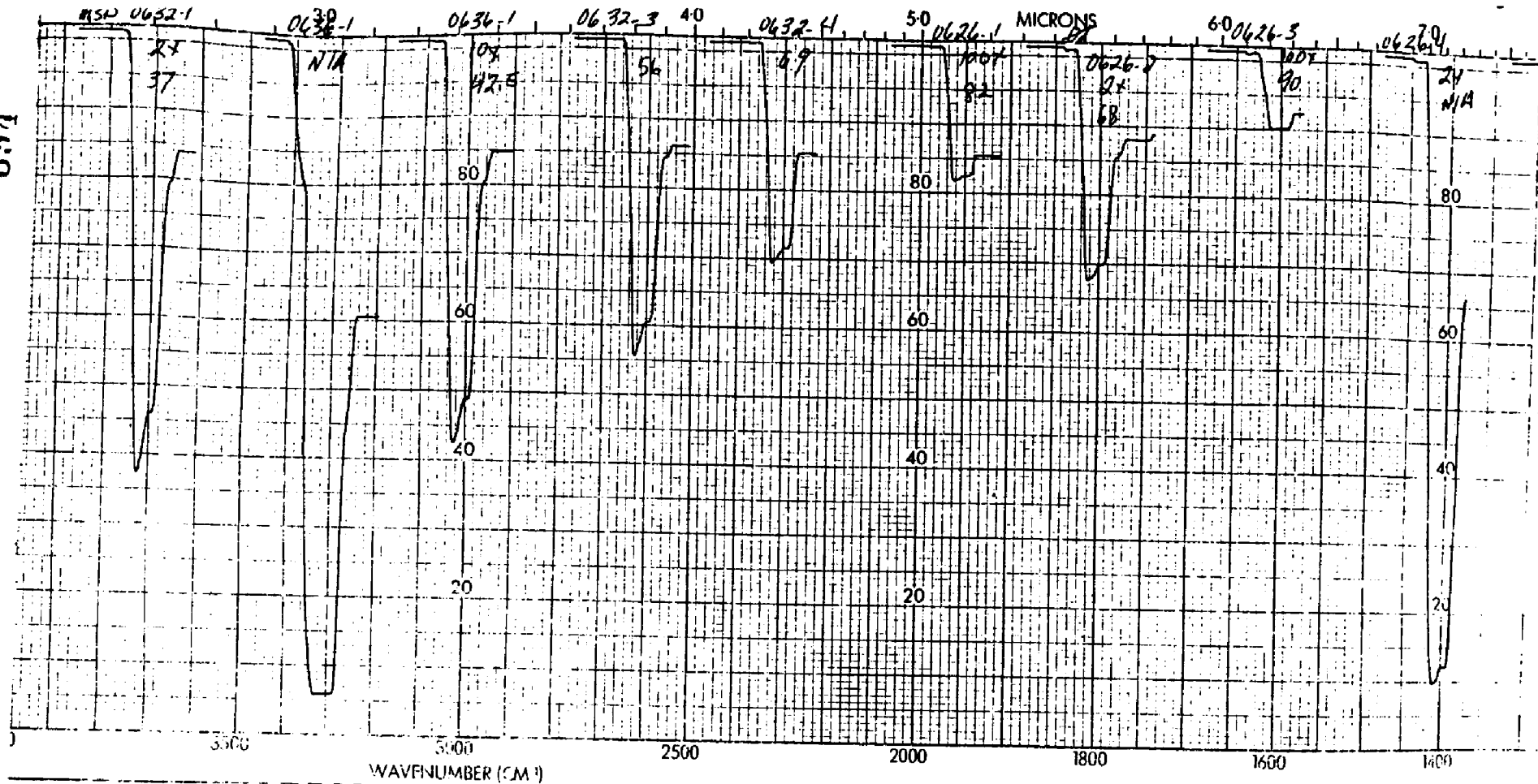
MI - Matrix interference

W 625449  
218195

|                    |  |  |
|--------------------|--|--|
| SCAN MODE          |  | GRAPHIC CO-PROCESSOR<br>SUNSTAR<br>NO PR |
| SLIT TIME CONSTANT |  |  |
| DATE               |  |  |
| OPERATOR           |  | REF No.                                  |



391

SAMPLE *UG 25449**2/28/95**86mmg*

ORIGIN

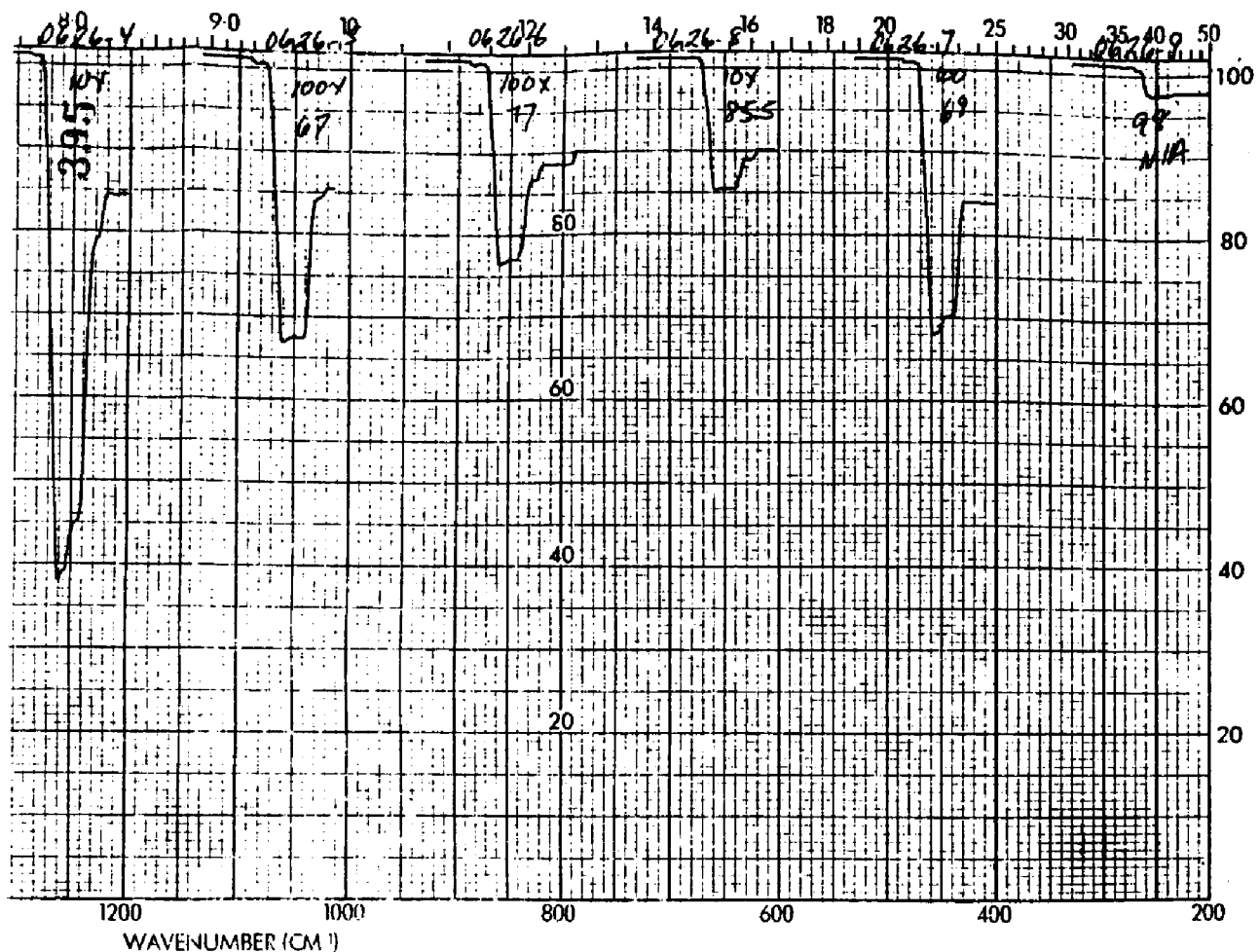
SOLVENT

CONCENTRATION

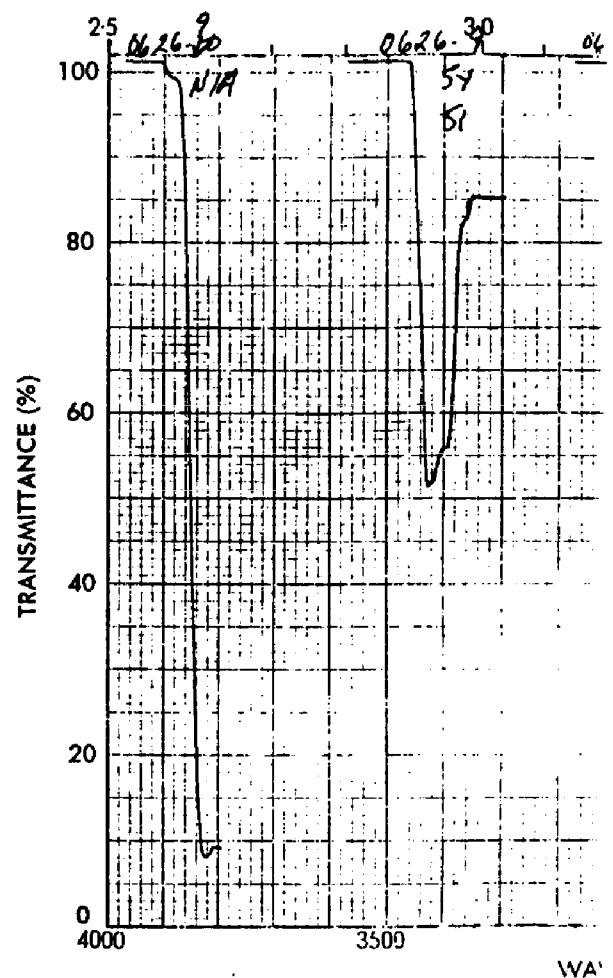
CELL PATH

REFERENCE

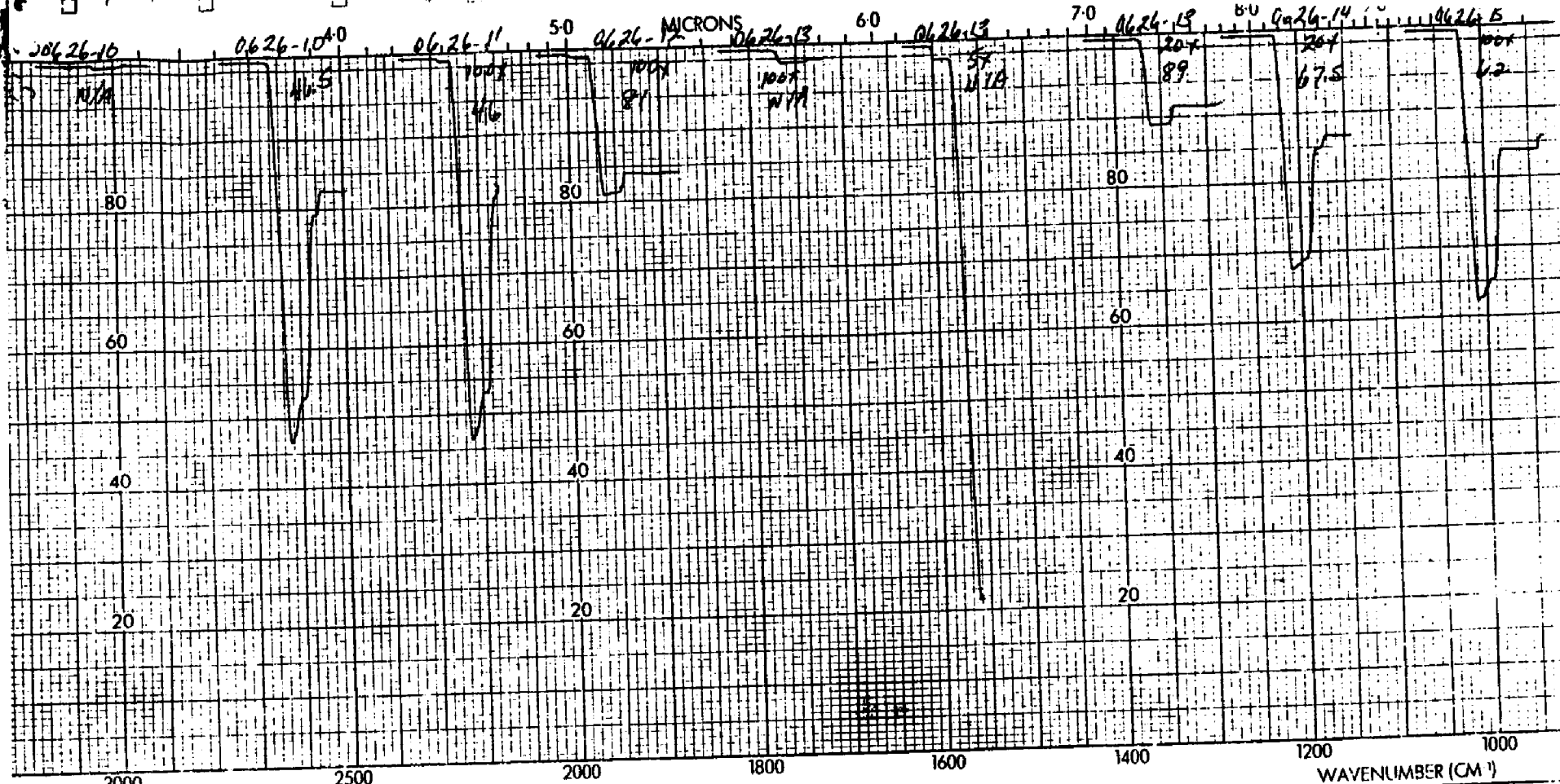
REMARKS



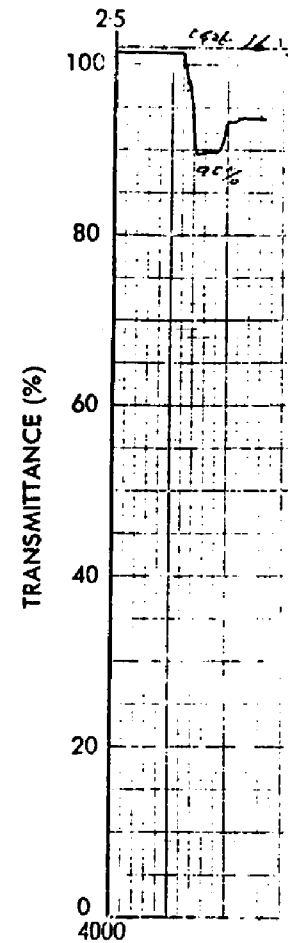
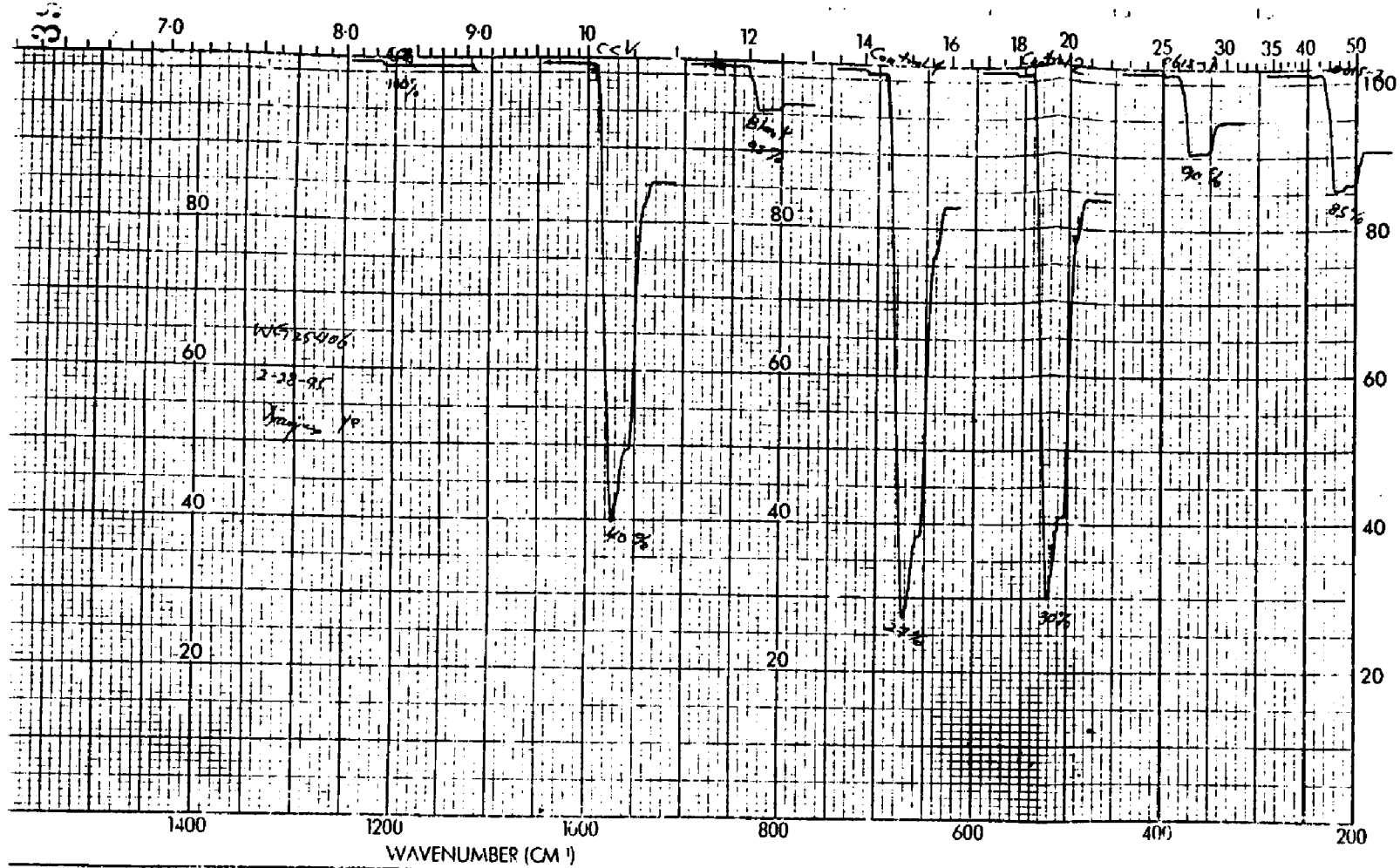
|  |                |
|--|----------------|
| SCAN MODE _____  | OPERATOR _____ |
| SLIT _____ TIME CONSTANT _____   | DATE _____     |
| <small>GRAPHIC CONTROLS CORPORATION<br/>BUNFORD, NEW YORK<br/>No. PR 5100-4357</small> |                |
| REF No. _____  |                |



|        |          |
|--------|----------|
| SAMPLE | WC 25449 |
|        | 2120195  |
| ORIGIN | Stuig    |

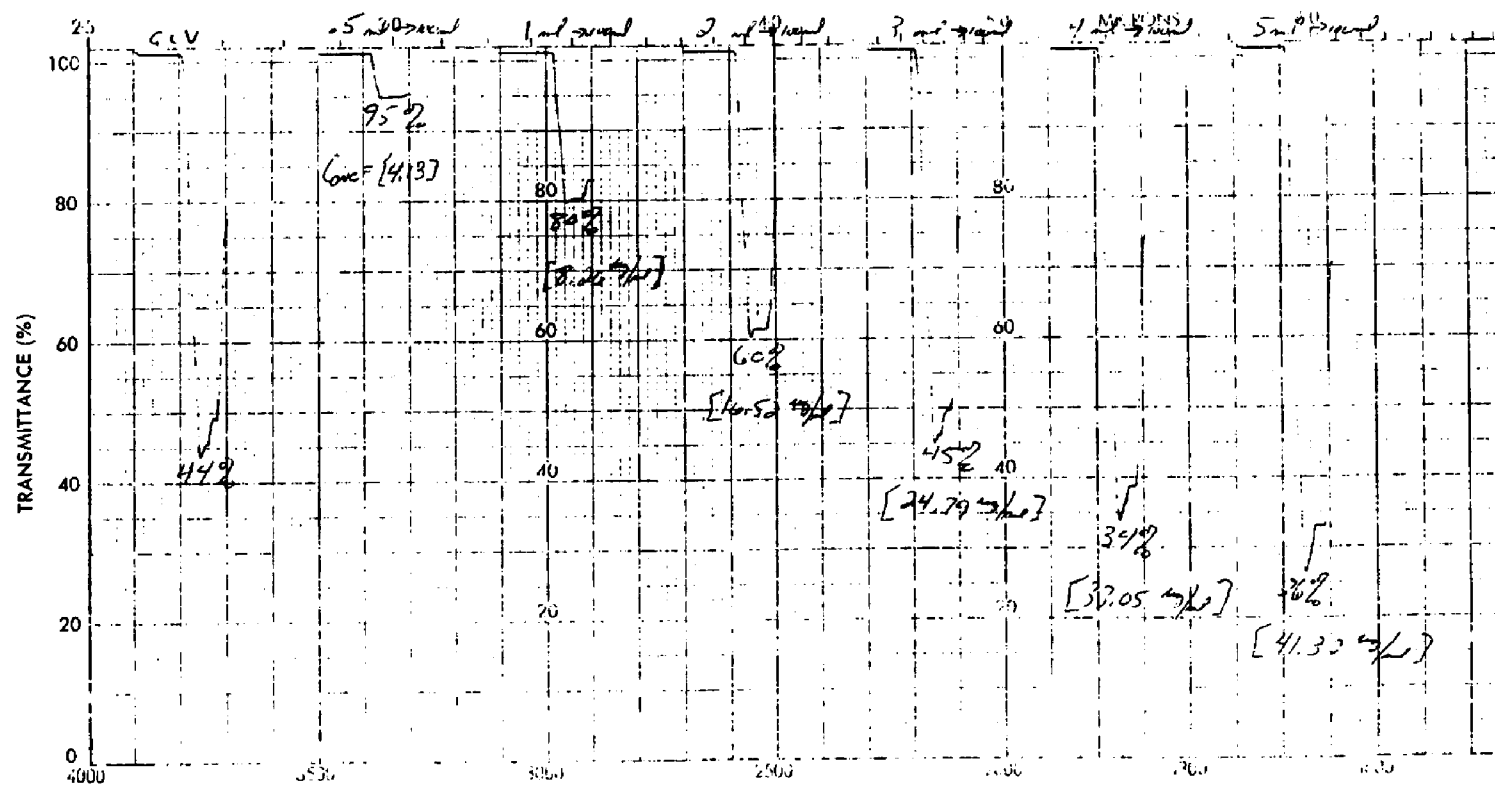
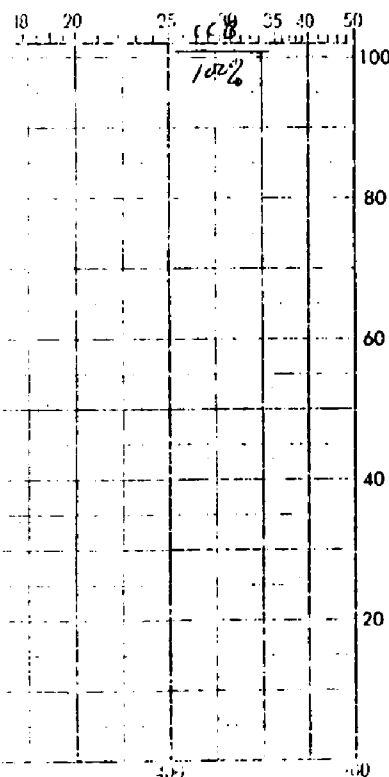


|                                |  |         |  |
|--------------------------------|--|---------|--|
| WAVENUMBER (CM <sup>-1</sup> ) |  | REMARKS |  |
| SOLVENT _____                  |  |         |  |
| CONCENTRATION _____            |  |         |  |
| CELL PATH _____                |  |         |  |
| REFERENCE _____                |  |         |  |



|       |  |                |
|-------|--|----------------|
| MARKS | SCAN MODE _____  | OPERATOR _____ |
|       | SLIT _____ TIME CONSTANT _____   | DATE _____     |
|       | <small>GRAPHIC CONTROLS CORPORATION<br/>BUFFALO, NEW YORK<br/>No. PR 5100-4367</small> |                |
|       | REF No. _____  |                |

|              |
|--------------|
| SAMPLE _____ |
| ORIGIN _____ |



OPERATOR  
DATE  
REF No.

SAMPLE 12-9987  
S. Hyslop  
1-23-95  
ORIGIN

SOVENT Total Petroleum Hydrocarbons 418.1  
CONCENTRATION  
CELL PATH  
REFERENCE

REMARKS



## INFRARED (IR) SPECTROPHOTOMETER NOTEBOOK

5. Chapman  
1-23

389  
EPA 418.1

**Signature:**

2/29/25

Page:

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