BO7GM6-DAT-193
0044236

DATA CHEM LABORATORIES
A SORENSON COMPANY

November 17, 1992

JUN 1996 RECEIVED EDMC

REPORT INTRODUCTION
ANALYTICAL COMMENTARY

SUBMITTED TO: Frank Gustafson

SUBMITTED BY: Joan J. Lambert

REFERENCE DATA:

Analysis of: 8 soil samples plus matrix spike and matrix spike duplicate

Method of Analysis: EPA 8240

Identification No.: S92-0846JJ

DataChem Laboratory No.: EL 4856 through EL 4863, EL 4859MS and EL 4859MSD

The above numbered samples were analyzed for volatile organics using EPA Method 8240 with modifications (SW-846; third edition; September 1986; U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response).

Five grams of the sample was weighed, heated and directly purged onto a 2-phase trap using a Dynatech PTA-30 autosampler. The desorbed organics were separated by a 2m x 2mm I.D. glass column packed with 1% SP-1000 on 60/80 mesh Carbopack B. The column oven was programmed from 45 degrees centigrade (held isothermal for 3 minutes) to 220 degrees centigrade at 8 degrees centigrade per minute. The resulting ions were scanned on a Finnigan 5100 GC/MS/DS from 35 to 300 every three seconds.

An internal standard method of quantitation was used. Internal standards were added to each sample and standard prior to analysis. Five standards were analyzed as prescribed by the method at 10, 20, 50, 100 and 200 micrograms/kilograms. System Performance Check Compounds were checked for a minimum response factor of 0.300, these compounds are chloromethane, bromoform (can be 0.250), 1,1-dichloroethane, chlorobenzene and 1,1,2,2-tetrachloroethane. Response factors from the initial calibration curve are used to calculate percent relative standard deviation (%RSD) for Calibration Check Compounds. These are toluene, 1,1-dichloroethene, chloroform, 1,2-dichloropropane, ethylbenzene, and vinyl chloride, the %RSD must be less than 30%. These Q.C. criteria were met for the initial calibration curve.

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Quantitation of each target compound is based on response factors from a 50 ug/Kg continuing calibration standard. Before sample analysis can begin, standardization requirements must be met. The response factors of System Performance Check Compounds must meet the minimum criteria of 0.300, except bromoform at 0.250, and the Calibration Check Compounds must be less than 25% difference with the average response from the initial calibration curve.

Tuning and calibration checks were made prior to sample analysis. A reagent blank was also analyzed prior to sample analysis to certify cleanliness of reagents. Before analysis, blanks were analyzed in each sparging unit to verify the cleanliness of the instrument sampling apparatus.

In addition, the following quality assurance procedures were routine; monitoring of internal standard absolute areas and retention times and measurement of surrogate standard recoveries.

DataChem will maintain a complete record of your data on magnetic tape including the ion chromatograms, mass spectra, and verification of compliance with EPA tuning (BFB).

The results for EPA Method 8240 are reported twice for each sample in the body of the report, first on the Summary Report and again on the Analytical Report (results by sample). The Analytical Report consists of two pages for each sample. Analytical standards have been analyzed for each compound on page one and the quantitative results are presented. The unknown compounds have been tentatively identified and are found on page two of the Analytical Report. The amount of each unknown present is estimated by comparison to an internal standard assuming the response factor to be one. Additionally, the footnotes on page two of the Analytical Report have been used to qualify the data reported.

The QC requirements for the orignal analysis of sample EL 4858 did not meet acceptance criteria. This sample was reanalyzed and the QC requirements still did not meet acceptance criteria. These results are attributed to possible matrix effect caused by the sample medium. The results reported in the Analytical Report for this sample are from the second analysis.

The matrix spike and matrix spike analyses were performed using sample EL 4859 (B07GN2). The spike analytes 1,1-dichloroethene, benzene, trichloroethene, toluene and chlorobenzene were spiked in at a concentration of 50 ug/Kg. These analytes are designated with an "S" or "SP" throughout the Analytical Report.

Joan J. Lambert

EPA METHOD 8240
TARGET ANALYTE SUMMARY REPORT

Sponsor: WESTINGHOUSE-HANFORD CO.
DataChem Set ID: S92-0846JJ
Results: ug/Kg

| Coumpound / Field ID: / DataChem No: | B07GM6 EL4856 | B07GN0 EL4857 | B07GN1 EL4858 | B07GN2 EL4859 |
|---|---|---|---|---|
| chloromethane | U | U | U | U |
| bromomethane | U | U | U | U |
| vinyl chloride | U | U | U | U |
| chloroethane | U | U | U | U |
| methylene chloride | U | U | 1.3 J | U |
| acetone | 67 | 31 | 46 | 31 |
| carbon disulfide | U | U | U | U |
| trichlorofluoromethane | U | U | U | U |
| 1,1-dichloroethene | U | U | U | U |
| 1,1-dichloroethane | U | U | U | U |
| total-1,2-dichloroethene | U | U | U | U |
| chloroform | U | U | U | U |
| 1,2-dichloroethane | U | U | U | U |
| iodomethane | U | U | U | U |
| acrolein | U | U | U | U |
| acrylonitrile | U | U | U | U |
| 2-butanone | U | U | U | U |
| 1,1,1-trichloroethane | U | U | U | U |
| carbon tetrachloride | U | U | U | U |
| vinyl acetate | U | U | U | U |
| bromodichloromethane | U | U | U | U |
| 1,2-dichloropropane | U | U | U | U |
| cis-1,3-dichloropropene | U | U | U | U |
| trichloroethene | U | U | U | U |
| chlorodibromomethane | U | U | U | U |
| 1,1,2-trichloroethane | U | U | U | U |
| benzene | U | U | U | U |
| trans-1,3-dichloropropene | U | U | U | U |
| 2-chloroethylvinyl ether | U | U | U | U |
| bromoform | U | U | U | U |
| 1,2-dibromoethane | U | U | U | U |
| dibromomethane | U | U | U | U |
| trans-1,4-dichloro-2-butene | U | U | U | U |
| 4-methyl-2-pentanone | U | U | U | U |
| 2-hexanone | U | U | U | U |
| tetrachloroethene | U | U | U | U |
| 1,1,2,2-tetrachloroethane | U | U | U | U |
| toluene | U | U | 2.6 | U |
| chlorobenzene | U | U | U | U |
| ethylbenzene | U | U | U | U |
| styrene | U | U | U | U |
| total xylene | U | U | U | U |
| 1,2,3-trichloropropane | U | U | U | U |
| ethyl methacrylate | U | U | U | U |

Analyst Reviewer Data Release

EPA METHOD 8240
TARGET ANALYTE SUMMARY REPORT

Sponsor: WESTINGHOUSE-HANFORD CO.
DataChem Set ID: S92-0846JJ
Results: ug/Kg

| Coumpound / Field ID: / DataChem No: | B07GN4 EL4860 | B07GN5 EL4861 | B07GN7 EL4862 | B07GN8 EL4863 |
|---|---|---|---|---|
| chloromethane | U | U | U | U |
| bromomethane | U | U | U | U |
| vinyl chloride | U | U | U | U |
| chloroethane | U | U | U | U |
| methylene chloride | U | U | U | U |
| acetone | 32 | 49 | 40 | 33 |
| carbon disulfide | U | U | U | U |
| trichlorofluoromethane | U | U | U | U |
| 1,1-dichloroethene | U | U | U | U |
| 1,1-dichloroethane | U | U | U | U |
| total-1,2-dichloroethene | U | U | U | U |
| chloroform | U | U | U | U |
| 1,2-dichloroethane | U | U | U | U |
| iodomethane | U | U | U | U |
| acrolein | U | U | U | U |
| acrylonitrile | U | U | U | U |
| 2-butanone | U | U | U | U |
| 1,1,1-trichloroethane | U | U | U | U |
| carbon tetrachloride | U | U | U | U |
| vinyl acetate | U | U | U | U |
| bromodichloromethane | U | U | U | U |
| 1,2-dichloropropane | U | U | U | U |
| cis-1,3-dichloropropene | U | U | U | U |
| trichloroethene | U | U | U | U |
| chlorodibromomethane | U | U | U | U |
| 1,1,2-trichloroethane | U | U | U | U |
| benzene | U | U | U | U |
| trans-1,3-dichloropropene | U | U | U | U |
| 2-chloroethylvinyl ether | U | U | U | U |
| bromoform | U | U | U | U |
| 1,2-dibromoethane | U | U | U | U |
| dibromomethane | U | U | U | U |
| trans-1,4-dichloro-2-butene | U | U | U | U |
| 4-methyl-2-pentanone | U | U | U | U |
| 2-hexanone | U | U | U | U |
| tetrachloroethene | U | U | U | U |
| 1,1,2,2-tetrachloroethane | U | U | U | U |
| toluene | U | U | U | U |
| chlorobenzene | U | U | U | U |
| ethylbenzene | U | U | U | U |
| styrene | U | U | U | U |
| total xylene | U | U | U | U |
| 1,2,3-trichloropropane | U | U | U | U |
| ethyl methacrylate | U | U | U | U |

Analyst Reviewer Data Release

EPA METHOD 8240
TARGET ANALYTE SUMMARY REPORT

Sponsor: WESTINGHOUSE-HANFORD CO.
DataChem Set ID: S92-0846JJ
Results: ug/Kg

| Coumpound | Field ID: / DataChem No: | B07GN2MS / EL4859MS | B07GN2MSD / EL4859MSD |
|---|---|---|---|
| chloromethane | | U | U |
| bromomethane | | U | U |
| vinyl chloride | | U | U |
| chloroethane | | U | U |
| methylene chloride | | U | U |
| acetone | | 28 | 34 |
| carbon disulfide | | U | U |
| trichlorofluoromethane | | U | U |
| 1,1-dichloroethene | | 54 S | 52 S |
| 1,1-dichloroethane | | U | U |
| total-1,2-dichloroethene | | U | U |
| chloroform | | U | U |
| 1,2-dichloroethane | | U | U |
| iodomethane | | U | U |
| acrolein | | U | U |
| acrylonitrile | | U | U |
| 2-butanone | | U | U |
| 1,1,1-trichloroethane | | U | U |
| carbon tetrachloride | | U | U |
| vinyl acetate | | U | U |
| bromodichloromethane | | U | U |
| 1,2-dichloropropane | | U | U |
| cis-1,3-dichloropropene | | U | U |
| trichloroethene | | 60 S | 58 S |
| chlorodibromomethane | | U | U |
| 1,1,2-trichloroethane | | U | U |
| benzene | | 56 S | 61 S |
| trans-1,3-dichloropropene | | U | U |
| 2-chloroethylvinyl ether | | U | U |
| bromoform | | U | U |
| 1,2-dibromoethane | | U | U |
| dibromomethane | | U | U |
| trans-1,4-dichloro-2-butene | | U | U |
| 4-methyl-2-pentanone | | U | U |
| 2-hexanone | | U | U |
| tetrachloroethene | | U | U |
| 1,1,2,2-tetrachloroethane | | U | U |
| toluene | | 51 S | 58 S |
| chlorobenzene | | 58 S | 60 S |
| ethylbenzene | | U | U |
| styrene | | U | U |
| total xylene | | U | U |
| 1,2,3-trichloropropane | | U | U |
| ethyl methacrylate | | U | U |

Analyst Reviewer Data Release

ANALYTICAL REPORT FOR SAMPLE No. METHOD BLANK

EPA METHOD 8240

Dil. factor 1

Target Analyte Results



Field ID: -
File ID: PB45BLANK
DataChem Set ID: S92-0846JJ

Sponsor: WESTINGHOUSE-HANFORD CO.
Date of Analysis: 11/03/92 21:26:00
Date Received: 10/29/92

| Cas No. | COMPOUND | RESULTS ug/KG | DETECTION LIMITS ug/KG |
|---|---|---|---|
| 74-87-3 | chloromethane | U | 3.3 |
| 74-83-9 | bromomethane | U | 2.1 |
| 9003-22-9 | vinyl chloride | U | 2.8 |
| 75-00-3 | chloroethane | U | 3.0 |
| 75-09-2 | methylene chloride | U | 3.3 |
| 67-64-1 | acetone | 37 | 2.8 |
| 75-15-0 | carbon disulfide | U | 1.8 |
| 75-69-4 | trichlorofluoromethane | U | 1.8 |
| 75-35-4 | 1,1-dichloroethene | U | 1.6 |
| 75-34-3 | 1,1-dichloroethane | U | 1.6 |
| 107-06-2 | total-1,2-dichloroethene | U | 2.1 |
| 76-66-3 | chloroform | U | 1.6 |
| 107-06-2 | 1,2-dichloroethane | U | 1.0 |
| 74-88-4 | iodomethane | U | 2.1 |
| 107-02-8 | acrolein | U | 1.7 |
| 107-13-1 | acrylonitrile | U | 1.7 |
| 78-93-3 | 2-butanone | U | 2.0 |
| 71-55-6 | 1,1,1-trichloroethane | U | 1.1 |
| 56-23-5 | carbon tetrachloride | U | 1.1 |
| 108-05-4 | vinyl acetate | U | 2.6 |
| 75-27-4 | bromodichloromethane | U | 1.4 |
| 78-87-5 | 1,2-dichloropropane | U | 1.2 |
| 542-75-6 | cis-1,3-dichloropropene | U | 1.8 |
| 79-01-6 | trichloroethene | U | 2.7 |
| 124-48-1 | chlorodibromomethane | U | 1.4 |
| 79-00-5 | 1,1,2-trichloroethane | U | 1.9 |
| 71-43-2 | benzene | U | 1.4 |
| 542-75-6 | trans-1,3-dichloropropene | U | 1.8 |
| 110-75-8 | 2-chloroethylvinyl ether | U | 1.7 |
| 75-25-2 | bromoform | U | 1.0 |
| 106-93-4 | 1,2-dibromoethane | U | 1.4 |
| 74-95-3 | dibromomethane | U | 0.8 |
| 764-41-0 | trans-1,4-dichloro-2-butene | U | 1.4 |
| 108-10-1 | 4-methyl-2-pentanone | U | 2.5 |
| 591-78-6 | 2-hexanone | 5.6 | 1.8 |
| 127-18-4 | tetrachloroethene | U | 1.4 |
| 79-34-5 | 1,1,2,2-tetrachloroethane | U | 1.3 |
| 108-88-3 | toluene | U | 1.4 |
| 108-90-7 | chlorobenzene | U | 1.2 |
| 100-41-4 | ethylbenzene | U | 1.1 |
| 100-42-5 | styrene | U | 2.1 |
| 1330-20-7 | total xylene | U | 0.9 |
| 96-18-4 | 1,2,3-trichloropropane | U | 1.4 |
| 97-63-2 | ethyl methacrylate | U | 1.1 |

ANALYTICAL REPORT FOR SAMPLE No. EL4856

EPA METHOD 8240

Target Analyte Results



| | |
|---|---|
| Dil. factor | 1 |
| % Moisture | 6.49 |

Field ID: B07GM6
File ID: PB46EL4856
DataChem Set ID: S92-0846JJ

Sponsor: WESTINGHOUSE-HANFORD CO.
Date of Analysis: 11/03/92 22:22:00
Date Received: 10/29/92

| Cas No. | COMPOUND | RESULTS ug/KG | DETECTION LIMITS ug/KG |
|---|---|---|---|
| 74-87-3 | chloromethane | U | 3.5 |
| 74-83-9 | bromomethane | U | 2.2 |
| 9003-22-9 | vinyl chloride | U | 3.0 |
| 75-00-3 | chloroethane | U | 3.2 |
| 75-09-2 | methylene chloride | U | 3.5 |
| 67-64-1 | acetone | 67 | 3.0 |
| 75-15-0 | carbon disulfide | U | 1.9 |
| 75-69-4 | trichlorofluoromethane | U | 1.9 |
| 75-35-4 | 1,1-dichloroethene | U | 1.7 |
| 75-34-3 | 1,1-dichloroethane | U | 1.7 |
| 107-06-2 | total-1,2-dichloroethene | U | 2.2 |
| 76-66-3 | chloroform | U | 1.7 |
| 107-06-2 | 1,2-dichloroethane | U | 1.1 |
| 74-88-4 | iodomethane | U | 2.2 |
| 107-02-8 | acrolein | U | 1.8 |
| 107-13-1 | acrylonitrile | U | 1.8 |
| 78-93-3 | 2-butanone | U | 2.1 |
| 71-55-6 | 1,1,1-trichloroethane | U | 1.2 |
| 56-23-5 | carbon tetrachloride | U | 1.2 |
| 108-05-4 | vinyl acetate | U | 2.8 |
| 75-27-4 | bromodichloromethane | U | 1.5 |
| 78-87-5 | 1,2-dichloropropane | U | 1.3 |
| 542-75-6 | cis-1,3-dichloropropene | U | 1.9 |
| 79-01-6 | trichloroethene | U | 2.9 |
| 124-48-1 | chlorodibromomethane | U | 1.5 |
| 79-00-5 | 1,1,2-trichloroethane | U | 2.0 |
| 71-43-2 | benzene | U | 1.5 |
| 542-75-6 | trans-1,3-dichloropropene | U | 1.9 |
| 110-75-8 | 2-chloroethylvinyl ether | U | 1.8 |
| 75-25-2 | bromoform | U | 1.1 |
| 106-93-4 | 1,2-dibromoethane | U | 1.5 |
| 74-95-3 | dibromomethane | U | 0.8 |
| 764-41-0 | trans-1,4-dichloro-2-butene | U | 1.5 |
| 108-10-1 | 4-methyl-2-pentanone | U | 2.7 |
| 591-78-6 | 2-hexanone | U | 1.9 |
| 127-18-4 | tetrachloroethene | U | 1.5 |
| 79-34-5 | 1,1,2,2-tetrachloroethane | U | 1.4 |
| 108-88-3 | toluene | U | 1.5 |
| 108-90-7 | chlorobenzene | U | 1.3 |
| 100-41-4 | ethylbenzene | U | 1.2 |
| 100-42-5 | styrene | U | 2.2 |
| 1330-20-7 | total xylene | U | 1.0 |
| 96-18-4 | 1,2,3-trichloropropane | U | 1.5 |
| 97-63-2 | ethyl methacrylate | U | 1.2 |

ANALYITICAL REPORT FOR SAMPLE No. EL4856
NON-TARGET ANALYTES


Field ID.: B07GM6

| CAS NUMBER | Compound Identification | Scan No. | Amount ug/KG | Footnotes |
|---|---|---|---|---|
| | NO UNKNOWNS | | | |

Footnotes:

- B The analyte was found in the method blank. The reported results have been adjusted for the quantity found in in the blank.
- E The reported concentration is an estimate only. The response factor was assumed to be 1.0 relative to an internal standard.
- J Indicates an estimated concentration below the Detection Limit.
- K The isomer is unknown
- N Analytical standards were not analyzed for this compound.
- U Not detected
- W The identification is tentative or closely related to the compound.

ANALYTICAL REPORT FOR SAMPLE No. EL4857

EPA METHOD 8240

Target Analyte Results



| | |
|---|---|
| Dil. factor | 1 |
| % Moisture | 11.5 |

Field ID: B07GN0
File ID: PB47EL4857
DataChem Set ID: S92-0846JJ

Sponsor: WESTINGHOUSE-HANFORD CO.
Date of Analysis: 11/03/92 22:55:00
Date Received: 10/29/92

| Cas No. | COMPOUND | RESULTS ug/KG | DETECTION LIMITS ug/KG |
|---|---|---|---|
| 74-87-3 | chloromethane | U | 3.7 |
| 74-83-9 | bromomethane | U | 2.4 |
| 9003-22-9 | vinyl chloride | U | 3.2 |
| 75-00-3 | chloroethane | U | 3.4 |
| 75-09-2 | methylene chloride | U | 3.7 |
| 67-64-1 | acetone | 31 | 3.2 |
| 75-15-0 | carbon disulfide | U | 2.0 |
| 75-69-4 | trichlorofluoromethane | U | 2.0 |
| 75-35-4 | 1,1-dichloroethene | U | 1.8 |
| 75-34-3 | 1,1-dichloroethane | U | 1.8 |
| 107-06-2 | total-1,2-dichloroethene | U | 2.4 |
| 76-66-3 | chloroform | U | 1.8 |
| 107-06-2 | 1,2-dichloroethane | U | 1.1 |
| 74-88-4 | iodomethane | U | 2.4 |
| 107-02-8 | acrolein | U | 1.9 |
| 107-13-1 | acrylonitrile | U | 1.9 |
| 78-93-3 | 2-butanone | U | 2.3 |
| 71-55-6 | 1,1,1-trichloroethane | U | 1.2 |
| 56-23-5 | carbon tetrachloride | U | 1.2 |
| 108-05-4 | vinyl acetate | U | 2.9 |
| 75-27-4 | bromodichloromethane | U | 1.6 |
| 78-87-5 | 1,2-dichloropropane | U | 1.4 |
| 542-75-6 | cis-1,3-dichloropropene | U | 2.0 |
| 79-01-6 | trichloroethene | U | 3.1 |
| 124-48-1 | chlorodibromomethane | U | 1.6 |
| 79-00-5 | 1,1,2-trichloroethane | U | 2.1 |
| 71-43-2 | benzene | U | 1.6 |
| 542-75-6 | trans-1,3-dichloropropene | U | 2.0 |
| 110-75-8 | 2-chloroethylvinyl ether | U | 1.9 |
| 75-25-2 | bromoform | U | 1.1 |
| 106-93-4 | 1,2-dibromoethane | U | 1.6 |
| 74-95-3 | dibromomethane | U | 0.9 |
| 764-41-0 | trans-1,4-dichloro-2-butene | U | 1.6 |
| 108-10-1 | 4-methyl-2-pentanone | U | 2.8 |
| 591-78-6 | 2-hexanone | U | 2.0 |
| 127-18-4 | tetrachloroethene | U | 1.6 |
| 79-34-5 | 1,1,2,2-tetrachloroethane | U | 1.5 |
| 108-88-3 | toluene | U | 1.6 |
| 108-90-7 | chlorobenzene | U | 1.4 |
| 100-41-4 | ethylbenzene | U | 1.2 |
| 100-42-5 | styrene | U | 2.4 |
| 1330-20-7 | total xylene | U | 1.1 |
| 96-18-4 | 1,2,3-trichloropropane | U | 1.6 |
| 97-63-2 | ethyl methacrylate | U | 1.2 |

ANALYITICAL REPORT FOR SAMPLE No. EL4857
NON-TARGET ANALYTES


Field ID.: B07GN0

| CAS NUMBER | Compound Identification | Scan No. | Amount ug/KG | Footnotes |
|---|---|---|---|---|
| | NO UNKNOWNS | | | |

Footnotes:

- B The analyte was found in the method blank. The reported results have been adjusted for the quantity found in in the blank.
- E The reported concentration is an estimate only. The response factor was assumed to be 1.0 relative to an internal standard.
- J Indicates an estimated concentration below the Detection Limit.
- K The isomer is unknown
- N Analytical standards were not analyzed for this compound.
- U Not detected
- W The identification is tentative or closely related to the compound.

ANALYTICAL REPORT FOR SAMPLE No. EL4858

EPA METHOD 8240

Target Analyte Results



| | |
|---|---|
| Dil. factor | 1 |
| % Moisture | 10.62 |

Field ID: B07GN1
File ID: PB56EL4858
DataChem Set ID: S92-0846JJ

Sponsor: WESTINGHOUSE-HANFORD CO.
Date of Analysis: 11/04/92 4:14:00
Date Received: 10/29/92

| Cas No. | COMPOUND | RESULTS ug/KG | DETECTION LIMITS ug/KG |
|---|---|---|---|
| 74-87-3 | chloromethane | U | 3.7 |
| 74-83-9 | bromomethane | U | 2.3 |
| 9003-22-9 | vinyl chloride | U | 3.1 |
| 75-00-3 | chloroethane | U | 3.4 |
| 75-09-2 | methylene chloride | 1.3 J | 3.7 |
| 67-64-1 | acetone | 46 | 3.1 |
| 75-15-0 | carbon disulfide | U | 2.0 |
| 75-69-4 | trichlorofluoromethane | U | 2.0 |
| 75-35-4 | 1,1-dichloroethene | U | 1.8 |
| 75-34-3 | 1,1-dichloroethane | U | 1.8 |
| 107-06-2 | total-1,2-dichloroethene | U | 2.3 |
| 76-66-3 | chloroform | U | 1.8 |
| 107-06-2 | 1,2-dichloroethane | U | 1.1 |
| 74-88-4 | iodomethane | U | 2.3 |
| 107-02-8 | acrolein | U | 1.9 |
| 107-13-1 | acrylonitrile | U | 1.9 |
| 78-93-3 | 2-butanone | U | 2.2 |
| 71-55-6 | 1,1,1-trichloroethane | U | 1.2 |
| 56-23-5 | carbon tetrachloride | U | 1.2 |
| 108-05-4 | vinyl acetate | U | 2.9 |
| 75-27-4 | bromodichloromethane | U | 1.6 |
| 78-87-5 | 1,2-dichloropropane | U | 1.3 |
| 542-75-6 | cis-1,3-dichloropropene | U | 2.0 |
| 79-01-6 | trichloroethene | U | 3.0 |
| 124-48-1 | chlorodibromomethane | U | 1.6 |
| 79-00-5 | 1,1,2-trichloroethane | U | 2.1 |
| 71-43-2 | benzene | U | 1.6 |
| 542-75-6 | trans-1,3-dichloropropene | U | 2.0 |
| 110-75-8 | 2-chloroethylvinyl ether | U | 1.9 |
| 75-25-2 | bromoform | U | 1.1 |
| 106-93-4 | 1,2-dibromoethane | U | 1.6 |
| 74-95-3 | dibromomethane | U | 0.9 |
| 764-41-0 | trans-1,4-dichloro-2-butene | U | 1.6 |
| 108-10-1 | 4-methyl-2-pentanone | U | 2.8 |
| 591-78-6 | 2-hexanone | U | 2.0 |
| 127-18-4 | tetrachloroethene | U | 1.6 |
| 79-34-5 | 1,1,2,2-tetrachloroethane | U | 1.5 |
| 108-88-3 | toluene | 2.6 | 1.6 |
| 108-90-7 | chlorobenzene | U | 1.3 |
| 100-41-4 | ethylbenzene | U | 1.2 |
| 100-42-5 | styrene | U | 2.3 |
| 1330-20-7 | total xylene | U | 1.0 |
| 96-18-4 | 1,2,3-trichloropropane | U | 1.6 |
| 97-63-2 | ethyl methacrylate | U | 1.2 |

ANALYITICAL REPORT FOR SAMPLE No. EL4858
NON-TARGET ANALYTES


Field ID.: B07GN1

| CAS NUMBER | Compound Identification | Scan No. | Amount ug/KG | Footnotes |
|---|---|---|---|---|
| | NO UNKNOWNS | | | |

Footnotes:

- B The analyte was found in the method blank. The reported results have been adjusted for the quantity found in in the blank.
- E The reported concentration is an estimate only. The response factor was assumed to be 1.0 relative to an internal standard.
- J Indicates an estimated concentration below the Detection Limit.
- K The isomer is unknown
- N Analytical standards were not analyzed for this compound.
- U Not detected
- W The identification is tentative or closely related to the compound.

ANALYTICAL REPORT FOR SAMPLE No. EL4859

EPA METHOD 8240

Target Analyte Results



| | |
|---|---|
| Dil. factor | 1 |
| % Moisture | 7.37 |

Field ID: B07GN2
File ID: PB49EL4859
DataChem Set ID: S92-0846JJ

Sponsor: WESTINGHOUSE-HANFORD CO.
Date of Analysis: 11/04/92 0:03:00
Date Received: 10/29/92

| Cas No. | COMPOUND | RESULTS ug/KG | DETECTION LIMITS ug/KG |
|---|---|---|---|
| 74-87-3 | chloromethane | U | 3.6 |
| 74-83-9 | bromomethane | U | 2.3 |
| 9003-22-9 | vinyl chloride | U | 3.0 |
| 75-00-3 | chloroethane | U | 3.2 |
| 75-09-2 | methylene chloride | U | 3.6 |
| 67-64-1 | acetone | 31 | 3.0 |
| 75-15-0 | carbon disulfide | U | 1.9 |
| 75-69-4 | trichlorofluoromethane | U | 1.9 |
| 75-35-4 | 1,1-dichloroethene | U | 1.7 |
| 75-34-3 | 1,1-dichloroethane | U | 1.7 |
| 107-06-2 | total-1,2-dichloroethene | U | 2.3 |
| 76-66-3 | chloroform | U | 1.7 |
| 107-06-2 | 1,2-dichloroethane | U | 1.1 |
| 74-88-4 | iodomethane | U | 2.3 |
| 107-02-8 | acrolein | U | 1.8 |
| 107-13-1 | acrylonitrile | U | 1.8 |
| 78-93-3 | 2-butanone | U | 2.2 |
| 71-55-6 | 1,1,1-trichloroethane | U | 1.2 |
| 56-23-5 | carbon tetrachloride | U | 1.2 |
| 108-05-4 | vinyl acetate | U | 2.8 |
| 75-27-4 | bromodichloromethane | U | 1.5 |
| 78-87-5 | 1,2-dichloropropane | U | 1.3 |
| 542-75-6 | cis-1,3-dichloropropene | U | 1.9 |
| 79-01-6 | trichloroethene | U | 2.9 |
| 124-48-1 | chlorodibromomethane | U | 1.5 |
| 79-00-5 | 1,1,2-trichloroethane | U | 2.1 |
| 71-43-2 | benzene | U | 1.5 |
| 542-75-6 | trans-1,3-dichloropropene | U | 1.9 |
| 110-75-8 | 2-chloroethylvinyl ether | U | 1.8 |
| 75-25-2 | bromoform | U | 1.1 |
| 106-93-4 | 1,2-dibromoethane | U | 1.5 |
| 74-95-3 | dibromomethane | U | 0.9 |
| 764-41-0 | trans-1,4-dichloro-2-butene | U | 1.5 |
| 108-10-1 | 4-methyl-2-pentanone | U | 2.7 |
| 591-78-6 | 2-hexanone | U | 1.9 |
| 127-18-4 | tetrachloroethene | U | 1.5 |
| 79-34-5 | 1,1,2,2-tetrachloroethane | U | 1.4 |
| 108-88-3 | toluene | U | 1.5 |
| 108-90-7 | chlorobenzene | U | 1.3 |
| 100-41-4 | ethylbenzene | U | 1.2 |
| 100-42-5 | styrene | U | 2.3 |
| 1330-20-7 | total xylene | U | 1.0 |
| 96-18-4 | 1,2,3-trichloropropane | U | 1.5 |
| 97-63-2 | ethyl methacrylate | U | 1.2 |

ANALYITICAL REPORT FOR SAMPLE No. EL4859
NON-TARGET ANALYTES


Field ID.: B07GN2

| CAS NUMBER | Compound Identification | Scan No. | Amount ug/KG | Footnotes |
|---|---|---|---|---|
| | NO UNKNOWNS | | | |

Footnotes:

- B The analyte was found in the method blank. The reported results have been adjusted for the quantity found in in the blank.
- E The reported concentration is an estimate only. The response factor was assumed to be 1.0 relative to an internal standard.
- J Indicates an estimated concentration below the Detection Limit.
- K The isomer is unknown
- N Analytical standards were not analyzed for this compound.
- U Not detected
- W The identification is tentative or closely related to the compound.

ANALYTICAL REPORT FOR SAMPLE No. EL4860

EPA METHOD 8240

Target Analyte Results



| | |
|---|---|
| Dil. factor | 1 |
| % Moisture | 3.86 |

Field ID: B07GN4
File ID: PB50EL4860
DataChem Set ID: S92-0846JJ

Sponsor: WESTINGHOUSE-HANFORD CO.
Date of Analysis: 11/04/92 0:37:00
Date Received: 10/29/92

| Cas No. | COMPOUND | RESULTS ug/KG | DETECTION LIMITS ug/KG |
|---|---|---|---|
| 74-87-3 | chloromethane | U | 3.4 |
| 74-83-9 | bromomethane | U | 2.2 |
| 9003-22-9 | vinyl chloride | U | 2.9 |
| 75-00-3 | chloroethane | U | 3.1 |
| 75-09-2 | methylene chloride | U | 3.4 |
| 67-64-1 | acetone | 32 | 2.9 |
| 75-15-0 | carbon disulfide | U | 1.9 |
| 75-69-4 | trichlorofluoromethane | U | 1.9 |
| 75-35-4 | 1,1-dichloroethene | U | 1.7 |
| 75-34-3 | 1,1-dichloroethane | U | 1.7 |
| 107-06-2 | total-1,2-dichloroethene | U | 2.2 |
| 76-66-3 | chloroform | U | 1.7 |
| 107-06-2 | 1,2-dichloroethane | U | 1.0 |
| 74-88-4 | iodomethane | U | 2.2 |
| 107-02-8 | acrolein | U | 1.8 |
| 107-13-1 | acrylonitrile | U | 1.8 |
| 78-93-3 | 2-butanone | U | 2.1 |
| 71-55-6 | 1,1,1-trichloroethane | U | 1.1 |
| 56-23-5 | carbon tetrachloride | U | 1.1 |
| 108-05-4 | vinyl acetate | U | 2.7 |
| 75-27-4 | bromodichloromethane | U | 1.5 |
| 78-87-5 | 1,2-dichloropropane | U | 1.2 |
| 542-75-6 | cis-1,3-dichloropropene | U | 1.9 |
| 79-01-6 | trichloroethene | U | 2.8 |
| 124-48-1 | chlorodibromomethane | U | 1.5 |
| 79-00-5 | 1,1,2-trichloroethane | U | 2.0 |
| 71-43-2 | benzene | U | 1.5 |
| 542-75-6 | trans-1,3-dichloropropene | U | 1.9 |
| 110-75-8 | 2-chloroethylvinyl ether | U | 1.8 |
| 75-25-2 | bromoform | U | 1.0 |
| 106-93-4 | 1,2-dibromoethane | U | 1.5 |
| 74-95-3 | dibromomethane | U | 0.8 |
| 764-41-0 | trans-1,4-dichloro-2-butene | U | 1.5 |
| 108-10-1 | 4-methyl-2-pentanone | U | 2.6 |
| 591-78-6 | 2-hexanone | U | 1.9 |
| 127-18-4 | tetrachloroethene | U | 1.5 |
| 79-34-5 | 1,1,2,2-tetrachloroethane | U | 1.4 |
| 108-88-3 | toluene | U | 1.5 |
| 108-90-7 | chlorobenzene | U | 1.2 |
| 100-41-4 | ethylbenzene | U | 1.1 |
| 100-42-5 | styrene | U | 2.2 |
| 1330-20-7 | total xylene | U | 1.0 |
| 96-18-4 | 1,2,3-trichloropropane | U | 1.5 |
| 97-63-2 | ethyl methacrylate | U | 1.1 |

ANALYITICAL REPORT FOR SAMPLE No. EL4860
NON-TARGET ANALYTES


Field ID.: B07GN4

| CAS NUMBER | Compound Identification | Scan No. | Amount ug/KG | Footnotes |
|---|---|---|---|---|
| | NO UNKNOWNS | | | |

Footnotes:

- B The analyte was found in the method blank. The reported results have been adjusted for the quantity found in in the blank.
- E The reported concentration is an estimate only. The response factor was assumed to be 1.0 relative to an internal standard.
- J Indicates an estimated concentration below the Detection Limit.
- K The isomer is unknown
- N Analytical standards were not analyzed for this compound.
- U Not detected
- W The identification is tentative or closely related to the compound.

ANALYTICAL REPORT FOR SAMPLE No. EL4861

EPA METHOD 8240

Target Analyte Results



| | |
|---|---|
| Dil. factor | 1 |
| % Moisture | 3.6 |

Field ID: B07GN5
File ID: PB67EL4861
DataChem Set ID: S92-0846JJ

Sponsor: WESTINGHOUSE-HANFORD CO.
Date of Analysis: 11/04/92 19:11:00
Date Received: 10/29/92

| Cas No. | COMPOUND | RESULTS ug/KG | DETECTION LIMITS ug/KG |
|---|---|---|---|
| 74-87-3 | chloromethane | U | 3.4 |
| 74-83-9 | bromomethane | U | 2.2 |
| 9003-22-9 | vinyl chloride | U | 2.9 |
| 75-00-3 | chloroethane | U | 3.1 |
| 75-09-2 | methylene chloride | U | 3.4 |
| 67-64-1 | acetone | 49 | 2.9 |
| 75-15-0 | carbon disulfide | U | 1.9 |
| 75-69-4 | trichlorofluoromethane | U | 1.9 |
| 75-35-4 | 1,1-dichloroethene | U | 1.7 |
| 75-34-3 | 1,1-dichloroethane | U | 1.7 |
| 107-06-2 | total-1,2-dichloroethene | U | 2.2 |
| 76-66-3 | chloroform | U | 1.7 |
| 107-06-2 | 1,2-dichloroethane | U | 1.0 |
| 74-88-4 | iodomethane | U | 2.2 |
| 107-02-8 | acrolein | U | 1.8 |
| 107-13-1 | acrylonitrile | U | 1.8 |
| 78-93-3 | 2-butanone | U | 2.1 |
| 71-55-6 | 1,1,1-trichloroethane | U | 1.1 |
| 56-23-5 | carbon tetrachloride | U | 1.1 |
| 108-05-4 | vinyl acetate | U | 2.7 |
| 75-27-4 | bromodichloromethane | U | 1.5 |
| 78-87-5 | 1,2-dichloropropane | U | 1.2 |
| 542-75-6 | cis-1,3-dichloropropene | U | 1.9 |
| 79-01-6 | trichloroethene | U | 2.8 |
| 124-48-1 | chlorodibromomethane | U | 1.5 |
| 79-00-5 | 1,1,2-trichloroethane | U | 2.0 |
| 71-43-2 | benzene | U | 1.5 |
| 542-75-6 | trans-1,3-dichloropropene | U | 1.9 |
| 110-75-8 | 2-chloroethylvinyl ether | U | 1.8 |
| 75-25-2 | bromoform | U | 1.0 |
| 106-93-4 | 1,2-dibromoethane | U | 1.5 |
| 74-95-3 | dibromomethane | U | 0.8 |
| 764-41-0 | trans-1,4-dichloro-2-butene | U | 1.5 |
| 108-10-1 | 4-methyl-2-pentanone | U | 2.6 |
| 591-78-6 | 2-hexanone | U | 1.9 |
| 127-18-4 | tetrachloroethene | U | 1.5 |
| 79-34-5 | 1,1,2,2-tetrachloroethane | U | 1.3 |
| 108-88-3 | toluene | U | 1.5 |
| 108-90-7 | chlorobenzene | U | 1.2 |
| 100-41-4 | ethylbenzene | U | 1.1 |
| 100-42-5 | styrene | U | 2.2 |
| 1330-20-7 | total xylene | U | 1.0 |
| 96-18-4 | 1,2,3-trichloropropane | U | 1.5 |
| 97-63-2 | ethyl methacrylate | U | 1.1 |

ANALYITICAL REPORT FOR SAMPLE No. EL4861
NON-TARGET ANALYTES


Field ID.: B07GN5

| CAS NUMBER | Compound Identification | Scan No. | Amount ug/KG | Footnotes |
|---|---|---|---|---|
| | NO UNKNOWNS | | | |

Footnotes:

- B The analyte was found in the method blank. The reported results have been adjusted for the quantity found in in the blank.
- E The reported concentration is an estimate only. The response factor was assumed to be 1.0 relative to an internal standard.
- J Indicates an estimated concentration below the Detection Limit.
- K The isomer is unknown
- N Analytical standards were not analyzed for this compound.
- U Not detected
- W The identification is tentative or closely related to the compound.

ANALYTICAL REPORT FOR SAMPLE No. EL4862

EPA METHOD 8240

Target Analyte Results



| | |
|---|---|
| Dil. factor | 1 |
| % Moisture | 7.69 |

Field ID: B07GN7
File ID: PB52EL4862
DataChem Set ID: S92-0846JJ

Sponsor: WESTINGHOUSE-HANFORD CO.
Date of Analysis: 11/04/92 1:47:00
Date Received: 10/29/92

| Cas No. | COMPOUND | RESULTS ug/KG | DETECTION LIMITS ug/KG |
|---|---|---|---|
| 74-87-3 | chloromethane | U | 3.6 |
| 74-83-9 | bromomethane | U | 2.3 |
| 9003-22-9 | vinyl chloride | U | 3.0 |
| 75-00-3 | chloroethane | U | 3.2 |
| 75-09-2 | methylene chloride | U | 3.6 |
| 67-64-1 | acetone | 40 | 3.0 |
| 75-15-0 | carbon disulfide | U | 1.9 |
| 75-69-4 | trichlorofluoromethane | U | 1.9 |
| 75-35-4 | 1,1-dichloroethene | U | 1.7 |
| 75-34-3 | 1,1-dichloroethane | U | 1.7 |
| 107-06-2 | total-1,2-dichloroethene | U | 2.3 |
| 76-66-3 | chloroform | U | 1.7 |
| 107-06-2 | 1,2-dichloroethane | U | 1.1 |
| 74-88-4 | iodomethane | U | 2.3 |
| 107-02-8 | acrolein | U | 1.8 |
| 107-13-1 | acrylonitrile | U | 1.8 |
| 78-93-3 | 2-butanone | U | 2.2 |
| 71-55-6 | 1,1,1-trichloroethane | U | 1.2 |
| 56-23-5 | carbon tetrachloride | U | 1.2 |
| 108-05-4 | vinyl acetate | U | 2.8 |
| 75-27-4 | bromodichloromethane | U | 1.5 |
| 78-87-5 | 1,2-dichloropropane | U | 1.3 |
| 542-75-6 | cis-1,3-dichloropropene | U | 1.9 |
| 79-01-6 | trichloroethene | U | 2.9 |
| 124-48-1 | chlorodibromomethane | U | 1.5 |
| 79-00-5 | 1,1,2-trichloroethane | U | 2.1 |
| 71-43-2 | benzene | U | 1.5 |
| 542-75-6 | trans-1,3-dichloropropene | U | 1.9 |
| 110-75-8 | 2-chloroethylvinyl ether | U | 1.8 |
| 75-25-2 | bromoform | U | 1.1 |
| 106-93-4 | 1,2-dibromoethane | U | 1.5 |
| 74-95-3 | dibromomethane | U | 0.9 |
| 764-41-0 | trans-1,4-dichloro-2-butene | U | 1.5 |
| 108-10-1 | 4-methyl-2-pentanone | U | 2.7 |
| 591-78-6 | 2-hexanone | U | 1.9 |
| 127-18-4 | tetrachloroethene | U | 1.5 |
| 79-34-5 | 1,1,2,2-tetrachloroethane | U | 1.4 |
| 108-88-3 | toluene | U | 1.5 |
| 108-90-7 | chlorobenzene | U | 1.3 |
| 100-41-4 | ethylbenzene | U | 1.2 |
| 100-42-5 | styrene | U | 2.3 |
| 1330-20-7 | total xylene | U | 1.0 |
| 96-18-4 | 1,2,3-trichloropropane | U | 1.5 |
| 97-63-2 | ethyl methacrylate | U | 1.2 |

ANALYITICAL REPORT FOR SAMPLE No. EL4862
NON-TARGET ANALYTES


Field ID.: B07GN7

| CAS NUMBER | Compound Identification | Scan No. | Amount ug/KG | Footnotes |
|---|---|---|---|---|
| | NO UNKNOWNS | | | |

Footnotes:

- B The analyte was found in the method blank. The reported results have been adjusted for the quantity found in in the blank.
- E The reported concentration is an estimate only. The response factor was assumed to be 1.0 relative to an internal standard.
- J Indicates an estimated concentration below the Detection Limit.
- K The isomer is unknown
- N Analytical standards were not analyzed for this compound.
- U Not detected
- W The identification is tentative or closely related to the compound.

ANALYTICAL REPORT FOR SAMPLE No. EL4863

EPA METHOD 8240

Target Analyte Results



| | |
|---|---|
| Dil. factor | 1 |
| % Moisture | 4.06 |

Field ID: B07GN8
File ID: PB53EL4863
DataChem Set ID: S92-0846JJ

Sponsor: WESTINGHOUSE-HANFORD CO.
Date of Analysis: 11/04/92 2:24:00
Date Received: 10/29/92

| Cas No. | COMPOUND | RESULTS ug/KG | DETECTION LIMITS ug/KG |
|---|---|---|---|
| 74-87-3 | chloromethane | U | 3.4 |
| 74-83-9 | bromomethane | U | 2.2 |
| 9003-22-9 | vinyl chloride | U | 2.9 |
| 75-00-3 | chloroethane | U | 3.1 |
| 75-09-2 | methylene chloride | U | 3.4 |
| 67-64-1 | acetone | 33 | 2.9 |
| 75-15-0 | carbon disulfide | U | 1.9 |
| 75-69-4 | trichlorofluoromethane | U | 1.9 |
| 75-35-4 | 1,1-dichloroethene | U | 1.7 |
| 75-34-3 | 1,1-dichloroethane | U | 1.7 |
| 107-06-2 | total-1,2-dichloroethene | U | 2.2 |
| 76-66-3 | chloroform | U | 1.7 |
| 107-06-2 | 1,2-dichloroethane | U | 1.0 |
| 74-88-4 | iodomethane | U | 2.2 |
| 107-02-8 | acrolein | U | 1.8 |
| 107-13-1 | acrylonitrile | U | 1.8 |
| 78-93-3 | 2-butanone | U | 2.1 |
| 71-55-6 | 1,1,1-trichloroethane | U | 1.1 |
| 56-23-5 | carbon tetrachloride | U | 1.1 |
| 108-05-4 | vinyl acetate | U | 2.7 |
| 75-27-4 | bromodichloromethane | U | 1.5 |
| 78-87-5 | 1,2-dichloropropane | U | 1.3 |
| 542-75-6 | cis-1,3-dichloropropene | U | 1.9 |
| 79-01-6 | trichloroethene | U | 2.8 |
| 124-48-1 | chlorodibromomethane | U | 1.5 |
| 79-00-5 | 1,1,2-trichloroethane | U | 2.0 |
| 71-43-2 | benzene | U | 1.5 |
| 542-75-6 | trans-1,3-dichloropropene | U | 1.9 |
| 110-75-8 | 2-chloroethylvinyl ether | U | 1.8 |
| 75-25-2 | bromoform | U | 1.0 |
| 106-93-4 | 1,2-dibromoethane | U | 1.5 |
| 74-95-3 | dibromomethane | U | 0.8 |
| 764-41-0 | trans-1,4-dichloro-2-butene | U | 1.5 |
| 108-10-1 | 4-methyl-2-pentanone | U | 2.6 |
| 591-78-6 | 2-hexanone | U | 1.9 |
| 127-18-4 | tetrachloroethene | U | 1.5 |
| 79-34-5 | 1,1,2,2-tetrachloroethane | U | 1.4 |
| 108-88-3 | toluene | U | 1.5 |
| 108-90-7 | chlorobenzene | U | 1.3 |
| 100-41-4 | ethylbenzene | U | 1.1 |
| 100-42-5 | styrene | U | 2.2 |
| 1330-20-7 | total xylene | U | 1.0 |
| 96-18-4 | 1,2,3-trichloropropane | U | 1.5 |
| 97-63-2 | ethyl methacrylate | U | 1.1 |

ANALYITICAL REPORT FOR SAMPLE No. EL4863
NON-TARGET ANALYTES


Field ID.: B07GN8

| CAS NUMBER | Compound Identification | Scan No. | Amount ug/KG | Footnotes |
|---|---|---|---|---|
| | NO UNKNOWNS | | | |

Footnotes:

- B The analyte was found in the method blank. The reported results have been adjusted for the quantity found in in the blank.
- E The reported concentration is an estimate only. The response factor was assumed to be 1.0 relative to an internal standard.
- J Indicates an estimated concentration below the Detection Limit.
- K The isomer is unknown
- N Analytical standards were not analyzed for this compound.
- U Not detected
- W The identification is tentative or closely related to the compound.

DATA CHEM LABORATORIES

# ANALYTICAL REQUEST FORM

1. ☐ REGULAR Status

☐ RUSH Status Requested - ADDITIONAL CHARGE

RESULTS REQUIRED BY _____ DATE

CONTACT DATACHEM LABS PRIOR TO SENDING SAMPLES.

2. Date 10-22-92 Purchase Order No. _____

3. Company Name Westinghouse Hanford Co.

Address PO Box 1970

Richland, WA 99352

Person to Contact Frank Gustafson

Telephone (509) 376-1736

Fax Telephone (509) 376-6476

Billing Address (if different from above)

4. Sample Collection

Sampling Site North Slope PSN04

Industrial Process _____

Date of Collection 21-26 Oct 92

Time Collected See Bottles

Date of Shipment 10-22-92

Chain of Custody No. N/A

5. REQUEST FOR ANALYSES

| Laboratory Use Only | Client Sample Number | Media Type* | Sample Volume (Liters) | ANALYSES REQUESTED - Use Method Number if Known |
|---|---|---|---|---|
| EL 4856 | BØ7GM6 | Soil | each sample: | Glass Septum 120 ml: VOA (8240) |
| 4857 | BØ7GNØ | | | Amber glass 250ml: Semi-VOA (8270) |
| 4858 | BØ7GN1 | | | PCB/Pest. (8080) Phosphorus |
| 4859 | BØ7GN2 | | | Pest (8140), Herbicides (8150) |
| 4860 | B07GN4 | | | Amber glass 120ml: ICP Metals (6010) |
| 4861 | B07GN5 | | | AA Metals - As (7060), Pb (7420) |
| 4862 | B07GN7 | | | Se (7740), Tl (7840), Hg (7471) |
| 4863 | B07GN8 | | | Amber glass 120ml: F, Cl, $PO_4$, $SO_4$ by |
| | | | | (EPA 300.0), $NO_2$, $NO_3$ by (EPA |
| | | | | 353.3) Chromium VI by (EPA |
| | | | | 218.4) |
| | | | | Amber glass 120ml: TPH (EPA 418.1) |

*Specify: Solid sorbent tube, e.g. Charcoal; Filter type; Impinger solution; Bulk Sample; Blood; Urine; Tissue; Soil; Water; Other

6. Q C REQUIREMENTS
MUST BE COMPLETED - See General Services Terms and Conditions: QC samples billed at regular sample rate

☐ METHOD QC SAMPLES (Lab QC according to published methods)

☐ PROJECT PLAN QC SAMPLES (Lab QC according to provided QA/QC Plan)

☐ NO QC SAMPLES REQUESTED (May not conform to Agency requirements)

☐ OTHER (as specified below)

Comments RCRA samples, Store 4°C

Possible Contamination and/or Chemical Hazards _____

7. Requested by _____

960 West LeVoy Drive / Salt Lake City, UT 84123 800-356-9135 or 801-266-7700 / FAX: 801-268-9992
4388 Glendale-Milford Road / Cincinnati, OH 45242 800-458-1493 or 513-733-5336 / FAX: 513-733-5347

DATACHEM LABORATORIES - A SORENSON COMPANY

DISTRIBUTION: WHITE - LABORATORY COPY CANARY - CUSTOMER COPY

| Westinghouse Hanford Company | CHAIN OF CUSTODY |
|---|---|

Custody Form Initiator FRANK GUSTAFSON

Company Contact FRANK GUSTAFSON

Telephone (509) 376-1736

Project Designation/Sampling Locations NORTH SLOPE - PSN-04

Collection Date 10-20-92 10-21-92

Ice Chest No. RM # 82

Field Logbook No. EFL-1031

Bill of Lading/Airbill No. 2509865886

Offsite Property No. W23-0-0002 #28

Method of Shipment Emery

Shipped to DATA CHEM

Possible Sample Hazards/Remarks N/A

Sample Identification

| | |
|---|---|
| BØ76M6 (3) AMBER GLASS 120ml, | (1) 120 W/ SEPTUM, (1) 250 AMBER GLASS |
| BØ76M7 | |
| BØ76NØ | |
| BØ76N1 | |
| BØ76N2 | |
| BØ76N3 | |
| BØ76M8 | (1) 1000ml AMBER GLASS |

☐ Field Transfer of Custody

| CHAIN OF POSSESSION (Sign and Print Names) | | |
|---|---|---|
| Relinquished by: 10/27/92 F.W. Gustafson | Received by: | Date/Time: 10-29-92 / 1200 |
| Relinquished by: | Received by: | Date/Time: |
| Relinquished by: | Received by: | Date/Time: |
| Relinquished by: | Received by: | Date/Time: |

Final Sample Disposition

| Disposal Method: | Disposed by: | Date/Time: |
|---|---|---|

Comments:

A-6000-407 (12/90)

DATA CHEM
LABORATORIES
A SORENSON COMPANY

December 9, 1992

REPORT INTRODUCTION
ANALYTICAL COMMENTARY

SUBMITTED TO: Jeanette Duncan

SUBMITTED BY: Amy M. Fossett

REFERENCE DATA:

Analysis of: 10 soil samples, including a matrix spike and duplicate

Method of Analysis: EPA 8270 with modifications

Identification No: S92-0846-IJ

DataChem Laboratory No: EL4856, EL4857, EL4857MS, EL4857MD, EL4858, EL4859, EL4860, EL4861, EL4862, EK4863

The above numbered samples were analyzed for base-neutral and acid compounds by gas chromatography/mass spectrometry. EPA Test Method 8270 was followed with modifications. (United States Environmental Protection Agency; Office of Solid Waste and Emergency Response, SW-846 November 1986).

EPA Method 3550 was used for preparation of the samples prior to analysis. Thirty grams of each soil sample were extracted with methylene chloride using sonication. Surrogate standards were added prior to the extraction as prescribed. The total volume of the samples after extraction and concentration was one milliliter. Internal standards were added to each sample and standard mixtures prior to analysis. This set was batched with DCL set S92-0853-DD for extraction.

Separation of the compounds of interest was obtained with a 30 m, 0.32 mm internal diameter, DB-5 fused silica capillary column. Oven temperature was programmed from 40 degrees centigrade (held isothermal for 4 minutes) to 300 degrees centigrade at 10 degrees centigrade per minute. A 40 second splitless injection interval was used. Analysis was performed using a Finnigan 5100 GC/MS/DS system, scanning a mass range of 35 to 500 amu each second.

SALT LAKE CITY OFFICE
960 WEST LeVOY DRIVE
SALT LAKE CITY, UTAH 84123-2547
801 266-7700, FAX 801 268-9992

CINCINNATI OFFICE
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CINCINNATI, OHIO 45242-3706
513 733-5336, FAX 513 733-5347

BALTIMORE OFFICE
10 JULIET LANE, SUITE F203
BALTIMORE, MARYLAND 21236-1220
410 494-3612 FAX 513 733-5347

RICHLAND OFFICE
313 WELLSIAN WAY
RICHLAND, WASHINGTON 99352-4116
509 943-5858 FAX 509 943-5654

The initial calibration of the instrument was performed at concentrations of 160, 120, 80, 50 and 20 ug/mL. Calibration check compounds (CCC's) specified by the method are acenaphthene, 1,4-dichlorobenzene, hexachlorobutadiene, N-nitroso-di-n-phenylamine, di-n-octylphthalate, fluoranthene, benzo(a)pyrene, 4-chloro-3-methylphenol, 2,4-dichlorophenol, 2-nitrophenol, phenol, pentachlorophenol, and 2,4,6-trichlorophenol. The relative standard deviations for the CCC's in the initial standards were less than the 30% criteria required by the method. System performance check compounds (SPCC's) specified in the method are N-nitroso-di-n-propylamine, hexachlorocyclopentadiene, 2,4-dinitrophenol, and 4-nitrophenol. The minimum response factors (RF) for the SPCC's were greater than the 0.050 required in the method.

The continuing calibration of the instrument was performed at a concentration of 50 ug/mL for all compounds. The response factors for all CCC's were less than the maximum percent difference of 25% compared to the initial curve and SPCC's response factors were greater than the minimum RF of 0.050. DFTPP performance criteria was met for all sample and standard analyses.

DataChem Laboratories will maintain a complete record of this data on magnetic tape along with hard copies of the ion chromatograms, mass spectra, surrogate recovery summary, and verification of compliance with EPA tuning (DFTPP) and chromatography criteria.

Surrogate recoveries were monitored and are reported at the end of the report package. Surrogate recoveries are within QC limits.

Matrix spiking was performed an EL4857. Matrix spike recoveries are within QC limits and reproducibility is excellent. Matrix spike compounds are given the footnote, S, throughout the report.

Aldol condensation products reported in the blank and samples are products of the extraction procedure. These compounds are given the footnote, A.

The results for the sample are reported twice in the report; first on the Target Analyte Summary Report and again on the Analytical Report (results by sample). The report follows.

Amy M Fossett

Amy M. Fossett

TARGET ANALYTE SUMMARY REPORT

EPA METHOD 8270, 3rd ED.


Sponsor: WESTINGHOUSE HANFORD COMPANY SET ID: S92- 0846-IJ

Results: ug/Kg

| Field No. | B07GM6 | B07GN0 | B07GN0MS | B07GN0MSD | METHOD BLANK |
|---|---|---|---|---|---|
| DataChem No. | EL4856 | EL4857 | EL4857MS | EL4857MD | |
| COMPOUND | | | | | |
| N-nitroso-dimethylamine | U | U | U | U | U |
| phenol | U | U | 5.6E+03 S | 6.0E+03 S | U |
| bis(2-chloroethyl)ether | U | U | U | U | U |
| 2-chlorophenol | U | U | 6.7E+03 S | 6.8E+03 S | U |
| 1,3-dichlorobenzene | U | U | U | U | U |
| 1,4-dichlorobenzene | U | U | 3.0E+03 S | 3.1E+03 S | U |
| benzyl alcohol | U | U | U | U | U |
| 1,2-dichlorobenzene | U | U | U | U | U |
| 2-methylphenol | U | U | U | U | U |
| bis(2-chloroisopropyl)ether | U | U | U | U | U |
| 4-methylphenol | U | U | U | U | U |
| N-nitroso-di-n-propylamine | U | U | 3.1E+03 S | 3.2E+03 S | U |
| hexachloroethane | U | U | U | U | U |
| nitrobenzene | U | U | U | U | U |
| isophorone | U | U | U | U | U |
| 2-nitrophenol | U | U | U | U | U |
| 2,4-dimethylphenol | U | U | U | U | U |
| bis(2-chloroethoxy)methane | U | U | U | U | U |
| benzoic acid | U | U | U | U | U |
| 2,4-dichlorophenol | U | U | U | U | U |
| 1,2,4-trichlorobenzene | U | U | 3.0E+03 S | 3.2E+03 S | U |
| naphthalene | U | U | U | U | U |
| 4-chloroaniline | U | U | U | U | U |
| hexachlorobutadiene | U | U | U | U | U |
| 4-chloro-3-methylphenol | U | U | 6.6E+03 S | 6.9E+03 S | U |
| 2-methylnaphthalene | U | U | U | U | U |
| hexachlorocyclopentadiene | U | U | U | U | U |
| 2,4,6-trichlorophenol | U | U | U | U | U |
| 2,4,5-trichlorophenol | U | U | U | U | U |
| 2-chloronaphthalene | U | U | U | U | U |
| 2-nitroaniline | U | U | U | U | U |
| dimethyl phthalate | U | U | U | U | U |
| 2,6-dinitrotoluene | U | U | U | U | U |
| acenaphthylene | U | U | U | U | U |
| 3-nitroaniline | U | U | U | U | U |
| acenaphthene | U | U | 3.1E+03 S | 3.2E+03 S | U |
| 2,4-dinitrophenol | U | U | U | U | U |
| 4-nitrophenol | U | U | 6.6E+03 S | 7.5E+03 S | U |
| dibenzofuran | U | U | U | U | U |

TARGET ANALYTE SUMMARY REPORT

EPA METHOD 8270, 3rd ED.


Sponsor: WESTINGHOUSE HANFORD COMPANY SET ID: S92- 0846-IJ

Results: ug/Kg

| Field No. | B07GM6 | B07GN0 | B07GN0MS | B07GN0MSD | METHOD BLANK |
|---|---|---|---|---|---|
| DataChem No. | EL4856 | EL4857 | EL4857MS | EL4857MD | |
| COMPOUND | | | | | |
| 2,4-dinitrotoluene | U | U | 3.5E+03 S | 3.9E+03 S | U |
| diethyl phthalate | U | U | U | U | U |
| 4-chlorophenyl-phenylether | U | U | U | U | U |
| fluorene | U | U | U | U | U |
| 4-nitroaniline | U | U | U | U | U |
| 2-methyl-4,6-dinitrophenol | U | U | U | U | U |
| N-nitroso-diphenylamine | U | U | U | U | U |
| 1,2-diphenylhydrazine | U | U | U | U | U |
| 4-bromophenyl-phenylether | U | U | U | U | U |
| .alpha.-BHC | U | U | U | U | U |
| beta-BHC | U | U | U | U | U |
| hexachlorobenzene | U | U | U | U | U |
| pentachlorophenol | U | U | 4.8E+03 S | 5.2E+03 S | U |
| .gamma.-BHC | U | U | U | U | U |
| phenanthrene | U | U | U | U | U |
| anthracene | U | U | U | U | U |
| delta-BHC | U | U | U | U | U |
| heptachlor | U | U | U | U | U |
| di-n-butyl phthalate | U | U | U | U | U |
| aldrin | U | U | U | U | U |
| heptachlor epoxide | U | U | U | U | U |
| fluoranthene | U | U | U | U | U |
| pyrene | U | U | 3.4E+03 S | 3.5E+03 S | U |
| endosulfan I | U | U | U | U | U |
| 4,4'DDE | U | U | U | U | U |
| dieldrin | U | U | U | U | U |
| endrin aldehyde | U | U | U | U | U |
| endrin | U | U | U | U | U |
| 4,4'DDD | U | U | U | U | U |
| endosulfan II | U | U | U | U | U |
| butylbenzylphthalate | U | U | U | U | U |
| 4,4'DDT | U | U | U | U | U |
| endosulfan sulfate | U | U | U | U | U |
| p,p'-methoxychlor | U | U | U | U | U |
| 3,3'-dichlorobenzidine | U | U | U | U | U |
| benzo(a)anthracene | U | U | U | U | U |
| bis(2-ethylhexyl)phthalate | U | U | U | U | U |
| chrysene | U | U | U | U | U |
| di-n-octylphthalate | U | U | U | U | U |

TARGET ANALYTE SUMMARY REPORT

EPA METHOD 8270, 3rd ED.


Sponsor: WESTINGHOUSE HANFORD COMPANY SET ID: S92- 0846-IJ

Results: ug/Kg

| Field No. | B07GM6 | B07GN0 | B07GN0MS | B07GN0MSD | METHOD BLANK |
|---|---|---|---|---|---|
| DataChem No. | EL4856 | EL4857 | EL4857MS | EL4857MD | |
| COMPOUND | | | | | |
| benzo(b)fluoranthene | U | U | U | U | U |
| benzo(k)fluoranthene | U | U | U | U | U |
| benzo(a)pyrene | U | U | U | U | U |
| indeno(1,2,3-cd)pyrene | U | U | U | U | U |
| dibenzo(a,h)anthracene | U | U | U | U | U |
| benzo(g,h,i)perylene | U | U | U | U | U |
| endrin ketone | U | U | U | U | U |
| 2-picoline | U | U | U | U | U |
| ethyl methanesulfonate | U | U | U | U | U |
| methyl methanesulfonate | U | U | U | U | U |
| aniline | U | U | U | U | U |
| acetophenone | U | U | U | U | U |
| N-nitroso-piperidine | U | U | U | U | U |
| a,a-dimethylphenethylamine | U | U | U | U | U |
| 2,6-dichlorophenol | U | U | U | U | U |
| N-nitroso-di-n-butylamine | U | U | U | U | U |
| 1,2,4,5-tetrachlorobenzene | U | U | U | U | U |
| 1-chloronaphthalene | U | U | U | U | U |
| pentachlorobenzene | U | U | U | U | U |
| 1-naphthylamine | U | U | U | U | U |
| 2,3,4,6-tetrachlorophenol | U | U | U | U | U |
| 2-naphthylamine | U | U | U | U | U |
| phenacetin | U | U | U | U | U |
| 4-aminobiphenyl | U | U | U | U | U |
| pronamide (propyzamide) | U | U | U | U | U |
| pentachloronitrobenzene | U | U | U | U | U |
| benzidine | U | U | U | U | U |
| p-dimethylaminoazobenzene | U | U | U | U | U |
| 7,12-dimethbenz(a)anthracene | U | U | U | U | U |
| 3-methylchloranthrene | U | U | U | U | U |
| chlordane | U | U | U | U | U |
| toxaphene | U | U | U | U | U |
| PCB-1016 | U | U | U | U | U |
| PCB-1221 | U | U | U | U | U |
| PCB-1232 | U | U | U | U | U |
| PCB-1242 | U | U | U | U | U |
| PCB-1248 | U | U | U | U | U |
| PCB-1254 | U | U | U | U | U |
| PCB-1260 | U | U | U | U | U |

TARGET ANALYTE SUMMARY REPORT

EPA METHOD 8270, 3rd ED.



Sponsor: WESTINGHOUSE HANFORD COMPANY SET ID: S92- 0846-IJ

Results: ug/Kg

| Field No. | B07GN1 | B07GN2 | B07GN4 | B07GN5 | METHOD BLANK |
|---|---|---|---|---|---|
| DataChem No. | EL4858 | EL4859 | EL4860 | EL4861 | |
| COMPOUND | | | | | |
| N-nitroso-dimethylamine | U | U | U | U | U |
| phenol | U | U | U | U | U |
| bis(2-chloroethyl)ether | U | U | U | U | U |
| 2-chlorophenol | U | U | U | U | U |
| 1,3-dichlorobenzene | U | U | U | U | U |
| 1,4-dichlorobenzene | U | U | U | U | U |
| benzyl alcohol | U | U | U | U | U |
| 1,2-dichlorobenzene | U | U | U | U | U |
| 2-methylphenol | U | U | U | U | U |
| bis(2-chloroisopropyl)ether | U | U | U | U | U |
| 4-methylphenol | U | U | U | U | U |
| N-nitroso-di-n-propylamine | U | U | U | U | U |
| hexachloroethane | U | U | U | U | U |
| nitrobenzene | U | U | U | U | U |
| isophorone | U | U | U | U | U |
| 2-nitrophenol | U | U | U | U | U |
| 2,4-dimethylphenol | U | U | U | U | U |
| bis(2-chloroethoxy)methane | U | U | U | U | U |
| benzoic acid | U | U | U | U | U |
| 2,4-dichlorophenol | U | U | U | U | U |
| 1,2,4-trichlorobenzene | U | U | U | U | U |
| naphthalene | U | U | U | U | U |
| 4-chloroaniline | U | U | U | U | U |
| hexachlorobutadiene | U | U | U | U | U |
| 4-chloro-3-methylphenol | U | U | U | U | U |
| 2-methylnaphthalene | U | U | U | U | U |
| hexachlorocyclopentadiene | U | U | U | U | U |
| 2,4,6-trichlorophenol | U | U | U | U | U |
| 2,4,5-trichlorophenol | U | U | U | U | U |
| 2-chloronaphthalene | U | U | U | U | U |
| 2-nitroaniline | U | U | U | U | U |
| dimethyl phthalate | U | U | U | U | U |
| 2,6-dinitrotoluene | U | U | U | U | U |
| acenaphthylene | U | U | U | U | U |
| 3-nitroaniline | U | U | U | U | U |
| acenaphthene | U | U | U | U | U |
| 2,4-dinitrophenol | U | U | U | U | U |
| 4-nitrophenol | U | U | U | U | U |
| dibenzofuran | U | U | U | U | U |

TARGET ANALYTE SUMMARY REPORT

EPA METHOD 8270, 3rd ED.



Sponsor: WESTINGHOUSE HANFORD COMPANY SET ID: S92- 0846-IJ

Results: ug/Kg

| Field No. | B07GN1 | B07GN2 | B07GN4 | B07GN5 | METHOD BLANK |
|---|---|---|---|---|---|
| DataChem No. | EL4858 | EL4859 | EL4860 | EL4861 | |
| COMPOUND | | | | | |
| 2,4-dinitrotoluene | U | U | U | U | U |
| diethyl phthalate | U | 9.7E+02 | U | U | U |
| 4-chlorophenyl-phenylether | U | U | U | U | U |
| fluorene | U | U | U | U | U |
| 4-nitroaniline | U | U | U | U | U |
| 2-methyl-4,6-dinitrophenol | U | U | U | U | U |
| N-nitroso-diphenylamine | U | U | U | U | U |
| 1,2-diphenylhydrazine | U | U | U | U | U |
| 4-bromophenyl-phenylether | U | U | U | U | U |
| .alpha.-BHC | U | U | U | U | U |
| beta-BHC | U | U | U | U | U |
| hexachlorobenzene | U | U | U | U | U |
| pentachlorophenol | U | U | U | U | U |
| .gamma.-BHC | U | U | U | U | U |
| phenanthrene | U | 9.5E+01 J | U | U | U |
| anthracene | U | U | U | U | U |
| delta-BHC | U | U | U | U | U |
| heptachlor | U | U | U | U | U |
| di-n-butyl phthalate | 5.4E+01 J | U | U | U | U |
| aldrin | U | U | U | U | U |
| heptachlor epoxide | U | U | U | U | U |
| fluoranthene | U | 2.2E+02 J | U | U | U |
| pyrene | U | 2.4E+02 J | U | U | U |
| endosulfan I | U | U | U | U | U |
| 4,4'DDE | U | U | U | U | U |
| dieldrin | U | U | U | U | U |
| endrin aldehyde | U | U | U | U | U |
| endrin | U | U | U | U | U |
| 4,4'DDD | U | U | U | U | U |
| endosulfan II | U | U | U | U | U |
| butylbenzylphthalate | U | U | U | U | U |
| 4,4'DDT | U | U | U | U | U |
| endosulfan sulfate | U | U | U | U | U |
| p,p'-methoxychlor | U | U | U | U | U |
| 3,3'-dichlorobenzidine | U | U | U | U | U |
| benzo(a)anthracene | U | 2.2E+02 J | U | U | U |
| bis(2-ethylhexyl)phthalate | U | U | U | U | U |
| chrysene | U | 3.1E+02 J | U | U | U |
| di-n-octylphthalate | U | U | U | U | U |

TARGET ANALYTE SUMMARY REPORT

EPA METHOD 8270, 3rd ED.


Sponsor: WESTINGHOUSE HANFORD COMPANY SET ID: S92- 0846-IJ

Results: ug/Kg

| Field No. | B07GN1 | B07GN2 | B07GN4 | B07GN5 | METHOD BLANK |
|---|---|---|---|---|---|
| DataChem No. | EL4858 | EL4859 | EL4860 | EL4861 | |
| COMPOUND | | | | | |
| benzo(b)fluoranthene | U | 4.0E+02 | U | U | U |
| benzo(k)fluoranthene | U | 3.4E+02 J | U | U | U |
| benzo(a)pyrene | U | 3.6E+02 | U | U | U |
| indeno(1,2,3-cd)pyrene | U | 3.9E+02 | U | U | U |
| dibenzo(a,h)anthracene | U | 1.4E+02 J | U | U | U |
| benzo(g,h,i)perylene | U | 4.5E+02 | U | U | U |
| endrin ketone | U | U | U | U | U |
| 2-picoline | U | U | U | U | U |
| ethyl methanesulfonate | U | U | U | U | U |
| methyl methanesulfonate | U | U | U | U | U |
| aniline | U | U | U | U | U |
| acetophenone | U | U | U | U | U |
| N-nitroso-piperidine | U | U | U | U | U |
| a,a-dimethylphenethylamine | U | U | U | U | U |
| 2,6-dichlorophenol | U | U | U | U | U |
| N-nitroso-di-n-butylamine | U | U | U | U | U |
| 1,2,4,5-tetrachlorobenzene | U | U | U | U | U |
| 1-chloronaphthalene | U | U | U | U | U |
| pentachlorobenzene | U | U | U | U | U |
| 1-naphthylamine | U | U | U | U | U |
| 2,3,4,6-tetrachlorophenol | U | U | U | U | U |
| 2-naphthylamine | U | U | U | U | U |
| phenacetin | U | U | U | U | U |
| 4-aminobiphenyl | U | U | U | U | U |
| pronamide (propyzamide) | U | U | U | U | U |
| pentachloronitrobenzene | U | U | U | U | U |
| benzidine | U | U | U | U | U |
| p-dimethylaminoazobenzene | U | U | U | U | U |
| 7,12-dimethbenz(a)anthracene | U | U | U | U | U |
| 3-methylchloranthrene | U | U | U | U | U |
| chlordane | U | U | U | U | U |
| toxaphene | U | U | U | U | U |
| PCB-1016 | U | U | U | U | U |
| PCB-1221 | U | U | U | U | U |
| PCB-1232 | U | U | U | U | U |
| PCB-1242 | U | U | U | U | U |
| PCB-1248 | U | U | U | U | U |
| PCB-1254 | U | U | U | U | U |
| PCB-1260 | U | U | U | U | U |

TARGET ANALYTE SUMMARY REPORT

EPA METHOD 8270, 3rd ED.



Sponsor: WESTINGHOUSE HANFORD COMPANY SET ID: S92- 0846-IJ

Results: ug/Kg

| Field No. | B07GN7 | B07GN8 | | | METHOD BLANK |
|---|---|---|---|---|---|
| DataChem No. | EL4862 | EL4863 | | | |
| COMPOUND | | | | | |
| N-nitroso-dimethylamine | U | U | U | U | U |
| phenol | U | U | U | U | U |
| bis(2-chloroethyl)ether | U | U | U | U | U |
| 2-chlorophenol | U | U | U | U | U |
| 1,3-dichlorobenzene | U | U | U | U | U |
| 1,4-dichlorobenzene | U | U | U | U | U |
| benzyl alcohol | U | U | U | U | U |
| 1,2-dichlorobenzene | U | U | U | U | U |
| 2-methylphenol | U | U | U | U | U |
| bis(2-chloroisopropyl)ether | U | U | U | U | U |
| 4-methylphenol | U | U | U | U | U |
| N-nitroso-di-n-propylamine | U | U | U | U | U |
| hexachloroethane | U | U | U | U | U |
| nitrobenzene | U | U | U | U | U |
| isophorone | U | U | U | U | U |
| 2-nitrophenol | U | U | U | U | U |
| 2,4-dimethylphenol | U | U | U | U | U |
| bis(2-chloroethoxy)methane | U | U | U | U | U |
| benzoic acid | U | U | U | U | U |
| 2,4-dichlorophenol | U | U | U | U | U |
| 1,2,4-trichlorobenzene | U | U | U | U | U |
| naphthalene | U | U | U | U | U |
| 4-chloroaniline | U | U | U | U | U |
| hexachlorobutadiene | U | U | U | U | U |
| 4-chloro-3-methylphenol | U | U | U | U | U |
| 2-methylnaphthalene | U | U | U | U | U |
| hexachlorocyclopentadiene | U | U | U | U | U |
| 2,4,6-trichlorophenol | U | U | U | U | U |
| 2,4,5-trichlorophenol | U | U | U | U | U |
| 2-chloronaphthalene | U | U | U | U | U |
| 2-nitroaniline | U | U | U | U | U |
| dimethyl phthalate | U | U | U | U | U |
| 2,6-dinitrotoluene | U | U | U | U | U |
| acenaphthylene | U | U | U | U | U |
| 3-nitroaniline | U | U | U | U | U |
| acenaphthene | U | U | U | U | U |
| 2,4-dinitrophenol | U | U | U | U | U |
| 4-nitrophenol | U | U | U | U | U |
| dibenzofuran | U | U | U | U | U |

TARGET ANALYTE SUMMARY REPORT

EPA METHOD 8270, 3rd ED.


Sponsor: WESTINGHOUSE HANFORD COMPANY SET ID: S92- 0846-IJ

Results: ug/Kg

| Field No. | B07GN7 | B07GN8 | | | METHOD BLANK |
|---|---|---|---|---|---|
| DataChem No. | EL4862 | EL4863 | | | |
| COMPOUND | | | | | |
| 2,4-dinitrotoluene | U | U | U | U | U |
| diethyl phthalate | U | U | U | U | U |
| 4-chlorophenyl-phenylether | U | U | U | U | U |
| fluorene | U | U | U | U | U |
| 4-nitroaniline | U | U | U | U | U |
| 2-methyl-4,6-dinitrophenol | U | U | U | U | U |
| N-nitroso-diphenylamine | U | U | U | U | U |
| 1,2-diphenylhydrazine | U | U | U | U | U |
| 4-bromophenyl-phenylether | U | U | U | U | U |
| .alpha.-BHC | U | U | U | U | U |
| beta-BHC | U | U | U | U | U |
| hexachlorobenzene | U | U | U | U | U |
| pentachlorophenol | U | U | U | U | U |
| .gamma.-BHC | U | U | U | U | U |
| phenanthrene | U | U | U | U | U |
| anthracene | U | U | U | U | U |
| delta-BHC | U | U | U | U | U |
| heptachlor | U | U | U | U | U |
| di-n-butyl phthalate | U | U | U | U | U |
| aldrin | U | U | U | U | U |
| heptachlor epoxide | U | U | U | U | U |
| fluoranthene | U | U | U | U | U |
| pyrene | U | U | U | U | U |
| endosulfan I | U | U | U | U | U |
| 4,4'DDE | U | U | U | U | U |
| dieldrin | U | U | U | U | U |
| endrin aldehyde | U | U | U | U | U |
| endrin | U | U | U | U | U |
| 4,4'DDD | U | U | U | U | U |
| endosulfan II | U | U | U | U | U |
| butylbenzylphthalate | U | U | U | U | U |
| 4,4'DDT | U | U | U | U | U |
| endosulfan sulfate | U | U | U | U | U |
| p,p'-methoxychlor | U | U | U | U | U |
| 3,3'-dichlorobenzidine | U | U | U | U | U |
| benzo(a)anthracene | U | U | U | U | U |
| bis(2-ethylhexyl)phthalate | U | U | U | U | U |
| chrysene | U | U | U | U | U |
| di-n-octylphthalate | U | U | U | U | U |

TARGET ANALYTE SUMMARY REPORT

EPA METHOD 8270, 3rd ED.


Sponsor: WESTINGHOUSE HANFORD COMPANY SET ID: S92- 0846-IJ

Results: ug/Kg

| Field No. | B07GN7 | B07GN8 | | | METHOD BLANK |
|---|---|---|---|---|---|
| DataChem No. | EL4862 | EL4863 | | | |
| COMPOUND | | | | | |
| benzo(b)fluoranthene | U | U | U | U | U |
| benzo(k)fluoranthene | U | U | U | U | U |
| benzo(a)pyrene | U | U | U | U | U |
| indeno(1,2,3-cd)pyrene | U | U | U | U | U |
| dibenzo(a,h)anthracene | U | U | U | U | U |
| benzo(g,h,i)perylene | U | U | U | U | U |
| endrin ketone | U | U | U | U | U |
| 2-picoline | U | U | U | U | U |
| ethyl methanesulfonate | U | U | U | U | U |
| methyl methanesulfonate | U | U | U | U | U |
| aniline | U | U | U | U | U |
| acetophenone | U | U | U | U | U |
| N-nitroso-piperidine | U | U | U | U | U |
| a,a-dimethylphenethylamine | U | U | U | U | U |
| 2,6-dichlorophenol | U | U | U | U | U |
| N-nitroso-di-n-butylamine | U | U | U | U | U |
| 1,2,4,5-tetrachlorobenzene | U | U | U | U | U |
| 1-chloronaphthalene | U | U | U | U | U |
| pentachlorobenzene | U | U | U | U | U |
| 1-naphthylamine | U | U | U | U | U |
| 2,3,4,6-tetrachlorophenol | U | U | U | U | U |
| 2-naphthylamine | U | U | U | U | U |
| phenacetin | U | U | U | U | U |
| 4-aminobiphenyl | U | U | U | U | U |
| pronamide (propyzamide) | U | U | U | U | U |
| pentachloronitrobenzene | U | U | U | U | U |
| benzidine | U | U | U | U | U |
| p-dimethylaminoazobenzene | U | U | U | U | U |
| 7,12-dimethbenz(a)anthracene | U | U | U | U | U |
| 3-methylchloranthrene | U | U | U | U | U |
| chlordane | U | U | U | U | U |
| toxaphene | U | U | U | U | U |
| PCB-1016 | U | U | U | U | U |
| PCB-1221 | U | U | U | U | U |
| PCB-1232 | U | U | U | U | U |
| PCB-1242 | U | U | U | U | U |
| PCB-1248 | U | U | U | U | U |
| PCB-1254 | U | U | U | U | U |
| PCB-1260 | U | U | U | U | U |

ANALYTICAL REPORT FOR SAMPLE No.: EL4856



EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Sponsor: WESTINGHOUSE HANFORD DCL SET ID: S92-0846-IJ

File ID: FP4EL4856 Date Extracted: 11/04/92

FIELD No.:B07GM6 Analysis Date: 11/28/92

| Cas. No | COMPOUND | QLFR | RESULTS ug/Kg |
|---|---|---|---|
| 62-75-9 | N-nitroso-dimethylamine | U | 1.2E+03 |
| 108-95-2 | phenol | U | 3.9E+02 |
| 111-44-4 | bis(2-chloroethyl)ether | U | 3.9E+02 |
| 95-57-8 | 2-chlorophenol | U | 3.9E+02 |
| 541-73-1 | 1,3-dichlorobenzene | U | 3.9E+02 |
| 106-46-7 | 1,4-dichlorobenzene | U | 3.9E+02 |
| 100-51-6 | benzyl alcohol | U | 1.2E+03 |
| 95-50-1 | 1,2-dichlorobenzene | U | 3.9E+02 |
| 95-48-7 | 2-methylphenol | U | 3.9E+02 |
| 39638-329 | bis(2-chloroisopropyl)ether | U | 3.9E+02 |
| 106-44-5 | 4-methylphenol | U | 3.9E+02 |
| 621-64-7 | N-nitroso-di-n-propylamine | U | 3.9E+02 |
| 67-72-1 | hexachloroethane | U | 3.9E+02 |
| 98-95-3 | nitrobenzene | U | 3.9E+02 |
| 78-59-1 | isophorone | U | 3.9E+02 |
| 88-75-5 | 2-nitrophenol | U | 3.9E+02 |
| 105-67-9 | 2,4-dimethylphenol | U | 3.9E+02 |
| 111-91-1 | bis(2-chloroethoxy)methane | U | 3.9E+02 |
| 65-85-0 | benzoic acid | U | 1.2E+03 |
| 120-83-2 | 2,4-dichlorophenol | U | 3.9E+02 |
| 120-82-1 | 1,2,4-trichlorobenzene | U | 3.9E+02 |
| 91-20-3 | naphthalene | U | 3.9E+02 |
| 106-47-8 | 4-chloroaniline | U | 3.9E+02 |
| 87-68-3 | hexachlorobutadiene | U | 3.9E+02 |
| 59-50-7 | 4-chloro-3-methylphenol | U | 3.9E+02 |
| 91-57-6 | 2-methylnaphthalene | U | 3.9E+02 |
| 77-47-4 | hexachlorocyclopentadiene | U | 3.9E+02 |
| 88-06-2 | 2,4,6-trichlorophenol | U | 3.9E+02 |
| 95-95-4 | 2,4,5-trichlorophenol | U | 9.5E+02 |
| 91-58-7 | 2-chloronaphthalene | U | 3.9E+02 |
| 88-74-4 | 2-nitroaniline | U | 9.5E+02 |
| 131-11-3 | dimethyl phthalate | U | 3.9E+02 |
| 606-20-2 | 2,6-dinitrotoluene | U | 3.9E+02 |
| 208-96-8 | acenaphthylene | U | 3.9E+02 |
| 99-09-2 | 3-nitroaniline | U | 9.5E+02 |
| 83-32-9 | acenaphthene | U | 3.9E+02 |
| 51-28-5 | 2,4-dinitrophenol | U | 9.5E+02 |
| 100-02-7 | 4-nitrophenol | U | 9.5E+02 |
| 132-64-9 | dibenzofuran | U | 3.9E+02 |

See footnotes on page 4.

ANALYTICAL REPORT FOR SAMPLE No.: EL4856



EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Field Sample ID:B07GM6

| Cas. No | COMPOUND | QLFR | RESULTS ug/Kg |
|---|---|---|---|
| 121-14-2 | 2,4-dinitrotoluene | U | 3.9E+02 |
| 84-66-2 | diethyl phthalate | U | 3.9E+02 |
| 7005-72-3 | 4-chlorophenyl-phenylether | U | 3.9E+02 |
| 86-73-7 | fluorene | U | 3.9E+02 |
| 100-01-6 | 4-nitroaniline | U | 9.5E+02 |
| 534-52-1 | 2-methyl-4,6-dinitrophenol | U | 9.5E+02 |
| 86-30-6 | N-nitroso-diphenylamine | U | 3.9E+02 |
| 122-66-7 | 1,2-diphenylhydrazine | U | 1.2E+03 |
| 101-55-3 | 4-bromophenyl-phenylether | U | 3.9E+02 |
| 319-84-6 | .alpha.-BHC | U | 1.2E+03 |
| 319-85-7 | beta-BHC | U | 6.0E+03 |
| 118-74-1 | hexachlorobenzene | U | 3.9E+02 |
| 87-86-5 | pentachlorophenol | U | 9.5E+02 |
| 58-89-9 | .gamma.-BHC | U | 1.2E+03 |
| 85-01-8 | phenanthrene | U | 3.9E+02 |
| 120-12-7 | anthracene | U | 3.9E+02 |
| 319-86-8 | delta-BHC | U | 6.0E+03 |
| 76-44-8 | heptachlor | U | 6.0E+03 |
| 84-74-2 | di-n-butyl phthalate | U | 3.9E+02 |
| 309-00-2 | aldrin | U | 6.0E+03 |
| 1024-57-3 | heptachlor epoxide | U | 6.0E+03 |
| 206-44-0 | fluoranthene | U | 3.9E+02 |
| 129-00-0 | pyrene | U | 3.9E+02 |
| 959-98-8 | endosulfan I | U | 6.0E+03 |
| 72-55-9 | 4,4'DDE | U | 6.0E+03 |
| 60-57-1 | dieldrin | U | 6.0E+03 |
| 7421-93-4 | endrin aldehyde | U | 6.0E+03 |
| 72-20-8 | endrin | U | 6.0E+03 |
| 72-54-8 | 4,4'DDD | U | 6.0E+03 |
| 33213-65-9 | endosulfan II | U | 6.0E+03 |
| 85-68-7 | butylbenzylphthalate | U | 3.9E+02 |
| 50-29-3 | 4,4'DDT | U | 6.0E+03 |
| 1031-07-8 | endosulfan sulfate | U | 6.0E+03 |
| 72-43-5 | p,p'-methoxychlor | U | 1.2E+03 |
| 91-94-1 | 3,3'-dichlorobenzidine | U | 1.2E+03 |
| 56-55-3 | benzo(a)anthracene | U | 3.9E+02 |
| 117-81-7 | bis(2-ethylhexyl)phthalate | U | 3.9E+02 |
| 218-01-9 | chrysene | U | 3.9E+02 |
| 117-84-0 | di-n-octylphthalate | U | 3.9E+02 |

See footnotes on page 4.

ANALYTICAL REPORT FOR SAMPLE No.: EL4856



EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Field Sample ID:B07GM6

| Cas. No | COMPOUND | QLFR | RESULTS ug/Kg |
|---|---|---|---|
| 205-99-2 | benzo(b)fluoranthene | U | 3.9E+02 |
| 207-08-9 | benzo(k)fluoranthene | U | 3.9E+02 |
| 50-32-8 | benzo(a)pyrene | U | 3.9E+02 |
| 193-39-5 | indeno(1,2,3-cd)pyrene | U | 3.9E+02 |
| 53-70-3 | dibenzo(a,h)anthracene | U | 3.9E+02 |
| 191-24-2 | benzo(g,h,i)perylene | U | 3.9E+02 |
| 53494-70-5 | endrin ketone | U | 1.2E+03 |
| 109-06-8 | 2-picoline | U | 1.2E+03 |
| 62-50-0 | ethyl methanesulfonate | U | 1.2E+03 |
| 66-27-3 | methyl methanesulfonate | U | 1.2E+03 |
| 62-53-3 | aniline | U | 1.2E+03 |
| 98-86-2 | acetophenone | U | 1.2E+03 |
| 100-75-4 | N-nitroso-piperidine | U | 1.2E+03 |
| 122-09-8 | a,a-dimethylphenethylamine | U | 1.2E+03 |
| 87-65-0 | 2,6-dichlorophenol | U | 1.2E+03 |
| 924-16-3 | N-nitroso-di-n-butylamine | U | 1.2E+03 |
| 95-94-3 | 1,2,4,5-tetrachlorobenzene | U | 1.2E+03 |
| 90-13-1 | 1-chloronaphthalene | U | 1.2E+03 |
| 608-93-5 | pentachlorobenzene | U | 1.2E+03 |
| 134-32-7 | 1-naphthylamine | U | 1.2E+03 |
| 58-90-2 | 2,3,4,6-tetrachlorophenol | U | 1.2E+03 |
| 91-59-8 | 2-naphthylamine | U | 1.2E+03 |
| 62-44-2 | phenacetin | U | 1.2E+03 |
| 92-67-1 | 4-aminobiphenyl | U | 1.2E+03 |
| 23950-58-5 | pronamide (propyzamide) | U | 1.2E+03 |
| 82-68-8 | pentachloronitrobenzene | U | 1.2E+03 |
| 92-87-5 | benzidine | U | 1.2E+03 |
| 60-11-7 | p-dimethylaminoazobenzene | U | 1.2E+03 |
| 57-97-6 | 7,12-dimethbenz(a)anthracene | U | 1.2E+03 |
| 56-49-5 | 3-methylchloranthrene | U | 1.2E+03 |
| 57-74-9 | chlordane | U | 1.2E+04 |
| 8001-35-2 | toxaphene | U | 1.2E+04 |
| 12674-11-2 | PCB-1016 | U | 1.2E+04 |
| 11104-28-2 | PCB-1221 | U | 1.2E+04 |
| 11141-16-5 | PCB-1232 | U | 1.2E+04 |
| 53469-21-9 | PCB-1242 | U | 1.2E+04 |
| 12672-29-6 | PCB-1248 | U | 1.2E+04 |
| 11097-69-1 | PCB-1254 | U | 1.2E+04 |
| 11096-82-5 | PCB-1260 | U | 1.2E+04 |

See footnotes on page 4

ANALYTICAL REPORT FOR SAMPLE No.: EL4856



NON-TARGET ANALYTE RESULTS
Additional Semi-Volatiles

SET ID: S92-0846-IJ

Field samp ID: B07GM6

| Cas. No | COMPOUND | Scan No. | Results ug/Kg | Qlfr |
|---|---|---|---|---|
| 0-00-0 | ALDOL CONDENSATION PRODUCT | 527 | 2.3E+02 | ENA |
| 0-00-0 | ALDOL CONDENSATION PRODUCT | 573 | 6.2E+02 | ENAB |
| 0-00-0 | BROMOFLUOROBENZENE | 818 | 2.6E+02 | EN |

B The analyte was found in the method blank.
E The reported concentration is an estimate only. The response factor was assumed to be 1.000 relative to an internal standard.
J Indicates an estimated concentration below the Method Detection Limit.
K The isomer is unknown.
N Analytical standards were not analyzed for this compound.
U Not detected.
W The identification is tentative or closely related to the compound.

ANALYTICAL REPORT FOR SAMPLE No.: EL4857



EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Sponsor: WESTINGHOUSE HANFORD DCL SET ID: S92-0846-IJ

File ID: FP5EL4857 Date Extracted: 11/04/92

FIELD No.:B07GN0 Analysis Date: 11/28/92

| Cas. No | COMPOUND | QLFR | RESULTS ug/Kg |
|---|---|---|---|
| 62-75-9 | N-nitroso-dimethylamine | U | 1.1E+03 |
| 108-95-2 | phenol | U | 3.8E+02 |
| 111-44-4 | bis(2-chloroethyl)ether | U | 3.8E+02 |
| 95-57-8 | 2-chlorophenol | U | 3.8E+02 |
| 541-73-1 | 1,3-dichlorobenzene | U | 3.8E+02 |
| 106-46-7 | 1,4-dichlorobenzene | U | 3.8E+02 |
| 100-51-6 | benzyl alcohol | U | 1.1E+03 |
| 95-50-1 | 1,2-dichlorobenzene | U | 3.8E+02 |
| 95-48-7 | 2-methylphenol | U | 3.8E+02 |
| 39638-329 | bis(2-chloroisopropyl)ether | U | 3.8E+02 |
| 106-44-5 | 4-methylphenol | U | 3.8E+02 |
| 621-64-7 | N-nitroso-di-n-propylamine | U | 3.8E+02 |
| 67-72-1 | hexachloroethane | U | 3.8E+02 |
| 98-95-3 | nitrobenzene | U | 3.8E+02 |
| 78-59-1 | isophorone | U | 3.8E+02 |
| 88-75-5 | 2-nitrophenol | U | 3.8E+02 |
| 105-67-9 | 2,4-dimethylphenol | U | 3.8E+02 |
| 111-91-1 | bis(2-chloroethoxy)methane | U | 3.8E+02 |
| 65-85-0 | benzoic acid | U | 1.1E+03 |
| 120-83-2 | 2,4-dichlorophenol | U | 3.8E+02 |
| 120-82-1 | 1,2,4-trichlorobenzene | U | 3.8E+02 |
| 91-20-3 | naphthalene | U | 3.8E+02 |
| 106-47-8 | 4-chloroaniline | U | 3.8E+02 |
| 87-68-3 | hexachlorobutadiene | U | 3.8E+02 |
| 59-50-7 | 4-chloro-3-methylphenol | U | 3.8E+02 |
| 91-57-6 | 2-methylnaphthalene | U | 3.8E+02 |
| 77-47-4 | hexachlorocyclopentadiene | U | 3.8E+02 |
| 88-06-2 | 2,4,6-trichlorophenol | U | 3.8E+02 |
| 95-95-4 | 2,4,5-trichlorophenol | U | 9.1E+02 |
| 91-58-7 | 2-chloronaphthalene | U | 3.8E+02 |
| 88-74-4 | 2-nitroaniline | U | 9.1E+02 |
| 131-11-3 | dimethyl phthalate | U | 3.8E+02 |
| 606-20-2 | 2,6-dinitrotoluene | U | 3.8E+02 |
| 208-96-8 | acenaphthylene | U | 3.8E+02 |
| 99-09-2 | 3-nitroaniline | U | 9.1E+02 |
| 83-32-9 | acenaphthene | U | 3.8E+02 |
| 51-28-5 | 2,4-dinitrophenol | U | 9.1E+02 |
| 100-02-7 | 4-nitrophenol | U | 9.1E+02 |
| 132-64-9 | dibenzofuran | U | 3.8E+02 |

See footnotes on page 4.

ANALYTICAL REPORT FOR SAMPLE No.: EL4857



EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Field Sample ID:B07GN0

| Cas. No | COMPOUND | QLFR | RESULTS ug/Kg |
|---|---|---|---|
| 121-14-2 | 2,4-dinitrotoluene | U | 3.8E+02 |
| 84-66-2 | diethyl phthalate | U | 3.8E+02 |
| 7005-72-3 | 4-chlorophenyl-phenylether | U | 3.8E+02 |
| 86-73-7 | fluorene | U | 3.8E+02 |
| 100-01-6 | 4-nitroaniline | U | 9.1E+02 |
| 534-52-1 | 2-methyl-4,6-dinitrophenol | U | 9.1E+02 |
| 86-30-6 | N-nitroso-diphenylamine | U | 3.8E+02 |
| 122-66-7 | 1,2-diphenylhydrazine | U | 1.1E+03 |
| 101-55-3 | 4-bromophenyl-phenylether | U | 3.8E+02 |
| 319-84-6 | .alpha.-BHC | U | 1.1E+03 |
| 319-85-7 | beta-BHC | U | 5.7E+03 |
| 118-74-1 | hexachlorobenzene | U | 3.8E+02 |
| 87-86-5 | pentachlorophenol | U | 9.1E+02 |
| 58-89-9 | .gamma.-BHC | U | 1.1E+03 |
| 85-01-8 | phenanthrene | U | 3.8E+02 |
| 120-12-7 | anthracene | U | 3.8E+02 |
| 319-86-8 | delta-BHC | U | 5.7E+03 |
| 76-44-8 | heptachlor | U | 5.7E+03 |
| 84-74-2 | di-n-butyl phthalate | U | 3.8E+02 |
| 309-00-2 | aldrin | U | 5.7E+03 |
| 1024-57-3 | heptachlor epoxide | U | 5.7E+03 |
| 206-44-0 | fluoranthene | U | 3.8E+02 |
| 129-00-0 | pyrene | U | 3.8E+02 |
| 959-98-8 | endosulfan I | U | 5.7E+03 |
| 72-55-9 | 4,4'DDE | U | 5.7E+03 |
| 60-57-1 | dieldrin | U | 5.7E+03 |
| 7421-93-4 | endrin aldehyde | U | 5.7E+03 |
| 72-20-8 | endrin | U | 5.7E+03 |
| 72-54-8 | 4,4'DDD | U | 5.7E+03 |
| 33213-65-9 | endosulfan II | U | 5.7E+03 |
| 85-68-7 | butylbenzylphthalate | U | 3.8E+02 |
| 50-29-3 | 4,4'DDT | U | 5.7E+03 |
| 1031-07-8 | endosulfan sulfate | U | 5.7E+03 |
| 72-43-5 | p,p'-methoxychlor | U | 1.1E+03 |
| 91-94-1 | 3,3'-dichlorobenzidine | U | 1.1E+03 |
| 56-55-3 | benzo(a)anthracene | U | 3.8E+02 |
| 117-81-7 | bis(2-ethylhexyl)phthalate | U | 3.8E+02 |
| 218-01-9 | chrysene | U | 3.8E+02 |
| 117-84-0 | di-n-octylphthalate | U | 3.8E+02 |

See footnotes on page 4.

ANALYTICAL REPORT FOR SAMPLE No.: EL4857



EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Field Sample ID:B07GN0

| Cas. No | COMPOUND | QLFR | RESULTS ug/Kg |
|---|---|---|---|
| 205-99-2 | benzo(b)fluoranthene | U | 3.8E+02 |
| 207-08-9 | benzo(k)fluoranthene | U | 3.8E+02 |
| 50-32-8 | benzo(a)pyrene | U | 3.8E+02 |
| 193-39-5 | indeno(1,2,3-cd)pyrene | U | 3.8E+02 |
| 53-70-3 | dibenzo(a,h)anthracene | U | 3.8E+02 |
| 191-24-2 | benzo(g,h,i)perylene | U | 3.8E+02 |
| 53494-70-5 | endrin ketone | U | 1.1E+03 |
| 109-06-8 | 2-picoline | U | 1.1E+03 |
| 62-50-0 | ethyl methanesulfonate | U | 1.1E+03 |
| 66-27-3 | methyl methanesulfonate | U | 1.1E+03 |
| 62-53-3 | aniline | U | 1.1E+03 |
| 98-86-2 | acetophenone | U | 1.1E+03 |
| 100-75-4 | N-nitroso-piperidine | U | 1.1E+03 |
| 122-09-8 | a,a-dimethylphenethylamine | U | 1.1E+03 |
| 87-65-0 | 2,6-dichlorophenol | U | 1.1E+03 |
| 924-16-3 | N-nitroso-di-n-butylamine | U | 1.1E+03 |
| 95-94-3 | 1,2,4,5-tetrachlorobenzene | U | 1.1E+03 |
| 90-13-1 | 1-chloronaphthalene | U | 1.1E+03 |
| 608-93-5 | pentachlorobenzene | U | 1.1E+03 |
| 134-32-7 | 1-naphthylamine | U | 1.1E+03 |
| 58-90-2 | 2,3,4,6-tetrachlorophenol | U | 1.1E+03 |
| 91-59-8 | 2-naphthylamine | U | 1.1E+03 |
| 62-44-2 | phenacetin | U | 1.1E+03 |
| 92-67-1 | 4-aminobiphenyl | U | 1.1E+03 |
| 23950-58-5 | pronamide (propyzamide) | U | 1.1E+03 |
| 82-68-8 | pentachloronitrobenzene | U | 1.1E+03 |
| 92-87-5 | benzidine | U | 1.1E+03 |
| 60-11-7 | p-dimethylaminoazobenzene | U | 1.1E+03 |
| 57-97-6 | 7,12-dimethbenz(a)anthracene | U | 1.1E+03 |
| 56-49-5 | 3-methylchloranthrene | U | 1.1E+03 |
| 57-74-9 | chlordane | U | 1.1E+04 |
| 8001-35-2 | toxaphene | U | 1.1E+04 |
| 12674-11-2 | PCB-1016 | U | 1.1E+04 |
| 11104-28-2 | PCB-1221 | U | 1.1E+04 |
| 11141-16-5 | PCB-1232 | U | 1.1E+04 |
| 53469-21-9 | PCB-1242 | U | 1.1E+04 |
| 12672-29-6 | PCB-1248 | U | 1.1E+04 |
| 11097-69-1 | PCB-1254 | U | 1.1E+04 |
| 11096-82-5 | PCB-1260 | U | 1.1E+04 |

See footnotes on page 4

ANALYTICAL REPORT FOR SAMPLE No.: EL4857



NON-TARGET ANALYTE RESULTS
Additional Semi-Volatiles

SET ID: S92-0846-IJ

Field samp ID: B07GN0

| Cas. No | COMPOUND | Scan No. | Results ug/Kg | Qlfr |
|---|---|---|---|---|
| 0-00-0 | ALDOL CONDENSATION PRODUCT | 521 | 2.2E+02 | ENA |
| 0-00-0 | ALDOL CONDENSATION PRODUCT | 569 | 7.5E+02 | ENAB |
| 0-00-0 | ALDOL CONDENSATION PRODUCT | 633 | 3.3E+02 | ENA |

B The analyte was found in the method blank.
E The reported concentration is an estimate only. The response factor was assumed to be 1.000 relative to an internal standard.
J Indicates an estimated concentration below the Method Detection Limit.
K The isomer is unknown.
N Analytical standards were not analyzed for this compound.
U Not detected.
W The identification is tentative or closely related to the compound.

ANALYTICAL REPORT FOR SAMPLE No.: EL4858



EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Sponsor: WESTINGHOUSE HANFORD DCL SET ID: S92-0846-IJ

File ID: FP8EL4858 Date Extracted: 11/04/92

FIELD No.:B07GN1 Analysis Date: 11/29/92

| Cas. No | COMPOUND | QLFR | RESULTS ug/Kg |
|---|---|---|---|
| 62-75-9 | N-nitroso-dimethylamine | U | 1.1E+03 |
| 108-95-2 | phenol | U | 3.7E+02 |
| 111-44-4 | bis(2-chloroethyl)ether | U | 3.7E+02 |
| 95-57-8 | 2-chlorophenol | U | 3.7E+02 |
| 541-73-1 | 1,3-dichlorobenzene | U | 3.7E+02 |
| 106-46-7 | 1,4-dichlorobenzene | U | 3.7E+02 |
| 100-51-6 | benzyl alcohol | U | 1.1E+03 |
| 95-50-1 | 1,2-dichlorobenzene | U | 3.7E+02 |
| 95-48-7 | 2-methylphenol | U | 3.7E+02 |
| 39638-329 | bis(2-chloroisopropyl)ether | U | 3.7E+02 |
| 106-44-5 | 4-methylphenol | U | 3.7E+02 |
| 621-64-7 | N-nitroso-di-n-propylamine | U | 3.7E+02 |
| 67-72-1 | hexachloroethane | U | 3.7E+02 |
| 98-95-3 | nitrobenzene | U | 3.7E+02 |
| 78-59-1 | isophorone | U | 3.7E+02 |
| 88-75-5 | 2-nitrophenol | U | 3.7E+02 |
| 105-67-9 | 2,4-dimethylphenol | U | 3.7E+02 |
| 111-91-1 | bis(2-chloroethoxy)methane | U | 3.7E+02 |
| 65-85-0 | benzoic acid | U | 1.1E+03 |
| 120-83-2 | 2,4-dichlorophenol | U | 3.7E+02 |
| 120-82-1 | 1,2,4-trichlorobenzene | U | 3.7E+02 |
| 91-20-3 | naphthalene | U | 3.7E+02 |
| 106-47-8 | 4-chloroaniline | U | 3.7E+02 |
| 87-68-3 | hexachlorobutadiene | U | 3.7E+02 |
| 59-50-7 | 4-chloro-3-methylphenol | U | 3.7E+02 |
| 91-57-6 | 2-methylnaphthalene | U | 3.7E+02 |
| 77-47-4 | hexachlorocyclopentadiene | U | 3.7E+02 |
| 88-06-2 | 2,4,6-trichlorophenol | U | 3.7E+02 |
| 95-95-4 | 2,4,5-trichlorophenol | U | 9.0E+02 |
| 91-58-7 | 2-chloronaphthalene | U | 3.7E+02 |
| 88-74-4 | 2-nitroaniline | U | 9.0E+02 |
| 131-11-3 | dimethyl phthalate | U | 3.7E+02 |
| 606-20-2 | 2,6-dinitrotoluene | U | 3.7E+02 |
| 208-96-8 | acenaphthylene | U | 3.7E+02 |
| 99-09-2 | 3-nitroaniline | U | 9.0E+02 |
| 83-32-9 | acenaphthene | U | 3.7E+02 |
| 51-28-5 | 2,4-dinitrophenol | U | 9.0E+02 |
| 100-02-7 | 4-nitrophenol | U | 9.0E+02 |
| 132-64-9 | dibenzofuran | U | 3.7E+02 |

See footnotes on page 4.

ANALYTICAL REPORT FOR SAMPLE No.: EL4858



EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Field Sample ID:B07GN1

| Cas. No | COMPOUND | QLFR | RESULTS ug/Kg |
|---|---|---|---|
| 121-14-2 | 2,4-dinitrotoluene | U | 3.7E+02 |
| 84-66-2 | diethyl phthalate | U | 3.7E+02 |
| 7005-72-3 | 4-chlorophenyl-phenylether | U | 3.7E+02 |
| 86-73-7 | fluorene | U | 3.7E+02 |
| 100-01-6 | 4-nitroaniline | U | 9.0E+02 |
| 534-52-1 | 2-methyl-4,6-dinitrophenol | U | 9.0E+02 |
| 86-30-6 | N-nitroso-diphenylamine | U | 3.7E+02 |
| 122-66-7 | 1,2-diphenylhydrazine | U | 1.1E+03 |
| 101-55-3 | 4-bromophenyl-phenylether | U | 3.7E+02 |
| 319-84-6 | .alpha.-BHC | U | 1.1E+03 |
| 319-85-7 | beta-BHC | U | 5.6E+03 |
| 118-74-1 | hexachlorobenzene | U | 3.7E+02 |
| 87-86-5 | pentachlorophenol | U | 9.0E+02 |
| 58-89-9 | .gamma.-BHC | U | 1.1E+03 |
| 85-01-8 | phenanthrene | U | 3.7E+02 |
| 120-12-7 | anthracene | U | 3.7E+02 |
| 319-86-8 | delta-BHC | U | 5.6E+03 |
| 76-44-8 | heptachlor | U | 5.6E+03 |
| 84-74-2 | di-n-butyl phthalate | J | 5.4E+01 |
| 309-00-2 | aldrin | U | 5.6E+03 |
| 1024-57-3 | heptachlor epoxide | U | 5.6E+03 |
| 206-44-0 | fluoranthene | U | 3.7E+02 |
| 129-00-0 | pyrene | U | 3.7E+02 |
| 959-98-8 | endosulfan I | U | 5.6E+03 |
| 72-55-9 | 4,4'DDE | U | 5.6E+03 |
| 60-57-1 | dieldrin | U | 5.6E+03 |
| 7421-93-4 | endrin aldehyde | U | 5.6E+03 |
| 72-20-8 | endrin | U | 5.6E+03 |
| 72-54-8 | 4,4'DDD | U | 5.6E+03 |
| 33213-65-9 | endosulfan II | U | 5.6E+03 |
| 85-68-7 | butylbenzylphthalate | U | 3.7E+02 |
| 50-29-3 | 4,4'DDT | U | 5.6E+03 |
| 1031-07-8 | endosulfan sulfate | U | 5.6E+03 |
| 72-43-5 | p,p'-methoxychlor | U | 1.1E+03 |
| 91-94-1 | 3,3'-dichlorobenzidine | U | 1.1E+03 |
| 56-55-3 | benzo(a)anthracene | U | 3.7E+02 |
| 117-81-7 | bis(2-ethylhexyl)phthalate | U | 3.7E+02 |
| 218-01-9 | chrysene | U | 3.7E+02 |
| 117-84-0 | di-n-octylphthalate | U | 3.7E+02 |

See footnotes on page 4.

ANALYTICAL REPORT FOR SAMPLE No.: EL4858



EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Field Sample ID:B07GN1

| Cas. No | COMPOUND | QLFR | RESULTS ug/Kg |
|---|---|---|---|
| 205-99-2 | benzo(b)fluoranthene | U | 3.7E+02 |
| 207-08-9 | benzo(k)fluoranthene | U | 3.7E+02 |
| 50-32-8 | benzo(a)pyrene | U | 3.7E+02 |
| 193-39-5 | indeno(1,2,3-cd)pyrene | U | 3.7E+02 |
| 53-70-3 | dibenzo(a,h)anthracene | U | 3.7E+02 |
| 191-24-2 | benzo(g,h,i)perylene | U | 3.7E+02 |
| 53494-70-5 | endrin ketone | U | 1.1E+03 |
| 109-06-8 | 2-picoline | U | 1.1E+03 |
| 62-50-0 | ethyl methanesulfonate | U | 1.1E+03 |
| 66-27-3 | methyl methanesulfonate | U | 1.1E+03 |
| 62-53-3 | aniline | U | 1.1E+03 |
| 98-86-2 | acetophenone | U | 1.1E+03 |
| 100-75-4 | N-nitroso-piperidine | U | 1.1E+03 |
| 122-09-8 | a,a-dimethylphenethylamine | U | 1.1E+03 |
| 87-65-0 | 2,6-dichlorophenol | U | 1.1E+03 |
| 924-16-3 | N-nitroso-di-n-butylamine | U | 1.1E+03 |
| 95-94-3 | 1,2,4,5-tetrachlorobenzene | U | 1.1E+03 |
| 90-13-1 | 1-chloronaphthalene | U | 1.1E+03 |
| 608-93-5 | pentachlorobenzene | U | 1.1E+03 |
| 134-32-7 | 1-naphthylamine | U | 1.1E+03 |
| 58-90-2 | 2,3,4,6-tetrachlorophenol | U | 1.1E+03 |
| 91-59-8 | 2-naphthylamine | U | 1.1E+03 |
| 62-44-2 | phenacetin | U | 1.1E+03 |
| 92-67-1 | 4-aminobiphenyl | U | 1.1E+03 |
| 23950-58-5 | pronamide (propyzamide) | U | 1.1E+03 |
| 82-68-8 | pentachloronitrobenzene | U | 1.1E+03 |
| 92-87-5 | benzidine | U | 1.1E+03 |
| 60-11-7 | p-dimethylaminoazobenzene | U | 1.1E+03 |
| 57-97-6 | 7,12-dimethbenz(a)anthracene | U | 1.1E+03 |
| 56-49-5 | 3-methylchloranthrene | U | 1.1E+03 |
| 57-74-9 | chlordane | U | 1.1E+04 |
| 8001-35-2 | toxaphene | U | 1.1E+04 |
| 12674-11-2 | PCB-1016 | U | 1.1E+04 |
| 11104-28-2 | PCB-1221 | U | 1.1E+04 |
| 11141-16-5 | PCB-1232 | U | 1.1E+04 |
| 53469-21-9 | PCB-1242 | U | 1.1E+04 |
| 12672-29-6 | PCB-1248 | U | 1.1E+04 |
| 11097-69-1 | PCB-1254 | U | 1.1E+04 |
| 11096-82-5 | PCB-1260 | U | 1.1E+04 |

See footnotes on page 4

ANALYTICAL REPORT FOR SAMPLE No.: EL4858



NON-TARGET ANALYTE RESULTS
Additional Semi-Volatiles

SET ID: S92-0846-IJ

Field samp ID: B07GN1

| Cas. No | COMPOUND | Scan No. | Results ug/Kg | Qlfr |
|---|---|---|---|---|
| 0-00-0 | ALDOL CONDENSATION PRODUCT | 521 | 2.1E+02 | ENA |
| 0-00-0 | ALDOL CONDENSATION PRODUCT | 569 | 6.9E+02 | ENAB |
| 0-00-0 | ALDOL CONDENSATION PRODUCT | 633 | 4.4E+02 | ENA |
| 0-00-0 | BROMOFLUOROBENZENE | 818 | 1.5E+02 | EN |
| 57-10-3 | HEXADECANOIC ACID | 1483 | 2.1E+02 | EN |
| 0-00-0 | ALKANE @ C29 | 2057 | 1.6E+02 | EN |

B The analyte was found in the method blank.
E The reported concentration is an estimate only. The response factor was assumed to be 1.000 relative to an internal standard.
J Indicates an estimated concentration below the Method Detection Limit.
K The isomer is unknown.
N Analytical standards were not analyzed for this compound.
U Not detected.
W The identification is tentative or closely related to the compound.

ANALYTICAL REPORT FOR SAMPLE No.: EL4859



EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Sponsor: WESTINGHOUSE HANFORD DCL SET ID: S92-0846-IJ

File ID: FP9EL4859 Date Extracted: 11/04/92

FIELD No.:B07GN2 Analysis Date: 11/29/92

| Cas. No | COMPOUND | QLFR | RESULTS ug/Kg |
|---|---|---|---|
| 62-75-9 | N-nitroso-dimethylamine | U | 1.1E+03 |
| 108-95-2 | phenol | U | 3.5E+02 |
| 111-44-4 | bis(2-chloroethyl)ether | U | 3.5E+02 |
| 95-57-8 | 2-chlorophenol | U | 3.5E+02 |
| 541-73-1 | 1,3-dichlorobenzene | U | 3.5E+02 |
| 106-46-7 | 1,4-dichlorobenzene | U | 3.5E+02 |
| 100-51-6 | benzyl alcohol | U | 1.1E+03 |
| 95-50-1 | 1,2-dichlorobenzene | U | 3.5E+02 |
| 95-48-7 | 2-methylphenol | U | 3.5E+02 |
| 39638-329 | bis(2-chloroisopropyl)ether | U | 3.5E+02 |
| 106-44-5 | 4-methylphenol | U | 3.5E+02 |
| 621-64-7 | N-nitroso-di-n-propylamine | U | 3.5E+02 |
| 67-72-1 | hexachloroethane | U | 3.5E+02 |
| 98-95-3 | nitrobenzene | U | 3.5E+02 |
| 78-59-1 | isophorone | U | 3.5E+02 |
| 88-75-5 | 2-nitrophenol | U | 3.5E+02 |
| 105-67-9 | 2,4-dimethylphenol | U | 3.5E+02 |
| 111-91-1 | bis(2-chloroethoxy)methane | U | 3.5E+02 |
| 65-85-0 | benzoic acid | U | 1.1E+03 |
| 120-83-2 | 2,4-dichlorophenol | U | 3.5E+02 |
| 120-82-1 | 1,2,4-trichlorobenzene | U | 3.5E+02 |
| 91-20-3 | naphthalene | U | 3.5E+02 |
| 106-47-8 | 4-chloroaniline | U | 3.5E+02 |
| 87-68-3 | hexachlorobutadiene | U | 3.5E+02 |
| 59-50-7 | 4-chloro-3-methylphenol | U | 3.5E+02 |
| 91-57-6 | 2-methylnaphthalene | U | 3.5E+02 |
| 77-47-4 | hexachlorocyclopentadiene | U | 3.5E+02 |
| 88-06-2 | 2,4,6-trichlorophenol | U | 3.5E+02 |
| 95-95-4 | 2,4,5-trichlorophenol | U | 8.6E+02 |
| 91-58-7 | 2-chloronaphthalene | U | 3.5E+02 |
| 88-74-4 | 2-nitroaniline | U | 8.6E+02 |
| 131-11-3 | dimethyl phthalate | U | 3.5E+02 |
| 606-20-2 | 2,6-dinitrotoluene | U | 3.5E+02 |
| 208-96-8 | acenaphthylene | U | 3.5E+02 |
| 99-09-2 | 3-nitroaniline | U | 8.6E+02 |
| 83-32-9 | acenaphthene | U | 3.5E+02 |
| 51-28-5 | 2,4-dinitrophenol | U | 8.6E+02 |
| 100-02-7 | 4-nitrophenol | U | 8.6E+02 |
| 132-64-9 | dibenzofuran | U | 3.5E+02 |

See footnotes on page 4.

ANALYTICAL REPORT FOR SAMPLE No.: EL4859



EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Field Sample ID:B07GN2

| Cas. No | COMPOUND | QLFR | RESULTS ug/Kg |
|---|---|---|---|
| 121-14-2 | 2,4-dinitrotoluene | U | 3.5E+02 |
| 84-66-2 | diethyl phthalate | | 9.7E+02 |
| 7005-72-3 | 4-chlorophenyl-phenylether | U | 3.5E+02 |
| 86-73-7 | fluorene | U | 3.5E+02 |
| 100-01-6 | 4-nitroaniline | U | 8.6E+02 |
| 534-52-1 | 2-methyl-4,6-dinitrophenol | U | 8.6E+02 |
| 86-30-6 | N-nitroso-diphenylamine | U | 3.5E+02 |
| 122-66-7 | 1,2-diphenylhydrazine | U | 1.1E+03 |
| 101-55-3 | 4-bromophenyl-phenylether | U | 3.5E+02 |
| 319-84-6 | .alpha.-BHC | U | 1.1E+03 |
| 319-85-7 | beta-BHC | U | 5.4E+03 |
| 118-74-1 | hexachlorobenzene | U | 3.5E+02 |
| 87-86-5 | pentachlorophenol | U | 8.6E+02 |
| 58-89-9 | .gamma.-BHC | U | 1.1E+03 |
| 85-01-8 | phenanthrene | J | 9.5E+01 |
| 120-12-7 | anthracene | U | 3.5E+02 |
| 319-86-8 | delta-BHC | U | 5.4E+03 |
| 76-44-8 | heptachlor | U | 5.4E+03 |
| 84-74-2 | di-n-butyl phthalate | U | 3.5E+02 |
| 309-00-2 | aldrin | U | 5.4E+03 |
| 1024-57-3 | heptachlor epoxide | U | 5.4E+03 |
| 206-44-0 | fluoranthene | J | 2.2E+02 |
| 129-00-0 | pyrene | J | 2.4E+02 |
| 959-98-8 | endosulfan I | U | 5.4E+03 |
| 72-55-9 | 4,4'DDE | U | 5.4E+03 |
| 60-57-1 | dieldrin | U | 5.4E+03 |
| 7421-93-4 | endrin aldehyde | U | 5.4E+03 |
| 72-20-8 | endrin | U | 5.4E+03 |
| 72-54-8 | 4,4'DDD | U | 5.4E+03 |
| 33213-65-9 | endosulfan II | U | 5.4E+03 |
| 85-68-7 | butylbenzylphthalate | U | 3.5E+02 |
| 50-29-3 | 4,4'DDT | U | 5.4E+03 |
| 1031-07-8 | endosulfan sulfate | U | 5.4E+03 |
| 72-43-5 | p,p'-methoxychlor | U | 1.1E+03 |
| 91-94-1 | 3,3'-dichlorobenzidine | U | 1.1E+03 |
| 56-55-3 | benzo(a)anthracene | J | 2.2E+02 |
| 117-81-7 | bis(2-ethylhexyl)phthalate | U | 3.5E+02 |
| 218-01-9 | chrysene | J | 3.1E+02 |
| 117-84-0 | di-n-octylphthalate | U | 3.5E+02 |

See footnotes on page 4.

ANALYTICAL REPORT FOR SAMPLE No.: EL4859



EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Field Sample ID:B07GN2

| Cas. No | COMPOUND | QLFR | RESULTS ug/Kg |
|---|---|---|---|
| 205-99-2 | benzo(b)fluoranthene | | 4.0E+02 |
| 207-08-9 | benzo(k)fluoranthene | J | 3.4E+02 |
| 50-32-8 | benzo(a)pyrene | | 3.6E+02 |
| 193-39-5 | indeno(1,2,3-cd)pyrene | | 3.9E+02 |
| 53-70-3 | dibenzo(a,h)anthracene | J | 1.4E+02 |
| 191-24-2 | benzo(g,h,i)perylene | | 4.5E+02 |
| 53494-70-5 | endrin ketone | U | 1.1E+03 |
| 109-06-8 | 2-picoline | U | 1.1E+03 |
| 62-50-0 | ethyl methanesulfonate | U | 1.1E+03 |
| 66-27-3 | methyl methanesulfonate | U | 1.1E+03 |
| 62-53-3 | aniline | U | 1.1E+03 |
| 98-86-2 | acetophenone | U | 1.1E+03 |
| 100-75-4 | N-nitroso-piperidine | U | 1.1E+03 |
| 122-09-8 | a,a-dimethylphenethylamine | U | 1.1E+03 |
| 87-65-0 | 2,6-dichlorophenol | U | 1.1E+03 |
| 924-16-3 | N-nitroso-di-n-butylamine | U | 1.1E+03 |
| 95-94-3 | 1,2,4,5-tetrachlorobenzene | U | 1.1E+03 |
| 90-13-1 | 1-chloronaphthalene | U | 1.1E+03 |
| 608-93-5 | pentachlorobenzene | U | 1.1E+03 |
| 134-32-7 | 1-naphthylamine | U | 1.1E+03 |
| 58-90-2 | 2,3,4,6-tetrachlorophenol | U | 1.1E+03 |
| 91-59-8 | 2-naphthylamine | U | 1.1E+03 |
| 62-44-2 | phenacetin | U | 1.1E+03 |
| 92-67-1 | 4-aminobiphenyl | U | 1.1E+03 |
| 23950-58-5 | pronamide (propyzamide) | U | 1.1E+03 |
| 82-68-8 | pentachloronitrobenzene | U | 1.1E+03 |
| 92-87-5 | benzidine | U | 1.1E+03 |
| 60-11-7 | p-dimethylaminoazobenzene | U | 1.1E+03 |
| 57-97-6 | 7,12-dimethbenz(a)anthracene | U | 1.1E+03 |
| 56-49-5 | 3-methylchloranthrene | U | 1.1E+03 |
| 57-74-9 | chlordane | U | 1.1E+04 |
| 8001-35-2 | toxaphene | U | 1.1E+04 |
| 12674-11-2 | PCB-1016 | U | 1.1E+04 |
| 11104-28-2 | PCB-1221 | U | 1.1E+04 |
| 11141-16-5 | PCB-1232 | U | 1.1E+04 |
| 53469-21-9 | PCB-1242 | U | 1.1E+04 |
| 12672-29-6 | PCB-1248 | U | 1.1E+04 |
| 11097-69-1 | PCB-1254 | U | 1.1E+04 |
| 11096-82-5 | PCB-1260 | U | 1.1E+04 |

See footnotes on page 4

ANALYTICAL REPORT FOR SAMPLE No.: EL4859



NON-TARGET ANALYTE RESULTS
Additional Semi-Volatiles

SET ID: S92-0846-IJ

Field samp ID: B07GN2

| Cas. No | COMPOUND | Scan No. | Results ug/Kg | Qlfr |
|---|---|---|---|---|
| 0-00-0 | ALDOL CONDENSATION PRODUCT | 521 | 2.1E+02 | ENA |
| 0-00-0 | ALDOL CONDENSATION PRODUCT | 569 | 9.9E+02 | ENAB |
| 0-00-0 | ALDOL CONDENSATION PRODUCT | 634 | 9.9E+02 | ENA |
| 0-00-0 | ALDOL CONDENSATION PRODUCT | 709 | 2.9E+02 | ENA |
| 0-00-0 | ALKANE @ C29 | 2057 | 1.8E+02 | EN |
| 205-82-3 | PNA, MW=252 | 2107 | 3.7E+02 | EN |

B The analyte was found in the method blank.
E The reported concentration is an estimate only. The response factor was assumed to be 1.000 relative to an internal standard.
J Indicates an estimated concentration below the Method Detection Limit.
K The isomer is unknown.
N Analytical standards were not analyzed for this compound.
U Not detected.
W The identification is tentative or closely related to the compound.

ANALYTICAL REPORT FOR SAMPLE No.: EL4860



EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Sponsor: WESTINGHOUSE HANFORD DCL SET ID: S92-0846-IJ

File ID: FP10EL4860 Date Extracted: 11/04/92

FIELD No.:B07GN4 Analysis Date: 11/29/92

| Cas. No | COMPOUND | QLFR | RESULTS ug/Kg |
|---|---|---|---|
| 62-75-9 | N-nitroso-dimethylamine | U | 1.0E+03 |
| 108-95-2 | phenol | U | 3.4E+02 |
| 111-44-4 | bis(2-chloroethyl)ether | U | 3.4E+02 |
| 95-57-8 | 2-chlorophenol | U | 3.4E+02 |
| 541-73-1 | 1,3-dichlorobenzene | U | 3.4E+02 |
| 106-46-7 | 1,4-dichlorobenzene | U | 3.4E+02 |
| 100-51-6 | benzyl alcohol | U | 1.0E+03 |
| 95-50-1 | 1,2-dichlorobenzene | U | 3.4E+02 |
| 95-48-7 | 2-methylphenol | U | 3.4E+02 |
| 39638-329 | bis(2-chloroisopropyl)ether | U | 3.4E+02 |
| 106-44-5 | 4-methylphenol | U | 3.4E+02 |
| 621-64-7 | N-nitroso-di-n-propylamine | U | 3.4E+02 |
| 67-72-1 | hexachloroethane | U | 3.4E+02 |
| 98-95-3 | nitrobenzene | U | 3.4E+02 |
| 78-59-1 | isophorone | U | 3.4E+02 |
| 88-75-5 | 2-nitrophenol | U | 3.4E+02 |
| 105-67-9 | 2,4-dimethylphenol | U | 3.4E+02 |
| 111-91-1 | bis(2-chloroethoxy)methane | U | 3.4E+02 |
| 65-85-0 | benzoic acid | U | 1.0E+03 |
| 120-83-2 | 2,4-dichlorophenol | U | 3.4E+02 |
| 120-82-1 | 1,2,4-trichlorobenzene | U | 3.4E+02 |
| 91-20-3 | naphthalene | U | 3.4E+02 |
| 106-47-8 | 4-chloroaniline | U | 3.4E+02 |
| 87-68-3 | hexachlorobutadiene | U | 3.4E+02 |
| 59-50-7 | 4-chloro-3-methylphenol | U | 3.4E+02 |
| 91-57-6 | 2-methylnaphthalene | U | 3.4E+02 |
| 77-47-4 | hexachlorocyclopentadiene | U | 3.4E+02 |
| 88-06-2 | 2,4,6-trichlorophenol | U | 3.4E+02 |
| 95-95-4 | 2,4,5-trichlorophenol | U | 8.3E+02 |
| 91-58-7 | 2-chloronaphthalene | U | 3.4E+02 |
| 88-74-4 | 2-nitroaniline | U | 8.3E+02 |
| 131-11-3 | dimethyl phthalate | U | 3.4E+02 |
| 606-20-2 | 2,6-dinitrotoluene | U | 3.4E+02 |
| 208-96-8 | acenaphthylene | U | 3.4E+02 |
| 99-09-2 | 3-nitroaniline | U | 8.3E+02 |
| 83-32-9 | acenaphthene | U | 3.4E+02 |
| 51-28-5 | 2,4-dinitrophenol | U | 8.3E+02 |
| 100-02-7 | 4-nitrophenol | U | 8.3E+02 |
| 132-64-9 | dibenzofuran | U | 3.4E+02 |

See footnotes on page 4.

ANALYTICAL REPORT FOR SAMPLE No.: EL4860



EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Field Sample ID:B07GN4

| Cas. No | COMPOUND | QLFR | RESULTS ug/Kg |
|---|---|---|---|
| 121-14-2 | 2,4-dinitrotoluene | U | 3.4E+02 |
| 84-66-2 | diethyl phthalate | U | 3.4E+02 |
| 7005-72-3 | 4-chlorophenyl-phenylether | U | 3.4E+02 |
| 86-73-7 | fluorene | U | 3.4E+02 |
| 100-01-6 | 4-nitroaniline | U | 8.3E+02 |
| 534-52-1 | 2-methyl-4,6-dinitrophenol | U | 8.3E+02 |
| 86-30-6 | N-nitroso-diphenylamine | U | 3.4E+02 |
| 122-66-7 | 1,2-diphenylhydrazine | U | 1.0E+03 |
| 101-55-3 | 4-bromophenyl-phenylether | U | 3.4E+02 |
| 319-84-6 | .alpha.-BHC | U | 1.0E+03 |
| 319-85-7 | beta-BHC | U | 5.2E+03 |
| 118-74-1 | hexachlorobenzene | U | 3.4E+02 |
| 87-86-5 | pentachlorophenol | U | 8.3E+02 |
| 58-89-9 | .gamma.-BHC | U | 1.0E+03 |
| 85-01-8 | phenanthrene | U | 3.4E+02 |
| 120-12-7 | anthracene | U | 3.4E+02 |
| 319-86-8 | delta-BHC | U | 5.2E+03 |
| 76-44-8 | heptachlor | U | 5.2E+03 |
| 84-74-2 | di-n-butyl phthalate | U | 3.4E+02 |
| 309-00-2 | aldrin | U | 5.2E+03 |
| 1024-57-3 | heptachlor epoxide | U | 5.2E+03 |
| 206-44-0 | fluoranthene | U | 3.4E+02 |
| 129-00-0 | pyrene | U | 3.4E+02 |
| 959-98-8 | endosulfan I | U | 5.2E+03 |
| 72-55-9 | 4,4'DDE | U | 5.2E+03 |
| 60-57-1 | dieldrin | U | 5.2E+03 |
| 7421-93-4 | endrin aldehyde | U | 5.2E+03 |
| 72-20-8 | endrin | U | 5.2E+03 |
| 72-54-8 | 4,4'DDD | U | 5.2E+03 |
| 33213-65-9 | endosulfan II | U | 5.2E+03 |
| 85-68-7 | butylbenzylphthalate | U | 3.4E+02 |
| 50-29-3 | 4,4'DDT | U | 5.2E+03 |
| 1031-07-8 | endosulfan sulfate | U | 5.2E+03 |
| 72-43-5 | p,p'-methoxychlor | U | 1.0E+03 |
| 91-94-1 | 3,3'-dichlorobenzidine | U | 1.0E+03 |
| 56-55-3 | benzo(a)anthracene | U | 3.4E+02 |
| 117-81-7 | bis(2-ethylhexyl)phthalate | U | 3.4E+02 |
| 218-01-9 | chrysene | U | 3.4E+02 |
| 117-84-0 | di-n-octylphthalate | U | 3.4E+02 |

See footnotes on page 4.

ANALYTICAL REPORT FOR SAMPLE No.: EL4860



EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Field Sample ID:B07GN4

| Cas. No | COMPOUND | QLFR | RESULTS ug/Kg |
|---|---|---|---|
| 205-99-2 | benzo(b)fluoranthene | U | 3.4E+02 |
| 207-08-9 | benzo(k)fluoranthene | U | 3.4E+02 |
| 50-32-8 | benzo(a)pyrene | U | 3.4E+02 |
| 193-39-5 | indeno(1,2,3-cd)pyrene | U | 3.4E+02 |
| 53-70-3 | dibenzo(a,h)anthracene | U | 3.4E+02 |
| 191-24-2 | benzo(g,h,i)perylene | U | 3.4E+02 |
| 53494-70-5 | endrin ketone | U | 1.0E+03 |
| 109-06-8 | 2-picoline | U | 1.0E+03 |
| 62-50-0 | ethyl methanesulfonate | U | 1.0E+03 |
| 66-27-3 | methyl methanesulfonate | U | 1.0E+03 |
| 62-53-3 | aniline | U | 1.0E+03 |
| 98-86-2 | acetophenone | U | 1.0E+03 |
| 100-75-4 | N-nitroso-piperidine | U | 1.0E+03 |
| 122-09-8 | a,a-dimethylphenethylamine | U | 1.0E+03 |
| 87-65-0 | 2,6-dichlorophenol | U | 1.0E+03 |
| 924-16-3 | N-nitroso-di-n-butylamine | U | 1.0E+03 |
| 95-94-3 | 1,2,4,5-tetrachlorobenzene | U | 1.0E+03 |
| 90-13-1 | 1-chloronaphthalene | U | 1.0E+03 |
| 608-93-5 | pentachlorobenzene | U | 1.0E+03 |
| 134-32-7 | 1-naphthylamine | U | 1.0E+03 |
| 58-90-2 | 2,3,4,6-tetrachlorophenol | U | 1.0E+03 |
| 91-59-8 | 2-naphthylamine | U | 1.0E+03 |
| 62-44-2 | phenacetin | U | 1.0E+03 |
| 92-67-1 | 4-aminobiphenyl | U | 1.0E+03 |
| 23950-58-5 | pronamide (propyzamide) | U | 1.0E+03 |
| 82-68-8 | pentachloronitrobenzene | U | 1.0E+03 |
| 92-87-5 | benzidine | U | 1.0E+03 |
| 60-11-7 | p-dimethylaminoazobenzene | U | 1.0E+03 |
| 57-97-6 | 7,12-dimethbenz(a)anthracene | U | 1.0E+03 |
| 56-49-5 | 3-methylchloranthrene | U | 1.0E+03 |
| 57-74-9 | chlordane | U | 1.0E+04 |
| 8001-35-2 | toxaphene | U | 1.0E+04 |
| 12674-11-2 | PCB-1016 | U | 1.0E+04 |
| 11104-28-2 | PCB-1221 | U | 1.0E+04 |
| 11141-16-5 | PCB-1232 | U | 1.0E+04 |
| 53469-21-9 | PCB-1242 | U | 1.0E+04 |
| 12672-29-6 | PCB-1248 | U | 1.0E+04 |
| 11097-69-1 | PCB-1254 | U | 1.0E+04 |
| 11096-82-5 | PCB-1260 | U | 1.0E+04 |

See footnotes on page 4

ANALYTICAL REPORT FOR SAMPLE No.: EL4860



NON-TARGET ANALYTE RESULTS
Additional Semi-Volatiles

SET ID: S92-0846-IJ

Field samp ID: B07GN4

| Cas. No | COMPOUND | Scan No. | Results ug/Kg | Qlfr |
|---|---|---|---|---|
| 0-00-0 | ALDOL CONDENSATION PRODUCT | 521 | 2.4E+02 | ENA |
| 0-00-0 | ALDOL CONDENSATION PRODUCT | 569 | 7.4E+02 | ENAB |
| 0-00-0 | ALDOL CONDENSATION PRODUCT | 632 | 3.3E+02 | ENA |
| 0-00-0 | ALKANE @ C29 | 2056 | 2.6E+02 | EN |

B The analyte was found in the method blank.
E The reported concentration is an estimate only. The response factor was assumed to be 1.000 relative to an internal standard.
J Indicates an estimated concentration below the Method Detection Limit.
K The isomer is unknown.
N Analytical standards were not analyzed for this compound.
U Not detected.
W The identification is tentative or closely related to the compound.

ANALYTICAL REPORT FOR SAMPLE No.: EL4861



EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Sponsor: WESTINGHOUSE HANFORD DCL SET ID: S92-0846-IJ

File ID: FP11EL4861 Date Extracted: 11/04/92

FIELD No.:B07GN5 Analysis Date: 11/29/92

| Cas. No | COMPOUND | QLFR | RESULTS ug/Kg |
|---|---|---|---|
| 62-75-9 | N-nitroso-dimethylamine | U | 1.0E+03 |
| 108-95-2 | phenol | U | 3.4E+02 |
| 111-44-4 | bis(2-chloroethyl)ether | U | 3.4E+02 |
| 95-57-8 | 2-chlorophenol | U | 3.4E+02 |
| 541-73-1 | 1,3-dichlorobenzene | U | 3.4E+02 |
| 106-46-7 | 1,4-dichlorobenzene | U | 3.4E+02 |
| 100-51-6 | benzyl alcohol | U | 1.0E+03 |
| 95-50-1 | 1,2-dichlorobenzene | U | 3.4E+02 |
| 95-48-7 | 2-methylphenol | U | 3.4E+02 |
| 39638-329 | bis(2-chloroisopropyl)ether | U | 3.4E+02 |
| 106-44-5 | 4-methylphenol | U | 3.4E+02 |
| 621-64-7 | N-nitroso-di-n-propylamine | U | 3.4E+02 |
| 67-72-1 | hexachloroethane | U | 3.4E+02 |
| 98-95-3 | nitrobenzene | U | 3.4E+02 |
| 78-59-1 | isophorone | U | 3.4E+02 |
| 88-75-5 | 2-nitrophenol | U | 3.4E+02 |
| 105-67-9 | 2,4-dimethylphenol | U | 3.4E+02 |
| 111-91-1 | bis(2-chloroethoxy)methane | U | 3.4E+02 |
| 65-85-0 | benzoic acid | U | 1.0E+03 |
| 120-83-2 | 2,4-dichlorophenol | U | 3.4E+02 |
| 120-82-1 | 1,2,4-trichlorobenzene | U | 3.4E+02 |
| 91-20-3 | naphthalene | U | 3.4E+02 |
| 106-47-8 | 4-chloroaniline | U | 3.4E+02 |
| 87-68-3 | hexachlorobutadiene | U | 3.4E+02 |
| 59-50-7 | 4-chloro-3-methylphenol | U | 3.4E+02 |
| 91-57-6 | 2-methylnaphthalene | U | 3.4E+02 |
| 77-47-4 | hexachlorocyclopentadiene | U | 3.4E+02 |
| 88-06-2 | 2,4,6-trichlorophenol | U | 3.4E+02 |
| 95-95-4 | 2,4,5-trichlorophenol | U | 8.3E+02 |
| 91-58-7 | 2-chloronaphthalene | U | 3.4E+02 |
| 88-74-4 | 2-nitroaniline | U | 8.3E+02 |
| 131-11-3 | dimethyl phthalate | U | 3.4E+02 |
| 606-20-2 | 2,6-dinitrotoluene | U | 3.4E+02 |
| 208-96-8 | acenaphthylene | U | 3.4E+02 |
| 99-09-2 | 3-nitroaniline | U | 8.3E+02 |
| 83-32-9 | acenaphthene | U | 3.4E+02 |
| 51-28-5 | 2,4-dinitrophenol | U | 8.3E+02 |
| 100-02-7 | 4-nitrophenol | U | 8.3E+02 |
| 132-64-9 | dibenzofuran | U | 3.4E+02 |

See footnotes on page 4.

ANALYTICAL REPORT FOR SAMPLE No.: EL4861



EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Field Sample ID:B07GN5

| Cas. No | COMPOUND | QLFR | RESULTS ug/Kg |
|---|---|---|---|
| 121-14-2 | 2,4-dinitrotoluene | U | 3.4E+02 |
| 84-66-2 | diethyl phthalate | U | 3.4E+02 |
| 7005-72-3 | 4-chlorophenyl-phenylether | U | 3.4E+02 |
| 86-73-7 | fluorene | U | 3.4E+02 |
| 100-01-6 | 4-nitroaniline | U | 8.3E+02 |
| 534-52-1 | 2-methyl-4,6-dinitrophenol | U | 8.3E+02 |
| 86-30-6 | N-nitroso-diphenylamine | U | 3.4E+02 |
| 122-66-7 | 1,2-diphenylhydrazine | U | 1.0E+03 |
| 101-55-3 | 4-bromophenyl-phenylether | U | 3.4E+02 |
| 319-84-6 | .alpha.-BHC | U | 1.0E+03 |
| 319-85-7 | beta-BHC | U | 5.2E+03 |
| 118-74-1 | hexachlorobenzene | U | 3.4E+02 |
| 87-86-5 | pentachlorophenol | U | 8.3E+02 |
| 58-89-9 | .gamma.-BHC | U | 1.0E+03 |
| 85-01-8 | phenanthrene | U | 3.4E+02 |
| 120-12-7 | anthracene | U | 3.4E+02 |
| 319-86-8 | delta-BHC | U | 5.2E+03 |
| 76-44-8 | heptachlor | U | 5.2E+03 |
| 84-74-2 | di-n-butyl phthalate | U | 3.4E+02 |
| 309-00-2 | aldrin | U | 5.2E+03 |
| 1024-57-3 | heptachlor epoxide | U | 5.2E+03 |
| 206-44-0 | fluoranthene | U | 3.4E+02 |
| 129-00-0 | pyrene | U | 3.4E+02 |
| 959-98-8 | endosulfan I | U | 5.2E+03 |
| 72-55-9 | 4,4'DDE | U | 5.2E+03 |
| 60-57-1 | dieldrin | U | 5.2E+03 |
| 7421-93-4 | endrin aldehyde | U | 5.2E+03 |
| 72-20-8 | endrin | U | 5.2E+03 |
| 72-54-8 | 4,4'DDD | U | 5.2E+03 |
| 33213-65-9 | endosulfan II | U | 5.2E+03 |
| 85-68-7 | butylbenzylphthalate | U | 3.4E+02 |
| 50-29-3 | 4,4'DDT | U | 5.2E+03 |
| 1031-07-8 | endosulfan sulfate | U | 5.2E+03 |
| 72-43-5 | p,p'-methoxychlor | U | 1.0E+03 |
| 91-94-1 | 3,3'-dichlorobenzidine | U | 1.0E+03 |
| 56-55-3 | benzo(a)anthracene | U | 3.4E+02 |
| 117-81-7 | bis(2-ethylhexyl)phthalate | U | 3.4E+02 |
| 218-01-9 | chrysene | U | 3.4E+02 |
| 117-84-0 | di-n-octylphthalate | U | 3.4E+02 |

See footnotes on page 4.

ANALYTICAL REPORT FOR SAMPLE No.: EL4861



EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Field Sample ID:B07GN5

| Cas. No | COMPOUND | QLFR | RESULTS ug/Kg |
|---|---|---|---|
| 205-99-2 | benzo(b)fluoranthene | U | 3.4E+02 |
| 207-08-9 | benzo(k)fluoranthene | U | 3.4E+02 |
| 50-32-8 | benzo(a)pyrene | U | 3.4E+02 |
| 193-39-5 | indeno(1,2,3-cd)pyrene | U | 3.4E+02 |
| 53-70-3 | dibenzo(a,h)anthracene | U | 3.4E+02 |
| 191-24-2 | benzo(g,h,i)perylene | U | 3.4E+02 |
| 53494-70-5 | endrin ketone | U | 1.0E+03 |
| 109-06-8 | 2-picoline | U | 1.0E+03 |
| 62-50-0 | ethyl methanesulfonate | U | 1.0E+03 |
| 66-27-3 | methyl methanesulfonate | U | 1.0E+03 |
| 62-53-3 | aniline | U | 1.0E+03 |
| 98-86-2 | acetophenone | U | 1.0E+03 |
| 100-75-4 | N-nitroso-piperidine | U | 1.0E+03 |
| 122-09-8 | a,a-dimethylphenethylamine | U | 1.0E+03 |
| 87-65-0 | 2,6-dichlorophenol | U | 1.0E+03 |
| 924-16-3 | N-nitroso-di-n-butylamine | U | 1.0E+03 |
| 95-94-3 | 1,2,4,5-tetrachlorobenzene | U | 1.0E+03 |
| 90-13-1 | 1-chloronaphthalene | U | 1.0E+03 |
| 608-93-5 | pentachlorobenzene | U | 1.0E+03 |
| 134-32-7 | 1-naphthylamine | U | 1.0E+03 |
| 58-90-2 | 2,3,4,6-tetrachlorophenol | U | 1.0E+03 |
| 91-59-8 | 2-naphthylamine | U | 1.0E+03 |
| 62-44-2 | phenacetin | U | 1.0E+03 |
| 92-67-1 | 4-aminobiphenyl | U | 1.0E+03 |
| 23950-58-5 | pronamide (propyzamide) | U | 1.0E+03 |
| 82-68-8 | pentachloronitrobenzene | U | 1.0E+03 |
| 92-87-5 | benzidine | U | 1.0E+03 |
| 60-11-7 | p-dimethylaminoazobenzene | U | 1.0E+03 |
| 57-97-6 | 7,12-dimethbenz(a)anthracene | U | 1.0E+03 |
| 56-49-5 | 3-methylchloranthrene | U | 1.0E+03 |
| 57-74-9 | chlordane | U | 1.0E+04 |
| 8001-35-2 | toxaphene | U | 1.0E+04 |
| 12674-11-2 | PCB-1016 | U | 1.0E+04 |
| 11104-28-2 | PCB-1221 | U | 1.0E+04 |
| 11141-16-5 | PCB-1232 | U | 1.0E+04 |
| 53469-21-9 | PCB-1242 | U | 1.0E+04 |
| 12672-29-6 | PCB-1248 | U | 1.0E+04 |
| 11097-69-1 | PCB-1254 | U | 1.0E+04 |
| 11096-82-5 | PCB-1260 | U | 1.0E+04 |

See footnotes on page 4

ANALYTICAL REPORT FOR SAMPLE No.: EL4861



NON-TARGET ANALYTE RESULTS
Additional Semi-Volatiles

SET ID: S92-0846-IJ

Field samp ID: B07GN5

| Cas. No | COMPOUND | Scan No. | Results ug/Kg | Qlfr |
|---|---|---|---|---|
| 0-00-0 | ALDOL CONDENSATION PRODUCT | 519 | 1.8E+02 | ENA |
| 0-00-0 | ALDOL CONDENSATION PRODUCT | 567 | 5.5E+02 | ENAB |
| 0-00-0 | ALDOL CONDENSATION PRODUCT | 632 | 3.5E+02 | ENA |
| 0-00-0 | ALKANE @ C29 | 2056 | 2.7E+02 | EN |

B The analyte was found in the method blank.
E The reported concentration is an estimate only. The response factor was assumed to be 1.000 relative to an internal standard.
J Indicates an estimated concentration below the Method Detection Limit.
K The isomer is unknown.
N Analytical standards were not analyzed for this compound.
U Not detected.
W The identification is tentative or closely related to the compound.

ANALYTICAL REPORT FOR SAMPLE No.: EL4862



EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Sponsor: WESTINGHOUSE HANFORD DCL SET ID: S92-0846-IJ

File ID: FP12EL4862 Date Extracted: 11/04/92

FIELD No.:B07GN7 Analysis Date: 11/29/92

| Cas. No | COMPOUND | QLFR | RESULTS ug/Kg |
|---|---|---|---|
| 62-75-9 | N-nitroso-dimethylamine | U | 1.1E+03 |
| 108-95-2 | phenol | U | 3.6E+02 |
| 111-44-4 | bis(2-chloroethyl)ether | U | 3.6E+02 |
| 95-57-8 | 2-chlorophenol | U | 3.6E+02 |
| 541-73-1 | 1,3-dichlorobenzene | U | 3.6E+02 |
| 106-46-7 | 1,4-dichlorobenzene | U | 3.6E+02 |
| 100-51-6 | benzyl alcohol | U | 1.1E+03 |
| 95-50-1 | 1,2-dichlorobenzene | U | 3.6E+02 |
| 95-48-7 | 2-methylphenol | U | 3.6E+02 |
| 39638-329 | bis(2-chloroisopropyl)ether | U | 3.6E+02 |
| 106-44-5 | 4-methylphenol | U | 3.6E+02 |
| 621-64-7 | N-nitroso-di-n-propylamine | U | 3.6E+02 |
| 67-72-1 | hexachloroethane | U | 3.6E+02 |
| 98-95-3 | nitrobenzene | U | 3.6E+02 |
| 78-59-1 | isophorone | U | 3.6E+02 |
| 88-75-5 | 2-nitrophenol | U | 3.6E+02 |
| 105-67-9 | 2,4-dimethylphenol | U | 3.6E+02 |
| 111-91-1 | bis(2-chloroethoxy)methane | U | 3.6E+02 |
| 65-85-0 | benzoic acid | U | 1.1E+03 |
| 120-83-2 | 2,4-dichlorophenol | U | 3.6E+02 |
| 120-82-1 | 1,2,4-trichlorobenzene | U | 3.6E+02 |
| 91-20-3 | naphthalene | U | 3.6E+02 |
| 106-47-8 | 4-chloroaniline | U | 3.6E+02 |
| 87-68-3 | hexachlorobutadiene | U | 3.6E+02 |
| 59-50-7 | 4-chloro-3-methylphenol | U | 3.6E+02 |
| 91-57-6 | 2-methylnaphthalene | U | 3.6E+02 |
| 77-47-4 | hexachlorocyclopentadiene | U | 3.6E+02 |
| 88-06-2 | 2,4,6-trichlorophenol | U | 3.6E+02 |
| 95-95-4 | 2,4,5-trichlorophenol | U | 8.7E+02 |
| 91-58-7 | 2-chloronaphthalene | U | 3.6E+02 |
| 88-74-4 | 2-nitroaniline | U | 8.7E+02 |
| 131-11-3 | dimethyl phthalate | U | 3.6E+02 |
| 606-20-2 | 2,6-dinitrotoluene | U | 3.6E+02 |
| 208-96-8 | acenaphthylene | U | 3.6E+02 |
| 99-09-2 | 3-nitroaniline | U | 8.7E+02 |
| 83-32-9 | acenaphthene | U | 3.6E+02 |
| 51-28-5 | 2,4-dinitrophenol | U | 8.7E+02 |
| 100-02-7 | 4-nitrophenol | U | 8.7E+02 |
| 132-64-9 | dibenzofuran | U | 3.6E+02 |

See footnotes on page 4.

ANALYTICAL REPORT FOR SAMPLE No.: EL4862



EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Field Sample ID:B07GN7

| Cas. No | COMPOUND | QLFR | RESULTS ug/Kg |
|---|---|---|---|
| 121-14-2 | 2,4-dinitrotoluene | U | 3.6E+02 |
| 84-66-2 | diethyl phthalate | U | 3.6E+02 |
| 7005-72-3 | 4-chlorophenyl-phenylether | U | 3.6E+02 |
| 86-73-7 | fluorene | U | 3.6E+02 |
| 100-01-6 | 4-nitroaniline | U | 8.7E+02 |
| 534-52-1 | 2-methyl-4,6-dinitrophenol | U | 8.7E+02 |
| 86-30-6 | N-nitroso-diphenylamine | U | 3.6E+02 |
| 122-66-7 | 1,2-diphenylhydrazine | U | 1.1E+03 |
| 101-55-3 | 4-bromophenyl-phenylether | U | 3.6E+02 |
| 319-84-6 | .alpha.-BHC | U | 1.1E+03 |
| 319-85-7 | beta-BHC | U | 5.4E+03 |
| 118-74-1 | hexachlorobenzene | U | 3.6E+02 |
| 87-86-5 | pentachlorophenol | U | 8.7E+02 |
| 58-89-9 | .gamma.-BHC | U | 1.1E+03 |
| 85-01-8 | phenanthrene | U | 3.6E+02 |
| 120-12-7 | anthracene | U | 3.6E+02 |
| 319-86-8 | delta-BHC | U | 5.4E+03 |
| 76-44-8 | heptachlor | U | 5.4E+03 |
| 84-74-2 | di-n-butyl phthalate | U | 3.6E+02 |
| 309-00-2 | aldrin | U | 5.4E+03 |
| 1024-57-3 | heptachlor epoxide | U | 5.4E+03 |
| 206-44-0 | fluoranthene | U | 3.6E+02 |
| 129-00-0 | pyrene | U | 3.6E+02 |
| 959-98-8 | endosulfan I | U | 5.4E+03 |
| 72-55-9 | 4,4'DDE | U | 5.4E+03 |
| 60-57-1 | dieldrin | U | 5.4E+03 |
| 7421-93-4 | endrin aldehyde | U | 5.4E+03 |
| 72-20-8 | endrin | U | 5.4E+03 |
| 72-54-8 | 4,4'DDD | U | 5.4E+03 |
| 33213-65-9 | endosulfan II | U | 5.4E+03 |
| 85-68-7 | butylbenzylphthalate | U | 3.6E+02 |
| 50-29-3 | 4,4'DDT | U | 5.4E+03 |
| 1031-07-8 | endosulfan sulfate | U | 5.4E+03 |
| 72-43-5 | p,p'-methoxychlor | U | 1.1E+03 |
| 91-94-1 | 3,3'-dichlorobenzidine | U | 1.1E+03 |
| 56-55-3 | benzo(a)anthracene | U | 3.6E+02 |
| 117-81-7 | bis(2-ethylhexyl)phthalate | U | 3.6E+02 |
| 218-01-9 | chrysene | U | 3.6E+02 |
| 117-84-0 | di-n-octylphthalate | U | 3.6E+02 |

See footnotes on page 4.

ANALYTICAL REPORT FOR SAMPLE No.: EL4862



EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Field Sample ID:B07GN7

| Cas. No | COMPOUND | QLFR | RESULTS ug/Kg |
|---|---|---|---|
| 205-99-2 | benzo(b)fluoranthene | U | 3.6E+02 |
| 207-08-9 | benzo(k)fluoranthene | U | 3.6E+02 |
| 50-32-8 | benzo(a)pyrene | U | 3.6E+02 |
| 193-39-5 | indeno(1,2,3-cd)pyrene | U | 3.6E+02 |
| 53-70-3 | dibenzo(a,h)anthracene | U | 3.6E+02 |
| 191-24-2 | benzo(g,h,i)perylene | U | 3.6E+02 |
| 53494-70-5 | endrin ketone | U | 1.1E+03 |
| 109-06-8 | 2-picoline | U | 1.1E+03 |
| 62-50-0 | ethyl methanesulfonate | U | 1.1E+03 |
| 66-27-3 | methyl methanesulfonate | U | 1.1E+03 |
| 62-53-3 | aniline | U | 1.1E+03 |
| 98-86-2 | acetophenone | U | 1.1E+03 |
| 100-75-4 | N-nitroso-piperidine | U | 1.1E+03 |
| 122-09-8 | a,a-dimethylphenethylamine | U | 1.1E+03 |
| 87-65-0 | 2,6-dichlorophenol | U | 1.1E+03 |
| 924-16-3 | N-nitroso-di-n-butylamine | U | 1.1E+03 |
| 95-94-3 | 1,2,4,5-tetrachlorobenzene | U | 1.1E+03 |
| 90-13-1 | 1-chloronaphthalene | U | 1.1E+03 |
| 608-93-5 | pentachlorobenzene | U | 1.1E+03 |
| 134-32-7 | 1-naphthylamine | U | 1.1E+03 |
| 58-90-2 | 2,3,4,6-tetrachlorophenol | U | 1.1E+03 |
| 91-59-8 | 2-naphthylamine | U | 1.1E+03 |
| 62-44-2 | phenacetin | U | 1.1E+03 |
| 92-67-1 | 4-aminobiphenyl | U | 1.1E+03 |
| 23950-58-5 | pronamide (propyzamide) | U | 1.1E+03 |
| 82-68-8 | pentachloronitrobenzene | U | 1.1E+03 |
| 92-87-5 | benzidine | U | 1.1E+03 |
| 60-11-7 | p-dimethylaminoazobenzene | U | 1.1E+03 |
| 57-97-6 | 7,12-dimethbenz(a)anthracene | U | 1.1E+03 |
| 56-49-5 | 3-methylchloranthrene | U | 1.1E+03 |
| 57-74-9 | chlordane | U | 1.1E+04 |
| 8001-35-2 | toxaphene | U | 1.1E+04 |
| 12674-11-2 | PCB-1016 | U | 1.1E+04 |
| 11104-28-2 | PCB-1221 | U | 1.1E+04 |
| 11141-16-5 | PCB-1232 | U | 1.1E+04 |
| 53469-21-9 | PCB-1242 | U | 1.1E+04 |
| 12672-29-6 | PCB-1248 | U | 1.1E+04 |
| 11097-69-1 | PCB-1254 | U | 1.1E+04 |
| 11096-82-5 | PCB-1260 | U | 1.1E+04 |

See footnotes on page 4

ANALYTICAL REPORT FOR SAMPLE No.: EL4862



NON-TARGET ANALYTE RESULTS
Additional Semi-Volatiles

SET ID: S92-0846-IJ

Field samp ID: B07GN7

| Cas. No | COMPOUND | Scan No. | Results ug/Kg | Qlfr |
|---|---|---|---|---|
| 0-00-0 | ALDOL CONDENSATION PRODUCT | 521 | 1.9E+02 | ENA |
| 0-00-0 | ALDOL CONDENSATION PRODUCT | 569 | 5.1E+02 | ENAB |
| 0-00-0 | ALDOL CONDENSATION PRODUCT | 632 | 3.3E+02 | ENA |
| 0-00-0 | ALKANE @ C29 | 2056 | 2.2E+02 | EN |

B The analyte was found in the method blank.
E The reported concentration is an estimate only. The response factor was assumed to be 1.000 relative to an internal standard.
J Indicates an estimated concentration below the Method Detection Limit.
K The isomer is unknown.
N Analytical standards were not analyzed for this compound.
U Not detected.
W The identification is tentative or closely related to the compound.

ANALYTICAL REPORT FOR SAMPLE No.: EL4863



EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Sponsor: WESTINGHOUSE HANFORD DCL SET ID: S92-0846-IJ

File ID: FQ8EL4863 Date Extracted: 11/04/92

FIELD No.:B07GN8 Analysis Date: 11/29/92

| Cas. No | COMPOUND | QLFR | RESULTS ug/Kg |
|---|---|---|---|
| 62-75-9 | N-nitroso-dimethylamine | U | 1.0E+03 |
| 108-95-2 | phenol | U | 3.4E+02 |
| 111-44-4 | bis(2-chloroethyl)ether | U | 3.4E+02 |
| 95-57-8 | 2-chlorophenol | U | 3.4E+02 |
| 541-73-1 | 1,3-dichlorobenzene | U | 3.4E+02 |
| 106-46-7 | 1,4-dichlorobenzene | U | 3.4E+02 |
| 100-51-6 | benzyl alcohol | U | 1.0E+03 |
| 95-50-1 | 1,2-dichlorobenzene | U | 3.4E+02 |
| 95-48-7 | 2-methylphenol | U | 3.4E+02 |
| 39638-329 | bis(2-chloroisopropyl)ether | U | 3.4E+02 |
| 106-44-5 | 4-methylphenol | U | 3.4E+02 |
| 621-64-7 | N-nitroso-di-n-propylamine | U | 3.4E+02 |
| 67-72-1 | hexachloroethane | U | 3.4E+02 |
| 98-95-3 | nitrobenzene | U | 3.4E+02 |
| 78-59-1 | isophorone | U | 3.4E+02 |
| 88-75-5 | 2-nitrophenol | U | 3.4E+02 |
| 105-67-9 | 2,4-dimethylphenol | U | 3.4E+02 |
| 111-91-1 | bis(2-chloroethoxy)methane | U | 3.4E+02 |
| 65-85-0 | benzoic acid | U | 1.0E+03 |
| 120-83-2 | 2,4-dichlorophenol | U | 3.4E+02 |
| 120-82-1 | 1,2,4-trichlorobenzene | U | 3.4E+02 |
| 91-20-3 | naphthalene | U | 3.4E+02 |
| 106-47-8 | 4-chloroaniline | U | 3.4E+02 |
| 87-68-3 | hexachlorobutadiene | U | 3.4E+02 |
| 59-50-7 | 4-chloro-3-methylphenol | U | 3.4E+02 |
| 91-57-6 | 2-methylnaphthalene | U | 3.4E+02 |
| 77-47-4 | hexachlorocyclopentadiene | U | 3.4E+02 |
| 88-06-2 | 2,4,6-trichlorophenol | U | 3.4E+02 |
| 95-95-4 | 2,4,5-trichlorophenol | U | 8.3E+02 |
| 91-58-7 | 2-chloronaphthalene | U | 3.4E+02 |
| 88-74-4 | 2-nitroaniline | U | 8.3E+02 |
| 131-11-3 | dimethyl phthalate | U | 3.4E+02 |
| 606-20-2 | 2,6-dinitrotoluene | U | 3.4E+02 |
| 208-96-8 | acenaphthylene | U | 3.4E+02 |
| 99-09-2 | 3-nitroaniline | U | 8.3E+02 |
| 83-32-9 | acenaphthene | U | 3.4E+02 |
| 51-28-5 | 2,4-dinitrophenol | U | 8.3E+02 |
| 100-02-7 | 4-nitrophenol | U | 8.3E+02 |
| 132-64-9 | dibenzofuran | U | 3.4E+02 |

See footnotes on page 4.

ANALYTICAL REPORT FOR SAMPLE No.: EL4863



EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Field Sample ID:B07GN8

| Cas. No | COMPOUND | QLFR | RESULTS ug/Kg |
|---|---|---|---|
| 121-14-2 | 2,4-dinitrotoluene | U | 3.4E+02 |
| 84-66-2 | diethyl phthalate | U | 3.4E+02 |
| 7005-72-3 | 4-chlorophenyl-phenylether | U | 3.4E+02 |
| 86-73-7 | fluorene | U | 3.4E+02 |
| 100-01-6 | 4-nitroaniline | U | 8.3E+02 |
| 534-52-1 | 2-methyl-4,6-dinitrophenol | U | 8.3E+02 |
| 86-30-6 | N-nitroso-diphenylamine | U | 3.4E+02 |
| 122-66-7 | 1,2-diphenylhydrazine | U | 1.0E+03 |
| 101-55-3 | 4-bromophenyl-phenylether | U | 3.4E+02 |
| 319-84-6 | .alpha.-BHC | U | 1.0E+03 |
| 319-85-7 | beta-BHC | U | 5.2E+03 |
| 118-74-1 | hexachlorobenzene | U | 3.4E+02 |
| 87-86-5 | pentachlorophenol | U | 8.3E+02 |
| 58-89-9 | .gamma.-BHC | U | 1.0E+03 |
| 85-01-8 | phenanthrene | U | 3.4E+02 |
| 120-12-7 | anthracene | U | 3.4E+02 |
| 319-86-8 | delta-BHC | U | 5.2E+03 |
| 76-44-8 | heptachlor | U | 5.2E+03 |
| 84-74-2 | di-n-butyl phthalate | U | 3.4E+02 |
| 309-00-2 | aldrin | U | 5.2E+03 |
| 1024-57-3 | heptachlor epoxide | U | 5.2E+03 |
| 206-44-0 | fluoranthene | U | 3.4E+02 |
| 129-00-0 | pyrene | U | 3.4E+02 |
| 959-98-8 | endosulfan I | U | 5.2E+03 |
| 72-55-9 | 4,4'DDE | U | 5.2E+03 |
| 60-57-1 | dieldrin | U | 5.2E+03 |
| 7421-93-4 | endrin aldehyde | U | 5.2E+03 |
| 72-20-8 | endrin | U | 5.2E+03 |
| 72-54-8 | 4,4'DDD | U | 5.2E+03 |
| 33213-65-9 | endosulfan II | U | 5.2E+03 |
| 85-68-7 | butylbenzylphthalate | U | 3.4E+02 |
| 50-29-3 | 4,4'DDT | U | 5.2E+03 |
| 1031-07-8 | endosulfan sulfate | U | 5.2E+03 |
| 72-43-5 | p,p'-methoxychlor | U | 1.0E+03 |
| 91-94-1 | 3,3'-dichlorobenzidine | U | 1.0E+03 |
| 56-55-3 | benzo(a)anthracene | U | 3.4E+02 |
| 117-81-7 | bis(2-ethylhexyl)phthalate | U | 3.4E+02 |
| 218-01-9 | chrysene | U | 3.4E+02 |
| 117-84-0 | di-n-octylphthalate | U | 3.4E+02 |

See footnotes on page 4.

ANALYTICAL REPORT FOR SAMPLE No.: EL4863



EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Field Sample ID:B07GN8

| Cas. No | COMPOUND | QLFR | RESULTS ug/Kg |
|---|---|---|---|
| 205-99-2 | benzo(b)fluoranthene | U | 3.4E+02 |
| 207-08-9 | benzo(k)fluoranthene | U | 3.4E+02 |
| 50-32-8 | benzo(a)pyrene | U | 3.4E+02 |
| 193-39-5 | indeno(1,2,3-cd)pyrene | U | 3.4E+02 |
| 53-70-3 | dibenzo(a,h)anthracene | U | 3.4E+02 |
| 191-24-2 | benzo(g,h,i)perylene | U | 3.4E+02 |
| 53494-70-5 | endrin ketone | U | 1.0E+03 |
| 109-06-8 | 2-picoline | U | 1.0E+03 |
| 62-50-0 | ethyl methanesulfonate | U | 1.0E+03 |
| 66-27-3 | methyl methanesulfonate | U | 1.0E+03 |
| 62-53-3 | aniline | U | 1.0E+03 |
| 98-86-2 | acetophenone | U | 1.0E+03 |
| 100-75-4 | N-nitroso-piperidine | U | 1.0E+03 |
| 122-09-8 | a,a-dimethylphenethylamine | U | 1.0E+03 |
| 87-65-0 | 2,6-dichlorophenol | U | 1.0E+03 |
| 924-16-3 | N-nitroso-di-n-butylamine | U | 1.0E+03 |
| 95-94-3 | 1,2,4,5-tetrachlorobenzene | U | 1.0E+03 |
| 90-13-1 | 1-chloronaphthalene | U | 1.0E+03 |
| 608-93-5 | pentachlorobenzene | U | 1.0E+03 |
| 134-32-7 | 1-naphthylamine | U | 1.0E+03 |
| 58-90-2 | 2,3,4,6-tetrachlorophenol | U | 1.0E+03 |
| 91-59-8 | 2-naphthylamine | U | 1.0E+03 |
| 62-44-2 | phenacetin | U | 1.0E+03 |
| 92-67-1 | 4-aminobiphenyl | U | 1.0E+03 |
| 23950-58-5 | pronamide (propyzamide) | U | 1.0E+03 |
| 82-68-8 | pentachloronitrobenzene | U | 1.0E+03 |
| 92-87-5 | benzidine | U | 1.0E+03 |
| 60-11-7 | p-dimethylaminoazobenzene | U | 1.0E+03 |
| 57-97-6 | 7,12-dimethbenz(a)anthracene | U | 1.0E+03 |
| 56-49-5 | 3-methylchloranthrene | U | 1.0E+03 |
| 57-74-9 | chlordane | U | 1.0E+04 |
| 8001-35-2 | toxaphene | U | 1.0E+04 |
| 12674-11-2 | PCB-1016 | U | 1.0E+04 |
| 11104-28-2 | PCB-1221 | U | 1.0E+04 |
| 11141-16-5 | PCB-1232 | U | 1.0E+04 |
| 53469-21-9 | PCB-1242 | U | 1.0E+04 |
| 12672-29-6 | PCB-1248 | U | 1.0E+04 |
| 11097-69-1 | PCB-1254 | U | 1.0E+04 |
| 11096-82-5 | PCB-1260 | U | 1.0E+04 |

See footnotes on page 4

ANALYTICAL REPORT FOR SAMPLE No.: EL4863



NON-TARGET ANALYTE RESULTS
Additional Semi-Volatiles

SET ID: S92-0846-IJ

Field samp ID: B07GN8

| Cas. No | COMPOUND | Scan No. | Results ug/Kg | Qlfr |
|---|---|---|---|---|
| 0-00-0 | ALDOL CONDENSATION PRODUCT | 566 | 4.5E+02 | ENAB |
| 0-00-0 | ALDOL CONDENSATION PRODUCT | 631 | 1.8E+02 | ENA |
| 0-00-0 | ALKENE @ C10 | 682 | 1.7E+02 | EN |
| 0-00-0 | ALKANE @ C29 | 2056 | 2.2E+02 | EN |

B The analyte was found in the method blank.
E The reported concentration is an estimate only. The response factor was assumed to be 1.000 relative to an internal standard.
J Indicates an estimated concentration below the Method Detection Limit.
K The isomer is unknown.
N Analytical standards were not analyzed for this compound.
U Not detected.
W The identification is tentative or closely related to the compound.

DATA CHEM LABORATORIES

# ANALYTICAL REPORT

Form ARF-AL
Page 1 of 5
Part 1 of 4

Date NOV 13 1992
Agency Identification Number S92-0846-FJ
Account No. 3534C

NOV 1992 RECEIVED OSM DMO

Westinghouse Hanford Company
2355 Stevens Drive
MSIN T6-08
Richland, WA 99352
Attention: Jeanette Duncan

FAX (509) 373-3992
Telephone (509) 373-3225

**Sampling Collection and Shipment**

Sampling Site North Slope PSN04 Date of Collection October 21, 1992

Date Samples Received at Laboratory October 29, 1992

**Analysis**

Method of Analysis EPA 8080

Date(s) of Analysis November 07, 1992 - November 08, 1992

**Analytical Results**

| Field Sample Number | Laboratory Number | Sample Type | Aldrin ug/kg | alpha-BHC ug/kg | Beta-BHC ug/kg | Delta-BHC ug/kg | Lindane ug/kg | Chlordane ug/kg | 4,4'-DDD ug/kg | 4,4'-DDE ug/kg |
|---|---|---|---|---|---|---|---|---|---|---|
| QC-90694-1 | QC-90694-1 | SOIL | 19 | ND* | ND* | ND* | 18 | ND* | ND* | ND* |
| BL-90694-1 | BL-90694-1 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GM6 | EL 4856 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN0 | EL 4857 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN1 | EL 4858 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | 44 |
| B07GN2 | EL 4859 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN2MS | EL 4859MS | SOIL | 17 | ND* | ND* | ND* | 17 | ND* | ND* | ND* |
| B07GN2MSD | EL 4859MSD | SOIL | 20 | ND* | ND* | ND* | 19 | ND* | ND* | ND* |
| B07GN4 | EL 4860 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN5 | EL 4861 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN7 | EL 4862 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN8 | EL 4863 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| * Limit of Detection | | | 10 | 10 | 10 | 20 | 10 | 50 | 20 | 10 |

† See comment on last page.
ND Parameter not detected.
NR Parameter not requested.
** See comment on last page.
( ) Parameter between LOD and LOQ.

RECORD COPY

Analyst: Guangyue Liu

Reviewer: Vicki Hoe-Lin Tsai

Laboratory Supervisor: Jose C. Danino

DATA CHEM LABORATORIES

# ANALYTICAL REPORT



Date NOV 13 1992
Agency Identification Number S92-0846-FJ
Account No. 3534C

Westinghouse Hanford Company
2355 Stevens Drive
MSIN T6-08
Richland, WA 99352
Attention: Jeanette Duncan

FAX (509) 373-3992
Telephone (509) 373-3225

**Sampling Collection and Shipment**

Sampling Site North Slope PSN04 Date of Collection October 21, 1992

Date Samples Received at Laboratory October 29, 1992

**Analysis**

Method of Analysis EPA 8080

Date(s) of Analysis November 07, 1992 - November 08, 1992

**Analytical Results**

| Field Sample Number | Laboratory Number | Sample Type | 4,4'-DDT ug/kg | Dieldrin ug/kg | Endosulfan I ug/kg | Endosulfan II ug/kg | Endosulfan Sulfate ug/kg | Endrin ug/kg | Endrin aldehyde ug/kg | Heptachlor ug/kg |
|---|---|---|---|---|---|---|---|---|---|---|
| QC-90694-1 | QC-90694-1 | SOIL | 36 | 37 | ND* | ND* | ND* | 41 | ND* | 19 |
| BL-90694-1 | BL-90694-1 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GM6 | EL 4856 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN0 | EL 4857 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN1 | EL 4858 | SOIL | 65 | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN2 | EL 4859 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN2MS | EL 4859MS | SOIL | 46 | 35 | ND* | ND* | ND* | 40 | ND* | 18 |
| B07GN2MSD | EL 4859MSD | SOIL | 47 | 40 | ND* | ND* | ND* | 45 | ND* | 21 |
| B07GN4 | EL 4860 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN5 | EL 4861 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN7 | EL 4862 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN8 | EL 4863 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| * Limit of Detection | | | 20 | 10 | 10 | 10 | 20 | 10 | 50 | 10 |

† See comment on last page.
ND Parameter not detected.
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** See comment on last page.
( ) Parameter between LOD and LOQ.

DATA CHEM LABORATORIES

# ANALYTICAL REPORT

Form ARF-AL
Page 3 of 5
Part 3 of 4

Date NOV 13 1992
Agency Identification Number S92-0846-EJ
Account No. 3534C

Westinghouse Hanford Company
2355 Stevens Drive
MSIN T6-08
Richland, WA 99352
Attention: Jeanette Duncan

FAX (509) 373-3992
Telephone (509) 373-3225

**Sampling Collection and Shipment**

Sampling Site North Slope PSN04 Date of Collection October 21, 1992

Date Samples Received at Laboratory October 29, 1992

**Analysis**

Method of Analysis EPA 8080

Date(s) of Analysis November 07, 1992 - November 08, 1992

**Analytical Results**

| Field Sample Number | Laboratory Number | Sample Type | Heptachlor epoxide ug/kg | Toxaphene ug/kg | Aroclor 1016 ug/kg | Aroclor 1221 ug/kg | Aroclor 1232 ug/kg | Aroclor 1242 ug/kg | Aroclor 1248 ug/kg | Aroclor 1254 ug/kg |
|---|---|---|---|---|---|---|---|---|---|---|
| QC-90694-1 | QC-90694-1 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| BL-90694-1 | BL-90694-1 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GM6 | EL 4856 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN0 | EL 4857 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN1 | EL 4858 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN2 | EL 4859 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN2MS | EL 4859MS | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN2MSD | EL 4859MSD | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN4 | EL 4860 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN5 | EL 4861 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN7 | EL 4862 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN8 | EL 4863 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| * Limit of Detection | | | 60 | 400 | 100 | 200 | 200 | 100 | 100 | 100 |

† See comment on last page.
ND Parameter not detected.
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( ) Parameter between LOD and LOQ.

DATA CHEM LABORATORIES

# ANALYTICAL REPORT



Date NOV 13 1992
Agency Identification Number S92-0846-FJ
Account No. 3534C

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Attention: Jeanette Duncan

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**Sampling Collection and Shipment**

Sampling Site North Slope PSN04 Date of Collection October 21, 1992

Date Samples Received at Laboratory October 29, 1992

**Analysis**

Method of Analysis EPA 8080

Date(s) of Analysis November 07, 1992 - November 08, 1992

**Analytical Results**

| Field Sample Number | Laboratory Number | Sample Type | Aroclor 1260 ug/kg | Methoxychlor ug/kg | Dibutyl chlorendate ug/kg | Tetrachloro-meta-xylene ug/kg | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| QC-90694-1 | QC-90694-1 | SOIL | ND* | ND* | 37 | 35 | | | | |
| BL-90694-1 | BL-90694-1 | SOIL | ND* | ND* | 38 | 34 | | | | |
| B07GM6 | EL 4856 | SOIL | ND* | ND* | 33 | 33 | | | | |
| B07GN0 | EL 4857 | SOIL | ND* | ND* | 36 | 33 | | | | |
| B07GN1 | EL 4858 | SOIL | ND* | ND* | 36 | 33 | | | | |
| B07GN2 | EL 4859 | SOIL | ND* | ND* | 39 | 36 | | | | |
| B07GN2MS | EL 4859MS | SOIL | ND* | ND* | 39 | 33 | | | | |
| B07GN2MSD | EL 4859MSD | SOIL | ND* | ND* | 41 | 37 | | | | |
| B07GN4 | EL 4860 | SOIL | ND* | ND* | 37 | 35 | | | | |
| B07GN5 | EL 4861 | SOIL | ND* | ND* | 38 | 37 | | | | |
| B07GN7 | EL 4862 | SOIL | ND* | ND* | 38 | 35 | | | | |
| B07GN8 | EL 4863 | SOIL | ND* | ND* | 40 | 34 | | | | |
| * Limit of Detection | | | 100 | 100 | SURR. | SURR. | | | | |

† See comment on last page. ** See comment on last page.
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DATA CHEM LABORATORIES

# ANALYTICAL REPORT



Date NOV 13 1992

Agency Identification Number S92-0846-FJ

General Set Comments

The samples were spiked with the surrogates dibutylchlorendate (DBC) and 2,4,5,6-tetrachloro-m-xylene (TCMX) at 33 µg/kg.

The matrix spike, matrix spike duplicate, and Laboratory Control Samples were spiked with lindane (gamma-BHC), heptachlor, and aldrin at 17 µg/kg and with dieldrin, edrin, and 4,4'-DDT at 33 µg/kg.

DATA CHEM LABORATORIES

# ANALYTICAL REPORT



Date _____
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Account No. 3534C

Westinghouse Hanford Company
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**Sampling Collection and Shipment**

Sampling Site North Slope PSN04 Date of Collection October 21, 1992

Date Samples Received at Laboratory October 29, 1992

**Analysis**

Method of Analysis EPA 8080

Date(s) of Analysis November 07, 1992 - November 08, 1992

**Analytical Results**

| Field Sample Number | Laboratory Number | Sample Type | Aldrin ug/kg | alpha-BHC ug/kg | Beta-BHC ug/kg | Delta-BHC ug/kg | Lindane ug/kg | Chlordane ug/kg | 4,4'-DDD ug/kg | 4,4'-DDE ug/kg |
|---|---|---|---|---|---|---|---|---|---|---|
| QC-90694-1 | QC-90694-1 | SOIL | 19 | ND* | ND* | ND* | 18 | ND* | ND* | ND* |
| BL-90694-1 | BL-90694-1 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GM6 | EL 4856 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN0 | EL 4857 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN1 | EL 4858 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | 44 |
| B07GN2 | EL 4859 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN2MS | EL 4859MS | SOIL | 17 | ND* | ND* | ND* | 17 | ND* | ND* | ND* |
| B07GN2MSD | EL 4859MSD | SOIL | 20 | ND* | ND* | ND* | 19 | ND* | ND* | ND* |
| B07GN4 | EL 4860 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN5 | EL 4861 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN7 | EL 4862 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN8 | EL 4863 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| * Limit of Detection | | | 10 | 10 | 10 | 20 | 10 | 50 | 20 | 10 |

† See comment on last page.
ND Parameter not detected.
NR Parameter not requested.
** See comment on last page.
( ) Parameter between LOD and LOQ.

Analyst: Guangyue Liu

Reviewer: Vicki Hoe-Lin Tsai

Laboratory Supervisor: Jose C. Danino

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# ANALYTICAL REPORT



Date _____
Agency Identification Number S92-0846-FJ
Account No. 3534C

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Richland, WA 99352
Attention: Jeanette Duncan

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**Sampling Collection and Shipment**

Sampling Site North Slope PSN04 Date of Collection October 21, 1992

Date Samples Received at Laboratory October 29, 1992

**Analysis**

Method of Analysis EPA 8080

Date(s) of Analysis November 07, 1992 - November 08, 1992

**Analytical Results**

| Field Sample Number | Laboratory Number | Sample Type | 4,4'-DDT ug/kg | Dieldrin ug/kg | Endosulfan I ug/kg | Endosulfan II ug/kg | Endosulfan Sulfate ug/kg | Endrin ug/kg | Endrin aldehyde ug/kg | Heptachlor ug/kg |
|---|---|---|---|---|---|---|---|---|---|---|
| QC-90694-1 | QC-90694-1 | SOIL | 36 | 37 | ND* | ND* | ND* | 41 | ND* | 19 |
| BL-90694-1 | BL-90694-1 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GM6 | EL 4856 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN0 | EL 4857 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN1 | EL 4858 | SOIL | 65 | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN2 | EL 4859 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN2MS | EL 4859MS | SOIL | 46 | 35 | ND* | ND* | ND* | 40 | ND* | 18 |
| B07GN2MSD | EL 4859MSD | SOIL | 47 | 40 | ND* | ND* | ND* | 45 | ND* | 21 |
| B07GN4 | EL 4860 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN5 | EL 4861 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN7 | EL 4862 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN8 | EL 4863 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| * Limit of Detection | | | 20 | 10 | 10 | 10 | 20 | 10 | 50 | 10 |

† See comment on last page.
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** See comment on last page.
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# ANALYTICAL REPORT



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**Sampling Collection and Shipment**

Sampling Site North Slope PSN04 Date of Collection October 21, 1992

Date Samples Received at Laboratory October 29, 1992

**Analysis**

Method of Analysis EPA 8080

Date(s) of Analysis November 07, 1992 - November 08, 1992

**Analytical Results**

| Field Sample Number | Laboratory Number | Sample Type | Heptachlor epoxide ug/kg | Toxaphene ug/kg | Aroclor 1016 ug/kg | Aroclor 1221 ug/kg | Aroclor 1232 ug/kg | Aroclor 1242 ug/kg | Aroclor 1248 ug/kg | Aroclor 1254 ug/kg |
|---|---|---|---|---|---|---|---|---|---|---|
| QC-90694-1 | QC-90694-1 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| BL-90694-1 | BL-90694-1 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GM6 | EL 4856 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN0 | EL 4857 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN1 | EL 4858 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN2 | EL 4859 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN2MS | EL 4859MS | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN2MSD | EL 4859MSD | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN4 | EL 4860 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN5 | EL 4861 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN7 | EL 4862 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN8 | EL 4863 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| * Limit of Detection | | | 60 | 400 | 100 | 200 | 200 | 100 | 100 | 100 |

† See comment on last page. ** See comment on last page.
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DATA CHEM LABORATORIES

# ANALYTICAL REPORT



Date _____
Agency Identification Number S92-0846-FJ
Account No. 3534C

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Richland, WA 99352
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**Sampling Collection and Shipment**

Sampling Site North Slope PSN04 Date of Collection October 21, 1992

Date Samples Received at Laboratory October 29, 1992

**Analysis**

Method of Analysis EPA 8080

Date(s) of Analysis November 07, 1992 - November 08, 1992

**Analytical Results**

| Field Sample Number | Laboratory Number | Sample Type | Aroclor 1260 ug/kg | Methoxychlor ug/kg | Dibutyl chlorendate ug/kg | Tetrachloro-meta-xylene ug/kg | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| QC-90694-1 | QC-90694-1 | SOIL | ND* | ND* | 37 | 35 | | | | |
| BL-90694-1 | BL-90694-1 | SOIL | ND* | ND* | 38 | 34 | | | | |
| B07GM6 | EL 4856 | SOIL | ND* | ND* | 33 | 33 | | | | |
| B07GN0 | EL 4857 | SOIL | ND* | ND* | 36 | 33 | | | | |
| B07GN1 | EL 4858 | SOIL | ND* | ND* | 36 | 33 | | | | |
| B07GN2 | EL 4859 | SOIL | ND* | ND* | 39 | 36 | | | | |
| B07GN2MS | EL 4859MS | SOIL | ND* | ND* | 39 | 33 | | | | |
| B07GN2MSD | EL 4859MSD | SOIL | ND* | ND* | 41 | 37 | | | | |
| B07GN4 | EL 4860 | SOIL | ND* | ND* | 37 | 35 | | | | |
| B07GN5 | EL 4861 | SOIL | ND* | ND* | 38 | 37 | | | | |
| B07GN7 | EL 4862 | SOIL | ND* | ND* | 38 | 35 | | | | |
| B07GN8 | EL 4863 | SOIL | ND* | ND* | 40 | 34 | | | | |
| * Limit of Detection | | | 100 | 100 | SURR- | SURR- | | | | |

† See comment on last page.
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( ) Parameter between LOD and LOQ.

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DATA CHEM LABORATORIES

# ANALYTICAL REPORT



Date _____

Agency Identification Number S92-0846-FJ

**General Set Comments**

The samples were spiked with the surrogates dibutylchlorendate (DBC) and 2,4,5,6-tetrachloro-m-xylene (TCMX) at 33 µg/kg.

The matrix spike, matrix spike duplicate, and Laboratory Control Samples were spiked with lindane (gamma-BHC), heptachlor, and aldrin at 17 µg/kg and with dieldrin, edrin, and 4,4'-DDT at 33 µg/kg.

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DATA CHEM LABORATORIES

# ANALYTICAL REPORT

Form ARF-AL
Page 1 of 3
Part 1 of 2

Date DEC 01 1992
Agency Identification Number S92-0846-HJ
Account No. 3534C

DEC 1992 RECEIVED OSM DMO

Westinghouse Hanford Company
2355 Stevens Drive
MSIN T6-08
Richland, WA 99352
Attention: Jeanette Duncan

FAX (509) 373-3992
Telephone (509) 373-3225

**Sampling Collection and Shipment**

Sampling Site North Slope PSN04 Date of Collection October 21, 1992

Date Samples Received at Laboratory October 29, 1992

**Analysis**

Method of Analysis EPA 8150

Date(s) of Analysis November 22, 1992 - November 23, 1992

**Analytical Results**

| Field Sample Number | Laboratory Number | Sample Type | 2,4-D ug/kg | 2,4-DB ug/kg | 2,4,5-T ug/kg | 2,4,5-TP (silvex) ug/kg | Dalapon ug/kg | Dicamba ug/kg | Dichloroprop ug/kg | Dinoseb ug/kg |
|---|---|---|---|---|---|---|---|---|---|---|
| BL-90696-1 | BL-90696-1 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| QC-90696-1 | QC-90696-1 | SOIL | 83 | ND* | 45 | 46 | ND* | ND* | ND* | ND* |
| B07GM6 | EL 4856 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN0 | EL 4857 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN1 | EL 4858 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN2 | EL 4859 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN4 | EL 4860 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN5 | EL 4861 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN7 | EL 4862 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN8 | EL 4863 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN8MS | EL 4863MS | SOIL | 84 | ND* | 48 | 48 | ND* | ND* | ND* | ND* |
| B07GN8MSD | EL 4863MSD | SOIL | 89 | ND* | 48 | 47 | ND* | ND* | ND* | ND* |
| * Limit of Detection | | | 20 | 100 | 10 | 10 | 100 | 10 | 20 | 20 |

† See comment on last page.
ND Parameter not detected.
NR Parameter not requested.

** See comment on last page.
( ) Parameter between LOD and LOQ.

Analyst: Guangyue Liu

Reviewer: John Meikle

Laboratory Supervisor: Jose C. Danino

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DATA CHEM LABORATORIES

# ANALYTICAL REPORT



Date Dec 01, 1992
Agency Identification Number S92-0846-HJ
Account No. 3534C

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2355 Stevens Drive
MSIN T6-08
Richland, WA 99352
Attention: Jeanette Duncan

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Telephone (509) 373-3225

**Sampling Collection and Shipment**

Sampling Site North Slope PSN04 Date of Collection October 21, 1992

Date Samples Received at Laboratory October 29, 1992

**Analysis**

Method of Analysis EPA 8150

Date(s) of Analysis November 22, 1992 - November 23, 1992

**Analytical Results**

| Field Sample Number | Laboratory Number | Sample Type | MCPA ug/kg | MCPP ug/kg | DCAA ug/kg | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| BL-90696-1 | BL-90696-1 | SOIL | ND* | ND* | 46 | | | | | |
| QC-90696-1 | QC-90696-1 | SOIL | ND* | ND* | 50 | | | | | |
| B07GM6 | EL 4856 | SOIL | ND* | ND* | 46 | | | | | |
| B07GN0 | EL 4857 | SOIL | ND* | ND* | 46 | | | | | |
| B07GN1 | EL 4858 | SOIL | ND* | ND* | 57 | | | | | |
| B07GN2 | EL 4859 | SOIL | ND* | ND* | 54 | | | | | |
| B07GN4 | EL 4860 | SOIL | ND* | ND* | 43 | | | | | |
| B07GN5 | EL 4861 | SOIL | ND* | ND* | 49 | | | | | |
| B07GN7 | EL 4862 | SOIL | ND* | ND* | 50 | | | | | |
| B07GN8 | EL 4863 | SOIL | ND* | ND* | 51 | | | | | |
| B07GN8MS | EL 4863MS | SOIL | ND* | ND* | 48 | | | | | |
| B07GN8MSD | EL 4863MSD | SOIL | ND* | ND* | 50 | | | | | |
| * Limit of Detection | | | 5000 | 5000 | SURR | | | | | |

† See comment on last page.
ND Parameter not detected.
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** See comment on last page.
( ) Parameter between LOD and LOQ.

DATA CHEM LABORATORIES

# ANALYTICAL REPORT



Date Dec. 01, 1992
Agency Identification Number S92-0846-HJ

**General Set Comments**

The samples were spiked with the surrogate, 2,4-dichlorophenylacetic acid (DCAA), at 50 µg/kg.

The matrix spike, matrix spike duplicate, and Laboratory Control Samples were spiked with 2,4-D at 100 µg/kg, 2,4,5-TP at 50 µg/kg, and 2,4,5-T at 50 ug/kg.

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# ANALYTICAL REPORT

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Page 1 of 5
Part 1 of 4

NOV 1992 RECEIVED OSM DMO

Date NOV 16 1992
Agency Identification Number S92-0846-GJ
Account No. 3534C

Westinghouse Hanford Company
2355 Stevens Drive
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Richland, WA 99352
Attention: Jeanette Duncan

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**Sampling Collection and Shipment**

Sampling Site North Slope PSN04 Date of Collection October 21, 1992

Date Samples Received at Laboratory October 29, 1992

**Analysis**

Method of Analysis EPA 8141

Date(s) of Analysis November 12, 1992

**Analytical Results**

| Field Sample Number | Laboratory Number | Sample Type | Azinphos Methyl ug/kg GC/FPD | Bolstar ug/kg GC/FPD | Chlorpyrifos ug/kg GC/FPD | Coumaphos ug/kg GC/FPD | Demeton-S ug/kg GC/FPD | Diazinon ug/kg GC/FPD | Dichlorvos ug/kg GC/FPD | Disulfoton ug/kg GC/FPD |
|---|---|---|---|---|---|---|---|---|---|---|
| QC-90695-1 | QC-90695-1 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | 62 |
| BL-90695-1 | BL-90695-1 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GM6 | EL 4856 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GM6MS | EL 4856MS | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | 72 |
| B07GM6MSD | EL 4856MSD | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | 57 |
| B07GN0 | EL 4857 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN1 | EL 4858 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN2 | EL 4859 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN4 | EL 4860 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN5 | EL 4861 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN7 | EL 4862 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN8 | EL 4863 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| * Limit of Detection | | | 33.3 | 16.6 | 33.3 | 16.6 | 33.3 | 16.6 | 16.6 | 16.6 |

† See comment on last page.
ND Parameter not detected.
NR Parameter not requested.
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( ) Parameter between LOD and LOQ.

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Vicki Hoe-Lin Tsai
Analyst: Vicki Hoe-Lin Tsai

Reviewer:

Laboratory Supervisor: Jose C. Danino

DATA CHEM LABORATORIES

# ANALYTICAL REPORT



Date NOV 16 1992
Agency Identification Number S92-0846-GJ
Account No. 3534C

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**Sampling Collection and Shipment**

Sampling Site North Slope PSN04 Date of Collection October 21, 1992

Date Samples Received at Laboratory October 29, 1992

**Analysis**

Method of Analysis EPA 8141

Date(s) of Analysis November 12, 1992

**Analytical Results**

| Field Sample Number | Laboratory Number | Sample Type | Ethoprop ug/kg GC/FPD | Fensulfothion ug/kg GC/FPD | Fenthion ug/kg GC/FPD | Merphos ug/kg GC/FPD | Mevinphos ug/kg GC/FPD | Naled ug/kg GC/FPD | Parathion methyl ug/kg GC/FPD | Phorate ug/kg GC/FPD |
|---|---|---|---|---|---|---|---|---|---|---|
| QC-90695-1 | QC-90695-1 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | 79 | 93 |
| BL-90695-1 | BL-90695-1 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GM6 | EL 4856 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GM6MS | EL 4856MS | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | 75 | 89 |
| B07GM6MSD | EL 4856MSD | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | 57 | 70 |
| B07GN0 | EL 4857 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN1 | EL 4858 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN2 | EL 4859 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN4 | EL 4860 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN5 | EL 4861 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN7 | EL 4862 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN8 | EL 4863 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| * Limit of Detection | | | 33.3 | 33.3 | 33.3 | 33.3 | 66.6 | 16.6 | 16.6 | 66.6 |

† See comment on last page. ** See comment on last page.
ND Parameter not detected. ( ) Parameter between LOD and LOQ.
NR Parameter not requested.

DATA CHEM LABORATORIES

# ANALYTICAL REPORT



Date NOV 16 1992
Agency Identification Number S92-0846-GJ
Account No. 3534C

Westinghouse Hanford Company
2355 Stevens Drive
MSIN T6-08
Richland, WA 99352
Attention: Jeanette Duncan

FAX (509) 373-3992
Telephone (509) 373-3225

**Sampling Collection and Shipment**

Sampling Site North Slope PSN04 Date of Collection October 21, 1992

Date Samples Received at Laboratory October 29, 1992

**Analysis**

Method of Analysis EPA 8141

Date(s) of Analysis November 12, 1992

**Analytical Results**

| Field Sample Number | Laboratory Number | Sample Type | Ronnel ug/kg GC/FPD | Stirophos ug/kg GC/FPD | Dimethoate ug/kg GC/FPD | EPN ug/kg GC/FPD | Malathion ug/kg GC/FPD | Monocrotophos ug/kg GC/FPD | Parathion ug/kg GC/FPD | SULFOTEP ug/kg GC/FPD |
|---|---|---|---|---|---|---|---|---|---|---|
| QC-90695-1 | QC-90695-1 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| BL-90695-1 | BL-90695-1 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GM6 | EL 4856 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GM6MS | EL 4856MS | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GM6MSD | EL 4856MSD | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN0 | EL 4857 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN1 | EL 4858 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN2 | EL 4859 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN4 | EL 4860 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN5 | EL 4861 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN7 | EL 4862 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN8 | EL 4863 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND** |
| * Limit of Detection | | | 33.3 | 33.3 | 66.6 | 66.6 | 33.3 | 16.6 | 16.6 | 16.6 |

† See comment on last page.
ND Parameter not detected.
NR Parameter not requested.
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( ) Parameter between LOD and LOQ.

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**Sampling Collection and Shipment**

Sampling Site North Slope PSN04 Date of Collection October 21, 1992

Date Samples Received at Laboratory October 29, 1992

**Analysis**

Method of Analysis EPA 8141

Date(s) of Analysis November 12, 1992

**Analytical Results**

| Field Sample Number | Laboratory Number | Sample Type | TEPP ug/kg GC/FPD | TPP ug/kg GC/FPD | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| QC-90695-1 | QC-90695-1 | SOIL | ND* | 306 | | | | | | | |
| BL-90695-1 | BL-90695-1 | SOIL | ND* | 307 | | | | | | | |
| B07GM6 | EL 4856 | SOIL | ND* | 303 | | | | | | | |
| B07GM6MS | EL 4856MS | SOIL | ND* | 307 | | | | | | | |
| B07GM6MSD | EL 4856MSD | SOIL | ND* | 219 | | | | | | | |
| B07GN0 | EL 4857 | SOIL | ND* | 305 | | | | | | | |
| B07GN1 | EL 4858 | SOIL | ND* | 329 | | | | | | | |
| B07GN2 | EL 4859 | SOIL | ND* | 323 | | | | | | | |
| B07GN4 | EL 4860 | SOIL | ND* | 317 | | | | | | | |
| B07GN5 | EL 4861 | SOIL | ND* | 324 | | | | | | | |
| B07GN7 | EL 4862 | SOIL | ND* | 325 | | | | | | | |
| B07GN8 | EL 4863 | SOIL | ND* | 336 | | | | | | | |
| * Limit of Detection | | | 16.6 | 16.6 | | | | | | | |

† See comment on last page.
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NR Parameter not requested.

** See comment on last page.
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DATA CHEM LABORATORIES

# ANALYTICAL REPORT



Date NOV 16 1992

Agency Identification Number S92-0846-GJ

General Set Comments

Phorate,Disulfoton and methyl-parathion were spiked at 60 ug/kg in LCS, method spike and method spike duplicate. Surrogate (TPP) was spiked at 300 ug/kg in all samples. The recoveries (%) of samples were as follows:

| | Phorate | Disulfoton | Methyl-Parathion | TPP |
|---|---|---|---|---|
| LCS | 155 | 103 | 132 | 102 |
| EL4856MS | 148 | 120 | 125 | 102 |
| EL4856MSD | 117 | 100 | 95 | 73 |
| Blank | | | | 102 |
| EL4856 | | | | 101 |
| EL4857 | | | | 102 |
| EL4858 | | | | 110 |
| EL4859 | | | | 108 |
| EL4860 | | | | 106 |
| EL4861 | | | | 108 |
| EL4862 | | | | 108 |
| EL4863 | | | | 112 |

DATA CHEM LABORATORIES

# ENVIRONMENTAL SOIL REPORT

Form EPRS-A
Page 1 of 3
Part 1 of 2

Date DEC 02 1992

Agency Identification Number S92-0846-DJ

Account No. 3534C

Westinghouse Hanford Company
2355 Stevens Drive
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Attention: Jeanette Duncan

DEC 1992 RECEIVED OSM DMO

Telephone (509) 373-3225

## Sampling Collection and Shipment

Sampling Site North Slope PSN04 Date of Collection October 21, 1992

Date Samples Received at Laboratory October 29, 1992

## Analytical Results

| Parameter Name / Analysis Date / Method / Prep Method | Units | Field Number / Lab Number | B07GM6 EL 4856 | B07GN0 EL 4857 | B07GN1 EL 4858 | B07GN2 EL 4859 | B07GN4 EL 4860 | B07GN5 EL 4861 | B07GN7 EL 4862 | |
|---|---|---|---|---|---|---|---|---|---|---|
| Fluoride (F) 11/04/1992 300.0 [1] | µg/g | | ND* | 3. | 7. | 3. | 4. | 2. | 6. | |
| Chloride (Cl) 11/04/1992 300.0 [1] | µg/g | | 33. | 62. | 190 | ND* | 73. | 28. | 6. | |
| Phosphate ($PO_4$-P) 11/04/1992 300.0 [1] | µg/g | | ND* | ND* | ND* | ND* | ND* | 1.3 | ND* | |
| Sulfate ($SO_4$) 11/04/1992 300.0 [1] | µg/g | | 280 | 1300 | 3100 | 28. | 270 | 200 | 42. | |
| Nitrates ($NO_3$-N + $NO_2$-N) 11/03/1992 353.2 [1] | µg/g | | 6. | 6. | 10. | 1. | 6. | 3. | 2. | |
| Chromium VI 11/12/1992 7196 [2] 3060M [2] | µg/g | | ND* | ND* | ND* | ND* | ND* | ND* | ND* | |
| | | | | | | | | | | |
| | | | | | | | | | | |

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ND Parameter not detected.
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** Parameter not analyzed (See comment page).
( ) Parameter between LOD and LOQ.
[ ] Method Reference (See comments page.)

RECORDS

Analyst: Cynthia Adams for CA

Reviewer: Michael E. Richmond

Laboratory Supervisor: Michael P. Beesley for MPB

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# ENVIRONMENTAL SOIL REPORT



Date DEC 02 1992
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## Sampling Collection and Shipment

Sampling Site North Slope PSN04 Date of Collection October 21, 1992

Date Samples Received at Laboratory October 29, 1992

## Analytical Results

| Parameter Name / Analysis Date / Units / Method / Prep Method | Field Number / Lab Number | B07GN8 / EL 4863 | | | | | | | Limit of Detection |
|---|---|---|---|---|---|---|---|---|---|
| Fluoride (F) 11/04/1992 300.0 [1] | µg/g | 4. | | | | | | | 2. |
| Chloride (Cl) 11/04/1992 300.0 [1] | µg/g | 3. | | | | | | | 2. |
| Phosphate ($PO_4$-P) 11/04/1992 300.0 [1] | µg/g | ND* | | | | | | | 0.7 |
| Sulfate ($SO_4$) 11/04/1992 300.0 [1] | µg/g | 200 | | | | | | | 2. |
| Nitrates ($NO_3$-N + $NO_2$-N) 11/03/1992 353.2 [1] | µg/g | 1. | | | | | | | 1. |
| Chromium VI 11/12/1992 7196 [2] 3060M [2] | µg/g | ND* | | | | | | | 1. |
| | | | | | | | | | |
| | | | | | | | | | |

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[ ] Method Reference (See comments page.)

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# ENVIRONMENTAL SOIL REPORT



Date DEC 02 1992

Agency Identification Number S92-0846-DJ

## General Set Comments

A noncharacteristic fluoride peak on sample EL 4858 indicates a positive interference. The actual fluoride present may be lower than the reported value.

## Sample Comments

| Laboratory Number | -- Comment -- |
|---|---|
| EL 4858 | See comment above. |

| Method Index | -- Method Reference -- |
|---|---|
| [1] | EPA-600/4-79-020 "Methods for Chemical Analysis of Water and Wastes", March 1983 (Modified for use with soils.) |
| [2] | SW-846 "Test Methods for Evaluating Solid Waste", 3rd Edition, November 1986. |

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# ENVIRONMENTAL SOIL REPORT

Form EPRS-A
Page 1 of 3
Part 1 of 2

Date NOV 16 1992
Agency Identification Number S92-0846-EJ
Account No. 3534C

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**Sampling Collection and Shipment**

Sampling Site North Slope PSN04 Date of Collection October 21, 1992

Date Samples Received at Laboratory October 29, 1992

**Analytical Results**

| Parameter Name / Analysis Date / Units / Method / Prep Method | Field Number / Lab Number | B07GM6 EL 4856 | B07GN0 EL 4857 | B07GN1 EL 4858 | B07GN2 EL 4859 | B07GN4 EL 4860 | B07GN5 EL 4861 | B07GN7 EL 4862 | |
|---|---|---|---|---|---|---|---|---|---|
| Total Petroleum Hydrocarbons 11/10/1992 µg/g 418.1 [1] 3550 [2] | | ND* | ND* | 30 | ND* | ND* | ND* | ND* | |
| | | | | | | | | | |
| | | | | | | | | | |
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** Parameter not analyzed (See comment page).
( ) Parameter between LOD and LOQ.
[ ] Method Reference (See comments page.)

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Analyst: David W. Thomas

Reviewer: Rosemary H. Hanks

Laboratory Supervisor: Norman K. Christensen

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## Sampling Collection and Shipment

Sampling Site North Slope PSN04 Date of Collection October 21, 1992

Date Samples Received at Laboratory October 29, 1992

## Analytical Results

| Parameter Name / Analysis Date / Units / Method / Prep Method | Field Number / Lab Number | B07GN8 / EL 4863 | | | | | | | * Limit of Detection |
|---|---|---|---|---|---|---|---|---|---|
| Total Petroleum Hydrocarbons<br>11/10/1992 µg/g<br>418.1 [1] 3550 [2] | | ND* | | | | | | | 10 |
| | | | | | | | | | |
| | | | | | | | | | |
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# ENVIRONMENTAL SOIL REPORT



Date NOV 16 1992

Agency Identification Number S92-0846-EJ

**Method Index** **-- Method Reference --**

[1] EPA-600/4-79-020 "Methods for Chemical Analysis of Water and Wastes", March 1983 (Modified for use with soils.)

[2] SW-846 "Test Methods for Evaluating Solid Waste", 3rd Edition, November 1986.

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# ENVIRONMENTAL SOIL REPORT



NOV 23 1992

Date _____
Agency Identification Number S92-0846-AJ
Account No. 3534C

Westinghouse Hanford Company
2355 Stevens Drive
MSIN T6-08
Richland, WA 99352
Attention: Jeanette Duncan

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Telephone (509) 373-3225

**Sampling Collection and Shipment**

Sampling Site North Slope PSN04 Date of Collection October 21, 1992

Date Samples Received at Laboratory October 29, 1992

**Analytical Results**

| Parameter Name / Analysis Date / Units / Method / Prep Method | Field Number / Lab Number | BL-90688-1 / BL-90688-1 | QC-90688-1 / QC-90688-1 | B07GM6 / EL 4856 | B07GN0 / EL 4857 | B07GN1 / EL 4858 | B07GN2 / EL 4859 | B07GN4 / EL 4860 | B07GN5 / EL 4861 |
|---|---|---|---|---|---|---|---|---|---|
| **Aluminum (Al)** 11/19/1992 µg/gram 6010 [1] 3050 [1] | | ND* | 360 | 13000 | 17000 | 20000 | 9700 | 13000 | 10000 |
| **Antimony (Sb)** 11/19/1992 µg/gram 6010 [1] 3050 [1] | | ND* | 260 | ND* | ND* | ND* | ND* | ND* | ND* |
| **Arsenic (As)** 11/19/1992 µg/gram 6010 [1] 3050 [1] | | ND* | 1000 | ND* | ND* | ND* | ND* | ND* | ND* |
| **Barium (Ba)** 11/19/1992 µg/gram 6010 [1] 3050 [1] | | ND* | 6. | 110 | 260 | 130 | 98. | 130 | 110 |
| **Beryllium (Be)** 11/19/1992 µg/gram 6010 [1] 3050 [1] | | ND* | 19. | 1. | ND* | ND* | ND* | ND* | ND* |
| **Cadmium (Cd)** 11/19/1992 µg/gram 6010 [1] 3050 [1] | | ND* | 45. | ND* | ND* | ND* | ND* | ND* | ND* |
| **Calcium (Ca)** 11/19/1992 µg/gram 6010 [1] 3050 [1] | | ND* | 190000 | 22000 | 21000 | 19000 | 14000 | 14000 | 9600 |
| **Chromium (Cr)** 11/19/1992 µg/gram 6010 [1] 3050 [1] | | ND* | 100 | 11. | 17. | 15. | 11. | 18. | 14. |

* See comment on last page.
ND Parameter not detected.
NR Parameter not requested.
[1] Analyses completed on or before this date.
** Parameter not analyzed (See comment page).
( ) Parameter between LOD and LOQ.
[ ] Method Reference (See comments page.)

RECORD COPY

Analyst: Loren P. Higby

Reviewer: John A. Kershisnik

Laboratory Supervisor: Brent E. Stephens

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DATA CHEM LABORATORIES

# ENVIRONMENTAL SOIL REPORT



NOV 23 1992

Date _____
Agency Identification Number S92-0846-AJ
Account No. 3534C

## Analytical Results

| Parameter Name / Analysis Date / Units / Method / Prep Method | Field Number / Lab Number | BL-90688-1 / BL-90688-1 | QC-90688-1 / QC-90688-1 | B07GM6 / EL 4856 | B07GN0 / EL 4857 | B07GN1 / EL 4858 | B07GN2 / EL 4859 | B07GN4 / EL 4860 | B07GN5 / EL 4861 |
|---|---|---|---|---|---|---|---|---|---|
| Cobalt (Co) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | ND* | 150 | 9. | 9. | 11. | 9. | 10. | 9. |
| Copper (Cu) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | ND* | 7000 | 13. | 14. | 16. | 15. | 18. | 15. |
| Iron (Fe) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | ND* | 23000 | 11000 | 20000 | 19000 | 22000 | 21000 | 20000 |
| Lead (Pb) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | ND* | 250 | ND* | ND* | 20 | ND* | 10 | ND* |
| Lithium (Li) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | ND* | ND* | 9. | 15. | 13. | 10. | 15. | 12. |
| Magnesium (Mg) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | ND* | 120000 | 5100 | 8300 | 9200 | 5900 | 7500 | 5900 |
| Manganese (Mn) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | ND* | 210 | 230 | 360 | 370 | 350 | 420 | 380 |
| Molybdenum (Mo) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | ND* | 56. | ND* | ND* | ND* | ND* | ND* | ND* |
| Nickel (Ni) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | ND* | 58. | 11. | 16. | 15. | 13. | 19. | 16. |
| Phosphorus (P) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | ND* | ND* | 130 | 450 | 500 | 730 | 620 | 620 |
| Potassium (K) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | ND* | ND* | 1000 | 1300 | 2000 | 1300 | 2100 | 1800 |
| Selenium (Se) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| Silver (Ag) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | ND* | 24. | ND* | ND* | ND* | ND* | ND* | ND* |
| Sodium (Na) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | ND* | 80 | 490 | 720 | 890 | 410 | 530 | 550 |
| Strontium (Sr) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | ND* | 57. | 88. | 92. | 100 | 59. | 54. | 42. |

† See comment on last page.
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[ ] Method Reference (See comments page).

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# ENVIRONMENTAL SOIL REPORT



NOV 23 1992

Date _____
Agency Identification Number S92-0846-AJ
Account No. 3534C

## Analytical Results

| Parameter Name / Analysis Date / Units / Method / Prep Method | Field Number / Lab Number | BL-90688-1 / BL-90688-1 | QC-90688-1 / QC-90688-1 | B07GM6 / EL 4856 | B07GN0 / EL 4857 | B07GN1 / EL 4858 | B07GN2 / EL 4859 | B07GN4 / EL 4860 | B07GN5 / EL 4861 |
|---|---|---|---|---|---|---|---|---|---|
| **Thallium (Tl)** 11/19/1992 µg/gram 6010 [1] 3050 [1] | | ND* | 50 | ND* | ND* | ND* | ND* | ND* | ND* |
| **Vanadium (V)** 11/19/1992 µg/gram 6010 [1] 3050 [1] | | ND* | 73. | 28. | 73. | 45. | 51. | 38. | 40. |
| **Zinc (Zn)** 11/19/1992 µg/gram 6010 [1] 3050 [1] | | ND* | 180 | 25. | 41. | 71. | 46. | 52. | 58. |

† See comment on last page.
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[ ] Method Reference (See comments page).

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# ENVIRONMENTAL SOIL REPORT



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Attention: Jeanette Duncan

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**Sampling Collection and Shipment**

Sampling Site North Slope PSN04 Date of Collection October 21, 1992

Date Samples Received at Laboratory October 29, 1992

**Analytical Results**

| Parameter Name / Analysis Date / Method / Prep Method | Units | Field Number / Lab Number | B07GN7 EL 4862 | B07GN8 EL 4863 | B07GN8MD EL 4863MD | B07GN8MS EL 4863MS | | | | * Limit of Detection |
|---|---|---|---|---|---|---|---|---|---|---|
| **Aluminum (Al)** 11/19/1992 6010 [1] 3050 [1] | µg/gram | | 12000 | 13000 | 13000 | 14000 | | | | 10 |
| **Antimony (Sb)** 11/19/1992 6010 [1] 3050 [1] | µg/gram | | ND* | ND* | ND* | ND* | | | | 20 |
| **Arsenic (As)** 11/19/1992 6010 [1] 3050 [1] | µg/gram | | ND* | ND* | ND* | 200 | | | | 50 |
| **Barium (Ba)** 11/19/1992 6010 [1] 3050 [1] | µg/gram | | 110 | 120 | 130 | 320 | | | | 2. |
| **Beryllium (Be)** 11/19/1992 6010 [1] 3050 [1] | µg/gram | | ND* | ND* | ND* | 5. | | | | 1. |
| **Cadmium (Cd)** 11/19/1992 6010 [1] 3050 [1] | µg/gram | | ND* | ND* | ND* | 5. | | | | 1. |
| **Calcium (Ca)** 11/19/1992 6010 [1] 3050 [1] | µg/gram | | 13000 | 15000 | 15000 | 15000 | | | | 10 |
| **Chromium (Cr)** 11/19/1992 6010 [1] 3050 [1] | µg/gram | | 18. | 18. | 18. | 37. | | | | 2. |

† See comment on last page.
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[ ] Method Reference (See comments page.)

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Date NOV 23 1992

Agency Identification Number S92-0846-AJ

Account No. 3534C

## Analytical Results

| Parameter Name / Analysis Date / Units / Method / Prep Method | Field Number / Lab Number | B07GN7 EL 4862 | B07GN8 EL 4863 | B07GN8MD EL 4863MD | B07GN8MS EL 4863MS | | | | Limit of Detection |
|---|---|---|---|---|---|---|---|---|---|
| Cobalt (Co) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | 10. | 10. | 10. | 56. | | | | 2. |
| Copper (Cu) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | 21. | 21. | 19. | 44. | | | | 2. |
| Iron (Fe) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | 21000 | 22000 | 22000 | 22000 | | | | 10. |
| Lead (Pb) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | 30 | 20 | 10 | 50 | | | | 10. |
| Lithium (Li) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | 15. | 15. | 15. | 16. | | | | 2. |
| Magnesium (Mg) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | 7100 | 7600 | 7600 | 7800 | | | | 10. |
| Manganese (Mn) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | 550 | 430 | 420 | 490 | | | | 1. |
| Molybdenum (Mo) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | ND* | ND* | ND* | ND* | | | | 5. |
| Nickel (Ni) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | 18. | 17. | 18. | 64. | | | | 3. |
| Phosphorus (P) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | 620 | 600 | 610 | 620 | | | | 50. |
| Potassium (K) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | 2000 | 2100 | 2000 | 2100 | | | | 200. |
| Selenium (Se) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | ND* | ND* | ND* | 180 | | | | 30. |
| Silver (Ag) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | ND* | ND* | ND* | 4. | | | | 1. |
| Sodium (Na) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | 520 | 640 | 640 | 670 | | | | 20. |
| Strontium (Sr) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | 53. | 56. | 56. | 56. | | | | 2. |

† See comment on last page.
ND Parameter not detected.
NR Parameter not requested.
[1] Analyses completed on or before this date.
** Parameter not analyzed (See comments page).
( ) Parameter between LOD and LOQ.
[ ] Method Reference (See comments page).

960 West LeVoy Drive / Salt Lake City, Utah 84123-2547 / (801) 266-7700
A Sorenson Company

DATA CHEM LABORATORIES

# ENVIRONMENTAL SOIL REPORT



Date NOV 23 1992
Agency Identification Number S92-0846-AJ
Account No. 3534C

## Analytical Results

| Parameter Name / Analysis Date / Units / Method / Prep Method | Field Number / Lab Number | B07GN7 EL 4862 | B07GN8 EL 4863 | B07GN8MD EL 4863MD | B07GN8MS EL 4863MS | | | | * Limit of Detection |
|---|---|---|---|---|---|---|---|---|---|
| **Thallium (Tl)** 11/19/1992 µg/gram 6010 [1] 3050 [1] | | ND* | ND* | ND* | ND* | | | | 50 |
| **Vanadium (V)** 11/19/1992 µg/gram 6010 [1] 3050 [1] | | 36. | 38. | 37. | 83. | | | | 2. |
| **Zinc (Zn)** 11/19/1992 µg/gram 6010 [1] 3050 [1] | | 250 | 58. | 57. | 100 | | | | 2. |

† See comment on last page.
ND Parameter not detected.
NR Parameter not requested.
[1] Analyses completed on or before this date.

** Parameter not analyzed (See comments page).
( ) Parameter between LOD and LOQ.
[ ] Method Reference (See comments page).

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DATA CHEM LABORATORIES

# ENVIRONMENTAL SOIL REPORT

Date NOV 23 1992

Agency Identification Number S92-0846-AJ

**Method Index** **-- Method Reference --**

[1] SW-846 "Test Methods for Evaluating Solid Waste", 3rd Edition, November 1986.

DATA CHEM LABORATORIES

# ENVIRONMENTAL SOIL REPORT



Date NOV 16 1992

Agency Identification Number S92-0846-CJ

Account No. 3534C

NOV 1992 RECEIVED OSM DMO

Westinghouse Hanford Company
2355 Stevens Drive
MSIN T6-08
Richland, WA 99352
Attention: Jeanette Duncan

Telephone (509) 373-3225

**Sampling Collection and Shipment**

Sampling Site North Slope PSN04 Date of Collection October 21, 1992

Date Samples Received at Laboratory October 29, 1992

**Analytical Results**

| Parameter Name / Analysis Date / Units / Method / Prep Method | Field Number / Lab Number | BL-90691-1 / BL-90691-1 | QC-90691-1 / QC-90691-1 | B07GM6 / EL 4856 | B07GM6MD / EL 4856MD | B07GM6MS / EL 4856MS | B07GN0 / EL 4857 | B07GN1 / EL 4858 | B07GN2 / EL 4859 |
|---|---|---|---|---|---|---|---|---|---|
| Mercury (Hg) 11/12/1992 7471 [1] | µg/g | ND* | 13. | ND* | ND* | 0.51 | ND* | ND* | ND* |
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† See comment on last page.
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[1] Analyses completed on or before this date.

** Parameter not analyzed (See comment page).
( ) Parameter between LOD and LOQ.
[ ] Method Reference (See comments page.)

RECORD COPY

Kristie Bitner
Analyst: Kristie F. Bitner

Todd Schmanski
Reviewer: Todd Schmanski

for BES
Laboratory Supervisor: Brent E. Stephens

960 West LeVoy Drive / Salt Lake City, Utah 84123-2547 / (801) 266-7700
A Sorenson Company

DATA CHEM LABORATORIES

# ENVIRONMENTAL SOIL REPORT



Date NOV 16 1992

Agency Identification Number S92-0846-CJ

Account No. 3534C

Westinghouse Hanford Company
2355 Stevens Drive
MSIN T6-08
Richland, WA 99352
Attention: Jeanette Duncan

Telephone (509) 373-3225

**Sampling Collection and Shipment**

Sampling Site North Slope PSN04 Date of Collection October 21, 1992

Date Samples Received at Laboratory October 29, 1992

**Analytical Results**

| Parameter Name / Analysis Date / Units / Method / Prep Method | Field Number / Lab Number | B07GN4 EL 4860 | B07GN5 EL 4861 | B07GN7 EL 4862 | B07GN8 EL 4863 | | | | * Limit of Detection |
|---|---|---|---|---|---|---|---|---|---|
| Mercury (Hg) 11/12/1992 7471 [1] | µg/g | ND* | ND* | ND* | ND* | | | | 0.05 |
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NR Parameter not requested.
[1] Analyses completed on or before this date.

** Parameter not analyzed (See comment page).
( ) Parameter between LOD and LOQ.
[ ] Method Reference (See comments page.)

DATA CHEM LABORATORIES

# ENVIRONMENTAL SOIL REPORT



Date NOV 16 1992

Agency Identification Number S92-0846-CJ

**General Set Comments**

Data for one matrix spike, one matrix duplicate, a method blank and a QC sample are included with this set. Targets for the QC sample and the matrix spike are as follows: QC sample = 12.7 µg/g; matrix spike = 0.5 µg/g.

**Method Index** **-- Method Reference --**

[1] SW-846 "Test Methods for Evaluating Solid Waste", 3rd Edition, November 1986.

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# ENVIRONMENTAL SOIL REPORT



Date NOV 25 1992

Agency Identification Number S92-0846-BJ

General Set Comments

Set S92-0846-BJ was digested and analyzed as one analytical batch. The QC target values are 917 µgAs/g, 236 µgPb/g, 39.2 µgSe/g, and 39.0 µgTl/g. The results for the QC sample, method blank, and matrix duplicate are reported with this set.

Method Index -- Method Reference --

[1] SW-846 "Test Methods for Evaluating Solid Waste", 3rd Edition, November 1986.

DATA CHEM LABORATORIES

# ENVIRONMENTAL SOIL REPORT

Form EPRS-A
Page 1 of 3
Part 1 of 2

NOV 25 1992

Date

Agency Identification Number S92-0846-BJ

Account No. 3534C

DEC 1992 RECEIVED OSM DMO

Westinghouse Hanford Company
2355 Stevens Drive
MSIN T6-08
Richland, WA 99352
Attention: Jeanette Duncan

Telephone (509) 373-3225

**Sampling Collection and Shipment**

Sampling Site North Slope PSN04 Date of Collection October 21, 1992

Date Samples Received at Laboratory October 29, 1992

**Analytical Results**

| Parameter Name / Analysis Date / Method | Units / Prep Method | Field Number / Lab Number | BL-90690-1 / BL-90690-1 | QC-90690-1 / QC-90690-1 | B07GM6 / EL 4856 | B07GN0 / EL 4857 | B07GN1 / EL 4858 | B07GN2 / EL 4859 | B07GN4 / EL 4860 | B07GN5 / EL 4861 |
|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic (As) 11/18/1992 7060 [1] | 3050 [1] | µg/g | ND* | 920 | 4.2 | 8.1 | 8.5 | 4.3 | 5.3 | 4.6 |
| Lead (Pb) 11/18/1992 7421 [1] | 3050 [1] | µg/g | ND* | 250 | 7.1 | 5.6 | 14. | 6.7 | 8.2 | 7.8 |
| Selenium (Se) 11/19/1992 7740 [1] | 3050 [1] | µg/g | ND* | 40. | ND* | ND* | ND* | ND* | ND* | ND* |
| Thallium (Tl) 11/19/1992 7841 [1] | 3050 [1] | µg/g | ND* | 38. | ND* | ND* | ND* | ND* | ND* | ND* |
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† See comment on last page.
ND Parameter not detected.
NR Parameter not requested.
[1] Analyses completed on or before this date.

** Parameter not analyzed (See comment page).
( ) Parameter between LOD and LOQ.
[ ] Method Reference (See comments page.)

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Analyst: Robert B. Copenhafer

Reviewer: Young W. Han

Laboratory Supervisor: Brent E. Stephens

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A Sorenson Company

DATA CHEM LABORATORIES

# ENVIRONMENTAL SOIL REPORT



Date NOV 25 1992
Agency Identification Number S92-0846-BJ
Account No. 3534C

Westinghouse Hanford Company
2355 Stevens Drive
MSIN T6-08
Richland, WA 99352
Attention: Jeanette Duncan

Telephone (509) 373-3225

**Sampling Collection and Shipment**

Sampling Site North Slope PSN04 Date of Collection October 21, 1992

Date Samples Received at Laboratory October 29, 1992

**Analytical Results**

| Parameter Name / Analysis Date / Method | Units / Prep Method | Field Number / Lab Number | B07GN7 EL 4862 | B07GN8 EL 4863 | B07GN8MD EL 4863MD | | | | | * Limit of Detection |
|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic (As) 11/18/1992 7060 [1] | 3050 [1] | µg/g | 5.5 | 5.5 | 5.6 | | | | | 0.5 |
| Lead (Pb) 11/18/1992 7421 [1] | 3050 [1] | µg/g | 47. | 9.9 | 9.5 | | | | | 0.5 |
| Selenium (Se) 11/19/1992 7740 [1] | 3050 [1] | µg/g | ND* | ND* | ND* | | | | | 0.5 |
| Thallium (Tl) 11/19/1992 7841 [1] | 3050 [1] | µg/g | ND* | ND* | ND* | | | | | 1. |
| | | | | | | | | | | |
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† See comment on last page.
ND Parameter not detected.
NR Parameter not requested.
[1] Analyses completed on or before this date.

** Parameter not analyzed (See comment page).
( ) Parameter between LOD and LOQ.
[ ] Method Reference (See comments page.)

DATA CHEM LABORATORIES

# ENVIRONMENTAL SOIL REPORT



Date NOV 25 1992

Agency Identification Number S92-0846-BJ

General Set Comments

Set S92-0846-BJ was digested and analyzed as one analytical batch. The QC target values are 917 µgAs/g, 236 µgPb/g, 39.2 µgSe/g, and 39.0 µgTl/g. The results for the QC sample, method blank, and matrix duplicate are reported with this set.

Method Index -- Method Reference --

[1] SW-846 "Test Methods for Evaluating Solid Waste", 3rd Edition, November 1986.

960 West LeVoy Drive / Salt Lake City, Utah 84123-2547 / (801) 266-7700
A Sorenson Company

**Golder Associates Inc.**

4104-148th Avenue, NE
Redmond, WA 98052
Telephone (206) 883-0777
Fax (206) 882-5498

Golder Associates

June 28, 1993

Our ref: 893-1458
WHC/O/383

Westinghouse Hanford Company
Hanford Analytical Services Management
345 Hills, MSIN H4-29
Richland, Washington 99352

ATTENTION: Ms. Brianna Colley

RE: NORTH SLOPE ERA DATA VALIDATION, TASK ORDER G93-58, TRANSMITTAL OF DATA VALIDATION PACKAGES

Dear Ms. Colley:

Enclosed are five analytical data packages including associated data validation documentation for North Slope ERA samples analyzed by the DataChem laboratory for volatile, semivolatile, chlorinated pesticide/PCB, chlorinated herbicide and phosphate pesticide organic compounds, metals, anions, and total petroleum hydrocarbons.

The data packages included in this shipment are listed as follows:

- B07GM6-DAT-193
- B07GM0-DAT-189
- B07GM1-DAT-204
- B07KQ1-DAT-220
- B07GP1-DAT-206

The validation documentation is located at the front of the data package folder. Please call if you have any questions.

Sincerely,

GOLDER ASSOCIATES INC.

Kent M. Angelos
Project Manager

Donald M. Caldwell
Project Director

Enclosures

cc: George Henckel, WHC

RECEIVED
JUN 29 1993
VALIDATION DOCUMENTATION
SDLA

FYI.

B07FN4 should be B07GN4

MEMORANDUM

TO: North Slope ERA Data Validation Project QA Record

FR: Tom Stapp, Golder Associates Inc.

RE: Data Validation Summary for Data Package: B07GM6-DAT-193

## INTRODUCTION

This memo presents the results of data validation and verification on data package B07GM6-DAT-193 consisting of eight (8) soil samples submitted for volatile, semivolatile, pesticide/PCB, organochlorine herbicides, organophosphorus pesticides, metals, general chemistry and total recoverable petroleum hydrocarbons analysis. The sample(s) were analyzed by the DataChem laboratory using SW-846 methods. The following table describes the samples validated, sample dates and analyses performed.

| SAMPLE ID | SAMPLE DATE | VOA | BNA | PEST PCB | HERB | PHOS PEST | METALS | GEN. CHEM | TPH |
|---|---|---|---|---|---|---|---|---|---|
| B07GM6 | 10/21/92 | X | X | X | X | X | X | X | X |
| B07GN0 | 10/21/92 | X | X | X | X | X | X | X | X |
| B07GN1 | 10/21/92 | X | X | X | X | X | X | X | X |
| B07GN2 | 10/21/92 | X | X | X | X | X | X | X | X |
| B07FN4 | 10/21/92 | X | X | X | X | X | X | X | X |
| B07GN5 | 10/21/92 | X | X | X | X | X | X | X | X |
| B07GN7 | 10/21/92 | X | X | X | X | X | X | X | X |
| B07GN8 | 10/21/92 | X | X | X | X | X | X | X | X |

Data verification and validation was conducted in accordance with the WHC statement of work (WHC 1993) and validation procedures (Bechtold 1992). Attachments 1 through 3 provide a data qualification summary form, copies of the verified laboratory reports, and associated positive blank results.

## DATA QUALITY OBJECTIVES

**Sample Result Verification.** The data package was complete for all requested items and all results were supported in the raw data.

## MAJOR DEFICIENCIES

The following presents a summary of the rejected data.

The semivolatile tentatively identified compounds (TICs) identified as aldol condensation products and hexadecanoic acid have been rejected (R) since they are suspected laboratory contaminants.

## MINOR DEFICIENCIES

The results for all associated blank samples were undetected with the exception of the blanks in the associated parameters listed below.

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JUN 29 1993
VALIDATION DOCUMENTATION
SDLA

Volatile Blanks

Acetone was detected in the laboratory method blank, therefore, associated sample results above the contract required detection limit (CRQL) and less than ten times the highest blank concentration have been qualified as undetected (U).

**REFERENCES**

WHC, 1993, Westinghouse Hanford Company, North Slope ERA Data Validation, Task Order G-93-01-58. Westinghouse Hanford Company, Richland, Washington.

Bechtold, 1992, Westinghouse Hanford Company, Data Validation Procedures for Chemical Analyses, WHC-SD-EN-SPP-002, Rev. 1, 1992. Westinghouse Hanford Company, Richland, Washington.

ATTACHMENT 1

DATA QUALIFICATION SUMMARY

## DATA QUALIFICATION SUMMARY - FORM B-7

B07GM6-DAT-193

| SDG: | REVIEWER: TMS | DATE: 6-17-93 | PAGE 1 OF 1 |
|---|---|---|---|
| COMMENTS: | | | |
| COMPOUND | QUALIFIER | SAMPLES AFFECTED | REASON |
| Acetone | U | B07GM6 | Contaminant in Blank |
| | U | N0 | |
| | U | N1 | |
| | U | N2 | |
| | U | N4 | |
| | U | N5 | |
| | U | N7 | |
| | U | N8 | |
| | | | |
| Semivolatiles | | | |
| Aldol Cond. Products (A10) | R | All | Laboratory contaminants |
| | | | |
| Hexadecanoic Acid | R | B07GN1 | Laboratory contaminant |
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6/25/93

6/25/93

ATTACHMENT 2

VERIFIED DATA SUMMARY

ANALYTICAL REPORT FOR SAMPLE No. EL4856

EPA METHOD 8240

Target Analyte Results



| | |
|---|---|
| Dil. factor | 1 |
| % Moisture | 6.49 |

Field ID: B07GM6
File ID: PB46EL4856
DataChem Set ID: S92-0846JJ

Sponsor: WESTINGHOUSE-HANFORD CO.
Date of Analysis: 11/03/92 22:22:00
Date Received: 10/29/92

| Cas No. | COMPOUND | RESULTS ug/KG | DETECTION LIMITS ug/KG |
|---|---|---|---|
| 74-87-3 | chloromethane | U | 3.5 |
| 74-83-9 | bromomethane | U | 2.2 |
| 9003-22-9 | vinyl chloride | U | 3.0 |
| 75-00-3 | chloroethane | U | 3.2 |
| 75-09-2 | methylene chloride | U | 3.5 |
| 67-64-1 | acetone | 67 U | 3.0 |
| 75-15-0 | carbon disulfide | U | 1.9 |
| 75-69-4 | trichlorofluoromethane | U | 1.9 |
| 75-35-4 | 1,1-dichloroethene | U | 1.7 |
| 75-34-3 | 1,1-dichloroethane | U | 1.7 |
| 107-06-2 | total-1,2-dichloroethene | U | 2.2 |
| 76-66-3 | chloroform | U | 1.7 |
| 107-06-2 | 1,2-dichloroethane | U | 1.1 |
| 74-88-4 | iodomethane | U | 2.2 |
| 107-02-8 | acrolein | U | 1.8 |
| 107-13-1 | acrylonitrile | U | 1.8 |
| 78-93-3 | 2-butanone | U | 2.1 |
| 71-55-6 | 1,1,1-trichloroethane | U | 1.2 |
| 56-23-5 | carbon tetrachloride | U | 1.2 |
| 108-05-4 | vinyl acetate | U | 2.8 |
| 75-27-4 | bromodichloromethane | U | 1.5 |
| 78-87-5 | 1,2-dichloropropane | U | 1.3 |
| 542-75-6 | cis-1,3-dichloropropene | U | 1.9 |
| 79-01-6 | trichloroethene | U | 2.9 |
| 124-48-1 | chlorodibromomethane | U | 1.5 |
| 79-00-5 | 1,1,2-trichloroethane | U | 2.0 |
| 71-43-2 | benzene | U | 1.5 |
| 542-75-6 | trans-1,3-dichloropropene | U | 1.9 |
| 110-75-8 | 2-chloroethylvinyl ether | U | 1.8 |
| 75-25-2 | bromoform | U | 1.1 |
| 106-93-4 | 1,2-dibromoethane | U | 1.5 |
| 74-95-3 | dibromomethane | U | 0.8 |
| 764-41-0 | trans-1,4-dichloro-2-butene | U | 1.5 |
| 108-10-1 | 4-methyl-2-pentanone | U | 2.7 |
| 591-78-6 | 2-hexanone | U | 1.9 |
| 127-18-4 | tetrachloroethene | U | 1.5 |
| 79-34-5 | 1,1,2,2-tetrachloroethane | U | 1.4 |
| 108-88-3 | toluene | U | 1.5 |
| 108-90-7 | chlorobenzene | U | 1.3 |
| 100-41-4 | ethylbenzene | U | 1.2 |
| 100-42-5 | styrene | U | 2.2 |
| 1330-20-7 | total xylene | U | 1.0 |
| 96-18-4 | 1,2,3-trichloropropane | U | 1.5 |
| 97-63-2 | ethyl methacrylate | U | 1.2 |

6/17/93

ANALYTICAL REPORT FOR SAMPLE No. EL4857

EPA METHOD 8240

Target Analyte Results



| | |
|---|---|
| Dil. factor | 1 |
| % Moisture | 11.5 |

Field ID: B07GN0
File ID: PB47EL4857
DataChem Set ID: S92-0846JJ

Sponsor: WESTINGHOUSE-HANFORD CO.
Date of Analysis: 11/03/92 22:55:00
Date Received: 10/29/92

| Cas No. | COMPOUND | RESULTS ug/KG | | DETECTION LIMITS ug/KG |
|---|---|---|---|---|
| 74-87-3 | chloromethane | U | | 3.7 |
| 74-83-9 | bromomethane | U | | 2.4 |
| 9003-22-9 | vinyl chloride | U | | 3.2 |
| 75-00-3 | chloroethane | U | | 3.4 |
| 75-09-2 | methylene chloride | U | | 3.7 |
| 67-64-1 | acetone | 31 | U | 3.2 |
| 75-15-0 | carbon disulfide | U | | 2.0 |
| 75-69-4 | trichlorofluoromethane | U | | 2.0 |
| 75-35-4 | 1,1-dichloroethene | U | | 1.8 |
| 75-34-3 | 1,1-dichloroethane | U | | 1.8 |
| 107-06-2 | total-1,2-dichloroethene | U | | 2.4 |
| 76-66-3 | chloroform | U | | 1.8 |
| 107-06-2 | 1,2-dichloroethane | U | | 1.1 |
| 74-88-4 | iodomethane | U | | 2.4 |
| 107-02-8 | acrolein | U | | 1.9 |
| 107-13-1 | acrylonitrile | U | | 1.9 |
| 78-93-3 | 2-butanone | U | | 2.3 |
| 71-55-6 | 1,1,1-trichloroethane | U | | 1.2 |
| 56-23-5 | carbon tetrachloride | U | | 1.2 |
| 108-05-4 | vinyl acetate | U | | 2.9 |
| 75-27-4 | bromodichloromethane | U | | 1.6 |
| 78-87-5 | 1,2-dichloropropane | U | | 1.4 |
| 542-75-6 | cis-1,3-dichloropropene | U | | 2.0 |
| 79-01-6 | trichloroethene | U | | 3.1 |
| 124-48-1 | chlorodibromomethane | U | | 1.6 |
| 79-00-5 | 1,1,2-trichloroethane | U | | 2.1 |
| 71-43-2 | benzene | U | | 1.6 |
| 542-75-6 | trans-1,3-dichloropropene | U | | 2.0 |
| 110-75-8 | 2-chloroethylvinyl ether | U | | 1.9 |
| 75-25-2 | bromoform | U | | 1.1 |
| 106-93-4 | 1,2-dibromoethane | U | | 1.6 |
| 74-95-3 | dibromomethane | U | | 0.9 |
| 764-41-0 | trans-1,4-dichloro-2-butene | U | | 1.6 |
| 108-10-1 | 4-methyl-2-pentanone | U | | 2.8 |
| 591-78-6 | 2-hexanone | U | | 2.0 |
| 127-18-4 | tetrachloroethene | U | | 1.6 |
| 79-34-5 | 1,1,2,2-tetrachloroethane | U | | 1.5 |
| 108-88-3 | toluene | U | | 1.6 |
| 108-90-7 | chlorobenzene | U | | 1.4 |
| 100-41-4 | ethylbenzene | U | | 1.2 |
| 100-42-5 | styrene | U | | 2.4 |
| 1330-20-7 | total xylene | U | | 1.1 |
| 96-18-4 | 1,2,3-trichloropropane | U | | 1.6 |
| 97-63-2 | ethyl methacrylate | U | | 1.2 |

6/17/93

ANALYTICAL REPORT FOR SAMPLE No. EL4858
EPA METHOD 8240
Target Analyte Results


| | |
|---|---|
| Dil. factor | 1 |
| % Moisture | 10.62 |

Field ID: B07GN1
File ID: PB56EL4858
DataChem Set ID: S92-0846JJ

Sponsor: WESTINGHOUSE-HANFORD CO.
Date of Analysis: 11/04/92 4:14:00
Date Received: 10/29/92

| Cas No. | COMPOUND | RESULTS ug/KG | DETECTION LIMITS ug/KG |
|---|---|---|---|
| 74-87-3 | chloromethane | U | 3.7 |
| 74-83-9 | bromomethane | U | 2.3 |
| 9003-22-9 | vinyl chloride | U | 3.1 |
| 75-00-3 | chloroethane | U | 3.4 |
| 75-09-2 | methylene chloride | 1.3 J | 3.7 |
| 67-64-1 | acetone | 46 ~~46~~ ~~59~~ U | 3.1 |
| 75-15-0 | carbon disulfide | U | 2.0 |
| 75-69-4 | trichlorofluoromethane | U | 2.0 |
| 75-35-4 | 1,1-dichloroethene | U | 1.8 |
| 75-34-3 | 1,1-dichloroethane | U | 1.8 |
| 107-06-2 | total-1,2-dichloroethene | U | 2.3 |
| 76-66-3 | chloroform | U | 1.8 |
| 107-06-2 | 1,2-dichloroethane | U | 1.1 |
| 74-88-4 | iodomethane | U | 2.3 |
| 107-02-8 | acrolein | U | 1.9 |
| 107-13-1 | acrylonitrile | U | 1.9 |
| 78-93-3 | 2-butanone | U | 2.2 |
| 71-55-6 | 1,1,1-trichloroethane | U | 1.2 |
| 56-23-5 | carbon tetrachloride | U | 1.2 |
| 108-05-4 | vinyl acetate | U | 2.9 |
| 75-27-4 | bromodichloromethane | U | 1.6 |
| 78-87-5 | 1,2-dichloropropane | U | 1.3 |
| 542-75-6 | cis-1,3-dichloropropene | U | 2.0 |
| 79-01-6 | trichloroethene | U | 3.0 |
| 124-48-1 | chlorodibromomethane | U | 1.6 |
| 79-00-5 | 1,1,2-trichloroethane | U | 2.1 |
| 71-43-2 | benzene | U | 1.6 |
| 542-75-6 | trans-1,3-dichloropropene | U | 2.0 |
| 110-75-8 | 2-chloroethylvinyl ether | U | 1.9 |
| 75-25-2 | bromoform | U | 1.1 |
| 106-93-4 | 1,2-dibromoethane | U | 1.6 |
| 74-95-3 | dibromomethane | U | 0.9 |
| 764-41-0 | trans-1,4-dichloro-2-butene | U | 1.6 |
| 108-10-1 | 4-methyl-2-pentanone | U | 2.8 |
| 591-78-6 | 2-hexanone | U | 2.0 |
| 127-18-4 | tetrachloroethene | U | 1.6 |
| 79-34-5 | 1,1,2,2-tetrachloroethane | U | 1.5 |
| 108-88-3 | toluene | 2.6 | 1.6 |
| 108-90-7 | chlorobenzene | U | 1.3 |
| 100-41-4 | ethylbenzene | U | 1.2 |
| 100-42-5 | styrene | U | 2.3 |
| 1330-20-7 | total xylene | U | 1.0 |
| 96-18-4 | 1,2,3-trichloropropane | U | 1.6 |
| 97-63-2 | ethyl methacrylate | U | 1.2 |

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ANALYTICAL REPORT FOR SAMPLE No. EL4859
EPA METHOD 8240
Target Analyte Results


| | |
|---|---|
| Dil. factor | 1 |
| % Moisture | 7.37 |

Field ID: B07GN2
File ID: PB49EL4859
DataChem Set ID: S92-0846JJ

Sponsor: WESTINGHOUSE-HANFORD CO.
Date of Analysis: 11/04/92 0:03:00
Date Received: 10/29/92

| Cas No. | COMPOUND | RESULTS ug/KG | DETECTION LIMITS ug/KG |
|---|---|---|---|
| 74-87-3 | chloromethane | U | 3.6 |
| 74-83-9 | bromomethane | U | 2.3 |
| 9003-22-9 | vinyl chloride | U | 3.0 |
| 75-00-3 | chloroethane | U | 3.2 |
| 75-09-2 | methylene chloride | U | 3.6 |
| 67-64-1 | acetone | 31 U | 3.0 |
| 75-15-0 | carbon disulfide | U | 1.9 |
| 75-69-4 | trichlorofluoromethane | U | 1.9 |
| 75-35-4 | 1,1-dichloroethene | U | 1.7 |
| 75-34-3 | 1,1-dichloroethane | U | 1.7 |
| 107-06-2 | total-1,2-dichloroethene | U | 2.3 |
| 76-66-3 | chloroform | U | 1.7 |
| 107-06-2 | 1,2-dichloroethane | U | 1.1 |
| 74-88-4 | iodomethane | U | 2.3 |
| 107-02-8 | acrolein | U | 1.8 |
| 107-13-1 | acrylonitrile | U | 1.8 |
| 78-93-3 | 2-butanone | U | 2.2 |
| 71-55-6 | 1,1,1-trichloroethane | U | 1.2 |
| 56-23-5 | carbon tetrachloride | U | 1.2 |
| 108-05-4 | vinyl acetate | U | 2.8 |
| 75-27-4 | bromodichloromethane | U | 1.5 |
| 78-87-5 | 1,2-dichloropropane | U | 1.3 |
| 542-75-6 | cis-1,3-dichloropropene | U | 1.9 |
| 79-01-6 | trichloroethene | U | 2.9 |
| 124-48-1 | chlorodibromomethane | U | 1.5 |
| 79-00-5 | 1,1,2-trichloroethane | U | 2.1 |
| 71-43-2 | benzene | U | 1.5 |
| 542-75-6 | trans-1,3-dichloropropene | U | 1.9 |
| 110-75-8 | 2-chloroethylvinyl ether | U | 1.8 |
| 75-25-2 | bromoform | U | 1.1 |
| 106-93-4 | 1,2-dibromoethane | U | 1.5 |
| 74-95-3 | dibromomethane | U | 0.9 |
| 764-41-0 | trans-1,4-dichloro-2-butene | U | 1.5 |
| 108-10-1 | 4-methyl-2-pentanone | U | 2.7 |
| 591-78-6 | 2-hexanone | U | 1.9 |
| 127-18-4 | tetrachloroethene | U | 1.5 |
| 79-34-5 | 1,1,2,2-tetrachloroethane | U | 1.4 |
| 108-88-3 | toluene | U | 1.5 |
| 108-90-7 | chlorobenzene | U | 1.3 |
| 100-41-4 | ethylbenzene | U | 1.2 |
| 100-42-5 | styrene | U | 2.3 |
| 1330-20-7 | total xylene | U | 1.0 |
| 96-18-4 | 1,2,3-trichloropropane | U | 1.5 |
| 97-63-2 | ethyl methacrylate | U | 1.2 |

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ANALYTICAL REPORT FOR SAMPLE No. EL4860

EPA METHOD 8240

Target Analyte Results



| | |
|---|---|
| Dil. factor | 1 |
| % Moisture | 3.86 |

Field ID: B07GN4
File ID: PB50EL4860
DataChem Set ID: S92-0846JJ

Sponsor: WESTINGHOUSE-HANFORD CO.
Date of Analysis: 11/04/92 0:37:00
Date Received: 10/29/92

| Cas No. | COMPOUND | RESULTS ug/KG | DETECTION LIMITS ug/KG |
|---|---|---|---|
| 74-87-3 | chloromethane | U | 3.4 |
| 74-83-9 | bromomethane | U | 2.2 |
| 9003-22-9 | vinyl chloride | U | 2.9 |
| 75-00-3 | chloroethane | U | 3.1 |
| 75-09-2 | methylene chloride | U | 3.4 |
| 67-64-1 | acetone | 32 U | 2.9 |
| 75-15-0 | carbon disulfide | U | 1.9 |
| 75-69-4 | trichlorofluoromethane | U | 1.9 |
| 75-35-4 | 1,1-dichloroethene | U | 1.7 |
| 75-34-3 | 1,1-dichloroethane | U | 1.7 |
| 107-06-2 | total-1,2-dichloroethene | U | 2.2 |
| 76-66-3 | chloroform | U | 1.7 |
| 107-06-2 | 1,2-dichloroethane | U | 1.0 |
| 74-88-4 | iodomethane | U | 2.2 |
| 107-02-8 | acrolein | U | 1.8 |
| 107-13-1 | acrylonitrile | U | 1.8 |
| 78-93-3 | 2-butanone | U | 2.1 |
| 71-55-6 | 1,1,1-trichloroethane | U | 1.1 |
| 56-23-5 | carbon tetrachloride | U | 1.1 |
| 108-05-4 | vinyl acetate | U | 2.7 |
| 75-27-4 | bromodichloromethane | U | 1.5 |
| 78-87-5 | 1,2-dichloropropane | U | 1.2 |
| 542-75-6 | cis-1,3-dichloropropene | U | 1.9 |
| 79-01-6 | trichloroethene | U | 2.8 |
| 124-48-1 | chlorodibromomethane | U | 1.5 |
| 79-00-5 | 1,1,2-trichloroethane | U | 2.0 |
| 71-43-2 | benzene | U | 1.5 |
| 542-75-6 | trans-1,3-dichloropropene | U | 1.9 |
| 110-75-8 | 2-chloroethylvinyl ether | U | 1.8 |
| 75-25-2 | bromoform | U | 1.0 |
| 106-93-4 | 1,2-dibromoethane | U | 1.5 |
| 74-95-3 | dibromomethane | U | 0.8 |
| 764-41-0 | trans-1,4-dichloro-2-butene | U | 1.5 |
| 108-10-1 | 4-methyl-2-pentanone | U | 2.6 |
| 591-78-6 | 2-hexanone | U | 1.9 |
| 127-18-4 | tetrachloroethene | U | 1.5 |
| 79-34-5 | 1,1,2,2-tetrachloroethane | U | 1.4 |
| 108-88-3 | toluene | U | 1.5 |
| 108-90-7 | chlorobenzene | U | 1.2 |
| 100-41-4 | ethylbenzene | U | 1.1 |
| 100-42-5 | styrene | U | 2.2 |
| 1330-20-7 | total xylene | U | 1.0 |
| 96-18-4 | 1,2,3-trichloropropane | U | 1.5 |
| 97-63-2 | ethyl methacrylate | U | 1.1 |

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ANALYTICAL REPORT FOR SAMPLE No. EL4861

EPA METHOD 8240

Target Analyte Results



| | |
|---|---|
| Dil. factor | 1 |
| % Moisture | 3.6 |

Field ID: B07GN5
File ID: PB67EL4861
DataChem Set ID: S92-0846JJ

Sponsor: WESTINGHOUSE-HANFORD CO.
Date of Analysis: 11/04/92 19:11:00
Date Received: 10/29/92

| Cas No. | COMPOUND | RESULTS ug/KG | DETECTION LIMITS ug/KG |
|---|---|---|---|
| 74-87-3 | chloromethane | U | 3.4 |
| 74-83-9 | bromomethane | U | 2.2 |
| 9003-22-9 | vinyl chloride | U | 2.9 |
| 75-00-3 | chloroethane | U | 3.1 |
| 75-09-2 | methylene chloride | U | 3.4 |
| 67-64-1 | acetone | 49 U | 2.9 |
| 75-15-0 | carbon disulfide | U | 1.9 |
| 75-69-4 | trichlorofluoromethane | U | 1.9 |
| 75-35-4 | 1,1-dichloroethene | U | 1.7 |
| 75-34-3 | 1,1-dichloroethane | U | 1.7 |
| 107-06-2 | total-1,2-dichloroethene | U | 2.2 |
| 76-66-3 | chloroform | U | 1.7 |
| 107-06-2 | 1,2-dichloroethane | U | 1.0 |
| 74-88-4 | iodomethane | U | 2.2 |
| 107-02-8 | acrolein | U | 1.8 |
| 107-13-1 | acrylonitrile | U | 1.8 |
| 78-93-3 | 2-butanone | U | 2.1 |
| 71-55-6 | 1,1,1-trichloroethane | U | 1.1 |
| 56-23-5 | carbon tetrachloride | U | 1.1 |
| 108-05-4 | vinyl acetate | U | 2.7 |
| 75-27-4 | bromodichloromethane | U | 1.5 |
| 78-87-5 | 1,2-dichloropropane | U | 1.2 |
| 542-75-6 | cis-1,3-dichloropropene | U | 1.9 |
| 79-01-6 | trichloroethene | U | 2.8 |
| 124-48-1 | chlorodibromomethane | U | 1.5 |
| 79-00-5 | 1,1,2-trichloroethane | U | 2.0 |
| 71-43-2 | benzene | U | 1.5 |
| 542-75-6 | trans-1,3-dichloropropene | U | 1.9 |
| 110-75-8 | 2-chloroethylvinyl ether | U | 1.8 |
| 75-25-2 | bromoform | U | 1.0 |
| 106-93-4 | 1,2-dibromoethane | U | 1.5 |
| 74-95-3 | dibromomethane | U | 0.8 |
| 764-41-0 | trans-1,4-dichloro-2-butene | U | 1.5 |
| 108-10-1 | 4-methyl-2-pentanone | U | 2.6 |
| 591-78-6 | 2-hexanone | U | 1.9 |
| 127-18-4 | tetrachloroethene | U | 1.5 |
| 79-34-5 | 1,1,2,2-tetrachloroethane | U | 1.3 |
| 108-88-3 | toluene | U | 1.5 |
| 108-90-7 | chlorobenzene | U | 1.2 |
| 100-41-4 | ethylbenzene | U | 1.1 |
| 100-42-5 | styrene | U | 2.2 |
| 1330-20-7 | total xylene | U | 1.0 |
| 96-18-4 | 1,2,3-trichloropropane | U | 1.5 |
| 97-63-2 | ethyl methacrylate | U | 1.1 |

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ANALYTICAL REPORT FOR SAMPLE No. EL4862
EPA METHOD 8240
Target Analyte Results


| | |
|---|---|
| Dil. factor | 1 |
| % Moisture | 7.69 |

Field ID: B07GN7
File ID: PB52EL4862
DataChem Set ID: S92-0846JJ

Sponsor: WESTINGHOUSE-HANFORD CO.
Date of Analysis: 11/04/92 1:47:00
Date Received: 10/29/92

| Cas No. | COMPOUND | RESULTS ug/KG | DETECTION LIMITS ug/KG |
|---|---|---|---|
| 74-87-3 | chloromethane | U | 3.6 |
| 74-83-9 | bromomethane | U | 2.3 |
| 9003-22-9 | vinyl chloride | U | 3.0 |
| 75-00-3 | chloroethane | U | 3.2 |
| 75-09-2 | methylene chloride | U | 3.6 |
| 67-64-1 | acetone | 40 U | 3.0 |
| 75-15-0 | carbon disulfide | U | 1.9 |
| 75-69-4 | trichlorofluoromethane | U | 1.9 |
| 75-35-4 | 1,1-dichloroethene | U | 1.7 |
| 75-34-3 | 1,1-dichloroethane | U | 1.7 |
| 107-06-2 | total-1,2-dichloroethene | U | 2.3 |
| 76-66-3 | chloroform | U | 1.7 |
| 107-06-2 | 1,2-dichloroethane | U | 1.1 |
| 74-88-4 | iodomethane | U | 2.3 |
| 107-02-8 | acrolein | U | 1.8 |
| 107-13-1 | acrylonitrile | U | 1.8 |
| 78-93-3 | 2-butanone | U | 2.2 |
| 71-55-6 | 1,1,1-trichloroethane | U | 1.2 |
| 56-23-5 | carbon tetrachloride | U | 1.2 |
| 108-05-4 | vinyl acetate | U | 2.8 |
| 75-27-4 | bromodichloromethane | U | 1.5 |
| 78-87-5 | 1,2-dichloropropane | U | 1.3 |
| 542-75-6 | cis-1,3-dichloropropene | U | 1.9 |
| 79-01-6 | trichloroethene | U | 2.9 |
| 124-48-1 | chlorodibromomethane | U | 1.5 |
| 79-00-5 | 1,1,2-trichloroethane | U | 2.1 |
| 71-43-2 | benzene | U | 1.5 |
| 542-75-6 | trans-1,3-dichloropropene | U | 1.9 |
| 110-75-8 | 2-chloroethylvinyl ether | U | 1.8 |
| 75-25-2 | bromoform | U | 1.1 |
| 106-93-4 | 1,2-dibromoethane | U | 1.5 |
| 74-95-3 | dibromomethane | U | 0.9 |
| 764-41-0 | trans-1,4-dichloro-2-butene | U | 1.5 |
| 108-10-1 | 4-methyl-2-pentanone | U | 2.7 |
| 591-78-6 | 2-hexanone | U | 1.9 |
| 127-18-4 | tetrachloroethene | U | 1.5 |
| 79-34-5 | 1,1,2,2-tetrachloroethane | U | 1.4 |
| 108-88-3 | toluene | U | 1.5 |
| 108-90-7 | chlorobenzene | U | 1.3 |
| 100-41-4 | ethylbenzene | U | 1.2 |
| 100-42-5 | styrene | U | 2.3 |
| 1330-20-7 | total xylene | U | 1.0 |
| 96-18-4 | 1,2,3-trichloropropane | U | 1.5 |
| 97-63-2 | ethyl methacrylate | U | 1.2 |

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ANALYTICAL REPORT FOR SAMPLE No. EL4863

EPA METHOD 8240

Target Analyte Results



| | |
|---|---|
| Dil. factor | 1 |
| % Moisture | 4.06 |

Field ID: B07GN8
File ID: PB53EL4863
DataChem Set ID: S92-0846JJ

Sponsor: WESTINGHOUSE-HANFORD CO.
Date of Analysis: 11/04/92 2:24:00
Date Received: 10/29/92

| Cas No. | COMPOUND | RESULTS ug/KG | DETECTION LIMITS ug/KG |
|---|---|---|---|
| 74-87-3 | chloromethane | U | 3.4 |
| 74-83-9 | bromomethane | U | 2.2 |
| 9003-22-9 | vinyl chloride | U | 2.9 |
| 75-00-3 | chloroethane | U | 3.1 |
| 75-09-2 | methylene chloride | U | 3.4 |
| 67-64-1 | acetone | 33 U | 2.9 |
| 75-15-0 | carbon disulfide | U | 1.9 |
| 75-69-4 | trichlorofluoromethane | U | 1.9 |
| 75-35-4 | 1,1-dichloroethene | U | 1.7 |
| 75-34-3 | 1,1-dichloroethane | U | 1.7 |
| 107-06-2 | total-1,2-dichloroethene | U | 2.2 |
| 76-66-3 | chloroform | U | 1.7 |
| 107-06-2 | 1,2-dichloroethane | U | 1.0 |
| 74-88-4 | iodomethane | U | 2.2 |
| 107-02-8 | acrolein | U | 1.8 |
| 107-13-1 | acrylonitrile | U | 1.8 |
| 78-93-3 | 2-butanone | U | 2.1 |
| 71-55-6 | 1,1,1-trichloroethane | U | 1.1 |
| 56-23-5 | carbon tetrachloride | U | 1.1 |
| 108-05-4 | vinyl acetate | U | 2.7 |
| 75-27-4 | bromodichloromethane | U | 1.5 |
| 78-87-5 | 1,2-dichloropropane | U | 1.3 |
| 542-75-6 | cis-1,3-dichloropropene | U | 1.9 |
| 79-01-6 | trichloroethene | U | 2.8 |
| 124-48-1 | chlorodibromomethane | U | 1.5 |
| 79-00-5 | 1,1,2-trichloroethane | U | 2.0 |
| 71-43-2 | benzene | U | 1.5 |
| 542-75-6 | trans-1,3-dichloropropene | U | 1.9 |
| 110-75-8 | 2-chloroethylvinyl ether | U | 1.8 |
| 75-25-2 | bromoform | U | 1.0 |
| 106-93-4 | 1,2-dibromoethane | U | 1.5 |
| 74-95-3 | dibromomethane | U | 0.8 |
| 764-41-0 | trans-1,4-dichloro-2-butene | U | 1.5 |
| 108-10-1 | 4-methyl-2-pentanone | U | 2.6 |
| 591-78-6 | 2-hexanone | U | 1.9 |
| 127-18-4 | tetrachloroethene | U | 1.5 |
| 79-34-5 | 1,1,2,2-tetrachloroethane | U | 1.4 |
| 108-88-3 | toluene | U | 1.5 |
| 108-90-7 | chlorobenzene | U | 1.3 |
| 100-41-4 | ethylbenzene | U | 1.1 |
| 100-42-5 | styrene | U | 2.2 |
| 1330-20-7 | total xylene | U | 1.0 |
| 96-18-4 | 1,2,3-trichloropropane | U | 1.5 |
| 97-63-2 | ethyl methacrylate | U | 1.1 |

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ANALYTICAL REPORT FOR SAMPLE No.: EL4856



EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Sponsor: WESTINGHOUSE HANFORD DCL SET ID: S92-0846-IJ

File ID: FP4EL4856 Date Extracted: 11/04/92

FIELD No.:B07GM6 Analysis Date: 11/28/92

| Cas. No | COMPOUND | QLFR | RESULTS ug/Kg |
|---|---|---|---|
| 62-75-9 | N-nitroso-dimethylamine | U | 1.2E+03 |
| 108-95-2 | phenol | U | 3.9E+02 |
| 111-44-4 | bis(2-chloroethyl)ether | U | 3.9E+02 |
| 95-57-8 | 2-chlorophenol | U | 3.9E+02 |
| 541-73-1 | 1,3-dichlorobenzene | U | 3.9E+02 |
| 106-46-7 | 1,4-dichlorobenzene | U | 3.9E+02 |
| 100-51-6 | benzyl alcohol | U | 1.2E+03 |
| 95-50-1 | 1,2-dichlorobenzene | U | 3.9E+02 |
| 95-48-7 | 2-methylphenol | U | 3.9E+02 |
| 39638-329 | bis(2-chloroisopropyl)ether | U | 3.9E+02 |
| 106-44-5 | 4-methylphenol | U | 3.9E+02 |
| 621-64-7 | N-nitroso-di-n-propylamine | U | 3.9E+02 |
| 67-72-1 | hexachloroethane | U | 3.9E+02 |
| 98-95-3 | nitrobenzene | U | 3.9E+02 |
| 78-59-1 | isophorone | U | 3.9E+02 |
| 88-75-5 | 2-nitrophenol | U | 3.9E+02 |
| 105-67-9 | 2,4-dimethylphenol | U | 3.9E+02 |
| 111-91-1 | bis(2-chloroethoxy)methane | U | 3.9E+02 |
| 65-85-0 | benzoic acid | U | 1.2E+03 |
| 120-83-2 | 2,4-dichlorophenol | U | 3.9E+02 |
| 120-82-1 | 1,2,4-trichlorobenzene | U | 3.9E+02 |
| 91-20-3 | naphthalene | U | 3.9E+02 |
| 106-47-8 | 4-chloroaniline | U | 3.9E+02 |
| 87-68-3 | hexachlorobutadiene | U | 3.9E+02 |
| 59-50-7 | 4-chloro-3-methylphenol | U | 3.9E+02 |
| 91-57-6 | 2-methylnaphthalene | U | 3.9E+02 |
| 77-47-4 | hexachlorocyclopentadiene | U | 3.9E+02 |
| 88-06-2 | 2,4,6-trichlorophenol | U | 3.9E+02 |
| 95-95-4 | 2,4,5-trichlorophenol | U | 9.5E+02 |
| 91-58-7 | 2-chloronaphthalene | U | 3.9E+02 |
| 88-74-4 | 2-nitroaniline | U | 9.5E+02 |
| 131-11-3 | dimethyl phthalate | U | 3.9E+02 |
| 606-20-2 | 2,6-dinitrotoluene | U | 3.9E+02 |
| 208-96-8 | acenaphthylene | U | 3.9E+02 |
| 99-09-2 | 3-nitroaniline | U | 9.5E+02 |
| 83-32-9 | acenaphthene | U | 3.9E+02 |
| 51-28-5 | 2,4-dinitrophenol | U | 9.5E+02 |
| 100-02-7 | 4-nitrophenol | U | 9.5E+02 |
| 132-64-9 | dibenzofuran | U | 3.9E+02 |

See footnotes on page 4.

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ANALYTICAL REPORT FOR SAMPLE No.: EL4856



EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Field Sample ID:B07GM6

| Cas. No | COMPOUND | QLFR | RESULTS ug/Kg |
|---|---|---|---|
| 121-14-2 | 2,4-dinitrotoluene | U | 3.9E+02 |
| 84-66-2 | diethyl phthalate | U | 3.9E+02 |
| 7005-72-3 | 4-chlorophenyl-phenylether | U | 3.9E+02 |
| 86-73-7 | fluorene | U | 3.9E+02 |
| 100-01-6 | 4-nitroaniline | U | 9.5E+02 |
| 534-52-1 | 2-methyl-4,6-dinitrophenol | U | 9.5E+02 |
| 86-30-6 | N-nitroso-diphenylamine | U | 3.9E+02 |
| 122-66-7 | 1,2-diphenylhydrazine | U | 1.2E+03 |
| 101-55-3 | 4-bromophenyl-phenylether | U | 3.9E+02 |
| 319-84-6 | .alpha.-BHC | U | 1.2E+03 |
| 319-85-7 | beta-BHC | U | 6.0E+03 |
| 118-74-1 | hexachlorobenzene | U | 3.9E+02 |
| 87-86-5 | pentachlorophenol | U | 9.5E+02 |
| 58-89-9 | .gamma.-BHC | U | 1.2E+03 |
| 85-01-8 | phenanthrene | U | 3.9E+02 |
| 120-12-7 | anthracene | U | 3.9E+02 |
| 319-86-8 | delta-BHC | U | 6.0E+03 |
| 76-44-8 | heptachlor | U | 6.0E+03 |
| 84-74-2 | di-n-butyl phthalate | U | 3.9E+02 |
| 309-00-2 | aldrin | U | 6.0E+03 |
| 1024-57-3 | heptachlor epoxide | U | 6.0E+03 |
| 206-44-0 | fluoranthene | U | 3.9E+02 |
| 129-00-0 | pyrene | U | 3.9E+02 |
| 959-98-8 | endosulfan I | U | 6.0E+03 |
| 72-55-9 | 4,4'DDE | U | 6.0E+03 |
| 60-57-1 | dieldrin | U | 6.0E+03 |
| 7421-93-4 | endrin aldehyde | U | 6.0E+03 |
| 72-20-8 | endrin | U | 6.0E+03 |
| 72-54-8 | 4,4'DDD | U | 6.0E+03 |
| 33213-65-9 | endosulfan II | U | 6.0E+03 |
| 85-68-7 | butylbenzylphthalate | U | 3.9E+02 |
| 50-29-3 | 4,4'DDT | U | 6.0E+03 |
| 1031-07-8 | endosulfan sulfate | U | 6.0E+03 |
| 72-43-5 | p,p'-methoxychlor | U | 1.2E+03 |
| 91-94-1 | 3,3'-dichlorobenzidine | U | 1.2E+03 |
| 56-55-3 | benzo(a)anthracene | U | 3.9E+02 |
| 117-81-7 | bis(2-ethylhexyl)phthalate | U | 3.9E+02 |
| 218-01-9 | chrysene | U | 3.9E+02 |
| 117-84-0 | di-n-octylphthalate | U | 3.9E+02 |

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See footnotes on page 4.

ANALYTICAL REPORT FOR SAMPLE No.: EL4856



EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Field Sample ID:B07GM6

| Cas. No | COMPOUND | QLFR | RESULTS ug/Kg |
|---|---|---|---|
| 205-99-2 | benzo(b)fluoranthene | U | 3.9E+02 |
| 207-08-9 | benzo(k)fluoranthene | U | 3.9E+02 |
| 50-32-8 | benzo(a)pyrene | U | 3.9E+02 |
| 193-39-5 | indeno(1,2,3-cd)pyrene | U | 3.9E+02 |
| 53-70-3 | dibenzo(a,h)anthracene | U | 3.9E+02 |
| 191-24-2 | benzo(g,h,i)perylene | U | 3.9E+02 |
| 53494-70-5 | endrin ketone | U | 1.2E+03 |
| 109-06-8 | 2-picoline | U | 1.2E+03 |
| 62-50-0 | ethyl methanesulfonate | U | 1.2E+03 |
| 66-27-3 | methyl methanesulfonate | U | 1.2E+03 |
| 62-53-3 | aniline | U | 1.2E+03 |
| 98-86-2 | acetophenone | U | 1.2E+03 |
| 100-75-4 | N-nitroso-piperidine | U | 1.2E+03 |
| 122-09-8 | a,a-dimethylphenethylamine | U | 1.2E+03 |
| 87-65-0 | 2,6-dichlorophenol | U | 1.2E+03 |
| 924-16-3 | N-nitroso-di-n-butylamine | U | 1.2E+03 |
| 95-94-3 | 1,2,4,5-tetrachlorobenzene | U | 1.2E+03 |
| 90-13-1 | 1-chloronaphthalene | U | 1.2E+03 |
| 608-93-5 | pentachlorobenzene | U | 1.2E+03 |
| 134-32-7 | 1-naphthylamine | U | 1.2E+03 |
| 58-90-2 | 2,3,4,6-tetrachlorophenol | U | 1.2E+03 |
| 91-59-8 | 2-naphthylamine | U | 1.2E+03 |
| 62-44-2 | phenacetin | U | 1.2E+03 |
| 92-67-1 | 4-aminobiphenyl | U | 1.2E+03 |
| 23950-58-5 | pronamide (propyzamide) | U | 1.2E+03 |
| 82-68-8 | pentachloronitrobenzene | U | 1.2E+03 |
| 92-87-5 | benzidine | U | 1.2E+03 |
| 60-11-7 | p-dimethylaminoazobenzene | U | 1.2E+03 |
| 57-97-6 | 7,12-dimethbenz(a)anthracene | U | 1.2E+03 |
| 56-49-5 | 3-methylchloranthrene | U | 1.2E+03 |
| 57-74-9 | chlordane | U | 1.2E+04 |
| 8001-35-2 | toxaphene | U | 1.2E+04 |
| 12674-11-2 | PCB-1016 | U | 1.2E+04 |
| 11104-28-2 | PCB-1221 | U | 1.2E+04 |
| 11141-16-5 | PCB-1232 | U | 1.2E+04 |
| 53469-21-9 | PCB-1242 | U | 1.2E+04 |
| 12672-29-6 | PCB-1248 | U | 1.2E+04 |
| 11097-69-1 | PCB-1254 | U | 1.2E+04 |
| 11096-82-5 | PCB-1260 | U | 1.2E+04 |

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See footnotes on page 4

ANALYTICAL REPORT FOR SAMPLE No.: EL4856



NON-TARGET ANALYTE RESULTS
Additional Semi-Volatiles

SET ID: S92-0846-IJ

Field samp ID: B07GM6

| Cas. No | COMPOUND | Scan No. | Results ug/Kg | Qlfr |
|---|---|---|---|---|
| 0-00-0 | ALDOL CONDENSATION PRODUCT | 527 | 2.3E+02 | ~~ENA~~ K |
| 0-00-0 | ALDOL CONDENSATION PRODUCT | 573 | 6.2E+02 | ~~ENAB~~ K |
| 0-00-0 | BROMOFLUOROBENZENE | 818 | 2.6E+02 | EN |

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B The analyte was found in the method blank.
E The reported concentration is an estimate only. The response factor was assumed to be 1.000 relative to an internal standard.
J Indicates an estimated concentration below the Method Detection Limit.
K The isomer is unknown.
N Analytical standards were not analyzed for this compound.
U Not detected.
W The identification is tentative or closely related to the compound.

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ANALYTICAL REPORT FOR SAMPLE No.: EL4857



EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Sponsor: WESTINGHOUSE HANFORD DCL SET ID: S92-0846-IJ

File ID: FP5EL4857 Date Extracted: 11/04/92

FIELD No.:B07GN0 Analysis Date: 11/28/92

| Cas. No | COMPOUND | QLFR | RESULTS ug/Kg |
|---|---|---|---|
| 62-75-9 | N-nitroso-dimethylamine | U | 1.1E+03 |
| 108-95-2 | phenol | U | 3.8E+02 |
| 111-44-4 | bis(2-chloroethyl)ether | U | 3.8E+02 |
| 95-57-8 | 2-chlorophenol | U | 3.8E+02 |
| 541-73-1 | 1,3-dichlorobenzene | U | 3.8E+02 |
| 106-46-7 | 1,4-dichlorobenzene | U | 3.8E+02 |
| 100-51-6 | benzyl alcohol | U | 1.1E+03 |
| 95-50-1 | 1,2-dichlorobenzene | U | 3.8E+02 |
| 95-48-7 | 2-methylphenol | U | 3.8E+02 |
| 39638-329 | bis(2-chloroisopropyl)ether | U | 3.8E+02 |
| 106-44-5 | 4-methylphenol | U | 3.8E+02 |
| 621-64-7 | N-nitroso-di-n-propylamine | U | 3.8E+02 |
| 67-72-1 | hexachloroethane | U | 3.8E+02 |
| 98-95-3 | nitrobenzene | U | 3.8E+02 |
| 78-59-1 | isophorone | U | 3.8E+02 |
| 88-75-5 | 2-nitrophenol | U | 3.8E+02 |
| 105-67-9 | 2,4-dimethylphenol | U | 3.8E+02 |
| 111-91-1 | bis(2-chloroethoxy)methane | U | 3.8E+02 |
| 65-85-0 | benzoic acid | U | 1.1E+03 |
| 120-83-2 | 2,4-dichlorophenol | U | 3.8E+02 |
| 120-82-1 | 1,2,4-trichlorobenzene | U | 3.8E+02 |
| 91-20-3 | naphthalene | U | 3.8E+02 |
| 106-47-8 | 4-chloroaniline | U | 3.8E+02 |
| 87-68-3 | hexachlorobutadiene | U | 3.8E+02 |
| 59-50-7 | 4-chloro-3-methylphenol | U | 3.8E+02 |
| 91-57-6 | 2-methylnaphthalene | U | 3.8E+02 |
| 77-47-4 | hexachlorocyclopentadiene | U | 3.8E+02 |
| 88-06-2 | 2,4,6-trichlorophenol | U | 3.8E+02 |
| 95-95-4 | 2,4,5-trichlorophenol | U | 9.1E+02 |
| 91-58-7 | 2-chloronaphthalene | U | 3.8E+02 |
| 88-74-4 | 2-nitroaniline | U | 9.1E+02 |
| 131-11-3 | dimethyl phthalate | U | 3.8E+02 |
| 606-20-2 | 2,6-dinitrotoluene | U | 3.8E+02 |
| 208-96-8 | acenaphthylene | U | 3.8E+02 |
| 99-09-2 | 3-nitroaniline | U | 9.1E+02 |
| 83-32-9 | acenaphthene | U | 3.8E+02 |
| 51-28-5 | 2,4-dinitrophenol | U | 9.1E+02 |
| 100-02-7 | 4-nitrophenol | U | 9.1E+02 |
| 132-64-9 | dibenzofuran | U | 3.8E+02 |

See footnotes on page 4.

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ANALYTICAL REPORT FOR SAMPLE No.: EL4857



EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Field Sample ID:B07GN0

| Cas. No | COMPOUND | QLFR | RESULTS ug/Kg |
|---|---|---|---|
| 121-14-2 | 2,4-dinitrotoluene | U | 3.8E+02 |
| 84-66-2 | diethyl phthalate | U | 3.8E+02 |
| 7005-72-3 | 4-chlorophenyl-phenylether | U | 3.8E+02 |
| 86-73-7 | fluorene | U | 3.8E+02 |
| 100-01-6 | 4-nitroaniline | U | 9.1E+02 |
| 534-52-1 | 2-methyl-4,6-dinitrophenol | U | 9.1E+02 |
| 86-30-6 | N-nitroso-diphenylamine | U | 3.8E+02 |
| 122-66-7 | 1,2-diphenylhydrazine | U | 1.1E+03 |
| 101-55-3 | 4-bromophenyl-phenylether | U | 3.8E+02 |
| 319-84-6 | .alpha.-BHC | U | 1.1E+03 |
| 319-85-7 | beta-BHC | U | 5.7E+03 |
| 118-74-1 | hexachlorobenzene | U | 3.8E+02 |
| 87-86-5 | pentachlorophenol | U | 9.1E+02 |
| 58-89-9 | .gamma.-BHC | U | 1.1E+03 |
| 85-01-8 | phenanthrene | U | 3.8E+02 |
| 120-12-7 | anthracene | U | 3.8E+02 |
| 319-86-8 | delta-BHC | U | 5.7E+03 |
| 76-44-8 | heptachlor | U | 5.7E+03 |
| 84-74-2 | di-n-butyl phthalate | U | 3.8E+02 |
| 309-00-2 | aldrin | U | 5.7E+03 |
| 1024-57-3 | heptachlor epoxide | U | 5.7E+03 |
| 206-44-0 | fluoranthene | U | 3.8E+02 |
| 129-00-0 | pyrene | U | 3.8E+02 |
| 959-98-8 | endosulfan I | U | 5.7E+03 |
| 72-55-9 | 4,4'DDE | U | 5.7E+03 |
| 60-57-1 | dieldrin | U | 5.7E+03 |
| 7421-93-4 | endrin aldehyde | U | 5.7E+03 |
| 72-20-8 | endrin | U | 5.7E+03 |
| 72-54-8 | 4,4'DDD | U | 5.7E+03 |
| 33213-65-9 | endosulfan II | U | 5.7E+03 |
| 85-68-7 | butylbenzylphthalate | U | 3.8E+02 |
| 50-29-3 | 4,4'DDT | U | 5.7E+03 |
| 1031-07-8 | endosulfan sulfate | U | 5.7E+03 |
| 72-43-5 | p,p'-methoxychlor | U | 1.1E+03 |
| 91-94-1 | 3,3'-dichlorobenzidine | U | 1.1E+03 |
| 56-55-3 | benzo(a)anthracene | U | 3.8E+02 |
| 117-81-7 | bis(2-ethylhexyl)phthalate | U | 3.8E+02 |
| 218-01-9 | chrysene | U | 3.8E+02 |
| 117-84-0 | di-n-octylphthalate | U | 3.8E+02 |

See footnotes on page 4.

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ANALYTICAL REPORT FOR SAMPLE No.: EL4857



EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Field Sample ID:B07GN0

| Cas. No | COMPOUND | QLFR | RESULTS ug/Kg |
|---|---|---|---|
| 205-99-2 | benzo(b)fluoranthene | U | 3.8E+02 |
| 207-08-9 | benzo(k)fluoranthene | U | 3.8E+02 |
| 50-32-8 | benzo(a)pyrene | U | 3.8E+02 |
| 193-39-5 | indeno(1,2,3-cd)pyrene | U | 3.8E+02 |
| 53-70-3 | dibenzo(a,h)anthracene | U | 3.8E+02 |
| 191-24-2 | benzo(g,h,i)perylene | U | 3.8E+02 |
| 53494-70-5 | endrin ketone | U | 1.1E+03 |
| 109-06-8 | 2-picoline | U | 1.1E+03 |
| 62-50-0 | ethyl methanesulfonate | U | 1.1E+03 |
| 66-27-3 | methyl methanesulfonate | U | 1.1E+03 |
| 62-53-3 | aniline | U | 1.1E+03 |
| 98-86-2 | acetophenone | U | 1.1E+03 |
| 100-75-4 | N-nitroso-piperidine | U | 1.1E+03 |
| 122-09-8 | a,a-dimethylphenethylamine | U | 1.1E+03 |
| 87-65-0 | 2,6-dichlorophenol | U | 1.1E+03 |
| 924-16-3 | N-nitroso-di-n-butylamine | U | 1.1E+03 |
| 95-94-3 | 1,2,4,5-tetrachlorobenzene | U | 1.1E+03 |
| 90-13-1 | 1-chloronaphthalene | U | 1.1E+03 |
| 608-93-5 | pentachlorobenzene | U | 1.1E+03 |
| 134-32-7 | 1-naphthylamine | U | 1.1E+03 |
| 58-90-2 | 2,3,4,6-tetrachlorophenol | U | 1.1E+03 |
| 91-59-8 | 2-naphthylamine | U | 1.1E+03 |
| 62-44-2 | phenacetin | U | 1.1E+03 |
| 92-67-1 | 4-aminobiphenyl | U | 1.1E+03 |
| 23950-58-5 | pronamide (propyzamide) | U | 1.1E+03 |
| 82-68-8 | pentachloronitrobenzene | U | 1.1E+03 |
| 92-87-5 | benzidine | U | 1.1E+03 |
| 60-11-7 | p-dimethylaminoazobenzene | U | 1.1E+03 |
| 57-97-6 | 7,12-dimethbenz(a)anthracene | U | 1.1E+03 |
| 56-49-5 | 3-methylchloranthrene | U | 1.1E+03 |
| 57-74-9 | chlordane | U | 1.1E+04 |
| 8001-35-2 | toxaphene | U | 1.1E+04 |
| 12674-11-2 | PCB-1016 | U | 1.1E+04 |
| 11104-28-2 | PCB-1221 | U | 1.1E+04 |
| 11141-16-5 | PCB-1232 | U | 1.1E+04 |
| 53469-21-9 | PCB-1242 | U | 1.1E+04 |
| 12672-29-6 | PCB-1248 | U | 1.1E+04 |
| 11097-69-1 | PCB-1254 | U | 1.1E+04 |
| 11096-82-5 | PCB-1260 | U | 1.1E+04 |

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See footnotes on page 4

ANALYTICAL REPORT FOR SAMPLE No.: EL4857



NON-TARGET ANALYTE RESULTS
Additional Semi-Volatiles

SET ID: S92-0846-IJ

Field samp ID: B07GN0

| Cas. No | COMPOUND | Scan No. | Results ug/Kg | Qlfr |
|---|---|---|---|---|
| 0-00-0 | ALDOL CONDENSATION PRODUCT | 521 | 2.2E+02 | ~~ENA~~ R |
| 0-00-0 | ALDOL CONDENSATION PRODUCT | 569 | 7.5E+02 | ~~ENAB~~ R |
| 0-00-0 | ALDOL CONDENSATION PRODUCT | 633 | 3.3E+02 | ~~ENA~~ R |

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B The analyte was found in the method blank.
E The reported concentration is an estimate only. The response factor was assumed to be 1.000 relative to an internal standard.
J Indicates an estimated concentration below the Method Detection Limit.
K The isomer is unknown.
N Analytical standards were not analyzed for this compound.
U Not detected.
W The identification is tentative or closely related to the compound.

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ANALYTICAL REPORT FOR SAMPLE No.: EL4858



EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Sponsor: WESTINGHOUSE HANFORD DCL SET ID: S92-0846-IJ

File ID: FP8EL4858 Date Extracted: 11/04/92

FIELD No.:B07GN1 Analysis Date: 11/29/92

| Cas. No | COMPOUND | QLFR | RESULTS ug/Kg |
|---|---|---|---|
| 62-75-9 | N-nitroso-dimethylamine | U | 1.1E+03 |
| 108-95-2 | phenol | U | 3.7E+02 |
| 111-44-4 | bis(2-chloroethyl)ether | U | 3.7E+02 |
| 95-57-8 | 2-chlorophenol | U | 3.7E+02 |
| 541-73-1 | 1,3-dichlorobenzene | U | 3.7E+02 |
| 106-46-7 | 1,4-dichlorobenzene | U | 3.7E+02 |
| 100-51-6 | benzyl alcohol | U | 1.1E+03 |
| 95-50-1 | 1,2-dichlorobenzene | U | 3.7E+02 |
| 95-48-7 | 2-methylphenol | U | 3.7E+02 |
| 39638-329 | bis(2-chloroisopropyl)ether | U | 3.7E+02 |
| 106-44-5 | 4-methylphenol | U | 3.7E+02 |
| 621-64-7 | N-nitroso-di-n-propylamine | U | 3.7E+02 |
| 67-72-1 | hexachloroethane | U | 3.7E+02 |
| 98-95-3 | nitrobenzene | U | 3.7E+02 |
| 78-59-1 | isophorone | U | 3.7E+02 |
| 88-75-5 | 2-nitrophenol | U | 3.7E+02 |
| 105-67-9 | 2,4-dimethylphenol | U | 3.7E+02 |
| 111-91-1 | bis(2-chloroethoxy)methane | U | 3.7E+02 |
| 65-85-0 | benzoic acid | U | 1.1E+03 |
| 120-83-2 | 2,4-dichlorophenol | U | 3.7E+02 |
| 120-82-1 | 1,2,4-trichlorobenzene | U | 3.7E+02 |
| 91-20-3 | naphthalene | U | 3.7E+02 |
| 106-47-8 | 4-chloroaniline | U | 3.7E+02 |
| 87-68-3 | hexachlorobutadiene | U | 3.7E+02 |
| 59-50-7 | 4-chloro-3-methylphenol | U | 3.7E+02 |
| 91-57-6 | 2-methylnaphthalene | U | 3.7E+02 |
| 77-47-4 | hexachlorocyclopentadiene | U | 3.7E+02 |
| 88-06-2 | 2,4,6-trichlorophenol | U | 3.7E+02 |
| 95-95-4 | 2,4,5-trichlorophenol | U | 9.0E+02 |
| 91-58-7 | 2-chloronaphthalene | U | 3.7E+02 |
| 88-74-4 | 2-nitroaniline | U | 9.0E+02 |
| 131-11-3 | dimethyl phthalate | U | 3.7E+02 |
| 606-20-2 | 2,6-dinitrotoluene | U | 3.7E+02 |
| 208-96-8 | acenaphthylene | U | 3.7E+02 |
| 99-09-2 | 3-nitroaniline | U | 9.0E+02 |
| 83-32-9 | acenaphthene | U | 3.7E+02 |
| 51-28-5 | 2,4-dinitrophenol | U | 9.0E+02 |
| 100-02-7 | 4-nitrophenol | U | 9.0E+02 |
| 132-64-9 | dibenzofuran | U | 3.7E+02 |

See footnotes on page 4.

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ANALYTICAL REPORT FOR SAMPLE No.: EL4858



EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Field Sample ID:B07GN1

| Cas. No | COMPOUND | QLFR | RESULTS ug/Kg |
|---|---|---|---|
| 121-14-2 | 2,4-dinitrotoluene | U | 3.7E+02 |
| 84-66-2 | diethyl phthalate | U | 3.7E+02 |
| 7005-72-3 | 4-chlorophenyl-phenylether | U | 3.7E+02 |
| 86-73-7 | fluorene | U | 3.7E+02 |
| 100-01-6 | 4-nitroaniline | U | 9.0E+02 |
| 534-52-1 | 2-methyl-4,6-dinitrophenol | U | 9.0E+02 |
| 86-30-6 | N-nitroso-diphenylamine | U | 3.7E+02 |
| 122-66-7 | 1,2-diphenylhydrazine | U | 1.1E+03 |
| 101-55-3 | 4-bromophenyl-phenylether | U | 3.7E+02 |
| 319-84-6 | .alpha.-BHC | U | 1.1E+03 |
| 319-85-7 | beta-BHC | U | 5.6E+03 |
| 118-74-1 | hexachlorobenzene | U | 3.7E+02 |
| 87-86-5 | pentachlorophenol | U | 9.0E+02 |
| 58-89-9 | .gamma.-BHC | U | 1.1E+03 |
| 85-01-8 | phenanthrene | U | 3.7E+02 |
| 120-12-7 | anthracene | U | 3.7E+02 |
| 319-86-8 | delta-BHC | U | 5.6E+03 |
| 76-44-8 | heptachlor | U | 5.6E+03 |
| 84-74-2 | di-n-butyl phthalate | J | 5.4E+01 |
| 309-00-2 | aldrin | U | 5.6E+03 |
| 1024-57-3 | heptachlor epoxide | U | 5.6E+03 |
| 206-44-0 | fluoranthene | U | 3.7E+02 |
| 129-00-0 | pyrene | U | 3.7E+02 |
| 959-98-8 | endosulfan I | U | 5.6E+03 |
| 72-55-9 | 4,4'DDE | U | 5.6E+03 |
| 60-57-1 | dieldrin | U | 5.6E+03 |
| 7421-93-4 | endrin aldehyde | U | 5.6E+03 |
| 72-20-8 | endrin | U | 5.6E+03 |
| 72-54-8 | 4,4'DDD | U | 5.6E+03 |
| 33213-65-9 | endosulfan II | U | 5.6E+03 |
| 85-68-7 | butylbenzylphthalate | U | 3.7E+02 |
| 50-29-3 | 4,4'DDT | U | 5.6E+03 |
| 1031-07-8 | endosulfan sulfate | U | 5.6E+03 |
| 72-43-5 | p,p'-methoxychlor | U | 1.1E+03 |
| 91-94-1 | 3,3'-dichlorobenzidine | U | 1.1E+03 |
| 56-55-3 | benzo(a)anthracene | U | 3.7E+02 |
| 117-81-7 | bis(2-ethylhexyl)phthalate | U | 3.7E+02 |
| 218-01-9 | chrysene | U | 3.7E+02 |
| 117-84-0 | di-n-octylphthalate | U | 3.7E+02 |

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See footnotes on page 4.

ANALYTICAL REPORT FOR SAMPLE No.: EL4858



EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Field Sample ID:B07GN1

| Cas. No | COMPOUND | QLFR | RESULTS ug/Kg |
|---|---|---|---|
| 205-99-2 | benzo(b)fluoranthene | U | 3.7E+02 |
| 207-08-9 | benzo(k)fluoranthene | U | 3.7E+02 |
| 50-32-8 | benzo(a)pyrene | U | 3.7E+02 |
| 193-39-5 | indeno(1,2,3-cd)pyrene | U | 3.7E+02 |
| 53-70-3 | dibenzo(a,h)anthracene | U | 3.7E+02 |
| 191-24-2 | benzo(g,h,i)perylene | U | 3.7E+02 |
| 53494-70-5 | endrin ketone | U | 1.1E+03 |
| 109-06-8 | 2-picoline | U | 1.1E+03 |
| 62-50-0 | ethyl methanesulfonate | U | 1.1E+03 |
| 66-27-3 | methyl methanesulfonate | U | 1.1E+03 |
| 62-53-3 | aniline | U | 1.1E+03 |
| 98-86-2 | acetophenone | U | 1.1E+03 |
| 100-75-4 | N-nitroso-piperidine | U | 1.1E+03 |
| 122-09-8 | a,a-dimethylphenethylamine | U | 1.1E+03 |
| 87-65-0 | 2,6-dichlorophenol | U | 1.1E+03 |
| 924-16-3 | N-nitroso-di-n-butylamine | U | 1.1E+03 |
| 95-94-3 | 1,2,4,5-tetrachlorobenzene | U | 1.1E+03 |
| 90-13-1 | 1-chloronaphthalene | U | 1.1E+03 |
| 608-93-5 | pentachlorobenzene | U | 1.1E+03 |
| 134-32-7 | 1-naphthylamine | U | 1.1E+03 |
| 58-90-2 | 2,3,4,6-tetrachlorophenol | U | 1.1E+03 |
| 91-59-8 | 2-naphthylamine | U | 1.1E+03 |
| 62-44-2 | phenacetin | U | 1.1E+03 |
| 92-67-1 | 4-aminobiphenyl | U | 1.1E+03 |
| 23950-58-5 | pronamide (propyzamide) | U | 1.1E+03 |
| 82-68-8 | pentachloronitrobenzene | U | 1.1E+03 |
| 92-87-5 | benzidine | U | 1.1E+03 |
| 60-11-7 | p-dimethylaminoazobenzene | U | 1.1E+03 |
| 57-97-6 | 7,12-dimethbenz(a)anthracene | U | 1.1E+03 |
| 56-49-5 | 3-methylchloranthrene | U | 1.1E+03 |
| 57-74-9 | chlordane | U | 1.1E+04 |
| 8001-35-2 | toxaphene | U | 1.1E+04 |
| 12674-11-2 | PCB-1016 | U | 1.1E+04 |
| 11104-28-2 | PCB-1221 | U | 1.1E+04 |
| 11141-16-5 | PCB-1232 | U | 1.1E+04 |
| 53469-21-9 | PCB-1242 | U | 1.1E+04 |
| 12672-29-6 | PCB-1248 | U | 1.1E+04 |
| 11097-69-1 | PCB-1254 | U | 1.1E+04 |
| 11096-82-5 | PCB-1260 | U | 1.1E+04 |

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See footnotes on page 4

ANALYTICAL REPORT FOR SAMPLE No.: EL4858



NON-TARGET ANALYTE RESULTS
Additional Semi-Volatiles

SET ID: S92-0846-IJ

Field samp ID: B07GN1

| Cas. No | COMPOUND | Scan No. | Results ug/Kg | Qlfr | |
|---|---|---|---|---|---|
| 0-00-0 | ALDOL CONDENSATION PRODUCT | 521 | 2.1E+02 | ~~ENA~~ | K |
| 0-00-0 | ALDOL CONDENSATION PRODUCT | 569 | 6.9E+02 | ~~ENAB~~ | K |
| 0-00-0 | ALDOL CONDENSATION PRODUCT | 633 | 4.4E+02 | ~~ENA~~ | K |
| 0-00-0 | BROMOFLUOROBENZENE | 818 | 1.5E+02 | EN | |
| 57-10-3 | HEXADECANOIC ACID | 1483 | 2.1E+02 | ~~EN~~ | K |
| 0-00-0 | ALKANE @ C29 | 2057 | 1.6E+02 | EN | |

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B The analyte was found in the method blank.
E The reported concentration is an estimate only. The response factor was assumed to be 1.000 relative to an internal standard.
J Indicates an estimated concentration below the Method Detection Limit.
K The isomer is unknown.
N Analytical standards were not analyzed for this compound.
U Not detected.
W The identification is tentative or closely related to the compound.

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ANALYTICAL REPORT FOR SAMPLE No.: EL4859



EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Sponsor: WESTINGHOUSE HANFORD DCL SET ID: S92-0846-IJ

File ID: FP9EL4859 Date Extracted: 11/04/92

FIELD No.:B07GN2 Analysis Date: 11/29/92

| Cas. No | COMPOUND | QLFR | RESULTS ug/Kg |
|---|---|---|---|
| 62-75-9 | N-nitroso-dimethylamine | U | 1.1E+03 |
| 108-95-2 | phenol | U | 3.5E+02 |
| 111-44-4 | bis(2-chloroethyl)ether | U | 3.5E+02 |
| 95-57-8 | 2-chlorophenol | U | 3.5E+02 |
| 541-73-1 | 1,3-dichlorobenzene | U | 3.5E+02 |
| 106-46-7 | 1,4-dichlorobenzene | U | 3.5E+02 |
| 100-51-6 | benzyl alcohol | U | 1.1E+03 |
| 95-50-1 | 1,2-dichlorobenzene | U | 3.5E+02 |
| 95-48-7 | 2-methylphenol | U | 3.5E+02 |
| 39638-329 | bis(2-chloroisopropyl)ether | U | 3.5E+02 |
| 106-44-5 | 4-methylphenol | U | 3.5E+02 |
| 621-64-7 | N-nitroso-di-n-propylamine | U | 3.5E+02 |
| 67-72-1 | hexachloroethane | U | 3.5E+02 |
| 98-95-3 | nitrobenzene | U | 3.5E+02 |
| 78-59-1 | isophorone | U | 3.5E+02 |
| 88-75-5 | 2-nitrophenol | U | 3.5E+02 |
| 105-67-9 | 2,4-dimethylphenol | U | 3.5E+02 |
| 111-91-1 | bis(2-chloroethoxy)methane | U | 3.5E+02 |
| 65-85-0 | benzoic acid | U | 1.1E+03 |
| 120-83-2 | 2,4-dichlorophenol | U | 3.5E+02 |
| 120-82-1 | 1,2,4-trichlorobenzene | U | 3.5E+02 |
| 91-20-3 | naphthalene | U | 3.5E+02 |
| 106-47-8 | 4-chloroaniline | U | 3.5E+02 |
| 87-68-3 | hexachlorobutadiene | U | 3.5E+02 |
| 59-50-7 | 4-chloro-3-methylphenol | U | 3.5E+02 |
| 91-57-6 | 2-methylnaphthalene | U | 3.5E+02 |
| 77-47-4 | hexachlorocyclopentadiene | U | 3.5E+02 |
| 88-06-2 | 2,4,6-trichlorophenol | U | 3.5E+02 |
| 95-95-4 | 2,4,5-trichlorophenol | U | 8.6E+02 |
| 91-58-7 | 2-chloronaphthalene | U | 3.5E+02 |
| 88-74-4 | 2-nitroaniline | U | 8.6E+02 |
| 131-11-3 | dimethyl phthalate | U | 3.5E+02 |
| 606-20-2 | 2,6-dinitrotoluene | U | 3.5E+02 |
| 208-96-8 | acenaphthylene | U | 3.5E+02 |
| 99-09-2 | 3-nitroaniline | U | 8.6E+02 |
| 83-32-9 | acenaphthene | U | 3.5E+02 |
| 51-28-5 | 2,4-dinitrophenol | U | 8.6E+02 |
| 100-02-7 | 4-nitrophenol | U | 8.6E+02 |
| 132-64-9 | dibenzofuran | U | 3.5E+02 |

See footnotes on page 4.

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ANALYTICAL REPORT FOR SAMPLE No.: EL4859



EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Field Sample ID:B07GN2

| Cas. No | COMPOUND | QLFR | RESULTS ug/Kg |
|---|---|---|---|
| 121-14-2 | 2,4-dinitrotoluene | U | 3.5E+02 |
| 84-66-2 | diethyl phthalate | | 9.7E+02 |
| 7005-72-3 | 4-chlorophenyl-phenylether | U | 3.5E+02 |
| 86-73-7 | fluorene | U | 3.5E+02 |
| 100-01-6 | 4-nitroaniline | U | 8.6E+02 |
| 534-52-1 | 2-methyl-4,6-dinitrophenol | U | 8.6E+02 |
| 86-30-6 | N-nitroso-diphenylamine | U | 3.5E+02 |
| 122-66-7 | 1,2-diphenylhydrazine | U | 1.1E+03 |
| 101-55-3 | 4-bromophenyl-phenylether | U | 3.5E+02 |
| 319-84-6 | .alpha.-BHC | U | 1.1E+03 |
| 319-85-7 | beta-BHC | U | 5.4E+03 |
| 118-74-1 | hexachlorobenzene | U | 3.5E+02 |
| 87-86-5 | pentachlorophenol | U | 8.6E+02 |
| 58-89-9 | .gamma.-BHC | U | 1.1E+03 |
| 85-01-8 | phenanthrene | J | 9.5E+01 |
| 120-12-7 | anthracene | U | 3.5E+02 |
| 319-86-8 | delta-BHC | U | 5.4E+03 |
| 76-44-8 | heptachlor | U | 5.4E+03 |
| 84-74-2 | di-n-butyl phthalate | U | 3.5E+02 |
| 309-00-2 | aldrin | U | 5.4E+03 |
| 1024-57-3 | heptachlor epoxide | U | 5.4E+03 |
| 206-44-0 | fluoranthene | J | 2.2E+02 |
| 129-00-0 | pyrene | J | 2.4E+02 |
| 959-98-8 | endosulfan I | U | 5.4E+03 |
| 72-55-9 | 4,4'DDE | U | 5.4E+03 |
| 60-57-1 | dieldrin | U | 5.4E+03 |
| 7421-93-4 | endrin aldehyde | U | 5.4E+03 |
| 72-20-8 | endrin | U | 5.4E+03 |
| 72-54-8 | 4,4'DDD | U | 5.4E+03 |
| 33213-65-9 | endosulfan II | U | 5.4E+03 |
| 85-68-7 | butylbenzylphthalate | U | 3.5E+02 |
| 50-29-3 | 4,4'DDT | U | 5.4E+03 |
| 1031-07-8 | endosulfan sulfate | U | 5.4E+03 |
| 72-43-5 | p,p'-methoxychlor | U | 1.1E+03 |
| 91-94-1 | 3,3'-dichlorobenzidine | U | 1.1E+03 |
| 56-55-3 | benzo(a)anthracene | J | 2.2E+02 |
| 117-81-7 | bis(2-ethylhexyl)phthalate | U | 3.5E+02 |
| 218-01-9 | chrysene | J | 3.1E+02 |
| 117-84-0 | di-n-octylphthalate | U | 3.5E+02 |

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See footnotes on page 4.

ANALYTICAL REPORT FOR SAMPLE No.: EL4859



EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Field Sample ID:B07GN2

| Cas. No | COMPOUND | QLFR | RESULTS ug/Kg |
|---|---|---|---|
| 205-99-2 | benzo(b)fluoranthene | | 4.0E+02 |
| 207-08-9 | benzo(k)fluoranthene | J | 3.4E+02 |
| 50-32-8 | benzo(a)pyrene | | 3.6E+02 |
| 193-39-5 | indeno(1,2,3-cd)pyrene | | 3.9E+02 |
| 53-70-3 | dibenzo(a,h)anthracene | J | 1.4E+02 |
| 191-24-2 | benzo(g,h,i)perylene | | 4.5E+02 |
| 53494-70-5 | endrin ketone | U | 1.1E+03 |
| 109-06-8 | 2-picoline | U | 1.1E+03 |
| 62-50-0 | ethyl methanesulfonate | U | 1.1E+03 |
| 66-27-3 | methyl methanesulfonate | U | 1.1E+03 |
| 62-53-3 | aniline | U | 1.1E+03 |
| 98-86-2 | acetophenone | U | 1.1E+03 |
| 100-75-4 | N-nitroso-piperidine | U | 1.1E+03 |
| 122-09-8 | a,a-dimethylphenethylamine | U | 1.1E+03 |
| 87-65-0 | 2,6-dichlorophenol | U | 1.1E+03 |
| 924-16-3 | N-nitroso-di-n-butylamine | U | 1.1E+03 |
| 95-94-3 | 1,2,4,5-tetrachlorobenzene | U | 1.1E+03 |
| 90-13-1 | 1-chloronaphthalene | U | 1.1E+03 |
| 608-93-5 | pentachlorobenzene | U | 1.1E+03 |
| 134-32-7 | 1-naphthylamine | U | 1.1E+03 |
| 58-90-2 | 2,3,4,6-tetrachlorophenol | U | 1.1E+03 |
| 91-59-8 | 2-naphthylamine | U | 1.1E+03 |
| 62-44-2 | phenacetin | U | 1.1E+03 |
| 92-67-1 | 4-aminobiphenyl | U | 1.1E+03 |
| 23950-58-5 | pronamide (propyzamide) | U | 1.1E+03 |
| 82-68-8 | pentachloronitrobenzene | U | 1.1E+03 |
| 92-87-5 | benzidine | U | 1.1E+03 |
| 60-11-7 | p-dimethylaminoazobenzene | U | 1.1E+03 |
| 57-97-6 | 7,12-dimethbenz(a)anthracene | U | 1.1E+03 |
| 56-49-5 | 3-methylchloranthrene | U | 1.1E+03 |
| 57-74-9 | chlordane | U | 1.1E+04 |
| 8001-35-2 | toxaphene | U | 1.1E+04 |
| 12674-11-2 | PCB-1016 | U | 1.1E+04 |
| 11104-28-2 | PCB-1221 | U | 1.1E+04 |
| 11141-16-5 | PCB-1232 | U | 1.1E+04 |
| 53469-21-9 | PCB-1242 | U | 1.1E+04 |
| 12672-29-6 | PCB-1248 | U | 1.1E+04 |
| 11097-69-1 | PCB-1254 | U | 1.1E+04 |
| 11096-82-5 | PCB-1260 | U | 1.1E+04 |

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See footnotes on page 4

ANALYTICAL REPORT FOR SAMPLE No.: EL4859



NON-TARGET ANALYTE RESULTS
Additional Semi-Volatiles

SET ID: S92-0846-IJ

Field samp ID: B07GN2

| Cas. No | COMPOUND | Scan No. | Results ug/Kg | Qlfr |
|---|---|---|---|---|
| 0-00-0 | ALDOL CONDENSATION PRODUCT | 521 | 2.1E+02 | ~~ENA~~ K |
| 0-00-0 | ALDOL CONDENSATION PRODUCT | 569 | 9.9E+02 | ~~ENAB~~ K |
| 0-00-0 | ALDOL CONDENSATION PRODUCT | 634 | 9.9E+02 | ~~ENA~~ K |
| 0-00-0 | ALDOL CONDENSATION PRODUCT | 709 | 2.9E+02 | ~~ENA~~ K |
| 0-00-0 | ALKANE @ C29 | 2057 | 1.8E+02 | EN |
| 205-82-3 | PNA, MW=252 | 2107 | 3.7E+02 | EN |

B The analyte was found in the method blank.
E The reported concentration is an estimate only. The response factor was assumed to be 1.000 relative to an internal standard.
J Indicates an estimated concentration below the Method Detection Limit.
K The isomer is unknown.
N Analytical standards were not analyzed for this compound.
U Not detected.
W The identification is tentative or closely related to the compound.

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ANALYTICAL REPORT FOR SAMPLE No.: EL4860



EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Sponsor: WESTINGHOUSE HANFORD DCL SET ID: S92-0846-IJ

File ID: FP10EL4860 Date Extracted: 11/04/92

FIELD No.:B07GN4 Analysis Date: 11/29/92

| Cas. No | COMPOUND | QLFR | RESULTS ug/Kg |
|---|---|---|---|
| 62-75-9 | N-nitroso-dimethylamine | U | 1.0E+03 |
| 108-95-2 | phenol | U | 3.4E+02 |
| 111-44-4 | bis(2-chloroethyl)ether | U | 3.4E+02 |
| 95-57-8 | 2-chlorophenol | U | 3.4E+02 |
| 541-73-1 | 1,3-dichlorobenzene | U | 3.4E+02 |
| 106-46-7 | 1,4-dichlorobenzene | U | 3.4E+02 |
| 100-51-6 | benzyl alcohol | U | 1.0E+03 |
| 95-50-1 | 1,2-dichlorobenzene | U | 3.4E+02 |
| 95-48-7 | 2-methylphenol | U | 3.4E+02 |
| 39638-329 | bis(2-chloroisopropyl)ether | U | 3.4E+02 |
| 106-44-5 | 4-methylphenol | U | 3.4E+02 |
| 621-64-7 | N-nitroso-di-n-propylamine | U | 3.4E+02 |
| 67-72-1 | hexachloroethane | U | 3.4E+02 |
| 98-95-3 | nitrobenzene | U | 3.4E+02 |
| 78-59-1 | isophorone | U | 3.4E+02 |
| 88-75-5 | 2-nitrophenol | U | 3.4E+02 |
| 105-67-9 | 2,4-dimethylphenol | U | 3.4E+02 |
| 111-91-1 | bis(2-chloroethoxy)methane | U | 3.4E+02 |
| 65-85-0 | benzoic acid | U | 1.0E+03 |
| 120-83-2 | 2,4-dichlorophenol | U | 3.4E+02 |
| 120-82-1 | 1,2,4-trichlorobenzene | U | 3.4E+02 |
| 91-20-3 | naphthalene | U | 3.4E+02 |
| 106-47-8 | 4-chloroaniline | U | 3.4E+02 |
| 87-68-3 | hexachlorobutadiene | U | 3.4E+02 |
| 59-50-7 | 4-chloro-3-methylphenol | U | 3.4E+02 |
| 91-57-6 | 2-methylnaphthalene | U | 3.4E+02 |
| 77-47-4 | hexachlorocyclopentadiene | U | 3.4E+02 |
| 88-06-2 | 2,4,6-trichlorophenol | U | 3.4E+02 |
| 95-95-4 | 2,4,5-trichlorophenol | U | 8.3E+02 |
| 91-58-7 | 2-chloronaphthalene | U | 3.4E+02 |
| 88-74-4 | 2-nitroaniline | U | 8.3E+02 |
| 131-11-3 | dimethyl phthalate | U | 3.4E+02 |
| 606-20-2 | 2,6-dinitrotoluene | U | 3.4E+02 |
| 208-96-8 | acenaphthylene | U | 3.4E+02 |
| 99-09-2 | 3-nitroaniline | U | 8.3E+02 |
| 83-32-9 | acenaphthene | U | 3.4E+02 |
| 51-28-5 | 2,4-dinitrophenol | U | 8.3E+02 |
| 100-02-7 | 4-nitrophenol | U | 8.3E+02 |
| 132-64-9 | dibenzofuran | U | 3.4E+02 |

See footnotes on page 4.

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ANALYTICAL REPORT FOR SAMPLE No.: EL4860



EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Field Sample ID:B07GN4

| Cas. No | COMPOUND | QLFR | RESULTS ug/Kg |
|---|---|---|---|
| 121-14-2 | 2,4-dinitrotoluene | U | 3.4E+02 |
| 84-66-2 | diethyl phthalate | U | 3.4E+02 |
| 7005-72-3 | 4-chlorophenyl-phenylether | U | 3.4E+02 |
| 86-73-7 | fluorene | U | 3.4E+02 |
| 100-01-6 | 4-nitroaniline | U | 8.3E+02 |
| 534-52-1 | 2-methyl-4,6-dinitrophenol | U | 8.3E+02 |
| 86-30-6 | N-nitroso-diphenylamine | U | 3.4E+02 |
| 122-66-7 | 1,2-diphenylhydrazine | U | 1.0E+03 |
| 101-55-3 | 4-bromophenyl-phenylether | U | 3.4E+02 |
| 319-84-6 | .alpha.-BHC | U | 1.0E+03 |
| 319-85-7 | beta-BHC | U | 5.2E+03 |
| 118-74-1 | hexachlorobenzene | U | 3.4E+02 |
| 87-86-5 | pentachlorophenol | U | 8.3E+02 |
| 58-89-9 | .gamma.-BHC | U | 1.0E+03 |
| 85-01-8 | phenanthrene | U | 3.4E+02 |
| 120-12-7 | anthracene | U | 3.4E+02 |
| 319-86-8 | delta-BHC | U | 5.2E+03 |
| 76-44-8 | heptachlor | U | 5.2E+03 |
| 84-74-2 | di-n-butyl phthalate | U | 3.4E+02 |
| 309-00-2 | aldrin | U | 5.2E+03 |
| 1024-57-3 | heptachlor epoxide | U | 5.2E+03 |
| 206-44-0 | fluoranthene | U | 3.4E+02 |
| 129-00-0 | pyrene | U | 3.4E+02 |
| 959-98-8 | endosulfan I | U | 5.2E+03 |
| 72-55-9 | 4,4'DDE | U | 5.2E+03 |
| 60-57-1 | dieldrin | U | 5.2E+03 |
| 7421-93-4 | endrin aldehyde | U | 5.2E+03 |
| 72-20-8 | endrin | U | 5.2E+03 |
| 72-54-8 | 4,4'DDD | U | 5.2E+03 |
| 33213-65-9 | endosulfan II | U | 5.2E+03 |
| 85-68-7 | butylbenzylphthalate | U | 3.4E+02 |
| 50-29-3 | 4,4'DDT | U | 5.2E+03 |
| 1031-07-8 | endosulfan sulfate | U | 5.2E+03 |
| 72-43-5 | p,p'-methoxychlor | U | 1.0E+03 |
| 91-94-1 | 3,3'-dichlorobenzidine | U | 1.0E+03 |
| 56-55-3 | benzo(a)anthracene | U | 3.4E+02 |
| 117-81-7 | bis(2-ethylhexyl)phthalate | U | 3.4E+02 |
| 218-01-9 | chrysene | U | 3.4E+02 |
| 117-84-0 | di-n-octylphthalate | U | 3.4E+02 |

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See footnotes on page 4.

ANALYTICAL REPORT FOR SAMPLE No.: EL4860



EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Field Sample ID:B07GN4

| Cas. No | COMPOUND | QLFR | RESULTS ug/Kg |
|---|---|---|---|
| 205-99-2 | benzo(b)fluoranthene | U | 3.4E+02 |
| 207-08-9 | benzo(k)fluoranthene | U | 3.4E+02 |
| 50-32-8 | benzo(a)pyrene | U | 3.4E+02 |
| 193-39-5 | indeno(1,2,3-cd)pyrene | U | 3.4E+02 |
| 53-70-3 | dibenzo(a,h)anthracene | U | 3.4E+02 |
| 191-24-2 | benzo(g,h,i)perylene | U | 3.4E+02 |
| 53494-70-5 | endrin ketone | U | 1.0E+03 |
| 109-06-8 | 2-picoline | U | 1.0E+03 |
| 62-50-0 | ethyl methanesulfonate | U | 1.0E+03 |
| 66-27-3 | methyl methanesulfonate | U | 1.0E+03 |
| 62-53-3 | aniline | U | 1.0E+03 |
| 98-86-2 | acetophenone | U | 1.0E+03 |
| 100-75-4 | N-nitroso-piperidine | U | 1.0E+03 |
| 122-09-8 | a,a-dimethylphenethylamine | U | 1.0E+03 |
| 87-65-0 | 2,6-dichlorophenol | U | 1.0E+03 |
| 924-16-3 | N-nitroso-di-n-butylamine | U | 1.0E+03 |
| 95-94-3 | 1,2,4,5-tetrachlorobenzene | U | 1.0E+03 |
| 90-13-1 | 1-chloronaphthalene | U | 1.0E+03 |
| 608-93-5 | pentachlorobenzene | U | 1.0E+03 |
| 134-32-7 | 1-naphthylamine | U | 1.0E+03 |
| 58-90-2 | 2,3,4,6-tetrachlorophenol | U | 1.0E+03 |
| 91-59-8 | 2-naphthylamine | U | 1.0E+03 |
| 62-44-2 | phenacetin | U | 1.0E+03 |
| 92-67-1 | 4-aminobiphenyl | U | 1.0E+03 |
| 23950-58-5 | pronamide (propyzamide) | U | 1.0E+03 |
| 82-68-8 | pentachloronitrobenzene | U | 1.0E+03 |
| 92-87-5 | benzidine | U | 1.0E+03 |
| 60-11-7 | p-dimethylaminoazobenzene | U | 1.0E+03 |
| 57-97-6 | 7,12-dimethbenz(a)anthracene | U | 1.0E+03 |
| 56-49-5 | 3-methylchloranthrene | U | 1.0E+03 |
| 57-74-9 | chlordane | U | 1.0E+04 |
| 8001-35-2 | toxaphene | U | 1.0E+04 |
| 12674-11-2 | PCB-1016 | U | 1.0E+04 |
| 11104-28-2 | PCB-1221 | U | 1.0E+04 |
| 11141-16-5 | PCB-1232 | U | 1.0E+04 |
| 53469-21-9 | PCB-1242 | U | 1.0E+04 |
| 12672-29-6 | PCB-1248 | U | 1.0E+04 |
| 11097-69-1 | PCB-1254 | U | 1.0E+04 |
| 11096-82-5 | PCB-1260 | U | 1.0E+04 |

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See footnotes on page 4

ANALYTICAL REPORT FOR SAMPLE No.: EL4860



NON-TARGET ANALYTE RESULTS
Additional Semi-Volatiles

SET ID: S92-0846-IJ

Field samp ID: B07GN4

| Cas. No | COMPOUND | Scan No. | Results ug/Kg | Qlfr |
|---|---|---|---|---|
| 0-00-0 | ALDOL CONDENSATION PRODUCT | 521 | 2.4E+02 | ~~ENA~~ R |
| 0-00-0 | ALDOL CONDENSATION PRODUCT | 569 | 7.4E+02 | ~~ENAB~~ R |
| 0-00-0 | ALDOL CONDENSATION PRODUCT | 632 | 3.3E+02 | ~~ENA~~ R |
| 0-00-0 | ALKANE @ C29 | 2056 | 2.6E+02 | EN |

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B The analyte was found in the method blank.
E The reported concentration is an estimate only. The response factor was assumed to be 1.000 relative to an internal standard.
J Indicates an estimated concentration below the Method Detection Limit.
K The isomer is unknown.
N Analytical standards were not analyzed for this compound.
U Not detected.
W The identification is tentative or closely related to the compound.

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ANALYTICAL REPORT FOR SAMPLE No.: EL4861



EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Sponsor: WESTINGHOUSE HANFORD DCL SET ID: S92-0846-IJ

File ID: FP11EL4861 Date Extracted: 11/04/92

FIELD No.:B07GN5 Analysis Date: 11/29/92

| Cas. No | COMPOUND | QLFR | RESULTS ug/Kg |
|---|---|---|---|
| 62-75-9 | N-nitroso-dimethylamine | U | 1.0E+03 |
| 108-95-2 | phenol | U | 3.4E+02 |
| 111-44-4 | bis(2-chloroethyl)ether | U | 3.4E+02 |
| 95-57-8 | 2-chlorophenol | U | 3.4E+02 |
| 541-73-1 | 1,3-dichlorobenzene | U | 3.4E+02 |
| 106-46-7 | 1,4-dichlorobenzene | U | 3.4E+02 |
| 100-51-6 | benzyl alcohol | U | 1.0E+03 |
| 95-50-1 | 1,2-dichlorobenzene | U | 3.4E+02 |
| 95-48-7 | 2-methylphenol | U | 3.4E+02 |
| 39638-329 | bis(2-chloroisopropyl)ether | U | 3.4E+02 |
| 106-44-5 | 4-methylphenol | U | 3.4E+02 |
| 621-64-7 | N-nitroso-di-n-propylamine | U | 3.4E+02 |
| 67-72-1 | hexachloroethane | U | 3.4E+02 |
| 98-95-3 | nitrobenzene | U | 3.4E+02 |
| 78-59-1 | isophorone | U | 3.4E+02 |
| 88-75-5 | 2-nitrophenol | U | 3.4E+02 |
| 105-67-9 | 2,4-dimethylphenol | U | 3.4E+02 |
| 111-91-1 | bis(2-chloroethoxy)methane | U | 3.4E+02 |
| 65-85-0 | benzoic acid | U | 1.0E+03 |
| 120-83-2 | 2,4-dichlorophenol | U | 3.4E+02 |
| 120-82-1 | 1,2,4-trichlorobenzene | U | 3.4E+02 |
| 91-20-3 | naphthalene | U | 3.4E+02 |
| 106-47-8 | 4-chloroaniline | U | 3.4E+02 |
| 87-68-3 | hexachlorobutadiene | U | 3.4E+02 |
| 59-50-7 | 4-chloro-3-methylphenol | U | 3.4E+02 |
| 91-57-6 | 2-methylnaphthalene | U | 3.4E+02 |
| 77-47-4 | hexachlorocyclopentadiene | U | 3.4E+02 |
| 88-06-2 | 2,4,6-trichlorophenol | U | 3.4E+02 |
| 95-95-4 | 2,4,5-trichlorophenol | U | 8.3E+02 |
| 91-58-7 | 2-chloronaphthalene | U | 3.4E+02 |
| 88-74-4 | 2-nitroaniline | U | 8.3E+02 |
| 131-11-3 | dimethyl phthalate | U | 3.4E+02 |
| 606-20-2 | 2,6-dinitrotoluene | U | 3.4E+02 |
| 208-96-8 | acenaphthylene | U | 3.4E+02 |
| 99-09-2 | 3-nitroaniline | U | 8.3E+02 |
| 83-32-9 | acenaphthene | U | 3.4E+02 |
| 51-28-5 | 2,4-dinitrophenol | U | 8.3E+02 |
| 100-02-7 | 4-nitrophenol | U | 8.3E+02 |
| 132-64-9 | dibenzofuran | U | 3.4E+02 |

See footnotes on page 4.

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ANALYTICAL REPORT FOR SAMPLE No.: EL4861



EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Field Sample ID:B07GN5

| Cas. No | COMPOUND | QLFR | RESULTS ug/Kg |
|---|---|---|---|
| 121-14-2 | 2,4-dinitrotoluene | U | 3.4E+02 |
| 84-66-2 | diethyl phthalate | U | 3.4E+02 |
| 7005-72-3 | 4-chlorophenyl-phenylether | U | 3.4E+02 |
| 86-73-7 | fluorene | U | 3.4E+02 |
| 100-01-6 | 4-nitroaniline | U | 8.3E+02 |
| 534-52-1 | 2-methyl-4,6-dinitrophenol | U | 8.3E+02 |
| 86-30-6 | N-nitroso-diphenylamine | U | 3.4E+02 |
| 122-66-7 | 1,2-diphenylhydrazine | U | 1.0E+03 |
| 101-55-3 | 4-bromophenyl-phenylether | U | 3.4E+02 |
| 319-84-6 | .alpha.-BHC | U | 1.0E+03 |
| 319-85-7 | beta-BHC | U | 5.2E+03 |
| 118-74-1 | hexachlorobenzene | U | 3.4E+02 |
| 87-86-5 | pentachlorophenol | U | 8.3E+02 |
| 58-89-9 | .gamma.-BHC | U | 1.0E+03 |
| 85-01-8 | phenanthrene | U | 3.4E+02 |
| 120-12-7 | anthracene | U | 3.4E+02 |
| 319-86-8 | delta-BHC | U | 5.2E+03 |
| 76-44-8 | heptachlor | U | 5.2E+03 |
| 84-74-2 | di-n-butyl phthalate | U | 3.4E+02 |
| 309-00-2 | aldrin | U | 5.2E+03 |
| 1024-57-3 | heptachlor epoxide | U | 5.2E+03 |
| 206-44-0 | fluoranthene | U | 3.4E+02 |
| 129-00-0 | pyrene | U | 3.4E+02 |
| 959-98-8 | endosulfan I | U | 5.2E+03 |
| 72-55-9 | 4,4'DDE | U | 5.2E+03 |
| 60-57-1 | dieldrin | U | 5.2E+03 |
| 7421-93-4 | endrin aldehyde | U | 5.2E+03 |
| 72-20-8 | endrin | U | 5.2E+03 |
| 72-54-8 | 4,4'DDD | U | 5.2E+03 |
| 33213-65-9 | endosulfan II | U | 5.2E+03 |
| 85-68-7 | butylbenzylphthalate | U | 3.4E+02 |
| 50-29-3 | 4,4'DDT | U | 5.2E+03 |
| 1031-07-8 | endosulfan sulfate | U | 5.2E+03 |
| 72-43-5 | p,p'-methoxychlor | U | 1.0E+03 |
| 91-94-1 | 3,3'-dichlorobenzidine | U | 1.0E+03 |
| 56-55-3 | benzo(a)anthracene | U | 3.4E+02 |
| 117-81-7 | bis(2-ethylhexyl)phthalate | U | 3.4E+02 |
| 218-01-9 | chrysene | U | 3.4E+02 |
| 117-84-0 | di-n-octylphthalate | U | 3.4E+02 |

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See footnotes on page 4.

ANALYTICAL REPORT FOR SAMPLE No.: EL4861



EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Field Sample ID:B07GN5

| Cas. No | COMPOUND | QLFR | RESULTS ug/Kg |
|---|---|---|---|
| 205-99-2 | benzo(b)fluoranthene | U | 3.4E+02 |
| 207-08-9 | benzo(k)fluoranthene | U | 3.4E+02 |
| 50-32-8 | benzo(a)pyrene | U | 3.4E+02 |
| 193-39-5 | indeno(1,2,3-cd)pyrene | U | 3.4E+02 |
| 53-70-3 | dibenzo(a,h)anthracene | U | 3.4E+02 |
| 191-24-2 | benzo(g,h,i)perylene | U | 3.4E+02 |
| 53494-70-5 | endrin ketone | U | 1.0E+03 |
| 109-06-8 | 2-picoline | U | 1.0E+03 |
| 62-50-0 | ethyl methanesulfonate | U | 1.0E+03 |
| 66-27-3 | methyl methanesulfonate | U | 1.0E+03 |
| 62-53-3 | aniline | U | 1.0E+03 |
| 98-86-2 | acetophenone | U | 1.0E+03 |
| 100-75-4 | N-nitroso-piperidine | U | 1.0E+03 |
| 122-09-8 | a,a-dimethylphenethylamine | U | 1.0E+03 |
| 87-65-0 | 2,6-dichlorophenol | U | 1.0E+03 |
| 924-16-3 | N-nitroso-di-n-butylamine | U | 1.0E+03 |
| 95-94-3 | 1,2,4,5-tetrachlorobenzene | U | 1.0E+03 |
| 90-13-1 | 1-chloronaphthalene | U | 1.0E+03 |
| 608-93-5 | pentachlorobenzene | U | 1.0E+03 |
| 134-32-7 | 1-naphthylamine | U | 1.0E+03 |
| 58-90-2 | 2,3,4,6-tetrachlorophenol | U | 1.0E+03 |
| 91-59-8 | 2-naphthylamine | U | 1.0E+03 |
| 62-44-2 | phenacetin | U | 1.0E+03 |
| 92-67-1 | 4-aminobiphenyl | U | 1.0E+03 |
| 23950-58-5 | pronamide (propyzamide) | U | 1.0E+03 |
| 82-68-8 | pentachloronitrobenzene | U | 1.0E+03 |
| 92-87-5 | benzidine | U | 1.0E+03 |
| 60-11-7 | p-dimethylaminoazobenzene | U | 1.0E+03 |
| 57-97-6 | 7,12-dimethbenz(a)anthracene | U | 1.0E+03 |
| 56-49-5 | 3-methylchloranthrene | U | 1.0E+03 |
| 57-74-9 | chlordane | U | 1.0E+04 |
| 8001-35-2 | toxaphene | U | 1.0E+04 |
| 12674-11-2 | PCB-1016 | U | 1.0E+04 |
| 11104-28-2 | PCB-1221 | U | 1.0E+04 |
| 11141-16-5 | PCB-1232 | U | 1.0E+04 |
| 53469-21-9 | PCB-1242 | U | 1.0E+04 |
| 12672-29-6 | PCB-1248 | U | 1.0E+04 |
| 11097-69-1 | PCB-1254 | U | 1.0E+04 |
| 11096-82-5 | PCB-1260 | U | 1.0E+04 |

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See footnotes on page 4

ANALYTICAL REPORT FOR SAMPLE No.: EL4861



NON-TARGET ANALYTE RESULTS
Additional Semi-Volatiles

SET ID: S92-0846-IJ

Field samp ID: B07GN5

| Cas. No | COMPOUND | Scan No. | Results ug/Kg | Qlfr | Q |
|---|---|---|---|---|---|
| 0-00-0 | ALDOL CONDENSATION PRODUCT | 519 | 1.8E+02 | ~~ENA~~ | R |
| 0-00-0 | ALDOL CONDENSATION PRODUCT | 567 | 5.5E+02 | ~~ENAB~~ | R |
| 0-00-0 | ALDOL CONDENSATION PRODUCT | 632 | 3.5E+02 | ~~ENA~~ | R |
| 0-00-0 | ALKANE @ C29 | 2056 | 2.7E+02 | EN | |

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B The analyte was found in the method blank.
E The reported concentration is an estimate only. The response factor was assumed to be 1.000 relative to an internal standard.
J Indicates an estimated concentration below the Method Detection Limit.
K The isomer is unknown.
N Analytical standards were not analyzed for this compound.
U Not detected.
W The identification is tentative or closely related to the compound.

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ANALYTICAL REPORT FOR SAMPLE No.: EL4862



EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Sponsor: WESTINGHOUSE HANFORD DCL SET ID: S92-0846-IJ

File ID: FP12EL4862 Date Extracted: 11/04/92

FIELD No.:B07GN7 Analysis Date: 11/29/92

| Cas. No | COMPOUND | QLFR | RESULTS ug/Kg |
|---|---|---|---|
| 62-75-9 | N-nitroso-dimethylamine | U | 1.1E+03 |
| 108-95-2 | phenol | U | 3.6E+02 |
| 111-44-4 | bis(2-chloroethyl)ether | U | 3.6E+02 |
| 95-57-8 | 2-chlorophenol | U | 3.6E+02 |
| 541-73-1 | 1,3-dichlorobenzene | U | 3.6E+02 |
| 106-46-7 | 1,4-dichlorobenzene | U | 3.6E+02 |
| 100-51-6 | benzyl alcohol | U | 1.1E+03 |
| 95-50-1 | 1,2-dichlorobenzene | U | 3.6E+02 |
| 95-48-7 | 2-methylphenol | U | 3.6E+02 |
| 39638-329 | bis(2-chloroisopropyl)ether | U | 3.6E+02 |
| 106-44-5 | 4-methylphenol | U | 3.6E+02 |
| 621-64-7 | N-nitroso-di-n-propylamine | U | 3.6E+02 |
| 67-72-1 | hexachloroethane | U | 3.6E+02 |
| 98-95-3 | nitrobenzene | U | 3.6E+02 |
| 78-59-1 | isophorone | U | 3.6E+02 |
| 88-75-5 | 2-nitrophenol | U | 3.6E+02 |
| 105-67-9 | 2,4-dimethylphenol | U | 3.6E+02 |
| 111-91-1 | bis(2-chloroethoxy)methane | U | 3.6E+02 |
| 65-85-0 | benzoic acid | U | 1.1E+03 |
| 120-83-2 | 2,4-dichlorophenol | U | 3.6E+02 |
| 120-82-1 | 1,2,4-trichlorobenzene | U | 3.6E+02 |
| 91-20-3 | naphthalene | U | 3.6E+02 |
| 106-47-8 | 4-chloroaniline | U | 3.6E+02 |
| 87-68-3 | hexachlorobutadiene | U | 3.6E+02 |
| 59-50-7 | 4-chloro-3-methylphenol | U | 3.6E+02 |
| 91-57-6 | 2-methylnaphthalene | U | 3.6E+02 |
| 77-47-4 | hexachlorocyclopentadiene | U | 3.6E+02 |
| 88-06-2 | 2,4,6-trichlorophenol | U | 3.6E+02 |
| 95-95-4 | 2,4,5-trichlorophenol | U | 8.7E+02 |
| 91-58-7 | 2-chloronaphthalene | U | 3.6E+02 |
| 88-74-4 | 2-nitroaniline | U | 8.7E+02 |
| 131-11-3 | dimethyl phthalate | U | 3.6E+02 |
| 606-20-2 | 2,6-dinitrotoluene | U | 3.6E+02 |
| 208-96-8 | acenaphthylene | U | 3.6E+02 |
| 99-09-2 | 3-nitroaniline | U | 8.7E+02 |
| 83-32-9 | acenaphthene | U | 3.6E+02 |
| 51-28-5 | 2,4-dinitrophenol | U | 8.7E+02 |
| 100-02-7 | 4-nitrophenol | U | 8.7E+02 |
| 132-64-9 | dibenzofuran | U | 3.6E+02 |

See footnotes on page 4.

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ANALYTICAL REPORT FOR SAMPLE No.: EL4862



EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Field Sample ID:B07GN7

| Cas. No | COMPOUND | QLFR | RESULTS ug/Kg |
|---|---|---|---|
| 121-14-2 | 2,4-dinitrotoluene | U | 3.6E+02 |
| 84-66-2 | diethyl phthalate | U | 3.6E+02 |
| 7005-72-3 | 4-chlorophenyl-phenylether | U | 3.6E+02 |
| 86-73-7 | fluorene | U | 3.6E+02 |
| 100-01-6 | 4-nitroaniline | U | 8.7E+02 |
| 534-52-1 | 2-methyl-4,6-dinitrophenol | U | 8.7E+02 |
| 86-30-6 | N-nitroso-diphenylamine | U | 3.6E+02 |
| 122-66-7 | 1,2-diphenylhydrazine | U | 1.1E+03 |
| 101-55-3 | 4-bromophenyl-phenylether | U | 3.6E+02 |
| 319-84-6 | .alpha.-BHC | U | 1.1E+03 |
| 319-85-7 | beta-BHC | U | 5.4E+03 |
| 118-74-1 | hexachlorobenzene | U | 3.6E+02 |
| 87-86-5 | pentachlorophenol | U | 8.7E+02 |
| 58-89-9 | .gamma.-BHC | U | 1.1E+03 |
| 85-01-8 | phenanthrene | U | 3.6E+02 |
| 120-12-7 | anthracene | U | 3.6E+02 |
| 319-86-8 | delta-BHC | U | 5.4E+03 |
| 76-44-8 | heptachlor | U | 5.4E+03 |
| 84-74-2 | di-n-butyl phthalate | U | 3.6E+02 |
| 309-00-2 | aldrin | U | 5.4E+03 |
| 1024-57-3 | heptachlor epoxide | U | 5.4E+03 |
| 206-44-0 | fluoranthene | U | 3.6E+02 |
| 129-00-0 | pyrene | U | 3.6E+02 |
| 959-98-8 | endosulfan I | U | 5.4E+03 |
| 72-55-9 | 4,4'DDE | U | 5.4E+03 |
| 60-57-1 | dieldrin | U | 5.4E+03 |
| 7421-93-4 | endrin aldehyde | U | 5.4E+03 |
| 72-20-8 | endrin | U | 5.4E+03 |
| 72-54-8 | 4,4'DDD | U | 5.4E+03 |
| 33213-65-9 | endosulfan II | U | 5.4E+03 |
| 85-68-7 | butylbenzylphthalate | U | 3.6E+02 |
| 50-29-3 | 4,4'DDT | U | 5.4E+03 |
| 1031-07-8 | endosulfan sulfate | U | 5.4E+03 |
| 72-43-5 | p,p'-methoxychlor | U | 1.1E+03 |
| 91-94-1 | 3,3'-dichlorobenzidine | U | 1.1E+03 |
| 56-55-3 | benzo(a)anthracene | U | 3.6E+02 |
| 117-81-7 | bis(2-ethylhexyl)phthalate | U | 3.6E+02 |
| 218-01-9 | chrysene | U | 3.6E+02 |
| 117-84-0 | di-n-octylphthalate | U | 3.6E+02 |

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See footnotes on page 4.

ANALYTICAL REPORT FOR SAMPLE No.: EL4862



EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Field Sample ID:B07GN7

| Cas. No | COMPOUND | QLFR | RESULTS ug/Kg |
|---|---|---|---|
| 205-99-2 | benzo(b)fluoranthene | U | 3.6E+02 |
| 207-08-9 | benzo(k)fluoranthene | U | 3.6E+02 |
| 50-32-8 | benzo(a)pyrene | U | 3.6E+02 |
| 193-39-5 | indeno(1,2,3-cd)pyrene | U | 3.6E+02 |
| 53-70-3 | dibenzo(a,h)anthracene | U | 3.6E+02 |
| 191-24-2 | benzo(g,h,i)perylene | U | 3.6E+02 |
| 53494-70-5 | endrin ketone | U | 1.1E+03 |
| 109-06-8 | 2-picoline | U | 1.1E+03 |
| 62-50-0 | ethyl methanesulfonate | U | 1.1E+03 |
| 66-27-3 | methyl methanesulfonate | U | 1.1E+03 |
| 62-53-3 | aniline | U | 1.1E+03 |
| 98-86-2 | acetophenone | U | 1.1E+03 |
| 100-75-4 | N-nitroso-piperidine | U | 1.1E+03 |
| 122-09-8 | a,a-dimethylphenethylamine | U | 1.1E+03 |
| 87-65-0 | 2,6-dichlorophenol | U | 1.1E+03 |
| 924-16-3 | N-nitroso-di-n-butylamine | U | 1.1E+03 |
| 95-94-3 | 1,2,4,5-tetrachlorobenzene | U | 1.1E+03 |
| 90-13-1 | 1-chloronaphthalene | U | 1.1E+03 |
| 608-93-5 | pentachlorobenzene | U | 1.1E+03 |
| 134-32-7 | 1-naphthylamine | U | 1.1E+03 |
| 58-90-2 | 2,3,4,6-tetrachlorophenol | U | 1.1E+03 |
| 91-59-8 | 2-naphthylamine | U | 1.1E+03 |
| 62-44-2 | phenacetin | U | 1.1E+03 |
| 92-67-1 | 4-aminobiphenyl | U | 1.1E+03 |
| 23950-58-5 | pronamide (propyzamide) | U | 1.1E+03 |
| 82-68-8 | pentachloronitrobenzene | U | 1.1E+03 |
| 92-87-5 | benzidine | U | 1.1E+03 |
| 60-11-7 | p-dimethylaminoazobenzene | U | 1.1E+03 |
| 57-97-6 | 7,12-dimethbenz(a)anthracene | U | 1.1E+03 |
| 56-49-5 | 3-methylchloranthrene | U | 1.1E+03 |
| 57-74-9 | chlordane | U | 1.1E+04 |
| 8001-35-2 | toxaphene | U | 1.1E+04 |
| 12674-11-2 | PCB-1016 | U | 1.1E+04 |
| 11104-28-2 | PCB-1221 | U | 1.1E+04 |
| 11141-16-5 | PCB-1232 | U | 1.1E+04 |
| 53469-21-9 | PCB-1242 | U | 1.1E+04 |
| 12672-29-6 | PCB-1248 | U | 1.1E+04 |
| 11097-69-1 | PCB-1254 | U | 1.1E+04 |
| 11096-82-5 | PCB-1260 | U | 1.1E+04 |

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See footnotes on page 4

ANALYTICAL REPORT FOR SAMPLE No.: EL4862



NON-TARGET ANALYTE RESULTS
Additional Semi-Volatiles

SET ID: S92-0846-IJ

Field samp ID: B07GN7

| Cas. No | COMPOUND | Scan No. | Results ug/Kg | Qlfr | Q |
|---|---|---|---|---|---|
| 0-00-0 | ALDOL CONDENSATION PRODUCT | 521 | 1.9E+02 | ~~ENA~~ | R |
| 0-00-0 | ALDOL CONDENSATION PRODUCT | 569 | 5.1E+02 | ~~ENAB~~ | R |
| 0-00-0 | ALDOL CONDENSATION PRODUCT | 632 | 3.3E+02 | ~~ENA~~ | R |
| 0-00-0 | ALKANE @ C29 | 2056 | 2.2E+02 | EN | |

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B The analyte was found in the method blank.
E The reported concentration is an estimate only. The response factor was assumed to be 1.000 relative to an internal standard.
J Indicates an estimated concentration below the Method Detection Limit.
K The isomer is unknown.
N Analytical standards were not analyzed for this compound.
U Not detected.
W The identification is tentative or closely related to the compound.

6/17/93

ANALYTICAL REPORT FOR SAMPLE No.: EL4863



EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Sponsor: WESTINGHOUSE HANFORD DCL SET ID: S92-0846-IJ

File ID: FQ8EL4863 Date Extracted: 11/04/92

FIELD No.:B07GN8 Analysis Date: 11/29/92

| Cas. No | COMPOUND | QLFR | RESULTS ug/Kg |
|---|---|---|---|
| 62-75-9 | N-nitroso-dimethylamine | U | 1.0E+03 |
| 108-95-2 | phenol | U | 3.4E+02 |
| 111-44-4 | bis(2-chloroethyl)ether | U | 3.4E+02 |
| 95-57-8 | 2-chlorophenol | U | 3.4E+02 |
| 541-73-1 | 1,3-dichlorobenzene | U | 3.4E+02 |
| 106-46-7 | 1,4-dichlorobenzene | U | 3.4E+02 |
| 100-51-6 | benzyl alcohol | U | 1.0E+03 |
| 95-50-1 | 1,2-dichlorobenzene | U | 3.4E+02 |
| 95-48-7 | 2-methylphenol | U | 3.4E+02 |
| 39638-329 | bis(2-chloroisopropyl)ether | U | 3.4E+02 |
| 106-44-5 | 4-methylphenol | U | 3.4E+02 |
| 621-64-7 | N-nitroso-di-n-propylamine | U | 3.4E+02 |
| 67-72-1 | hexachloroethane | U | 3.4E+02 |
| 98-95-3 | nitrobenzene | U | 3.4E+02 |
| 78-59-1 | isophorone | U | 3.4E+02 |
| 88-75-5 | 2-nitrophenol | U | 3.4E+02 |
| 105-67-9 | 2,4-dimethylphenol | U | 3.4E+02 |
| 111-91-1 | bis(2-chloroethoxy)methane | U | 3.4E+02 |
| 65-85-0 | benzoic acid | U | 1.0E+03 |
| 120-83-2 | 2,4-dichlorophenol | U | 3.4E+02 |
| 120-82-1 | 1,2,4-trichlorobenzene | U | 3.4E+02 |
| 91-20-3 | naphthalene | U | 3.4E+02 |
| 106-47-8 | 4-chloroaniline | U | 3.4E+02 |
| 87-68-3 | hexachlorobutadiene | U | 3.4E+02 |
| 59-50-7 | 4-chloro-3-methylphenol | U | 3.4E+02 |
| 91-57-6 | 2-methylnaphthalene | U | 3.4E+02 |
| 77-47-4 | hexachlorocyclopentadiene | U | 3.4E+02 |
| 88-06-2 | 2,4,6-trichlorophenol | U | 3.4E+02 |
| 95-95-4 | 2,4,5-trichlorophenol | U | 8.3E+02 |
| 91-58-7 | 2-chloronaphthalene | U | 3.4E+02 |
| 88-74-4 | 2-nitroaniline | U | 8.3E+02 |
| 131-11-3 | dimethyl phthalate | U | 3.4E+02 |
| 606-20-2 | 2,6-dinitrotoluene | U | 3.4E+02 |
| 208-96-8 | acenaphthylene | U | 3.4E+02 |
| 99-09-2 | 3-nitroaniline | U | 8.3E+02 |
| 83-32-9 | acenaphthene | U | 3.4E+02 |
| 51-28-5 | 2,4-dinitrophenol | U | 8.3E+02 |
| 100-02-7 | 4-nitrophenol | U | 8.3E+02 |
| 132-64-9 | dibenzofuran | U | 3.4E+02 |

See footnotes on page 4.

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ANALYTICAL REPORT FOR SAMPLE No.: EL4863



EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Field Sample ID:B07GN8

| Cas. No | COMPOUND | QLFR | RESULTS ug/Kg |
|---|---|---|---|
| 121-14-2 | 2,4-dinitrotoluene | U | 3.4E+02 |
| 84-66-2 | diethyl phthalate | U | 3.4E+02 |
| 7005-72-3 | 4-chlorophenyl-phenylether | U | 3.4E+02 |
| 86-73-7 | fluorene | U | 3.4E+02 |
| 100-01-6 | 4-nitroaniline | U | 8.3E+02 |
| 534-52-1 | 2-methyl-4,6-dinitrophenol | U | 8.3E+02 |
| 86-30-6 | N-nitroso-diphenylamine | U | 3.4E+02 |
| 122-66-7 | 1,2-diphenylhydrazine | U | 1.0E+03 |
| 101-55-3 | 4-bromophenyl-phenylether | U | 3.4E+02 |
| 319-84-6 | .alpha.-BHC | U | 1.0E+03 |
| 319-85-7 | beta-BHC | U | 5.2E+03 |
| 118-74-1 | hexachlorobenzene | U | 3.4E+02 |
| 87-86-5 | pentachlorophenol | U | 8.3E+02 |
| 58-89-9 | .gamma.-BHC | U | 1.0E+03 |
| 85-01-8 | phenanthrene | U | 3.4E+02 |
| 120-12-7 | anthracene | U | 3.4E+02 |
| 319-86-8 | delta-BHC | U | 5.2E+03 |
| 76-44-8 | heptachlor | U | 5.2E+03 |
| 84-74-2 | di-n-butyl phthalate | U | 3.4E+02 |
| 309-00-2 | aldrin | U | 5.2E+03 |
| 1024-57-3 | heptachlor epoxide | U | 5.2E+03 |
| 206-44-0 | fluoranthene | U | 3.4E+02 |
| 129-00-0 | pyrene | U | 3.4E+02 |
| 959-98-8 | endosulfan I | U | 5.2E+03 |
| 72-55-9 | 4,4'DDE | U | 5.2E+03 |
| 60-57-1 | dieldrin | U | 5.2E+03 |
| 7421-93-4 | endrin aldehyde | U | 5.2E+03 |
| 72-20-8 | endrin | U | 5.2E+03 |
| 72-54-8 | 4,4'DDD | U | 5.2E+03 |
| 33213-65-9 | endosulfan II | U | 5.2E+03 |
| 85-68-7 | butylbenzylphthalate | U | 3.4E+02 |
| 50-29-3 | 4,4'DDT | U | 5.2E+03 |
| 1031-07-8 | endosulfan sulfate | U | 5.2E+03 |
| 72-43-5 | p,p'-methoxychlor | U | 1.0E+03 |
| 91-94-1 | 3,3'-dichlorobenzidine | U | 1.0E+03 |
| 56-55-3 | benzo(a)anthracene | U | 3.4E+02 |
| 117-81-7 | bis(2-ethylhexyl)phthalate | U | 3.4E+02 |
| 218-01-9 | chrysene | U | 3.4E+02 |
| 117-84-0 | di-n-octylphthalate | U | 3.4E+02 |

RB 6/17/95

See footnotes on page 4.

ANALYTICAL REPORT FOR SAMPLE No.: EL4863



EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Field Sample ID:B07GN8

| Cas. No | COMPOUND | QLFR | RESULTS ug/Kg |
|---|---|---|---|
| 205-99-2 | benzo(b)fluoranthene | U | 3.4E+02 |
| 207-08-9 | benzo(k)fluoranthene | U | 3.4E+02 |
| 50-32-8 | benzo(a)pyrene | U | 3.4E+02 |
| 193-39-5 | indeno(1,2,3-cd)pyrene | U | 3.4E+02 |
| 53-70-3 | dibenzo(a,h)anthracene | U | 3.4E+02 |
| 191-24-2 | benzo(g,h,i)perylene | U | 3.4E+02 |
| 53494-70-5 | endrin ketone | U | 1.0E+03 |
| 109-06-8 | 2-picoline | U | 1.0E+03 |
| 62-50-0 | ethyl methanesulfonate | U | 1.0E+03 |
| 66-27-3 | methyl methanesulfonate | U | 1.0E+03 |
| 62-53-3 | aniline | U | 1.0E+03 |
| 98-86-2 | acetophenone | U | 1.0E+03 |
| 100-75-4 | N-nitroso-piperidine | U | 1.0E+03 |
| 122-09-8 | a,a-dimethylphenethylamine | U | 1.0E+03 |
| 87-65-0 | 2,6-dichlorophenol | U | 1.0E+03 |
| 924-16-3 | N-nitroso-di-n-butylamine | U | 1.0E+03 |
| 95-94-3 | 1,2,4,5-tetrachlorobenzene | U | 1.0E+03 |
| 90-13-1 | 1-chloronaphthalene | U | 1.0E+03 |
| 608-93-5 | pentachlorobenzene | U | 1.0E+03 |
| 134-32-7 | 1-naphthylamine | U | 1.0E+03 |
| 58-90-2 | 2,3,4,6-tetrachlorophenol | U | 1.0E+03 |
| 91-59-8 | 2-naphthylamine | U | 1.0E+03 |
| 62-44-2 | phenacetin | U | 1.0E+03 |
| 92-67-1 | 4-aminobiphenyl | U | 1.0E+03 |
| 23950-58-5 | pronamide (propyzamide) | U | 1.0E+03 |
| 82-68-8 | pentachloronitrobenzene | U | 1.0E+03 |
| 92-87-5 | benzidine | U | 1.0E+03 |
| 60-11-7 | p-dimethylaminoazobenzene | U | 1.0E+03 |
| 57-97-6 | 7,12-dimethbenz(a)anthracene | U | 1.0E+03 |
| 56-49-5 | 3-methylchloranthrene | U | 1.0E+03 |
| 57-74-9 | chlordane | U | 1.0E+04 |
| 8001-35-2 | toxaphene | U | 1.0E+04 |
| 12674-11-2 | PCB-1016 | U | 1.0E+04 |
| 11104-28-2 | PCB-1221 | U | 1.0E+04 |
| 11141-16-5 | PCB-1232 | U | 1.0E+04 |
| 53469-21-9 | PCB-1242 | U | 1.0E+04 |
| 12672-29-6 | PCB-1248 | U | 1.0E+04 |
| 11097-69-1 | PCB-1254 | U | 1.0E+04 |
| 11096-82-5 | PCB-1260 | U | 1.0E+04 |

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See footnotes on page 4

ANALYTICAL REPORT FOR SAMPLE No.: EL4863



NON-TARGET ANALYTE RESULTS
Additional Semi-Volatiles

SET ID: S92-0846-IJ

Field samp ID: B07GN8

| Cas. No | COMPOUND | Scan No. | Results ug/Kg | Qlfr |
|---|---|---|---|---|
| 0-00-0 | ALDOL CONDENSATION PRODUCT | 566 | 4.5E+02 | ~~ENAB~~ R |
| 0-00-0 | ALDOL CONDENSATION PRODUCT | 631 | 1.8E+02 | ~~ENA~~ R |
| 0-00-0 | ALKENE @ C10 | 682 | 1.7E+02 | EN |
| 0-00-0 | ALKANE @ C29 | 2056 | 2.2E+02 | EN |

6/18/93

B The analyte was found in the method blank.
E The reported concentration is an estimate only. The response factor was assumed to be 1.000 relative to an internal standard.
J Indicates an estimated concentration below the Method Detection Limit.
K The isomer is unknown.
N Analytical standards were not analyzed for this compound.
U Not detected.
W The identification is tentative or closely related to the compound.

6/17/93

DATA CHEM LABORATORIES

# ANALYTICAL REPORT

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Part 1 of 4

Date NOV 13 1992
Agency Identification Number S92-0846-FJ
Account No. 3534C

NOV 1992 RECEIVED OSM DMO

Westinghouse Hanford Company
2355 Stevens Drive
MSIN T6-08
Richland, WA 99352
Attention: Jeanette Duncan

FAX (509) 373-3992
Telephone (509) 373-3225

**Sampling Collection and Shipment**

Sampling Site North Slope PSN04 Date of Collection October 21, 1992

Date Samples Received at Laboratory October 29, 1992

**Analysis**

Method of Analysis EPA 8080

Date(s) of Analysis November 07, 1992 - November 08, 1992

**Analytical Results**

| Field Sample Number | Laboratory Number | Sample Type | Aldrin ug/kg | alpha-BHC ug/kg | Beta-BHC ug/kg | Delta-BHC ug/kg | Lindane ug/kg | Chlordane ug/kg | 4,4'-DDD ug/kg | 4,4'-DDE ug/kg |
|---|---|---|---|---|---|---|---|---|---|---|
| QC-90694-1 | QC-90694-1 | SOIL | 19 | ND* | ND* | ND* | 18 | ND* | ND* | ND* |
| BL-90694-1 | BL-90694-1 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GM6 | EL 4856 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN0 | EL 4857 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN1 | EL 4858 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | 44 |
| B07GN2 | EL 4859 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN2MS | EL 4859MS | SOIL | 17 | ND* | ND* | ND* | 17 | ND* | ND* | ND* |
| B07GN2MSD | EL 4859MSD | SOIL | 20 | ND* | ND* | ND* | 19 | ND* | ND* | ND* |
| B07GN4 | EL 4860 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN5 | EL 4861 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN7 | EL 4862 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN8 | EL 4863 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| * Limit of Detection | | | 10 | 10 | 10 | 20 | 10 | 50 | 20 | 10 |

† See comment on last page.
ND Parameter not detected.
NR Parameter not requested.
** See comment on last page.
( ) Parameter between LOD and LOQ.

6/17/93

Analyst: Guangyue Liu

Reviewer: Vicki Hoe-Lin Tsai

Laboratory Supervisor: Jose C. Danino

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# ANALYTICAL REPORT

Form ARF-AL
Page 2 of 5
Part 2 of 4

Date NOV 13 1992
Agency Identification Number S92-0846-FJ
Account No. 3534C

Westinghouse Hanford Company
2355 Stevens Drive
MSIN T6-08
Richland, WA 99352
Attention: Jeanette Duncan

FAX (509) 373-3992
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**Sampling Collection and Shipment**

Sampling Site North Slope PSN04 Date of Collection October 21, 1992

Date Samples Received at Laboratory October 29, 1992

**Analysis**

Method of Analysis EPA 8080

Date(s) of Analysis November 07, 1992 - November 08, 1992

**Analytical Results**

| Field Sample Number | Laboratory Number | Sample Type | 4,4'-DDT ug/kg | Dieldrin ug/kg | Endosulfan I ug/kg | Endosulfan II ug/kg | Endosulfan Sulfate ug/kg | Endrin ug/kg | Endrin aldehyde ug/kg | Heptachlor ug/kg |
|---|---|---|---|---|---|---|---|---|---|---|
| QC-90694-1 | QC-90694-1 | SOIL | 36 | 37 | ND* | ND* | ND* | 41 | ND* | 19 |
| BL-90694-1 | BL-90694-1 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GM6 | EL 4856 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN0 | EL 4857 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN1 | EL 4858 | SOIL | 65 | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN2 | EL 4859 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN2MS | EL 4859MS | SOIL | 46 | 35 | ND* | ND* | ND* | 40 | ND* | 18 |
| B07GN2MSD | EL 4859MSD | SOIL | 47 | 40 | ND* | ND* | ND* | 45 | ND* | 21 |
| B07GN4 | EL 4860 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN5 | EL 4861 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN7 | EL 4862 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN8 | EL 4863 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| * Limit of Detection | | | 20 | 10 | 10 | 10 | 20 | 10 | 50 | 10 |

† See comment on last page.
ND Parameter not detected.
NR Parameter not requested.
** See comment on last page.
( ) Parameter between LOD and LOQ.

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# ANALYTICAL REPORT

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Date NOV 13 1992
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Account No. 3534C

Westinghouse Hanford Company
2355 Stevens Drive
MSIN T6-08
Richland, WA 99352
Attention: Jeanette Duncan

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Telephone (509) 373-3225

**Sampling Collection and Shipment**

Sampling Site North Slope PSN04 Date of Collection October 21, 1992

Date Samples Received at Laboratory October 29, 1992

**Analysis**

Method of Analysis EPA 8080

Date(s) of Analysis November 07, 1992 - November 08, 1992

**Analytical Results**

| Field Sample Number | Laboratory Number | Sample Type | Heptachlor epoxide ug/kg | Toxaphene ug/kg | Aroclor 1016 ug/kg | Aroclor 1221 ug/kg | Aroclor 1232 ug/kg | Aroclor 1242 ug/kg | Aroclor 1248 ug/kg | Aroclor 1254 ug/kg |
|---|---|---|---|---|---|---|---|---|---|---|
| QC-90694-1 | QC-90694-1 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| BL-90694-1 | BL-90694-1 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GM6 | EL 4856 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN0 | EL 4857 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN1 | EL 4858 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN2 | EL 4859 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN2MS | EL 4859MS | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN2MSD | EL 4859MSD | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN4 | EL 4860 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN5 | EL 4861 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN7 | EL 4862 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN8 | EL 4863 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| * Limit of Detection | | | 60 | 400 | 100 | 200 | 200 | 100 | 100 | 100 |

† See comment on last page.
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** See comment on last page.
( ) Parameter between LOD and LOQ.

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# ANALYTICAL REPORT

Form ARF-AL
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Part 4 of 4

Date NOV 13 1992
Agency Identification Number S92-0846-FJ
Account No. 3534C

Westinghouse Hanford Company
2355 Stevens Drive
MSIN T6-08
Richland, WA 99352
Attention: Jeanette Duncan

FAX (509) 373-3992
Telephone (509) 373-3225

**Sampling Collection and Shipment**

Sampling Site North Slope PSN04 Date of Collection October 21, 1992

Date Samples Received at Laboratory October 29, 1992

**Analysis**

Method of Analysis EPA 8080

Date(s) of Analysis November 07, 1992 - November 08, 1992

**Analytical Results**

| Field Sample Number | Laboratory Number | Sample Type | Aroclor 1260 ug/kg | Methoxychlor ug/kg | Dibutyl chlorendate ug/kg | Tetrachloro-meta-xylene ug/kg | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| QC-90694-1 | QC-90694-1 | SOIL | ND* | ND* | 37 | 35 | | | | |
| BL-90694-1 | BL-90694-1 | SOIL | ND* | ND* | 38 | 34 | | | | |
| B07GM6 | EL 4856 | SOIL | ND* | ND* | 33 | 33 | | | | |
| B07GN0 | EL 4857 | SOIL | ND* | ND* | 36 | 33 | | | | |
| B07GN1 | EL 4858 | SOIL | ND* | ND* | 36 | 33 | | | | |
| B07GN2 | EL 4859 | SOIL | ND* | ND* | 39 | 36 | | | | |
| B07GN2MS | EL 4859MS | SOIL | ND* | ND* | 39 | 33 | | | | |
| B07GN2MSD | EL 4859MSD | SOIL | ND* | ND* | 41 | 37 | | | | |
| B07GN4 | EL 4860 | SOIL | ND* | ND* | 37 | 35 | | | | |
| B07GN5 | EL 4861 | SOIL | ND* | ND* | 38 | 37 | | | | |
| B07GN7 | EL 4862 | SOIL | ND* | ND* | 38 | 35 | | | | |
| B07GN8 | EL 4863 | SOIL | ND* | ND* | 40 | 34 | | | | |
| * Limit of Detection | | | 100 | 100 | SURR. | SURR. | | | | |

† See comment on last page.
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NR Parameter not requested.
** See comment on last page.
( ) Parameter between LOD and LOQ.

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DATA CHEM LABORATORIES

# ANALYTICAL REPORT

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Part 1 of 2

Date DEC 01 1992

Agency Identification Number S92-0846-HJ

Account No. 3534C

DEC 1992 RECEIVED OSM DMO

Westinghouse Hanford Company
2355 Stevens Drive
MSIN T6-08
Richland, WA 99352
Attention: Jeanette Duncan

FAX (509) 373-3992
Telephone (509) 373-3225

**Sampling Collection and Shipment**

Sampling Site North Slope PSN04 Date of Collection October 21, 1992

Date Samples Received at Laboratory October 29, 1992

**Analysis**

Method of Analysis EPA 8150

Date(s) of Analysis November 22, 1992 - November 23, 1992

**Analytical Results**

| Field Sample Number | Laboratory Number | Sample Type | 2,4-D ug/kg | 2,4-DB ug/kg | 2,4,5-T ug/kg | 2,4,5-TP (Silvex) ug/kg | Dalapon ug/kg | Dicamba ug/kg | Dichloroprop ug/kg | Dinoseb ug/kg |
|---|---|---|---|---|---|---|---|---|---|---|
| BL-90696-1 | BL-90696-1 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| QC-90696-1 | QC-90696-1 | SOIL | 83 | ND* | 45 | 46 | ND* | ND* | ND* | ND* |
| B07GM6 | EL 4856 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN0 | EL 4857 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN1 | EL 4858 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN2 | EL 4859 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN4 | EL 4860 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN5 | EL 4861 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN7 | EL 4862 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN8 | EL 4863 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN8MS | EL 4863MS | SOIL | 84 | ND* | 48 | 48 | ND* | ND* | ND* | ND* |
| B07GN8MSD | EL 4863MSD | SOIL | 89 | ND* | 48 | 47 | ND* | ND* | ND* | ND* |
| * Limit of Detection | | | 20 | 100 | 10 | 10 | 100 | 10 | 20 | 20 |

† See comment on last page.
ND Parameter not detected.
NR Parameter not requested.
** See comment on last page.
( ) Parameter between LOD and LOQ.

Verified 6/25/93

Analyst: Guangyue Liu

Reviewer: John Meikle

Laboratory Supervisor: Jose C. Danino

960 West LeVoy Drive / Salt Lake City, Utah 84123-2547 / (801) 266-7700
A Sorenson Company

ATA CHEM LABORATORIES

# ANALYTICAL REPORT

Form ARF-AL
Page 2 of 3
Part 2 of 2

Date Dec 01, 1992
Agency Identification Number S92-0846-HJ
Account No. 3534C

Westinghouse Hanford Company
2355 Stevens Drive
MSIN T6-08
Richland, WA 99352
Attention: Jeanette Duncan

FAX (509) 373-3992
Telephone (509) 373-3225

**Sampling Collection and Shipment**

Sampling Site North Slope PSN04 Date of Collection October 21, 1992

Date Samples Received at Laboratory October 29, 1992

**Analysis**

Method of Analysis EPA 8150

Date(s) of Analysis November 22, 1992 - November 23, 1992

**Analytical Results**

| Field Sample Number | Laboratory Number | Sample Type | MCPA ug/kg ✓ | MCPP ug/kg ✓ | DCAA ug/kg ✓ | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| BL-90696-1 | BL-90696-1 | SOIL | ND* | ND* | 46 | | | | | |
| QC-90696-1 | QC-90696-1 | SOIL | ND* | ND* | 50 | | | | | |
| B07GM6 | EL 4856 | SOIL | ND* | ND* | 46 | | | | | |
| B07GN0 | EL 4857 | SOIL | ND* | ND* | 46 | | | | | |
| B07GN1 | EL 4858 | SOIL | ND* | ND* | 57 | | | | | |
| B07GN2 | EL 4859 | SOIL | ND* | ND* | 54 | | | | | |
| B07GN4 | EL 4860 | SOIL | ND* | ND* | 43 | | | | | |
| B07GN5 | EL 4861 | SOIL | ND* | ND* | 49 | | | | | |
| B07GN7 | EL 4862 | SOIL | ND* | ND* | 50 | | | | | |
| B07GN8 | EL 4863 | SOIL | ND* | ND* | 51 | | | | | |
| B07GN8MS | EL 4863MS | SOIL | ND* | ND* | 48 | | | | | |
| B07GN8MSD | EL 4863MSD | SOIL | ND* | ND* | 50 | | | | | |
| * Limit of Detection | | | 5000 | 5000 | SURR. | | | | | |

† See comment on last page.
ND Parameter not detected.
NR Parameter not requested.
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6/25/93

DATA CHEM LABORATORIES

# ANALYTICAL REPORT

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Page 1 of 5
Part 1 of 4

NOV 1992 RECEIVED OSM DMO

Date NOV 16 1992
Agency Identification Number S92-0846-GJ
Account No. 3534C

Westinghouse Hanford Company
2355 Stevens Drive
MSIN T6-08
Richland, WA 99352
Attention: Jeanette Duncan

FAX (509) 373-3992
Telephone (509) 373-3225

**Sampling Collection and Shipment**

Sampling Site North Slope PSN04 Date of Collection October 21, 1992

Date Samples Received at Laboratory October 29, 1992

**Analysis**

Method of Analysis EPA 8141

Date(s) of Analysis November 12, 1992

**Analytical Results**

| Field Sample Number | Laboratory Number | Sample Type | Azinphos Methyl ug/kg GC/FPD | Bolstar ug/kg GC/FPD | Chlorpyrifos ug/kg GC/FPD | Coumaphos ug/kg GC/FPD | Demeton-S ug/kg GC/FPD | Diazinon ug/kg GC/FPD | Dichlorvos ug/kg GC/FPD | Disulfoton ug/kg GC/FPD |
|---|---|---|---|---|---|---|---|---|---|---|
| QC-90695-1 | QC-90695-1 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | 62 |
| BL-90695-1 | BL-90695-1 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GM6 | EL 4856 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GM6MS | EL 4856MS | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | 72 |
| B07GM6MSD | EL 4856MSD | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | 57 |
| B07GN0 | EL 4857 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN1 | EL 4858 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN2 | EL 4859 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN4 | EL 4860 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN5 | EL 4861 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN7 | EL 4862 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN8 | EL 4863 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| * Limit of Detection | | | 33.3 | 16.6 | 33.3 | 16.6 | 33.3 | 16.6 | 16.6 | 16.6 |

† See comment on last page.
ND Parameter not detected.
NR Parameter not requested.
** See comment on last page.
( ) Parameter between LOD and LOQ.

6/17/93

Vicki Hoe Lin Tsai
Analyst: Vicki Hoe-Lin Tsai

Reviewer:

Laboratory Supervisor: Jose C. Danino

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DATA CHEM LABORATORIES

# ANALYTICAL REPORT



Date NOV 16 1992
Agency Identification Number S92-0846-GJ
Account No. 3534C

Westinghouse Hanford Company
2355 Stevens Drive
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**Sampling Collection and Shipment**

Sampling Site North Slope PSN04 Date of Collection October 21, 1992

Date Samples Received at Laboratory October 29, 1992

**Analysis**

Method of Analysis EPA 8141

Date(s) of Analysis November 12, 1992

**Analytical Results**

| Field Sample Number | Laboratory Number | Sample Type | Ethoprop ug/kg GC/FPD | Fensulfothion ug/kg GC/FPD | Fenthion ug/kg GC/FPD | Merphos ug/kg GC/FPD | Mevinphos ug/kg GC/FPD | Naled ug/kg GC/FPD | Parathion methyl ug/kg GC/FPD | Phorate ug/kg GC/FPD |
|---|---|---|---|---|---|---|---|---|---|---|
| QC-90695-1 | QC-90695-1 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | 79 | 93 |
| BL-90695-1 | BL-90695-1 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GM6 | EL 4856 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GM6MS | EL 4856MS | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | 75 | 89 |
| B07GM6MSD | EL 4856MSD | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | 57 | 70 |
| B07GN0 | EL 4857 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN1 | EL 4858 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN2 | EL 4859 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN4 | EL 4860 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN5 | EL 4861 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN7 | EL 4862 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN8 | EL 4863 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| * Limit of Detection | | | 33.3 | 33.3 | 33.3 | 33.3 | 66.6 | 16.6 | 16.6 | 66.6 |

† See comment on last page.
ND Parameter not detected.
NR Parameter not requested.

** See comment on last page.
( ) Parameter between LOD and LOQ.

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DATA CHEM LABORATORIES

# ANALYTICAL REPORT

Form ARF-AL
Page 3 of 5
Part 3 of 4

Date NOV 16 1992
Agency Identification Number S92-0846-GJ
Account No. 3534C

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Richland, WA 99352
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**Sampling Collection and Shipment**

Sampling Site North Slope PSN04 Date of Collection October 21, 1992

Date Samples Received at Laboratory October 29, 1992

**Analysis**

Method of Analysis EPA 8141

Date(s) of Analysis November 12, 1992

**Analytical Results**

| Field Sample Number | Laboratory Number | Sample Type | Ronnel ug/kg GC/FPD | Stirophos ug/kg GC/FPD | Dimethoate ug/kg GC/FPD | EPN ug/kg GC/FPD | Malathion ug/kg GC/FPD | Monocrotophos ug/kg GC/FPD | Parathion ug/kg GC/FPD | SULFOTEP ug/kg GC/FPD |
|---|---|---|---|---|---|---|---|---|---|---|
| QC-90695-1 | QC-90695-1 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| BL-90695-1 | BL-90695-1 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GM6 | EL 4856 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GM6MS | EL 4856MS | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GM6MSD | EL 4856MSD | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN0 | EL 4857 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN1 | EL 4858 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN2 | EL 4859 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN4 | EL 4860 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN5 | EL 4861 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN7 | EL 4862 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| B07GN8 | EL 4863 | SOIL | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| * Limit of Detection | | | 33.3 | 33.3 | 66.6 | 66.6 | 33.3 | 166 | 16.6 | 16.6 |

† See comment on last page. ** See comment on last page.
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NR Parameter not requested.

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# ANALYTICAL REPORT

Form ARF-AL
Page 4 of 5
Part 4 of 4

Date NOV 16 1992
Agency Identification Number S92-0846-GJ
Account No. 3534C

Westinghouse Hanford Company
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**Sampling Collection and Shipment**

Sampling Site North Slope PSN04 Date of Collection October 21, 1992

Date Samples Received at Laboratory October 29, 1992

**Analysis**

Method of Analysis EPA 8141

Date(s) of Analysis November 12, 1992

**Analytical Results**

| Field Sample Number | Laboratory Number | Sample Type | TEPP ug/kg GC/FPD | TPP ug/kg GC/FPD | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| QC-90695-1 | QC-90695-1 | SOIL | ND* | 306 | | | | | | |
| BL-90695-1 | BL-90695-1 | SOIL | ND* | 307 | | | | | | |
| B07GM6 | EL 4856 | SOIL | ND* | 303 | | | | | | |
| B07GM6MS | EL 4856MS | SOIL | ND* | 307 | | | | | | |
| B07GM6MSD | EL 4856MSD | SOIL | ND* | 219 | | | | | | |
| B07GN0 | EL 4857 | SOIL | ND* | 305 | | | | | | |
| B07GN1 | EL 4858 | SOIL | ND* | 329 | | | | | | |
| B07GN2 | EL 4859 | SOIL | ND* | 323 | | | | | | |
| B07GN4 | EL 4860 | SOIL | ND* | 317 | | | | | | |
| B07GN5 | EL 4861 | SOIL | ND* | 324 | | | | | | |
| B07GN7 | EL 4862 | SOIL | ND* | 325 | | | | | | |
| B07GN8 | EL 4863 | SOIL | ND* | 336 | | | | | | |
| * Limit of Detection | | | 16.6 | 16.6 | | | | | | |

† See comment on last page.
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NR Parameter not requested.
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# ENVIRONMENTAL SOIL REPORT



NOV 23 1992

Date _____
Agency Identification Number S92-0846-AJ
Account No. 3534C

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Westinghouse Hanford Company
2355 Stevens Drive
MSIN T6-08
Richland, WA 99352
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**Sampling Collection and Shipment**

Sampling Site North Slope PSN04 Date of Collection October 21, 1992

Date Samples Received at Laboratory October 29, 1992

**Analytical Results**

| Parameter Name / Analysis Date / Units / Method / Prep Method | Field Number / Lab Number | BL-90688-1 / BL-90688-1 | QC-90688-1 / QC-90688-1 | B07GM6 / EL 4856 | B07GN0 / EL 4857 | B07GN1 / EL 4858 | B07GN2 / EL 4859 | B07GN4 / EL 4860 | B07GN5 / EL 4861 |
|---|---|---|---|---|---|---|---|---|---|
| Aluminum (Al) 11/19/1992 6010 [1] 3050 [1] | µg/gram | ND* | 360 | 13000 | 17000 | 20000 | 9700 | 13000 | 10000 |
| Antimony (Sb) 11/19/1992 6010 [1] 3050 [1] | µg/gram | ND* | 260 | ND* | ND* | ND* | ND* | ND* | ND* |
| Arsenic (As) 11/19/1992 6010 [1] 3050 [1] | µg/gram | ND* | 1000 | ND* | ND* | ND* | ND* | ND* | ND* |
| Barium (Ba) 11/19/1992 6010 [1] 3050 [1] | µg/gram | ND* | 6. | 110 | 260 | 130 | 98. | 130 | 110 |
| Beryllium (Be) 11/19/1992 6010 [1] 3050 [1] | µg/gram | ND* | 19. | 1. | ND* | ND* | ND* | ND* | ND* |
| Cadmium (Cd) 11/19/1992 6010 [1] 3050 [1] | µg/gram | ND* | 45. | ND* | ND* | ND* | ND* | ND* | ND* |
| Calcium (Ca) 11/19/1992 6010 [1] 3050 [1] | µg/gram | ND* | 190000 | 22000 | 21000 | 19000 | 14000 | 14000 | 9600 |
| Chromium (Cr) 11/19/1992 6010 [1] 3050 [1] | µg/gram | ND* | 100 | 11. | 17. | 15. | 11. | 18. | 14. |

† See comment on last page.
ND Parameter not detected.
NR Parameter not requested.
* Analyses completed on or before this date.

** Parameter not analyzed (See comment page).
( ) Parameter between LOD and LOQ.
[ ] Method Reference (See comments page.)

6/17/93

Analyst: Loren P. Higby

Reviewer: John T. Kershisnik

Laboratory Supervisor: Brent E. Stephens

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DATA CHEM LABORATORIES

# ENVIRONMENTAL SOIL REPORT



NOV 23 1992

Date _____
Agency Identification Number S92-0846-AJ
Account No. 3534C

## Analytical Results

| Parameter Name / Analysis Date / Units / Method / Prep Method | Field Number / Lab Number | BL-90688-1 / BL-90688-1 | QC-90688-1 / QC-90688-1 | B07GM6 / EL 4856 | B07GN0 / EL 4857 | B07GN1 / EL 4858 | B07GN2 / EL 4859 | B07GN4 / EL 4860 | B07GN5 / EL 4861 |
|---|---|---|---|---|---|---|---|---|---|
| Cobalt (Co) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | ND* | 150 | 9. | 9. | 11. | 9. | 10. | 9. |
| Copper (Cu) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | ND* | 7000 | 13. | 14. | 16. | 15. | 18. | 15. |
| Iron (Fe) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | ND* | 23000 | 11000 | 20000 | 19000 | 22000 | 21000 | 20000 |
| Lead (Pb) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | ND* | 250 | ND* | ND* | 20 | ND* | 10 | ND* |
| Lithium (Li) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | ND* | ND* | 9. | 15. | 13. | 10. | 15. | 12. |
| Magnesium (Mg) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | ND* | 120000 | 5100 | 8300 | 9200 | 5900 | 7500 | 5900 |
| Manganese (Mn) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | ND* | 210 | 230 | 360 | 370 | 350 | 420 | 380 |
| Molybdenum (Mo) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | ND* | 56. | ND* | ND* | ND* | ND* | ND* | ND* |
| Nickel (Ni) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | ND* | 58. | 11. | 16. | 15. | 13. | 19. | 16. |
| Phosphorus (P) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | ND* | ND* | 130 | 450 | 500 | 730 | 620 | 620 |
| Potassium (K) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | ND* | ND* | 1000 | 1300 | 2000 | 1300 | 2100 | 1800 |
| Selenium (Se) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | ND* | ND* | ND* | ND* | ND* | ND* | ND* | ND* |
| Silver (Ag) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | ND* | 24. | ND* | ND* | ND* | ND* | ND* | ND* |
| Sodium (Na) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | ND* | 80 | 490 | 720 | 890 | 410 | 530 | 550 |
| Strontium (Sr) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | ND* | 57. | 88. | 92. | 100 | 59. | 54. | 42. |

* See comment on last page.
ND Parameter not detected.
NR Parameter not requested.
[1] Analyses completed on or before this date.

** Parameter not analyzed (See comments page).
( ) Parameter between LOD and LOQ.
[ ] Method Reference (See comments page).

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DATA CHEM LABORATORIES

# ENVIRONMENTAL SOIL REPORT



NOV 23 1992

Date _____
Agency Identification Number S92-0846-AJ
Account No. 3534C

## Analytical Results

| Parameter Name / Analysis Date / Units / Method / Prep Method | Field Number / Lab Number | BL-90688-1 / BL-90688-1 | QC-90688-1 / QC-90688-1 | B07GM6 / EL 4856 | B07GN0 / EL 4857 | B07GN1 / EL 4858 | B07GN2 / EL 4859 | B07GN4 / EL 4860 | B07GN5 / EL 4861 |
|---|---|---|---|---|---|---|---|---|---|
| Thallium (Tl) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | ND* | 50 | ND* | ND* | ND* | ND* | ND* | ND* |
| Vanadium (V) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | ND* | 73. | 28. | 73. | 45. | 51. | 38. | 40. |
| Zinc (Zn) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | ND* | 180 | 25. | 41. | 71. | 46. | 52. | 58. |

* See comment on last page.
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[ ] Method Reference (See comments page).

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DATA CHEM LABORATORIES

# ENVIRONMENTAL SOIL REPORT



Date NOV 23 1992
Agency Identification Number S92-0846-AJ
Account No. 3534C

Westinghouse Hanford Company
2355 Stevens Drive
MSIN T6-08
Richland, WA 99352
Attention: Jeanette Duncan

Telephone (509) 373-3225

**Sampling Collection and Shipment**

Sampling Site North Slope PSN04 Date of Collection October 21, 1992

Date Samples Received at Laboratory October 29, 1992

**Analytical Results**

| Parameter Name / Analysis Date / Units / Method / Prep Method | Field Number / Lab Number | B07GN7 EL 4862 | B07GN8 EL 4863 | B07GN8MD EL 4863MD | B07GN8MS EL 4863MS | | | | * Limit of Detection |
|---|---|---|---|---|---|---|---|---|---|
| Aluminum (Al) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | 12000 | 13000 | 13000 | 14000 | | | | 10 |
| Antimony (Sb) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | ND* | ND* | ND* | ND* | | | | 20 |
| Arsenic (As) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | ND* | ND* | ND* | 200 | | | | 50 |
| Barium (Ba) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | 110 | 120 | 130 | 320 | | | | 2. |
| Beryllium (Be) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | ND* | ND* | ND* | 5. | | | | 1. |
| Cadmium (Cd) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | ND* | ND* | ND* | 5. | | | | 1. |
| Calcium (Ca) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | 13000 | 15000 | 15000 | 15000 | | | | 10 |
| Chromium (Cr) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | 18. | 18. | 18. | 37. | | | | 2. |

† See comment on last page.
ND Parameter not detected.
NR Parameter not requested.
* Analyses completed on or before this date.
** Parameter not analyzed (See comment page).
( ) Parameter between LOD and LOQ.
[ ] Method Reference (See comments page.)

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DATA CHEM LABORATORIES

# ENVIRONMENTAL SOIL REPORT



Date NOV 23 1992

Agency Identification Number S92-0846-AJ

Account No. 3534C

## Analytical Results

| Parameter Name / Analysis Date / Units / Method / Prep Method | Field Number / Lab Number | B07GN7 EL 4862 | B07GN8 EL 4863 | B07GN8MD EL 4863MD | B07GN8MS EL 4863MS | | | | * Limit of Detection |
|---|---|---|---|---|---|---|---|---|---|
| Cobalt (Co) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | 10. | 10. | 10. | 56. | | | | 2. |
| Copper (Cu) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | 21. | 21. | 19. | 44. | | | | 2. |
| Iron (Fe) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | 21000 | 22000 | 22000 | 22000 | | | | 10 |
| Lead (Pb) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | 30 | 20 | 10 | 50 | | | | 10 |
| Lithium (Li) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | 15. | 15. | 15. | 16. | | | | 2. |
| Magnesium (Mg) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | 7100 | 7600 | 7600 | 7800 | | | | 10 |
| Manganese (Mn) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | 550 | 430 | 420 | 490 | | | | 1. |
| Molybdenum (Mo) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | ND* | ND* | ND* | ND* | | | | 5. |
| Nickel (Ni) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | 18. | 17. | 18. | 64. | | | | 3. |
| Phosphorus (P) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | 620 | 600 | 610 | 620 | | | | 50 |
| Potassium (K) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | 2000 | 2100 | 2000 | 2100 | | | | 200 |
| Selenium (Se) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | ND* | ND* | ND* | 180 | | | | 30 |
| Silver (Ag) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | ND* | ND* | ND* | 4. | | | | 1. |
| Sodium (Na) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | 520 | 640 | 640 | 670 | | | | 20 |
| Strontium (Sr) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | 53. | 56. | 56. | 56. | | | | 2. |

* See comment on last page.
ND Parameter not detected.
NR Parameter not requested.
[1] Analyses completed on or before this date.

** Parameter not analyzed (See comments page).
( ) Parameter between LOD and LOQ.
[ ] Method Reference (See comments page).

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# ENVIRONMENTAL SOIL REPORT

Form EPRS-B
Page 6 of 7
Part 2 of 2

Date NOV 23 1992
Agency Identification Number S92-0846-AJ
Account No. 3534C

## Analytical Results

| Parameter Name / Analysis Date / Units / Method / Prep Method | Field Number / Lab Number | B07GN7 EL 4862 | B07GN8 EL 4863 | B07GN8MD EL 4863MD | B07GN8MS EL 4863MS | | | | * Limit of Detection |
|---|---|---|---|---|---|---|---|---|---|
| Thallium (Tl) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | ND* | ND* | ND* | ND* | | | | 50 |
| Vanadium (V) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | 36. | 38. | 37. | 83. | | | | 2. |
| Zinc (Zn) 11/19/1992 µg/gram 6010 [1] 3050 [1] | | 250 | 58. | 57. | 100 | | | | 2. |

* See comment on last page.
ND Parameter not detected.
NR Parameter not requested.
[1] Analyses completed on or before this date.

** Parameter not analyzed (See comments page).
( ) Parameter between LOD and LOQ.
[ ] Method Reference (See comments page).

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DATA CHEM LABORATORIES

# ENVIRONMENTAL SOIL REPORT

Form EPRS-A
Page 1 of 3
Part 1 of 2

Date NOV 25 1992

Agency Identification Number S92-0846-BJ

Account No. 3534C

Westinghouse Hanford Company
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Telephone (509) 373-3225

**Sampling Collection and Shipment**

Sampling Site North Slope PSN04 Date of Collection October 21, 1992

Date Samples Received at Laboratory October 29, 1992

**Analytical Results**

| Parameter Name / Analysis Date / Method | Units / Prep Method | Field Number / Lab Number | BL-90690-1 / BL-90690-1 | QC-90690-1 / QC-90690-1 | B07GM6 / EL 4856 | B07GN0 / EL 4857 | B07GN1 / EL 4858 | B07GN2 / EL 4859 | B07GN4 / EL 4860 | B07GN5 / EL 4861 |
|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic (As) 11/18/1992 7060 [1] | 3050 [1] | µg/g | ND* | 920 | 4.2 | 8.1 | 8.5 | 4.3 | 5.3 | 4.6 |
| Lead (Pb) 11/18/1992 7421 [1] | 3050 [1] | µg/g | ND* | 250 | 7.1 | 5.6 | 14. | 6.7 | 8.2 | 7.8 |
| Selenium (Se) 11/19/1992 7740 [1] | 3050 [1] | µg/g | ND* | 40. | ND* | ND* | ND* | ND* | ND* | ND* |
| Thallium (Tl) 11/19/1992 7841 [1] | 3050 [1] | µg/g | ND* | 38. | ND* | ND* | ND* | ND* | ND* | ND* |
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† See comment on last page.
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NR Parameter not requested.
[1] Analyses completed on or before this date.

** Parameter not analyzed (See comment page)
( ) Parameter between LOD and LOQ.
[ ] Method Reference (See comments page.)

6/17/93

Analyst: Robert B. Copenhafer

Reviewer: Young W. Han

Laboratory Supervisor: Brent E. Stephens

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DATA CHEM LABORATORIES

# ENVIRONMENTAL SOIL REPORT



Date NOV 25 1992
Agency Identification Number S92-0846-BJ
Account No. 3534C

Westinghouse Hanford Company
2355 Stevens Drive
MSIN T6-08
Richland, WA 99352
Attention: Jeanette Duncan

Telephone (509) 373-3225

**Sampling Collection and Shipment**

Sampling Site North Slope PSN04 Date of Collection October 21, 1992

Date Samples Received at Laboratory October 29, 1992

**Analytical Results**

| Parameter Name / Analysis Date / Method / Prep Method | Units | Field Number / Lab Number: B07GN7 EL 4862 | B07GN8 EL 4863 | B07GN8MD EL 4863MD | | | | | Limit of Detection |
|---|---|---|---|---|---|---|---|---|---|
| Arsenic (As) 11/18/1992 7060 [1] 3050 [1] | µg/g | 5.5 | 5.5 | 5.6 | | | | | 0.5 |
| Lead (Pb) 11/18/1992 7421 [1] 3050 [1] | µg/g | 47. | 9.9 | 9.5 | | | | | 0.5 |
| Selenium (Se) 11/19/1992 7740 [1] 3050 [1] | µg/g | ND* | ND* | ND* | | | | | 0.5 |
| Thallium (Tl) 11/19/1992 7841 [1] 3050 [1] | µg/g | ND* | ND* | ND* | | | | | 1. |
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( ) Parameter between LOD and LOQ.
[ ] Method Reference (See comments page.)

6/17/93

DATA CHEM LABORATORIES

# ENVIRONMENTAL SOIL REPORT

Form EPRS-A
Page 1 of 3
Part 1 of 2

Date NOV 16 1992

Agency Identification Number S92-0846-CJ

Account No. 3534C

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Westinghouse Hanford Company
2355 Stevens Drive
MSIN T6-08
Richland, WA 99352
Attention: Jeanette Duncan

Telephone (509) 373-3225

**Sampling Collection and Shipment**

Sampling Site North Slope PSN04 Date of Collection October 21, 1992

Date Samples Received at Laboratory October 29, 1992

**Analytical Results**

| Parameter Name / Analysis Date / Method / Prep Method / Units | Field Number / Lab Number | BL-90691-1 / BL-90691-1 | QC-90691-1 / QC-90691-1 | B07GM6 / EL 4856 | B07GM6MD / EL 4856MD | B07GM6MS / EL 4856MS | B07GN0 / EL 4857 | B07GN1 / EL 4858 | B07GN2 / EL 4859 |
|---|---|---|---|---|---|---|---|---|---|
| Mercury (Hg) 11/12/1992 7471 [1] | µg/g | ND* | 13. | ND* | ND* | 0.51 | ND* | ND* | ND* |
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[ ] Method Reference (See comments page.)

6/17/93

Kristie Bitner
Analyst: Kristie F. Bitner

Todd Schmanski
Reviewer: Todd Schmanski

for BES
Laboratory Supervisor: Brent E. Stephens

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Date NOV 16 1992

Agency Identification Number S92-0846-CJ

Account No. 3534C

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2355 Stevens Drive
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Richland, WA 99352
Attention: Jeanette Duncan

Telephone (509) 373-3225

**Sampling Collection and Shipment**

Sampling Site North Slope PSN04 Date of Collection October 21, 1992

Date Samples Received at Laboratory October 29, 1992

**Analytical Results**

| Parameter Name / Analysis Date / Units / Method / Prep Method | Field Number / Lab Number | B07GN4 EL 4860 | B07GN5 EL 4861 | B07GN7 EL 4862 | B07GN8 EL 4863 | | | | * Limit of Detection |
|---|---|---|---|---|---|---|---|---|---|
| Mercury (Hg) 11/12/1992 7471 [1] | µg/g | ND* | ND* | ND* | ND* | | | | 0.05 |
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# ENVIRONMENTAL SOIL REPORT

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Page 1 of 3
Part 1 of 2

Date DEC 02 1992
Agency Identification Number S92-0846-DJ
Account No. 3534C

Westinghouse Hanford Company
2355 Stevens Drive
MSIN T6-08
Richland, WA 99352
Attention: Jeanette Duncan

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Telephone (509) 373-3225

Sampling Collection and Shipment

Sampling Site North Slope PSN04 Date of Collection October 21, 1992

Date Samples Received at Laboratory October 29, 1992

Analytical Results

| Parameter Name / Analysis Date / Method / Prep Method | Units | Field Number / Lab Number | B07GM6 EL 4856 | B07GN0 EL 4857 | B07GN1 EL 4858 | B07GN2 EL 4859 | B07GN4 EL 4860 | B07GN5 EL 4861 | B07GN7 EL 4862 | |
|---|---|---|---|---|---|---|---|---|---|---|
| Fluoride (F) 11/04/1992 300.0 [1] | µg/g | | ND* | 3. | 7. | 3. | 4. | 2. | 6. | |
| Chloride (Cl) 11/04/1992 300.0 [1] | µg/g | | 33. | 62. | 190 | ND* | 73. | 28. | 6. | |
| Phosphate ($PO_4$-P) 11/04/1992 300.0 [1] | µg/g | | ND* | ND* | ND* | ND* | ND* | 1.3 | ND* | |
| Sulfate ($SO_4$) 11/04/1992 300.0 [1] | µg/g | | 280 | 1300 | 3100 | 28. | 270 | 200 | 42. | |
| Nitrates ($NO_3$-N + $NO_2$-N) 11/03/1992 353.2 [1] | µg/g | | 6. | 6. | 10. | 1. | 6. | 3. | 2. | |
| Chromium VI 11/12/1992 7196 [2] 3060M [2] | µg/g | | ND* | ND* | ND* | ND* | ND* | ND* | ND* | |
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RS 6/17/93

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( ) Parameter between LOD and LOQ.
[ ] Method Reference (See comments page.)

Analyst: Cynthia Adams for CA

Reviewer: Michael E. Richmond

Norman K. Christensen for MPB
Laboratory Supervisor: Michael P. Beesley

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Date DEC 02 1992
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2355 Stevens Drive
MSIN T6-08
Richland, WA 99352
Attention: Jeanette Duncan

Telephone (509) 373-3225

## Sampling Collection and Shipment

Sampling Site North Slope PSN04 Date of Collection October 21, 1992

Date Samples Received at Laboratory October 29, 1992

## Analytical Results

| Parameter Name / Analysis Date / Method / Prep Method | Units | Field Number / Lab Number: B07GN8 EL 4863 | | | | | | | Limit of Detection |
|---|---|---|---|---|---|---|---|---|---|
| Fluoride (F) 11/04/1992 300.0 [1] | µg/g | 4. | | | | | | | 2. |
| Chloride (Cl) 11/04/1992 300.0 [1] | µg/g | 3. | | | | | | | 2. |
| Phosphate ($PO_4$-P) 11/04/1992 300.0 [1] | µg/g | ND* | | | | | | | 0.7 |
| Sulfate ($SO_4$) 11/04/1992 300.0 [1] | µg/g | 200 | | | | | | | 2. |
| Nitrates ($NO_3$-N + $NO_2$-N) 11/03/1992 353.2 [1] | µg/g | 1. | | | | | | | 1. |
| Chromium VI 11/12/1992 7196 [2] 3060M [2] | µg/g | ND* | | | | | | | 1. |
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# ENVIRONMENTAL SOIL REPORT

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Date NOV 16 1992

Agency Identification Number S92-0846-EJ

Account No. 3534C

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Attention: Jeanette Duncan

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**Sampling Collection and Shipment**

Sampling Site North Slope PSN04 Date of Collection October 21, 1992

Date Samples Received at Laboratory October 29, 1992

**Analytical Results**

| Parameter Name / Analysis Date / Units / Method / Prep Method | Field Number / Lab Number | B07GM6 EL 4856 | B07GN0 EL 4857 | B07GN1 EL 4858 | B07GN2 EL 4859 | B07GN4 EL 4860 | B07GN5 EL 4861 | B07GN7 EL 4862 | |
|---|---|---|---|---|---|---|---|---|---|
| Total Petroleum Hydrocarbons 11/10/1992 µg/g 418.1 [1] 3550 [2] | | ND* | ND* | 30 | ND* | ND* | ND* | ND* | |
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[ ] Method Reference (See comments page.)

6/12/93

Analyst: David W. Thomas

Rosemary H. Hanks
Reviewer: Rosemary H. Hanks

Norman K. Christensen
Laboratory Supervisor: Norman K. Christensen

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Part 2 of 2

Date NOV 16 1992

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**Sampling Collection and Shipment**

Sampling Site North Slope PSN04 Date of Collection October 21, 1992

Date Samples Received at Laboratory October 29, 1992

**Analytical Results**

| Parameter Name / Analysis Date / Units / Method / Prep Method | Field Number / Lab Number | B07GN8 / EL 4863 | | | | | | | Limit of Detection |
|---|---|---|---|---|---|---|---|---|---|
| Total Petroleum Hydrocarbons<br>11/10/1992 µg/g<br>418.1 [1] 3550 [2] | | ND* | | | | | | | 10 |
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ATTACHMENT 3

ASSOCIATED BLANK DATA SUMMARY

## BLANK AND SAMPLE DATA SUMMARY - FORM B-3

B07GM6-DAT-193

| SDG: | REVIEWER: T. Stapp | DATE: 6-17-93 | PAGE 1 OF 1 |
|---|---|---|---|

COMMENTS:

| SAMPLE ID | COMPOUND | RESULT | Q | RT | UNITS | 5X RESULT | 10X RESULT | SAMPLES AFFECTED | QUALIFIER |
|---|---|---|---|---|---|---|---|---|---|
| VBLK01 | Acetone | 37 | | | µg/kg | | 370 | B07GM6 | 67 U |
| | | " | | | " | | " | N0 | 31 U |
| | | " | | | " | | " | N1 | 46 U |
| | | " | | | " | | " | N2 | 31 U |
| | | " | | | " | | " | N4 | 32 U |
| | | " | | | " | | " | N5 | 49 U |
| | | " | | | " | | " | N7 | 40 U |
| | | " | | | " | | " | N8 | 33 U |
| VBLK01 | 2-Hexanone | 5.6 | | | µg/kg | — | — | None | — |
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