START 9613444.1581

B07GP0-DAT-194

0044228

DATA CHEM LABORATORIES

A BERENSON COMPANY

November 24, 1992

REPORT INTRODUCTION
ANALYTICAL COMMENTARY

SUBMITTED TO: Frank Gustafson

SUBMITTED BY: Thomas N. Bosch

REFERENCE DATA:

Analysis of: 6 soil samples

Method of Analysis: EPA 8240

Identification No.: S92-0859-JJ

DataChem Laboratory No.: EL 4941 through EL 4946

JUN 1996 RECEIVED EDMC

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.

Quantitation of each target compound is based on response

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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 matrix spike and matrix spike analyses were performed using sample EL 4859 (B07GN2, Set ID# S92-0846JJ). The spike analytes 1,1-dichloro-ethene, 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.

Thomas N. Bosch

Thomas N. Bosch

9613444.1383

EPA METHOD 8240
TARGET ANALYTE SUMMARY REPORT

Sponsor: WESTINGHOUSE-HANFORD
DataChem Set ID: S92-0859JJ
Results: ug/Kg

Coumpound	Field ID: / DataChem No:	B07GPO / EL4941	B07GP2 / EL4942	B07GP3 / EL4943	B07KP7 / EL4944
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		22	26	22	12
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

Thomas Bass
Analyst

Reviewer

Data Release

9613444.1384

EPA METHOD 8240
TARGET ANALYTE SUMMARY REPORT

Sponsor: WESTINGHOUSE-HANFORD
DataChem Set ID: S92-0859JJ
Results: ug/Kg

Coumpound	Field ID: / DataChem No:	B07KP9 / EL4945	B07KQO / EL4946
chloromethane		U	U
bromomethane		U	U
vinyl chloride		U	U
chloroethane		U	U
methylene chloride		U	U
acetone		10	11
carbon disulfide		U	U
trichlorofluoromethane		U	U
1,1-dichloroethene		U	U
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		U	U
chlorodibromomethane		U	U
1,1,2-trichloroethane		U	U
benzene		U	U
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		U	U
chlorobenzene		U	U
ethylbenzene		U	U
styrene		U	U
total xylene		U	U
1,2,3-trichloropropane		U	U
ethyl methacrylate		U	U

Thomas Bosch
Analyst

Reviewer

Data Release

9613444.1385

ANALYTICAL REPORT FOR SAMPLE No. EL4941
EPA METHOD 8240
Target Analyte Results

Dil. factor	1
% Moisture	4.23

Field ID: B07GPO
File ID: PD22EL4941
DataChem Set ID: S92-0859JJ

Sponsor: WESTINGHOUSE-HANFORD
Date of Analysis: 11/12/92 6:29:00
Date Received: 11/05/92

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	22	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. EL4941
NON-TARGET ANALYTES

Field ID.: B07GPO

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.

9613444.1387

ANALYTICAL REPORT FOR SAMPLE No. EL4942
EPA METHOD 8240
Target Analyte Results

Dil. factor	1
% Moisture	5.22

Field ID: B07GP2
File ID: PD23EL4942
DataChem Set ID: S92-0859JJ

Sponsor: WESTINGHOUSE-HANFORD
Date of Analysis: 11/12/92 7:06:00
Date Received: 11/05/92

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	26	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	2.7
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	1.1
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	2.6
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	1.2
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. EL4942
NON-TARGET ANALYTES

Field ID.: B07GP2

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.

9613444.1389

ANALYTICAL REPORT FOR SAMPLE No. EL4943
EPA METHOD 8240
Target Analyte Results

Dil. factor	1
% Moisture	4.31

Field ID: B07GP3
File ID: PD24EL4943
DataChem Set ID: S92-0859JJ

Sponsor: WESTINGHOUSE-HANFORD
Date of Analysis: 11/12/92 7:43:00
Date Received: 11/05/92

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	22	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. EL4943
NON-TARGET ANALYTES

Field ID.: B07GP3

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.

9613444.1391

ANALYTICAL REPORT FOR SAMPLE No. EL4944
EPA METHOD 8240
Target Analyte Results

Dil. factor	1
% Moisture	9.63

Field ID: B07KP7
File ID: PD43EL4944
DataChem Set ID: S92-0859JJ

Sponsor: WESTINGHOUSE-HANFORD
Date of Analysis: 11/13/92 3:26:00
Date Received: 11/05/92

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	3.3
75-09-2	methylene chloride	U	3.7
67-64-1	acetone	12	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	1.5
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	1.5
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	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	1.5
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	2.8
591-78-6	2-hexanone	U	2.0
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. EL4944
NON-TARGET ANALYTES

Field ID.: B07KP7

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.

9613444.1393

ANALYTICAL REPORT FOR SAMPLE No. EL4945
EPA METHOD 8240
Target Analyte Results

Dil. factor	1
% Moisture	5.22

Field ID: B07KP9
File ID: PD44EL4945
DataChem Set ID: S92-0859JJ

Sponsor: WESTINGHOUSE-HANFORD
Date of Analysis: 11/13/92 4:03:00
Date Received: 11/05/92

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	10	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	2.7
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	1.1
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	2.6
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	1.2
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. EL4945
NON-TARGET ANALYTES

Field ID.: B07KP9

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.

9613444.1395

ANALYTICAL REPORT FOR SAMPLE No. EL4946
EPA METHOD 8240
Target Analyte Results

Dil. factor	1
% Moisture	7.49

Field ID: B07KQO
File ID: PD45EL4946
DataChem Set ID: S92-0859JJ

Sponsor: WESTINGHOUSE-HANFORD
Date of Analysis: 11/13/92 4:40:00
Date Received: 11/05/92

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	11	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. EL4946
NON-TARGET ANALYTES

Field ID.: B07KQO

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.

9613444.1307

ANALYTICAL REQUEST FORM

DATA CHEM LABORATORIES

1. ☐ REGULAR Status

☐ RUSH Status Requested - ADDITIONAL CHARGE

RESULTS REQUIRED BY _____ DATE

CONTACT DATACHEM LABS PRIOR TO SENDING SAMPLES.

2. Date 11-3-92 Purchase Order No. _____

3. Company Name Westinghouse Hanford Co.

Address P.O. 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 ERA: H-06-H (E,W)

Industrial Process _____

Date of Collection 10-30-92/11-2-92/11-3-92

Time Collected See bottles

Date of Shipment 11-4-92

Chain of Custody No. _____

5. REQUEST FOR ANALYSES

Laboratory Use Only	Client Sample Number	Media Type*	Sample Volume (Liters)	ANALYSES REQUESTED - Use Method Number if Known
EL 4941	B07GP0	SOIL		Glass Septum 120ml - VOA (8240)
4942	B07GP2			
4943	B07GP3			Amber glass 250ml - Semi VOA (8270)
4944	B07KP7			PCB/Pests (8080), phosphorous Pests (8140),
4945	B07KP9			Herbicides (8150)
4946	B07KQ0			
				Amber glass 120ml - ICP metals (6010),
				AA metals (7060, 7420, 7740, 7840, 7471)
				Amber glass 120ml - Anions (F, Cl, PO4, SO4 -
				EPA 300.0)
				Chromium VI (EPA 218.4), Anions (NO2, NO3 - EPA 353.
				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 Cool 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 9613444.1398

CHAIN OF CUSTODY

Custody Form Initiator: J. G. Lucas

Company Contact: Frank Gustafson — Telephone: 376-1736

Project Designation/Sampling Locations: North Slope ERA — H-06-H (W,E) — Collection Date: 10-30-92, 11-2-92, 11-3-92

Ice Chest No.: RM # 105 — Field Logbook No.: EFL-1031

Bill of Lading/Airbill No.: 2519001660 0 — Offsite Property No: W93-0-0002-37

Method of Shipment: Emery

Shipped to: Data Chem Salt Lake City, UT

Possible Sample Hazards/Remarks: None

Sample Identification

B07GP0	
B07GP2	
B07GP3	
B07KP7	
B07KP9	Soil —
B07KQ0	1 - 120 ml glass septum
B07GP1	1 - 250ml aG
B07GP4	3 - 120ml aG
B07KP4	
B07KP5	
B07KP8	

☐ Field Transfer of Custody

CHAIN OF POSSESSION (Sign and Print Names)

Relinquished by:	Received by:	Date/Time:
Jonathan G. Lucas	T. Jackson	11-5-92 / 1200

Final Sample Disposition

Disposal Method:	Disposed by:	Date/Time:

Comments:

A-6000-407 (12/90)

9613444.1399

DATA CHEM
LABORATORIES
A SORENSON COMPANY

December 14, 1992

REPORT INTRODUCTION
ANALYTICAL COMMENTARY

SUBMITTED TO: Jeanette Duncan

SUBMITTED BY: Amy M. Fossett

REFERENCE DATA:

Analysis of: 8 soil samples, including a matrix spike and duplicate

Method of Analysis: EPA 8270 with modifications

Identification No: S92-0859-IJ

DataChem Laboratory No: EL4941, EL4941MS, EL4941MD, EL4942, EL4943, EL4944, EL4945, EL4946

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.

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
4388 GLENDALE-MILFORD ROAD
CINCINNATI, OHIO 45242-3706
513 733-5336, FAX 513 733-5347

BALTIMORE OFFICE
10 JULIET LANE, SUITE #203
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. EL4946 was double spiked with surrogate prior to extraction. The reported recoveries for this sample are corrected for the error. Surrogate recoveries are within QC limits.

Matrix spiking was performed an EL4941. 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 some samples are products of the extraction procedure. The footnote, A, is used to indicate that an unknown is a suspected aldol condensation product.

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

Amy M. Fossett

Amy M. Fossett

9613444.1401

TARGET ANALYTE SUMMARY REPORT

EPA METHOD 8270, 3rd ED.

Sponsor: WESTINGHOUSE HANFORD CO. SET ID: S92- 0859-IJ

Results: ug/Kg

Field No.	B07GP3	B07KP7	B07KP9	B07KQ0	METHOD BLANK
DataChem No.	EL4943	EL4944	EL4945	EL4946	
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 CO. SET ID: S92- 0859-IJ

Results: ug/Kg

Field No.	B07GP3	B07KP7	B07KP9	B07KQ0	METHOD BLANK
DataChem No.	EL4943	EL4944	EL4945	EL4946	
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	9.1E+01 J	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	8.2E+01 J	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 CO. SET ID: S92- 0859-IJ

Results: ug/Kg

Field No.	B07GP3	B07KP7	B07KP9	B07KQ0	METHOD BLANK
DataChem No.	EL4943	EL4944	EL4945	EL4946	
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

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TARGET ANALYTE SUMMARY REPORT

EPA METHOD 8270, 3rd ED.

Sponsor: WESTINGHOUSE HANFORD CO. SET ID: S92- 0859-IJ

Results: ug/Kg

Field No.	B07GP0	B07GP0MS	B07GP0MSD	B07GP2	METHOD BLANK
DataChem No.	EL4941	EL4941MS	EL4941MD	EL4942	
COMPOUND					
N-nitroso-dimethylamine	U	U	U	U	U
phenol	U	4.4E+03 S	4.6E+03 S	U	U
bis(2-chloroethyl)ether	U	U	U	U	U
2-chlorophenol	U	4.8E+03 S	5.1E+03 S	U	U
1,3-dichlorobenzene	U	U	U	U	U
1,4-dichlorobenzene	U	2.5E+03 S	2.7E+03 S	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	2.6E+03 S	2.7E+03 S	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	2.8E+03 S	2.9E+03 S	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	5.8E+03 S	6.0E+03 S	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	3.0E+03 S	3.0E+03 S	U	U
2,4-dinitrophenol	U	U	U	U	U
4-nitrophenol	U	3.8E+03 S	4.0E+03 S	U	U
dibenzofuran	U	U	U	U	U

9613444.1405

TARGET ANALYTE SUMMARY REPORT

EPA METHOD 8270, 3rd ED.

Sponsor: WESTINGHOUSE HANFORD CO. SET ID: S92- 0859-IJ

Results: ug/Kg

Field No.	B07GP0	B07GP0MS	B07GP0MSD	B07GP2	METHOD BLANK
DataChem No.	EL4941	EL4941MS	EL4941MD	EL4942	
COMPOUND					
2,4-dinitrotoluene	U	3.2E+03 S	3.3E+03 S	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	5.3E+03 S	5.3E+03 S	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	4.0E+02	2.0E+02 J	2.7E+02 S	1.1E+02 J	U
aldrin	U	U	U	U	U
heptachlor epoxide	U	U	U	U	U
fluoranthene	U	U	U	U	U
pyrene	U	2.7E+03 S	2.7E+03 S	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	1.1E+02 J	U
chrysene	U	U	U	U	U
di-n-octylphthalate	U	U	U	U	U

9613444.1406

TARGET ANALYTE SUMMARY REPORT

EPA METHOD 8270, 3rd ED.

Sponsor: WESTINGHOUSE HANFORD CO. SET ID: S92- 0859-IJ

Results: ug/Kg

Field No.	B07GP0	B07GP0MS	B07GP0MSD	B07GP2	METHOD BLANK
DataChem No.	EL4941	EL4941MS	EL4941MD	EL4942	
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

9613444.1407

ANALYTICAL REPORT FOR SAMPLE No.: EL4941

EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Sponsor: WESTINGHOUSE HANFORD DCL SET ID: S92-0859-IJ

File ID: GD11EL4941 Date Extracted: 11/11/92

FIELD No.:B07GP0 Analysis Date: 12/07/92

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.: EL4941

EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Field Sample ID:B07GP0

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		4.0E+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.: EL4941

EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Field Sample ID:B07GP0

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.: EL4941

NON-TARGET ANALYTE RESULTS
Additional Semi-Volatiles

SET ID: S92-0859-IJ

Field samp ID: B07GP0

Cas. No	COMPOUND	Scan No.	Results ug/Kg	Qlfr
0-00-0	UNKNOWN BROMINATED PYRIMIDINEDI	1485	2.6E+02	EN
0-00-0	ALKANE @ C24	1729	2.4E+02	EN
0-00-0	ALKANE @ C25	1781	3.7E+02	EN
0-00-0	ALKANE @ C26	1832	4.7E+02	EN
0-00-0	ALKANE @ C27	1887	6.4E+02	EN
0-00-0	ALKANE @ C28	1952	6.4E+02	EN
0-00-0	ALKANE @ C29	2028	1.0E+03	EN
0-00-0	ALKANE @ C30	2119	6.7E+02	EN
0-00-0	ALKANE @ C31	2229	7.8E+02	EN
0-00-0	ALKANE @ C32	2363	3.9E+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.

9613444.1411

ANALYTICAL REPORT FOR SAMPLE No.: EL4942

EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Sponsor: WESTINGHOUSE HANFORD DCL SET ID: S92-0859-IJ

File ID: GE5EL4942 Date Extracted: 11/11/92

FIELD No.:B07GP2 Analysis Date: 12/08/92

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	8.4E+02
91-58-7	2-chloronaphthalene	U	3.5E+02
88-74-4	2-nitroaniline	U	8.4E+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	8.4E+02
83-32-9	acenaphthene	U	3.5E+02
51-28-5	2,4-dinitrophenol	U	8.4E+02
100-02-7	4-nitrophenol	U	8.4E+02
132-64-9	dibenzofuran	U	3.5E+02

See footnotes on page 4.

ANALYTICAL REPORT FOR SAMPLE No.: EL4942

EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Field Sample ID:B07GP2

Cas. No	COMPOUND	QLFR	RESULTS ug/kg
121-14-2	2,4-dinitrotoluene	U	3.5E+02
84-66-2	diethyl phthalate	U	3.5E+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	8.4E+02
534-52-1	2-methyl-4,6-dinitrophenol	U	8.4E+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	5.3E+03
118-74-1	hexachlorobenzene	U	3.5E+02
87-86-5	pentachlorophenol	U	8.4E+02
58-89-9	.gamma.-BHC	U	1.1E+03
85-01-8	phenanthrene	U	3.5E+02
120-12-7	anthracene	U	3.5E+02
319-86-8	delta-BHC	U	5.3E+03
76-44-8	heptachlor	U	5.3E+03
84-74-2	di-n-butyl phthalate	J	1.1E+02
309-00-2	aldrin	U	5.3E+03
1024-57-3	heptachlor epoxide	U	5.3E+03
206-44-0	fluoranthene	U	3.5E+02
129-00-0	pyrene	U	3.5E+02
959-98-8	endosulfan I	U	5.3E+03
72-55-9	4,4'DDE	U	5.3E+03
60-57-1	dieldrin	U	5.3E+03
7421-93-4	endrin aldehyde	U	5.3E+03
72-20-8	endrin	U	5.3E+03
72-54-8	4,4'DDD	U	5.3E+03
33213-65-9	endosulfan II	U	5.3E+03
85-68-7	butylbenzylphthalate	U	3.5E+02
50-29-3	4,4'DDT	U	5.3E+03
1031-07-8	endosulfan sulfate	U	5.3E+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	3.5E+02
117-81-7	bis(2-ethylhexyl)phthalate	J	1.1E+02
218-01-9	chrysene	U	3.5E+02
117-84-0	di-n-octylphthalate	U	3.5E+02

See footnotes on page 4.

ANALYTICAL REPORT FOR SAMPLE No.: EL4942

EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Field Sample ID:B07GP2

Cas. No	COMPOUND	QLFR	RESULTS ug/Kg
205-99-2	benzo(b)fluoranthene	U	3.5E+02
207-08-9	benzo(k)fluoranthene	U	3.5E+02
50-32-8	benzo(a)pyrene	U	3.5E+02
193-39-5	indeno(1,2,3-cd)pyrene	U	3.5E+02
53-70-3	dibenzo(a,h)anthracene	U	3.5E+02
191-24-2	benzo(g,h,i)perylene	U	3.5E+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.: EL4942

NON-TARGET ANALYTE RESULTS
Additional Semi-Volatiles

SET ID: S92-0859-IJ

Field samp ID: B07GP2

Cas. No	COMPOUND	Scan No.	Results ug/Kg	Qlfr
0-00-0	ALKANE @ C29	2028	2.1E+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.

9613444.1415

ANALYTICAL REPORT FOR SAMPLE No.: EL4943

EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Sponsor: WESTINGHOUSE HANFORD DCL SET ID: S92-0859-IJ

File ID: GE6EL4943 Date Extracted: 11/11/92

FIELD No.:B07GP3 Analysis Date: 12/08/92

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.: EL4943

EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Field Sample ID:B07GP3

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	J	9.1E+01
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.: EL4943

EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Field Sample ID:B07GP3

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.: EL4943

NON-TARGET ANALYTE RESULTS
Additional Semi-Volatiles

SET ID: S92-0859-IJ

Field samp ID: B07GP3

Cas. No	COMPOUND	Scan No.	Results ug/Kg	Qlfr
111-02-4	SQUALENE	1983	1.6E+02	EN
0-00-0	ALKANE @ C29	2027	2.5E+02	EN
0-00-0	ALKANE @ C31	2228	1.8E+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.: EL4944

EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Sponsor: WESTINGHOUSE HANFORD DCL SET ID: S92-0859-IJ

File ID: GE7EL4944 Date Extracted: 11/11/92

FIELD No.:B07KP7 Analysis Date: 12/08/92

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	8.9E+02
91-58-7	2-chloronaphthalene	U	3.7E+02
88-74-4	2-nitroaniline	U	8.9E+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	8.9E+02
83-32-9	acenaphthene	U	3.7E+02
51-28-5	2,4-dinitrophenol	U	8.9E+02
100-02-7	4-nitrophenol	U	8.9E+02
132-64-9	dibenzofuran	U	3.7E+02

See footnotes on page 4.

ANALYTICAL REPORT FOR SAMPLE No.: EL4944

EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Field Sample ID:B07KP7

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	8.9E+02
534-52-1	2-methyl-4,6-dinitrophenol	U	8.9E+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	8.9E+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	U	3.7E+02
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.: EL4944

EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Field Sample ID:B07KP7

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.: EL4944

NON-TARGET ANALYTE RESULTS
Additional Semi-Volatiles

SET ID: S92-0859-IJ

Field samp ID: B07KP7

Cas. No	COMPOUND	Scan No.	Results ug/Kg	Qlfr
0-00-0	ALDOL CONDENSATION PRODUCT	558	4.4E+02	ENAB
0-00-0	ALKANE @ C29	2028	2.8E+02	EN
0-00-0	ALKANE @ C31	2229	1.9E+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.: EL4945

EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Sponsor: WESTINGHOUSE HANFORD DCL SET ID: S92-0859-IJ

File ID: GE8EL4945 Date Extracted: 11/11/92

FIELD No.:B07KP9 Analysis Date: 12/08/92

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	8.4E+02
91-58-7	2-chloronaphthalene	U	3.5E+02
88-74-4	2-nitroaniline	U	8.4E+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	8.4E+02
83-32-9	acenaphthene	U	3.5E+02
51-28-5	2,4-dinitrophenol	U	8.4E+02
100-02-7	4-nitrophenol	U	8.4E+02
132-64-9	dibenzofuran	U	3.5E+02

See footnotes on page 4.

9613444.1424

ANALYTICAL REPORT FOR SAMPLE No.: EL4945

EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Field Sample ID:B07KP9

Cas. No	COMPOUND	QLFR	RESULTS ug/Kg
121-14-2	2,4-dinitrotoluene	U	3.5E+02
84-66-2	diethyl phthalate	U	3.5E+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	8.4E+02
534-52-1	2-methyl-4,6-dinitrophenol	U	8.4E+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	5.3E+03
118-74-1	hexachlorobenzene	U	3.5E+02
87-86-5	pentachlorophenol	U	8.4E+02
58-89-9	.gamma.-BHC	U	1.1E+03
85-01-8	phenanthrene	U	3.5E+02
120-12-7	anthracene	U	3.5E+02
319-86-8	delta-BHC	U	5.3E+03
76-44-8	heptachlor	U	5.3E+03
84-74-2	di-n-butyl phthalate	U	3.5E+02
309-00-2	aldrin	U	5.3E+03
1024-57-3	heptachlor epoxide	U	5.3E+03
206-44-0	fluoranthene	U	3.5E+02
129-00-0	pyrene	U	3.5E+02
959-98-8	endosulfan I	U	5.3E+03
72-55-9	4,4'DDE	U	5.3E+03
60-57-1	dieldrin	U	5.3E+03
7421-93-4	endrin aldehyde	U	5.3E+03
72-20-8	endrin	U	5.3E+03
72-54-8	4,4'DDD	U	5.3E+03
33213-65-9	endosulfan II	U	5.3E+03
85-68-7	butylbenzylphthalate	U	3.5E+02
50-29-3	4,4'DDT	U	5.3E+03
1031-07-8	endosulfan sulfate	U	5.3E+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	3.5E+02
117-81-7	bis(2-ethylhexyl)phthalate	U	3.5E+02
218-01-9	chrysene	U	3.5E+02
117-84-0	di-n-octylphthalate	U	3.5E+02

See footnotes on page 4.

ANALYTICAL REPORT FOR SAMPLE No.: EL4945

EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Field Sample ID:B07KP9

Cas. No	COMPOUND	QLFR	RESULTS ug/Kg
205-99-2	benzo(b)fluoranthene	U	3.5E+02
207-08-9	benzo(k)fluoranthene	U	3.5E+02
50-32-8	benzo(a)pyrene	U	3.5E+02
193-39-5	indeno(1,2,3-cd)pyrene	U	3.5E+02
53-70-3	dibenzo(a,h)anthracene	U	3.5E+02
191-24-2	benzo(g,h,i)perylene	U	3.5E+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

9613444.1426

ANALYTICAL REPORT FOR SAMPLE No.: EL4945

NON-TARGET ANALYTE RESULTS
Additional Semi-Volatiles

SET ID: S92-0859-IJ

Field samp ID: B07KP9

Cas. No	COMPOUND	Scan No.	Results ug/Kg	Qlfr
0-00-0	ALKANE @ C29	2028	2.5E+02	EN
0-00-0	ALKANE @ C31	2229	1.8E+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.

9613444.1427

ANALYTICAL REPORT FOR SAMPLE No.: EL4946

EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Sponsor: WESTINGHOUSE HANFORD DCL SET ID: S92-0859-IJ

File ID: GE9EL4946 Date Extracted: 11/11/92

FIELD No.:B07KQ0 Analysis Date: 12/08/92

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.: EL4946

EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Field Sample ID:B07KQ0

Cas. No	COMPOUND	QLFR	RESULTS ug/Kg
121-14-2	2,4-dinitrotoluene	U	3.5E+02
84-66-2	diethyl phthalate	U	3.5E+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	U	3.5E+02
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	U	3.5E+02
129-00-0	pyrene	U	3.5E+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	U	3.5E+02
117-81-7	bis(2-ethylhexyl)phthalate	J	8.2E+01
218-01-9	chrysene	U	3.5E+02
117-84-0	di-n-octylphthalate	U	3.5E+02

See footnotes on page 4.

ANALYTICAL REPORT FOR SAMPLE No.: EL4946

EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Field Sample ID:B07KQ0

Cas. No	COMPOUND	QLFR	RESULTS ug/Kg
205-99-2	benzo(b)fluoranthene	U	3.5E+02
207-08-9	benzo(k)fluoranthene	U	3.5E+02
50-32-8	benzo(a)pyrene	U	3.5E+02
193-39-5	indeno(1,2,3-cd)pyrene	U	3.5E+02
53-70-3	dibenzo(a,h)anthracene	U	3.5E+02
191-24-2	benzo(g,h,i)perylene	U	3.5E+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.: EL4946

NON-TARGET ANALYTE RESULTS
Additional Semi-Volatiles

SET ID: S92-0859-IJ

Field samp ID: B07KQ0

Cas. No	COMPOUND	Scan No.	Results ug/Kg	Qlfr
0-00-0	ALDOL CONDENSATION PRODUCT	511	3.3E+02	ENAB
0-00-0	ALDOL CONDENSATION PRODUCT	558	5.0E+02	ENAB
0-00-0	ALKANE @ C27	1887	1.5E+02	EN
111-02-4	SQUALENE	1984	8.3E+02	EN
0-00-0	ALKANE @ C29	2028	4.7E+02	EN
0-00-0	ALKANE @ C31	2229	3.5E+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.

9613444.1431

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ENVIRONMENTAL SOIL REPORT

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

Date _____
Agency Identification Number S92-0859-C
Account No. 3534C

COPY

MAY 1993 RECEIVED SDLA

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

Telephone (509) 373-3575

Sampling Collection and Shipment

Sampling Site North Slope ERA Date of Collection October 30, 1992

Date Samples Received at Laboratory November 05, 1992

Analytical Results

Parameter Name / Analysis Date / Units / Method / Prep Method	Field Number / Lab Number	BL-90979-1 / BL-90979-1	QC-90979-1 / QC-90979-1	B07GP0 / EL 4941	B07GP0MD / EL 4941MD	B07GP0MS / EL 4941MS	B07GP2 / EL 4942	B07GP3 / EL 4943	B07KP7 / EL 4944
Mercury (Hg) 11/25/1992 sw 7471	µg/g	ND*	2.4	ND*	ND*	0.6	ND*	ND*	ND*

† 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.)

Boyd Neilson
Analyst: Boyd E. Neilson

Todd Schmanski
Reviewer: Todd Schmanski

Laboratory Supervisor: Michael P. Beesley

960 West LeVoy Drive / Salt Lake City, Utah 84123-2547 / (801) 266-7700
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9613444.1432

DATA CHEM LABORATORIES

ENVIRONMENTAL SOIL REPORT

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

Date _____
Agency Identification Number S92-0859-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 ERA Date of Collection October 30, 1992

Date Samples Received at Laboratory November 05, 1992

Analytical Results

Parameter Name / Analysis Date / Units / Method / Prep Method	Field Number / Lab Number	B07KP9 EL 4945	B07KQ0 EL 4946						* Limit of Detection
Mercury (Hg) 11/25/1992 sw 7471	µg/g	ND*	ND*						0.2

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

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ENVIRONMENTAL SOIL REPORT

Date _____

Agency Identification Number S92-0859-CJ

General Set Comments

This set was analyzed in conjunction with set S92-0853-BD under one batch #. A prep blank, matrix duplicate, matrix spike, and QC sample were also analyzed and reported with this set. The QC sample spike level was 2.5 µg/g. The matrix spike level was 0.5 µg/g.

9613444.1434

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ENVIRONMENTAL SOIL REPORT

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

Date DEC 21 1992

Agency Identification Number S92-0859-BJ

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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 ERA Date of Collection October 30, 1992

Date Samples Received at Laboratory November 05, 1992

Analytical Results

Parameter Name / Analysis Date / Method	Units	Prep Method	Field Number / Lab Number	QC-90978-1 / QC-90978-1	BL-90978-1 / BL-90978-1	B07GP0 / EL 4941	B07GP0MS / EL 4941MS	B07GP0MD / EL 4941MD	B07GP2 / EL 4942	B07GP3 / EL 4943	B07KP7 / EL 4944
Arsenic (As) 12/17/1992 7060 [1]	µg/g	3050 [1]		1100	ND*	7.2	***	7.2	8.5	9.2	5.1
Lead (Pb) 12/14/1992 7421 [1]	µg/g	3050 [1]		260	ND*	38.	34.***	34.	13.	11.	21.
Selenium (Se) 12/15/1992 7740 [1]	µg/g	3050 [1]		44.	ND*	ND*	0.7	ND*	ND*	ND*	ND*
Thallium (Tl) 12/16/1992 7841 [1]	µg/g	3050 [1]		41.	ND*	ND*	5.1	ND*	ND*	ND*	ND*

† 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: Jeannine M. Chan

Laboratory Supervisor: Brent E. Stephens

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9613444.1435

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ENVIRONMENTAL SOIL REPORT

Date DEC 21 1992

Agency Identification Number S92-0859-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 ERA Date of Collection October 30, 1992

Date Samples Received at Laboratory November 05, 1992

Analytical Results

Parameter Name / Analysis Date / Method / Prep Method	Units	Field Number / Lab Number	B07KP9 EL 4945	B07KQ0 EL 4946						* Limit of Detection
Arsenic (As) 12/17/1992 7060 [1] 3050 [1]	µg/g		8.8	8.5						0.5
Lead (Pb) 12/14/1992 7421 [1] 3050 [1]	µg/g		14.	11.						0.5
Selenium (Se) 12/15/1992 7740 [1] 3050 [1]	µg/g		ND*	ND*						0.5
Thallium (Tl) 12/16/1992 7841 [1] 3050 [1]	µg/g		ND*	ND*						0.5

† 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 DEC 21 1992

Agency Identification Number S92-0859-BJ

General Set Comments

This set was digested and analyzed as one analytical batch. The QC sample target values are 917 µgAs/g, 236 µgPb/g, 39.2 µgSe/g, and 39.0 µgTl/g. The matrix spike target values are 4.0 µgAs/g, 2.0 µgPb/g, 1.0 µgSe/g, and 5.0 µgTl/g. The results for the QC sample, method blank, matrix spike, and matrix duplicate are reported with this set.

***The Pb spike added is negligible because of the high Pb concentration in the sample. The spike recovery is therefore not representative of the method performance and should be disregarded. The As spike recovery is not reported because the high sample concentration combined with the spike added caused the matrix spike recovery to be greater than the highest standard.

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

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

9613444.1437

DATA CHEM LABORATORIES

ANALYTICAL REPORT

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

Date DEC 22 1992
Agency Identification Number S92-0859-HJ
Account No. 3534C

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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 ERA Date of Collection October 30, 1992

Date Samples Received at Laboratory November 05, 1992

Analysis

Method of Analysis EPA 8150

Date(s) of Analysis December 14, 1992

Analytical Results

Field Sample Number	Laboratory Number	Sample Type	2,4-D µG/G	2,4-DB µG/G	2,4,5-T µG/G	2,4,5-TP (Silvex) µG/G	Dalapon µG/G	Dicamba µG/G	Dichloroprop µG/G	Dinoseb µG/G
QC-90982-1	QC-90982-1	SOIL	.14	ND*	.058	.076	ND*	ND*	ND*	ND*
BL-90982-1	BL-90982-1	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07GP0	EL 4941	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07GP2	EL 4942	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07GP3	EL 4943	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07KP7	EL 4944	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07KP9	EL 4945	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07KP9MS	EL 4945MS	SOIL	.036	ND*	.038	.036	ND*	ND*	ND*	ND*
B07KP9MSD	EL 4945MSD	SOIL	.036	ND*	.035	.039	ND*	ND*	ND*	ND*
B07KQ0	EL 4946	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
* Limit of Detection			.02	.1	.01	.01	.1	.01	.02	.02

† 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: John Meikle

Reviewer: Guangyue Liu

Laboratory Supervisor: Jose C. Danino

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9613444.1438

DATA CHEM LABORATORIES

ANALYTICAL REPORT

Date DEC 22 1992
Agency Identification Number S92-0859-HJ
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 ERA Date of Collection October 30, 1992

Date Samples Received at Laboratory November 05, 1992

Analysis

Method of Analysis EPA 8150

Date(s) of Analysis December 14, 1992

Analytical Results

Field Sample Number	Laboratory Number	Sample Type	MCPA µG/G	MCPP µG/G	DCAA µG/G					
QC-90982-1	QC-90982-1	SOIL	ND*	ND*	.081					
BL-90982-1	BL-90982-1	SOIL	ND*	ND*	.082					
B07GP0	EL 4941	SOIL	ND*	ND*	.069					
B07GP2	EL 4942	SOIL	ND*	ND*	.091					
B07GP3	EL 4943	SOIL	ND*	ND*	.058					
B07KP7	EL 4944	SOIL	ND*	ND*	.076					
B07KP9	EL 4945	SOIL	ND*	ND*	.080					
B07KP9MS	EL 4945MS	SOIL	ND*	ND*	.083					
B07KP9MSD	EL 4945MSD	SOIL	ND*	ND*	.077					
B07KQ0	EL 4946	SOIL	ND*	ND*	.089					
* Limit of Detection			5	5	SURR					

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

9613444.1439

DATA CHEM LABORATORIES

ANALYTICAL REPORT

Date DEC 22 1992

Agency Identification Number S92-0859-HJ

General Set Comments

The samples were spiked with the surrogate, 2,4-dichlorophenylacetic acid (DCAA), at 0.05 µg/g.

The matrix spike, matrix spike duplicate, and Laboratory Control Samples were spiked with 2,4-D at 0.10 µg/g, 2,4,5-TP at 0.05 µg/g, and 2,4,5-T at 0.05 µg/g.

9613444.1440

DATA CHEM LABORATORIES

ENVIRONMENTAL SOIL REPORT

Date JAN 08 1993

Agency Identification Number S92-0859-DJ

Account No. 3534C

JAN 1993 RECEIVED OSM DMO

Westinghouse Hanford Company
2355 Stevens Drive
MSIN H4-23 345 Hill Street/300 Area
Richland, WA 99352
Attention: Briana Colley

Telephone (509) 373-3225

Sampling Collection and Shipment

Sampling Site North Slope ERA Date of Collection October 30, 1992

Date Samples Received at Laboratory November 05, 1992

Analytical Results

Parameter Name / Analysis Date / Units / Method / Prep Method	Field Number / Lab Number	B07GP0 EL 4941	B07GP2 EL 4942	B07GP3 EL 4943	B07KP7 EL 4944	B07KP9 EL 4945	B07KQ0 EL 4946		* Limit of Detection
Fluoride (F) 11/10/1992 300.0 [1]	µg/g	3.	5.	3.	5.	5.	5.		1.
Chloride (Cl) 11/10/1992 300.0 [1]	µg/g	140	75.	78.	9.	4.	28.		1.
Sulfate (SO_4) 11/10/1992 300.0 [1]	µg/g	140	180	120	42.	45.	240		1.
Phosphate (PO_4-P) 11/10/1992 300.0 [1]	µg/g	ND*	ND*	ND*	ND*	ND*	ND*		4.
Nitrates (NO_3-N + NO_2-N) 11/27/1992 353.2 [1]	µg/g	16.	12.	2.	2.	ND*	1.		1.
Chromium VI 11/12/1992 7196 [2] 3060M [2]	µg/g	ND*	ND*	ND*	ND*	ND*	ND*		1.

† 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.)

Analyst: Dorene A. Kley

Reviewer: Michael E. Richmond

Laboratory Supervisor: Michael P. Beesley

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A Sorenson Company

9613444.1441

DATA CHEM LABORATORIES

ENVIRONMENTAL SOIL REPORT

Date JAN 0 8 1993

Agency Identification Number S92-0859-DJ

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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DATA CHEM LABORATORIES

ENVIRONMENTAL SOIL REPORT

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

Date DEC 07 1992
Agency Identification Number S92-0859-EJ
Account No. 3534C

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

DEC 1992 RECEIVED OSM DMO

Telephone (509) 373-3225

Sampling Collection and Shipment

Sampling Site North Slope ERA Date of Collection October 30, 1992

Date Samples Received at Laboratory November 05, 1992

Analytical Results

Parameter Name / Analysis Date / Units / Method / Prep Method	Field Number / Lab Number	B07GP0 EL 4941	B07GP2 EL 4942	B07GP3 EL 4943	B07KP7 EL 4944	B07KP9 EL 4945	B07KQ0 EL 4946		* Limit of Detection
Total Petroleum Hydrocarbons 11/24/1992 µg/g 418.1 [1] 3550 [2]		ND*	ND*	ND*	ND*	ND*	ND*		10

† 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

David W. Thomas
Analyst: David W. Thomas

Rosemary H. Hanks
Reviewer: Rosemary H. Hanks

Suzanne W. Bowe for NKC
Laboratory Supervisor: Norman K. Christensen

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9613444.1443

DATA CHEM LABORATORIES

ENVIRONMENTAL SOIL REPORT

Date DEC 07 1992

Agency Identification Number S92-0859-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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9613444.1444

DATA CHEM LABORATORIES

ANALYTICAL REPORT

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

Date DEC 07 1992
Agency Identification Number S92-0859-FJ
Account No. 3534C

DEC 1992 RECEIVED OSM DMO

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

Sampling Site North Slope ERA Date of Collection October 30, 1992

Date Samples Received at Laboratory November 05, 1992

Analysis

Method of Analysis EPA 8080

Date(s) of Analysis December 03, 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-90985-1	QC-90985-1	SOIL	8.6	ND*	ND*	ND*	9.4	ND*	ND*	ND*
BL-90985-1	BL-90985-1	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07GP0	EL 4941	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07GP2	EL 4942	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07GP2MS	EL 4942MS	SOIL	17	ND*	ND*	ND*	16	ND*	ND*	ND*
B07GP2MSD	EL 4942MSD	SOIL	16	ND*	ND*	ND*	15	ND*	ND*	ND*
B07GP3	EL 4943	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07KP7	EL 4944	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	34
B07KP9	EL 4945	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07KQ0	EL 4946	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

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9613444.1445

DATA CHEM LABORATORIES

ANALYTICAL REPORT

Date DEC 07 1992

Agency Identification Number S92-0859-FJ

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Sampling Collection and Shipment

Sampling Site North Slope ERA Date of Collection October 30, 1992

Date Samples Received at Laboratory November 05, 1992

Analysis

Method of Analysis EPA 8080

Date(s) of Analysis December 03, 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-90985-1	QC-90985-1	SOIL	19	27	ND*	ND*	ND*	35	ND*	8.0
BL-90985-1	BL-90985-1	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07GP0	EL 4941	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07GP2	EL 4942	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07GP2MS	EL 4942MS	SOIL	31	35	ND*	ND*	ND*	47	ND*	16
B07GP2MSD	EL 4942MSD	SOIL	29	33	ND*	ND*	ND*	44	ND*	14
B07GP3	EL 4943	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07KP7	EL 4944	SOIL	36	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07KP9	EL 4945	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07KQ0	EL 4946	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.

9613444.1446

DATA CHEM LABORATORIES

ANALYTICAL REPORT

Date DEC 07 1992
Agency Identification Number S92-0859-FJ
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Sampling Collection and Shipment

Sampling Site North Slope ERA Date of Collection October 30, 1992

Date Samples Received at Laboratory November 05, 1992

Analysis

Method of Analysis EPA 8080

Date(s) of Analysis December 03, 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-90985-1	QC-90985-1	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
BL-90985-1	BL-90985-1	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07GP0	EL 4941	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07GP2	EL 4942	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07GP2MS	EL 4942MS	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07GP2MSD	EL 4942MSD	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07GP3	EL 4943	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07KP7	EL 4944	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07KP9	EL 4945	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07KQ0	EL 4946	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.
NR Parameter not requested.
** See comment on last page.
( ) Parameter between LOD and LOQ.

9613444.1447

DATA CHEM LABORATORIES

ANALYTICAL REPORT

Date DEC 07 1992
Agency Identification Number S92-0859-FJ
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Sampling Collection and Shipment

Sampling Site North Slope ERA Date of Collection October 30, 1992

Date Samples Received at Laboratory November 05, 1992

Analysis

Method of Analysis EPA 8080

Date(s) of Analysis December 03, 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-90985-1	QC-90985-1	SOIL	ND*	ND*	28	9.3				
BL-90985-1	BL-90985-1	SOIL	ND*	ND*	27	6.4				
B07GP0	EL 4941	SOIL	ND*	ND*	43	31				
B07GP2	EL 4942	SOIL	ND*	ND*	41	33				
B07GP2MS	EL 4942MS	SOIL	ND*	ND*	38	31				
B07GP2MSD	EL 4942MSD	SOIL	ND*	ND*	39	29				
B07GP3	EL 4943	SOIL	ND*	ND*	32	25				
B07KP7	EL 4944	SOIL	ND*	ND*	39	28				
B07KP9	EL 4945	SOIL	ND*	ND*	35	27				
B07KQ0	EL 4946	SOIL	ND*	ND*	34	26				
* Limit of Detection			100	100	SURR.	SURR.				

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

DATA CHEM LABORATORIES

ANALYTICAL REPORT

Date DEC 07 1992

Agency Identification Number S92-0859-FJ

General Set Comments

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

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

9613444.1449

DATA CHEM LABORATORIES

ANALYTICAL REPORT

Date DEC 03 1992

Agency Identification Number S92-0859-GJ

Account No. 3534C

DEC 1992 RECEIVED OSM DMO

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Sampling Collection and Shipment

Sampling Site North Slope ERA Date of Collection October 30, 1992

Date Samples Received at Laboratory November 05, 1992

Analysis

Method of Analysis EPA 8141

Date(s) of Analysis November 13, 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-90986-1	QC-90986-1	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	82
BL-90986-1	BL-90986-1	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07GP0	EL 4941	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07GP2	EL 4942	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07GP3	EL 4943	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07KP7	EL 4944	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07KP9	EL 4945	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07KQ0	EL 4946	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
* Limit of Detection			6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7

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

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

Vicki Hoe Lin Tsai
Analyst: Vicki Hoe-Lin Tsai

Reviewer: Guangyue Liu

Laboratory Supervisor: Jose C. Danino

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9613444.1450

DATA CHEM LABORATORIES

ANALYTICAL REPORT

Date DEC 03 1992
Agency Identification Number S92-0859-GJ
Account No. 3534C

Westinghouse Hanford Company
2355 Stevens Drive
MSIN T6-08
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Attention: Jeanette Duncan

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Sampling Collection and Shipment

Sampling Site North Slope ERA Date of Collection October 30, 1992

Date Samples Received at Laboratory November 05, 1992

Analysis

Method of Analysis EPA 8141

Date(s) of Analysis November 13, 1992

Analytical Results

Field Sample Number	Laboratory Number	Sample Type	Ethoprop ug/kg GC/PPD	Fensulfothion ug/kg GC/PPD	Fenthion ug/kg GC/PPD	Merphos ug/kg GC/PPD	Mevinphos ug/kg GC/PPD	Naled ug/kg GC/PPD	Parathion methyl ug/kg GC/PPD	Phorate ug/kg GC/PPD
QC-90986-1	QC-90986-1	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	72	76
BL-90986-1	BL-90986-1	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07GP0	EL 4941	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07GP2	EL 4942	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07GP3	EL 4943	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07KP7	EL 4944	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07KP9	EL 4945	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07KQ0	EL 4946	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
* Limit of Detection			6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7

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

9613444.1451

DATA CHEM LABORATORIES

ANALYTICAL REPORT

Date DEC 03 1992
Agency Identification Number S92-0859-GJ
Account No. 3534C

Westinghouse Hanford Company
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Sampling Collection and Shipment

Sampling Site North Slope ERA Date of Collection October 30, 1992

Date Samples Received at Laboratory November 05, 1992

Analysis

Method of Analysis EPA 8141

Date(s) of Analysis November 13, 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-90986-1	QC-90986-1	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
BL-90986-1	BL-90986-1	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07GP0	EL 4941	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07GP2	EL 4942	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07GP3	EL 4943	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07KP7	EL 4944	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07KP9	EL 4945	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07KQ0	EL 4946	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
* Limit of Detection			6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7

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

9613444.1452

DATA CHEM LABORATORIES

ANALYTICAL REPORT

Date DEC 03 1992
Agency Identification Number S92-0859-GJ
Account No. 3534C

Westinghouse Hanford Company
2355 Stevens Drive
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Sampling Collection and Shipment

Sampling Site North Slope ERA Date of Collection October 30, 1992

Date Samples Received at Laboratory November 05, 1992

Analysis

Method of Analysis EPA 8141

Date(s) of Analysis November 13, 1992

Analytical Results

Field Sample Number	Laboratory Number	Sample Type	TEPP ug/kg GC/FPD								
QC-90986-1	QC-90986-1	SOIL	ND*								
BL-90986-1	BL-90986-1	SOIL	ND*								
B07GP0	EL 4941	SOIL	ND*								
B07GP2	EL 4942	SOIL	ND*								
B07GP3	EL 4943	SOIL	ND*								
B07KP7	EL 4944	SOIL	ND*								
B07KP9	EL 4945	SOIL	ND*								
B07KQ0	EL 4946	SOIL	ND*								
* Limit of Detection			6.7								

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

DATA CHEM LABORATORIES

ANALYTICAL REPORT

Date DEC 03 1992

Agency Identification Number S92-0859-GJ

General Set Comments

Method blank,LCS,method spike,method spike duplicate (using sample CLP 11611 spiked at 60 ug/kg) and surrogate (TPP spiked at 300 ug/kg) were performed with the samples. The method blank was free of contamination. The recoveries (%) of QC samples and surrogate were as follows :

	Phorate	Disulfoton	Parathion-Methyl	TPP
LCS	127	137	120	97
CLP11611MS	135	138	127	109
CLP11611MSD	133	130	128	107
Blank				96
EL4941				125
EL4942				108
EL4943				126
EL4944				102
EL4945				115
EL4946				112

9613444.1454

DATA CHEM LABORATORIES

ENVIRONMENTAL SOIL REPORT

Date DEC 21 1992
Agency Identification Number S92-0859-AJ
Account No. 3534C

DEC 1992 RECEIVED OSM DMO

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Sampling Collection and Shipment

Sampling Site North Slope ERA Date of Collection October 30, 1992

Date Samples Received at Laboratory November 05, 1992

Analytical Results

Parameter Name / Analysis Date / Method	Units / Prep Method	Field Number / Lab Number	QC-90977-1 / QC-90977-1	BL-90977-1 / BL-90977-1	B07GP0 / EL 4941	B07GP0MS / EL 4941MS	B07GP0MD / EL 4941MD	B07GP2 / EL 4942	B07GP3 / EL 4943	B07KP7 / EL 4944
Aluminum (Al) 12/15/1992 6010 [1]	µg/gram 3050 [1]		380	ND*	15000	13000	14000	19000	20000	19000
Antimony (Sb) 12/15/1992 6010 [1]	µg/gram 3050 [1]		180	ND*	ND*	ND*	ND*	ND*	ND*	ND*
Arsenic (As) 12/15/1992 6010 [1]	µg/gram 3050 [1]		980	ND*	ND*	200	ND*	ND*	ND*	ND*
Barium (Ba) 12/15/1992 6010 [1]	µg/gr m 3050 [1]		5.	ND*	130	320	120	130	130	150
Beryllium (Be) 12/15/1992 6010 [1]	µg/gram 3050 [1]		19.	ND*	ND*	5.	ND*	ND*	ND*	ND*
Cadmium (Cd) 12/15/1992 6010 [1]	µg/gram 3050 [1]		43.	ND*	ND*	4.	ND*	ND*	ND*	ND*
Calcium (Ca) 12/15/1992 6010 [1]	µg/gram 3050 [1]		180000	20	13000	12000	13000	17000	18000	16000
Chromium (Cr) 12/15/1992 6010 [1]	µg/gram 3050 [1]		100	ND*	23.	40.	21.	25.	25.	26.

* 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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Analyst: Henry F. Lin

Reviewer: John T. Kershisnik

Laboratory Supervisor: Brent E. Stephens

9613444.1455

DATA CHEM LABORATORIES

ENVIRONMENTAL SOIL REPORT

Date DEC 21 1992
Agency Identification Number S92-0859-AJ
Account No. 3534C

Analytical Results

Parameter Name / Analysis Date / Units / Method / Prep Method	Field Number / Lab Number	QC-90977-1 / QC-90977-1	BL-90977-1 / BL-90977-1	B07GP0 / EL 4941	B07GP0MS / EL 4941MS	B07GP0MD / EL 4941MD	B07GP2 / EL 4942	B07GP3 / EL 4943	B07KP7 / EL 4944
Cobalt (Co) 12/15/1992 µg/gram 6010 [1] 3050 [1]		140	ND*	8.	56.	8.	10.	10.	10.
Copper (Cu) 12/15/1992 µg/gram 6010 [1] 3050 [1]		6600	ND*	35.	42.	21.	43.	31.	24.
Iron (Fe) 12/15/1992 µg/gram 6010 [1] 3050 [1]		22000	ND*	29000	23000	23000	26000	25000	26000
Lead (Pb) 12/15/1992 µg/gram 6010 [1] 3050 [1]		210	ND*	55.	85.	27.	17.	15.	19.
Lithium (Li) 12/15/1992 µg/gram 6010 [1] 3050 [1]		ND*	ND*	16.	15.	15.	21.	20.	21.
Magnesium (Mg) 12/15/1992 µg/gram 6010 [1] 3050 [1]		120000	ND*	7300	6900	7100	9100	8800	9000
Manganese (Mn) 12/15/1992 µg/gram 6010 [1] 3050 [1]		200	ND*	470	470	420	500	460	500
Molybdenum (Mo) 12/15/1992 µg/gram 6010 [1] 3050 [1]		50.	ND*	ND*	ND*	ND*	2.	ND*	ND*
Nickel (Ni) 12/15/1992 µg/gram 6010 [1] 3050 [1]		57.	ND*	18.	67.	17.	22.	21.	23.
Phosphorus (P) 12/15/1992 µg/gram 6010 [1] 3050 [1]		550	ND*	610	620	610	590	600	580
Potassium (K) 12/15/1992 µg/gram 6010 [1] 3050 [1]		ND*	ND*	2700	2400	2500	3000	3100	2800
Selenium (Se) 12/15/1992 µg/gram 6010 [1] 3050 [1]		40	ND*	ND*	200	ND*	ND*	ND*	ND*
Silver (Ag) 12/15/1992 µg/gram 6010 [1] 3050 [1]		22.	ND*	ND*	5.	ND*	ND*	ND*	ND*
Sodium (Na) 12/15/1992 µg/gram 6010 [1] 3050 [1]		94.	ND*	540	450	470	790	560	600
Strontium (Sr) 12/15/1992 µg/gram 6010 [1] 3050 [1]		55.	ND*	54.	50.	53.	65.	64.	60.

* 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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A Sorenson Company

9613444.1456

DATA CHEM LABORATORIES

ENVIRONMENTAL SOIL REPORT

DEC 21 1992

Date

Agency Identification Number S92-0859-AJ

Account No. 3534C

Analytical Results

Parameter Name / Analysis Date / Units / Method / Prep Method	Field Number / Lab Number	QC-90977-1 / QC-90977-1	BL-90977-1 / BL-90977-1	B07GP0 / EL 4941	B07GP0MS / EL 4941MS	B07GP0MD / EL 4941MD	B07GP2 / EL 4942	B07GP3 / EL 4943	B07KP7 / EL 4944
Thallium (Tl) 12/15/1992 6010 [1]	μg/gram 3050 [1]	140	ND*	ND*	ND*	ND*	ND*	ND*	ND*
Vanadium (V) 12/15/1992 6010 [1]	μg/gram 3050 [1]	63.	ND*	42.	91.	43.	44.	43.	44.
Zinc (Zn) 12/15/1992 6010 [1]	μg/gram 3050 [1]	160	ND*	87.	120	96.	62.	61.	73.

* 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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9613444.1457

DATA CHEM LABORATORIES

ENVIRONMENTAL SOIL REPORT

DEC 21 1992

Date

Agency Identification Number S92-0859-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 ERA Date of Collection October 30, 1992

Date Samples Received at Laboratory November 05, 1992

Analytical Results

Parameter Name / Analysis Date / Method / Units / Prep Method	Field Number / Lab Number	B07KP9 EL 4945	B07KQ0 EL 4946						* Limit of Detection
Aluminum (Al) 12/15/1992 6010 [1] µg/gram 3050 [1]		20000	17000						20
Antimony (Sb) 12/15/1992 6010 [1] µg/gram 3050 [1]		ND*	ND*						20
Arsenic (As) 12/15/1992 6010 [1] µg/gram 3050 [1]		ND*	ND*						50
Barium (Ba) 12/15/1992 6010 [1] µg/gram 3050 [1]		150	200						2.
Beryllium (Be) 12/15/1992 6010 [1] µg/gram 3050 [1]		ND*	ND*						1.
Cadmium (Cd) 12/15/1992 6010 [1] µg/gram 3050 [1]		ND*	ND*						1.
Calcium (Ca) 12/15/1992 6010 [1] µg/gram 3050 [1]		17000	16000						10
Chromium (Cr) 12/15/1992 6010 [1] µg/gram 3050 [1]		25.	25.						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 comment page).
( ) Parameter between LOD and LOQ.
[ ] Method Reference (See comments page.)

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DATA CHEM LABORATORIES

ENVIRONMENTAL SOIL REPORT

Date DEC 21 1992

Agency Identification Number S92-0859-AJ

Account No. 3534C

Analytical Results

Parameter Name / Analysis Date / Units / Method / Prep Method	Field Number / Lab Number	B07KP9 EL 4945	B07KQ0 EL 4946						* Limit of Detection
Cobalt (Co) 12/15/1992 µg/gram 6010 [1] 3050 [1]		11.	10.						2.
Copper (Cu) 12/15/1992 µg/gram 6010 [1] 3050 [1]		26.	21.						2.
Iron (Fe) 12/15/1992 µg/gram 6010 [1] 3050 [1]		26000	24000						10
Lead (Pb) 12/15/1992 µg/gram 6010 [1] 3050 [1]		15.	13.						2.
Lithium (Li) 12/15/1992 µg/gram 6010 [1] 3050 [1]		21.	19.						2.
Magnesium (Mg) 12/15/1992 µg/gram 6010 [1] 3050 [1]		9200	8500						10
Manganese (Mn) 12/15/1992 µg/gram 6010 [1] 3050 [1]		510	460						1.
Molybdenum (Mo) 12/15/1992 µg/gram 6010 [1] 3050 [1]		ND*	ND*						2.
Nickel (Ni) 12/15/1992 µg/gram 6010 [1] 3050 [1]		22.	20.						3.
Phosphorus (P) 12/15/1992 µg/gram 6010 [1] 3050 [1]		610	600						50
Potassium (K) 12/15/1992 µg/gram 6010 [1] 3050 [1]		3000	2700						200
Selenium (Se) 12/15/1992 µg/gram 6010 [1] 3050 [1]		ND*	ND*						30
Silver (Ag) 12/15/1992 µg/gram 6010 [1] 3050 [1]		ND*	ND*						2.
Sodium (Na) 12/15/1992 µg/gram 6010 [1] 3050 [1]		570	610						20
Strontium (Sr) 12/15/1992 µg/gram 6010 [1] 3050 [1]		62.	62.						2.

[1] 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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A Sorenson Company

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DATA CHEM LABORATORIES

ENVIRONMENTAL SOIL REPORT

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

Date DEC 21 1992

Agency Identification Number S92-0859-AJ

Account No. 3534C

Analytical Results

Parameter Name / Analysis Date / Units / Method / Prep Method — Field Number / Lab Number	B07KP9 EL 4945	B07KQ0 EL 4946						* Limit of Detection
Thallium (Tl) 12/15/1992 µg/gram 6010 [1] 3050 [1]	ND*	ND*						50.
Vanadium (V) 12/15/1992 µg/gram 6010 [1] 3050 [1]	43.	43.						2.
Zinc (Zn) 12/15/1992 µg/gram 6010 [1] 3050 [1]	65.	58.						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

Date DEC 21 1992

Agency Identification Number S92-0859-AJ

General Set Comments

The spiking levels for matrix spike sample EL 4941MS and QC sample QC-90977-1 are below in µg/g.

QC-90977-1				EL 4941MS			
Sb	211	Ba	48	Sb	50	Ba	200
Be	19.4	Cd	45.4	Be	5	Cd	5
Ca	196200	Cr	99.6	Cr	20	Co	50
Co	144	Cu	6910	Cu	25	Fe	100
Fe	22430	Mg	118100	Mn	50	Ni	50
Mn	208	Ni	60.9	Ag	5	As	200
K	50	Ag	22.2	V	50	Zn	50
Na	50	Tl	39.0	Pb	50		
V	65.8	Zn	187				
Al	325	As	917				
Pb	236						

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

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

9613444.1461

DATA CHEM LABORATORIES

ENVIRONMENTAL SOIL REPORT

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

Date DEC 02 1992
Agency Identification Number S92-0859-CJ
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 ERA Date of Collection October 30, 1992

Date Samples Received at Laboratory November 05, 1992

Analytical Results

Parameter Name / Analysis Date / Method / Prep Method / Units	Field Number / Lab Number	BL-90979-1 / BL-90979-1	QC-90979-1 / QC-90979-1	B07GP0 / EL 4941	B07GP0MD / EL 4941MD	B07GP0MS / EL 4941MS	B07GP2 / EL 4942	B07GP3 / EL 4943	B07KP7 / EL 4944
Mercury (Hg) 11/25/1992 7471 [1]	µg/g	ND*	2.4	ND*	ND*	0.6	ND*	ND*	ND*

* 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: Boyd E. Neilson

Reviewer: Todd Schmanski

Laboratory Supervisor: Michael P. Beesley

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9613444.1462

DATA CHEM LABORATORIES

ENVIRONMENTAL SOIL REPORT

Date DEC 02 1992
Agency Identification Number S92-0859-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 ERA Date of Collection October 30, 1992

Date Samples Received at Laboratory November 05, 1992

Analytical Results

Parameter Name / Analysis Date / Method	Units / Prep Method	Field Number / Lab Number	B07KP9 EL 4945	B07KQ0 EL 4946						* Limit of Detection
Mercury (Hg) 11/25/1992 7471 [1]	µg/g		ND*	ND*						0.2

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

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DATA CHEM LABORATORIES

ENVIRONMENTAL SOIL REPORT

Date DEC 02 1992

Agency Identification Number S92-0859-CJ

General Set Comments

This set was analyzed in conjunction with set S92-0853-BD.
A prep blank, matrix duplicate, matrix spike, and QC sample were also analyzed and reported with this set. The QC sample spike level was 2.5 µg/g. The matrix spike level was 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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A Sorenson Company

9613444.1464

Golder Associates Inc.

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

Golder Associates

June 22, 1993

Our ref: 893-1458
WHC/O/381

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 G-93-58, TRANSMITTAL OF DATA VALIDATION PACKAGES

Dear Ms. Colley:

Enclosed are six complete analytical data packages including associated data validation documentation for a North Slope ERA sample 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:

- B07KQ6-DAT-234
- B07KQ4-DAT-233
- B07KR5-DAT-236
- B07KR4-DAT-232
- B07GM7-DAT-205
- B07GP0-DAT-194

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

RECEIVED
JUN 23 1993
VALIDATION DOCUMENTATION
SDLA

Enclosures

cc: George Henckel, WHC

9613444.1465

RECEIVED
JUN 2 3 1993
VALIDATION DOCUMENTATION

MEMORANDUM

TO: North Slope ERA Data Validation Project QA Record June 22, 1993

FR: Tom Stapp, Golder Associates Inc.

RE: Data Validation Summary for Data Package: B07GP0-DAT-194

INTRODUCTION

This memo presents the results of data validation and verification on data package B07GP0-DAT-194 consisting of six soil samples submitted for volatile, semivolatile, pesticide/PCB, organochlorine herbicides, organophosphorus pesticides, metals, general chemistry and total recoverable petroleum hydrocarbons analysis. The samples 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
B07GP0	10/30/92	X	X	X	X	X	X	X	X
B07GP2	10/30/92	X	X	X	X	X	X	X	X
B07GP3	11/2/92	X	X	X	X	X	X	X	X
B07KP7	11/2/92	X	X	X	X	X	X	X	X
B07KP9	11/3/92	X	X	X	X	X	X	X	X
B07KQ0	11/3/92	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). Attachment 1 provides copies of the verified laboratory reports and attachment 2 provides data validation supporting documentation.

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

No major deficiencies were identified requiring qualification of data except for the semivolatile tentatively identified compound (TIC) identified as an aldol condensation product in sample B07KP7 and the TIC identified as squalene in sample B07GP3 have been rejected (R) since they are suspected laboratory contaminants.

MINOR DEFICIENCIES

Volatile Blanks

Acetone was detected in the laboratory method blank and all samples. Therefore, all sample results have been qualified as undetected (U).

Inorganic Blanks

Copper was detected in the laboratory blank and associated samples B07KP9 and B07KQ0. Copper detected in both samples has 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.

9613444.1467

ATTACHMENT 1

VERIFIED LABORATORY REPORTS

9613444.1468

ANALYTICAL REPORT FOR SAMPLE No. EL4941
EPA METHOD 8240
Target Analyte Results

Dil. factor	1
% Moisture	4.23

Field ID: B07GPO
File ID: PD22EL4941
DataChem Set ID: S92-0859JJ

Sponsor: WESTINGHOUSE-HANFORD
Date of Analysis: 11/12/92 6:29:00
Date Received: 11/05/92

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	22 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

6/11/93

9613444.1469

ANALYTICAL REPORT FOR SAMPLE No. EL4942
EPA METHOD 8240
Target Analyte Results

Dil. factor	1
% Moisture	5.22

Field ID: B07GP2
File ID: PD23EL4942
DataChem Set ID: S92-0859JJ

Sponsor: WESTINGHOUSE-HANFORD
Date of Analysis: 11/12/92 7:06:00
Date Received: 11/05/92

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	26 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	2.7
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	1.1
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	2.6
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	1.2
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

6/11/93

9613444.1470

ANALYTICAL REPORT FOR SAMPLE No. EL4943
EPA METHOD 8240
Target Analyte Results

Dil. factor	1
% Moisture	4.31

Field ID: B07GP3
File ID: PD24EL4943
DataChem Set ID: S92-0859JJ

Sponsor: WESTINGHOUSE-HANFORD
Date of Analysis: 11/12/92 7:43:00
Date Received: 11/05/92

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	22 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. EL4944
EPA METHOD 8240
Target Analyte Results

Dil. factor	1
% Moisture	9.63

Field ID: B07KP7
File ID: PD43EL4944
DataChem Set ID: S92-0859JJ

Sponsor: WESTINGHOUSE-HANFORD
Date of Analysis: 11/13/92 3:26:00
Date Received: 11/05/92

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	3.3
75-09-2	methylene chloride	U	3.7
67-64-1	acetone	12 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	1.5
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	1.5
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	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	1.5
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	2.8
591-78-6	2-hexanone	U	2.0
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. EL4945
EPA METHOD 8240
Target Analyte Results

Dil. factor	1
% Moisture	5.22

Field ID: B07KP9
File ID: PD44EL4945
DataChem Set ID: S92-0859JJ

Sponsor: WESTINGHOUSE-HANFORD
Date of Analysis: 11/13/92 4:03:00
Date Received: 11/05/92

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	10 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	2.7
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	1.1
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	2.6
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	1.2
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

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ANALYTICAL REPORT FOR SAMPLE No. EL4946

EPA METHOD 8240

Target Analyte Results

Dil. factor	1
% Moisture	7.49

Field ID: B07KQO
File ID: PD45EL4946
DataChem Set ID: S92-0859JJ

Sponsor: WESTINGHOUSE-HANFORD
Date of Analysis: 11/13/92 4:40:00
Date Received: 11/05/92

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	11 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.: EL4941

EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Sponsor: WESTINGHOUSE HANFORD DCL SET ID: S92-0859-IJ

File ID: GD11EL4941 Date Extracted: 11/11/92

FIELD No.:B07GP0 Analysis Date: 12/07/92

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.: EL4941

EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Field Sample ID:B07GP0

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		4.0E+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.

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ANALYTICAL REPORT FOR SAMPLE No.: EL4941

EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Field Sample ID:B07GP0

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

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ANALYTICAL REPORT FOR SAMPLE No.: EL4941

NON-TARGET ANALYTE RESULTS
Additional Semi-Volatiles

SET ID: S92-0859-IJ

Field samp ID: B07GP0

Cas. No	COMPOUND	Scan No.	Results ug/Kg	Qlfr
0-00-0	UNKNOWN BROMINATED PYRIMIDINEDI	1485	2.6E+02	EN
0-00-0	ALKANE @ C24	1729	2.4E+02	EN
0-00-0	ALKANE @ C25	1781	3.7E+02	EN
0-00-0	ALKANE @ C26	1832	4.7E+02	EN
0-00-0	ALKANE @ C27	1887	6.4E+02	EN
0-00-0	ALKANE @ C28	1952	6.4E+02	EN
0-00-0	ALKANE @ C29	2028	1.0E+03	EN
0-00-0	ALKANE @ C30	2119	6.7E+02	EN
0-00-0	ALKANE @ C31	2229	7.8E+02	EN
0-00-0	ALKANE @ C32	2363	3.9E+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.

6/14/93

9613444.1478

ANALYTICAL REPORT FOR SAMPLE No.: EL4942

EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Sponsor: WESTINGHOUSE HANFORD DCL SET ID: S92-0859-IJ

File ID: GE5EL4942 Date Extracted: 11/11/92

FIELD No.:B07GP2 Analysis Date: 12/08/92

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	8.4E+02
91-58-7	2-chloronaphthalene	U	3.5E+02
88-74-4	2-nitroaniline	U	8.4E+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	8.4E+02
83-32-9	acenaphthene	U	3.5E+02
51-28-5	2,4-dinitrophenol	U	8.4E+02
100-02-7	4-nitrophenol	U	8.4E+02
132-64-9	dibenzofuran	U	3.5E+02

See footnotes on page 4.

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ANALYTICAL REPORT FOR SAMPLE No.: EL4942

EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Field Sample ID:B07GP2

Cas. No	COMPOUND	QLFR	RESULTS ug/Kg
121-14-2	2,4-dinitrotoluene	U	3.5E+02
84-66-2	diethyl phthalate	U	3.5E+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	8.4E+02
534-52-1	2-methyl-4,6-dinitrophenol	U	8.4E+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	5.3E+03
118-74-1	hexachlorobenzene	U	3.5E+02
87-86-5	pentachlorophenol	U	8.4E+02
58-89-9	.gamma.-BHC	U	1.1E+03
85-01-8	phenanthrene	U	3.5E+02
120-12-7	anthracene	U	3.5E+02
319-86-8	delta-BHC	U	5.3E+03
76-44-8	heptachlor	U	5.3E+03
84-74-2	di-n-butyl phthalate	J	1.1E+02
309-00-2	aldrin	U	5.3E+03
1024-57-3	heptachlor epoxide	U	5.3E+03
206-44-0	fluoranthene	U	3.5E+02
129-00-0	pyrene	U	3.5E+02
959-98-8	endosulfan I	U	5.3E+03
72-55-9	4,4'DDE	U	5.3E+03
60-57-1	dieldrin	U	5.3E+03
7421-93-4	endrin aldehyde	U	5.3E+03
72-20-8	endrin	U	5.3E+03
72-54-8	4,4'DDD	U	5.3E+03
33213-65-9	endosulfan II	U	5.3E+03
85-68-7	butylbenzylphthalate	U	3.5E+02
50-29-3	4,4'DDT	U	5.3E+03
1031-07-8	endosulfan sulfate	U	5.3E+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	3.5E+02
117-81-7	bis(2-ethylhexyl)phthalate	J	1.1E+02
218-01-9	chrysene	U	3.5E+02
117-84-0	di-n-octylphthalate	U	3.5E+02

See footnotes on page 4.

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ANALYTICAL REPORT FOR SAMPLE No.: EL4942

EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Field Sample ID:B07GP2

Cas. No	COMPOUND	QLFR	RESULTS ug/Kg
205-99-2	benzo(b)fluoranthene	U	3.5E+02
207-08-9	benzo(k)fluoranthene	U	3.5E+02
50-32-8	benzo(a)pyrene	U	3.5E+02
193-39-5	indeno(1,2,3-cd)pyrene	U	3.5E+02
53-70-3	dibenzo(a,h)anthracene	U	3.5E+02
191-24-2	benzo(g,h,i)perylene	U	3.5E+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

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ANALYTICAL REPORT FOR SAMPLE No.: EL4942

NON-TARGET ANALYTE RESULTS
Additional Semi-Volatiles

SET ID: S92-0859-IJ

Field samp ID: B07GP2

Cas. No	COMPOUND	Scan No.	Results ug/Kg	Qlfr
0-00-0	ALKANE @ C29	2028	2.1E+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.

6/14/93

9613444.1482

ANALYTICAL REPORT FOR SAMPLE No.: EL4943

EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Sponsor: WESTINGHOUSE HANFORD DCL SET ID: S92-0859-IJ

File ID: GE6EL4943 Date Extracted: 11/11/92

FIELD No.:B07GP3 Analysis Date: 12/08/92

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.: EL4943

EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Field Sample ID:B07GP3

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	J	9.1E+01
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.

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ANALYTICAL REPORT FOR SAMPLE No.: EL4943

EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Field Sample ID:B07GP3

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

RC 6/14/93

9613444.1485

ANALYTICAL REPORT FOR SAMPLE No.: EL4943

NON-TARGET ANALYTE RESULTS
Additional Semi-Volatiles

SET ID: S92-0859-IJ

Field samp ID: B07GP3

Cas. No	COMPOUND	Scan No.	Results ug/Kg	Qlfr
~~111-02-4~~	~~SQUALENE~~	~~1983~~	~~1.6E+02~~	~~EN~~ R
0-00-0	ALKANE @ C29	2027	2.5E+02	EN
0-00-0	ALKANE @ C31	2228	1.8E+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.

6/14/93

9613444.1486

ANALYTICAL REPORT FOR SAMPLE No.: EL4944

EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Sponsor: WESTINGHOUSE HANFORD DCL SET ID: S92-0859-IJ

File ID: GE7EL4944 Date Extracted: 11/11/92

FIELD No.:B07KP7 Analysis Date: 12/08/92

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	8.9E+02
91-58-7	2-chloronaphthalene	U	3.7E+02
88-74-4	2-nitroaniline	U	8.9E+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	8.9E+02
83-32-9	acenaphthene	U	3.7E+02
51-28-5	2,4-dinitrophenol	U	8.9E+02
100-02-7	4-nitrophenol	U	8.9E+02
132-64-9	dibenzofuran	U	3.7E+02

See footnotes on page 4.

6/14/93

9613444.1487

ANALYTICAL REPORT FOR SAMPLE No.: EL4944

EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Field Sample ID:B07KP7

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	8.9E+02
534-52-1	2-methyl-4,6-dinitrophenol	U	8.9E+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	8.9E+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	U	3.7E+02
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.

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ANALYTICAL REPORT FOR SAMPLE No.: EL4944

EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Field Sample ID:B07KP7

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

RCG 6/14/93

9613444.1489

ANALYTICAL REPORT FOR SAMPLE No.: EL4944

NON-TARGET ANALYTE RESULTS
Additional Semi-Volatiles

SET ID: S92-0859-IJ

Field samp ID: B07KP7

Cas. No	COMPOUND	Scan No.	Results ug/Kg	Qlfr
~~0-00-0~~	~~ALDOL CONDENSATION PRODUCT~~	~~558~~	~~4.4E+02~~	~~ENAB~~ R
0-00-0	ALKANE @ C29	2028	2.8E+02	EN
0-00-0	ALKANE @ C31	2229	1.9E+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.

6/14/93

9613444.1490

ANALYTICAL REPORT FOR SAMPLE No.: EL4945

EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Sponsor: WESTINGHOUSE HANFORD DCL SET ID: S92-0859-IJ

File ID: GE8EL4945 Date Extracted: 11/11/92

FIELD No.:B07KP9 Analysis Date: 12/08/92

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	8.4E+02
91-58-7	2-chloronaphthalene	U	3.5E+02
88-74-4	2-nitroaniline	U	8.4E+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	8.4E+02
83-32-9	acenaphthene	U	3.5E+02
51-28-5	2,4-dinitrophenol	U	8.4E+02
100-02-7	4-nitrophenol	U	8.4E+02
132-64-9	dibenzofuran	U	3.5E+02

See footnotes on page 4.

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9613444.1491

ANALYTICAL REPORT FOR SAMPLE No.: EL4945

EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Field Sample ID:B07KP9

Cas. No	COMPOUND	QLFR	RESULTS ug/Kg
121-14-2	2,4-dinitrotoluene	U	3.5E+02
84-66-2	diethyl phthalate	U	3.5E+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	8.4E+02
534-52-1	2-methyl-4,6-dinitrophenol	U	8.4E+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	5.3E+03
118-74-1	hexachlorobenzene	U	3.5E+02
87-86-5	pentachlorophenol	U	8.4E+02
58-89-9	.gamma.-BHC	U	1.1E+03
85-01-8	phenanthrene	U	3.5E+02
120-12-7	anthracene	U	3.5E+02
319-86-8	delta-BHC	U	5.3E+03
76-44-8	heptachlor	U	5.3E+03
84-74-2	di-n-butyl phthalate	U	3.5E+02
309-00-2	aldrin	U	5.3E+03
1024-57-3	heptachlor epoxide	U	5.3E+03
206-44-0	fluoranthene	U	3.5E+02
129-00-0	pyrene	U	3.5E+02
959-98-8	endosulfan I	U	5.3E+03
72-55-9	4,4'DDE	U	5.3E+03
60-57-1	dieldrin	U	5.3E+03
7421-93-4	endrin aldehyde	U	5.3E+03
72-20-8	endrin	U	5.3E+03
72-54-8	4,4'DDD	U	5.3E+03
33213-65-9	endosulfan II	U	5.3E+03
85-68-7	butylbenzylphthalate	U	3.5E+02
50-29-3	4,4'DDT	U	5.3E+03
1031-07-8	endosulfan sulfate	U	5.3E+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	3.5E+02
117-81-7	bis(2-ethylhexyl)phthalate	U	3.5E+02
218-01-9	chrysene	U	3.5E+02
117-84-0	di-n-octylphthalate	U	3.5E+02

See footnotes on page 4.

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9613444.1492

ANALYTICAL REPORT FOR SAMPLE No.: EL4945

EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Field Sample ID:B07KP9

Cas. No	COMPOUND	QLFR	RESULTS ug/Kg
205-99-2	benzo(b)fluoranthene	U	3.5E+02
207-08-9	benzo(k)fluoranthene	U	3.5E+02
50-32-8	benzo(a)pyrene	U	3.5E+02
193-39-5	indeno(1,2,3-cd)pyrene	U	3.5E+02
53-70-3	dibenzo(a,h)anthracene	U	3.5E+02
191-24-2	benzo(g,h,i)perylene	U	3.5E+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.: EL4945

NON-TARGET ANALYTE RESULTS
Additional Semi-Volatiles

SET ID: S92-0859-IJ

Field samp ID: B07KP9

Cas. No	COMPOUND	Scan No.	Results ug/Kg	Qlfr
0-00-0	ALKANE @ C29	2028	2.5E+02	EN
0-00-0	ALKANE @ C31	2229	1.8E+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.

6/14/93

9613444.1494

ANALYTICAL REPORT FOR SAMPLE No.: EL4946

EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Sponsor: WESTINGHOUSE HANFORD DCL SET ID: S92-0859-IJ

File ID: GE9EL4946 Date Extracted: 11/11/92

FIELD No.:B07KQ0 Analysis Date: 12/08/92

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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9613444.1495

ANALYTICAL REPORT FOR SAMPLE No.: EL4946

EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Field Sample ID:B07KQ0

Cas. No	COMPOUND	QLFR	RESULTS ug/Kg
121-14-2	2,4-dinitrotoluene	U	3.5E+02
84-66-2	diethyl phthalate	U	3.5E+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	U	3.5E+02
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	U	3.5E+02
129-00-0	pyrene	U	3.5E+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	U	3.5E+02
117-81-7	bis(2-ethylhexyl)phthalate	J	8.2E+01
218-01-9	chrysene	U	3.5E+02
117-84-0	di-n-octylphthalate	U	3.5E+02

See footnotes on page 4.

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9613444.1496

ANALYTICAL REPORT FOR SAMPLE No.: EL4946

EPA METHOD 8270, REV. 3
TARGET ANALYTE RESULTS

Field Sample ID:B07KQ0

Cas. No	COMPOUND	QLFR	RESULTS ug/Kg
205-99-2	benzo(b)fluoranthene	U	3.5E+02
207-08-9	benzo(k)fluoranthene	U	3.5E+02
50-32-8	benzo(a)pyrene	U	3.5E+02
193-39-5	indeno(1,2,3-cd)pyrene	U	3.5E+02
53-70-3	dibenzo(a,h)anthracene	U	3.5E+02
191-24-2	benzo(g,h,i)perylene	U	3.5E+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

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9613444.1497

DATA CHEM LABORATORIES

ANALYTICAL REPORT

Date DEC 07 1992
Agency Identification Number S92-0859-FJ
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 ERA Date of Collection October 30, 1992

Date Samples Received at Laboratory November 05, 1992

Analysis

Method of Analysis EPA 8080

Date(s) of Analysis December 03, 1992

6/14/93

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-90985-1	QC-90985-1	SOIL	8.6	ND*	ND*	ND*	9.4	ND*	ND*	ND*
BL-90985-1	BL-90985-1	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07GP0	EL 4941	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07GP2	EL 4942	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07GP2MS	EL 4942MS	SOIL	17	ND*	ND*	ND*	16	ND*	ND*	ND*
B07GP2MSD	EL 4942MSD	SOIL	16	ND*	ND*	ND*	15	ND*	ND*	ND*
B07GP3	EL 4943	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07KP7	EL 4944	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	34
B07KP9	EL 4945	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07KQ0	EL 4946	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.

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Analyst: Guangyue Liu

Vicki Hoe Lin Tsai

Reviewer: Vicki Hoe-Lin Tsai

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DATA CHEM LABORATORIES

ANALYTICAL REPORT

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Page 2 of 5
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Date DEC 07 1992
Agency Identification Number S92-0859-FJ
Account No. 3534C

Westinghouse Hanford Company
2355 Stevens Drive
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Attention: Jeanette Duncan

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Sampling Collection and Shipment

Sampling Site North Slope ERA Date of Collection October 30, 1992

Date Samples Received at Laboratory November 05, 1992

Analysis

Method of Analysis EPA 8080

Date(s) of Analysis December 03, 1992

6/14/93

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-90985-1	QC-90985-1	SOIL	19	27	ND*	ND*	ND*	35	ND*	8.0
BL-90985-1	BL-90985-1	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07GP0	EL 4941	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07GP2	EL 4942	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07GP2MS	EL 4942MS	SOIL	31	35	ND*	ND*	ND*	47	ND*	16
B07GP2MSD	EL 4942MSD	SOIL	29	33	ND*	ND*	ND*	44	ND*	14
B07GP3	EL 4943	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07KP7	EL 4944	SOIL	36	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07KP9	EL 4945	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07KQ0	EL 4946	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.
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Analysis

Method of Analysis EPA 8080

Date(s) of Analysis December 03, 1992

6/14/93

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-90985-1	QC-90985-1	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
BL-90985-1	BL-90985-1	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07GP0	EL 4941	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07GP2	EL 4942	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07GP2MS	EL 4942MS	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07GP2MSD	EL 4942MSD	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07GP3	EL 4943	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07KP7	EL 4944	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07KP9	EL 4945	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07KQ0	EL 4946	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
* Limit of Detection			50	400	100	200	200	100	100	100

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

** See comment on last page.
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Sampling Site North Slope ERA Date of Collection October 30, 1992

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Analysis

Method of Analysis EPA 8080

Date(s) of Analysis December 03, 1992

6/14/93

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-90985-1	QC-90985-1	SOIL	ND*	ND*	28	9.3					
BL-90985-1	BL-90985-1	SOIL	ND*	ND*	27	6.4					
B07GP0	EL 4941	SOIL	ND*	ND*	43	31					
B07GP2	EL 4942	SOIL	ND*	ND*	41	33					
B07GP2MS	EL 4942MS	SOIL	ND*	ND*	38	31					
B07GP2MSD	EL 4942MSD	SOIL	ND*	ND*	39	29					
B07GP3	EL 4943	SOIL	ND*	ND*	32	25					
B07KP7	EL 4944	SOIL	ND*	ND*	39	28					
B07KP9	EL 4945	SOIL	ND*	ND*	35	27					
B07KQ0	EL 4946	SOIL	ND*	ND*	34	26					
* Limit of Detection			100	100	SURR.	SURR.					

† See comment on last page.
ND Parameter not detected.
NR Parameter not requested.
** See comment on last page.
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Sampling Collection and Shipment

Sampling Site North Slope ERA Date of Collection October 30, 1992

Date Samples Received at Laboratory November 05, 1992

Analysis

Method of Analysis EPA 8150

Date(s) of Analysis December 14, 1992

6/14/93

Analytical Results

Field Sample Number	Laboratory Number	Sample Type	2,4-D µG/G	2,4-DB µG/G	2,4,5-T µG/G	2,4,5-TP (Silvex) µG/G	Dalapon µG/G	Dicamba µG/G	Dichloroprop µG/G	Dinoseb µG/G
QC-90982-1	QC-90982-1	SOIL	.14	ND*	.058	.076	ND*	ND*	ND*	ND*
BL-90982-1	BL-90982-1	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07GP0	EL 4941	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07GP2	EL 4942	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07GP3	EL 4943	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07KP7	EL 4944	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07KP9	EL 4945	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07KP9MS	EL 4945MS	SOIL	.036	ND*	.038	.036	ND*	ND*	ND*	ND*
B07KP9MSD	EL 4945MSD	SOIL	.036	ND*	.035	.039	ND*	ND*	ND*	ND*
B07KQ0	EL 4946	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
* Limit of Detection			.02	.1	.01	.01	.1	.01	.02	.02

† 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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Sampling Collection and Shipment

Sampling Site North Slope ERA Date of Collection October 30, 1992

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Analysis

Method of Analysis EPA 8150

Date(s) of Analysis December 14, 1992

6/14/93

Analytical Results

Field Sample Number	Laboratory Number	Sample Type	MCPA µG/G	MCPP µG/G	DCAA µG/G					
QC-90982-1	QC-90982-1	SOIL	ND*	ND*	.081					
BL-90982-1	BL-90982-1	SOIL	ND*	ND*	.082					
B07GP0	EL 4941	SOIL	ND*	ND*	.069					
B07GP2	EL 4942	SOIL	ND*	ND*	.091					
B07GP3	EL 4943	SOIL	ND*	ND*	.058					
B07KP7	EL 4944	SOIL	ND*	ND*	.076					
B07KP9	EL 4945	SOIL	ND*	ND*	.080					
B07KP9MS	EL 4945MS	SOIL	ND*	ND*	.083					
B07KP9MSD	EL 4945MSD	SOIL	ND*	ND*	.077					
B07KQ0	EL 4946	SOIL	ND*	ND*	.089					
* Limit of Detection			5	5	SURR					

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NR Parameter not requested.

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Sampling Collection and Shipment

Sampling Site North Slope ERA Date of Collection October 30, 1992

Date Samples Received at Laboratory November 05, 1992

Analysis

Method of Analysis EPA 8141

Date(s) of Analysis November 13, 1992

6/14/93

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-90986-1	QC-90986-1	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	82
BL-90986-1	BL-90986-1	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07GP0	EL 4941	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07GP2	EL 4942	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07GP3	EL 4943	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07KP7	EL 4944	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07KP9	EL 4945	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07KQ0	EL 4946	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
* Limit of Detection			6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7

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

Reviewer: Guangyue Liu

Laboratory Supervisor: Jose C. Danino

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Date DEC 03 1992
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Sampling Collection and Shipment

Sampling Site North Slope ERA Date of Collection October 30, 1992

Date Samples Received at Laboratory November 05, 1992

Analysis

Method of Analysis EPA 8141

Date(s) of Analysis November 13, 1992

6/14/93

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-90986-1	QC-90986-1	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	72	76
BL-90986-1	BL-90986-1	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07GP0	EL 4941	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07GP2	EL 4942	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07GP3	EL 4943	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07KP7	EL 4944	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07KP9	EL 4945	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07KQ0	EL 4946	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
* Limit of Detection			6.7	6.7	6.7	6.7	5.7	6.7	6.7	6.7

† 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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Sampling Collection and Shipment

Sampling Site North Slope ERA Date of Collection October 30, 1992

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Analysis

Method of Analysis EPA 8141

Date(s) of Analysis November 13, 1992

6/14/93

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-90986-1	QC-90986-1	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
BL-90986-1	BL-90986-1	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07GP0	EL 4941	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07GP2	EL 4942	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07GP3	EL 4943	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07KP7	EL 4944	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07KP9	EL 4945	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
B07KQ0	EL 4946	SOIL	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
* Limit of Detection			6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7

† 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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Analysis

Method of Analysis EPA 8141

Date(s) of Analysis November 13, 1992 6/14/93

Analytical Results

Field Sample Number	Laboratory Number	Sample Type	TEPP ug/kg GC/FPD							
QC-90986-1	QC-90986-1	SOIL	ND*							
BL-90986-1	BL-90986-1	SOIL	ND*							
B07GP0	EL 4941	SOIL	ND*							
B07GP2	EL 4942	SOIL	ND*							
B07GP3	EL 4943	SOIL	ND*							
B07KP7	EL 4944	SOIL	ND*							
B07KP9	EL 4945	SOIL	ND*							
B07KQ0	EL 4946	SOIL	ND*							
* Limit of Detection			6.7							

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

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ENVIRONMENTAL SOIL REPORT

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Sampling Collection and Shipment

Sampling Site North Slope ERA Date of Collection October 30, 1992

Date Samples Received at Laboratory November 05, 1992

6/14/93

Analytical Results

Parameter Name / Analysis Date / Units / Method / Prep Method	Field Number / Lab Number	QC-90977-1 / QC-90977-1	BL-90977-1 / BL-90977-1	B07GP0 / EL 4941	B07GP0MS / EL 4941MS	B07GP0MD / EL 4941MD	B07GP2 / EL 4942	B07GP3 / EL 4943	B07KP7 / EL 4944
Aluminum (Al) 12/15/1992 µg/gram 6010 [1] 3050 [1]		380	ND*	15000	13000	14000	19000	20000	19000
Antimony (Sb) 12/15/1992 µg/gram 6010 [1] 3050 [1]		180	ND*	ND*	ND*	ND*	ND*	ND*	ND*
Arsenic (As) 12/15/1992 µg/gram 6010 [1] 3050 [1]		980	ND*	ND*	200	ND*	ND*	ND*	ND*
Barium (Ba) 12/15/1992 µg/gr m 6010 [1] 3050 [1]		5.	ND*	130	320	120	130	130	150
Beryllium (Be) 12/15/1992 µg/gram 6010 [1] 3050 [1]		19.	ND*	ND*	5.	ND*	ND*	ND*	ND*
Cadmium (Cd) 12/15/1992 µg/gram 6010 [1] 3050 [1]		43.	ND*	ND*	4.	ND*	ND*	ND*	ND*
Calcium (Ca) 12/15/1992 µg/gram 6010 [1] 3050 [1]		180000	20	13000	12000	13000	17000	18000	16000
Chromium (Cr) 12/15/1992 µg/gram 6010 [1] 3050 [1]		100	ND*	23.	40.	21.	25.	25.	26.

† 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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Analyst: Henry F. Lin

Reviewer: John T. Kershisnik

Laboratory Supervisor: Brent E. Stephens

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Analytical Results

Parameter Name / Analysis Date / Method / Prep Method / Units	Field Number / Lab Number	QC-90977-1 / QC-90977-1	BL-90977-1 / BL-90977-1	B07GP0 / EL 4941	B07GP0MS / EL 4941MS	B07GP0MD / EL 4941MD	B07GP2 / EL 4942	B07GP3 / EL 4943	B07KP7 / EL 4944
Cobalt (Co) 12/15/1992 6010 [1] 3050 [1]	µg/gram	140	ND*	8.	56.	8.	10.	10.	10.
Copper (Cu) 12/15/1992 6010 [1] 3050 [1]	µg/gram	6600	ND*	35.	42.	21.	43.	31.	24.
Iron (Fe) 12/15/1992 6010 [1] 3050 [1]	µg/gram	22000	ND*	29000	23000	23000	26000	25000	26000
Lead (Pb) 12/15/1992 6010 [1] 3050 [1]	µg/gram	210	ND*	55.	85.	27.	17.	15.	19.
Lithium (Li) 12/15/1992 6010 [1] 3050 [1]	µg/gram	ND*	ND*	16.	15.	15.	21.	20.	21.
Magnesium (Mg) 12/15/1992 6010 [1] 3050 [1]	µg/gram	120000	ND*	7300	6900	7100	9100	8800	9000
Manganese (Mn) 12/15/1992 6010 [1] 3050 [1]	µg/gram	200	ND*	470	470	420	500	460	500
Molybdenum (Mo) 12/15/1992 6010 [1] 3050 [1]	µg/gram	50.	ND*	ND*	ND*	ND*	2.	ND*	ND*
Nickel (Ni) 12/15/1992 6010 [1] 3050 [1]	µg/gram	57.	ND*	18.	67.	17.	22.	21.	23.
Phosphorus (P) 12/15/1992 6010 [1] 3050 [1]	µg/gram	550	ND*	610	620	610	590	600	580
Potassium (K) 12/15/1992 6010 [1] 3050 [1]	µg/gram	ND*	ND*	2700	2400	2500	3000	3100	2800
Selenium (Se) 12/15/1992 6010 [1] 3050 [1]	µg/gram	40	ND*	ND*	200	ND*	ND*	ND*	ND*
Silver (Ag) 12/15/1992 6010 [1] 3050 [1]	µg/gram	22.	ND*	ND*	5.	ND*	ND*	ND*	ND*
Sodium (Na) 12/15/1992 6010 [1] 3050 [1]	µg/gram	94.	ND*	540	450	470	790	560	600
Strontium (Sr) 12/15/1992 6010 [1] 3050 [1]	µg/gram	55.	ND*	54.	50.	53.	65.	64.	60.

* 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

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Page 3 of 7
Part 1 of 2

Date DEC 21 1992

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6/14/9

Analytical Results

Parameter Name / Analysis Date / Units / Method / Prep Method	Field Number / Lab Number	QC-90977-1 / QC-90977-1	BL-90977-1 / BL-90977-1	B07GP0 / EL 4941	B07GP0MS / EL 4941MS	B07GP0MD / EL 4941MD	B07GP2 / EL 4942	B07GP3 / EL 4943	B07KP7 / EL 4944
Thallium (Tl) 12/15/1992 µg/gram 6010 [1] 3050 [1]		140	ND*	ND*	ND*	ND*	ND*	ND*	ND*
Vanadium (V) 12/15/1992 µg/gram 6010 [1] 3050 [1]		63.	ND*	42.	91.	43.	44.	43.	44.
Zinc (Zn) 12/15/1992 µg/gram 6010 [1] 3050 [1]		160	ND*	87.	120	96.	62.	61.	73.

* See comment on last page.
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ENVIRONMENTAL SOIL REPORT

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Page 4 of 7
Part 2 of 2

Date DEC 21 1992

Agency Identification Number S92-0859-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 ERA Date of Collection October 30, 1992

Date Samples Received at Laboratory November 05, 1992

6/14/93

Analytical Results

Parameter Name / Analysis Date / Method	Units / Prep Method	Field Number / Lab Number	B07KP9 EL 4945	B07KQ0 EL 4946						* Limit of Detection
Aluminum (Al) 12/15/1992 6010 [1]	µg/gram 3050 [1]		20000	17000						20
Antimony (Sb) 12/15/1992 6010 [1]	µg/gram 3050 [1]		ND*	ND*						20
Arsenic (As) 12/15/1992 6010 [1]	µg/gram 3050 [1]		ND*	ND*						50
Barium (Ba) 12/15/1992 6010 [1]	µg/gram 3050 [1]		150	200						2.
Beryllium (Be) 12/15/1992 6010 [1]	µg/gram 3050 [1]		ND*	ND*						1.
Cadmium (Cd) 12/15/1992 6010 [1]	µg/gram 3050 [1]		ND*	ND*						1.
Calcium (Ca) 12/15/1992 6010 [1]	µg/gram 3050 [1]		17000	16000						10
Chromium (Cr) 12/15/1992 6010 [1]	µg/gram 3050 [1]		25.	25.						2.

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ENVIRONMENTAL SOIL REPORT

Date DEC 21 1992

Agency Identification Number S92-0859-AJ

Account No. 3534C

Analytical Results

Parameter Name / Analysis Date / Units / Method / Prep Method	Field Number / Lab Number	B07KP9 EL 4945	B07KQ0 EL 4946						* Limit of Detection
Cobalt (Co) 12/15/1992 µg/gram 6010 [1] 3050 [1]		11.	10.						2.
Copper (Cu) 12/15/1992 µg/gram 6010 [1] 3050 [1]		26. U	21. U		6/11/93				2.
Iron (Fe) 12/15/1992 µg/gram 6010 [1] 3050 [1]		26000	24000						10
Lead (Pb) 12/15/1992 µg/gram 6010 [1] 3050 [1]		15.	13.						2.
Lithium (Li) 12/15/1992 µg/gram 6010 [1] 3050 [1]		21.	19.						2.
Magnesium (Mg) 12/15/1992 µg/gram 6010 [1] 3050 [1]		9200	8500						10
Manganese (Mn) 12/15/1992 µg/gram 6010 [1] 3050 [1]		510	460						1.
Molybdenum (Mo) 12/15/1992 µg/gram 6010 [1] 3050 [1]		ND*	ND*						2.
Nickel (Ni) 12/15/1992 µg/gram 6010 [1] 3050 [1]		22.	20.						3.
Phosphorus (P) 12/15/1992 µg/gram 6010 [1] 3050 [1]		610	600						50
Potassium (K) 12/15/1992 µg/gram 6010 [1] 3050 [1]		3000	2700						200
Selenium (Se) 12/15/1992 µg/gram 6010 [1] 3050 [1]		ND*	ND*						30
Silver (Ag) 12/15/1992 µg/gram 6010 [1] 3050 [1]		ND*	ND*						2.
Sodium (Na) 12/15/1992 µg/gram 6010 [1] 3050 [1]		570	610						20
Strontium (Sr) 12/15/1992 µg/gram 6010 [1] 3050 [1]		62.	62.						2.

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Account No. 3534C

Analytical Results

Parameter Name / Analysis Date / Units / Method / Prep Method	Field Number / Lab Number	B07KP9 EL 4945	B07KQ0 EL 4946						* Limit of Detection
Thallium (Tl) 12/15/1992 µg/gram 6010 [1] 3050 [1]		ND*	ND*						50
Vanadium (V) 12/15/1992 µg/gram 6010 [1] 3050 [1]		43.	43.						2.
Zinc (Zn) 12/15/1992 µg/gram 6010 [1] 3050 [1]		65.	58.						2.

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Date DEC 21 1992

Agency Identification Number S92-0859-BJ
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Westinghouse Hanford Company
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MSIN T6-08
Richland, WA 99352
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Sampling Collection and Shipment

Sampling Site North Slope ERA Date of Collection October 30, 1992

Date Samples Received at Laboratory November 05, 1992

6/14/93

Analytical Results

Parameter Name / Analysis Date / Method / Prep Method	Units	Field Number / Lab Number	QC-90978-1 / QC-90978-1	BL-90978-1 / BL-90978-1	B07GP0 / EL 4941	B07GP0MS / EL 4941MS	B07GP0MD / EL 4941MD	B07GP2 / EL 4942	B07GP3 / EL 4943	B07KP7 / EL 4944
Arsenic (As) 12/17/1992 7060 [1] 3050 [1]	µg/g		1100	ND*	7.2	***	7.2	8.5	9.2	5.1
Lead (Pb) 12/14/1992 7421 [1] 3050 [1]	µg/g		260	ND*	38.	34.***	34.	13.	11.	21.
Selenium (Se) 12/15/1992 7740 [1] 3050 [1]	µg/g		44.	ND*	ND*	0.7	ND*	ND*	ND*	ND*
Thallium (Tl) 12/16/1992 7841 [1] 3050 [1]	µg/g		41.	ND*	ND*	5.1	ND*	ND*	ND*	ND*

† See comment on last page.
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1 Analyses completed on or before this date.
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[ ] Method Reference (See comments page.)

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Analyst: Robert B. Copenhafer

Reviewer: Jeannine M. Chan

Laboratory Supervisor: Brent E. Stephens

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Date DEC 21 1992
Agency Identification Number S92-0859-BJ
Account No. 3534C

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Sampling Collection and Shipment

Sampling Site North Slope ERA Date of Collection October 30, 1992

Date Samples Received at Laboratory November 05, 1992

6/14/93

Analytical Results

Parameter Name / Analysis Date / Method / Prep Method	Units	Field Number / Lab Number	B07KP9 EL 4945	B07KQ0 EL 4946						% Limit of Detection
Arsenic (As) 12/17/1992 7060 [1] 3050 [1]	µg/g		8.8	8.5						0.5
Lead (Pb) 12/14/1992 7421 [1] 3050 [1]	µg/g		14.	11.						0.5
Selenium (Se) 12/15/1992 7740 [1] 3050 [1]	µg/g		ND*	ND*						0.5
Thallium (Tl) 12/16/1992 7841 [1] 3050 [1]	µg/g		ND*	ND*						0.5

† See comment on last page.
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Date DEC 02 1992
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Sampling Collection and Shipment

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Date Samples Received at Laboratory November 05, 1992

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Analytical Results

Parameter Name / Analysis Date / Units / Method / Prep Method	Field Number / Lab Number	BL-90979-1 / BL-90979-1	QC-90979-1 / QC-90979-1	B07GP0 / EL 4941	B07GP0MD / EL 4941MD	B07GP0MS / EL 4941MS	B07GP2 / EL 4942	B07GP3 / EL 4943	B07KP7 / EL 4944
Mercury (Hg) 11/25/1992 7471 [1]	µg/g	ND*	2.4	ND*	ND*	0.6	ND*	ND*	ND*

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[ ] Method Reference (See comments page.)

Analyst: Boyd E. Neilson for BEN

Reviewer: Todd Schmanski for TS

Laboratory Supervisor: Michael P. Beesley for MPB

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Date DEC 02 1992
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Sampling Collection and Shipment

Sampling Site North Slope ERA Date of Collection October 30, 1992

Date Samples Received at Laboratory November 05, 1992

6/14/93

Analytical Results

Parameter Name / Analysis Date / Method / Prep Method	Units	Field Number / Lab Number	B07KP9 EL 4945	B07KQ0 EL 4946						* Limit of Detection
Mercury (Hg) 11/25/1992 7471 [1]	µg/g		ND*	ND*						0.2

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Date JAN 0 8 1993

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2355 Stevens Drive
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Sampling Collection and Shipment

Sampling Site North Slope ERA Date of Collection October 30, 1992

Date Samples Received at Laboratory November 05, 1992

Analytical Results

Parameter Name / Analysis Date / Method / Prep Method	Units	Field Number / Lab Number	B07GP0 EL 4941	B07GP2 EL 4942	B07GP3 EL 4943	B07KP7 EL 4944	B07KP9 EL 4945	B07KQ0 EL 4946		< Limit of Detection
Fluoride (F) 11/10/1992 300.0 [1]	µg/g		3.	5.	3.	5.	5.	5.		1.
Chloride (Cl) 11/10/1992 300.0 [1]	µg/g		140	75.	78.	9.	4.	28.		1.
Sulfate (SO_4) 11/10/1992 300.0 [1]	µg/g		140	180	120	42.	45.	240		1.
Phosphate (PO_4-P) 11/10/1992 300.0 [1]	µg/g		ND*	ND*	ND*	ND*	ND*	ND*		4.
Nitrates (NO_3-N + NO_2-N) 11/27/1992 353.2 [1]	µg/g		16.	12.	2.	2.	ND*	1.		1.
Chromium VI 11/12/1992 7196 [2] 3060M [2]	µg/g		ND*	ND*	ND*	ND*	ND*	ND*		1.

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

Analyst: Dorene A. Kley

Reviewer: Michael E. Richmond

Laboratory Supervisor: Michael P. Beesley

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ENVIRONMENTAL SOIL REPORT

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Part 1 of 1

Date DEC 07 1992
Agency Identification Number S92-0859-EJ
Account No. 3534C

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Richland, WA 99352
Attention: Jeanette Duncan

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Telephone (509) 373-3225

Sampling Collection and Shipment

Sampling Site North Slope ERA Date of Collection October 30, 1992

Date Samples Received at Laboratory November 05, 1992

6/14/93

Analytical Results

Parameter Name / Analysis Date / Units / Method / Prep Method	Field Number / Lab Number	B07GP0 EL 4941	B07GP2 EL 4942	B07GP3 EL 4943	B07KP7 EL 4944	B07KP9 EL 4945	B07KQ0 EL 4946		* Limit of Detection
Total Petroleum Hydrocarbons 11/24/1992 418.1 [1] 3550 [2]	µg/g	ND*	ND*	ND*	ND*	ND*	ND*		10

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( ) 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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ATTACHMENT 2

DATA VALIDATION SUPPORTING DOCUMENTATION

DATA QUALIFICATION SUMMARY - FORM B-7

SDG: B07GP0-DAT-194	REVIEWER: TMS	DATE: 6/12/93	PAGE 1 OF 1
COMMENTS:			
COMPOUND	QUALIFIER	SAMPLES AFFECTED	REASON
Copper	U	B07KP9, B07KQ0	Contaminant found in Blank
Acetone	U	B07GP0	
	U	B07GP2	
	U	B07GP3	
	U	B07KP7	
	U	B07KP9	
	U	B07KQ0	

B07GP0-DAT-194

BLANK AND SAMPLE DATA SUMMARY - FORM B-3

SDG:	REVIEWER: T. Stapp	DATE: 6/11/93	PAGE 1 OF 1
COMMENTS: Includes Blanks from ICP metals and Volatile 8240 analyses.			

SAMPLE ID	COMPOUND	RESULT	Q	RT	UNITS	5X RESULT	10X RESULT	SAMPLES AFFECTED	QUALIFIER
CCB1	Copper	15.1				75.5		B07KP9	U
"	"							B07KQ0	U
MB 11/12	Acetone	24					240	B07GP0	22 U
							"	B07GP2	26 U
							"	B07GP3	22 U
MB 11/13		8.4					84	B07KP7	12 U
							"	B07KP9	10 U
							"	B07KQ0	11 U

6/12

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