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NSTC GREAT LAKES, IL
5090.3a

GAS VENT LIQUIDS SAMPLING LANDFILL 7 FORT SHERIDAN IL
5/1/1995
ENVIRONMENTAL SCIENCE & ENGINEERING, INC

21D

Note - April sampling was composited over 6 vents
- Dec sampling - 1 sample per rack of 6 vents

Gas Vent Liquids Sampling
Landfill 7
Fort Sheridan, Illinois

Contract No. DACA27-94-D-0002
Delivery Order 0008

Prepared for:
U.S. Army Corps of Engineers
Louisville District
January, 1995

Prepared by:
Environmental Science & Engineering, Inc.
Peoria, Illinois

May 1995

ESE Project No. 594-3447

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1.0 Introduction

This report presents the results and summarizes sampling information from sampling liquids in each of the six landfill gas vents at Landfill 7, Fort Sheridan. The liquids in each of these gas vents were sampled initially in December 1994. Additional sampling was completed on April 12, 1995 for constituents not sampled earlier that were determined to be necessary for a permit application to discharge recovered leachate to the local sanitary sewer system. The local sanitary sewer system flows to the North Shore Sanitary District, Gurnee, Illinois. Discharge to the North Shore Sanitary District has been identified as an option for disposal of leachate collected as a result of the closure of Landfills 6 and 7.

The six existing gas vents in Landfill 7 provide access to collect liquid samples. The six gas vents are distributed across the landfill. Liquid in each of the gas vents was sampled on December 2, 1994, to provide information necessary for evaluation of treatment or pretreatment options, for use in treatment system process evaluation, and for use in discussions and/or permitting activities with agencies and, potentially, the North Shore Sanitary District. Based on discussions with North Shore Sanitary District, it was determined that additional sampling information would be required if an application were to be submitted. Based on the initial sampling results, additional information beneficial to treatment system evaluation and design was also identified.

This document describes sampling activities and presents laboratory results from both the December 2, 1994, and April 12, 1995, sampling events. This work was completed by Environmental Science & Engineering, Inc. under contract with the U.S. Army Corps of Engineers, Louisville District (Contract No. DACA27-94-D-0002, Delivery Order 0008). A sampling report was prepared and submitted the U.S. Army Corps of Engineers in January 1995 for the initial sampling.

2.0 Sampling Information

Gas Vents in Landfill 7 are passive vents that were installed around 1977-78, prior to the intended closure of Landfill 7. Details presented in the 1980 closure plans show these vents were constructed by boring a 24-inch diameter hole and backfilling with coarse aggregate around a 6-inch diameter perforated PVC riser. The riser is indicated to be perforated from top to bottom. Available information suggests that the boreholes were extended to the bottom of the fill. Measured depths agree with depths given on 1980 closure design plans. The riser extends to the ground surface and is enclosed within an 8-inch diameter protective steel pipe. The steel casing pipe extends 60 inches above a ground-level concrete protective collar. Sheet metal hoods were installed over the tops of the steel pipe. At present, the hood is missing from Gas Vent number 6 (GV-6) and the GV-5 hood is damaged and loose. GV-1 is located at the west end of Landfill 7 and the vents are numbered up to GV-6, moving in an easterly direction. Filling of the landfill began on the east end near Lake Michigan in the early 1950's and ended in 1978 at the west end.

Data from the December 2, 1994 samples is provided in Appendix A. Data from the April 12, 1995, sampling is provided in Appendix B. No information has been found that indicates that the liquid within the gas vents had been sampled prior to this work. Air emissions from the vents were sampled in 1991 as part of the Fort Sheridan Remedial Investigation project. Results of that sampling effort are included in Appendix C for information.

2.1 December 2, 1994 Sampling

Prior to sampling at each vent, the liquid level was measured using an electronic water tape. The physical characteristics of the gas vents and water levels at times of sampling are summarized in Table 1.

The vents were not purged as would normally be done for sampling of monitoring wells. A large amount of liquid would have been generated by purging due to the 24-inch diameter borehole and considerable depth of liquid in the vents.

A grab sample was collected from the surface using a bottom-loading disposal PVC bailer for analysis of oil and grease. That sample was collected first, prior to any disturbance of the liquid column.

Stratification of constituents in the leachate was expected to be present in the vents. To obtain representative samples, the following sampling procedures were used. After collection of the oil and grease sample with a bottom loading bailer, the water column was mixed using a 4-inch diameter, 5-ft long PVC pipe surge plug. The surge plug was lowered to the bottom and raised 4-5 times in each vent. The mixed liquid column was sampled at a point from approximately 5-10 ft from the bottom. Samples were obtained using a Delrin Wattera® hand pump fitted with 0.625-inch inside diameter high-density polyethylene tubing. The tubing was placed through lengths of ¾-inch PVC pipe to maintain a straight length to allow greater accuracy in the location of the intake.

During an initial sampling effort (November 22, 1994), the sampling team was unable to get the tubing into the vents in a manner to sample at the intended vertical locations and sampling was completed using bailers. It was subsequently determined that the samples collected with bailers would not be representative of the entire stratified column. A resampling trip was performed on December 2, 1994 to complete the sampling as described above. Only the oil and grease samples from the first sampling trip were retained for analyses. The oil and grease values, being taken from the top of the column in each vent with a bottom loading bailer, are expected to be higher than the average concentration in the column.

The 4-inch diameter PVC surge plugs were dedicated to each vent. Bailers used for each vent were disposable. The dedicated tubing and pump used for collecting the sample from the column were new materials and dedicated to each vent. The pump and tubing remained in the vent following sampling. The electronic water level tape was washed with a solution of Alconox® and rinsed with deionized water after each use.

2.2 April 12, 1995 Sampling

The basic sampling procedures including water level measurement, mixing of the column, sample pumping, and decontamination, are all as performed for the December 2 sampling event. Selected parameters were sampled from each of the six gas vents. Parameters selected for use in treatment system evaluation and design were analyzed on a composite sample from all six vents. Additionally, because of implications of the relatively high iron concentrations on treatment system, samples from GV-1 were collected for analysis of total iron and dissolved iron. Dissolved iron analyses were performed on filtered samples using both a 5.0 micron and a 0.45 micron filter. The samples were field filtered. The total iron sample was pumped directly from the vent into the sample bottle. For the filtered samples, liquid was pumped into a 1-gallon plastic container. A peristaltic pump and tubing was used to pump from the container through the filters into the sample bottles.

The total iron concentration in the sample from GV-1 was 13.4 mg/L. The dissolved iron concentrations from the 5.0 and 0.45 micron filtered samples were 42.4 and 34.7 mg/L, respectively. Based on all available information, it appears that the total iron concentration from GV-1 is an unrepresentative value. The total iron concentration of that sample is lower than any prior total iron sample and is lower than the composite value from all vents sampled on April 12. Sine the dissolved iron concentrations appear to be consistent relative to filter sizes, relative to the total iron concentration in GV-1 in December 1994 (148 mg/L), and to total iron in other vents from both sampling events, the total iron concentration of 13 mg/L from GV-1 is believed to result from a sampling error.

Leachate levels in the landfill were generally at a maximum at the time of the April sampling. The sampling date was preceded by wet weather and the liquid level at some vents was near the landfill surface. Table 2 provides a comparison of results for parameters for which analyses were performed on both sampling events. The average of the concentrations from each individual vent for each parameter was calculated for comparison with the concentration from the composite sample collected on April 12, 1995. The results appear consistent with expectation. The concentrations in April 1995 would be expected to be slightly lower due to the higher water levels resulting from seasonal variations and the rain preceding the April 1995 sampling.

Table 1. Landfill 7 Gas Vent Water Levels

Gas Vent	Top of Casing Elevation[1] (ft-NGVD)	Total Depth from Top of Casing (ft)	Depth to Water (ft) 11/22/94 12/02/94 04/12/95	Water Column Depth (ft)	Water Elevation (ft-NGVD)
GV-1	659.84	44.1	32.89 31.54 28.02	11.2 12.6 16.1	626.95 628.30 631.82
GV-2	663.77	54.3	7.09 6.73 5.36	47.2 47.6 48.9	656.68 657.04 658.41
GV-3	663.90	49.1	8.55 7.03 5.92	40.6 42.1 43.2	655.35 656.82 657.98
GV-4	665.90	39.0	9.29 8.46 6.42	29.7 30.5 32.6	656.61 657.44 659.48
GV-5	663.65	30	8.57 7.04 5.35	21.4 23.1 24.7	655.08 656.74 658.30
GV-6	663.55	65	34.71 33.97 32.74	30.3 31.4 32.2	628.84 629.97 630.76

1 Approximate elevation determined by adding 5.0 ft casing stick-up to elevation of concrete base.

Source: ESE, 1995

Table 2. Comparison of Parameters Analyzed December 1994 and April 1995

Parameter	Average from 12/02/94 Samples	04/12/95 Composite Sample
Iron, total (mg/L)	102	67.6
BOD (mg/L)	42	18
TDS (mg/L)	1123	1370
Arsenic, total (mg/L)	58.3	23.0
Lead, total (mg/L)	154	131
Zinc, total (mg/L)	9118	2280

note - based on a composite sample

Source: ESE, 1995.

APPENDIX A - LABORATORY DATA GAS VENT LIQUIDS

DECEMBER 2, 1994

Environmental
Science &
Engineering, Inc.
A CILCORP Company

January 6, 1995

Mr. Wayne Ingram
Environmental Science & Engineering, Inc.
8901 N. Industrial Road
Peoria, Illinois 61615

Dear Wayne:

Please find attached the analytical results for the Ft. Sheridan leachate project. Six samples were received in our laboratory November 23, 1994 to be analyzed for Oil & Grease. Six samples were received December 3, 1994 to be analyzed for VOC's, SVOC's, pesticide/PCB's, metals and a specified list of inorganic parameters. This deliverable includes tabulated sample results and a QC summary.

Should you have any questions, please call me at your earliest convenience.

Sincerely,

ENVIRONMENTAL SCIENCE & ENGINEERING, INC.

Barbara G. Raya-Hash

Barbara G. Raya-Hash
Senior Project Manager

8901 North Industrial Road Peoria, IL 61615 Phone (309) 692-4422 (800) 234-1239 Fax (309) 692-9364

Environmental Science & Engineering DATE 01/04/95 STATUS : FINAL PAGE 1
PROJECT NUMBER 591-5103 PROJECT NAME ESE-PEORIA (FT. SHERIDAN)
FIELD GROUP 19629 PROJECT MANAGER (BARBARA RAYA-HASH)

SAMPLE ID'S		GV-1	GV-2	GV-3	GV-4	GV-5	GV-6
PARAMETERS	STORET	19629	19629	19629	19629	19629	19629
UNITS	METHOD	1	2	3	4	5	6
DATE		11/22/94	11/22/94	11/22/94	11/22/94	11/22/94	11/22/94
TIME							
Oil & Grease	556	<5	<5	<5	163	<5	153
MG/L	413.1-P						

Environmental Science & Engineering DATE 01/04/95 STATUS : FINAL PAGE 1
PROJECT NUMBER 591-5103 PROJECT NAME ESE-PEORIA (FT SHERIDAN)
FIELD GROUP 19728 PROJECT MANAGER (BARBARA RAYA-HASH)

SAMPLE ID'S		GV-1	GV-2	GV-3	GV-4	GV-5	GV-6	TRIP BLK
PARAMETERS	STORET	19728	19728	19728	19728	19728	19728	19728
UNITS	METHOD	1	2	3	4	5	6	7
DATE		12/02/94	12/02/94	12/02/94	12/02/94	12/02/94	12/02/94	12/02/94
TIME								
INORGANIC PARAMETERS								
Odor,25c	85	4	<1	2	<1	<1	<1	NRQ
THRSH NO	140.1-P							
Color,apparent	81	20	70	30	100	10	50	NRQ
PCU	110.2-P							
Turbidity	76	3800	880	280	420	1600	340	NRQ
NTU	180.1-P							
BOD	310	30	37	34	30	61	61	NRQ
MG/L	405.1-P							
TDS	70300	1310	1050	1810	692	766	1110	NRQ
MG/L	160.1-P							
TSS	530	3640	892	513	933	2490	278	NRQ
MG/L	160.2-P							
Nitrogen, NH3	610	2.34	4.01	0.58	1.33	0.25	1.15	NRQ
MG/L AS N	350.3-P							
Phosphorus, T	665	0.48	<0.05	<0.05	<0.05	<0.05	<0.05	NRQ
MG/L AS P	365.2-P							
Fluoride	951	0.25	0.24	0.23	0.24	0.26	0.21	NRQ
MG/L	340.2-P							
Chromium(+6)	29405	<0.050	<0.050	<0.050	<0.050	0.054	<0.050	NRQ
MG/L	7196A-P							
Cyanide	720	<0.005	0.015	<0.005	<0.005	<0.005	<0.005	NRQ
MG/L	335.2-P							
Phenols	32730	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	NRQ
MG/L	420.1-P							
pH	403	6.64	6.52	6.72	6.73	7.08	6.70	NRQ
STD UNITS	150.1-P							
METALS								
Arsenic,total	1002	101	67.8	31.4	49.9	75.2	24.4	NRQ
UG/L	206.2-P							
Selenium,total	1147	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NRQ
UG/L	270.2-P							
Thallium,total	1059	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	NRQ
UG/L	279.2-P							
Barium,total	1007	460	660	162	126	178	475	NRQ
UG/L	200.7-P							
Cadmium,total	1027	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NRQ
UG/L	200.7-P							
Chromium,total	1034	67.1	23.4	10.2	22.7	49.2	18.5	NRQ
UG/L	200.7-P							
Antimony,total	1097	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	NRQ
UG/L	200.7-P							
Beryllium,total	1012	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NRQ
UG/L	200.7-P							
Copper,total	1042	310	76.4	139	106	365	65.4	NRQ
UG/L	200.7-P							
Iron,total	1045	148000	141000	114000	106000	77800	27400	NRQ
UG/L	200.7-P							
Lead,total	1051	277	127	77.7	84.3	189	167	NRQ
UG/L	200.7-P							
Manganese,total	1055	1180	788	1170	651	744	698	NRQ
UG/L	200.7-P							
Nickel,total	1067	125	173	273	113	214	<20.0	NRQ
UG/L	200.7-P							
Silver,total	1077	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	NRQ
UG/L	200.7-P							
Zinc,total	1092	8610	20800	7110	12200	2570	3420	NRQ
UG/L	200.7-P							
Mercury,total	71900	0.6	<0.2	<0.2	<0.2	0.5	<0.2	NRQ
UG/L	245.1-P							

Environmental Science & Engineering DATE 01/04/95 STATUS : FINAL PAGE 2
PROJECT NUMBER 591-5103 PROJECT NAME ESE-PEORIA (FT SHERIDAN)
FIELD GROUP 19728 PROJECT MANAGER (BARBARA RAYA-HASH)

SAMPLE ID'S		GV-1	GV-2	GV-3	GV-4	GV-5	GV-6	TRIP BLK
PARAMETERS	STORET	19728	19728	19728	19728	19728	19728	19728
UNITS	METHOD	1	2	3	4	5	6	7
DATE		12/02/94	12/02/94	12/02/94	12/02/94	12/02/94	12/02/94	12/02/94
TIME								
VOLATILE ORGANICS								
Chloromethane	34418	<10	<10	<10	<10	<10	<10	<10
UG/L	624-P							
Bromomethane	34413	<10	<10	<10	<10	<10	<10	<10
UG/L	624-P							
Vinyl chloride	39175	<10	<10	<10	<10	<10	<10	<10
UG/L	624-P							
Chloroethane	34311	<10	<10	<10	<10	<10	<10	<10
UG/L	624-P							
Acrolein	34210	<50	<50	<50	<50	<50	<50	<50
UG/L	624-P							
Acrylonitrile	34215	<50	<50	<50	<50	<50	<50	<50
UG/L	624-P							
2-Chloroethylvinyl ether	34576	<50	<50	<50	<50	<50	<50	<50
UG/L	624-P							
Dichlorodifluoromethane	34668	<10	<10	<10	<10	<10	<10	<10
UG/L	624-P							
Trichlorofluoromethane	34488	<10	<10	<10	<10	<10	<10	<10
UG/L	624-P							
Methylene chloride	34423	<5	<5	<5	<5	<5	<5	<5
UG/L	624-P							
1,1-Dichloroethene	34501	<5	<5	<5	<5	<5	<5	<5
UG/L	624-P							
1,1-Dichloroethane	34496	<5	9	<5	<5	<5	<5	<5
UG/L	624-P							
trans-1,2-dichloroethene	34546	<5	<5	<5	<5	<5	<5	<5
UG/L	624-P							
Chloroform	32106	<5	<5	<5	<5	<5	<5	<5
UG/L	624-P							
1,2-Dichloroethane	34531	<5	<5	<5	<5	<5	<5	<5
UG/L	624-P							
1,1,1-Trichloroethane	34506	<5	<5	<5	<5	<5	<5	<5
UG/L	624-P							
Carbon tetrachloride	32102	<5	<5	<5	<5	<5	<5	<5
UG/L	624-P							
Bromodichloromethane	32101	<5	<5	<5	<5	<5	<5	<5
UG/L	624-P							
1,2-Dichloropropane	34541	<5	<5	<5	<5	<5	<5	<5
UG/L	624-P							
cis-1,3-Dichloropropene	34704	<5	<5	<5	<5	<5	<5	<5
UG/L	624-P							
Trichloroethene	39180	<5	<5	<5	<5	<5	<5	<5
UG/L	624-P							
Dibromochloromethane	32105	<5	<5	<5	<5	<5	<5	<5
UG/L	624-P							
1,1,2-Trichloroethane	34511	<5	<5	<5	<5	<5	<5	<5
UG/L	624-P							
Benzene	34030	<5	<5	<5	<5	<5	<5	<5
UG/L	624-P							
trans-1,3-Dichloropropene	34699	<5	<5	<5	<5	<5	<5	<5
UG/L	624-P							
Bromoform	32104	<5	<5	<5	<5	<5	<5	<5
UG/L	624-P							
Tetrachloroethene	34475	<5	<5	<5	<5	<5	<5	<5
UG/L	624-P							
1,1,2,2-Tetrachloroethane	34516	<5	<5	<5	<5	<5	<5	<5
UG/L	624-P							
Toluene	34010	<5	<5	<5	<5	<5	<5	<5
UG/L	624-P							
Chlorobenzene	34301	<5	<5	<5	<5	<5	<5	<5
UG/L	624-P							
Ethylbenzene	34371	<5	<5	<5	<5	<5	<5	<5
UG/L	624-P							
cis-1,2-Dichloroethene	77093	<5	<5	<5	<5	<5	<5	<5
UG/L	624-P							

PROJECT NUMBER 591-5103 PROJECT NAME ESE-PEORIA (FT SHERIDAN)
FIELD GROUP 19728 PROJECT MANAGER (BARBARA RAYA-HASH)

SAMPLE ID'S PARAMETERS UNITS	STORET METHOD	GV-1 19728 1	GV-2 19728 2	GV-3 19728 3	GV-4 19728 4	GV-5 19728 5	GV-6 19728 6	TRIP BLK 19728 7
DATE		12/02/94	12/02/94	12/02/94	12/02/94	12/02/94	12/02/94	12/02/94
TIME								
SEMI-VOLATILE ORGANICS								
1,2,4-Trichlorobenzene	34551	<10	<11	<11	<11	<11	<13	NRQ
UG/L	625/SEP-P							
1,2-Dichlorobenzene	34536	<10	<11	<11	<11	<11	<13	NRQ
UG/L	625/SEP-P							
1,2-Diphenylhydrazine	34346	<100	<110	<110	<110	<110	<130	NRQ
UG/L	625/SEP-P							
1,3-Dichlorobenzene	34566	<10	<11	<11	<11	<11	<13	NRQ
UG/L	625/SEP-P							
1,4-Dichlorobenzene	34571	<10	<11	<11	<11	<11	<13	NRQ
UG/L	625/SEP-P							
2,3,7,8-TCDD	34675	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	NRQ
UG/L	625/SEP-P							
2,4,6-Trichlorophenol	34621	<10	<11	<11	<11	<11	<13	NRQ
UG/L	625/SEP-P							
2,4-Dichlorophenol	34601	<10	<11	<11	<11	<11	<13	NRQ
UG/L	625/SEP-P							
2,4-Dimethylphenol	34606	<10	<11	<11	<11	<11	<13	NRQ
UG/L	625/SEP-P							
2,4-Dinitrophenol	34616	<50	<56	<56	<56	<57	<65	NRQ
UG/L	625/SEP-P							
2,6-Dinitrotoluene	34626	<10	<11	<11	<11	<11	<13	NRQ
UG/L	625/SEP-P							
2-Chloronaphthalene	34581	<10	<11	<11	<11	<11	<13	NRQ
UG/L	625/SEP-P							
2-Chlorophenol	34586	<10	<11	<11	<11	<11	<13	NRQ
UG/L	625/SEP-P							
2-Methyl-4,6-dinitrophenol	34657	<50	<56	<56	<56	<57	<65	NRQ
UG/L	625/SEP-P							
2-Nitrophenol	34591	<10	<11	<11	<11	<11	<13	NRQ
UG/L	625/SEP-P							
3,3'-Dichlorobenzidine	34631	<20	<22	<22	<22	<23	<26	NRQ
UG/L	625/SEP-P							
4-Bromophenyl-phenylether	34636	<10	<11	<11	<11	<11	<13	NRQ
UG/L	625/SEP-P							
4-Chloro-3-methylphenol	34452	<20	<22	<22	<22	<23	<26	NRQ
UG/L	625/SEP-P							
4-Chlorophenylphenyl ether	34641	<10	<11	<11	<11	<11	<13	NRQ
UG/L	625/SEP-P							
4-Nitrophenol	34646	<50	<56	<56	<56	<57	<65	NRQ
UG/L	625/SEP-P							
Acenaphthene	34205	<10	<11	<11	<11	<11	<13	NRQ
UG/L	625/SEP-P							
Acenaphthylene	34200	<10	<11	<11	<11	<11	<13	NRQ
UG/L	625/SEP-P							
Anthracene	34220	<10	<11	<11	<11	<11	<13	NRQ
UG/L	625/SEP-P							
Benzidine	39120	<100	<110	<110	<110	<110	<130	NRQ
UG/L	625/SEP-P							
Benzo(a)anthracene	34526	<10	<11	<11	<11	<11	<13	NRQ
UG/L	625/SEP-P							
Benzo(a)pyrene	34247	<10	<11	<11	<11	<11	<13	NRQ
UG/L	625/SEP-P							
Benzo(b)fluoranthene	34230	<10	<11	<11	<11	<11	<13	NRQ
UG/L	625/SEP-P							
Benzo(ghi)perylene	34521	<10	<11	<11	<11	<11	<13	NRQ
UG/L	625/SEP-P							
Benzo(k)fluoranthene	34242	<10	<11	<11	<11	<11	<13	NRQ
UG/L	625/SEP-P							
bis(2-Chloroisopropyl)ether	34283	<10	<11	<11	<11	<11	<13	NRQ
UG/L	625/SEP-P							
bis(2-Chloroethoxy)methane	34278	<10	<11	<11	<11	<11	<13	NRQ
UG/L	625/SEP-P							

N.D. = Not detected

SAMPLE ID'S			GV-1	GV-2	GV-3	GV-4	GV-5	GV-6	TRIP BLK
PARAMETERS		STORET	19728	19728	19728	19728	19728	19728	19728
UNITS	METHOD	1	2	3	4	5	6	7	
DATE			12/02/94	12/02/94	12/02/94	12/02/94	12/02/94	12/02/94	12/02/94
TIME									
SEMI-VOLATILE ORGANICS (CONT'D)									
bis(2-Chloroethyl)ether		34273	<10	<11	<11	<11	<11	<13	NRQ
UG/L	625/SEP-P								
bis(2-Ethylhexyl)phthalate		39100	<10	<11	<11	26	<11	<13	NRQ
UG/L	625/SEP-P								
Butylbenzylphthalate		34292	<10	<11	<11	<11	<11	<13	NRQ
UG/L	625/SEP-P								
Chrysene		34320	<10	<11	<11	<11	<11	<13	NRQ
UG/L	625/SEP-P								
di-n-Butylphthalate		39110	<10	<11	<11	<11	<11	<13	NRQ
UG/L	625/SEP-P								
di-n-Octylphthalate		34596	<10	<11	<11	<11	<11	<13	NRQ
UG/L	625/SEP-P								
Dibenzo(ah)anthracene		34556	<10	<11	<11	<11	<11	<13	NRQ
UG/L	625/SEP-P								
Diethylphthalate		34336	<10	<11	<11	<11	<11	<13	NRQ
UG/L	625/SEP-P								
Dimethylpthalate		34341	<10	<11	<11	<11	<11	<13	NRQ
UG/L	625/SEP-P								
Fluoranthene		34376	<10	<11	<11	<11	<11	<13	NRQ
UG/L	625/SEP-P								
Fluorene		34381	<10	<11	<11	<11	<11	<13	NRQ
UG/L	625/SEP-P								
Hexachlorobenzene		39700	<10	<11	<11	<11	<11	<13	NRQ
UG/L	625/SEP-P								
Hexachlorobutadiene		34391	<10	<11	<11	<11	<11	<13	NRQ
UG/L	625/SEP-P								
Hexachlorocyclopentadiene		34386	<10	<11	<11	<11	<11	<13	NRQ
UG/L	625/SEP-P								
Hexachloroethane		34396	<10	<11	<11	<11	<11	<13	NRQ
UG/L	625/SEP-P								
Indeno(1,2,3-cd)pyrene		34403	<10	<11	<11	<11	<11	<13	NRQ
UG/L	625/SEP-P								
Isophorone		34408	<10	<11	<11	<11	<11	<13	NRQ
UG/L	625/SEP-P								
n-Nitrosodi-n-propylamine		34428	<10	<11	<11	<11	<11	<13	NRQ
UG/L	625/SEP-P								
n-Nitrosodimethylamine		34438	<20	<22	<22	<22	<23	<26	NRQ
UG/L	625/SEP-P								
n-Nitrosodiphenylamine		34433	<10	<11	<11	<11	<11	<13	NRQ
UG/L	625/SEP-P								
Naphthalene		34696	<10	<11	<11	<11	<11	<13	NRQ
UG/L	625/SEP-P								
Nitrobenzene		34447	<10	<11	<11	<11	<11	<13	NRQ
UG/L	625/SEP-P								
Pentachlorophenol		39032	<50	<56	<56	<56	<57	<65	NRQ
UG/L	625/SEP-P								
Phenanthrene		34461	<10	<11	<11	<11	<11	<13	NRQ
UG/L	625/SEP-P								
Phenol		34694	<10	<11	<11	<11	<11	<13	NRQ
UG/L	625/SEP-P								
Pyrene		34469	<10	<11	<11	<11	<11	<13	NRQ
UG/L	625/SEP-P								
2,4-Dinitrotoluene		34611	<10	<11	<11	<11	<11	<13	NRQ
UG/L	625/SEP-P								

Environmental Science & Engineering DATE 01/04/95 STATUS : FINAL PAGE 5
PROJECT NUMBER 591-5103 PROJECT NAME ESE-PEORIA (FT SHERIDAN)
FIELD GROUP 19728 PROJECT MANAGER (BARBARA RAYA-HASH)

SAMPLE ID'S			GV-1	GV-2	GV-3	GV-4	GV-5	GV-6	TRIP BLK
PARAMETERS		STORET	19728	19728	19728	19728	19728	19728	19728
UNITS	METHOD	1	2	3	4	5	6	7	
DATE			12/02/94	12/02/94	12/02/94	12/02/94	12/02/94	12/02/94	12/02/94
TIME									
PESTICIDES/PCB'S									
alpha-BHC		39337	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	NRQ
UG/L		608/SEP-P							
beta-BHC		39338	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	NRQ
UG/L		608/SEP-P							
delta-BHC		34259	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	NRQ
UG/L		608/SEP-P							
gamma-BHC (Lindane)		39340	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	NRQ
UG/L		608/SEP-P							
Heptachlor		39410	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	NRQ
UG/L		608/SEP-P							
Aldrin		39330	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	NRQ
UG/L		608/SEP-P							
Heptachlor epoxide		39420	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	NRQ
UG/L		608/SEP-P							
Endosulfan I		34361	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	NRQ
UG/L		608/SEP-P							
Dieldrin		39380	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	NRQ
UG/L		608/SEP-P							
4,4'-DDE		39320	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	NRQ
UG/L		608/SEP-P							
Endrin		39390	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	NRQ
UG/L		608/SEP-P							
Endosulfan II		34356	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	NRQ
UG/L		608/SEP-P							
4,4'-DDD		39310	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	NRQ
UG/L		608/SEP-P							
Endosulfan sulfate		34351	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	NRQ
UG/L		608/SEP-P							
4,4'-DDT		39300	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	NRQ
UG/L		608/SEP-P							
Endrin aldehyde		34366	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	NRQ
UG/L		608/SEP-P							
gamma-Chlordane		39811	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NRQ
UG/L		608/SEP-P							
Toxaphene		39400	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	NRQ
UG/L		608/SEP-P							
Aroclor-1016		34671	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NRQ
UG/L		608/SEP-P							
Aroclor-1221		39488	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NRQ
UG/L		608/SEP-P							
Aroclor-1232		39492	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NRQ
UG/L		608/SEP-P							
Aroclor-1242		39496	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NRQ
UG/L		608/SEP-P							
Aroclor-1248		39500	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NRQ
UG/L		608/SEP-P							
Aroclor-1254		39504	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	NRQ
UG/L		608/SEP-P							
Aroclor-1260		39508	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	NRQ
UG/L		608/SEP-P							
alpha-Chlordane		39348	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NRQ
UG/L		608/SEP-P							

ESE BATCH : P25562
CLASSIFICATION : Odor,25c - 140.1

QC TYPE : FDER/SW
ANALYST : CHRIS FISHER
EXTRACTOR :
DATA ENTRY : CHRIS FISHER

REPORT DATE/TIME : 01/11/95 11:13:19
ANALYSIS DATE : 12/19/94
EXTRACT DATE :

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

BATCH NOTES
140.1

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
19728		591-5103	ESE-PEORIA (FT SHERIDAN)	BARBARA RAYA-HASH

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
19728*1	GV-1		
19728*2	GV-2		
19728*3	GV-3		
19728*4	GV-4		
19728*5	GV-5		
19728*6	GV-6		

Replicate Analysis Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	REP #1	REP #2	RPD	RPD CRIT
12/19/94	RP*19728*6	85*140.1-P	Odor,25c	THRSH	<1	<1		N/A

Environmental Science and Engineering Analytical Services
Computer QC Checks

Batch No.: P25562 Analysis Date: 12/19/94 Analyst: CHRIS FISHER

	"Exceptions" Yes	No	Comment / Corrective Action
Are ALL units documented in batch?		X	
Analysis holding time within criteria?		X	
Sample replicate present?		X	
Sample replicate within acceptance criteria?		X	

Note: Any "NO" answer requires a comment.

BATCH OVERRIDE BY: GREG ST. AUBIN 5145

FINALIZED BY: GREG ST. AUBIN 5145

ESE BATCH : P25329
CLASSIFICATION : Color,apparent - 110.2

QC TYPE : FDER/SW
ANALYST : KEVIN CRANFORD
EXTRACTOR :
DATA ENTRY : KEVIN CRANFORD

REPORT DATE/TIME : 01/11/95 11:13:33
ANALYSIS DATE : 12/05/94
EXTRACT DATE :

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

BATCH NOTES
110.2

FIELD GRP QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
19728	591-5103	ESE-PEORIA (FT SHERIDAN)	BARBARA RAYA-HASH

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
19728*1	GV-1		
19728*2	GV-2		
19728*3	GV-3		
19728*4	GV-4		
19728*5	GV-5		
19728*6	GV-6		

ESE BATCH : P25329

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND	DET LMT
12/05/94	MB*QC*1	81*110.2-P	Color,apparent	PCU	ND	0.0

Replicate Analysis Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	REP #1	REP #2	RPD	RPD CRIT
12/05/94	RP*19728*1	81*110.2-P	Color,apparent	PCU	20	20	0.0	N/A
12/05/94	RP*19728*5	81*110.2-P	Color,apparent	PCU	10	10	0.0	N/A

ESE BATCH : P25329

Environmental Science and Engineering Analytical Services
Computer QC Checks

Batch No.: P25329 Analysis Date: 12/05/94 Analyst: KEVIN CRANFORD

	"Exceptions" Yes	No	Comment / Corrective Action
Are ALL units documented in batch?	X		
Analysis holding time within criteria?	X		
Method blank present?	X		
Method blank within acceptance criteria?	X		
Sample replicate present?	X		
Sample replicate within acceptance criteria?	X		

Note: Any "NO" answer requires a comment.

BATCH OVERRIDE BY: WILLIAM GRAY 5159

FINALIZED BY: WILLIAM GRAY 5159

ESE BATCH : P25324
CLASSIFICATION : Turbidity - 180.1

QC TYPE : FDER/SW
ANALYST : CHRIS FISHER
EXTRACTOR :
DATA ENTRY : CHRIS FISHER

REPORT DATE/TIME : 01/11/95 11:13:47
ANALYSIS DATE : 12/06/94
EXTRACT DATE :

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

BATCH NOTES
180.1

FIELD GRP QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
19728	591-5103	ESE-PEORIA (FT SHERIDAN)	BARBARA RAYA-HASH

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
19728*1	GV-1		
19728*2	GV-2		
19728*3	GV-3		
19728*4	GV-4		
19728*5	GV-5		
19728*6	GV-6		

ESE BATCH : P25324

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND	DET LMT
12/06/94	MB*QC*1	76*180.1-P	Turbidity	NTU	ND	0.1

Replicate Analysis Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	REP #1	REP #2	RPD	RPD CRIT
12/06/94	RP*19728*1	76*180.1-P	Turbidity	NTU	3800	3600	5.4	N/A

ESE BATCH : P25324

Environmental Science and Engineering Analytical Services
Computer QC Checks

Batch No.: P25324 Analysis Date: 12/06/94 Analyst: CHRIS FISHER

	"Exceptions"		
	Yes	No	Comment / Corrective Action
Are ALL units documented in batch?	X		
Analysis holding time within criteria?	X		
Method blank present?	X		
Method blank within acceptance criteria?	X		
Sample replicate present?	X		
Sample replicate within acceptance criteria?	X		

Note: Any "NO" answer requires a comment.

BATCH OVERRIDE BY: WILLIAM GRAY 5159

FINALIZED BY: WILLIAM GRAY 5159

ESE BATCH : P25593
CLASSIFICATION : Residue,diss (tds) - 160.1

QC TYPE : FDER/SW
ANALYST : FRANCES JACOBS
EXTRACTOR :
DATA ENTRY : FRANCES JACOBS

REPORT DATE/TIME : 01/11/95 11:14:16
ANALYSIS DATE : 12/08/94
EXTRACT DATE :

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

BATCH NOTES
160.1

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
19728		591-5103	ESE-PEORIA (FT SHERIDAN)	BARBARA RAYA-HASH

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
19728*1	GV-1		
19728*2	GV-2		
19728*3	GV-3		
19728*4	GV-4		
19728*5	GV-5		
19728*6	GV-6		

ESE BATCH : P25593

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND	DET LMT
12/08/94	MB*QC*1	70300*160.1-P	TDS	MG/L	10	1

Replicate Analysis Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	REP #1	REP #2	RPD	RPD CRIT
12/08/94	RP*IAMHSW*18	70300*160.1-P	TDS	MG/L	0.0	U*2		N/A

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
12/08/94	SP*QC*1	70300*160.1-P	TDS	MG/L	1000	1000	100	80-120

ESE BATCH : P25593

Environmental Science and Engineering Analytical Services
Computer QC Checks

Batch No.: P25593 Analysis Date: 12/08/94 Analyst: FRANCES JACOBS

	Yes	No	"Exceptions" Comment / Corrective Action
Are ALL units documented in batch?		X	
Analysis holding time within criteria?		X	
Sample replicate present?		X	
Sample replicate within acceptance criteria?		X	

Note: Any "NO" answer requires a comment.

PROBLEM: Sample matrix spike duplicate not within acceptance criteria: 310*405.1-

EXPLANATION: Not present due to the SPM2 not reading back above 1 D.O. Possible spiking error by analyst.

BATCH OVERRIDE BY: WILLIAM GRAY 5159

FINALIZED BY: WILLIAM GRAY 5159

ESE BATCH : P25389
CLASSIFICATION : Residue,susp.(tss) - 160.2

QC TYPE : FDER/SW
ANALYST : FRANCES JACOBS
EXTRACTOR :
DATA ENTRY : FRANCES JACOBS

REPORT DATE/TIME : 01/11/95 11:14:29
ANALYSIS DATE : 12/06/94
EXTRACT DATE :

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

BATCH NOTES
160.2

FIELD GRP QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
19728	591-5103	ESE-PEORIA (FT SHERIDAN)	BARBARA RAYA-HASH

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
19728*1	GV-1		
19728*2	GV-2		
19728*3	GV-3		
19728*4	GV-4		
19728*5	GV-5		
19728*6	GV-6		

ESE BATCH : P25389

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND	DET LMT
12/06/94	MB*QC*1	530*160.2-P	TSS	MG/L	ND	1
12/06/94	MB*QC*2	530*160.2-P	TSS	MG/L	ND	1

Replicate Analysis Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	REP #1	REP #2	RPD	RPD CRIT
12/06/94	RP*19728*1	530*160.2-P	TSS	MG/L	3640	2330	44	20

ESE BATCH : P25389

Environmental Science and Engineering Analytical Services
Computer QC Checks

Batch No.: P25389 Analysis Date: 12/06/94 Analyst: FRANCES JACOBS

	Yes	"Exceptions" No	Comment / Corrective Action
Are ALL units documented in batch?	X		
Analysis holding time within criteria?	X		
Sample replicate present?	X		
Sample replicate within acceptance criteria?		X	530*160.2-

Note: Any "NO" answer requires a comment.

PROBLEM:
Sample replicate not within acceptance criteria:
530*160.2-
EXPLANATION:Extremely dirty sample, difficult to get representative sample.

BATCH OVERRIDE BY: WILLIAM GRAY 5159

FINALIZED BY: WILLIAM GRAY 5159

ESE BATCH : P25428
CLASSIFICATION : Nitrogen,nh3+nh4 350.3

QC TYPE : FDER/SW
ANALYST : CHRIS FISHER
EXTRACTOR :
DATA ENTRY : CHRIS FISHER

REPORT DATE/TIME : 01/11/95 11:14:52
ANALYSIS DATE : 12/12/94
EXTRACT DATE :

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

BATCH NOTES
350.3

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
19728		591-5103	ESE-PEORIA (FT SHERIDAN)	BARBARA RAYA-HASH

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
19728*1	GV-1		
19728*2	GV-2		
19728*3	GV-3		
19728*4	GV-4		
19728*5	GV-5		
19728*6	GV-6		

ESE BATCH : P25428

Continuing Calibration Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
12/12/94	CCB*QC*1	610*350.3-P	Nitrogen, NH3	MG/L	ND
12/12/94	CCB*QC*2	610*350.3-P	Nitrogen, NH3	MG/L	ND

Continuing Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
12/12/94	CCV*QC*1	610*350.3-P	Nitrogen, NH3	MG/L A	5.00	4.29	85.8	80-120
12/12/94	CCV*QC*2	610*350.3-P	Nitrogen, NH3	MG/L A	5.00	5.12	102	80-120

Initial Calibration Blank Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
12/12/94	ICB*QC*1	610*350.3-P	Nitrogen, NH3	MG/L	ND

Initial Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
12/12/94	ICV*QC*1	610*350.3-P	Nitrogen, NH3	MG/L A	1.00	1.08	108	80-120

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND	DET LMT
12/12/94	MB*QC*1	610*350.3-P	Nitrogen, NH3	MG/L A	ND	0.10

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
12/12/94	SP*QC*1	610*350.3-P	Nitrogen, NH3	MG/L A	5.00	4.58	91.6	80-120

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	UNSPIKED	TARGET	FOUND	%RECV	RECV CRIT	RPD
12/12/94	SPM1*19728*1	610*350.3-P	Nitrogen, NH3	MG/L	2.34	5.00	4.88	97.6	75-125	
12/12/94	SPM2*19728*1	610*350.3-P	Nitrogen, NH3	MG/L	2.34	5.00	4.94	98.8	75-125	1.20

ESE BATCH : P25428

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: P25428 Analysis Date: 12/12/94 Analyst: CHRIS FISHER

	Yes	No	"Exceptions" Comment / Corrective Action
Are ALL units documented in batch?	X		
Analysis holding time within criteria?	X		
Method blank present?	X		
Method blank within acceptance criteria?	X		
Standard matrix spike present?	X		
Standard matrix spike within acceptance criteria?	X		
Sample matrix spike present?	X		
Sample matrix spike within acceptance criteria?	X		
Sample matrix spike duplicate present?	X		
Sample matrix spike duplicate within acceptance criteria?	X		

Note: Any "NO" answer requires a comment.

BATCH OVERRIDE BY: WILLIAM GRAY 5159

FINALIZED BY: WILLIAM GRAY 5159

ESE BATCH : P25448
CLASSIFICATION : Phosphorus, T - 365.2

QC TYPE : FDER/SW
ANALYST : KEVIN CRANFORD
EXTRACTOR :
DATA ENTRY : KEVIN CRANFORD

REPORT DATE/TIME : 01/11/95 11:15:31
ANALYSIS DATE : 12/12/94
EXTRACT DATE :

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

BATCH NOTES
365.2

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
19728		591-5103	ESE-PEORIA (FT SHERIDAN)	BARBARA RAYA-HASH

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
19728*1	GV-1		
19728*2	GV-2		
19728*3	GV-3		
19728*4	GV-4		
19728*5	GV-5		
19728*6	GV-6		

ESE BATCH : P25448

Continuing Calibration Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
12/12/94	CCB*QC*1	665*365.2-P	Phosphorus, T	MG/L A	ND
12/12/94	CCB*QC*2	665*365.2-P	Phosphorus, T	MG/L A	ND

Continuing Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
12/12/94	CCV*QC*1	665*365.2-P	Phosphorus, T	MG/L A	0.40	0.43	108	80-120
12/12/94	CCV*QC*2	665*365.2-P	Phosphorus, T	MG/L A	0.40	0.45	113	80-120

Initial Calibration Blank Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
12/12/94	ICB*QC*1	665*365.2-P	Phosphorus, T	MG/L A	ND

Initial Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
12/12/94	ICV*QC*1	665*365.2-P	Phosphorus, T	MG/L A	0.40	0.39	97.5	80-120

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND	DET LMT
12/12/94	MB*QC*1	665*365.2-P	Phosphorus, T	MG/L A	ND	0.05

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
12/12/94	SP*QC*1	665*365.2-P	Phosphorus, T	MG/L A	0.40	0.41	102.5	80-120

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	UNSPIKED	TARGET	FOUND	%RECV	RECV CRIT	RPD
12/12/94	SPM1*19728*1	665*365.2-P	Phosphorus, T	MG/L A	0.48	0.40	-.17	-42.5	75-125	
12/12/94	SPM2*19728*1	665*365.2-P	Phosphorus, T	MG/L A	0.48	0.40	0.06	15.0	75-125	

ESE BATCH : P25448

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: P25448 Analysis Date: 12/12/94 Analyst: KEVIN CRANFORD

	Yes	No	"Exceptions" Comment / Corrective Action
Are ALL units documented in batch?	X		
Analysis holding time within criteria?	X		
No. of calibration standards present acceptable?	X		
Curve correlation coefficient >= 0.995?	X		
Calibration curve y-intercept < curve detection limit?	X		
Sample responses within highest standard response?	X		
Method blank present?	X		
Method blank within acceptance criteria?	X		
Standard matrix spike present?	X		
Standard matrix spike within acceptance criteria?	X		
Sample matrix spike present?	X		
Sample matrix spike within acceptance criteria?		X	665*365.2-
Sample matrix spike duplicate present?	X		
Sample matrix spike duplicate within acceptance criteria?		X	665*365.2-

Note: Any "NO" answer requires a comment.

PROBLEM:
Sample matrix spike not within acceptance criteria:
665*365.2-
EXPLANATION: Possible matrix interference. Method in control; see SP.
PROBLEM:
Sample matrix spike duplicate not within acceptance criteria:
665*365.2-
EXPLANATION: Possible matrix interference. Method in control; see SP.

BATCH OVERRIDE BY: TY WOODIN 5155

FINALIZED BY: CHRIS FISHER 5211

ESE BATCH : P25338
CLASSIFICATION : Fluoride - 340.2

QC TYPE : FDER/SW
ANALYST : CHRIS FISHER
EXTRACTOR :
DATA ENTRY : CHRIS FISHER

REPORT DATE/TIME : 01/11/95 11:15:59
ANALYSIS DATE : 12/07/94
EXTRACT DATE :

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

BATCH NOTES
340.2

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
19728		591-5103	ESE-PEORIA (FT SHERIDAN)	BARBARA RAYA-HASH

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
19728*1	GV-1		
19728*2	GV-2		
19728*3	GV-3		
19728*4	GV-4		
19728*5	GV-5		
19728*6	GV-6		

ESE BATCH : P25338

Continuing Calibration Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
12/07/94	CCB*QC*1	951*340.2-P	Fluoride	MG/L	ND
12/07/94	CCB*QC*2	951*340.2-P	Fluoride	MG/L	ND

Continuing Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
12/07/94	CCV*QC*1	951*340.2-P	Fluoride	MG/L	0.40	0.43	108	80-120
12/07/94	CCV*QC*2	951*340.2-P	Fluoride	MG/L	0.40	0.44	110	80-120

Initial Calibration Blank Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
12/07/94	ICB*QC*1	951*340.2-P	Fluoride	MG/L	ND

Initial Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
12/07/94	ICV*QC*1	951*340.2-P	Fluoride	MG/L	0.40	0.42	105	80-120

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND	DET LMT
12/07/94	MB*QC*1	951*340.2-P	Fluoride	MG/L	ND	0.10

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
12/07/94	SP*QC*1	951*340.2-P	Fluoride	MG/L	0.40	0.43	107.5	80-120

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	UNSPIKED	TARGET	FOUND	%RECV	RECV CRIT	RPD
12/07/94	SPM1*19728*1	951*340.2-P	Fluoride	MG/L	0.25	0.40	0.39	97.5	75-125	
12/07/94	SPM2*19728*1	951*340.2-P	Fluoride	MG/L	0.25	0.40	0.40	100.0	75-125	2.50

ESE BATCH : P25338

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: P25338 Analysis Date: 12/07/94 Analyst: CHRIS FISHER

	Yes	"Exceptions" No	Comment / Corrective Action
Are ALL units documented in batch?	X		
Analysis holding time within criteria?	X		
Method blank present?	X		
Method blank within acceptance criteria?	X		
Standard matrix spike present?	X		
Standard matrix spike within acceptance criteria?	X		
Sample matrix spike present?	X		
Sample matrix spike within acceptance criteria?	X		
Sample matrix spike duplicate present?	X		
Sample matrix spike duplicate within acceptance criteria?	X		

Note: Any "NO" answer requires a comment.

BATCH OVERRIDE BY: WILLIAM GRAY 5159

FINALIZED BY: WILLIAM GRAY 5159

ESE BATCH : P25349
CLASSIFICATION : Chromium(+6) - 7196

QC TYPE : FDER/SW
ANALYST : FRANCES JACOBS
EXTRACTOR :
DATA ENTRY : CHRIS FISHER

REPORT DATE/TIME : 01/11/95 11:16:37
ANALYSIS DATE : 12/03/94
EXTRACT DATE :

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

BATCH NOTES
7196

FIELD GRP QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
19728	591-5103	ESE-PEORIA (FT SHERIDAN)	BARBARA RAYA-HASH

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
19728*1	GV-1		
19728*2	GV-2		
19728*3	GV-3		
19728*4	GV-4		
19728*5	GV-5		
19728*6	GV-6		

ESE BATCH : P25349

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND	DET LMT
12/03/94	MB*QC*1	29405*7196A-P	Chromium(+6)	MG/L	ND	0.050

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
12/03/94	SP*QC*1	29405*7196A-P	Chromium(+6)	MG/L	0.200	0.208	104.0	80-120

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	UNSPIKED	TARGET	FOUND	%RECV	RECV CRIT	RP
12/03/94	SPM1*19728*1	29405*7196A-P	Chromium(+6)	MG/L	0.002	0.200	0.209	104.5	75-125	
12/03/94	SPM2*19728*1	29405*7196A-P	Chromium(+6)	MG/L	0.002	0.200	0.193	96.5	75-125	8.

ESE BATCH : P25349

Environmental Science and Engineering Analytical Services
Computer QC Checks

Batch No.: P25349 Analysis Date: 12/03/94 Analyst: FRANCES JACOBS

	Yes	"Exceptions" No	Comment / Corrective Action
Are ALL units documented in batch?	X		
Analysis holding time within criteria?	X		
No. of calibration standards present acceptable?	X		
Curve correlation coefficient >= 0.995?	X		
Calibration curve y-intercept < curve detection limit?	X		
Sample responses within highest standard response?	X		
Method blank present?	X		
Method blank within acceptance criteria?	X		
Standard matrix spike present?	X		
Standard matrix spike within acceptance criteria?	X		
Sample matrix spike present?	X		
Sample matrix spike within acceptance criteria?	X		
Sample matrix spike duplicate present?	X		
Sample matrix spike duplicate within acceptance criteria?	X		

Note: Any "NO" answer requires a comment.

BATCH OVERRIDE BY:

FINALIZED BY: WILLIAM GRAY 5159

0p18.75h6.0v0s0b6T

ESE BATCH : P25564
CLASSIFICATION : Cyanide - 335.2

QC TYPE : FDER/SW
ANALYST : KEVIN CRANFORD
EXTRACTOR :
DATA ENTRY : KEVIN CRANFORD

REPORT DATE/TIME : 01/11/95 11:16:55
ANALYSIS DATE : 12/16/94
EXTRACT DATE :

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

BATCH NOTES
335.2

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
19728		591-5103	ESE-PEORIA (FT SHERIDAN)	BARBARA RAYA-HASH

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
19728*1	GV-1		
19728*2	GV-2		
19728*3	GV-3		
19728*4	GV-4		
19728*5	GV-5		
19728*6	GV-6		

ESE BATCH : P25564

Continuing Calibration Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
12/16/94	CCB*QC*1	720*335.2-P	Cyanide	MG/L	ND

Continuing Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
12/16/94	CCV*QC*1	720*335.2-P	Cyanide	MG/L	0.100	0.087	87.0	80-120

Initial Calibration Blank Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
12/16/94	ICB*QC*1	720*335.2-P	Cyanide	MG/L	ND

Initial Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
12/16/94	ICV*QC*1	720*335.2-P	Cyanide	MG/L	0.100	0.092	92.0	80-120

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND	DET LMT
12/16/94	MB*QC*1	720*335.2-P	Cyanide	MG/L	ND	0.005

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
12/16/94	SP*QC*1	720*335.2-P	Cyanide	MG/L	0.050	0.047	94.0	80-120

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	UNSPIKED	TARGET	FOUND	%RECV	RECV CRIT	RPD
12/16/94	SPM1*19728*1	720*335.2-P	Cyanide	MG/L	0.0	0.050	0.047	94.0	75-125	
12/16/94	SPM2*19728*1	720*335.2-P	Cyanide	MG/L	0.0	0.050	0.033	66.0	75-125	35.0

ESE BATCH : P25564

Environmental Science and Engineering Analytical Services
Computer QC Checks

Batch No.: P25564 Analysis Date: 12/16/94 Analyst: KEVIN CRANFORD

	"Exceptions" Yes	No	Comment / Corrective Action
Are ALL units documented in batch?	X		
Analysis holding time within criteria?	X		
No. of calibration standards present acceptable?	X		

Curve correlation coefficient >= 0.995?	X	
Calibration curve y-intercept < curve detection limit?	X	
Sample responses within highest standard response?	X	
Method blank present?	X	
Method blank within acceptance criteria?	X	
Standard matrix spike present?	X	
Standard matrix spike within acceptance criteria?	X	
Sample matrix spike present?	X	
Sample matrix spike within acceptance criteria?	X	
Sample matrix spike duplicate present?	X	
Sample matrix spike duplicate within acceptance criteria?		X 720*335.2-

Note: Any "NO" answer requires a comment.

PROBLEM:
Sample matrix spike duplicate not within acceptance criteria:
720*335.2-
EXPLANATION:
Possible matrix interference; method in control, see SP data.

BATCH OVERRIDE BY: GREG ST. AUBIN 5145

FINALIZED BY: GREG ST. AUBIN 5145

ESE BATCH : P25373
CLASSIFICATION : Phenols - 420.1

QC TYPE : FDER/SW
ANALYST : CHRIS FISHER
EXTRACTOR :
DATA ENTRY : CHRIS FISHER

REPORT DATE/TIME : 01/11/95 11:17:18
ANALYSIS DATE : 12/08/94
EXTRACT DATE :

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

BATCH NOTES
420.1

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
19728		591-5103	ESE-PEORIA (FT SHERIDAN)	BARBARA RAYA-HASH

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
19728*1	GV-1		
19728*2	GV-2		
19728*3	GV-3		
19728*4	GV-4		
19728*5	GV-5		
19728*6	GV-6		

ESE BATCH : P25373

Continuing Calibration Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
12/08/94	CCB*QC*1	32730*420.1-P	Phenols	MG/L	ND
12/08/94	CCB*QC*2	32730*420.1-P	Phenols	MG/L	ND

Continuing Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
12/08/94	CCV*QC*1	32730*420.1-P	Phenols	MG/L	2.00	2.01	101	80-120
12/08/94	CCV*QC*2	32730*420.1-P	Phenols	MG/L	2.00	1.98	99.0	80-120

Initial Calibration Blank Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
12/08/94	ICB*QC*1	32730*420.1-P	Phenols	MG/L	ND

Initial Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
12/08/94	ICV*QC*1	32730*420.1-P	Phenols	MG/L	2.00	2.06	103	80-120

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND	DET LMT
12/08/94	MB*QC*1	32730*420.1-P	Phenols	MG/L	ND	0.05

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
12/08/94	SP*QC*1	32730*420.1-P	Phenols	MG/L	2.00	2.03	101.5	80-120

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	UNSPIKED	TARGET	FOUND	%RECV	RECV CRIT	RPD
12/08/94	SPM1*19728*1	32730*420.1-P	Phenols	MG/L	0.007	2.00	1.91	95.5	75-125	
12/08/94	SPM2*19728*1	32730*420.1-P	Phenols	MG/L	0.007	2.00	1.98	99.0	75-125	3.60

ESE BATCH : P25373

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: P25373 Analysis Date: 12/08/94 Analyst: CHRIS FISHER

	Yes	No	"Exceptions" Comment / Corrective Action
Are ALL units documented in batch?			X
Analysis holding time within criteria?			X
No. of calibration standards present acceptable?			X
Curve correlation coefficient >= 0.995?			X
Calibration curve y-intercept < curve detection limit?			X
Sample responses within highest standard response?			X
Method blank present?			X
Method blank within acceptance criteria?			X
Standard matrix spike present?			X
Standard matrix spike within acceptance criteria?			X
Sample matrix spike present?			X
Sample matrix spike within acceptance criteria?			X
Sample matrix spike duplicate present?			X
Sample matrix spike duplicate within acceptance criteria?			X

Note: Any "NO" answer requires a comment.

BATCH OVERRIDE BY:

FINALIZED BY: WILLIAM GRAY 5159

ESE BATCH : P25277
CLASSIFICATION : Ph,lab - 150.1

QC TYPE : FDER/SW
ANALYST : FRANCES JACOBS
EXTRACTOR :
DATA ENTRY : FRANCES JACOBS

REPORT DATE/TIME : 01/11/95 11:17:46
ANALYSIS DATE : 12/03/94
EXTRACT DATE :

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

BATCH NOTES
150.1

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
19728		591-5103	ESE-PEORIA (FT SHERIDAN)	BARBARA RAYA-HASH

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
19728*1	GV-1		
19728*2	GV-2		
19728*3	GV-3		
19728*4	GV-4		
19728*5	GV-5		
19728*6	GV-6		

ESE BATCH : P25277

Continuing Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
12/03/94	CCV*QC*1	403*150.1-P	pH	STD UN	7.00	7.01	100	80-120

Initial Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
12/03/94	ICV*QC*1	403*150.1-P	pH	STD UN	7.00	6.96	99.4	80-120

Replicate Analysis Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	REP #1	REP #2	RPD	RPD CRIT
12/03/94	RP*19728*1	403*150.1-P	pH	STD UN	6.64	6.73	1.30	20

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
12/03/94	SP*QC*1	403*150.1-P	pH	STD UN	7.00	7.01	100.1	80-120

ESE BATCH : P25277

Environmental Science and Engineering Analytical Services
Computer QC Checks

Batch No.: P25277 Analysis Date: 12/03/94 Analyst: FRANCES JACOBS

	Yes	"Exceptions" No	Comment / Corrective Action
Are ALL units documented in batch?	X		
Analysis holding time within criteria?	X		
Sample replicate present?	X		
Sample replicate within acceptance criteria?	X		

Note: Any "NO" answer requires a comment.

BATCH OVERRIDE BY:

FINALIZED BY: WILLIAM GRAY 5159

ESE BATCH : P25517
CLASSIFICATION : METALS

QC TYPE : FDER/SW
ANALYST : LEANNA SWEETLAND
EXTRACTOR : GREG ST. AUBIN
DATA ENTRY : LEANNA SWEETLAND

REPORT DATE/TIME : 01/11/95 11:18:02
ANALYSIS DATE : 12/16/94
EXTRACT DATE : 12/16/94

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
19728		591-5103	ESE-PEORIA (FT SHERIDAN)	BARBARA RAYA-HASH

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
19728*1	GV-1	12/16/94	07:21PM
19728*2	GV-2	12/16/94	10:11PM
19728*3	GV-3	12/16/94	10:26PM
19728*4	GV-4	12/16/94	10:31PM
19728*5	GV-5	12/16/94	10:37PM
19728*6	GV-6	12/16/94	10:42PM

ESE BATCH : P25517

Continuing Calibration Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
12/16/94	CCB*QC*1	1002*206.2-P	Arsenic,total	UG/L	ND
12/16/94	CCB*QC*1	1051*239.2-P	Lead,total	UG/L	ND
12/16/94	CCB*QC*2	1002*206.2-P	Arsenic,total	UG/L	ND
12/16/94	CCB*QC*2	1051*239.2-P	Lead,total	UG/L	0.03

Continuing Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
12/16/94	CCV*QC*1	1002*206.2-P	Arsenic,total	UG/L	40.0	41.7	104	90-110
12/16/94	CCV*QC*1	1051*239.2-P	Lead,total	UG/L	25.0	24.7	98.8	90-110
12/16/94	CCV*QC*2	1002*206.2-P	Arsenic,total	UG/L	40.0	38.3	95.8	90-110
12/16/94	CCV*QC*2	1051*239.2-P	Lead,total	UG/L	25.0	25.2	101	90-110

Initial Calibration Blank Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
12/16/94	ICB*QC*1	1002*206.2-P	Arsenic,total	UG/L	ND
12/16/94	ICB*QC*1	1051*239.2-P	Lead,total	UG/L	ND

Initial Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
12/16/94	ICV*QC*1	1002*206.2-P	Arsenic,total	UG/L	50.0	47.7	95.4	90-110
12/16/94	ICV*QC*1	1051*239.2-P	Lead,total	UG/L	30.0	31.7	106	90-110

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND	DET LMT
12/16/94	MB*QC*1	1002*206.2-P	Arsenic,total	UG/L	ND	10.0
12/16/94	MB*QC*1	1051*239.2-P	Lead,total	UG/L	ND	1.0

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
12/16/94	SP*QC*1	1002*206.2-P	Arsenic,total	UG/L	22.0	20.1	91.4	80-120
12/16/94	SP*QC*1	1051*239.2-P	Lead,total	UG/L	22.0	21.3	96.8	80-120

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	UNSPIKED	TARGET	FOUND	%RECV	RECV CRIT	RPD
12/16/94	SPM1*19728*1	1002*206.2-P	Arsenic,total	UG/L	101	24.4	34.0	139.3	75-125	
12/16/94	SPM1*19728*1	1051*239.2-P	Lead,total	UG/L	192	24.4	8.0	32.8	75-125	
12/16/94	SPM2*19728*1	1002*206.2-P	Arsenic,total	UG/L	101	24.4	37.0	151.6	75-125	8.3
12/16/94	SPM2*19728*1	1051*239.2-P	Lead,total	UG/L	192	24.4	10.0	41.0	75-125	22.0

ESE BATCH : P25517

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: P25517 Analysis Date: 12/16/94 Analyst: LEANNA SWEETLAND

	Yes	"Exceptions" No	Comment / Corrective Action
Are ALL units documented in batch?		X	
Analysis holding time within criteria?	X		
CCB present?	X		
CCB within acceptance criteria?	X		
CCV present?	X		
CCV within acceptance criteria?	X		
ICB present?	X		
ICB within acceptance criteria?	X		
ICV present?	X		
ICV within acceptance criteria?	X		
Method blank present?	X		
Method blank within acceptance criteria?	X		
Standard matrix spike present?	X		
Standard matrix spike within acceptance criteria?	X		
Sample matrix spike present?	X		
Sample matrix spike within acceptance criteria?		X	As _____
			Pb _____
Sample matrix spike duplicate present?	X		
Sample matrix spike duplicate within acceptance criteria?		X	As _____
			Pb _____

Note: Any "NO" answer requires a comment.

BATCH OVERRIDE BY: GREG ST. AUBIN 5145

FINALIZED BY: GREG ST. AUBIN 5145

PROBLEM:

Sample matrix spike not within acceptance criteria:

As

Pb

EXPLANATION:

Sample result significantly higher than spiking level, spike diluted out; method in control, see SP data.

ESE BATCH : P25518
CLASSIFICATION : METALS

QC TYPE : FDER/SW
ANALYST : LEANNA SWEETLAND
EXTRACTOR : GREG ST. AUBIN
DATA ENTRY : LEANNA SWEETLAND

REPORT DATE/TIME : 01/11/95 11:18:48
ANALYSIS DATE : 12/17/94
EXTRACT DATE : 12/16/94

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
19728		591-5103	ESE-PEORIA (FT SHERIDAN)	BARBARA RAYA-HASH

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
19728*1	GV-1	12/17/94	12:08AM
19728*2	GV-2	12/17/94	12:29AM
19728*3	GV-3	12/17/94	12:35AM
19728*4	GV-4	12/17/94	12:40AM
19728*5	GV-5	12/17/94	12:55AM
19728*6	GV-6	12/17/94	01:00AM

ESE BATCH : P25518

Continuing Calibration Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
12/17/94	CCB*QC*1	1147*270.2-P	Selenium,total	UG/L	ND
12/17/94	CCB*QC*1	1059*279.2-P	Thallium,total	UG/L	ND
12/17/94	CCB*QC*2	1147*270.2-P	Selenium,total	UG/L	ND
12/17/94	CCB*QC*2	1059*279.2-P	Thallium,total	UG/L	ND

Continuing Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
12/17/94	CCV*QC*1	1147*270.2-P	Selenium,total	UG/L	25.0	23.1	92.4	90-110
12/17/94	CCV*QC*1	1059*279.2-P	Thallium,total	UG/L		ND		90-110
12/17/94	CCV*QC*2	1147*270.2-P	Selenium,total	UG/L	25.0	22.5	90.0	90-110
12/17/94	CCV*QC*2	1059*279.2-P	Thallium,total	UG/L		ND		90-110

Initial Calibration Blank Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
12/17/94	ICB*QC*1	1147*270.2-P	Selenium,total	UG/L	ND
12/17/94	ICB*QC*1	1059*279.2-P	Thallium,total	UG/L	ND

Initial Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
12/17/94	ICV*QC*1	1147*270.2-P	Selenium,total	UG/L	30.0	30.4	101	90-110
12/17/94	ICV*QC*1	1059*279.2-P	Thallium,total	UG/L		ND		90-110

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND	DET LMT
12/16/94	MB*QC*1	1147*270.2-P	Selenium,total	UG/L	ND	5.0
12/16/94	MB*QC*1	1059*279.2-P	Thallium,total	UG/L	ND	10.0

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
12/17/94	SP*QC*1	1147*270.2-P	Selenium,total	UG/L	22.0	20.2	91.8	80-120
12/17/94	SP*QC*1	1059*279.2-P	Thallium,total	UG/L	22.0	22.7	103.2	80-120

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	UNSPIKED	TARGET	FOUND	%RECV	RECV CRIT	RPD
12/17/94	SPM1*19728*1	1147*270.2-P	Selenium,total	UG/L	3.0	22.0	15.1	68.6	75-125	
12/17/94	SPM1*19728*1	1059*279.2-P	Thallium,total	UG/L	0.0	22.0	1.0	4.5	75-125	
12/17/94	SPM2*19728*1	1147*270.2-P	Selenium,total	UG/L	3.0	22.0	15.1	68.6	75-125	0.0
12/17/94	SPM2*19728*1	1059*279.2-P	Thallium,total	UG/L	0.0	22.0	1.1	5.0	75-125	10.5

ESE BATCH : P25518

Environmental Science and Engineering Analytical Services
Computer QC Checks

Batch No.: P25518 Analysis Date: 12/17/94 Analyst: LEANNA SWEETLAND

	Yes	"Exceptions" No	Comment / Corrective Action
Are ALL units documented in batch?	X		
Analysis holding time within criteria?	X		
CCB present?	X		
CCB within acceptance criteria?	X		
CCV present?	X		
CCV within acceptance criteria?	X		
ICB present?	X		
ICB within acceptance criteria?	X		
ICV present?	X		
ICV within acceptance criteria?	X		
Method blank present?	X		
Method blank within acceptance criteria?	X		
Standard matrix spike present?	X		
Standard matrix spike within acceptance criteria?	X		
Sample matrix spike present?	X		
Sample matrix spike within acceptance criteria?		X	Se
			Tl
Sample matrix spike duplicate present?	X		
Sample matrix spike duplicate within acceptance criteria?		X	Se
			Tl

Note: Any "NO" answer requires a comment.

BATCH OVERRIDE BY: GREG ST. AUBIN 5145

FINALIZED BY: GREG ST. AUBIN 5145

PROBLEM:
Sample matrix spike not within acceptance criteria:
Se
Tl
EXPLANATION:
Possible matrix interference; method in control, see SP data.
PROBLEM:
Sample matrix spike duplicate not within acceptance criteria:
Se
Tl
EXPLANATION:
Possible matrix interference; method in control, see SP data.

ESE BATCH : P25565
CLASSIFICATION : METALS

QC TYPE : FDER/SW
ANALYST : ELLEN ZUCK
EXTRACTOR : GREG ST. AUBIN
DATA ENTRY : ICAP DOWNLOAD

REPORT DATE/TIME : 01/11/95 11:19:30
ANALYSIS DATE : 12/19/94
EXTRACT DATE :

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
19728		591-5103	ESE-PEORIA (FT SHERIDAN)	BARBARA RAYA-HASH

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
19728*1	GV-1	12/19/94	09:29AM
19728*2	GV-2	12/19/94	09:39AM
19728*3	GV-3	12/19/94	09:41AM
19728*4	GV-4	12/19/94	09:43AM
19728*5	GV-5	12/19/94	09:46AM
19728*6	GV-6	12/19/94	09:55AM

ESE BATCH : P25565

Continuing Calibration Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
12/19/94	CCB*QC*1	1077*200.7-P	Silver,total	UG/L	1.1
12/19/94	CCB*QC*1	1105*200.7-P	Aluminum,total	UG/L	0.03
12/19/94	CCB*QC*1	1022*200.7-P	Boron,total	UG/L	0.3
12/19/94	CCB*QC*1	1007*200.7-P	Barium,total	UG/L	ND
12/19/94	CCB*QC*1	1012*200.7-P	Beryllium,total	UG/L	0.1
12/19/94	CCB*QC*1	1027*200.7-P	Cadmium,total	UG/L	ND
12/19/94	CCB*QC*1	1034*200.7-P	Chromium,total	UG/L	0.9
12/19/94	CCB*QC*1	1042*200.7-P	Copper,total	UG/L	1.4
12/19/94	CCB*QC*1	1045*200.7-P	Iron,total	UG/L	1.8
12/19/94	CCB*QC*1	1055*200.7-P	Manganese,total	UG/L	ND
12/19/94	CCB*QC*1	1067*200.7-P	Nickel,total	UG/L	1.1
12/19/94	CCB*QC*1	1051*200.7-P	Lead,total	UG/L	11.4
12/19/94	CCB*QC*1	1097*200.7-P	Antimony,total	UG/L	ND
12/19/94	CCB*QC*1	1092*200.7-P	Zinc,total	UG/L	0.8
12/19/94	CCB*QC*2	1077*200.7-P	Silver,total	UG/L	0.7
12/19/94	CCB*QC*2	1105*200.7-P	Aluminum,total	UG/L	4.3
12/19/94	CCB*QC*2	1022*200.7-P	Boron,total	UG/L	ND
12/19/94	CCB*QC*2	1007*200.7-P	Barium,total	UG/L	ND
12/19/94	CCB*QC*2	1012*200.7-P	Beryllium,total	UG/L	0.04
12/19/94	CCB*QC*2	1027*200.7-P	Cadmium,total	UG/L	0.6
12/19/94	CCB*QC*2	1034*200.7-P	Chromium,total	UG/L	3.0
12/19/94	CCB*QC*2	1042*200.7-P	Copper,total	UG/L	4.2
12/19/94	CCB*QC*2	1045*200.7-P	Iron,total	UG/L	2.5
12/19/94	CCB*QC*2	1055*200.7-P	Manganese,total	UG/L	ND
12/19/94	CCB*QC*2	1067*200.7-P	Nickel,total	UG/L	ND
12/19/94	CCB*QC*2	1051*200.7-P	Lead,total	UG/L	16.3
12/19/94	CCB*QC*2	1097*200.7-P	Antimony,total	UG/L	8.2
12/19/94	CCB*QC*2	1092*200.7-P	Zinc,total	UG/L	0.4
12/19/94	CCB*QC*3	1077*200.7-P	Silver,total	UG/L	1.8
12/19/94	CCB*QC*3	1105*200.7-P	Aluminum,total	UG/L	6.5
12/19/94	CCB*QC*3	1022*200.7-P	Boron,total	UG/L	ND
12/19/94	CCB*QC*3	1007*200.7-P	Barium,total	UG/L	ND
12/19/94	CCB*QC*3	1012*200.7-P	Beryllium,total	UG/L	0.2
12/19/94	CCB*QC*3	1027*200.7-P	Cadmium,total	UG/L	0.1
12/19/94	CCB*QC*3	1034*200.7-P	Chromium,total	UG/L	5.2
12/19/94	CCB*QC*3	1042*200.7-P	Copper,total	UG/L	5.6
12/19/94	CCB*QC*3	1045*200.7-P	Iron,total	UG/L	3.2
12/19/94	CCB*QC*3	1055*200.7-P	Manganese,total	UG/L	ND
12/19/94	CCB*QC*3	1067*200.7-P	Nickel,total	UG/L	4.8
12/19/94	CCB*QC*3	1051*200.7-P	Lead,total	UG/L	17.2
12/19/94	CCB*QC*3	1097*200.7-P	Antimony,total	UG/L	ND
12/19/94	CCB*QC*3	1092*200.7-P	Zinc,total	UG/L	ND
12/19/94	CCB*QC*4	1077*200.7-P	Silver,total	UG/L	ND
12/19/94	CCB*QC*4	1105*200.7-P	Aluminum,total	UG/L	ND
12/19/94	CCB*QC*4	1022*200.7-P	Boron,total	UG/L	0.3
12/19/94	CCB*QC*4	1007*200.7-P	Barium,total	UG/L	ND
12/19/94	CCB*QC*4	1012*200.7-P	Beryllium,total	UG/L	0.05
12/19/94	CCB*QC*4	1027*200.7-P	Cadmium,total	UG/L	ND
12/19/94	CCB*QC*4	1034*200.7-P	Chromium,total	UG/L	4.1
12/19/94	CCB*QC*4	1042*200.7-P	Copper,total	UG/L	0.4
12/19/94	CCB*QC*4	1045*200.7-P	Iron,total	UG/L	1.2
12/19/94	CCB*QC*4	1055*200.7-P	Manganese,total	UG/L	0.7
12/19/94	CCB*QC*4	1067*200.7-P	Nickel,total	UG/L	1.7
12/19/94	CCB*QC*4	1051*200.7-P	Lead,total	UG/L	2.7
12/19/94	CCB*QC*4	1097*200.7-P	Antimony,total	UG/L	12.7
12/19/94	CCB*QC*4	1092*200.7-P	Zinc,total	UG/L	5.7
12/19/94	CCB*QC*5	1077*200.7-P	Silver,total	UG/L	ND
12/19/94	CCB*QC*5	1105*200.7-P	Aluminum,total	UG/L	ND
12/19/94	CCB*QC*5	1022*200.7-P	Boron,total	UG/L	0.3
12/19/94	CCB*QC*5	1007*200.7-P	Barium,total	UG/L	ND
12/19/94	CCB*QC*5	1012*200.7-P	Beryllium,total	UG/L	ND
12/19/94	CCB*QC*5	1027*200.7-P	Cadmium,total	UG/L	0.1
12/19/94	CCB*QC*5	1034*200.7-P	Chromium,total	UG/L	ND
12/19/94	CCB*QC*5	1042*200.7-P	Copper,total	UG/L	ND
12/19/94	CCB*QC*5	1045*200.7-P	Iron,total	UG/L	0.6
12/19/94	CCB*QC*5	1055*200.7-P	Manganese,total	UG/L	1.0
12/19/94	CCB*QC*5	1067*200.7-P	Nickel,total	UG/L	ND
12/19/94	CCB*QC*5	1051*200.7-P	Lead,total	UG/L	ND
12/19/94	CCB*QC*5	1097*200.7-P	Antimony,total	UG/L	0.4
12/19/94	CCB*QC*5	1092*200.7-P	Zinc,total	UG/L	5.8

ESE BATCH : P25565

Continuing Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT

Continuing Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
12/19/94	CCV*QC*1	1077*200.7-P	Silver,total	UG/L	500	495	99.0	90-110
12/19/94	CCV*QC*1	1105*200.7-P	Aluminum,total	UG/L	5000	4910	98.2	90-110
12/19/94	CCV*QC*1	1022*200.7-P	Boron,total	UG/L	500	501	100	90-110
12/19/94	CCV*QC*1	1007*200.7-P	Barium,total	UG/L	500	492	98.4	90-110
12/19/94	CCV*QC*1	1012*200.7-P	Beryllium,total	UG/L	500	490	98.0	90-110
12/19/94	CCV*QC*1	1027*200.7-P	Cadmium,total	UG/L	500	499	99.8	90-110
12/19/94	CCV*QC*1	1034*200.7-P	Chromium,total	UG/L	500	501	100	90-110
12/19/94	CCV*QC*1	1042*200.7-P	Copper,total	UG/L	500	500	100.0	90-110
12/19/94	CCV*QC*1	1045*200.7-P	Iron,total	UG/L	5000	4930	98.6	90-110
12/19/94	CCV*QC*1	1055*200.7-P	Manganese,total	UG/L	500	495	99.0	90-110
12/19/94	CCV*QC*1	1067*200.7-P	Nickel,total	UG/L	500	500	100.0	90-110
12/19/94	CCV*QC*1	1051*200.7-P	Lead,total	UG/L	500	514	103	90-110
12/19/94	CCV*QC*1	1097*200.7-P	Antimony,total	UG/L	500	478	95.6	90-110
12/19/94	CCV*QC*1	1092*200.7-P	Zinc,total	UG/L	500	493	98.6	90-110
12/19/94	CCV*QC*2	1077*200.7-P	Silver,total	UG/L	500	490	98.0	90-110
12/19/94	CCV*QC*2	1105*200.7-P	Aluminum,total	UG/L	5000	4850	97.0	90-110
12/19/94	CCV*QC*2	1022*200.7-P	Boron,total	UG/L	500	489	97.8	90-110
12/19/94	CCV*QC*2	1007*200.7-P	Barium,total	UG/L	500	487	97.4	90-110
12/19/94	CCV*QC*2	1012*200.7-P	Beryllium,total	UG/L	500	482	96.4	90-110
12/19/94	CCV*QC*2	1027*200.7-P	Cadmium,total	UG/L	500	490	98.0	90-110
12/19/94	CCV*QC*2	1034*200.7-P	Chromium,total	UG/L	500	495	99.0	90-110
12/19/94	CCV*QC*2	1042*200.7-P	Copper,total	UG/L	500	494	98.8	90-110
12/19/94	CCV*QC*2	1045*200.7-P	Iron,total	UG/L	5000	4860	97.2	90-110
12/19/94	CCV*QC*2	1055*200.7-P	Manganese,total	UG/L	500	488	97.6	90-110
12/19/94	CCV*QC*2	1067*200.7-P	Nickel,total	UG/L	500	492	98.4	90-110
12/19/94	CCV*QC*2	1051*200.7-P	Lead,total	UG/L	500	496	99.2	90-110
12/19/94	CCV*QC*2	1097*200.7-P	Antimony,total	UG/L	500	497	99.4	90-110
12/19/94	CCV*QC*2	1092*200.7-P	Zinc,total	UG/L	500	486	97.2	90-110
12/19/94	CCV*QC*3	1077*200.7-P	Silver,total	UG/L	500	487	97.4	90-110
12/19/94	CCV*QC*3	1105*200.7-P	Aluminum,total	UG/L	5000	4780	95.6	90-110
12/19/94	CCV*QC*3	1022*200.7-P	Boron,total	UG/L	500	484	96.8	90-110
12/19/94	CCV*QC*3	1007*200.7-P	Barium,total	UG/L	500	480	96.0	90-110
12/19/94	CCV*QC*3	1012*200.7-P	Beryllium,total	UG/L	500	475	95.0	90-110
12/19/94	CCV*QC*3	1027*200.7-P	Cadmium,total	UG/L	500	485	97.0	90-110
12/19/94	CCV*QC*3	1034*200.7-P	Chromium,total	UG/L	500	490	98.0	90-110
12/19/94	CCV*QC*3	1042*200.7-P	Copper,total	UG/L	500	488	97.6	90-110
12/19/94	CCV*QC*3	1045*200.7-P	Iron,total	UG/L	5000	4810	96.2	90-110
12/19/94	CCV*QC*3	1055*200.7-P	Manganese,total	UG/L	500	480	96.0	90-110
12/19/94	CCV*QC*3	1067*200.7-P	Nickel,total	UG/L	500	485	97.0	90-110
12/19/94	CCV*QC*3	1051*200.7-P	Lead,total	UG/L	500	482	96.4	90-110
12/19/94	CCV*QC*3	1097*200.7-P	Antimony,total	UG/L	500	502	100	90-110
12/19/94	CCV*QC*3	1092*200.7-P	Zinc,total	UG/L	500	482	96.4	90-110
12/19/94	CCV*QC*4	1077*200.7-P	Silver,total	UG/L	500	497	99.4	90-110
12/19/94	CCV*QC*4	1105*200.7-P	Aluminum,total	UG/L	5000	5010	100	90-110
12/19/94	CCV*QC*4	1022*200.7-P	Boron,total	UG/L	500	508	102	90-110
12/19/94	CCV*QC*4	1007*200.7-P	Barium,total	UG/L	500	504	101	90-110
12/19/94	CCV*QC*4	1012*200.7-P	Beryllium,total	UG/L	500	503	101	90-110
12/19/94	CCV*QC*4	1027*200.7-P	Cadmium,total	UG/L	500	509	102	90-110
12/19/94	CCV*QC*4	1034*200.7-P	Chromium,total	UG/L	500	508	102	90-110
12/19/94	CCV*QC*4	1042*200.7-P	Copper,total	UG/L	500	504	101	90-110
12/19/94	CCV*QC*4	1045*200.7-P	Iron,total	UG/L	5000	5070	101	90-110
12/19/94	CCV*QC*4	1055*200.7-P	Manganese,total	UG/L	500	507	101	90-110
12/19/94	CCV*QC*4	1067*200.7-P	Nickel,total	UG/L	500	504	101	90-110
12/19/94	CCV*QC*4	1051*200.7-P	Lead,total	UG/L	500	492	98.4	90-110
12/19/94	CCV*QC*4	1097*200.7-P	Antimony,total	UG/L		ND		90-110
12/19/94	CCV*QC*4	1092*200.7-P	Zinc,total	UG/L	500	506	101	90-110
12/19/94	CCV*QC*5	1077*200.7-P	Silver,total	UG/L	500	496	99.2	90-110
12/19/94	CCV*QC*5	1105*200.7-P	Aluminum,total	UG/L	5000	4990	99.8	90-110
12/19/94	CCV*QC*5	1022*200.7-P	Boron,total	UG/L	500	510	102	90-110
12/19/94	CCV*QC*5	1007*200.7-P	Barium,total	UG/L	500	502	100	90-110
12/19/94	CCV*QC*5	1012*200.7-P	Beryllium,total	UG/L	500	499	99.8	90-110
12/19/94	CCV*QC*5	1027*200.7-P	Cadmium,total	UG/L	500	506	101	90-110
12/19/94	CCV*QC*5	1034*200.7-P	Chromium,total	UG/L	500	503	101	90-110
12/19/94	CCV*QC*5	1042*200.7-P	Copper,total	UG/L	500	501	100	90-110
12/19/94	CCV*QC*5	1045*200.7-P	Iron,total	UG/L	5000	5040	101	90-110
12/19/94	CCV*QC*5	1055*200.7-P	Manganese,total	UG/L	500	503	101	90-110
12/19/94	CCV*QC*5	1067*200.7-P	Nickel,total	UG/L	500	503	101	90-110
12/19/94	CCV*QC*5	1051*200.7-P	Lead,total	UG/L	500	512	102	90-110
12/19/94	CCV*QC*5	1097*200.7-P	Antimony,total	UG/L		ND		90-110

ESE BATCH : P25565

Continuing Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
12/19/94	CCV*QC*5	1092*200.7-P	Zinc,total	UG/L	500	506	101	90-110

Interference Check Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
12/19/94	ICS*A*1	1105*200.7-P	Aluminum,total	UG/L	500000	474000	94.8	80-120
12/19/94	ICS*A*1	1045*200.7-P	Iron,total	UG/L	200000	173000	86.5	80-120
12/19/94	ICS*AB*1	1077*200.7-P	Silver,total	UG/L	1000	956	95.6	80-120
12/19/94	ICS*AB*1	1105*200.7-P	Aluminum,total	UG/L	500000	472000	94.4	80-120
12/19/94	ICS*AB*1	1007*200.7-P	Barium,total	UG/L	500	464	92.8	80-120
12/19/94	ICS*AB*1	1012*200.7-P	Beryllium,total	UG/L	500	448	89.6	80-120
12/19/94	ICS*AB*1	1027*200.7-P	Cadmium,total	UG/L	1000	873	87.3	80-120
12/19/94	ICS*AB*1	1034*200.7-P	Chromium,total	UG/L	500	441	88.2	80-120
12/19/94	ICS*AB*1	1042*200.7-P	Copper,total	UG/L	500	473	94.6	80-120
12/19/94	ICS*AB*1	1045*200.7-P	Iron,total	UG/L	200000	173000	86.5	80-120
12/19/94	ICS*AB*1	1055*200.7-P	Manganese,total	UG/L	500	439	87.8	80-120
12/19/94	ICS*AB*1	1067*200.7-P	Nickel,total	UG/L	1000	838	83.8	80-120
12/19/94	ICS*AB*1	1051*200.7-P	Lead,total	UG/L	1000	929	92.9	80-120
12/19/94	ICS*AB*1	1092*200.7-P	Zinc,total	UG/L	1000	912	91.2	80-120
12/19/94	ICS*A*2	1105*200.7-P	Aluminum,total	UG/L	500000	481000	96.2	80-120
12/19/94	ICS*A*2	1045*200.7-P	Iron,total	UG/L	200000	177000	88.5	80-120
12/19/94	ICS*AB*2	1077*200.7-P	Silver,total	UG/L	1000	948	94.8	80-120
12/19/94	ICS*AB*2	1105*200.7-P	Aluminum,total	UG/L	500000	474000	94.8	80-120
12/19/94	ICS*AB*2	1007*200.7-P	Barium,total	UG/L	500	466	93.2	80-120
12/19/94	ICS*AB*2	1012*200.7-P	Beryllium,total	UG/L	500	453	90.6	80-120
12/19/94	ICS*AB*2	1027*200.7-P	Cadmium,total	UG/L	1000	883	88.3	80-120
12/19/94	ICS*AB*2	1034*200.7-P	Chromium,total	UG/L	500	446	89.2	80-120
12/19/94	ICS*AB*2	1042*200.7-P	Copper,total	UG/L	500	476	95.2	80-120
12/19/94	ICS*AB*2	1045*200.7-P	Iron,total	UG/L	200000	175000	87.5	80-120
12/19/94	ICS*AB*2	1055*200.7-P	Manganese,total	UG/L	500	442	88.4	80-120
12/19/94	ICS*AB*2	1067*200.7-P	Nickel,total	UG/L	1000	850	85.0	80-120
12/19/94	ICS*AB*2	1051*200.7-P	Lead,total	UG/L	1000	949	94.9	80-120
12/19/94	ICS*AB*2	1092*200.7-P	Zinc,total	UG/L	1000	925	92.5	80-120
12/19/94	ICS*A*3	1105*200.7-P	Aluminum,total	UG/L	500000	480000	96.0	80-120
12/19/94	ICS*A*3	1045*200.7-P	Iron,total	UG/L	200000	176000	88.0	80-120

ESE BATCH : P25565

Interference Check Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
12/19/94	ICS*AB*3	1077*200.7-P	Silver,total	UG/L	1000	955	95.5	80-120
12/19/94	ICS*AB*3	1105*200.7-P	Aluminum,total	UG/L	500000	479000	95.8	80-120
12/19/94	ICS*AB*3	1007*200.7-P	Barium,total	UG/L	500	472	94.4	80-120
12/19/94	ICS*AB*3	1012*200.7-P	Beryllium,total	UG/L	500	458	91.6	80-120
12/19/94	ICS*AB*3	1027*200.7-P	Cadmium,total	UG/L	1000	893	89.3	80-120
12/19/94	ICS*AB*3	1034*200.7-P	Chromium,total	UG/L	500	454	90.8	80-120
12/19/94	ICS*AB*3	1042*200.7-P	Copper,total	UG/L	500	484	96.8	80-120
12/19/94	ICS*AB*3	1045*200.7-P	Iron,total	UG/L	200000	177000	88.5	80-120
12/19/94	ICS*AB*3	1055*200.7-P	Manganese,total	UG/L	500	448	89.6	80-120
12/19/94	ICS*AB*3	1067*200.7-P	Nickel,total	UG/L	1000	861	86.1	80-120
12/19/94	ICS*AB*3	1051*200.7-P	Lead,total	UG/L	1000	973	97.3	80-120
12/19/94	ICS*AB*3	1092*200.7-P	Zinc,total	UG/L	1000	939	93.9	80-120

Initial Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
12/19/94	ICV*QC*1	1077*200.7-P	Silver,total	UG/L	1500	1460	97.3	95-105
12/19/94	ICV*QC*1	1105*200.7-P	Aluminum,total	UG/L	3000	3020	101	95-105
12/19/94	ICV*QC*1	1022*200.7-P	Boron,total	UG/L	3000	3060	102	95-105
12/19/94	ICV*QC*1	1007*200.7-P	Barium,total	UG/L	3000	2990	99.7	95-105
12/19/94	ICV*QC*1	1012*200.7-P	Beryllium,total	UG/L	3000	3000	100.0	95-105
12/19/94	ICV*QC*1	1027*200.7-P	Cadmium,total	UG/L	3000	2990	99.7	95-105
12/19/94	ICV*QC*1	1034*200.7-P	Chromium,total	UG/L	3000	3010	100	95-105
12/19/94	ICV*QC*1	1042*200.7-P	Copper,total	UG/L	3000	3030	101	95-105
12/19/94	ICV*QC*1	1045*200.7-P	Iron,total	UG/L	3000	3050	102	95-105
12/19/94	ICV*QC*1	1055*200.7-P	Manganese,total	UG/L	3000	2980	99.3	95-105
12/19/94	ICV*QC*1	1067*200.7-P	Nickel,total	UG/L	3000	3020	101	95-105
12/19/94	ICV*QC*1	1051*200.7-P	Lead,total	UG/L	3000	2920	97.3	95-105
12/19/94	ICV*QC*1	1097*200.7-P	Antimony,total	UG/L	3000	2920	97.3	95-105
12/19/94	ICV*QC*1	1092*200.7-P	Zinc,total	UG/L	3000	2950	98.3	95-105
12/19/94	ICV*QC*2	1077*200.7-P	Silver,total	UG/L	1500	1450	96.7	95-105
12/19/94	ICV*QC*2	1105*200.7-P	Aluminum,total	UG/L	3000	3020	101	95-105
12/19/94	ICV*QC*2	1022*200.7-P	Boron,total	UG/L	3000	3090	103	95-105
12/19/94	ICV*QC*2	1007*200.7-P	Barium,total	UG/L	3000	3000	100.0	95-105
12/19/94	ICV*QC*2	1012*200.7-P	Beryllium,total	UG/L	3000	3020	101	95-105
12/19/94	ICV*QC*2	1027*200.7-P	Cadmium,total	UG/L	3000	3000	100.0	95-105
12/19/94	ICV*QC*2	1034*200.7-P	Chromium,total	UG/L	3000	3030	101	95-105
12/19/94	ICV*QC*2	1042*200.7-P	Copper,total	UG/L	3000	3050	102	95-105
12/19/94	ICV*QC*2	1045*200.7-P	Iron,total	UG/L	3000	3050	102	95-105
12/19/94	ICV*QC*2	1055*200.7-P	Manganese,total	UG/L	3000	2990	99.7	95-105
12/19/94	ICV*QC*2	1067*200.7-P	Nickel,total	UG/L	3000	3030	101	95-105
12/19/94	ICV*QC*2	1051*200.7-P	Lead,total	UG/L	3000	2980	99.3	95-105
12/19/94	ICV*QC*2	1097*200.7-P	Antimony,total	UG/L		ND		95-105
12/19/94	ICV*QC*2	1092*200.7-P	Zinc,total	UG/L	3000	2970	99.0	95-105

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND	DET LMT
12/19/94	MB*QC*1	1077*200.7-P	Silver,total	UG/L	1.3	9.0
12/19/94	MB*QC*1	1105*200.7-P	Aluminum,total	UG/L	47.8	45.0
12/19/94	MB*QC*1	1022*200.7-P	Boron,total	UG/L	6.8	18.0
12/19/94	MB*QC*1	1007*200.7-P	Barium,total	UG/L	ND	9.0
12/19/94	MB*QC*1	1012*200.7-P	Beryllium,total	UG/L	0.04	4.5
12/19/94	MB*QC*1	1027*200.7-P	Cadmium,total	UG/L	1.6	4.5
12/19/94	MB*QC*1	1034*200.7-P	Chromium,total	UG/L	4.7	9.0
12/19/94	MB*QC*1	1042*200.7-P	Copper,total	UG/L	7.4	9.0
12/19/94	MB*QC*1	1045*200.7-P	Iron,total	UG/L	30.3	90.0
12/19/94	MB*QC*1	1055*200.7-P	Manganese,total	UG/L	0.6	9.0
12/19/94	MB*QC*1	1067*200.7-P	Nickel,total	UG/L	4.3	18.0
12/19/94	MB*QC*1	1051*200.7-P	Lead,total	UG/L	15.5	45.0
12/19/94	MB*QC*1	1097*200.7-P	Antimony,total	UG/L	4.7	45.0
12/19/94	MB*QC*1	1092*200.7-P	Zinc,total	UG/L	2.9	18.0

Serial Dilution Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	REP #1	REP #2	RPD	RPD CRIT
12/19/94	SD*19728*1	1077*200.7-P	Silver,total	UG/L	4.2	31.2	NC	10
12/19/94	SD*19728*1	1105*200.7-P	Aluminum,total	UG/L	0.0	39500	NC	10
12/19/94	SD*19728*1	1022*200.7-P	Boron,total	UG/L	0.0	526	NC	10

ESE BATCH : P25565

Serial Dilution Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	REP #1	REP #2	RPD	RPD CRIT
12/19/94	SD*19728*1	1007*200.7-P	Barium,total	UG/L	460	508	9.9	10
12/19/94	SD*19728*1	1012*200.7-P	Beryllium,total	UG/L	1.3	1.9	NC	10
12/19/94	SD*19728*1	1027*200.7-P	Cadmium,total	UG/L	2.9	17.0	NC	10
12/19/94	SD*19728*1	1034*200.7-P	Chromium,total	UG/L	67.1	104	NC	10
12/19/94	SD*19728*1	1042*200.7-P	Copper,total	UG/L	310	353	NC	10
12/19/94	SD*19728*1	1045*200.7-P	Iron,total	UG/L	148000	168000	12.7	10
12/19/94	SD*19728*1	1055*200.7-P	Manganese,total	UG/L	1180	1320	11.2	10
12/19/94	SD*19728*1	1067*200.7-P	Nickel,total	UG/L	125	157	NC	10
12/19/94	SD*19728*1	1051*200.7-P	Lead,total	UG/L	277	388	NC	10
12/19/94	SD*19728*1	1097*200.7-P	Antimony,total	UG/L	10.7	124	NC	10
12/19/94	SD*19728*1	1092*200.7-P	Zinc,total	UG/L	8610	9510	9.9	10

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
12/19/94	SP*QC*1	1077*200.7-P	Silver,total	UG/L	50.0	45.7	91.4	80-120
12/19/94	SP*QC*1	1105*200.7-P	Aluminum,total	UG/L	2000	1960	98.0	80-120
12/19/94	SP*QC*1	1022*200.7-P	Boron,total	UG/L	500	509	101.8	80-120
12/19/94	SP*QC*1	1007*200.7-P	Barium,total	UG/L	2000	2020	101.0	80-120
12/19/94	SP*QC*1	1012*200.7-P	Beryllium,total	UG/L	50.0	49.7	99.4	80-120
12/19/94	SP*QC*1	1027*200.7-P	Cadmium,total	UG/L	50.0	50.6	101.2	80-120
12/19/94	SP*QC*1	1034*200.7-P	Chromium,total	UG/L	200	200	100.0	80-120
12/19/94	SP*QC*1	1042*200.7-P	Copper,total	UG/L	250	256	102.4	80-120
12/19/94	SP*QC*1	1045*200.7-P	Iron,total	UG/L	1000	1010	101.0	80-120
12/19/94	SP*QC*1	1055*200.7-P	Manganese,total	UG/L	500	501	100.2	80-120
12/19/94	SP*QC*1	1067*200.7-P	Nickel,total	UG/L	500	502	100.4	80-120
12/19/94	SP*QC*1	1051*200.7-P	Lead,total	UG/L	500	504	100.8	80-120
12/19/94	SP*QC*1	1097*200.7-P	Antimony,total	UG/L	500	474	94.8	80-120
12/19/94	SP*QC*1	1092*200.7-P	Zinc,total	UG/L	500	496	99.2	80-120

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	UNSPIKED	TARGET	FOUND	%RECV	RECV CRIT	RPD
12/19/94	SPM1*19728*1	1077*200.7-P	Silver,total	UG/L	4.2	55.6	49.3	88.7	75-125	
12/19/94	SPM1*19728*1	1105*200.7-P	Aluminum,total	UG/L	36300	2220	-700	-31.5	75-125	
12/19/94	SPM1*19728*1	1022*200.7-P	Boron,total	UG/L	459	556	551	99.1	75-125	
12/19/94	SPM1*19728*1	1007*200.7-P	Barium,total	UG/L	460	2220	2190	98.6	75-125	
12/19/94	SPM1*19728*1	1012*200.7-P	Beryllium,total	UG/L	1.3	55.6	53.5	96.2	75-125	
12/19/94	SPM1*19728*1	1027*200.7-P	Cadmium,total	UG/L	2.9	55.6	54.5	98.0	75-125	
12/19/94	SPM1*19728*1	1034*200.7-P	Chromium,total	UG/L	67.1	222	210	94.6	75-125	
12/19/94	SPM1*19728*1	1042*200.7-P	Copper,total	UG/L	310	278	266	95.7	75-125	
12/19/94	SPM1*19728*1	1045*200.7-P	Iron,total	UG/L	148000	1110	1000	90.1	75-125	
12/19/94	SPM1*19728*1	1055*200.7-P	Manganese,total	UG/L	1180	556	540	97.1	75-125	
12/19/94	SPM1*19728*1	1067*200.7-P	Nickel,total	UG/L	125	556	519	93.3	75-125	
12/19/94	SPM1*19728*1	1051*200.7-P	Lead,total	UG/L	277	556	506	91.0	75-125	
12/19/94	SPM1*19728*1	1097*200.7-P	Antimony,total	UG/L	10.7	556	326	58.6	75-125	
12/19/94	SPM1*19728*1	1092*200.7-P	Zinc,total	UG/L	8610	556	270	48.6	75-125	
12/19/94	SPM2*19728*1	1077*200.7-P	Silver,total	UG/L	4.2	55.6	47.2	84.9	75-125	4.3
12/19/94	SPM2*19728*1	1105*200.7-P	Aluminum,total	UG/L	36300	2220	-2900	-131	75-125	
12/19/94	SPM2*19728*1	1022*200.7-P	Boron,total	UG/L	459	556	541	97.3	75-125	1.7
12/19/94	SPM2*19728*1	1007*200.7-P	Barium,total	UG/L	460	2220	2180	98.2	75-125	0.5
12/19/94	SPM2*19728*1	1012*200.7-P	Beryllium,total	UG/L	1.3	55.6	53.4	96.0	75-125	0.1
12/19/94	SPM2*19728*1	1027*200.7-P	Cadmium,total	UG/L	2.9	55.6	52.3	94.1	75-125	4.1
12/19/94	SPM2*19728*1	1034*200.7-P	Chromium,total	UG/L	67.1	222	203	91.4	75-125	3.4
12/19/94	SPM2*19728*1	1042*200.7-P	Copper,total	UG/L	310	278	259	93.2	75-125	2.6
12/19/94	SPM2*19728*1	1045*200.7-P	Iron,total	UG/L	148000	1110	-8000	-721	75-125	
12/19/94	SPM2*19728*1	1055*200.7-P	Manganese,total	UG/L	1180	556	510	91.7	75-125	5.6
12/19/94	SPM2*19728*1	1067*200.7-P	Nickel,total	UG/L	125	556	513	92.3	75-125	1.1
12/19/94	SPM2*19728*1	1051*200.7-P	Lead,total	UG/L	277	556	485	87.2	75-125	4.2
12/19/94	SPM2*19728*1	1097*200.7-P	Antimony,total	UG/L	10.7	556	324	58.3	75-125	0.5
12/19/94	SPM2*19728*1	1092*200.7-P	Zinc,total	UG/L	8610	556	-320	-57.6	75-125	

ESE BATCH : P25565

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: P25565 Analysis Date: 12/19/94 Analyst: ELLEN ZUCK

	Yes	"Exceptions" No	Comment / Corrective Action
Are ALL units documented in batch?	X		
Analysis holding time within criteria?	X		
CCB present?	X		
CCB within acceptance criteria?	X		
CCV present?	X		
CCV within acceptance criteria?	X		
ICV present?	X		
ICV within acceptance criteria?	X		
Method blank present?	X		
Method blank within acceptance criteria?	X		
SD present?	X		
SD within acceptance criteria?	X		
	X		
	X		
	X		
	X		
	X		
		Cu	
		Fe	
		Mn	
	X		
	X		
	X		
Standard matrix spike present?	X		
Standard matrix spike within acceptance criteria?	X		
Sample matrix spike present?	X		
Sample matrix spike within acceptance criteria?		X	Al
			Sb
			Zn
Sample matrix spike duplicate present?	X		
Sample matrix spike duplicate within acceptance criteria?		X	Al

Fe _____

Sb _____

Zn _____

Note: Any "NO" answer requires a comment.

BATCH OVERRIDE BY: GREG ST. AUBIN 5145

FINALIZED BY: GREG ST. AUBIN 5145

put comments from next page here

PROBLEM:
SD not within acceptance criteria:
Cu
Fe
Mn
EXPLANATION:
Cu-Possible matrix interference; method in control, see SP data
Fe- "
Mn- "

PROBLEM:
Sample matrix spike not within acceptance criteria:
Al
Sb
Zn
EXPLANATION:
Al-Sample result significantly higher than spiking level
Sb-Possible matrix interference; method in control, see SP data
Zn-Sample result significantly higher than spiking level
PROBLEM:
Sample matrix spike duplicate not within acceptance criteria:
Al
Fe
Sb
Zn
EXPLANATION:
Al-Sample result significantly higher than spiking level
Fe-Sample result significantly higher than spiking level
Sb-Possible matrix interference; method in control, see SP data
Zn-Sample result significantly higher than spiking level

ESE BATCH : P25569
CLASSIFICATION : MERCURY

QC TYPE : FDER/SW
ANALYST : LEANNA SWEETLAND
EXTRACTOR : DEBBIE BLAHNIK
DATA ENTRY : LEANNA SWEETLAND

REPORT DATE/TIME : 01/11/95 11:26:18
ANALYSIS DATE : 12/19/94
EXTRACT DATE : 12/16/94

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
19728		591-5103	ESE-PEORIA (FT SHERIDAN)	BARBARA RAYA-HASH

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
19728*1	GV-1		
19728*2	GV-2		
19728*3	GV-3		
19728*4	GV-4		
19728*5	GV-5		
19728*6	GV-6		

ESE BATCH : P25569

Continuing Calibration Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
12/19/94	CCB*QC*1	71900*245.1-P	Mercury,total	UG/L	ND
12/19/94	CCB*QC*2	71900*245.1-P	Mercury,total	UG/L	ND
12/19/94	CCB*QC*3	71900*245.1-P	Mercury,total	UG/L	ND

Continuing Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
12/19/94	CCV*QC*1	71900*245.1-P	Mercury,total	UG/L	5.0	5.1	102	80-120
12/19/94	CCV*QC*2	71900*245.1-P	Mercury,total	UG/L	5.0	5.2	104	80-120
12/19/94	CCV*QC*3	71900*245.1-P	Mercury,total	UG/L	5.0	5.2	104	80-120

Initial Calibration Blank Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
12/19/94	ICB*QC*1	71900*245.1-P	Mercury,total	UG/L	ND

Initial Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
12/19/94	ICV*QC*1	71900*245.1-P	Mercury,total	UG/L	2.5	2.7	108	80-120

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND	DET LMT
12/19/94	MB*QC*1	71900*245.1-P	Mercury,total	UG/L	ND	0.2

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
12/19/94	SP*QC*1	71900*245.1-P	Mercury,total	UG/L	1.0	1.0	100.0	80-120

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	UNSPIKED	TARGET	FOUND	%RECV	RECV CRIT	RPD
12/19/94	SPM1*19728*1	71900*245.1-P	Mercury,total	UG/L	0.6	1.0	1.0	100.0	75-125	
12/19/94	SPM2*19728*1	71900*245.1-P	Mercury,total	UG/L	0.6	1.0	1.0	100.0	75-125	0.0

ESE BATCH : P25569

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: P25569 Analysis Date: 12/19/94 Analyst: LEANNA SWEETLAND

	"Exceptions"		
	Yes	No	Comment / Corrective Action
Are ALL units documented in batch?	X		
Analysis holding time within criteria?	X		
CCB present?	X		
CCB within acceptance criteria?	X		
CCV present?	X		
CCV within acceptance criteria?	X		
ICB present?	X		
ICB within acceptance criteria?	X		
ICV present?	X		
ICV within acceptance criteria?	X		
Method blank present?	X		
Method blank within acceptance criteria?	X		
Standard matrix spike present?	X		
Standard matrix spike within acceptance criteria?	X		
Sample matrix spike present?	X		
Sample matrix spike within acceptance criteria?	X		
Sample matrix spike duplicate present?	X		
Sample matrix spike duplicate within acceptance criteria?	X		

Note: Any "NO" answer requires a comment.

BATCH OVERRIDE BY:

FINALIZED BY: GREG ST. AUBIN 5145

ESE BATCH : P25672
CLASSIFICATION : VOC's (8240)

QC TYPE : FDER/SW
ANALYST : MELISSA LENTZ
EXTRACTOR :
DATA ENTRY : GCMS UPLOAD

REPORT DATE/TIME : 01/11/95 11:26:46
ANALYSIS DATE : 12/15/94
EXTRACT DATE :

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

BATCH NOTES
624

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
19728		591-5103	ESE-PEORIA (FT SHERIDAN)	BARBARA RAYA-HASH

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
19728*1	GV-1	12/07/94	01:09AM
19728*2	GV-2	12/07/94	03:02AM
19728*4	GV-4	12/07/94	04:18AM
19728*7	TRIP BLK	12/07/94	06:11AM
19728*3	GV-3	12/07/94	03:40AM
19728*5	GV-5	12/15/94	01:29AM
19728*6	GV-6	12/15/94	02:07AM

ESE BATCH : P25672

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND	DET LMT
12/06/94	MB*NONE*1	34418*624-P	Chloromethane	UG/L	ND	10
12/06/94	MB*NONE*1	34413*624-P	Bromomethane	UG/L	ND	10
12/06/94	MB*NONE*1	39175*624-P	Vinyl chloride	UG/L	ND	10
12/06/94	MB*NONE*1	34311*624-P	Chloroethane	UG/L	ND	10
12/06/94	MB*NONE*1	34423*624-P	Methylene chloride	UG/L	ND	5
12/06/94	MB*NONE*1	34501*624-P	1,1-Dichloroethene	UG/L	ND	5
12/06/94	MB*NONE*1	34496*624-P	1,1-Dichloroethane	UG/L	ND	5
12/06/94	MB*NONE*1	34546*624-P	trans-1,2-dichloroethene	UG/L	ND	5
12/06/94	MB*NONE*1	32106*624-P	Chloroform	UG/L	ND	5
12/06/94	MB*NONE*1	34531*624-P	1,2-Dichloroethane	UG/L	ND	5
12/06/94	MB*NONE*1	34506*624-P	1,1,1-Trichloroethane	UG/L	ND	5
12/06/94	MB*NONE*1	32102*624-P	Carbon tetrachloride	UG/L	ND	5
12/06/94	MB*NONE*1	32101*624-P	Bromodichloromethane	UG/L	ND	5
12/06/94	MB*NONE*1	34541*624-P	1,2-Dichloropropane	UG/L	ND	5
12/06/94	MB*NONE*1	34704*624-P	cis-1,3-Dichloropropene	UG/L	ND	5
12/06/94	MB*NONE*1	39180*624-P	Trichloroethene	UG/L	ND	5
12/06/94	MB*NONE*1	32105*624-P	Dibromochloromethane	UG/L	ND	5
12/06/94	MB*NONE*1	34511*624-P	1,1,2-Trichloroethane	UG/L	ND	5
12/06/94	MB*NONE*1	34030*624-P	Benzene	UG/L	ND	5
12/06/94	MB*NONE*1	34699*624-P	trans-1,3-Dichloropropene	UG/L	ND	5
12/06/94	MB*NONE*1	32104*624-P	Bromoform	UG/L	ND	5
12/06/94	MB*NONE*1	34475*624-P	Tetrachloroethene	UG/L	ND	5
12/06/94	MB*NONE*1	34516*624-P	1,1,2,2-Tetrachloroethane	UG/L	ND	5
12/06/94	MB*NONE*1	34010*624-P	Toluene	UG/L	ND	5
12/06/94	MB*NONE*1	34301*624-P	Chlorobenzene	UG/L	ND	5
12/06/94	MB*NONE*1	34371*624-P	Ethylbenzene	UG/L	ND	5
12/06/94	MB*NONE*1	77093*624-P	cis-1,2-Dichloroethene	UG/L	ND	5
12/06/94	MB*NONE*1	34210*624-P	Acrolein	UG/L	ND	50
12/06/94	MB*NONE*1	34215*624-P	Acrylonitrile	UG/L	ND	50
12/06/94	MB*NONE*1	34576*624-P	2-Chloroethylvinyl ether	UG/L	ND	50
12/06/94	MB*NONE*1	34488*624-P	Trichlorofluoromethane	UG/L	ND	10
12/06/94	MB*NONE*1	34668*624-P	Dichlorodifluoromethane	UG/L	ND	10
12/14/94	MB*NONE*2	34418*624-P	Chloromethane	UG/L	ND	10
12/14/94	MB*NONE*2	34413*624-P	Bromomethane	UG/L	ND	10
12/14/94	MB*NONE*2	39175*624-P	Vinyl chloride	UG/L	ND	10
12/14/94	MB*NONE*2	34311*624-P	Chloroethane	UG/L	ND	10
12/14/94	MB*NONE*2	34423*624-P	Methylene chloride	UG/L	ND	5
12/14/94	MB*NONE*2	34501*624-P	1,1-Dichloroethene	UG/L	ND	5
12/14/94	MB*NONE*2	34496*624-P	1,1-Dichloroethane	UG/L	ND	5
12/14/94	MB*NONE*2	34546*624-P	trans-1,2-dichloroethene	UG/L	ND	5
12/14/94	MB*NONE*2	32106*624-P	Chloroform	UG/L	ND	5
12/14/94	MB*NONE*2	34531*624-P	1,2-Dichloroethane	UG/L	ND	5
12/14/94	MB*NONE*2	34506*624-P	1,1,1-Trichloroethane	UG/L	ND	5
12/14/94	MB*NONE*2	32102*624-P	Carbon tetrachloride	UG/L	ND	5
12/14/94	MB*NONE*2	32101*624-P	Bromodichloromethane	UG/L	ND	5
12/14/94	MB*NONE*2	34541*624-P	1,2-Dichloropropane	UG/L	ND	5
12/14/94	MB*NONE*2	34704*624-P	cis-1,3-Dichloropropene	UG/L	ND	5
12/14/94	MB*NONE*2	39180*624-P	Trichloroethene	UG/L	ND	5
12/14/94	MB*NONE*2	32105*624-P	Dibromochloromethane	UG/L	ND	5
12/14/94	MB*NONE*2	34511*624-P	1,1,2-Trichloroethane	UG/L	ND	5
12/14/94	MB*NONE*2	34030*624-P	Benzene	UG/L	ND	5
12/14/94	MB*NONE*2	34699*624-P	trans-1,3-Dichloropropene	UG/L	ND	5
12/14/94	MB*NONE*2	32104*624-P	Bromoform	UG/L	ND	5
12/14/94	MB*NONE*2	34475*624-P	Tetrachloroethene	UG/L	ND	5
12/14/94	MB*NONE*2	34516*624-P	1,1,2,2-Tetrachloroethane	UG/L	ND	5
12/14/94	MB*NONE*2	34010*624-P	Toluene	UG/L	ND	5
12/14/94	MB*NONE*2	34301*624-P	Chlorobenzene	UG/L	ND	5
12/14/94	MB*NONE*2	34371*624-P	Ethylbenzene	UG/L	ND	5
12/14/94	MB*NONE*2	77093*624-P	cis-1,2-Dichloroethene	UG/L	ND	5
12/14/94	MB*NONE*2	34210*624-P	Acrolein	UG/L	ND	50
12/14/94	MB*NONE*2	34215*624-P	Acrylonitrile	UG/L	ND	50
12/14/94	MB*NONE*2	34576*624-P	2-Chloroethylvinyl ether	UG/L	ND	50
12/14/94	MB*NONE*2	34488*624-P	Trichlorofluoromethane	UG/L	ND	10
12/14/94	MB*NONE*2	34668*624-P	Dichlorodifluoromethane	UG/L	ND	10

ESE BATCH : P25672

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
12/07/94	SP*NONE*1	34501*624-P	1,1-Dichloroethene	UG/L	50	43	86	61-145
12/07/94	SP*NONE*1	39180*624-P	Trichloroethene	UG/L	50	50	100	71-120
12/07/94	SP*NONE*1	34030*624-P	Benzene	UG/L	50	49	98	76-127
12/07/94	SP*NONE*1	34010*624-P	Toluene	UG/L	50	50	100	76-125
12/07/94	SP*NONE*1	34301*624-P	Chlorobenzene	UG/L	50	53	106	75-130
12/14/94	SP*NONE*2	34501*624-P	1,1-Dichloroethene	UG/L	50	50	100	61-145
12/14/94	SP*NONE*2	39180*624-P	Trichloroethene	UG/L	50	55	110	71-120
12/14/94	SP*NONE*2	34030*624-P	Benzene	UG/L	50	49	98	76-127
12/14/94	SP*NONE*2	34010*624-P	Toluene	UG/L	50	44	88	76-125
12/14/94	SP*NONE*2	34301*624-P	Chlorobenzene	UG/L	50	49	98	75-130

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	UNSPIKED	TARGET	FOUND	%RECV	RECV CRIT	RPD
12/07/94	SPM1*19728*1	34501*624-P	1,1-Dichloroethene	UG/L	0.0	50	37	74	61-145	
12/07/94	SPM1*19728*1	39180*624-P	Trichloroethene	UG/L	0.0	50	52	104	71-120	
12/07/94	SPM1*19728*1	34030*624-P	Benzene	UG/L	0.0	50	47	94	76-127	
12/07/94	SPM1*19728*1	34010*624-P	Toluene	UG/L	0.0	50	46	92	76-125	
12/07/94	SPM1*19728*1	34301*624-P	Chlorobenzene	UG/L	0.0	50	47	94	75-130	
12/07/94	SPM2*19728*1	34501*624-P	1,1-Dichloroethene	UG/L	0.0	50	36	72	61-145	3
12/07/94	SPM2*19728*1	39180*624-P	Trichloroethene	UG/L	0.0	50	52	104	71-120	0.0
12/07/94	SPM2*19728*1	34030*624-P	Benzene	UG/L	0.0	50	51	102	76-127	8
12/07/94	SPM2*19728*1	34010*624-P	Toluene	UG/L	0.0	50	46	92	76-125	0.0
12/07/94	SPM2*19728*1	34301*624-P	Chlorobenzene	UG/L	0.0	50	47	94	75-130	0.0

Surrogate Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
12/06/94	MB*NONE*1	98810*SUR	TOLUENE-D(8)	UG/L	50	55	110	88-110
12/06/94	MB*NONE*1	98402*SUR	BROMOFLUOROBENZENE	UG/L	50	49	98	86-115
12/06/94	MB*NONE*1	98812*SUR	1,2-DICHLOROETHANE-D4	UG/L	50	53	110	76-114
12/07/94	SP*NONE*1	98810*SUR	TOLUENE-D(8)	UG/L	50	48	96	88-110
12/07/94	SP*NONE*1	98402*SUR	BROMOFLUOROBENZENE	UG/L	50	44	88	86-115
12/07/94	SP*NONE*1	98812*SUR	1,2-DICHLOROETHANE-D4	UG/L	50	56	110	76-114
12/07/94	DA*19728*1	98810*SUR	TOLUENE-D(8)	UG/L	50	48	96	88-110
12/07/94	DA*19728*1	98402*SUR	BROMOFLUOROBENZENE	UG/L	50	47	94	86-115
12/07/94	DA*19728*1	98812*SUR	1,2-DICHLOROETHANE-D4	UG/L	50	46	92	76-114
12/07/94	SPM1*19728*1	98810*SUR	TOLUENE-D(8)	UG/L	50	49	98	88-110
12/07/94	SPM1*19728*1	98402*SUR	BROMOFLUOROBENZENE	UG/L	50	44	88	86-115
12/07/94	SPM1*19728*1	98812*SUR	1,2-DICHLOROETHANE-D4	UG/L	50	54	110	76-114
12/07/94	SPM2*19728*1	98810*SUR	TOLUENE-D(8)	UG/L	50	51	100	88-110
12/07/94	SPM2*19728*1	98402*SUR	BROMOFLUOROBENZENE	UG/L	50	46	92	86-115
12/07/94	SPM2*19728*1	98812*SUR	1,2-DICHLOROETHANE-D4	UG/L	50	48	96	76-114

ESE BATCH : P25672

Surrogate Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
12/07/94	DA*19728*2	98810*SUR	TOLUENE-D(8)	UG/L	50	48	96	88-110
12/07/94	DA*19728*2	98402*SUR	BROMOFLUOROBENZENE	UG/L	50	48	96	86-115
12/07/94	DA*19728*2	98812*SUR	1,2-DICHLOROETHANE-D4	UG/L	50	50	100	76-114
12/07/94	DA*19728*4	98810*SUR	TOLUENE-D(8)	UG/L	50	52	100	88-110
12/07/94	DA*19728*4	98402*SUR	BROMOFLUOROBENZENE	UG/L	50	49	98	86-115
12/07/94	DA*19728*4	98812*SUR	1,2-DICHLOROETHANE-D4	UG/L	50	57	110	76-114
12/07/94	DA*19728*7	98810*SUR	TOLUENE-D(8)	UG/L	50	52	100	88-110
12/07/94	DA*19728*7	98402*SUR	BROMOFLUOROBENZENE	UG/L	50	49	98	86-115
12/07/94	DA*19728*7	98812*SUR	1,2-DICHLOROETHANE-D4	UG/L	50	46	92	76-114
12/14/94	MB*NONE*2	98810*SUR	TOLUENE-D(8)	UG/L	50	51	100	88-110
12/14/94	MB*NONE*2	98402*SUR	BROMOFLUOROBENZENE	UG/L	50	50	100	86-115
12/14/94	MB*NONE*2	98812*SUR	1,2-DICHLOROETHANE-D4	UG/L	50	45	90	76-114
12/14/94	SP*NONE*2	98810*SUR	TOLUENE-D(8)	UG/L	50	50	100	88-110
12/14/94	SP*NONE*2	98402*SUR	BROMOFLUOROBENZENE	UG/L	50	42	84	86-115
12/14/94	SP*NONE*2	98812*SUR	1,2-DICHLOROETHANE-D4	UG/L	50	54	110	76-114
12/07/94	DA*19728*3	98810*SUR	TOLUENE-D(8)	UG/L	50	53	110	88-110
12/07/94	DA*19728*3	98402*SUR	BROMOFLUOROBENZENE	UG/L	50	51	100	86-115
12/07/94	DA*19728*3	98812*SUR	1,2-DICHLOROETHANE-D4	UG/L	50	59	120	76-114
12/15/94	DA*19728*5	98810*SUR	TOLUENE-D(8)	UG/L	50	49	98	88-110
12/15/94	DA*19728*5	98402*SUR	BROMOFLUOROBENZENE	UG/L	50	47	94	86-115
12/15/94	DA*19728*5	98812*SUR	1,2-DICHLOROETHANE-D4	UG/L	50	42	84	76-114
12/15/94	DA*19728*6	98810*SUR	TOLUENE-D(8)	UG/L	50	46	92	88-110
12/15/94	DA*19728*6	98402*SUR	BROMOFLUOROBENZENE	UG/L	50	47	94	86-115
12/15/94	DA*19728*6	98812*SUR	1,2-DICHLOROETHANE-D4	UG/L	50	57	110	76-114
12/15/94	DA*19781*1	98810*SUR	TOLUENE-D(8)	UG/L	50	48	96	88-110
12/15/94	DA*19781*1	98402*SUR	BROMOFLUOROBENZENE	UG/L	50	50	100	86-115
12/15/94	DA*19781*1	98812*SUR	1,2-DICHLOROETHANE-D4	UG/L	50	45	90	76-114
12/15/94	UN*19728*3	98810*SUR	TOLUENE-D(8)	UG/L	50	48	96	88-110
12/15/94	UN*19728*3	98402*SUR	BROMOFLUOROBENZENE	UG/L	50	47	94	86-115
12/15/94	UN*19728*3	98812*SUR	1,2-DICHLOROETHANE-D4	UG/L	50	69	140	76-114

ESE BATCH : P25672

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: P25672 Analysis Date: 12/15/94 Analyst: MELISSA LENTZ

	Yes	"Exceptions" No	Comment / Corrective Action
Are ALL units documented in batch?	X		
Analysis holding time within criteria?	X		
Method blank present?	X		
Method blank within acceptance criteria?	X		
Standard matrix spike present?	X		
Standard matrix spike within acceptance criteria?	X		
Sample matrix spike present?	X		
Sample matrix spike within acceptance criteria?	X		
Sample matrix spike duplicate present?	X		
Sample matrix spike duplicate within acceptance criteria?	X		
Surrogate present?	X		
Surrogate within acceptance criteria?		X	BFB
			12DCD4

Note: Any "NO" answer requires a comment.

BATCH OVERRIDE BY: SANDY BOUCHER 5141

FINALIZED BY: SANDY BOUCHER 5141

PROBLEM:
Surrogate not within acceptance criteria:
BFB
12DCD4
EXPLANATION: One sample outside of QC limits. Sample ran 2X for method compliance. SP had one surrogate outside of QC limits by 2%. The SPMs passed. The data will be accepted.

0018.75h6.0v0s0b6T

ESE BATCH : P25803
CLASSIFICATION : BNA's - 625

QC TYPE : FDER/SW
ANALYST : DOUG HAFLEY
EXTRACTOR : TODD PETERSON
DATA ENTRY : JUDY ZOSKY

REPORT DATE/TIME : 01/11/95 11:30:17
ANALYSIS DATE : 12/21/94
EXTRACT DATE : 12/08/94

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
19728		591-5103	ESE-PEORIA (FT SHERIDAN)	BARBARA RAYA-HASH

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
19728*1	GV-1	12/21/94	04:49PM
19728*2	GV-2	12/21/94	06:36PM
19728*3	GV-3	12/21/94	07:30PM
19728*4	GV-4	12/21/94	08:23PM
19728*5	GV-5	12/21/94	09:16PM
19728*6	GV-6	12/31/94	03:18AM

ESE BATCH : P25803

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND	DET LMT
12/21/94	MB*287A*1	34551*625/SEP-P	1,2,4-Trichlorobenzene	UG/L	ND	10.00
12/21/94	MB*287A*1	34536*625/SEP-P	1,2-Dichlorobenzene	UG/L	ND	10
12/21/94	MB*287A*1	34346*625/SEP-P	1,2-Diphenylhydrazine	UG/L	ND	100
12/21/94	MB*287A*1	34566*625/SEP-P	1,3-Dichlorobenzene	UG/L	ND	10
12/21/94	MB*287A*1	34571*625/SEP-P	1,4-Dichlorobenzene	UG/L	ND	10
12/21/94	MB*287A*1	34675*625/SEP-P	2,3,7,8-TCDD	UG/L	ND	0.0
12/21/94	MB*287A*1	34621*625/SEP-P	2,4,6-Trichlorophenol	UG/L	ND	10
12/21/94	MB*287A*1	34601*625/SEP-P	2,4-Dichlorophenol	UG/L	ND	10
12/21/94	MB*287A*1	34606*625/SEP-P	2,4-Dimethylphenol	UG/L	ND	10
12/21/94	MB*287A*1	34616*625/SEP-P	2,4-Dinitrophenol	UG/L	ND	50
12/21/94	MB*287A*1	34626*625/SEP-P	2,6-Dinitrotoluene	UG/L	ND	10
12/21/94	MB*287A*1	34581*625/SEP-P	2-Chloronaphthalene	UG/L	ND	10
12/21/94	MB*287A*1	34586*625/SEP-P	2-Chlorophenol	UG/L	ND	10
12/21/94	MB*287A*1	34657*625/SEP-P	2-Methyl-4,6-dinitrophenol	UG/L	ND	50
12/21/94	MB*287A*1	34591*625/SEP-P	2-Nitrophenol	UG/L	ND	10
12/21/94	MB*287A*1	34631*625/SEP-P	3,3'-Dichlorobenzidine	UG/L	ND	20
12/21/94	MB*287A*1	34636*625/SEP-P	4-Bromophenyl-phenylether	UG/L	ND	10
12/21/94	MB*287A*1	34452*625/SEP-P	4-Chloro-3-methylphenol	UG/L	ND	20
12/21/94	MB*287A*1	34641*625/SEP-P	4-Chlorophenylphenyl ether	UG/L	ND	10
12/21/94	MB*287A*1	34646*625/SEP-P	4-Nitrophenol	UG/L	ND	50
12/21/94	MB*287A*1	34205*625/SEP-P	Acenaphthene	UG/L	ND	10
12/21/94	MB*287A*1	34200*625/SEP-P	Acenaphthylene	UG/L	ND	10
12/21/94	MB*287A*1	34220*625/SEP-P	Anthracene	UG/L	ND	10
12/21/94	MB*287A*1	39120*625/SEP-P	Benzidine	UG/L	ND	100
12/21/94	MB*287A*1	34526*625/SEP-P	Benzo(a)anthracene	UG/L	ND	10
12/21/94	MB*287A*1	34247*625/SEP-P	Benzo(a)pyrene	UG/L	ND	10
12/21/94	MB*287A*1	34230*625/SEP-P	Benzo(b)fluoranthene	UG/L	ND	10
12/21/94	MB*287A*1	34521*625/SEP-P	Benzo(ghi)perylene	UG/L	ND	10
12/21/94	MB*287A*1	34242*625/SEP-P	Benzo(k)fluoranthene	UG/L	ND	10
12/21/94	MB*287A*1	34283*625/SEP-P	bis(2-Chloroisopropyl)ether	UG/L	ND	10
12/21/94	MB*287A*1	34278*625/SEP-P	bis(2-Chloroethoxy)methane	UG/L	ND	10
12/21/94	MB*287A*1	34273*625/SEP-P	bis(2-Chloroethyl)ether	UG/L	ND	10
12/21/94	MB*287A*1	39100*625/SEP-P	bis(2-Ethylhexyl)phthalate	UG/L	54	10
12/21/94	MB*287A*1	34292*625/SEP-P	Butylbenzylphthalate	UG/L	ND	10
12/21/94	MB*287A*1	34320*625/SEP-P	Chrysene	UG/L	ND	10
12/21/94	MB*287A*1	39110*625/SEP-P	di-n-Butylphthalate	UG/L	ND	10
12/21/94	MB*287A*1	34596*625/SEP-P	di-n-Octylphthalate	UG/L	ND	10
12/21/94	MB*287A*1	34556*625/SEP-P	Dibenzo(ah)anthracene	UG/L	ND	10
12/21/94	MB*287A*1	34336*625/SEP-P	Diethylphthalate	UG/L	ND	10
12/21/94	MB*287A*1	34341*625/SEP-P	Dimethylpthalate	UG/L	ND	10
12/21/94	MB*287A*1	34376*625/SEP-P	Fluoranthene	UG/L	ND	10
12/21/94	MB*287A*1	34381*625/SEP-P	Fluorene	UG/L	ND	10
12/21/94	MB*287A*1	39700*625/SEP-P	Hexachlorobenzene	UG/L	ND	10
12/21/94	MB*287A*1	34391*625/SEP-P	Hexachlorobutadiene	UG/L	ND	10
12/21/94	MB*287A*1	34386*625/SEP-P	Hexachlorocyclopentadiene	UG/L	ND	10
12/21/94	MB*287A*1	34396*625/SEP-P	Hexachloroethane	UG/L	ND	10
12/21/94	MB*287A*1	34403*625/SEP-P	Indeno(1,2,3-cd)pyrene	UG/L	ND	10
12/21/94	MB*287A*1	34408*625/SEP-P	Isophorone	UG/L	ND	10
12/21/94	MB*287A*1	34428*625/SEP-P	n-Nitrosodi-n-propylamine	UG/L	ND	10
12/21/94	MB*287A*1	34438*625/SEP-P	n-Nitrosodimethylamine	UG/L	ND	20
12/21/94	MB*287A*1	34433*625/SEP-P	n-Nitrosodiphenylamine	UG/L	ND	10
12/21/94	MB*287A*1	34696*625/SEP-P	Naphthalene	UG/L	ND	10
12/21/94	MB*287A*1	34447*625/SEP-P	Nitrobenzene	UG/L	ND	10
12/21/94	MB*287A*1	39032*625/SEP-P	Pentachlorophenol	UG/L	ND	50
12/21/94	MB*287A*1	34461*625/SEP-P	Phenanthrene	UG/L	ND	10
12/21/94	MB*287A*1	34694*625/SEP-P	Phenol	UG/L	ND	10
12/21/94	MB*287A*1	34469*625/SEP-P	Pyrene	UG/L	ND	10
12/21/94	MB*287A*1	34611*625/SEP-P	2,4-Dinitrotoluene	UG/L	ND	10

ESE BATCH : P25803

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
12/21/94	SP*287A*1	34551*625/SEP-P	1,2,4-Trichlorobenzene	UG/L	50.0	21.0	42.0	39-98
12/21/94	SP*287A*1	34571*625/SEP-P	1,4-Dichlorobenzene	UG/L	50	18	36	36-97
12/21/94	SP*287A*1	34586*625/SEP-P	2-Chlorophenol	UG/L	75	39	52	27-123
12/21/94	SP*287A*1	34452*625/SEP-P	4-Chloro-3-methylphenol	UG/L	75	43	57	23-97
12/21/94	SP*287A*1	34646*625/SEP-P	4-Nitrophenol	UG/L	75	12	16	10-80
12/21/94	SP*287A*1	34205*625/SEP-P	Acenaphthene	UG/L	50	34	68	46-118
12/21/94	SP*287A*1	34428*625/SEP-P	n-Nitrosodi-n-propylamine	UG/L	50	31	62	41-116
12/21/94	SP*287A*1	39032*625/SEP-P	Pentachlorophenol	UG/L	75	58	77	9-103
12/21/94	SP*287A*1	34694*625/SEP-P	Phenol	UG/L	75	18	24	12-110
12/21/94	SP*287A*1	34469*625/SEP-P	Pyrene	UG/L	50	36	72	26-127
12/21/94	SP*287A*1	34611*625/SEP-P	2,4-Dinitrotoluene	UG/L	50	34	68	24-96

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	UNSPIKED	TARGET	FOUND	%RECV	RECV CRIT	RPD
12/21/94	SPM1*19728*1	34551*625/SEP-P	1,2,4-Trichlorobenzene	UG/L	0.0	50.0	16.0	32.0	39-98	
12/21/94	SPM1*19728*1	34571*625/SEP-P	1,4-Dichlorobenzene	UG/L	0.0	50	14	28	36-97	
12/21/94	SPM1*19728*1	34586*625/SEP-P	2-Chlorophenol	UG/L	0.0	75	26	35	27-123	
12/21/94	SPM1*19728*1	34452*625/SEP-P	4-Chloro-3-methylphenol	UG/L	0.0	75	39	52	23-97	
12/21/94	SPM1*19728*1	34646*625/SEP-P	4-Nitrophenol	UG/L	0.0	75	24	32	10-80	
12/21/94	SPM1*19728*1	34205*625/SEP-P	Acenaphthene	UG/L	0.0	50	26	52	46-118	
12/21/94	SPM1*19728*1	34428*625/SEP-P	n-Nitrosodi-n-propylamine	UG/L	0.0	50	23	46	41-116	
12/21/94	SPM1*19728*1	39032*625/SEP-P	Pentachlorophenol	UG/L	0.0	75	34	45	9-103	
12/21/94	SPM1*19728*1	34694*625/SEP-P	Phenol	UG/L	0.0	75	19	25	12-110	
12/21/94	SPM1*19728*1	34469*625/SEP-P	Pyrene	UG/L	0.0	50	24	48	26-127	
12/21/94	SPM1*19728*1	34611*625/SEP-P	2,4-Dinitrotoluene	UG/L	0.0	50	31	62	24-96	

ESE BATCH : P25803

Surrogate Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
12/21/94	MB*287A*1	91012*SUR	NITROBENZENE-D5	UG/L	50	24	48	35-114
12/21/94	MB*287A*1	98330*SUR	2-FLUOROBIPHENYL	UG/L	50	26	52	43-116
12/21/94	MB*287A*1	97449*SUR	TERPHENYL-D14	UG/L	50	36	72	33-141
12/21/94	MB*287A*1	98395*SUR	PHENOL-D5	UG/L	75	19	25	10-110
12/21/94	MB*287A*1	97024*SUR	2-FLUOROPHENOL	UG/L	75	25	33	21-110
12/21/94	MB*287A*1	91020*SUR	2,4,6-TRIBROMOPHENOL	UG/L	75	52	69	10-123
12/21/94	SP*287A*1	91012*SUR	NITROBENZENE-D5	UG/L	50	26	52	35-114
12/21/94	SP*287A*1	98330*SUR	2-FLUOROBIPHENYL	UG/L	50	22	44	43-116
12/21/94	SP*287A*1	97449*SUR	TERPHENYL-D14	UG/L	50	37	74	33-141
12/21/94	SP*287A*1	98395*SUR	PHENOL-D5	UG/L	75	20	27	10-110
12/21/94	SP*287A*1	97024*SUR	2-FLUOROPHENOL	UG/L	75	26	35	21-110
12/21/94	SP*287A*1	91020*SUR	2,4,6-TRIBROMOPHENOL	UG/L	75	52	69	10-123
12/21/94	SPM1*19728*1	91012*SUR	NITROBENZENE-D5	UG/L	50	20	40	35-114
12/21/94	SPM1*19728*1	98330*SUR	2-FLUOROBIPHENYL	UG/L	50	14	28	43-116
12/21/94	SPM1*19728*1	97449*SUR	TERPHENYL-D14	UG/L	50	36	72	33-141
12/21/94	SPM1*19728*1	98395*SUR	PHENOL-D5	UG/L	75	21	28	10-110
12/21/94	SPM1*19728*1	97024*SUR	2-FLUOROPHENOL	UG/L	75	22	29	21-110
12/21/94	SPM1*19728*1	91020*SUR	2,4,6-TRIBROMOPHENOL	UG/L	75	32	43	10-123
12/21/94	DA*19728*1	91012*SUR	NITROBENZENE-D5	UG/L	50	24	48	35-114
12/21/94	DA*19728*1	98330*SUR	2-FLUOROBIPHENYL	UG/L	50	27	54	43-116
12/21/94	DA*19728*1	97449*SUR	TERPHENYL-D14	UG/L	50	37	74	33-141
12/21/94	DA*19728*1	98395*SUR	PHENOL-D5	UG/L	75	24	32	10-110
12/21/94	DA*19728*1	97024*SUR	2-FLUOROPHENOL	UG/L	75	25	33	21-110
12/21/94	DA*19728*1	91020*SUR	2,4,6-TRIBROMOPHENOL	UG/L	75	43	57	10-123
12/21/94	DA*19728*2	91012*SUR	NITROBENZENE-D5	UG/L	50	22	44	35-114
12/21/94	DA*19728*2	98330*SUR	2-FLUOROBIPHENYL	UG/L	50	27	54	43-116
12/21/94	DA*19728*2	97449*SUR	TERPHENYL-D14	UG/L	50	52	100	33-141
12/21/94	DA*19728*2	98395*SUR	PHENOL-D5	UG/L	75	30	40	10-110
12/21/94	DA*19728*2	97024*SUR	2-FLUOROPHENOL	UG/L	75	28	37	21-110
12/21/94	DA*19728*2	91020*SUR	2,4,6-TRIBROMOPHENOL	UG/L	75	60	80	10-123
12/21/94	DA*19728*3	91012*SUR	NITROBENZENE-D5	UG/L	50	26	52	35-114
12/21/94	DA*19728*3	98330*SUR	2-FLUOROBIPHENYL	UG/L	50	29	58	43-116
12/21/94	DA*19728*3	97449*SUR	TERPHENYL-D14	UG/L	50	46	92	33-141
12/21/94	DA*19728*3	98395*SUR	PHENOL-D5	UG/L	75	31	41	10-110
12/21/94	DA*19728*3	97024*SUR	2-FLUOROPHENOL	UG/L	75	34	45	21-110
12/21/94	DA*19728*3	91020*SUR	2,4,6-TRIBROMOPHENOL	UG/L	75	60	80	10-123
12/21/94	DA*19728*4	91012*SUR	NITROBENZENE-D5	UG/L	50	28	56	35-114
12/21/94	DA*19728*4	98330*SUR	2-FLUOROBIPHENYL	UG/L	50	26	52	43-116
12/21/94	DA*19728*4	97449*SUR	TERPHENYL-D14	UG/L	50	43	86	33-141
12/21/94	DA*19728*4	98395*SUR	PHENOL-D5	UG/L	75	31	41	10-110
12/21/94	DA*19728*4	97024*SUR	2-FLUOROPHENOL	UG/L	75	33	44	21-110
12/21/94	DA*19728*4	91020*SUR	2,4,6-TRIBROMOPHENOL	UG/L	75	53	71	10-123
12/21/94	DA*19728*5	91012*SUR	NITROBENZENE-D5	UG/L	50	28	56	35-114
12/21/94	DA*19728*5	98330*SUR	2-FLUOROBIPHENYL	UG/L	50	23	46	43-116
12/21/94	DA*19728*5	97449*SUR	TERPHENYL-D14	UG/L	50	40	80	33-141
12/21/94	DA*19728*5	98395*SUR	PHENOL-D5	UG/L	75	32	43	10-110
12/21/94	DA*19728*5	97024*SUR	2-FLUOROPHENOL	UG/L	75	34	45	21-110
12/21/94	DA*19728*5	91020*SUR	2,4,6-TRIBROMOPHENOL	UG/L	75	26	35	10-123
12/31/94	DA*19728*6	91012*SUR	NITROBENZENE-D5	UG/L	50	25	50	35-114
12/31/94	DA*19728*6	98330*SUR	2-FLUOROBIPHENYL	UG/L	50	27	54	43-116
12/31/94	DA*19728*6	97449*SUR	TERPHENYL-D14	UG/L	50	52	100	33-141
12/31/94	DA*19728*6	98395*SUR	PHENOL-D5	UG/L	75	31	41	10-110
12/31/94	DA*19728*6	97024*SUR	2-FLUOROPHENOL	UG/L	75	26	35	21-110
12/31/94	DA*19728*6	91020*SUR	2,4,6-TRIBROMOPHENOL	UG/L	75	70	93	10-123

ESE BATCH : P25803

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: P25803 Analysis Date: 12/21/94 Analyst: DOUG HAFLEY

	Yes	No	"Exceptions" Comment / Corrective Action
Are ALL units documented in batch?	X		
Analysis holding time within criteria?	X		
Extract holding time within criteria?	X		
Method blank present?	X		
Method blank within acceptance criteria?	X		
Standard matrix spike present?	X		
Standard matrix spike within acceptance criteria?	X		
Sample matrix spike present?	X		
Sample matrix spike within acceptance criteria?		X	34551*625/
			34571*625/
Sample matrix spike duplicate present?		X	
Sample matrix spike duplicate within acceptance criteria?			
Surrogate present?	X		
Surrogate within acceptance criteria?		X	2-FBPHNL

Note: Any "NO" answer requires a comment.

BATCH OVERRIDE BY: LESLIE MILLER 6225

FINALIZED BY: LESLIE MILLER 6225

PROBLEM:
Sample matrix spike not within acceptance criteria:
34551*625/
34571*625/
EXPLANATION: 1,2,4-Trichlorobenzene and 1,4 Dichlorobenzene have recoveries below QC limits; no corrective action necessary.
PROBLEM:
Sample matrix spike duplicate not present:
EXPLANATION: No sample matrix spike duplicate extracted.
PROBLEM:
Surrogate not within acceptance criteria:
2-FBPHNL
EXPLANATION: One base neutral surrogate below QC limits; no corrective action required.

ESE BATCH : P25474
CLASSIFICATION : Pesticides/PCBs - 608

QC TYPE : FDER/SW
ANALYST : JUDY ZOSKY
EXTRACTOR :
DATA ENTRY : JUDY ZOSKY

REPORT DATE/TIME : 01/11/95 11:34:05
ANALYSIS DATE : 12/11/94
EXTRACT DATE : 12/07/94

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

BATCH NOTES
608

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
19728		591-5103	ESE-PEORIA (FT SHERIDAN)	BARBARA RAYA-HASH

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
19728*1	GV-1	12/10/94	11:52PM
19728*2	GV-2	12/11/94	12:36AM
19728*3	GV-3	12/11/94	01:20AM
19728*4	GV-4	12/11/94	02:05AM
19728*5	GV-5	12/11/94	02:50AM
19728*6	GV-6	12/11/94	03:34AM

ESE BATCH : P25474

Continuing Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
12/11/94	CCS*A3*1	39337*608/SEP-P	alpha-BHC	UG/L	586000	653000	111	80-120
12/11/94	CCS*A3*1	39340*608/SEP-P	gamma-BHC (Lindane)	UG/L	535000	589000	110	80-120
12/11/94	CCS*A3*1	39410*608/SEP-P	Heptachlor	UG/L	495000	550000	111	80-120
12/11/94	CCS*A3*1	34361*608/SEP-P	Endosulfan I	UG/L	459000	502000	109	80-120
12/11/94	CCS*A3*1	39380*608/SEP-P	Dieldrin	UG/L	904000	969000	107	80-120
12/11/94	CCS*A3*1	39390*608/SEP-P	Endrin	UG/L	681000	748000	110	80-120
12/11/94	CCS*A3*1	39310*608/SEP-P	4,4'-DDD	UG/L	534000	625000	117	80-120
12/11/94	CCS*A3*1	39300*608/SEP-P	4,4'-DDT	UG/L	597000	685000	115	80-120
12/11/94	CCS*B4*1	39338*608/SEP-P	beta-BHC	UG/L	449000	493000	110	80-120
12/11/94	CCS*B4*1	34259*608/SEP-P	delta-BHC	UG/L	817000	939000	115	80-120
12/11/94	CCS*B4*1	39330*608/SEP-P	Aldrin	UG/L	903000	1010000	112	80-120
12/11/94	CCS*B4*1	39420*608/SEP-P	Heptachlor epoxide	UG/L	838000	933000	111	80-120
12/11/94	CCS*B4*1	39320*608/SEP-P	4,4'-DDE	UG/L	1160000	1330000	115	80-120
12/11/94	CCS*B4*1	34356*608/SEP-P	Endosulfan II	UG/L	1370000	1460000	107	80-120
12/11/94	CCS*B4*1	34351*608/SEP-P	Endosulfan sulfate	UG/L	1060000	1150000	108	80-120
12/11/94	CCS*B4*1	34366*608/SEP-P	Endrin aldehyde	UG/L	981000	1080000	110	80-120
12/11/94	CCS*B4*1	39811*608/SEP-P	gamma-Chlordane	UG/L	840000	936000	111	80-120
12/11/94	CCS*B4*1	39348*608/SEP-P	alpha-Chlordane	UG/L	843000	931000	110	80-120
12/11/94	CCS*1660*1	34671*608/SEP-P	Aroclor-1016	UG/L	360000	577000	160	80-120
12/11/94	CCS*1660*1	39508*608/SEP-P	Aroclor-1260	UG/L	1770000	1680000	94.9	80-120

ESE BATCH : P25474

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND	DET LMT
12/10/94	MB*284A*1	39337*608/SEP-P	alpha-BHC	UG/L	0.003	0.05
12/10/94	MB*284A*1	34259*608/SEP-P	delta-BHC	UG/L	0.0004	0.05
12/10/94	MB*284A*1	39340*608/SEP-P	gamma-BHC (Lindane)	UG/L	0.001	0.05
12/10/94	MB*284A*1	39380*608/SEP-P	Dieldrin	UG/L	0.002	0.10
12/10/94	MB*284A*1	39390*608/SEP-P	Endrin	UG/L	0.003	0.10
12/10/94	MB*284A*1	39310*608/SEP-P	4,4'-DDD	UG/L	0.001	0.10
12/10/94	MB*284A*1	39300*608/SEP-P	4,4'-DDT	UG/L	0.004	0.10
12/10/94	MB*284A*1	34366*608/SEP-P	Endrin aldehyde	UG/L	0.004	0.10
12/10/94	MB*284A*1	34671*608/SEP-P	Aroclor-1016	UG/L	0.007	0.50
12/10/94	MB*284A*1	39508*608/SEP-P	Aroclor-1260	UG/L	0.17	1.00

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
12/10/94	SP1*284A*1	39340*608/SEP-P	gamma-BHC (Lindane)	UG/L	0.50	0.34	68.0	40-145
12/10/94	SP1*284A*1	39410*608/SEP-P	Heptachlor	UG/L	0.50	0.50	100.0	44-140
12/10/94	SP1*284A*1	39330*608/SEP-P	Aldrin	UG/L	0.50	0.45	90.0	42-122
12/10/94	SP1*284A*1	39380*608/SEP-P	Dieldrin	UG/L	1.00	1.01	101.0	53-140
12/10/94	SP1*284A*1	39390*608/SEP-P	Endrin	UG/L	1.00	1.01	101.0	48-143
12/10/94	SP1*284A*1	39300*608/SEP-P	4,4'-DDT	UG/L	1.00	0.86	86.0	50-149

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	UNSPIKED	TARGET	FOUND	%RECV	RECV CRIT	RPD
12/11/94	SPM1*19728*1	39340*608/SEP-P	gamma-BHC (Lindane)	UG/L	0.001	0.50	0.38	76.0	40-145	
12/11/94	SPM1*19728*1	39410*608/SEP-P	Heptachlor	UG/L	0.0	0.50	0.50	100.0	0-184.96	
12/11/94	SPM1*19728*1	39330*608/SEP-P	Aldrin	UG/L	0.0	0.50	0.42	84.0	42-122	
12/11/94	SPM1*19728*1	39380*608/SEP-P	Dieldrin	UG/L	0.002	1.00	1.05	105.0	53-140	
12/11/94	SPM1*19728*1	39390*608/SEP-P	Endrin	UG/L	0.003	1.00	1.09	109.0	48-143	
12/11/94	SPM1*19728*1	39300*608/SEP-P	4,4'-DDT	UG/L	0.009	1.00	0.72	72.0	50-149	
12/11/94	SPM2*19728*1	39340*608/SEP-P	gamma-BHC (Lindane)	UG/L	0.001	0.50	0.40	80.0	40-145	5.10
12/11/94	SPM2*19728*1	39410*608/SEP-P	Heptachlor	UG/L	0.0	0.50	0.52	104.0	0-184.96	3.90
12/11/94	SPM2*19728*1	39330*608/SEP-P	Aldrin	UG/L	0.0	0.50	0.44	88.0	42-122	4.70
12/11/94	SPM2*19728*1	39380*608/SEP-P	Dieldrin	UG/L	0.002	1.00	1.08	108.0	53-140	2.80
12/11/94	SPM2*19728*1	39390*608/SEP-P	Endrin	UG/L	0.003	1.00	1.12	112.0	48-143	2.70
12/11/94	SPM2*19728*1	39300*608/SEP-P	4,4'-DDT	UG/L	0.009	1.00	0.75	75.0	50-149	4.10

ESE BATCH : P25474

Surrogate Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
12/10/94	MB*284A*1	8770981*SUR	Tetrachloro-m-Xylene	UG/L	0.20	0.19	95.0	52-127
12/10/94	MB*284A*1	20512431*SUR	DECACHLOROBIPHENYL	UG/L	0.20	0.18	90.0	47-148
12/10/94	SP1*284A*1	8770981*SUR	Tetrachloro-m-Xylene	UG/L	0.20	0.19	95.0	52-127
12/10/94	SP1*284A*1	20512431*SUR	DECACHLOROBIPHENYL	UG/L	0.20	0.19	95.0	47-148
12/10/94	DA*19728*1	8770981*SUR	Tetrachloro-m-Xylene	UG/L	0.20	0.19	95.0	52-127
12/10/94	DA*19728*1	20512431*SUR	DECACHLOROBIPHENYL	UG/L	0.20	0.10	50.0	47-148
12/11/94	DA*19728*2	8770981*SUR	Tetrachloro-m-Xylene	UG/L	0.20	0.18	90.0	52-127
12/11/94	DA*19728*2	20512431*SUR	DECACHLOROBIPHENYL	UG/L	0.20	0.12	60.0	47-148
12/11/94	DA*19728*3	8770981*SUR	Tetrachloro-m-Xylene	UG/L	0.20	0.18	90.0	52-127
12/11/94	DA*19728*3	20512431*SUR	DECACHLOROBIPHENYL	UG/L	0.20	0.10	50.0	47-148
12/11/94	DA*19728*4	8770981*SUR	Tetrachloro-m-Xylene	UG/L	0.20	0.17	85.0	52-127
12/11/94	DA*19728*4	20512431*SUR	DECACHLOROBIPHENYL	UG/L	0.20	0.07	35.0	47-148
12/11/94	DA*19728*5	8770981*SUR	Tetrachloro-m-Xylene	UG/L	0.20	0.19	95.0	52-127
12/11/94	DA*19728*5	20512431*SUR	DECACHLOROBIPHENYL	UG/L	0.20	0.13	65.0	47-148
12/11/94	DA*19728*6	8770981*SUR	Tetrachloro-m-Xylene	UG/L	0.20	0.17	85.0	52-127
12/11/94	DA*19728*6	20512431*SUR	DECACHLOROBIPHENYL	UG/L	0.20	0.12	60.0	47-148
12/11/94	SPM1*19728*1	8770981*SUR	Tetrachloro-m-Xylene	UG/L	0.20	0.20	100.0	52-127
12/11/94	SPM1*19728*1	20512431*SUR	DECACHLOROBIPHENYL	UG/L	0.20	0.11	55.0	47-148
12/11/94	SPM2*19728*1	8770981*SUR	Tetrachloro-m-Xylene	UG/L	0.20	0.21	105	52-127
12/11/94	SPM2*19728*1	20512431*SUR	DECACHLOROBIPHENYL	UG/L	0.20	0.11	55.0	47-148
12/11/94	CCS*A3*1	8770981*SUR	Tetrachloro-m-Xylene	UG/L	513000	580000	113	52-127
12/11/94	CCS*A3*1	20512431*SUR	DECACHLOROBIPHENYL	UG/L	743000	805000	108	47-148
12/11/94	CCS*1660*1	8770981*SUR	Tetrachloro-m-Xylene	UG/L	2900000	2830000	97.6	52-127
12/11/94	CCS*1660*1	20512431*SUR	DECACHLOROBIPHENYL	UG/L	2230000	2120000	95.1	47-148

ESE BATCH : P25474

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: P25474 Analysis Date: 12/11/94 Analyst: JUDY ZOSKY

	Yes	"Exceptions" No	Comment / Corrective Action
Are ALL units documented in batch?	X		
Analysis holding time within criteria?	X		
Extract holding time within criteria?	X		
No. of calibration standards present acceptable?	X		
Curve correlation coefficient >= 0.995?	X		
Calibration curve y-intercept < curve detection limit?	X		
Sample responses within highest standard response?	X		
Method blank present?	X		
Method blank within acceptance criteria?	X		
Standard matrix spike present?	X		
Standard matrix spike within acceptance criteria?	X		
Sample matrix spike present?	X		
Sample matrix spike within acceptance criteria?	X		
Sample matrix spike duplicate present?	X		
Sample matrix spike duplicate within acceptance criteria?	X		
Surrogate present?	X		
Surrogate within acceptance criteria?		X	DCB

Note: Any "NO" answer requires a comment.

BATCH OVERRIDE BY: ROBERT PADDISON 3540

FINALIZED BY: ROBERT PADDISON 3540

PROBLEM:
Surrogate not within acceptance criteria:
DCB
EXPLANATION: TCX was in in this sample. Data acceptable.

ESE Environmental Science & Engineering, Inc.
A GILCORP Company
8901 North Industrial Road -- Peoria, Illinois 61615
Telephone: (309) 692-4422 -- Fax: (309) 692-5232

FOR LAB USE ONLY
Project Number: 591-5103
Due Date: 12-7-94

Chain of Custody Record

№ 09775

Company: ESE - PEORIA
Address: FT. SHERIDAN LF #7

Phone #: (__)____-_____ Fax #: (__)____-_____
P.O. #:
Client Contact: WAYNE INGRAM
Project # / Location: FT. SHERIDAN LF #7

Sample Type:
1. Water
2. Soil
3. Sludge
4. Oil
5. Tissue
Other :

Container Type:
P - Plastic
G - Glass
V - VOC

Preservative:
1. None
2. H2SO4
3. HNO3
4. NaOH

Analyses: SEE ATTACHED FOR PARAMETERS

Sample I.D. (10 Characters ONLY)	Sample Type	Container Size	Container Type	Container No.	Sampling Date	Sampling Time	Preservative	Lab I.D.	Comments
GV-1	1				11/22			19629-1	
GV-2	1							-2	
GV-3	1							-3	
GV-4	1							-4	
GV-5	1							-5	
GV-6	1							-6	
GV-1 MS	1							-1	
GV-1 MSD	1							-1	

SEE ATTACHED

Relinquished By:	Date:	Received By:	Date:
Thomas J. Moriarty	11-23-94 Time: 8:05 am		-- -- Time: :
Relinquished By:	Date: -- -- Time: :	Received For Lab By: Skeiring	Date: 11-23-94 Time: 8:00

TURNAROUND TIME:
☐ RUSH:_____ day turnaround
☒ ROUTINE

FOR LAB USE ONLY
Samples Received Chilled
☒ Yes 9°C
☐ No

SPECIAL INSTRUCTIONS:

Copies: White - Client Canary - Lab Receiving Pink - Lab File Goldenrod - Retained by Sampler

ESE Environmental Science & Engineering, Inc.
A CILCORP Company
8901 North Industrial Road -- Peoria, Illinois 61615
Telephone: (309) 692-4422 -- Fax: (309) 692-5232

FOR LAB USE ONLY
Project Number: 591-5103
Due Date: 12-15-94

Chain of Custody Record

№ 09925

Company: ESE - PEORIA
Address:
Phone #: ( ) - Fax #: ( ) -
P.O. #:
Client Contact: WAYNE INGRAM
Project # / Location: Ft. SHERIDAN LF #7

Sample Type:
1. Water
2. Soil
3. Sludge
4. Oil
5. Tissue
Other :

Container Type:
P - Plastic
G - Glass
V - VOC

Preservative:
1. None
2. H2SO4
3. HNO3
4. NaOH

Analyses: SEE ATTACHED FOR PARAMETERS

Sample I.D. (10 Characters ONLY)	Sample Type	Container Size	Container Type	Container No.	Sampling Date	Sampling Time	Preservative	Lab I.D.	Comments
GV-1	1			9	12/2			19728-1	
GV-1 MS	1			~~8~~ 7				-1	
GV-1 MSD	1			~~8~~ 7				-1	
GV-2	1			9				-2	
GV-3	1			9				-3	
GV-4	1			9				-4	
GV-5	1	SEE	ATTACHED	9				-5	
GV-6	1			9				-6	
TRIP BLANK	1			2				-7	

Relinquished By:	Date:	Received By:	Date:
Thomas J Merally	12-2-94 Time: 7:35 pm		-- -- Time: :
Relinquished By:	Date: -- -- Time: :	Received For Lab By: Alan R. Hayes	Date: 12-3-94 Time: 8:00 am

TURNAROUND TIME:
☐ RUSH: _____ day turnaround
☒ ROUTINE

FOR LAB USE ONLY
Samples Received Chilled
☒ Yes ☐ No 5°C

SPECIAL INSTRUCTIONS:

Copies: White - Client Canary - Lab Receiving Pink - Lab File Goldenrod - Retained by Sampler

APPENDIX B - LABORATORY DATA GAS VENT LIQUIDS

APRIL 12, 1994

Environmental
Science &
Engineering, Inc.
A CILCORP Company

8901 North Industrial Road
Peoria, Illinois 61615-1589

Phone (309) 692-4422
Lab Fax (309) 692-5232

An IEPA Contract Laboratory

May 1, 1995

Mr. Wayne Ingram
Environmental Science & Engineering, Inc.
8901 North Industrial Road
Peoria, IL 61615

Dear Wayne,

Environmental Science & Engineering, Inc. (ESE) appreciates the opportunity to provide the attached report of analyses for ESE sample delivery group # 21016, received 04/12/95 by our laboratory. This deliverable includes tabulated results, chain-of-custody, and QC summary.

Should you have any questions regarding this data, please contact me at (309) 693-5623.

Sincerely,

ENVIRONMENTAL SCIENCE & ENGINEERING, INC.

Barbara G. Raya-Hash

Barbara G. Raya-Hash
Senior Project Manager

Attachments

Environmental Science & Engineering 05/02/95 STATUS :FINAL PAGE 1
PROJECT NUMBER 591-5103 PROJECT NAME ESE-PEORIA (FT SHERIDAN)
FIELD GROUP 21016 LAB COORDINATOR BARBARA RAYA-HASH

CLIENT SAMPLE ID'S:			GV-1 TOTAL	GV-1 0.45	GV-1 5.0	GV-1	GV-2	GV-3	GV-4
ESE FIELD GROUP:			21016	21016	21016	21016	21016	21016	21016
ESE SEQUENCE #:			1	2	3	4	5	6	7
DATE COLLECTED:			04/12/95	04/12/95	04/12/95	04/12/95	04/12/95	04/12/95	04/12/95
TIME COLLECTED:									
PARAMETERS	UNITS	METHOD							
Iron,total	UG/L	6010	13400	NRQ	NRQ	NRQ	NRQ	NRQ	NRQ
Iron,dissolved	UG/L	6010	NRQ	34700	42400	NRQ	NRQ	NRQ	NRQ
2,4-D	UG/L	8150	NRQ	NRQ	NRQ	<2.0	<2.0	<2.0	<2.0
2,4,5-TP/Silvex	UG/L	8150	NRQ	NRQ	NRQ	<1.0	<1.0	<1.0	<1.0
Methoxychlor	UG/L	8080	NRQ	NRQ	NRQ	<0.5	<0.5	<0.5	<0.5
Pyridine	UG/L	8270	NRQ	NRQ	NRQ	<10	<10	<10	<11
2,4,5-Trichlorophenol	UG/L	8270	NRQ	NRQ	NRQ	<10	<10	<10	<11
Cresols, Total	UG/L	8270	NRQ	NRQ	NRQ	<30	<30	<30	<32
2-Butanone	UG/L	8240	NRQ	NRQ	NRQ	<10	<10	<10	<10

NRQ - Analysis not requested.

PROJECT NUMBER 591-5103 PROJECT NAME ESE-PEORIA (FT SHERIDAN)
FIELD GROUP 21016 LAB COORDINATOR BARBARA RAYA-HASH

CLIENT SAMPLE ID'S:			GV-5	GV-6	COMP GV
ESE FIELD GROUP:			21016	21016	21016
ESE SEQUENCE #:			8	9	10
DATE COLLECTED:			04/12/95	04/12/95	04/12/95
TIME COLLECTED:					
PARAMETERS	UNITS	METHOD			
Iron,total	UG/L	6010	NRQ	NRQ	67600
Iron,dissolved	UG/L	6010	NRQ	NRQ	NRQ
2,4-D	UG/L	8150	<2.0	<2.1	NRQ
2,4,5-TP/Silvex	UG/L	8150	<1.0	<1.1	NRQ
Methoxychlor	UG/L	8080	<0.5	<0.5	NRQ
Pyridine	UG/L	8270	<10	<10	NRQ
2,4,5-Trichlorophenol	UG/L	8270	<10	<10	NRQ
Cresols, Total	UG/L	8270	<30	<30	NRQ
2-Butanone	UG/L	8240	<10	<10	NRQ
BOD	MG/L	405.1	NRQ	NRQ	18
pH	STD UNITS	150.1	NRQ	NRQ	6.74
Nitrogen, NO3	MG/L	353.2	NRQ	NRQ	<0.10
TDS	MG/L	160.1	NRQ	NRQ	1370
Chloride	MG/L	325.3	NRQ	NRQ	53
COD	MG/L	410.4	NRQ	NRQ	11
Hardness	MG/L-CACO3	130.2	NRQ	NRQ	1090
Sulfide (REACTIVITY)	MG/KG	7.3.4.1	NRQ	NRQ	16.0
Arsenic,total	UG/L	7060	NRQ	NRQ	23.0
Boron,total	UG/L	6010	NRQ	NRQ	373
Calcium,total	MG/L	6010	NRQ	NRQ	311
Lead,total	UG/L	6010	NRQ	NRQ	131
Zinc,total	UG/L	6010	NRQ	NRQ	2280

NRQ - Analysis not requested.

PEORIA 21016 DATES REPORT

SAMPLE	STATION ID	COLLECT.	RECEIPT	CLASSIFICATION	EXTRACT.	ANALYSIS	DAYS, ACT/HT EXT	ANL	ESE BATCH
21016*1	GV-1 TOTAL	04/12/95	04/12/95	Iron,total - 6010	NA	04/17/95	NA	5/180	P27719
21016*2	GV-1 0.45	04/12/95	04/12/95	Iron,dissolved - 6010	NA	04/25/95	NA	13/180	P27878
21016*3	GV-1 5.0	04/12/95	04/12/95	Iron,dissolved - 6010	NA	04/25/95	NA	13/180	P27878
21016*4	GV-1	04/12/95	04/12/95	2,4-D - 8150	04/17/95	04/22/95	5/7	5/40	P27924
				2,4,5-TP/Silvex - 8150	04/17/95	04/22/95	5/7	5/40	P27924
				Methoxychlor - 8080/3510	04/13/95	04/25/95	1/7	12/40	P27895
				Pyridine - 8270/3510	04/14/95	04/19/95	2/7	5/40	P27813
				2,4,5-Trichlorophenol - 8270/3510	04/14/95	04/19/95	2/7	5/40	P27813
				2-Butanone - 8240	NA	04/19/95	NA	7/14	P27866
				BNA's	04/14/95	04/19/95	2/7	5/40	P27813
21016*5	GV-2	04/12/95	04/12/95	2,4-D - 8150	04/17/95	04/22/95	5/7	5/40	P27924
				2,4,5-TP/Silvex - 8150	04/17/95	04/22/95	5/7	5/40	P27924
				Methoxychlor - 8080/3510	04/13/95	04/25/95	1/7	12/40	P27895
				Pyridine - 8270/3510	04/14/95	04/19/95	2/7	5/40	P27813
				2,4,5-Trichlorophenol - 8270/3510	04/14/95	04/19/95	2/7	5/40	P27813
				2-Butanone - 8240	NA	04/19/95	NA	7/14	P27866
				BNA's	04/14/95	04/19/95	2/7	5/40	P27813
21016*6	GV-3	04/12/95	04/12/95	2,4-D - 8150	04/17/95	04/22/95	5/7	5/40	P27924
				2,4,5-TP/Silvex - 8150	04/17/95	04/22/95	5/7	5/40	P27924
				Methoxychlor - 8080/3510	04/13/95	04/25/95	1/7	12/40	P27895
				Pyridine - 8270/3510	04/14/95	04/19/95	2/7	5/40	P27813
				2,4,5-Trichlorophenol - 8270/3510	04/14/95	04/19/95	2/7	5/40	P27813
				2-Butanone - 8240	NA	04/19/95	NA	7/14	P27866
				BNA's	04/14/95	04/19/95	2/7	5/40	P27813
21016*7	GV-4	04/12/95	04/12/95	2,4-D - 8150	04/17/95	04/22/95	5/7	5/40	P27924
				2,4,5-TP/Silvex - 8150	04/17/95	04/22/95	5/7	5/40	P27924
				Methoxychlor - 8080/3510	04/13/95	04/25/95	1/7	12/40	P27895
				Pyridine - 8270/3510	04/14/95	04/19/95	2/7	5/40	P27813
				2,4,5-Trichlorophenol - 8270/3510	04/14/95	04/19/95	2/7	5/40	P27813
				2-Butanone - 8240	NA	04/20/95	NA	8/14	P27866
				BNA's	04/14/95	04/19/95	2/7	5/40	P27813
21016*8	GV-5	04/12/95	04/12/95	2,4-D - 8150	04/17/95	04/22/95	5/7	5/40	P27924
				2,4,5-TP/Silvex - 8150	04/17/95	04/22/95	5/7	5/40	P27924
				Methoxychlor - 8080/3510	04/13/95	04/27/95	1/7	14/40	P27895
				Pyridine - 8270/3510	04/14/95	04/19/95	2/7	5/40	P27813
				2,4,5-Trichlorophenol - 8270/3510	04/14/95	04/19/95	2/7	5/40	P27813
				2-Butanone - 8240	NA	04/19/95	NA	7/14	P27866
				BNA's	04/14/95	04/19/95	2/7	5/40	P27813
21016*9	GV-6	04/12/95	04/12/95	2,4-D - 8150	04/17/95	04/22/95	5/7	5/40	P27924
				2,4,5-TP/Silvex - 8150	04/17/95	04/22/95	5/7	5/40	P27924
				Methoxychlor - 8080/3510	04/13/95	04/25/95	1/7	12/40	P27895
				Pyridine - 8270/3510	04/14/95	04/19/95	2/7	5/40	P27813
				2,4,5-Trichlorophenol - 8270/3510	04/14/95	04/19/95	2/7	5/40	P27813
				2-Butanone - 8240	NA	04/19/95	NA	7/14	P27866
				BNA's	04/14/95	04/19/95	2/7	5/40	P27813
21016*10	COMP GV	04/12/95	04/12/95	Iron,total - 6010	NA	04/17/95	NA	5/180	P27719
				BOD - 405.1	NA	04/13/95	NA	1/2	P27776
				Ph,lab - 150.1	NA	04/13/95	NA	1/2	P27690
				Nitrogen, NO3	NA	04/13/95	NA	1/2	P27687
				Residue,diss (tds) - 160.1	NA	04/14/95	NA	2/7	P27713
				Chloride - 325.3	NA	04/18/95	NA	6/28	P27748

FOOTNOTES: * = EXCEEDS CRITERIA ACT = ACTUAL HT = HOLDING TIME

PEORIA 21016 DATES REPORT

SAMPLE	STATION ID	COLLECT.	RECEIPT	CLASSIFICATION	EXTRACT.	ANALYSIS	DAYS, ACT/HT EXT	ANL	ESE BATCH
				COD- 410.4	NA	04/18/95	NA	6/28	P27771
				Hardness - 130.2	NA	04/19/95	NA	7/180	P27773
				SULFIDE (REACTIVITY)	NA	04/14/95	NA	2/7	P27752
				Arsenic,total - 7060	NA	04/18/95	NA	6/180	P27757
				Boron,total - 6010	NA	04/17/95	NA	5/180	P27719
				Calcium,total - 6010	NA	04/17/95	NA	5/180	P27719
				Lead,total - 6010	NA	04/17/95	NA	5/180	P27719
				Zinc,total - 6010	NA	04/17/95	NA	5/180	P27719

FOOTNOTES: * = EXCEEDS CRITERIA ACT = ACTUAL HT = HOLDING TIME

000002

ESE BATCH : P27757
ANALYSIS : GFAA METALS

QC TYPE : ESE
ANALYST : LEANNA SWEETLAND
EXTRACTOR : DEBBIE BLAHNIK
DATA ENTRY : LEANNA SWEETLAND

REPORT DATE/TIME : 05/01/95 16:57:21
ANALYSIS DATE : 04/18/95
EXTRACT DATE : 04/17/95

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
21016	BATCH	591-5103	ESE-PEORIA (FT SHERIDAN)	BARBARA RAYA-HASH

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
21016*10	COMP GV	04/18/95	12:43PM

ESE BATCH : P27757

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND	DET LMT
04/18/95	MB*QC*1	1097*7041-P	Antimony,total	UG/L	ND	10.0
04/18/95	MB*QC*1	1002*7060-P	Arsenic,total	UG/L	ND	10.0
04/18/95	MB*QC*1	1147*7740-P	Selenium,total	UG/L	ND	5.0
04/18/95	MB*QC*1	1051*7421-P	Lead,total	UG/L	0.7	5.0
04/18/95	MB*QC*1	1059*7841-P	Thallium,total	UG/L	2.8	10.0

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/18/95	SP*QC*1	1097*7041-P	Antimony,total	UG/L	22.0	24.2	110.0	80-120
04/18/95	SP*QC*1	1002*7060-P	Arsenic,total	UG/L	22.0	21.1	95.9	80-120
04/18/95	SP*QC*1	1147*7740-P	Selenium,total	UG/L	22.0	23.2	105.5	80-120
04/18/95	SP*QC*1	1051*7421-P	Lead,total	UG/L	22.0	23.8	108.2	80-120
04/18/95	SP*QC*1	1059*7841-P	Thallium,total	UG/L	22.0	22.1	100.5	80-120

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	UNSPIKED	TARGET	FOUND	%RECV	RECV CRIT	RPD
04/18/95	SPM1*20970*2	1097*7041-P	Antimony,total	UG/L	0.9	22.0	21.5	97.7	75-125	
04/18/95	SPM1*20970*2	1002*7060-P	Arsenic,total	UG/L	2.5	22.0	20.6	93.6	75-125	
04/18/95	SPM1*20970*2	1147*7740-P	Selenium,total	UG/L	2.0	22.0	19.3	87.7	75-125	
04/18/95	SPM1*20970*2	1051*7421-P	Lead,total	UG/L	0.0	22.0	10.2	46.4	75-125	
04/18/95	SPM1*20970*2	1059*7841-P	Thallium,total	UG/L	2.3	22.0	21.7	98.6	75-125	
04/18/95	SPM2*20970*2	1097*7041-P	Antimony,total	UG/L	0.9	22.0	21.6	98.2	75-125	0.5
04/18/95	SPM2*20970*2	1002*7060-P	Arsenic,total	UG/L	2.5	22.0	19.7	89.5	75-125	4.5
04/18/95	SPM2*20970*2	1147*7740-P	Selenium,total	UG/L	2.0	22.0	19.8	90.0	75-125	2.6
04/18/95	SPM2*20970*2	1051*7421-P	Lead,total	UG/L	0.0	22.0	10.5	47.7	75-125	2.8
04/18/95	SPM2*20970*2	1059*7841-P	Thallium,total	UG/L	2.3	22.0	20.9	95.0	75-125	3.7

ESE BATCH : P27757

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: P27757 Analysis Date: 04/18/95 Analyst: LEANNA SWEETLAND

	Yes	"Exceptions" No	Comment / Corrective Action
Are ALL units documented in batch?	X		
Analysis holding time within criteria?	X		
Method blank present?	X		
Method blank within acceptance criteria?	X		
Standard matrix spike present?	X		
Standard matrix spike within acceptance criteria?	X		
Sample matrix spike present?	X		
Sample matrix spike within acceptance criteria?	X		

Note: Any "NO" answer requires a comment.

BATCH OVERRIDE BY: GREG ST. AUBIN 5145

FINALIZED BY: GREG ST. AUBIN 5145

ESE BATCH : P27719
ANALYSIS : ICP METALS

QC TYPE : ESE
ANALYST : ELLEN ZUCK
EXTRACTOR : DEBBIE BLAHNIK
DATA ENTRY : ELLEN ZUCK

REPORT DATE/TIME : 05/01/95 16:40:12
ANALYSIS DATE : 04/17/95
EXTRACT DATE : 04/17/95

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
21016	BATCH	591-5103	ESE-PEORIA (FT SHERIDAN)	BARBARA RAYA-HASH

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
21016*1	GV-1 TOTAL	04/17/95	03:34PM
21016*10	COMP GV	04/17/95	03:37PM

ESE BATCH : P27719

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND	DET LMT
04/17/95	MB*QC*1	1022*6010-P	Boron,total	UG/L	ND	20.0
04/17/95	MB*QC*1	916*6010-P	Calcium,total	MG/L	0.3	0.5
04/17/95	MB*QC*1	1051*6010-P	Lead,total	UG/L	4.4	50.0
04/17/95	MB*QC*1	1092*6010-P	Zinc,total	UG/L	3.9	20.0

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/17/95	SP*QC*1	1022*6010-P	Boron,total	UG/L	556	566	101.8	80-120
04/17/95	SP*QC*1	916*6010-P	Calcium,total	MG/L	11.1	11.3	101.8	80-120
04/17/95	SP*QC*1	1045*6010-P	Iron,total	UG/L	1110	1140	102.7	80-120
04/17/95	SP*QC*1	1051*6010-P	Lead,total	UG/L	556	583	104.9	80-120
04/17/95	SP*QC*1	1092*6010-P	Zinc,total	UG/L	556	575	103.4	80-120

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	UNSPIKED	TARGET	FOUND	%RECV	RECV CRIT	RPD
04/17/95	SPM1*20970*2	1022*6010-P	Boron,total	UG/L	6380	556	310	55.8	75-125	
04/17/95	SPM1*20970*2	916*6010-P	Calcium,total	MG/L	675	11.1	7.0	63.1	75-125	
04/17/95	SPM1*20970*2	1045*6010-P	Iron,total	UG/L	14800	1110	2700	243.2	75-125	
04/17/95	SPM1*20970*2	1051*6010-P	Lead,total	UG/L	20.4	556	501	90.1	75-125	
04/17/95	SPM1*20970*2	1092*6010-P	Zinc,total	UG/L	14.6	556	535	96.2	75-125	
04/17/95	SPM2*20970*2	1022*6010-P	Boron,total	UG/L	6380	556	320	57.6	75-125	3.2
04/17/95	SPM2*20970*2	916*6010-P	Calcium,total	MG/L	675	11.1	2.0	18.0	75-125	111
04/17/95	SPM2*20970*2	1045*6010-P	Iron,total	UG/L	14800	1110	2500	225.2	75-125	7.8
04/17/95	SPM2*20970*2	1051*6010-P	Lead,total	UG/L	20.4	556	509	91.5	75-125	1.7
04/17/95	SPM2*20970*2	1092*6010-P	Zinc,total	UG/L	14.6	556	549	98.7	75-125	2.7

ESE BATCH : P27719

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: P27719 Analysis Date: 04/17/95 Analyst: ELLEN ZUCK

	Yes	No	"Exceptions" Comment / Corrective Action
Are ALL units documented in batch?	X		
Analysis holding time within criteria?	X		
Method blank present?	X		
Method blank within acceptance criteria?	X		
Standard matrix spike present?	X		
Standard matrix spike within acceptance criteria?	X		
Sample matrix spike present?	X		
Sample matrix spike within acceptance criteria?		X	B
			Ca
			Fe

Note: Any "NO" answer requires a comment.

BATCH OVERRIDE BY: GREG ST. AUBIN 5145

FINALIZED BY: WILLIAM GRAY 5159

Batch Narrative - P27719 Analysis: SW846

Updated by 5058

PROBLEM:
Sample matrix spike not within acceptance criteria:
B
Ca
Fe
EXPLANATION: Sample result(s) are significantly greater than the spiking level.
Recovery criteria is not applicable.

PROBLEM:
Sample matrix spike duplicate not within acceptance criteria:
B
Ca
Fe
EXPLANATION: Sample result(s) are significantly greater than the spiking level.
Recovery criteria is not applicable.

ESE BATCH : P27773
ANALYSIS : 130.2

QC TYPE : ESE
ANALYST : KEVIN CRANFORD
EXTRACTOR :
DATA ENTRY : KEVIN CRANFORD

REPORT DATE/TIME : 05/01/95 16:56:50
ANALYSIS DATE : 04/19/95
EXTRACT DATE :

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

BATCH NOTES
130.2

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
21016	BATCH	591-5103	ESE-PEORIA (FT SHERIDAN)	BARBARA RAYA-HASH

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
21016*10	COMP GV		

ESE BATCH : P27773

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND	DET LMT
04/19/95	MB*QC*1	900*130.2-P	Hardness	MG/L-C	ND	5

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/19/95	SP*QC*1	900*130.2-P	Hardness	MG/L-C	500	508	102	80-120

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	UNSPIKED	TARGET	FOUND	%RECV	RECV CRIT	RPD
04/19/95	SPM1*21021*1	900*130.2-P	Hardness	MG/L-C	169	500	490	98	75-125	
04/19/95	SPM2*21021*1	900*130.2-P	Hardness	MG/L-C	169	500	490	98	75-125	0.0

ESE BATCH : P27773
Environmental Science and Engineering Analytical Services
Computer QC Checks

Batch No.: P27773 Analysis Date: 04/19/95 Analyst: KEVIN CRANFORD

	Yes	No	"Exceptions" Comment / Corrective Action
Are ALL units documented in batch?	X		
Analysis holding time within criteria?	X		
Method blank present?	X		
Method blank within acceptance criteria?	X		
Standard matrix spike present?	X		
Standard matrix spike within acceptance criteria?	X		
Sample matrix spike present?	X		
Sample matrix spike within acceptance criteria?	X		

Note: Any "NO" answer requires a comment.

BATCH OVERRIDE BY:

FINALIZED BY: WILLIAM GRAY 5159

ESE BATCH : P27752
ANALYSIS : 7.3.4.1

QC TYPE : ESE
ANALYST : KEVIN CRANFORD
EXTRACTOR :
DATA ENTRY : KEVIN CRANFORD

REPORT DATE/TIME : 05/01/95 16:57:06
ANALYSIS DATE : 04/14/95
EXTRACT DATE :

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

BATCH NOTES
9030

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
21016	BATCH	591-5103	ESE-PEORIA (FT SHERIDAN)	BARBARA RAYA-HASH

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
21016*10	COMP GV		

ESE BATCH : P27752

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND	DET LMT
04/14/95	MB*QC*1	747*7.3.4.1-P	Sulfide (REACTIVITY)	MG/KG	ND	0.0

Replicate Analysis Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	REP #1	REP #2	RPD	RPD CRIT
04/14/95	RP*20987*2	747*7.3.4.1-P	Sulfide (REACTIVITY)	MG/KG	20.0	28.0	33.3	N/A

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/14/95	SP*QC*1	747*7.3.4.1-P	Sulfide (REACTIVITY)	MG/KG	6.7	5.8	86.6	80-120

ESE BATCH : P27752
Environmental Science and Engineering Analytical Services
Computer QC Checks

Batch No.: P27752 Analysis Date: 04/14/95 Analyst: KEVIN CRANFORD

	"Exceptions" Yes	No	Comment / Corrective Action
Are ALL units documented in batch?	X		
Analysis holding time within criteria?	X		

Note: Any "NO" answer requires a comment.

BATCH OVERRIDE BY: WILLIAM GRAY 5159

FINALIZED BY: WILLIAM GRAY 5159

ESE BATCH : P27924
ANALYSIS : 8150

QC TYPE : ESE
ANALYST : RICK URISH
EXTRACTOR :
DATA ENTRY : RICK URISH

REPORT DATE/TIME : 05/01/95 16:43:50
ANALYSIS DATE : 04/21/95
EXTRACT DATE :

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

BATCH NOTES
8150

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
21016	BATCH	591-5103	ESE-PEORIA (FT SHERIDAN)	BARBARA RAYA-HASH

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
21016*4	GV-1	04/22/95	10:54AM
21016*5	GV-2	04/22/95	11:22AM
21016*6	GV-3	04/22/95	11:52AM
21016*7	GV-4	04/22/95	05:41PM
21016*8	GV-5	04/22/95	06:10PM
21016*9	GV-6	04/22/95	06:40PM

ESE BATCH : P27924

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND	DET LMT
04/22/95	MB*785*1	39730*8150-P	2,4-D	UG/L	0.14	2.0
04/22/95	MB*785*1	39760*8150-P	2,4,5-TP/Silvex	UG/L	0.168	1.00

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/22/95	SP1*785*1	39730*8150-P	2,4-D	UG/L	1.0	0.55	55	11-122
04/22/95	SP1*785*1	39760*8150-P	2,4,5-TP/Silvex	UG/L	0.500	0.248	49.6	35-140

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	UNSPIKED	TARGET	FOUND	%RECV	RECV CRIT	RPD
04/22/95	SPM1*21016*9	39730*8150-P	2,4-D	UG/L	0.15	1.0	0.73	73	11-122	
04/22/95	SPM1*21016*9	39760*8150-P	2,4,5-TP/Silvex	UG/L	0.177	0.530	0.301	56.8	35-140	
04/22/95	SPM2*21016*9	39730*8150-P	2,4-D	UG/L	0.15	1.0	0.52	52	11-122	34
04/22/95	SPM2*21016*9	39760*8150-P	2,4,5-TP/Silvex	UG/L	0.177	0.530	0.240	45.3	35-140	22.5

Surrogate Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/22/95	MB*785*1	96177*SUR	2,4-Dichlorophenylacetic acid	UG/L	5.00	7.18	144	30-115
04/22/95	SP1*785*1	96177*SUR	2,4-Dichlorophenylacetic acid	UG/L	5.00	7.72	154	30-115
04/22/95	DA*21016*4	96177*SUR	2,4-Dichlorophenylacetic acid	UG/L	5.00	10.2	204	30-115
04/22/95	DA*21016*5	96177*SUR	2,4-Dichlorophenylacetic acid	UG/L	5.00	7.71	154	30-115
04/22/95	DA*21016*6	96177*SUR	2,4-Dichlorophenylacetic acid	UG/L	5.00	7.15	143	30-115
04/22/95	CCS*HERB04*1	96177*SUR	2,4-Dichlorophenylacetic acid	UG/L	1.00	1.25	125	30-115
04/22/95	DA*21016*7	96177*SUR	2,4-Dichlorophenylacetic acid	UG/L	5.00	11.3	226	30-115
04/22/95	DA*21016*8	96177*SUR	2,4-Dichlorophenylacetic acid	UG/L	5.00	11.6	232	30-115
04/22/95	DA*21016*9	96177*SUR	2,4-Dichlorophenylacetic acid	UG/L	5.00	7.88	158	30-115
04/22/95	SPM1*21016*9	96177*SUR	2,4-Dichlorophenylacetic acid	UG/L	5.30	9.42	178	30-115
04/22/95	SPM2*21016*9	96177*SUR	2,4-Dichlorophenylacetic acid	UG/L	5.30	10.2	192	30-115
04/22/95	CCS*HERB04*2	96177*SUR	2,4-Dichlorophenylacetic acid	UG/L	1.00	1.29	129	30-115

ESE BATCH : P27924

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: P27924 Analysis Date: 04/21/95 Analyst: RICK URISH

	Yes	"Exceptions" No	Comment / Corrective Action
Are ALL units documented in batch?	X		
Analysis holding time within criteria?	X		
Extract holding time within criteria?	X		
Curve correlation coefficient >= 0.995?	X		
Calibration curve y-intercept < curve detection limit?	X		
Sample responses within highest standard response?	X		
Method blank present?	X		
Method blank within acceptance criteria?	X		
Standard matrix spike present?	X		
Standard matrix spike within acceptance criteria?	X		
Sample matrix spike present?	X		
Sample matrix spike within acceptance criteria?	X		
Surrogate present?	X		
Surrogate within acceptance criteria?		X	96177*SUR

Note: Any "NO" answer requires a comment.

BATCH OVERRIDE BY: ROBERT PADDISON 3540

FINALIZED BY: ROBERT PADDISON 3540

Batch Narrative - P27924 Analysis: 8150

Updated by 3540

PROBLEM:
Sample matrix spike duplicate not within acceptance criteria:
39730*8150
EXPLANATION: %RPD exceeded advisory limit. LCS within criteria; data acceptable.
PROBLEM:
Surrogate not within acceptance criteria:
96177*SUR
EXPLANATION: Surrogates were high biased; samples clean. Thus no corrective action required.

ESE BATCH : P27878
ANALYSIS : ICP METALS

QC TYPE : ESE
ANALYST : ELLEN ZUCK
EXTRACTOR : DEBBIE BLAHNIK
DATA ENTRY : ELLEN ZUCK

REPORT DATE/TIME : 05/01/95 16:43:20
ANALYSIS DATE : 04/25/95
EXTRACT DATE : 04/24/95

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
21016	BATCH	591-5103	ESE-PEORIA (FT SHERIDAN)	BARBARA RAYA-HASH

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
21016*2	GV-1 0.45	04/25/95	09:02AM
21016*3	GV-1 5.0	04/25/95	09:11AM

ESE BATCH : P27878

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND	DET LMT
04/25/95	MB*QC*1	1046*6010-P	Iron,dissolved	UG/L	7.9	100.0

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/25/95	SP*QC*1	1046*6010-P	Iron,dissolved	UG/L	1110	1100	99.1	80-120

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	UNSPIKED	TARGET	FOUND	%RECV	RECV CRIT	RPD
04/25/95	SPM1*21016*2	1046*6010-P	Iron,dissolved	UG/L	34700	1110	-100.0	-9.0	75-125	
04/25/95	SPM2*21016*2	1046*6010-P	Iron,dissolved	UG/L	34700	1110	300	27.0	75-125	400

ESE BATCH : P27878

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: P27878 Analysis Date: 04/25/95 Analyst: ELLEN ZUCK

	Yes	"Exceptions" No	Comment / Corrective Action
Are ALL units documented in batch?	X		
Analysis holding time within criteria?	X		
Method blank present?	X		
Method blank within acceptance criteria?	X		
Standard matrix spike present?	X		
Standard matrix spike within acceptance criteria?	X		
Sample matrix spike present?	X		
Sample matrix spike within acceptance criteria?		X	Fe

Note: Any "NO" answer requires a comment.

BATCH OVERRIDE BY: GREG ST. AUBIN 5145

FINALIZED BY: GREG ST. AUBIN 5145

Batch Narrative - P27878 Analysis: SW846

Updated by 5058

PROBLEM:
Sample matrix spike not within acceptance criteria:
Fe
EXPLANATION: Sample result(s) are significantly greater than the spiking level.
Recovery criteria is not applicable.

PROBLEM:
Sample matrix spike duplicate not within acceptance criteria:
Fe
EXPLANATION: Sample result(s) are significantly greater than the spiking level.
Recovery criteria is not applicable.

ESE BATCH : P27895
ANALYSIS : 8080

QC TYPE : ESE
ANALYST : MICHELE LARSEN
EXTRACTOR :
DATA ENTRY : MICHELE LARSEN

REPORT DATE/TIME : 05/01/95 16:44:46
ANALYSIS DATE : 04/25/95
EXTRACT DATE : 04/13/95

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

BATCH NOTES
8080-H2O

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
21016	BATCH	591-5103	ESE-PEORIA (FT SHERIDAN)	BARBARA RAYA-HASH

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
21016*4	GV-1	04/25/95	02:14AM
21016*5	GV-2	04/25/95	02:49AM
21016*6	GV-3	04/25/95	03:23AM
21016*7	GV-4	04/25/95	04:33AM
21016*8	GV-5	04/27/95	03:47AM
21016*9	GV-6	04/25/95	05:42AM

ESE BATCH : P27895

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND	DET LMT
04/25/95	MB*775*1	39340*8080/3510-P	gamma-BHC (Lindane)	UG/L	0.02	0.05
04/25/95	MB*775*1	39410*8080/3510-P	Heptachlor	UG/L	0.02	0.05
04/25/95	MB*775*1	39380*8080/3510-P	Dieldrin	UG/L	0.04	0.1
04/25/95	MB*775*1	39390*8080/3510-P	Endrin	UG/L	0.04	0.1
04/25/95	MB*775*1	39300*8080/3510-P	4,4'-DDT	UG/L	0.04	0.1
04/25/95	MB*775*1	39480*8080/3510-P	Methoxychlor	UG/L	0.2	0.5
04/27/95	MB*838RE*1	39340*8080/3510-P	gamma-BHC (Lindane)	UG/L	0.02	0.05
04/27/95	MB*838RE*1	39410*8080/3510-P	Heptachlor	UG/L	0.02	0.05
04/27/95	MB*838RE*1	39380*8080/3510-P	Dieldrin	UG/L	0.04	0.1
04/27/95	MB*838RE*1	39390*8080/3510-P	Endrin	UG/L	0.04	0.1
04/27/95	MB*838RE*1	39300*8080/3510-P	4,4'-DDT	UG/L	0.04	0.1
04/27/95	MB*838RE*1	39480*8080/3510-P	Methoxychlor	UG/L	0.2	0.5

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/25/95	SP*775*1	39340*8080/3510-P	gamma-BHC (Lindane)	UG/L	0.5	0.5	100	40-145
04/25/95	SP*775*1	39410*8080/3510-P	Heptachlor	UG/L	0.5	0.4	80	44-140
04/25/95	SP*775*1	39380*8080/3510-P	Dieldrin	UG/L	1	0.9	90	53-140
04/25/95	SP*775*1	39390*8080/3510-P	Endrin	UG/L	1	1	100	48-143
04/25/95	SP*775*1	39300*8080/3510-P	4,4'-DDT	UG/L	1	0.9	90	50-149
04/27/95	SP*838RE*1	39340*8080/3510-P	gamma-BHC (Lindane)	UG/L	0.5	0.3	60	40-145
04/27/95	SP*838RE*1	39410*8080/3510-P	Heptachlor	UG/L	0.5	0.3	60	44-140
04/27/95	SP*838RE*1	39380*8080/3510-P	Dieldrin	UG/L	1	0.6	60	53-140
04/27/95	SP*838RE*1	39390*8080/3510-P	Endrin	UG/L	1	0.5	50	48-143
04/27/95	SP*838RE*1	39300*8080/3510-P	4,4'-DDT	UG/L	1	0.6	60	50-149
04/27/95	SP*838RE*1	39480*8080/3510-P	Methoxychlor	UG/L		ND		80-120

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	UNSPIKED	TARGET	FOUND	%RECV	RECV CRIT	RPD
04/25/95	SPM1*21016*4	39340*8080/3510-P	gamma-BHC (Lindane)	UG/L	0.03	0.5	0.2	40	40-145	
04/25/95	SPM1*21016*4	39410*8080/3510-P	Heptachlor	UG/L	0.02	0.5	0.06	12	44-140	
04/25/95	SPM1*21016*4	39380*8080/3510-P	Dieldrin	UG/L	0.04	1	0.2	20	53-140	
04/25/95	SPM1*21016*4	39390*8080/3510-P	Endrin	UG/L	0.04	1	0.2	20	48-143	
04/25/95	SPM1*21016*4	39300*8080/3510-P	4,4'-DDT	UG/L	0.04	1	0.2	20	50-149	
04/25/95	SPM2*21016*4	39340*8080/3510-P	gamma-BHC (Lindane)	UG/L	0.03	0.5	0.2	40	40-145	0.0
04/25/95	SPM2*21016*4	39410*8080/3510-P	Heptachlor	UG/L	0.02	0.5	0.08	16	44-140	29
04/25/95	SPM2*21016*4	39380*8080/3510-P	Dieldrin	UG/L	0.04	1	0.2	20	53-140	0.0
04/25/95	SPM2*21016*4	39390*8080/3510-P	Endrin	UG/L	0.04	1	0.2	20	48-143	0.0
04/25/95	SPM2*21016*4	39300*8080/3510-P	4,4'-DDT	UG/L	0.04	1	0.2	20	50-149	0.0
04/25/95	SPM2*21016*4	39480*8080/3510-P	Methoxychlor	UG/L	0.0		ND		80-120	

Surrogate Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/25/95	MB*775*1	8770981*SUR	Tetrachloro-m-Xylene	UG/L	0.20	0.17	85.0	52-127
04/25/95	MB*775*1	20512431*SUR	DECACHLOROBIPHENYL	UG/L	0.20	0.10	50.0	47-148
04/25/95	SP*775*1	8770981*SUR	Tetrachloro-m-Xylene	UG/L	0.20	0.18	90.0	52-127
04/25/95	SP*775*1	20512431*SUR	DECACHLOROBIPHENYL	UG/L	0.20	0.12	60.0	47-148
04/25/95	DA*21016*4	8770981*SUR	Tetrachloro-m-Xylene	UG/L	0.20	0.08	40.0	52-127
04/25/95	DA*21016*4	20512431*SUR	DECACHLOROBIPHENYL	UG/L	0.20	0.07	35.0	47-148
04/25/95	DA*21016*5	8770981*SUR	Tetrachloro-m-Xylene	UG/L	0.20	0.12	60.0	52-127
04/25/95	DA*21016*5	20512431*SUR	DECACHLOROBIPHENYL	UG/L	0.20	0.09	45.0	47-148
04/25/95	DA*21016*6	8770981*SUR	Tetrachloro-m-Xylene	UG/L	0.20	0.11	55.0	52-127
04/25/95	DA*21016*6	20512431*SUR	DECACHLOROBIPHENYL	UG/L	0.20	0.08	40.0	47-148
04/25/95	CCS*A2*1	8770981*SUR	Tetrachloro-m-Xylene	UG/L	0.02	0.03	150	52-127
04/25/95	CCS*A2*1	20512431*SUR	DECACHLOROBIPHENYL	UG/L	0.04	0.05	125	47-148
04/25/95	DA*21016*7	8770981*SUR	Tetrachloro-m-Xylene	UG/L	0.20	0.12	60.0	52-127
04/25/95	DA*21016*7	20512431*SUR	DECACHLOROBIPHENYL	UG/L	0.20	0.07	35.0	47-148
04/27/95	DA*21016*8	8770981*SUR	Tetrachloro-m-Xylene	UG/L	0.20	0.06	30.0	52-127
04/27/95	DA*21016*8	20512431*SUR	DECACHLOROBIPHENYL	UG/L	0.20	0.06	30.0	47-148
04/25/95	DA*21016*9	8770981*SUR	Tetrachloro-m-Xylene	UG/L	0.20	0.14	70.0	52-127

ESE BATCH : P27895

Surrogate Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/25/95	DA*21016*9	20512431*SUR	DECACHLOROBIPHENYL	UG/L	0.20	0.08	40.0	47-148
04/25/95	SPM1*21016*4	8770981*SUR	Tetrachloro-m-Xylene	UG/L	0.20	0.05	25.0	52-127
04/25/95	SPM1*21016*4	20512431*SUR	DECACHLOROBIPHENYL	UG/L	0.20	0.06	30.0	47-148
04/25/95	SPM2*21016*4	8770981*SUR	Tetrachloro-m-Xylene	UG/L	0.20	0.05	25.0	52-127
04/25/95	SPM2*21016*4	20512431*SUR	DECACHLOROBIPHENYL	UG/L	0.20	0.05	25.0	47-148
04/27/95	CCS*A3*1	8770981*SUR	Tetrachloro-m-Xylene	UG/L	0.05	0.06	120	52-127
04/27/95	CCS*A3*1	20512431*SUR	DECACHLOROBIPHENYL	UG/L	0.10	0.11	110	47-148
04/25/95	UN*21016*4	8770981*SUR	Tetrachloro-m-Xylene	UG/L	0.20	0.08	40.0	52-127
04/25/95	UN*21016*4	20512431*SUR	DECACHLOROBIPHENYL	UG/L	0.20	0.07	35.0	47-148
04/27/95	MB*838RE*1	8770981*SUR	Tetrachloro-m-Xylene	UG/L	0.20	0.24	120	52-127
04/27/95	MB*838RE*1	20512431*SUR	DECACHLOROBIPHENYL	UG/L	0.20	0.17	85.0	47-148
04/27/95	SP*838RE*1	8770981*SUR	Tetrachloro-m-Xylene	UG/L	0.20	0.19	95.0	52-127
04/27/95	SP*838RE*1	20512431*SUR	DECACHLOROBIPHENYL	UG/L	0.20	0.09	45.0	47-148
04/27/95	UN*21016*8	8770981*SUR	Tetrachloro-m-Xylene	UG/L	0.20	0.19	95.0	52-127
04/27/95	UN*21016*8	20512431*SUR	DECACHLOROBIPHENYL	UG/L	0.20	0.09	45.0	47-148
04/27/95	CCS*HP2A3*1	8770981*SUR	Tetrachloro-m-Xylene	UG/L	0.05	0.07	140	52-127
04/27/95	CCS*HP2A3*1	20512431*SUR	DECACHLOROBIPHENYL	UG/L	0.10	0.11	110	47-148

ESE BATCH : P27895

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: P27895 Analysis Date: 04/25/95 Analyst: MICHELE LARSEN

	Yes	"Exceptions" No	Comment / Corrective Action
Are ALL units documented in batch?	X		
Analysis holding time within criteria?	X		
Extract holding time within criteria?	X		
Curve correlation coefficient >= 0.995?	X		
Calibration curve y-intercept < curve detection limit?	X		
Sample responses within highest standard response?	X		
Method blank present?	X		
Method blank within acceptance criteria?	X		
Standard matrix spike present?	X		
Standard matrix spike within acceptance criteria?	X		
Sample matrix spike present?	X		
Sample matrix spike within acceptance criteria?		X	39410*8080
			39380*8080
			39390*8080
			39300*8080
Surrogate present?	X		
Surrogate within acceptance criteria?		X	TCX
			DCB
			DBC

Note: Any "NO" answer requires a comment.

BATCH OVERRIDE BY: ROBERT PADDISON 3540

FINALIZED BY: ROBERT PADDISON 3540

Updated by 6271, 6271, 6271, 6271

GENERAL COMMENTS:

PROBLEM:

Sample matrix spike not within acceptance criteria:

39410*8080
39380*8080
39390*8080
39300*8080

EXPLANATION: Sample matrix spike has matrix interference. Method blank and standard matrix spike are within acceptance criteria. Data acceptable.

PROBLEM:

Sample matrix spike duplicate not within acceptance criteria:

39410*8080
39380*8080
39390*8080
39300*8080

EXPLANATION: Sample matrix spike has matrix interference. Method blank and standard matrix spike are within acceptance criteria. Data acceptable.

PROBLEM:

Surrogate not within acceptance criteria:

TCX
DCB
DBC

EXPLANATION: 21016-4 has low surrogate recoveries, however, 21016-4MS/MSD also has low surrogate. Data acceptable. 21016-8 has low surrogate recoveries. 21016-8RE was extracted out of hold time, however, the surrogate recoveries are within acceptance criteria and sample was clean. Data acceptable.

ESE BATCH : P27813
ANALYSIS : 8270

QC TYPE : ESE
ANALYST : ANNETTE HEINIE
EXTRACTOR : TODD PETERSON
DATA ENTRY : ANNETTE HEINIE

REPORT DATE/TIME : 05/01/95 16:47:47
ANALYSIS DATE : 04/19/95
EXTRACT DATE : 04/14/95

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

BATCH NOTES
8270

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
21016	BATCH	591-5103	ESE-PEORIA (FT SHERIDAN)	BARBARA RAYA-HASH

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
21016*4	GV-1	04/19/95	04:03PM
21016*5	GV-2	04/19/95	04:55PM
21016*6	GV-3	04/19/95	05:39PM
21016*7	GV-4	04/19/95	06:31PM
21016*8	GV-5	04/19/95	07:22PM
21016*9	GV-6	04/19/95	08:14PM

ESE BATCH : P27813

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND	DET LMT
04/17/95	MB*779*1	34571*8270/3510-P	1,4-Dichlorobenzene	UG/L	ND	10
04/17/95	MB*779*1	34428*8270/3510-P	n-Nitroso-di-n-propylamine	UG/L	ND	10
04/17/95	MB*779*1	34551*8270/3510-P	1,2,4-Trichlorobenzene	UG/L	ND	10
04/17/95	MB*779*1	34205*8270/3510-P	Acenaphthene	UG/L	ND	10
04/17/95	MB*779*1	34611*8270/3510-P	2,4-Dinitrotoluene	UG/L	ND	10
04/17/95	MB*779*1	34469*8270/3510-P	Pyrene	UG/L	ND	10
04/17/95	MB*779*1	34694*8270/3510-P	Phenol	UG/L	ND	10
04/17/95	MB*779*1	34586*8270/3510-P	2-Chlorophenol	UG/L	ND	10
04/17/95	MB*779*1	34452*8270/3510-P	4-Chloro-3-methylphenol	UG/L	ND	10
04/17/95	MB*779*1	34646*8270/3510-P	4-Nitrophenol	UG/L	ND	50
04/17/95	MB*779*1	39032*8270/3510-P	Pentachlorophenol	UG/L	ND	50
04/17/95	MB*779*1	97208*8270/3510-P	Pyridine	UG/L	ND	10.00
04/17/95	MB*779*1	77687*8270/3510-P	2,4,5-Trichlorophenol	UG/L	ND	10
04/17/95	MB*779*1	95544*8270/3510-P	Cresols, Total	UG/L	ND	30

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/17/95	SP*779*1	34571*8270/3510-P	1,4-Dichlorobenzene	UG/L	50	23	46	36-97
04/17/95	SP*779*1	34428*8270/3510-P	n-Nitroso-di-n-propylamine	UG/L	50	32	64	41-116
04/17/95	SP*779*1	34551*8270/3510-P	1,2,4-Trichlorobenzene	UG/L	50	27	54	39-98
04/17/95	SP*779*1	34205*8270/3510-P	Acenaphthene	UG/L	50	30	60	46-118
04/17/95	SP*779*1	34611*8270/3510-P	2,4-Dinitrotoluene	UG/L	50	31	62	24-96
04/17/95	SP*779*1	34469*8270/3510-P	Pyrene	UG/L	50	31	62	26-127
04/17/95	SP*779*1	34694*8270/3510-P	Phenol	UG/L	75	10	13	12-110
04/17/95	SP*779*1	34586*8270/3510-P	2-Chlorophenol	UG/L	75	13	17	27-123
04/17/95	SP*779*1	34452*8270/3510-P	4-Chloro-3-methylphenol	UG/L	75	39	52	23-97
04/17/95	SP*779*1	34646*8270/3510-P	4-Nitrophenol	UG/L	75	2	3	10-80
04/17/95	SP*779*1	39032*8270/3510-P	Pentachlorophenol	UG/L	75	2	3	9-103

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	UNSPIKED	TARGET	FOUND	%RECV	RECV CRIT	RPD
04/19/95	SPM1*21016*7	34571*8270/3510-P	1,4-Dichlorobenzene	UG/L	0.0	50	29	58	36-97	
04/19/95	SPM1*21016*7	34428*8270/3510-P	n-Nitroso-di-n-propylamine	UG/L	0.0	50	37	74	41-116	
04/19/95	SPM1*21016*7	34551*8270/3510-P	1,2,4-Trichlorobenzene	UG/L	0.0	50	35	70	39-98	
04/19/95	SPM1*21016*7	34205*8270/3510-P	Acenaphthene	UG/L	0.0	50	38	76	46-118	
04/19/95	SPM1*21016*7	34611*8270/3510-P	2,4-Dinitrotoluene	UG/L	0.0	50	45	90	24-96	
04/19/95	SPM1*21016*7	34469*8270/3510-P	Pyrene	UG/L	0.0	50	41	82	26-127	
04/19/95	SPM1*21016*7	34694*8270/3510-P	Phenol	UG/L	0.0	75	28	37	12-110	
04/19/95	SPM1*21016*7	34586*8270/3510-P	2-Chlorophenol	UG/L	0.0	75	41	55	27-123	
04/19/95	SPM1*21016*7	34452*8270/3510-P	4-Chloro-3-methylphenol	UG/L	0.0	75	55	73	23-97	
04/19/95	SPM1*21016*7	34646*8270/3510-P	4-Nitrophenol	UG/L	0.0	75	36	48	10-80	
04/19/95	SPM1*21016*7	39032*8270/3510-P	Pentachlorophenol	UG/L	0.0	75	48	64	9-103	
04/19/95	SPM2*21016*7	34571*8270/3510-P	1,4-Dichlorobenzene	UG/L	0.0	50	28	56	36-97	4
04/19/95	SPM2*21016*7	34428*8270/3510-P	n-Nitroso-di-n-propylamine	UG/L	0.0	50	37	74	41-116	0.0
04/19/95	SPM2*21016*7	34551*8270/3510-P	1,2,4-Trichlorobenzene	UG/L	0.0	50	33	66	39-98	6
04/19/95	SPM2*21016*7	34205*8270/3510-P	Acenaphthene	UG/L	0.0	50	34	68	46-118	11
04/19/95	SPM2*21016*7	34611*8270/3510-P	2,4-Dinitrotoluene	UG/L	0.0	50	41	82	24-96	9
04/19/95	SPM2*21016*7	34469*8270/3510-P	Pyrene	UG/L	0.0	50	39	78	26-127	5
04/19/95	SPM2*21016*7	34694*8270/3510-P	Phenol	UG/L	0.0	75	28	37	12-110	0.0
04/19/95	SPM2*21016*7	34586*8270/3510-P	2-Chlorophenol	UG/L	0.0	75	39	52	27-123	5
04/19/95	SPM2*21016*7	34452*8270/3510-P	4-Chloro-3-methylphenol	UG/L	0.0	75	48	64	23-97	14
04/19/95	SPM2*21016*7	34646*8270/3510-P	4-Nitrophenol	UG/L	0.0	75	37	49	10-80	3
04/19/95	SPM2*21016*7	39032*8270/3510-P	Pentachlorophenol	UG/L	0.0	75	43	57	9-103	11

Surrogate Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/17/95	MB*779*1	91012*SUR	NITROBENZENE-D5	UG/L	50	26	52	35-114
04/17/95	MB*779*1	98330*SUR	2-FLUOROBIPHENYL	UG/L	50	25	50	43-116
04/17/95	MB*779*1	97449*SUR	TERPHENYL-D14	UG/L	50	42	84	33-141
04/17/95	MB*779*1	98395*SUR	PHENOL-D5	UG/L	75	20	27	10-110
04/17/95	MB*779*1	97024*SUR	2-FLUOROPHENOL	UG/L	75	29	39	21-110

ESE BATCH : P27813

Surrogate Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/17/95	MB*779*1	91020*SUR	2,4,6-TRIBROMOPHENOL	UG/L	75	53	71	10-123
04/17/95	MB*779*1	98755*SUR	2-CHLOROPHENOL-D4	UG/L	75	45	60	33-110
04/17/95	MB*779*1	21996911*SUR	1,2-DICHLOROBENZENE-D4	UG/L	50	19	38	16-110
04/17/95	SP*779*1	91012*SUR	NITROBENZENE-D5	UG/L	50	30	60	35-114
04/17/95	SP*779*1	98330*SUR	2-FLUOROBIPHENYL	UG/L	50	27	54	43-116
04/17/95	SP*779*1	97449*SUR	TERPHENYL-D14	UG/L	50	32	64	33-141
04/17/95	SP*779*1	98395*SUR	PHENOL-D5	UG/L	75	9.0	12	10-110
04/17/95	SP*779*1	97024*SUR	2-FLUOROPHENOL	UG/L	75	3.0	4.0	21-110
04/17/95	SP*779*1	91020*SUR	2,4,6-TRIBROMOPHENOL	UG/L	75	13	17	10-123
04/17/95	SP*779*1	98755*SUR	2-CHLOROPHENOL-D4	UG/L	75	14	19	33-110
04/17/95	SP*779*1	21996911*SUR	1,2-DICHLOROBENZENE-D4	UG/L	50	20	40	16-110
04/19/95	DA*21016*4	91012*SUR	NITROBENZENE-D5	UG/L	50	30	60	35-114
04/19/95	DA*21016*4	98330*SUR	2-FLUOROBIPHENYL	UG/L	50	29	58	43-116
04/19/95	DA*21016*4	97449*SUR	TERPHENYL-D14	UG/L	50	42	84	33-141
04/19/95	DA*21016*4	98395*SUR	PHENOL-D5	UG/L	75	31	41	10-110
04/19/95	DA*21016*4	97024*SUR	2-FLUOROPHENOL	UG/L	75	34	45	21-110
04/19/95	DA*21016*4	91020*SUR	2,4,6-TRIBROMOPHENOL	UG/L	75	66	88	10-123
04/19/95	DA*21016*4	98755*SUR	2-CHLOROPHENOL-D4	UG/L	75	42	56	33-110
04/19/95	DA*21016*4	21996911*SUR	1,2-DICHLOROBENZENE-D4	UG/L	50	22	44	16-110
04/19/95	DA*21016*5	91012*SUR	NITROBENZENE-D5	UG/L	50	27	54	35-114
04/19/95	DA*21016*5	98330*SUR	2-FLUOROBIPHENYL	UG/L	50	26	52	43-116
04/19/95	DA*21016*5	97449*SUR	TERPHENYL-D14	UG/L	50	43	86	33-141
04/19/95	DA*21016*5	98395*SUR	PHENOL-D5	UG/L	75	36	48	10-110
04/19/95	DA*21016*5	97024*SUR	2-FLUOROPHENOL	UG/L	75	39	52	21-110
04/19/95	DA*21016*5	91020*SUR	2,4,6-TRIBROMOPHENOL	UG/L	75	72	96	10-123
04/19/95	DA*21016*5	98755*SUR	2-CHLOROPHENOL-D4	UG/L	75	45	60	33-110
04/19/95	DA*21016*5	21996911*SUR	1,2-DICHLOROBENZENE-D4	UG/L	50	20	40	16-110
04/19/95	DA*21016*6	91012*SUR	NITROBENZENE-D5	UG/L	50	24	48	35-114
04/19/95	DA*21016*6	98330*SUR	2-FLUOROBIPHENYL	UG/L	50	23	46	43-116
04/19/95	DA*21016*6	97449*SUR	TERPHENYL-D14	UG/L	50	41	82	33-141
04/19/95	DA*21016*6	98395*SUR	PHENOL-D5	UG/L	75	14	19	10-110
04/19/95	DA*21016*6	97024*SUR	2-FLUOROPHENOL	UG/L	75	14	19	21-110
04/19/95	DA*21016*6	91020*SUR	2,4,6-TRIBROMOPHENOL	UG/L	75	37	49	10-123
04/19/95	DA*21016*6	98755*SUR	2-CHLOROPHENOL-D4	UG/L	75	21	28	33-110
04/19/95	DA*21016*6	21996911*SUR	1,2-DICHLOROBENZENE-D4	UG/L	50	18	36	16-110
04/19/95	DA*21016*7	91012*SUR	NITROBENZENE-D5	UG/L	50	24	48	35-114
04/19/95	DA*21016*7	98330*SUR	2-FLUOROBIPHENYL	UG/L	50	23	46	43-116
04/19/95	DA*21016*7	97449*SUR	TERPHENYL-D14	UG/L	50	40	80	33-141
04/19/95	DA*21016*7	98395*SUR	PHENOL-D5	UG/L	75	23	31	10-110
04/19/95	DA*21016*7	97024*SUR	2-FLUOROPHENOL	UG/L	75	24	32	21-110
04/19/95	DA*21016*7	91020*SUR	2,4,6-TRIBROMOPHENOL	UG/L	75	58	77	10-123
04/19/95	DA*21016*7	98755*SUR	2-CHLOROPHENOL-D4	UG/L	75	35	47	33-110
04/19/95	DA*21016*7	21996911*SUR	1,2-DICHLOROBENZENE-D4	UG/L	50	18	36	16-110
04/19/95	DA*21016*8	91012*SUR	NITROBENZENE-D5	UG/L	50	24	48	35-114
04/19/95	DA*21016*8	98330*SUR	2-FLUOROBIPHENYL	UG/L	50	23	46	43-116
04/19/95	DA*21016*8	97449*SUR	TERPHENYL-D14	UG/L	50	38	76	33-141
04/19/95	DA*21016*8	98395*SUR	PHENOL-D5	UG/L	75	21	28	10-110
04/19/95	DA*21016*8	97024*SUR	2-FLUOROPHENOL	UG/L	75	22	29	21-110
04/19/95	DA*21016*8	91020*SUR	2,4,6-TRIBROMOPHENOL	UG/L	75	48	64	10-123
04/19/95	DA*21016*8	98755*SUR	2-CHLOROPHENOL-D4	UG/L	75	28	37	33-110
04/19/95	DA*21016*8	21996911*SUR	1,2-DICHLOROBENZENE-D4	UG/L	50	18	36	16-110
04/19/95	DA*21016*9	91012*SUR	NITROBENZENE-D5	UG/L	50	33	66	35-114
04/19/95	DA*21016*9	98330*SUR	2-FLUOROBIPHENYL	UG/L	50	32	64	43-116
04/19/95	DA*21016*9	97449*SUR	TERPHENYL-D14	UG/L	50	41	82	33-141
04/19/95	DA*21016*9	98395*SUR	PHENOL-D5	UG/L	75	27	36	10-110
04/19/95	DA*21016*9	97024*SUR	2-FLUOROPHENOL	UG/L	75	29	39	21-110
04/19/95	DA*21016*9	91020*SUR	2,4,6-TRIBROMOPHENOL	UG/L	75	58	77	10-123
04/19/95	DA*21016*9	98755*SUR	2-CHLOROPHENOL-D4	UG/L	75	40	53	33-110
04/19/95	DA*21016*9	21996911*SUR	1,2-DICHLOROBENZENE-D4	UG/L	50	25	50	16-110
04/19/95	SPM1*21016*7	91012*SUR	NITROBENZENE-D5	UG/L	50	39	78	35-114
04/19/95	SPM1*21016*7	98330*SUR	2-FLUOROBIPHENYL	UG/L	50	35	70	43-116
04/19/95	SPM1*21016*7	97449*SUR	TERPHENYL-D14	UG/L	50	46	92	33-141
04/19/95	SPM1*21016*7	98395*SUR	PHENOL-D5	UG/L	75	28	37	10-110
04/19/95	SPM1*21016*7	97024*SUR	2-FLUOROPHENOL	UG/L	75	32	43	21-110
04/19/95	SPM1*21016*7	91020*SUR	2,4,6-TRIBROMOPHENOL	UG/L	75	61	81	10-123
04/19/95	SPM1*21016*7	98755*SUR	2-CHLOROPHENOL-D4	UG/L	75	42	56	33-110
04/19/95	SPM1*21016*7	21996911*SUR	1,2-DICHLOROBENZENE-D4	UG/L	50	27	54	16-110
04/19/95	SPM2*21016*7	91012*SUR	NITROBENZENE-D5	UG/L	50	36	72	35-114
04/19/95	SPM2*21016*7	98330*SUR	2-FLUOROBIPHENYL	UG/L	50	33	66	43-116
04/19/95	SPM2*21016*7	97449*SUR	TERPHENYL-D14	UG/L	50	42	84	33-141
04/19/95	SPM2*21016*7	98395*SUR	PHENOL-D5	UG/L	75	29	39	10-110
04/19/95	SPM2*21016*7	97024*SUR	2-FLUOROPHENOL	UG/L	75	29	39	21-110
04/19/95	SPM2*21016*7	91020*SUR	2,4,6-TRIBROMOPHENOL	UG/L	75	55	73	10-123

ESE BATCH : P27813

Surrogate Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/19/95	SPM2*21016*7	98755*SUR	2-CHLOROPHENOL-D4	UG/L	75	40	53	33-110
04/19/95	SPM2*21016*7	21996911*SUR	1,2-DICHLOROBENZENE-D4	UG/L	50	27	54	16-110
04/19/95	UN*21016*7	91012*SUR	NITROBENZENE-D5	UG/L	50	24	48	35-114
04/19/95	UN*21016*7	98330*SUR	2-FLUOROBIPHENYL	UG/L	50	23	46	43-116
04/19/95	UN*21016*7	97449*SUR	TERPHENYL-D14	UG/L	50	40	80	33-141
04/19/95	UN*21016*7	98395*SUR	PHENOL-D5	UG/L	75	23	31	10-110
04/19/95	UN*21016*7	97024*SUR	2-FLUOROPHENOL	UG/L	75	24	32	21-110
04/19/95	UN*21016*7	91020*SUR	2,4,6-TRIBROMOPHENOL	UG/L	75	58	77	10-123
04/19/95	UN*21016*7	98755*SUR	2-CHLOROPHENOL-D4	UG/L	75	35	47	33-110
04/19/95	UN*21016*7	21996911*SUR	1,2-DICHLOROBENZENE-D4	UG/L	50	18	36	16-110

ESE BATCH : P27813

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: P27813 Analysis Date: 04/19/95 Analyst: ANNETTE HEINIE

	Yes	No	"Exceptions" Comment / Corrective Action
Are ALL units documented in batch?	X		
Analysis holding time within criteria?	X		
Extract holding time within criteria?	X		
Method blank present?	X		
Method blank within acceptance criteria?	X		
Standard matrix spike present?	X		
Standard matrix spike within acceptance criteria?		X	34586*8270 LESS THAN 1 SPIKE(S)
			34646*8270 LESS THAN 1 SPIKE(S)
			39032*8270 LESS THAN 1 SPIKE(S)
Sample matrix spike present?	X		
Sample matrix spike within acceptance criteria?	X		
Surrogate present?	X		
Surrogate within acceptance criteria?		X	97024*SUR
			98755*SUR

Note: Any "NO" answer requires a comment.

BATCH OVERRIDE BY: DEAN HUHMANN 1912

FINALIZED BY: BARBARA BEARD 6249

Batch Narrative - P27813 Analysis: 8270

Updated by 6249

PROBLEM:
Standard matrix spike not within acceptance criteria:
34586*8270
34646*8270
39032*8270
EXPLANATION: Poor recoveries in the SP prob. due to poor extraction.
Data is acceptable because recoveries in the MS and MSD were acceptable
PROBLEM:
Surrogate not within acceptance criteria:
97024*SUR
98755*SUR
EXPLANATION: Surrogates were either out, but >10% recovery, which is acceptable be the method, or were CLP advisory surrrogates, not required by SW-846.

ESE BATCH : P27866
ANALYSIS : 8240

QC TYPE : ESE
ANALYST : MELISSA LENTZ
EXTRACTOR :
DATA ENTRY : GCMS UPLOAD

REPORT DATE/TIME : 05/01/95 16:51:41
ANALYSIS DATE : 04/19/95
EXTRACT DATE :

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

BATCH NOTES
8240

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
21016	BATCH	591-5103	ESE-PEORIA (FT SHERIDAN)	BARBARA RAYA-HASH

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
21016*4	GV-1	04/19/95	02:14AM
21016*5	GV-2	04/19/95	02:55AM
21016*6	GV-3	04/19/95	03:36AM
21016*8	GV-5	04/19/95	04:57AM
21016*9	GV-6	04/19/95	05:37AM
21016*7	GV-4	04/20/95	04:33PM

ESE BATCH : P27866

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND	DET LMT
04/20/95	MB*B0005*2	34418*8240-P	Chloromethane	UG/L	ND	10
04/20/95	MB*B0005*2	34413*8240-P	Bromomethane	UG/L	ND	10
04/20/95	MB*B0005*2	39175*8240-P	Vinyl Chloride	UG/L	ND	10
04/20/95	MB*B0005*2	34311*8240-P	Chloroethane	UG/L	ND	10
04/20/95	MB*B0005*2	34423*8240-P	Methylene Chloride	UG/L	ND	5
04/20/95	MB*B0005*2	81552*8240-P	Acetone	UG/L	ND	10
04/20/95	MB*B0005*2	77041*8240-P	Carbon Disulfide	UG/L	ND	5
04/20/95	MB*B0005*2	34501*8240-P	1,1-Dichloroethene	UG/L	ND	5
04/20/95	MB*B0005*2	34496*8240-P	1,1-Dichloroethane	UG/L	ND	5
04/20/95	MB*B0005*2	34546*8240-P	trans-1,2-dichloroethene	UG/L	ND	5
04/20/95	MB*B0005*2	32106*8240-P	Chloroform	UG/L	ND	5
04/20/95	MB*B0005*2	34531*8240-P	1,2-Dichloroethane	UG/L	ND	5
04/20/95	MB*B0005*2	81595*8240-P	2-Butanone	UG/L	ND	10
04/20/95	MB*B0005*2	34506*8240-P	1,1,1-Trichloroethane	UG/L	ND	5
04/20/95	MB*B0005*2	32102*8240-P	Carbon Tetrachloride	UG/L	ND	5
04/20/95	MB*B0005*2	77057*8240-P	Vinyl Acetate	UG/L	ND	10
04/20/95	MB*B0005*2	32101*8240-P	Bromodichloromethane	UG/L	ND	5
04/20/95	MB*B0005*2	34541*8240-P	1,2-Dichloropropane	UG/L	ND	5
04/20/95	MB*B0005*2	34704*8240-P	cis-1,3-Dichloropropene	UG/L	ND	5
04/20/95	MB*B0005*2	39180*8240-P	Trichloroethene	UG/L	ND	5
04/20/95	MB*B0005*2	32105*8240-P	Dibromochloromethane	UG/L	ND	5
04/20/95	MB*B0005*2	34511*8240-P	1,1,2-Trichloroethane	UG/L	ND	5
04/20/95	MB*B0005*2	34030*8240-P	Benzene	UG/L	ND	5
04/20/95	MB*B0005*2	34699*8240-P	trans-1,3-Dichloropropene	UG/L	ND	5
04/20/95	MB*B0005*2	32104*8240-P	Bromoform	UG/L	ND	5
04/20/95	MB*B0005*2	81596*8240-P	4-Methyl-2-pentanone	UG/L	ND	10
04/20/95	MB*B0005*2	77103*8240-P	2-Hexanone	UG/L	ND	10
04/20/95	MB*B0005*2	34475*8240-P	Tetrachloroethene	UG/L	ND	5
04/20/95	MB*B0005*2	34516*8240-P	1,1,2,2-Tetrachloroethane	UG/L	ND	5
04/20/95	MB*B0005*2	34010*8240-P	Toluene	UG/L	ND	5
04/20/95	MB*B0005*2	34301*8240-P	Chlorobenzene	UG/L	ND	5
04/20/95	MB*B0005*2	34371*8240-P	Ethylbenzene	UG/L	ND	5
04/20/95	MB*B0005*2	77128*8240-P	Styrene	UG/L	ND	5
04/20/95	MB*B0005*2	81551*8240-P	Xylenes (total)	UG/L	ND	5
04/20/95	MB*B0005*2	77093*8240-P	cis-1,2-Dichloroethene	UG/L	ND	5
04/20/95	MB*B0005*2	34566*8240-P	1,3-Dichlorobenzene	UG/L	ND	5
04/20/95	MB*B0005*2	34571*8240-P	1,4-Dichlorobenzene	UG/L	ND	5
04/20/95	MB*B0005*2	34536*8240-P	1,2-Dichlorobenzene	UG/L	ND	5
04/20/95	MB*B0005*2	34210*8240-P	Acrolein	UG/L	ND	50
04/20/95	MB*B0005*2	34215*8240-P	Acrylonitrile	UG/L	ND	50
04/20/95	MB*B0005*2	34576*8240-P	2-Chloroethylvinyl Ether	UG/L	ND	50
04/20/95	MB*B0005*2	34488*8240-P	Trichlorofluoromethane	UG/L	ND	10
04/20/95	MB*B0005*2	34668*8240-P	Dichlorodifluoromethane	UG/L	ND	10
04/20/95	MB*B0005*2	34695*8240-P	Naphthalene	UG/L	ND	5
04/18/95	MB*B0003*1	34418*8240-P	Chloromethane	UG/L	ND	10
04/18/95	MB*B0003*1	34413*8240-P	Bromomethane	UG/L	ND	10
04/18/95	MB*B0003*1	39175*8240-P	Vinyl Chloride	UG/L	ND	10
04/18/95	MB*B0003*1	34311*8240-P	Chloroethane	UG/L	ND	10
04/18/95	MB*B0003*1	34423*8240-P	Methylene Chloride	UG/L	ND	5
04/18/95	MB*B0003*1	81552*8240-P	Acetone	UG/L	ND	10
04/18/95	MB*B0003*1	77041*8240-P	Carbon Disulfide	UG/L	ND	5
04/18/95	MB*B0003*1	34501*8240-P	1,1-Dichloroethene	UG/L	ND	5
04/18/95	MB*B0003*1	34496*8240-P	1,1-Dichloroethane	UG/L	ND	5
04/18/95	MB*B0003*1	34546*8240-P	trans-1,2-dichloroethene	UG/L	ND	5
04/18/95	MB*B0003*1	32106*8240-P	Chloroform	UG/L	ND	5
04/18/95	MB*B0003*1	34531*8240-P	1,2-Dichloroethane	UG/L	ND	5
04/18/95	MB*B0003*1	81595*8240-P	2-Butanone	UG/L	11	10
04/18/95	MB*B0003*1	34506*8240-P	1,1,1-Trichloroethane	UG/L	ND	5
04/18/95	MB*B0003*1	32102*8240-P	Carbon Tetrachloride	UG/L	ND	5
04/18/95	MB*B0003*1	77057*8240-P	Vinyl Acetate	UG/L	ND	10
04/18/95	MB*B0003*1	32101*8240-P	Bromodichloromethane	UG/L	ND	5
04/18/95	MB*B0003*1	34541*8240-P	1,2-Dichloropropane	UG/L	ND	5
04/18/95	MB*B0003*1	34704*8240-P	cis-1,3-Dichloropropene	UG/L	ND	5
04/18/95	MB*B0003*1	39180*8240-P	Trichloroethene	UG/L	ND	5
04/18/95	MB*B0003*1	32105*8240-P	Dibromochloromethane	UG/L	ND	5
04/18/95	MB*B0003*1	34511*8240-P	1,1,2-Trichloroethane	UG/L	ND	5
04/18/95	MB*B0003*1	34030*8240-P	Benzene	UG/L	ND	5
04/18/95	MB*B0003*1	34699*8240-P	trans-1,3-Dichloropropene	UG/L	ND	5
04/18/95	MB*B0003*1	32104*8240-P	Bromoform	UG/L	ND	5
04/18/95	MB*B0003*1	81596*8240-P	4-Methyl-2-pentanone	UG/L	ND	10
04/18/95	MB*B0003*1	77103*8240-P	2-Hexanone	UG/L	ND	10
04/18/95	MB*B0003*1	34475*8240-P	Tetrachloroethene	UG/L	ND	5
04/18/95	MB*B0003*1	34516*8240-P	1,1,2,2-Tetrachloroethane	UG/L	ND	5

ESE BATCH : P27866

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND	DET LMT
04/18/95	MB*B0003*1	34010*8240-P	Toluene	UG/L	ND	5
04/18/95	MB*B0003*1	34301*8240-P	Chlorobenzene	UG/L	ND	5
04/18/95	MB*B0003*1	34371*8240-P	Ethylbenzene	UG/L	ND	5
04/18/95	MB*B0003*1	77128*8240-P	Styrene	UG/L	ND	5
04/18/95	MB*B0003*1	81551*8240-P	Xylenes (total)	UG/L	ND	5
04/18/95	MB*B0003*1	77093*8240-P	cis-1,2-Dichloroethene	UG/L	ND	5
04/18/95	MB*B0003*1	34566*8240-P	1,3-Dichlorobenzene	UG/L	ND	5
04/18/95	MB*B0003*1	34571*8240-P	1,4-Dichlorobenzene	UG/L	ND	5
04/18/95	MB*B0003*1	34536*8240-P	1,2-Dichlorobenzene	UG/L	ND	5
04/18/95	MB*B0003*1	34210*8240-P	Acrolein	UG/L	ND	50
04/18/95	MB*B0003*1	34215*8240-P	Acrylonitrile	UG/L	ND	50
04/18/95	MB*B0003*1	34576*8240-P	2-Chloroethylvinyl Ether	UG/L	ND	50
04/18/95	MB*B0003*1	34488*8240-P	Trichlorofluoromethane	UG/L	ND	10
04/18/95	MB*B0003*1	34668*8240-P	Dichlorodifluoromethane	UG/L	ND	10
04/18/95	MB*B0003*1	34695*8240-P	Naphthalene	UG/L	ND	5

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/19/95	SP*B0003*1	34501*8240-P	1,1-Dichloroethene	UG/L	50	47	94	61-145
04/19/95	SP*B0003*1	39180*8240-P	Trichloroethene	UG/L	50	48	96	71-120
04/19/95	SP*B0003*1	34030*8240-P	Benzene	UG/L	50	48	96	76-127
04/19/95	SP*B0003*1	34010*8240-P	Toluene	UG/L	50	46	92	76-125
04/19/95	SP*B0003*1	34301*8240-P	Chlorobenzene	UG/L	50	51	102	75-130
04/21/95	SP*B0005*2	34501*8240-P	1,1-Dichloroethene	UG/L	50	41	82	61-145
04/21/95	SP*B0005*2	39180*8240-P	Trichloroethene	UG/L	50	47	94	71-120
04/21/95	SP*B0005*2	34030*8240-P	Benzene	UG/L	50	47	94	76-127
04/21/95	SP*B0005*2	34010*8240-P	Toluene	UG/L	50	46	92	76-125
04/21/95	SP*B0005*2	34301*8240-P	Chlorobenzene	UG/L	50	46	92	75-130

Surrogate Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/19/95	DA*21016*4	98810*SUR	TOLUENE-D8 (SW846)	UG/L	50	54	110	88-110
04/19/95	DA*21016*4	98402*SUR	BROMOFLUOROBENZENE (SW846)	UG/L	50	47	94	86-115
04/19/95	DA*21016*4	98812*SUR	1,2-DICHLOROETHANE-D4 (SW846)	UG/L	50	50	100	76-114
04/19/95	DA*21016*5	98810*SUR	TOLUENE-D8 (SW846)	UG/L	50	51	100	88-110
04/19/95	DA*21016*5	98402*SUR	BROMOFLUOROBENZENE (SW846)	UG/L	50	46	92	86-115
04/19/95	DA*21016*5	98812*SUR	1,2-DICHLOROETHANE-D4 (SW846)	UG/L	50	47	94	76-114
04/19/95	DA*21016*6	98810*SUR	TOLUENE-D8 (SW846)	UG/L	50	55	110	88-110
04/19/95	DA*21016*6	98402*SUR	BROMOFLUOROBENZENE (SW846)	UG/L	50	52	100	86-115
04/19/95	DA*21016*6	98812*SUR	1,2-DICHLOROETHANE-D4 (SW846)	UG/L	50	51	100	76-114
04/19/95	DA*21016*8	98810*SUR	TOLUENE-D8 (SW846)	UG/L	50	50	100	88-110
04/19/95	DA*21016*8	98402*SUR	BROMOFLUOROBENZENE (SW846)	UG/L	50	48	96	86-115
04/19/95	DA*21016*8	98812*SUR	1,2-DICHLOROETHANE-D4 (SW846)	UG/L	50	48	96	76-114
04/19/95	DA*21016*9	98810*SUR	TOLUENE-D8 (SW846)	UG/L	50	53	110	88-110
04/19/95	DA*21016*9	98402*SUR	BROMOFLUOROBENZENE (SW846)	UG/L	50	48	96	86-115
04/19/95	DA*21016*9	98812*SUR	1,2-DICHLOROETHANE-D4 (SW846)	UG/L	50	50	100	76-114
04/19/95	SP*B0003*1	98810*SUR	TOLUENE-D8 (SW846)	UG/L	50	52	100	88-110
04/19/95	SP*B0003*1	98402*SUR	BROMOFLUOROBENZENE (SW846)	UG/L	50	49	98	86-115
04/19/95	SP*B0003*1	98812*SUR	1,2-DICHLOROETHANE-D4 (SW846)	UG/L	50	49	98	76-114
04/20/95	MB*B0005*2	98810*SUR	TOLUENE-D8 (SW846)	UG/L	50	47	94	88-110
04/20/95	MB*B0005*2	98402*SUR	BROMOFLUOROBENZENE (SW846)	UG/L	50	45	90	86-115
04/20/95	MB*B0005*2	98812*SUR	1,2-DICHLOROETHANE-D4 (SW846)	UG/L	50	47	94	76-114
04/21/95	SP*B0005*2	98810*SUR	TOLUENE-D8 (SW846)	UG/L	50	50	100	88-110
04/21/95	SP*B0005*2	98402*SUR	BROMOFLUOROBENZENE (SW846)	UG/L	50	49	98	86-115
04/21/95	SP*B0005*2	98812*SUR	1,2-DICHLOROETHANE-D4 (SW846)	UG/L	50	49	98	76-114
04/18/95	MB*B0003*1	98810*SUR	TOLUENE-D8 (SW846)	UG/L	50	50	100	88-110
04/18/95	MB*B0003*1	98402*SUR	BROMOFLUOROBENZENE (SW846)	UG/L	50	51	100	86-115
04/18/95	MB*B0003*1	98812*SUR	1,2-DICHLOROETHANE-D4 (SW846)	UG/L	50	54	110	76-114
04/20/95	DA*21016*7	98810*SUR	TOLUENE-D8 (SW846)	UG/L	50	50	100	88-110
04/20/95	DA*21016*7	98402*SUR	BROMOFLUOROBENZENE (SW846)	UG/L	50	48	96	86-115
04/20/95	DA*21016*7	98812*SUR	1,2-DICHLOROETHANE-D4 (SW846)	UG/L	50	49	98	76-114

ESE BATCH : P27866

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: P27866 Analysis Date: 04/19/95 Analyst: MELISSA LENTZ

	Yes	"Exceptions" No	Comment / Corrective Action
Are ALL units documented in batch?	X		
Analysis holding time within criteria?	X		
Method blank present?	X		
Method blank within acceptance criteria?	X		
Standard matrix spike present?	X		
Standard matrix spike within acceptance criteria?	X		
Sample matrix spike present?		X	
Sample matrix spike within acceptance criteria?			
Surrogate present?	X		
Surrogate within acceptance criteria?	X		

Note: Any "NO" answer requires a comment.

BATCH OVERRIDE BY: BARBARA BEARD 6249

FINALIZED BY: BARBARA BEARD 6249

Batch Narrative - P27866 Analysis: 8240

Updated by 5698

PROBLEM:

Sample matrix spike not present:

EXPLANATION: The sample matrix spike will be in another batch.

ESE BATCH : P27776
ANALYSIS : 405.1

QC TYPE : ESE
ANALYST : FRANCES JACOBS
EXTRACTOR :
DATA ENTRY : FRANCES JACOBS

REPORT DATE/TIME : 05/01/95 16:54:44
ANALYSIS DATE : 04/13/95
EXTRACT DATE :

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

BATCH NOTES
405.1

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
21016	BATCH	591-5103	ESE-PEORIA (FT SHERIDAN)	BARBARA RAYA-HASH

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
21016*10	COMP GV		

ESE BATCH : P27776

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND	DET LMT
04/13/95	MB*QC*1	310*405.1-P	BOD	MG/L	ND	1
04/13/95	MB*QC*1	80082*405.1-P	BOD,CARB.	MG/L	ND	1

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/13/95	SP*QC*1	310*405.1-P	BOD	MG/L	200	175	88	80-120
04/13/95	SP*QC*1	80082*405.1-P	BOD,CARB.	MG/L	200	175	88	80-120

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	UNSPIKED	TARGET	FOUND	%RECV	RECV CRIT	RPD
04/13/95	SPM1*21021*1	310*405.1-P	BOD	MG/L	0.0	40	43	108	75-125	
04/13/95	SPM2*21021*1	310*405.1-P	BOD	MG/L	0.0	40	53	133	75-125	21
04/13/95	SPM1*21022*1	80082*405.1-P	BOD,CARB.	MG/L	0.0	40	26	65	75-125	
04/13/95	SPM2*21022*1	80082*405.1-P	BOD,CARB.	MG/L	0.0	40	28	70	75-125	7

ESE BATCH : P27776

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: P27776 Analysis Date: 04/13/95 Analyst: FRANCES JACOBS

	Yes	"Exceptions" No	Comment / Corrective Action
Are ALL units documented in batch?	X		
Analysis holding time within criteria?	X		
Method blank present?	X		
Method blank within acceptance criteria?	X		
Standard matrix spike present?	X		
Standard matrix spike within acceptance criteria?	X		
Sample matrix spike present?	X		
Sample matrix spike within acceptance criteria?		X	310*405.1-

Note: Any "NO" answer requires a comment.

BATCH OVERRIDE BY: WILLIAM GRAY 5159

FINALIZED BY: WILLIAM GRAY 5159

Batch Narrative - P27776 Analysis: 405.1

Updated by 5036

PROBLEM:

Sample matrix spike not within acceptance criteria:
80082*405.

EXPLANATION: Matrix spike recovery outside QC limits; no corrective action required.

PROBLEM:

Sample matrix spike duplicate not within acceptance criteria:
310*405.1-

EXPLANATION: Matrix spike recovery outside QC limits; no corrective action required.

ESE BATCH : P27690
ANALYSIS : 150.1

QC TYPE : ESE
ANALYST : FRANCES JACOBS
EXTRACTOR :
DATA ENTRY : FRANCES JACOBS

REPORT DATE/TIME : 05/01/95 16:55:09
ANALYSIS DATE : 04/13/95
EXTRACT DATE :

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

BATCH NOTES
150.1

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
21016	BATCH	591-5103	ESE-PEORIA (FT SHERIDAN)	BARBARA RAYA-HASH

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
21016*10	COMP GV		

ESE BATCH : P27690

Replicate Analysis Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	REP #1	REP #2	RPD	RPD CRIT
04/13/95	RP*21016*10	403*150.1-P	pH	STD UN	6.74	6.73	0.10	20

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/13/95	SP*QC*1	403*150.1-P	pH	STD UN	7.00	7.02	100.3	80-120

ESE BATCH : P27690
Environmental Science and Engineering Analytical Services
Computer QC Checks

Batch No.: P27690 Analysis Date: 04/13/95 Analyst: FRANCES JACOBS

	"Exceptions" Yes	No	Comment / Corrective Action
Are ALL units documented in batch?	X		
Analysis holding time within criteria?	X		
Sample replicate present?	X		
Sample replicate within acceptance criteria?	X		

Note: Any "NO" answer requires a comment.

BATCH OVERRIDE BY:

FINALIZED BY: VICKIE WYNKOOP 5034

ESE BATCH : P27713
ANALYSIS : 160.1

QC TYPE : ESE
ANALYST : FRANCES JACOBS
EXTRACTOR :
DATA ENTRY : FRANCES JACOBS

REPORT DATE/TIME : 05/01/95 16:55:49
ANALYSIS DATE : 04/14/95
EXTRACT DATE :

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

BATCH NOTES
160.1

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
21016	BATCH	591-5103	ESE-PEORIA (FT SHERIDAN)	BARBARA RAYA-HASH

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
21016*10	COMP GV		

ESE BATCH : P27713

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND	DET LMT
04/14/95	MB*QC*1	70300*160.1-P	TDS	MG/L	2	1

Replicate Analysis Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	REP #1	REP #2	RPD	RPD CRIT
04/14/95	RP*21016*10	70300*160.1-P	TDS	MG/L	1370	1370	0.0	20

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT

ESE BATCH : P27713

Environmental Science and Engineering Analytical Services
Computer QC Checks

Batch No.: P27713 Analysis Date: 04/14/95 Analyst: FRANCES JACOBS

	"Exceptions"		
	Yes	No	Comment / Corrective Action
Are ALL units documented in batch?	X		
Analysis holding time within criteria?	X		
Sample replicate present?	X		
Sample replicate within acceptance criteria?	X		

Note: Any "NO" answer requires a comment.

BATCH OVERRIDE BY:

FINALIZED BY: WILLIAM GRAY 5159

ESE BATCH : P27771
ANALYSIS : 410.4

QC TYPE : ESE
ANALYST : FRANCES JACOBS
EXTRACTOR :
DATA ENTRY : FRANCES JACOBS

REPORT DATE/TIME : 05/01/95 16:56:26
ANALYSIS DATE : 04/18/95
EXTRACT DATE :

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

BATCH NOTES
410.4

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
21016	BATCH	591-5103	ESE-PEORIA (FT SHERIDAN)	BARBARA RAYA-HASH

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
21016*10	COMP GV		

ESE BATCH : P27771

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND	DET. LMT.
04/18/95	MB*QC*1	335*410.4-P	COD	MG/L	ND	5

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/18/95	SP*QC*1	335*410.4-P	COD	MG/L	50	47	94	80-120

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	UNSPIKED	TARGET	FOUND	%RECV	RECV CRIT	RPD
04/18/95	SPM1*21021*1	335*410.4-P	COD	MG/L	13	50	44	88	75-125	
04/18/95	SPM2*21021*1	335*410.4-P	COD	MG/L	13	50	46	92	75-125	4
04/18/95	SPM1*21030*3	335*410.4-P	COD	MG/L	22	50	53	106	75-125	
04/18/95	SPM2*21030*3	335*410.4-P	COD	MG/L	22	50	39	78	75-125	30

ESE BATCH : P27748
ANALYSIS : 325.3

QC TYPE : ESE
ANALYST : KEVIN CRANFORD
EXTRACTOR :
DATA ENTRY : KEVIN CRANFORD

REPORT DATE/TIME : 05/01/95 16:56:03
ANALYSIS DATE : 04/18/95
EXTRACT DATE :

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

BATCH NOTES
325.3

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
21016	BATCH	591-5103	ESE-PEORIA (FT SHERIDAN)	BARBARA RAYA-HASH

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
21016*10	COMP GV		

ESE BATCH : P27748

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND	DET LMT
04/18/95	MB*QC*1	940*325.3-P	Chloride	MG/L	ND	5
04/18/95	MB*QC*1	941*325.3-P	Chloride,Dissolved	MG/L	ND	5

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/18/95	SP*QC*1	940*325.3-P	Chloride	MG/L	50	56	112	80-120
04/18/95	SP*QC*1	941*325.3-P	Chloride,Dissolved	MG/L	50	56	112	80-120

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	UNSPIKED	TARGET	FOUND	%RECV	RECV CRIT	RPD
04/18/95	SPM1*21030*6	940*325.3-P	Chloride	MG/L	0.0	50	56	112	75-125	
04/18/95	SPM2*21030*6	940*325.3-P	Chloride	MG/L	0.0	50	55	110	75-125	2

ESE BATCH : P27748

Environmental Science and Engineering Analytical Services
Computer QC Checks

Batch No.: P27748 Analysis Date: 04/18/95 Analyst: KEVIN CRANFORD

	Yes	No	"Exceptions" Comment / Corrective Action
Are ALL units documented in batch?	X		
Analysis holding time within criteria?	X		
Method blank present?	X		
Method blank within acceptance criteria?	X		
Sample matrix spike present?	X		
Sample matrix spike within acceptance criteria?	X		

Note: Any "NO" answer requires a comment.

BATCH OVERRIDE BY:

FINALIZED BY: WILLIAM GRAY 5159

ESE BATCH : P27687
ANALYSIS : 353.2

QC TYPE : ESE
ANALYST : FRANCES JACOBS
EXTRACTOR :
DATA ENTRY : FRANCES JACOBS

REPORT DATE/TIME : 05/01/95 16:55:23
ANALYSIS DATE : 04/13/95
EXTRACT DATE :

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

BATCH NOTES
353.2

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
21016	BATCH	591-5103	ESE-PEORIA (FT SHERIDAN)	BARBARA RAYA-HASH

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
21016*10	COMP GV		

ESE BATCH : P27687

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND	DET LMT
04/13/95	MB*QC*1	618*353.2-P	Nitrogen, NO3	MG/L	ND	0.10
04/13/95	MB*QC*1	630*353.2-P	Nitrogen,NO2+NO3	MG/L A	ND	0.10

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/13/95	SP*QC*1	618*353.2-P	Nitrogen, NO3	MG/L	1.00	0.99	99.0	80-120
04/13/95	SP*QC*1	630*353.2-P	Nitrogen,NO2+NO3	MG/L A	1.00	0.99	99.0	80-120

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	UNSPIKED	TARGET	FOUND	%RECV	RECV CRIT	RPD
04/13/95	SPM1*21016*10	618*353.2-P	Nitrogen, NO3	MG/L	0.0	1.00	1.06	106.0	75-125	
04/13/95	SPM2*21016*10	618*353.2-P	Nitrogen, NO3	MG/L	0.0	1.00	1.03	103.0	75-125	2.90
04/13/95	SPM1*21005*1	630*353.2-P	Nitrogen,NO2+NO3	MG/L A	0.0	1.00	1.17	117.0	75-125	
04/13/95	SPM2*21005*1	630*353.2-P	Nitrogen,NO2+NO3	MG/L A	0.0	1.00	1.14	114.0	75-125	2.60

ESE BATCH : P27687
Environmental Science and Engineering Analytical Services
Computer QC Checks

Batch No.: P27687 Analysis Date: 04/13/95 Analyst: FRANCES JACOBS

	"Exceptions" Yes	No	Comment / Corrective Action
Are ALL units documented in batch?	X		
Analysis holding time within criteria?	X		
Method blank present?	X		
Method blank within acceptance criteria?	X		
Standard matrix spike present?	X		
Standard matrix spike within acceptance criteria?	X		
Sample matrix spike present?	X		
Sample matrix spike within acceptance criteria?	X		

Note: Any "NO" answer requires a comment.

BATCH OVERRIDE BY:

FINALIZED BY: VICKIE WYNKOOP 5034

ESE BATCH : P27771

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: P27771 Analysis Date: 04/18/95 Analyst: FRANCES JACOBS

	Yes	"Exceptions" No	Comment / Corrective Action
Are ALL units documented in batch?	X		
Analysis holding time within criteria?	X		
Method blank present?	X		
Method blank within acceptance criteria?	X		
Standard matrix spike present?	X		
Standard matrix spike within acceptance criteria?	X		
Sample matrix spike present?	X		
Sample matrix spike within acceptance criteria?	X		

Note: Any "NO" answer requires a comment.

BATCH OVERRIDE BY: WILLIAM GRAY 5159

FINALIZED BY: WILLIAM GRAY 5159

Batch Narrative - P27771 Analysis: 410.4

Updated by 5036

PROBLEM:

Sample matrix spike duplicate not within acceptance criteria:

335*410.4-

EXPLANATION: Matrix interference suspected. Standard matrix spike confirms that the method is in control.

PAGE 1 OF 2

Chain of Custody Record

№ 11321

ESE Environmental Science & Engineering, Inc.
A CILCORP Company
8901 North Industrial Road -- Peoria, Illinois 61615
Telephone: (309) 692-4422 -- Fax: (309) 692-5232

FOR LAB USE ONLY
Project Number: 591-503
Due Date: 4-24-95

Company: ESE - PEORIA
Address:
Phone #: ( ) - Fax #: ( ) -
P.O. #:
Client Contact: WAYNE INGRAM
Project # / Location: Ft. SHERIDAN LF #7

Sample Type:
1. Water
2. Soil
3. Sludge
4. Oil
5. Tissue
Other :

Container Type:
P - Plastic
G - Glass
V - VOC

Preservative:
1. None
2. H2SO4
3. HNO3
4. NaOH

Analyses

Sample I.D. (10 Characters ONLY)	Sample Type	Container Size	Container Type	Container No.	Sampling Date	Sampling Time	Preservative	Lab I.D.	Fe	~~Cr Cr6 Hexavalent~~	Herbicides 8150	Pesticides 8080	BNA 8270	VOC's 8240									Comments
GV-1 TOTAL IRON	1	500 ml	P	1	4/12			21016-1	✓													A	
GV-1 FILTERED 0.45 um	1	"	P	1	4/12			-2	✓													B	
GV-1 FILTERED 5.0 um	1	"	P	1	4/12			-3	✓													B	
GV-1	1	1L ~~40ml~~	G/VOC	9 ~~2~~	4/12			-4			X	X	X	X								C	
GV-2	1	1L ~~40ml~~	G/VOC	9 ~~2~~	4/12			-5			X	X	X	X								↓	
GV-3	1	1L ~~40ml~~	G/VOC	9 ~~2~~	4/12			-6			X	X	X	X									
GV-4	1	1L ~~40ml~~	G/VOC	9 ~~2~~	4/12			-7			X	X	X	X									
GV-5	1	1L ~~40ml~~	G/VOC	9 ~~2~~	4/12			-8			X	X	X	X									
GV-6	1	1L ~~40ml~~	G/VOC	9 ~~2~~	4/12			-9			X	X	X	X								↓	

Relinquished By:	Date:	Received By:	Date:	TURNAROUND TIME:	FOR LAB USE ONLY
Thomas J McCally	4-12-95 Time: 6:10		-- -- Time: :	☐ RUSH: ____ day turnaround	Samples Received Chilled: ☒ Yes ☐ No
Relinquished By:	Date: -- -- Time: :	Received For Lab By: Alan R Hogan	Date: 4-12-95 Time: 9:00 pm	☒ ROUTINE	TC

SPECIAL INSTRUCTIONS:

Copies: White - Client Canary - Lab Receiving Pink - Lab File Goldenrod - Retained by Sampler

930009

ESE Environmental Science & Engineering, Inc.
A CILCORP Company
8901 North Industrial Road -- Peoria, Illinois 61615
Telephone: (309) 692-4422 -- Fax: (309) 692-5232

FOR LAB USE ONLY
Project Number: 591-5103
Due Date: 4-24-95

Chain of Custody Record

№ 11281

Company: ESE PEORIA
Address:
Phone #: ( ) - Fax #: ( ) -
P.O. #:
Client Contact: WAYNE INGRAM
Project # / Location: ft. Sheridan LF #7

Sample Type:
1. Water
2. Soil
3. Sludge
4. Oil
5. Tissue
Other:

Container Type:
P - Plastic
G - Glass
V - VOC

Preservative:
1. None
2. H2SO4
3. HNO3
4. NaOH

Analyses

Sample I.D. (10 Characters ONLY)	Sample Type	Container Size	Container Type	Container No.	Sampling Date	Sampling Time	Preservative	Lab I.D.	BOD, pH, NO3, TDS, Cl	COD, HARDNESS	As, B, Ca, Fe, Pb, Zn	REACTIVE SULFIDE										Comments
COMPOSITE GV	1	1L	P	1	4/12/95		1	21016-10	X	X											D	
"	1	500 ml	P	1	4/12/95		3	-10			X											
"	1	1L	P	1	4/12/95		4	-10				X										

Relinquished By:	Date:	Received By:	Date:	TURNAROUND TIME:	FOR LAB USE ONLY
Shawn J Menally	4-12-95 Time: 6:10		-- -- Time:	☐ RUSH: ____ day turnaround	Samples Received Chilled ☒ Yes ☐ No
Relinquished By:	Date: -- -- Time:	Received For Lab By: Alan R. Hogan	Date: 4-12-95 Time: 9:00 pm	☒ ROUTINE	

SPECIAL INSTRUCTIONS:

Copies: White - Client Canary - Lab Receiving Pink - Lab File Goldenrod - Retained by Sampler

APPENDIX C - GAS VENT AIR EMISSIONS MONITORING DATA FROM RI-FS (ESE, 1991)

TABLE 4-80 (Page 1 of 3)

SUMMARY OF VENT PIPE EMISSIONS

Vent Pipe Number	Vent Pipe Exhaust Flow Rate* (CFM)	Vinyl Chloride		Trichlorofluoromethane	
		Vent Gas Concentration (ppb)	Vent Pipe Emission Rate (g/s)	Vent Gas Concentration (ppb)	Vent Pipe Emission Rate (g/s)
GV-1	1.63	0.868	1.71×10^{-9}	4.37	1.89×10^{-8}
GV-2	1.86	3.76	8.41×10^{-9}	8.17	4.01×10^{-9}
GV-3	4.18	20.4	1.02×10^{-7}	3.75	4.12×10^{-8}
GV-4	2.84	2.1	7.15×10^{-9}	4.27	3.18×10^{-8}
GV-5	2.07	177.5	4.39×10^{-7}	13.6	7.43×10^{-8}
GV-6	1.44	0.334	5.72×10^{-10}	5.74	2.17×10^{-8}

Vent Pipe Number	Vent Pipe Exhaust Flow Rate* (CFM)	Dichloromethane		1,1,2-trichloro-1,2,2-difluoroethane	
		Vent Gas Concentration (ppb)	Vent Pipe Emission Rate (g/s)	Vent Gas Concentration (ppb)	Vent Pipe Emission Rate (g/s)
GV-1	1.63	0.66	1.76×10^{-9}	3.00	1.77×10^{-8}
GV-2	1.86	4.54	1.38×10^{-8}	5.41	3.62×10^{-8}
GV-3	4.18	0.793	5.38×10^{-9}	1.17	1.75×10^{-8}
GV-4	2.84	6.97	3.21×10^{-8}	5.95	6.05×10^{-8}
GV-5	2.07	3.53	1.19×10^{-8}	18.47	1.38×10^{-7}
GV-6	1.44	1.22	2.85×10^{-9}	2.57	1.33×10^{-8}

* - Diameter of all vent pipes was measured at 7 9/16 inches.

TABLE 4-80 (Page 2 of 3)

SUMMARY OF VENT PIPE EMISSIONS

Vent Pipe Number	Vent Pipe Exhaust Flow Rate* (CFM)	Chloroform		1,2-dichloroethane	
		Vent Gas Concentration (ppb)	Vent Pipe Emission Rate (g/s)	Vent Gas Concentration (ppb)	Vent Pipe Emission Rate (g/s)
GV-1	1.63	0.367	1.38×10^{-9}	0.071	2.21×10^{-10}
GV-2	1.86	0.461	1.97×10^{-9}	0	0
GV-3	4.18	0.442	4.21×10^{-9}	0.071	5.61×10^{-10}
GV-4	2.84	4.57	2.96×10^{-8}	0.123	6.60×10^{-10}
GV-5	2.07	0.497	2.35×10^{-9}	1.284	5.04×10^{-9}
GV-6	1.44	4.38	1.44×10^{-8}	0	0

Vent Pipe Number	Vent Pipe Exhaust Flow Rate* (CFM)	1,1,1-trichloroethane		Benzene	
		Vent Gas Concentration (ppb)	Vent Pipe Emission Rate (g/s)	Vent Gas Concentration (ppb)	Vent Pipe Emission Rate (g/s)
GV-1	1.63	0.71	2.98×10^{-9}	8.23	2.02×10^{-8}
GV-2	1.86	0.752	3.58×10^{-9}	10.45	2.92×10^{-8}
GV-3	4.18	0.407	4.34×10^{-9}	8.23	5.13×10^{-8}
GV-4	2.84	0.473	3.42×10^{-9}	132.5	5.61×10^{-7}
GV-5	2.07	0.536	2.84×10^{-9}	178.0	5.51×10^{-7}
GV-6	1.44	0.727	2.66×10^{-8}	12.57	2.70×10^{-8}

* - Diameter of all vent pipes was measured at 7 9/16 inches.

TABLE 4-80 (Page 3 of 3)

SUMMARY OF VENT PIPE EMISSIONS

Vent Pipe Number	Vent Pipe Exhaust Flow Rate* (CFM)	Tetrachloroethane		Trichloroethylene	
		Vent Gas Concentration (ppb)	Vent Pipe Emission Rate (g/s)	Vent Gas Concentration (ppb)	Vent Pipe Emission Rate (g/s)
GV-1	1.63	0.145	7.00×10^{-10}	0.547	2.26×10^{-9}
GV-2	1.86	0.18	9.92×10^{-10}	0.255	1.20×10^{-9}
GV-3	4.18	0.15	1.84×10^{-9}	0.553	5.81×10^{-10}
GV-4	2.84	0.255	2.13×10^{-9}	1.42	1.02×10^{-10}
GV-5	2.07	0.125	7.63×10^{-10}	3.57	1.86×10^{-9}
GV-6	1.44	0.137	5.80×10^{-10}	0.534	1.93×10^{-9}

Vent Pipe Number	Vent Pipe Exhaust Flow Rate* (CFM)	1,2-dibromomethane		Tetrachloroethylene	
		Vent Gas Concentration (ppb)	Vent Pipe Emission Rate (g/s)	Vent Gas Concentration (ppb)	Vent Pipe Emission Rate (g/s)
GV-1	1.63	0	0	0.304	1.58×10^{-9}
GV-2	1.86	0	0	0.23	1.36×10^{-9}
GV-3	4.18	0	0	0.922	1.22×10^{-8}
GV-4	2.84	0	0	2.00	1.80×10^{-8}
GV-5	2.07	0	0	0.994	6.51×10^{-9}
GV-6	1.44	0	0	1.721	7.81×10^{-9}

* - Diameter of all vent pipes was measured at 7 9/16 inches.