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Analytical and Supporting Laboratory

Quality Control Data For

DOE - Hanford North Slope Site H-06-1

VOLUME 1

Prepared by: Environmental Science & Engineering, Inc.

May 1994

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Analytical and Supporting Laboratory

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CASE NARRATIVE

DOE -Hanford North Slope Site H-06-1

The samples were analyzed using the prescribed EPA methods; and EPA holding times were met with the exception of an Alpha/Beta radiation scan that was received after holding time had expired. This is not considered a problem.

In general, the laboratory quality control (QC) requirements have been met and the sample matrix quality control outliers are due to matrix effects. Several of these samples were oily and several had very high levels of DDTs. All QC outliers are addressed by the analyst, the department manager and/or the laboratory coordinator in the batch. This information can be found at the end of the batch checklist page. An exception/special circumstance is outlined below.

Pesticides/PCBs - Sample (E)-WW1-01 (ESE # CDMHNSW*13) was a water sample of the IDW wash solution. Due to the high detergent content persistent emulsions formed during the extraction process. This sample was split into three fractions to extract it. During the extraction process two of the three split fractions were lost. Since the fraction remaining could not quantatively be calculated back to the original sample the extraction process was
halted.

Sample Date, Cross Reference &

Methodologies Report

ENVIRONMENTAL SCIENCE & ENGINEERING, INC.

SAMPLE DATE AND CROSS REFERENCE REPORT FOR CDM - HANFORD NORTH SLOPE LABORATORY ANALYSES

HEX #	CDM SAMPLE ID	LABORATORY SAMPLE ID	DATE COLLECT	DATE RECEIVED	ANALYSIS DESCRIPTION	DATE EXTRACTED	DATE ANALYZED	DAYS, ACTUAL/HOLD TIME DAYS TO EXTRACTION	DAYS TO ANALYSIS	ESE BATCH
B0B5Y6	EA01-1-10	CDMHNSS*22	05/02/94	05/03/94	SCREEN, ALPHA/BETA	NA	05/10/94	NA	1/2	G48925
					PERCENT MOISTURE - ASTM D2216	NA	05/03/94	NA	1/180	G48700
					ARSENIC - EPA 7060	NA	05/03/94	NA	1/180	G48747
					SELENIUM - EPA 7740	NA	05/03/94	NA	1/180	G48748
					MERCURY - EPA 7471 (MOD)	NA	05/04/94	NA	2/28	G48770
					ICAP METALS, EPA 6010	NA	05/04/94	NA	2/180	G48756
					VOCS - EPA 8260	NA	05/03/94	NA	1/14	G48758
					SVOCS - EPA 8270/3540 (SOX)	05/03/94	05/05/94	1/14	2/40	G48825
					OCPS/PCBS - EPA 8080/3540 (SOX)	05/03/94	05/05/94	1/14	2/40	G48806
					HYDROCARBONS, PETROL-SW3550/E418.1	NA	05/05/94	NA	3/28	G48781
B0BT0P	EA01-2-05	CDMHNSS*34	05/11/94	05/13/94	SCREEN, ALPHA/BETA	NA	05/16/94	NA	2/2	G49155
					PERCENT MOISTURE - ASTM D2216	NA	05/13/94	NA	2/180	G49118
					ARSENIC - EPA 7060	NA	05/16/94	NA	5/180	G49191
					SELENIUM - EPA 7740	NA	05/16/94	NA	5/180	G49179
					MERCURY - EPA 7471 (MOD)	NA	05/16/94	NA	5/28	G49180
					ICAP METALS, EPA 6010	NA	05/16/94	NA	5/180	G49175
					VOCS - EPA 8260	NA	05/13/94	NA	2/14	G49172
					SVOCS - EPA 8270/3540 (SOX)	05/14/94	05/15/94	3/14	1/40	G49170
					OCPS/PCBS - EPA 8080/3540 (SOX)	05/12/94	05/15/94	1/14	3/40	G49161
					HYDROCARBONS, PETROL-SW3550/E418.1	NA	05/16/94	NA	5/28	G49238
B0BT0	EA01-3-05	CDMHNSS*35	05/11/94	05/13/94	SCREEN, ALPHA/BETA	NA	05/16/94	NA	2/2	G49155
					PERCENT MOISTURE - ASTM D2216	NA	05/13/94	NA	2/180	G49118
					ARSENIC - EPA 7060	NA	05/16/94	NA	5/180	G49191
					SELENIUM - EPA 7740	NA	05/16/94	NA	5/180	G49179
					MERCURY - EPA 7471 (MOD)	NA	05/16/94	NA	5/28	G49180
					ICAP METALS, EPA 6010	NA	05/16/94	NA	5/180	G49175
					VOCS - EPA 8260	NA	05/13/94	NA	2/14	G49172
					SVOCS - EPA 8270/3540 (SOX)	05/14/94	05/15/94	3/14	1/40	G49170
					OCPS/PCBS - EPA 8080/3540 (SOX)	05/12/94	05/15/94	1/14	3/40	G49161
					HYDROCARBONS, PETROL-SW3550/E418.1	NA	05/16/94	NA	5/28	G49238
B0BT02	EA01-4-14	CDMHNSS*36	05/13/94	05/14/94	SCREEN, ALPHA/BETA	NA	05/16/94	NA	1/2	G49155
					PERCENT MOISTURE - ASTM D2216	NA	05/16/94	NA	3/180	G49144
					ARSENIC - EPA 7060	NA	05/16/94	NA	3/180	G49191
					SELENIUM - EPA 7740	NA	05/16/94	NA	3/180	G49179
					MERCURY - EPA 7471 (MOD)	NA	05/16/94	NA	3/28	G49180
					ICAP METALS, EPA 6010	NA	05/16/94	NA	3/180	G49175
					VOAS - CLP SOW OLM01.8	NA	05/16/94	NA	3/14	G49194
					SVOCS - CLP SOW OLM01.8	05/14/94	05/16/94	1/14	2/40	G49285
					OCPS/PCBS - CLP SOW OLM01.8	05/14/94	05/15/94	1/14	1/40	G49216
					HYDROCARBONS, PETROL-SW3550/E418.1	NA	05/16/94	NA	3/28	G49238
B0BT03	EA01-5-12	CDMHNSS*37	05/13/94	05/14/94	SCREEN, ALPHA/BETA	NA	05/16/94	NA	1/2	G49155
					PERCENT MOISTURE - ASTM D2216	NA	05/16/94	NA	3/180	G49144
					ARSENIC - EPA 7060	NA	05/16/94	NA	3/180	G49191
					SELENIUM - EPA 7740	NA	05/16/94	NA	3/180	G49179
					MERCURY - EPA 7471 (MOD)	NA	05/16/94	NA	3/28	G49180
					ICAP METALS, EPA 6010	NA	05/16/94	NA	3/180	G49175
					VOCS - EPA 8260	NA	05/16/94	NA	3/14	G49199
					SVOCS - EPA 8270/3540 (SOX)	05/14/94	05/16/94	1/14	2/40	G49211
					OCPS/PCBS - EPA 8080/3540 (SOX)	05/14/94	05/17/94	1/14	3/40	G49246
					HYDROCARBONS, PETROL-SW3550/E418.1	NA	05/16/94	NA	3/28	G49238
B0BT04	EA01-6-10	CDMHNSS*38	05/13/94	05/14/94	SCREEN, ALPHA/BETA	NA	05/16/94	NA	1/2	G49155

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ENVIRONMENTAL SCIENCE & ENGINEERING, INC.
SAMPLE DATE AND CROSS REFERENCE REPORT FOR CDM - HANFORD NORTH SLOPE LABORATORY ANALYSES

	CDM SAMPLE ID	LABORATORY SAMPLE ID	DATE COLLECT	DATE RECEIVED	ANALYSIS DESCRIPTION	DATE EXTRACTED	DATE ANALYZED	DAYS, ACTUAL/HOLD TIME DAYS TO EXTRACTION	DAYS TO ANALYSIS	ESE BATCH
					PERCENT MOISTURE - ASTM D2216	NA	05/16/94	NA	3/180	G49144
					ARSENIC - EPA 7060	NA	05/16/94	NA	3/180	G49191
					SELENIUM - EPA 7740	NA	05/16/94	NA	3/180	G49179
					MERCURY - EPA 7471 (MOD)	NA	05/16/94	NA	3/28	G49180
					ICAP METALS, EPA 6010	NA	05/16/94	NA	3/180	G49175
					VOCS - EPA 8260	NA	05/16/94	NA	3/14	G49199
					SVOCS - EPA 8270/3540 (SOX)	05/14/94	05/16/94	1/14	2/40	G49211
					OCPS/PCBS - EPA 8080/3540 (SOX)	05/14/94	05/17/94	1/14	3/40	G49246
					HYDROCARBONS, PETROL-SW3550/E418.1	NA	05/16/94	NA	3/28	G49238
B0B5X9	WA04-1-05	CDMHNSS*15	04/25/94	04/27/94	SCREEN, ALPHA/BETA	NA	05/10/94	NA	2/2	G48925
					PERCENT MOISTURE - ASTM D2216	NA	04/27/94	NA	2/180	G48469
					ARSENIC - EPA 7060	NA	04/27/94	NA	2/180	G48546
					SELENIUM - EPA 7740	NA	04/28/94	NA	3/180	G48560
					MERCURY - EPA 7471 (MOD)	NA	04/27/94	NA	2/28	G48501
					ICAP METALS, EPA 6010	NA	04/28/94	NA	3/180	G48528
					VOCS - EPA 8260	NA	04/27/94	NA	2/14	G48570
					SVOCS - EPA 8270/3540 (SOX)	04/27/94	05/01/94	2/14	4/40	G48567
					OCPS/PCBS - EPA 8080/3540 (SOX)	04/27/94	04/29/94	2/14	2/40	G48561
					HYDROCARBONS, PETROL-SW3550/E418.1	NA	04/28/94	NA	3/28	G48569
B0B5Y0	WA04-2-12	CDMHNSS*16	04/25/94	04/27/94	SCREEN, ALPHA/BETA	NA	05/10/94	NA	2/2	G48925
					PERCENT MOISTURE - ASTM D2216	NA	04/27/94	NA	2/180	G48469
					ARSENIC - EPA 7060	NA	04/27/94	NA	2/180	G48546
					SELENIUM - EPA 7740	NA	04/28/94	NA	3/180	G48560
					MERCURY - EPA 7471 (MOD)	NA	04/27/94	NA	2/28	G48501
					ICAP METALS, EPA 6010	NA	04/28/94	NA	3/180	G48528
					VOCS - EPA 8260	NA	04/27/94	NA	2/14	G48570
					SVOCS - EPA 8270/3540 (SOX)	04/27/94	05/02/94	2/14	5/40	G48567
					OCPS/PCBS - EPA 8080/3540 (SOX)	04/27/94	04/29/94	2/14	2/40	G48561
					HYDROCARBONS, PETROL-SW3550/E418.1	NA	04/28/94	NA	3/28	G48569
B0B5Z2	WA04-3-20	CDMHNSS*28	05/04/94	05/06/94	SCREEN, ALPHA/BETA	NA	05/10/94	NA	2/2	G48925
					PERCENT MOISTURE - ASTM D2216	NA	05/06/94	NA	2/180	G48815
					ARSENIC - EPA 7060	NA	05/09/94	NA	5/180	G48918
					SELENIUM - EPA 7740	NA	05/09/94	NA	5/180	G48873
					MERCURY - EPA 7471 (MOD)	NA	05/10/94	NA	6/28	G48905
					ICAP METALS, EPA 6010	NA	05/09/94	NA	5/180	G48889
					VOCS - EPA 8260	NA	05/09/94	NA	5/14	G49000
					SVOCS - EPA 8270/3540 (SOX)	05/06/94	05/09/94	2/14	3/40	G48891
					OCPS/PCBS - EPA 8080/3540 (SOX)	05/06/94	05/10/94	2/14	4/40	G48847
					HYDROCARBONS, PETROL-SW3550/E418.1	NA	05/09/94	NA	5/28	G48928
B0B5Z3	WA04-4-08	CDMHNSS*29	05/04/94	05/06/94	SCREEN, ALPHA/BETA	NA	05/10/94	NA	2/2	G48925
					PERCENT MOISTURE - ASTM D2216	NA	05/06/94	NA	2/180	G48815
					ARSENIC - EPA 7060	NA	05/09/94	NA	5/180	G48918
					SELENIUM - EPA 7740	NA	05/09/94	NA	5/180	G48873
					MERCURY - EPA 7471 (MOD)	NA	05/10/94	NA	6/28	G48905
					ICAP METALS, EPA 6010	NA	05/09/94	NA	5/180	G48889
					VOAS - CLP SOW OLM01.8	NA	05/06/94	NA	2/14	G48933
					SVOCS - CLP SOW OLM01.8	05/06/94	05/09/94	2/14	3/40	G48916
					OCPS/PCBS - CLP SOW OLM01.8	05/06/94	05/09/94	2/14	3/40	G49096
					HYDROCARBONS, PETROL-SW3550/E418.1	NA	05/09/94	NA	5/28	G48928
B0B5X5	WA05-1-04	CDMHNSS*12	04/23/94	04/26/94	SCREEN, ALPHA/BETA	NA	05/10/94	NA	3/2	G48925
					PERCENT MOISTURE - ASTM D2216	NA	04/26/94	NA	3/180	G48433

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ENVIRONMENTAL SCIENCE & ENGINEERING, INC.
SAMPLE DATE AND CROSS REFERENCE REPORT FOR CDM - HANFORD NORTH SLOPE LABORATORY ANALYSES

CDM SAMPLE ID	LABORATORY SAMPLE ID	DATE COLLECT	DATE RECEIVED	ANALYSIS DESCRIPTION	DATE EXTRACTED	DATE ANALYZED	DAYS, ACTUAL/HOLD TIME DAYS TO EXTRACTION	DAYS TO ANALYSIS	ESE BATCH
				ARSENIC - EPA 7060	NA	04/26/94	NA	3/180	G48451
				SELENIUM - EPA 7740	NA	04/26/94	NA	3/180	G48450
				MERCURY - EPA 7471 (MOD)	NA	04/27/94	NA	4/28	G48473
				ICAP METALS, EPA 6010	NA	04/27/94	NA	4/180	G48468
				VOCS - EPA 8260	NA	04/26/94	NA	3/14	G48484
				SVOCS - EPA 8270/3540 (SOX)	04/26/94	04/27/94	3/14	1/40	G48519
				OCPS/PCBS - EPA 8080/3540 (SOX)	04/26/94	04/28/94	3/14	2/40	G48533
				HYDROCARBONS, PETROL-SW3550/E418.1	NA	04/26/94	NA	3/28	G48544
BOBSY7 WA05-2-03	CDMHNSS*13	04/25/94	04/27/94	SCREEN, ALPHA/BETA	NA	05/10/94	NA	2/2	G48925
				PERCENT MOISTURE - ASTM D2216	NA	04/27/94	NA	2/180	G48469
				ARSENIC - EPA 7060	NA	04/27/94	NA	2/180	G48546
				SELENIUM - EPA 7740	NA	04/28/94	NA	3/180	G48560
				MERCURY - EPA 7471 (MOD)	NA	04/27/94	NA	2/28	G48501
				ICAP METALS, EPA 6010	NA	04/28/94	NA	3/180	G48528
				VOCS - EPA 8260	NA	04/27/94	NA	2/14	G48570
				SVOCS - EPA 8270/3540 (SOX)	04/27/94	05/02/94	2/14	5/40	G48567
				OCPS/PCBS - EPA 8080/3540 (SOX)	04/27/94	04/29/94	2/14	2/40	G48561
				HYDROCARBONS, PETROL-SW3550/E418.1	NA	04/28/94	NA	3/28	G48569
BOBSY3 WA05-3-04	CDMHNSS*14	04/25/94	04/27/94	SCREEN, ALPHA/BETA	NA	05/10/94	NA	2/2	G48925
				PERCENT MOISTURE - ASTM D2216	NA	04/27/94	NA	2/180	G48469
				ARSENIC - EPA 7060	NA	04/27/94	NA	2/180	G48546
				SELENIUM - EPA 7740	NA	04/28/94	NA	3/180	G48560
				MERCURY - EPA 7471 (MOD)	NA	04/27/94	NA	2/28	G48501
				ICAP METALS, EPA 6010	NA	04/28/94	NA	3/180	G48528
				VOCS - EPA 8260	NA	04/27/94	NA	2/14	G48570
				SVOCS - EPA 8270/3540 (SOX)	04/27/94	05/01/94	2/14	4/40	G48567
				OCPS/PCBS - EPA 8080/3540 (SOX)	04/27/94	04/29/94	2/14	2/40	G48561
				HYDROCARBONS, PETROL-SW3550/E418.1	NA	04/28/94	NA	3/28	G48569
BOBSY2 WA07-1-01	CDMHNSS*10	04/22/94	04/26/94	SCREEN, ALPHA/BETA	NA	05/10/94	NA	4/2	G48925
				PERCENT MOISTURE - ASTM D2216	NA	04/26/94	NA	4/180	G48433
				ARSENIC - EPA 7060	NA	04/26/94	NA	4/180	G48451
				SELENIUM - EPA 7740	NA	04/26/94	NA	4/180	G48450
				MERCURY - EPA 7471 (MOD)	NA	04/27/94	NA	5/28	G48473
				ICAP METALS, EPA 6010	NA	04/27/94	NA	5/180	G48468
				VOCS - EPA 8260	NA	04/26/94	NA	4/14	G48484
				SVOCS - EPA 8270/3540 (SOX)	04/26/94	04/27/94	4/14	1/40	G48519
				OCPS/PCBS - EPA 8080/3540 (SOX)	04/26/94	04/28/94	4/14	2/40	G48533
				HYDROCARBONS, PETROL-SW3550/E418.1	NA	04/26/94	NA	4/28	G48544
BOBSY3 WA07-2-05	CDMHNSS*11	04/23/94	04/26/94	SCREEN, ALPHA/BETA	NA	05/10/94	NA	3/2	G48925
				PERCENT MOISTURE - ASTM D2216	NA	04/26/94	NA	3/180	G48433
				ARSENIC - EPA 7060	NA	04/26/94	NA	3/180	G48451
				SELENIUM - EPA 7740	NA	04/26/94	NA	3/180	G48450
				MERCURY - EPA 7471 (MOD)	NA	04/27/94	NA	4/28	G48473
				ICAP METALS, EPA 6010	NA	04/27/94	NA	4/180	G48468
				VOCS - EPA 8260	NA	04/26/94	NA	3/14	G48484
				SVOCS - EPA 8270/3540 (SOX)	04/26/94	04/27/94	3/14	1/40	G48519
				OCPS/PCBS - EPA 8080/3540 (SOX)	04/26/94	04/28/94	3/14	2/40	G48533
				HYDROCARBONS, PETROL-SW3550/E418.1	NA	04/26/94	NA	3/28	G48544
BOBSY5 EA11-1-07	CDMHNSS*21	04/29/94	05/03/94	SCREEN, ALPHA/BETA	NA	05/10/94	NA	5/2	G48925
				PERCENT MOISTURE - ASTM D2216	NA	05/03/94	NA	4/180	G48700
				ARSENIC - EPA 7060	NA	05/03/94	NA	4/180	G48747

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ENVIRONMENTAL SCIENCE & ENGINEERING, INC.
SAMPLE DATE AND CROSS REFERENCE REPORT FOR CDM - HANFORD NORTH SLOPE LABORATORY ANALYSES

CDM SAMPLE ID	LABORATORY SAMPLE ID	DATE COLLECT	DATE RECEIVED	ANALYSIS DESCRIPTION	DATE EXTRACTED	DATE ANALYZED	DAYS, ACTUAL/HOLD TIME DAYS TO EXTRACTION	DAYS TO ANALYSIS	ESE BATCH
				SELENIUM - EPA 7740	NA	05/03/94	NA	4/180	G48748
				MERCURY - EPA 7471 (MOD)	NA	05/04/94	NA	5/28	G48770
				ICAP METALS, EPA 6010	NA	05/04/94	NA	5/180	G48756
				VOAS - CLP SOW OLM01.8	NA	05/05/94	NA	6/14	G48855
				SVOCS - CLP SOW OLM01.8	05/04/94	05/05/94	5/14	1/40	G48790
				OCPS/PCBS - CLP SOW OLM01.8	05/03/94	05/04/94	4/14	1/40	G48777
				HYDROCARBONS, PETROL-SW3550/E418.1	NA	05/05/94	NA	6/28	G48781
BOB5Y3 EA12-1-10	CDMHNSS*19	04/27/94	04/29/94	SCREEN, ALPHA/BETA	NA	05/10/94	NA	2/2	G48925
				PERCENT MOISTURE - ASTM D2216	NA	04/29/94	NA	2/180	G48562
				ARSENIC - EPA 7060	NA	05/02/94	NA	5/180	G48701
				SELENIUM - EPA 7740	NA	05/02/94	NA	5/180	G48670
				MERCURY - EPA 7471 (MOD)	NA	04/29/94	NA	2/28	G48646
				ICAP METALS, EPA 6010	NA	05/02/94	NA	5/180	G48672
				VOCS - EPA 8260	NA	05/02/94	NA	5/14	G48684
				SVOCS - EPA 8270/3540 (SOX)	04/29/94	04/30/94	2/14	1/40	G48659
				OCPS/PCBS - EPA 8080/3540 (SOX)	04/29/94	05/01/94	2/14	2/40	G48654
				HYDROCARBONS, PETROL-SW3550/E418.1	NA	05/02/94	NA	5/28	G48667
BOB5Y4 EA12-2-12	CDMHNSS*20	04/27/94	04/29/94	SCREEN, ALPHA/BETA	NA	05/10/94	NA	2/2	G48925
				PERCENT MOISTURE - ASTM D2216	NA	04/29/94	NA	2/180	G48562
				ARSENIC - EPA 7060	NA	05/02/94	NA	5/180	G48701
				SELENIUM - EPA 7740	NA	05/02/94	NA	5/180	G48670
				MERCURY - EPA 7471 (MOD)	NA	04/29/94	NA	2/28	G48646
				ICAP METALS, EPA 6010	NA	05/02/94	NA	5/180	G48672
				VOCS - EPA 8260	NA	05/02/94	NA	5/14	G48684
				SVOCS - EPA 8270/3540 (SOX)	04/29/94	04/30/94	2/14	1/40	G48659
				OCPS/PCBS - EPA 8080/3540 (SOX)	04/29/94	05/01/94	2/14	2/40	G48654
				HYDROCARBONS, PETROL-SW3550/E418.1	NA	05/02/94	NA	5/28	G48667
BOB5Y1 EA14-1-01	CDMHNSS*17	04/27/94	04/29/94	SCREEN, ALPHA/BETA	NA	05/10/94	NA	2/2	G48925
				PERCENT MOISTURE - ASTM D2216	NA	04/29/94	NA	2/180	G48562
				ARSENIC - EPA 7060	NA	05/02/94	NA	5/180	G48701
				SELENIUM - EPA 7740	NA	05/02/94	NA	5/180	G48670
				MERCURY - EPA 7471 (MOD)	NA	04/29/94	NA	2/28	G48646
				ICAP METALS, EPA 6010	NA	05/02/94	NA	5/180	G48672
				VOCS - EPA 8260	NA	05/02/94	NA	5/14	G48684
				SVOCS - EPA 8270/3540 (SOX)	04/29/94	04/30/94	2/14	1/40	G48659
				OCPS/PCBS - EPA 8080/3540 (SOX)	04/29/94	05/01/94	2/14	2/40	G48654
				HYDROCARBONS, PETROL-SW3550/E418.1	NA	05/02/94	NA	5/28	G48667
BOB5Y2 EA14-2-01	CDMHNSS*18	04/27/94	04/29/94	SCREEN, ALPHA/BETA	NA	05/10/94	NA	2/2	G48925
				PERCENT MOISTURE - ASTM D2216	NA	04/29/94	NA	2/180	G48562
				ARSENIC - EPA 7060	NA	05/02/94	NA	5/180	G48701
				SELENIUM - EPA 7740	NA	05/02/94	NA	5/180	G48670
				MERCURY - EPA 7471 (MOD)	NA	04/29/94	NA	2/28	G48646
				ICAP METALS, EPA 6010	NA	05/02/94	NA	5/180	G48672
				VOCS - EPA 8260	NA	05/02/94	NA	5/14	G48684
				SVOCS - EPA 8270/3540 (SOX)	04/29/94	04/30/94	2/14	1/40	G48659
				OCPS/PCBS - EPA 8080/3540 (SOX)	04/29/94	05/01/94	2/14	2/40	G48654
				HYDROCARBONS, PETROL-SW3550/E418.1	NA	05/02/94	NA	5/28	G48667
BOB5X0 WA16-1-02	CDMHNSS*8	04/22/94	04/23/94	PERCENT MOISTURE - ASTM D2216	NA	04/25/94	NA	3/180	G48375
				ARSENIC - EPA 7060	NA	04/25/94	NA	3/180	G48412
				SELENIUM - EPA 7740	NA	04/25/94	NA	3/180	G48411

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SAMPLE DATE AND CROSS REFERENCE REPORT FOR CDM - HANFORD NORTH SLOPE LABORATORY ANALYSES

CDM SAMPLE ID	LABORATORY SAMPLE ID	DATE COLLECT	DATE RECEIVED	ANALYSIS DESCRIPTION	DATE EXTRACTED	DATE ANALYZED	DAYS, ACTUAL/HOLD TIME DAYS TO EXTRACTION	DAYS TO ANALYSIS	ESE BATCH
				MERCURY - EPA 7471 (MOD)	NA	04/25/94	NA	3/28	G48453
				ICAP METALS, EPA 6010	NA	04/26/94	NA	4/180	G48432
				VOCS - EPA 8260	NA	04/25/94	NA	3/14	G48437
				SVOCS - EPA 8270/3540 (SOX)	04/23/94	04/25/94	1/14	2/40	G48396
				OCPS/PCBS - EPA 8080/3540 (SOX)	04/23/94	04/26/94	1/14	3/40	G48428
				HYDROCARBONS,PETROL-SW3550/E418.1	NA	04/25/94	NA	3/28	G48406
WA16-2-03	CDMHNSS*9	04/22/94	04/23/94	PERCENT MOISTURE - ASTM D2216	NA	04/25/94	NA	3/180	G48375
				ARSENIC - EPA 7060	NA	04/25/94	NA	3/180	G48412
				SELENIUM - EPA 7740	NA	04/25/94	NA	3/180	G48411
				MERCURY - EPA 7471 (MOD)	NA	04/25/94	NA	3/28	G48453
				ICAP METALS, EPA 6010	NA	04/26/94	NA	4/180	G48432
				VOCS - EPA 8260	NA	04/25/94	NA	3/14	G48437
				SVOCS - EPA 8270/3540 (SOX)	04/23/94	04/24/94	1/14	1/40	G48396
				OCPS/PCBS - EPA 8080/3540 (SOX)	04/23/94	04/26/94	1/14	3/40	G48428
				HYDROCARBONS,PETROL-SW3550/E418.1	NA	04/25/94	NA	3/28	G48406
WA17-1-03	CDMHNSS*7	04/21/94	04/23/94	PERCENT MOISTURE - ASTM D2216	NA	04/25/94	NA	4/180	G48375
				ARSENIC - EPA 7060	NA	04/25/94	NA	4/180	G48412
				SELENIUM - EPA 7740	NA	04/25/94	NA	4/180	G48411
				MERCURY - EPA 7471 (MOD)	NA	04/25/94	NA	4/28	G48453
				ICAP METALS, EPA 6010	NA	04/26/94	NA	5/180	G48432
				VOCS - EPA 8260	NA	04/25/94	NA	4/14	G48437
				SVOCS - EPA 8270/3540 (SOX)	04/23/94	04/24/94	2/14	1/40	G48396
				OCPS/PCBS - EPA 8080/3540 (SOX)	04/23/94	04/26/94	2/14	3/40	G48428
				HYDROCARBONS,PETROL-SW3550/E418.1	NA	04/25/94	NA	4/28	G48406
WA19-1-08	CDMHNSS*3	04/19/94	04/21/94	SCREEN, ALPHA/BETA	NA	05/10/94	NA	2/2	G48925
				PERCENT MOISTURE - ASTM D2216	NA	04/21/94	NA	2/180	G48292
				ARSENIC - EPA 7060	NA	04/21/94	NA	2/180	G48307
				SELENIUM - EPA 7740	NA	04/21/94	NA	2/180	G48324
				MERCURY - EPA 7471 (MOD)	NA	04/21/94	NA	2/28	G48304
				ICAP METALS, EPA 6010	NA	04/22/94	NA	3/180	G48323
				VOCS - EPA 8260	NA	04/21/94	NA	2/14	G48315
				SVOCS - EPA 8270/3540 (SOX)	04/21/94	04/22/94	2/14	1/40	G48389
				OCPS/PCBS - EPA 8080/3540 (SOX)	04/21/94	04/23/94	2/14	2/40	G48370
				HYDROCARBONS,PETROL-SW3550/E418.1	NA	04/22/94	NA	3/28	G48314
WA19-2-07	CDMHNSS*4	04/20/94	04/21/94	SCREEN, ALPHA/BETA	NA	05/10/94	NA	1/2	G48925
				PERCENT MOISTURE - ASTM D2216	NA	04/21/94	NA	1/180	G48292
				ARSENIC - EPA 7060	NA	04/21/94	NA	1/180	G48307
				SELENIUM - EPA 7740	NA	04/21/94	NA	1/180	G48324
				MERCURY - EPA 7471 (MOD)	NA	04/21/94	NA	1/28	G48304
				ICAP METALS, EPA 6010	NA	04/22/94	NA	2/180	G48323
				VOCS - EPA 8260	NA	04/21/94	NA	1/14	G48315
				SVOCS - EPA 8270/3540 (SOX)	04/21/94	04/22/94	1/14	1/40	G48389
				OCPS/PCBS - EPA 8080/3540 (SOX)	04/21/94	04/23/94	1/14	2/40	G48370
				HYDROCARBONS,PETROL-SW3550/E418.1	NA	04/22/94	NA	2/28	G48314
WA19-3-05	CDMHNSS*5	04/20/94	04/22/94	SCREEN, ALPHA/BETA	NA	05/10/94	NA	2/2	G48925
				PERCENT MOISTURE - ASTM D2216	NA	04/22/94	NA	2/180	G48332
				ARSENIC - EPA 7060	NA	04/24/94	NA	4/180	G48393
				SELENIUM - EPA 7740	NA	04/25/94	NA	5/180	G48394
				MERCURY - EPA 7471 (MOD)	NA	04/25/94	NA	5/28	G48388

BOBSW9

BOBSW5

BOBSW6

BOBSW7

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SAMPLE DATE AND CROSS REFERENCE REPORT FOR CDM - HANFORD NORTH SLOPE LABORATORY ANALYSES

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				ICAP METALS, EPA 6010	NA	04/25/94	NA	5/180	G48391
				VOCS - EPA 8260	NA	04/22/94	NA	2/14	G48371
				SVOCS - EPA 8270/3540 (SOX)	04/22/94	04/24/94	2/14	2/40	G48390
				OCPS/PCBS - EPA 8080/3540 (SOX)	04/22/94	04/25/94	2/14	3/40	G48401
				HYDROCARBONS, PETROL-SW3550/E418.1	NA	04/25/94	NA	5/28	G48406
BOBSW3 WA19-4-05	CDMHNSS*6	04/20/94	04/22/94	SCREEN, ALPHA/BETA	NA	05/10/94	NA	2/2	G48925
				PERCENT MOISTURE - ASTM D2216	NA	04/22/94	NA	2/180	G48332
				ARSENIC - EPA 7060	NA	04/24/94	NA	4/180	G48393
				SELENIUM - EPA 7740	NA	04/25/94	NA	5/180	G48394
				MERCURY - EPA 7471 (MOD)	NA	04/25/94	NA	5/28	G48388
				ICAP METALS, EPA 6010	NA	04/25/94	NA	5/180	G48391
				VOCS - EPA 8260	NA	04/22/94	NA	2/14	G48371
				SVOCS - EPA 8270/3540 (SOX)	04/22/94	04/24/94	2/14	2/40	G48390
				OCPS/PCBS - EPA 8080/3540 (SOX)	04/22/94	04/25/94	2/14	3/40	G48401
				HYDROCARBONS, PETROL-SW3550/E418.1	NA	04/25/94	NA	5/28	G48406
BOBSW3 WA20-1-04	CDMHNSS*1	04/19/94	04/21/94	SCREEN, ALPHA/BETA	NA	05/10/94	NA	2/2	G48925
				PERCENT MOISTURE - ASTM D2216	NA	04/21/94	NA	2/180	G48292
				ARSENIC - EPA 7060	NA	04/21/94	NA	2/180	G48307
				SELENIUM - EPA 7740	NA	04/21/94	NA	2/180	G48324
				MERCURY - EPA 7471 (MOD)	NA	04/21/94	NA	2/28	G48304
				ICAP METALS, EPA 6010	NA	04/22/94	NA	3/180	G48323
				VOCS - EPA 8260	NA	04/21/94	NA	2/14	G48315
				SVOCS - EPA 8270/3540 (SOX)	04/21/94	04/22/94	2/14	1/40	G48389
				OCPS/PCBS - EPA 8080/3540 (SOX)	04/21/94	04/23/94	2/14	2/40	G48370
				HYDROCARBONS, PETROL-SW3550/E418.1	NA	04/22/94	NA	3/28	G48314
BOBSW4 WA20-2-06	CDMHNSS*2	04/19/94	04/21/94	SCREEN, ALPHA/BETA	NA	05/10/94	NA	2/2	G48925
				PERCENT MOISTURE - ASTM D2216	NA	04/21/94	NA	2/180	G48292
				ARSENIC - EPA 7060	NA	04/21/94	NA	2/180	G48307
				SELENIUM - EPA 7740	NA	04/21/94	NA	2/180	G48324
				MERCURY - EPA 7471 (MOD)	NA	04/21/94	NA	2/28	G48304
				ICAP METALS, EPA 6010	NA	04/22/94	NA	3/180	G48323
				VOCS - EPA 8260	NA	04/21/94	NA	2/14	G48315
				SVOCS - EPA 8270/3540 (SOX)	04/21/94	04/22/94	2/14	1/40	G48389
				OCPS/PCBS - EPA 8080/3540 (SOX)	04/21/94	04/23/94	2/14	2/40	G48370
				HYDROCARBONS, PETROL-SW3550/E418.1	NA	04/22/94	NA	3/28	G48314
BOBSY8 EBG1-1-02	CDMHNSS*24	05/03/94	05/05/94	SCREEN, ALPHA/BETA	NA	05/10/94	NA	2/2	G48925
				PERCENT MOISTURE - ASTM D2216	NA	05/05/94	NA	2/180	G48778
				ARSENIC - EPA 7060	NA	05/06/94	NA	3/180	G48832
				SELENIUM - EPA 7740	NA	05/05/94	NA	2/180	G48830
				MERCURY - EPA 7471 (MOD)	NA	05/06/94	NA	3/28	G48828
				ICAP METALS, EPA 6010	NA	05/06/94	NA	3/180	G48819
				VOCS - EPA 8260	NA	05/06/94	NA	3/14	G48887
				SVOCS - EPA 8270/3540 (SOX)	05/05/94	05/06/94	2/14	1/40	G48857
				OCPS/PCBS - EPA 8080/3540 (SOX)	05/05/94	05/08/94	2/14	3/40	G48837
				HYDROCARBONS, PETROL-SW3550/E418.1	NA	05/06/94	NA	3/28	G48892
BOBSZ0 WBG2-1-02	CDMHNSS*26	05/03/94	05/05/94	SCREEN, ALPHA/BETA	NA	05/10/94	NA	2/2	G48925
				PERCENT MOISTURE - ASTM D2216	NA	05/05/94	NA	2/180	G48778
				ARSENIC - EPA 7060	NA	05/06/94	NA	3/180	G48832
				SELENIUM - EPA 7740	NA	05/05/94	NA	2/180	G48830
				MERCURY - EPA 7471 (MOD)	NA	05/06/94	NA	3/28	G48828
				ICAP METALS, EPA 6010	NA	05/06/94	NA	3/180	G48819

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SAMPLE DATE AND CROSS REFERENCE REPORT FOR CDM - HANFORD NORTH SLOPE LABORATORY ANALYSES

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				VOCS - EPA 8260	NA	05/06/94	NA	3/14	G48887
				SVOCS - EPA 8270/3540 (SOX)	05/05/94	05/06/94	2/14	1/40	G48857
				OCPS/PCBS - EPA 8080/3540 (SOX)	05/05/94	05/08/94	2/14	3/40	G48837
				HYDROCARBONS,PETROL-SW3550/E418.1	NA	05/06/94	NA	3/28	G48892
BOBSZ1 WBG2-2-02	CDMHNSS*27	05/03/94	05/05/94	SCREEN, ALPHA/BETA	NA	05/10/94	NA	2/2	G48925
				PERCENT MOISTURE - ASTM D2216	NA	05/05/94	NA	2/180	G48778
				ARSENIC - EPA 7060	NA	05/06/94	NA	3/180	G48832
				SELENIUM - EPA 7740	NA	05/05/94	NA	2/180	G48830
				MERCURY - EPA 7471 (MOD)	NA	05/06/94	NA	3/28	G48828
				ICAP METALS, EPA 6010	NA	05/06/94	NA	3/180	G48819
				VOCS - EPA 8260	NA	05/06/94	NA	3/14	G48887
				SVOCS - EPA 8270/3540 (SOX)	05/05/94	05/06/94	2/14	1/40	G48857
				OCPS/PCBS - EPA 8080/3540 (SOX)	05/05/94	05/08/94	2/14	3/40	G48837
				HYDROCARBONS,PETROL-SW3550/E418.1	NA	05/06/94	NA	3/28	G48892
BOBSZ5 WBG3-1-02	CDMHNSS*31	05/04/94	05/06/94	SCREEN, ALPHA/BETA	NA	05/10/94	NA	2/2	G48925
				PERCENT MOISTURE - ASTM D2216	NA	05/06/94	NA	2/180	G48815
				ARSENIC - EPA 7060	NA	05/09/94	NA	5/180	G48918
				SELENIUM - EPA 7740	NA	05/09/94	NA	5/180	G48873
				MERCURY - EPA 7471 (MOD)	NA	05/10/94	NA	6/28	G48905
				ICAP METALS, EPA 6010	NA	05/09/94	NA	5/180	G48889
				VOCS - EPA 8260	NA	05/09/94	NA	5/14	G49000
				SVOCS - EPA 8270/3540 (SOX)	05/06/94	05/09/94	2/14	3/40	G48891
				OCPS/PCBS - EPA 8080/3540 (SOX)	05/06/94	05/10/94	2/14	4/40	G48847
				HYDROCARBONS,PETROL-SW3550/E418.1	NA	05/09/94	NA	5/28	G48928
BOBSZ7 OCS1-1-00	CDMHNSS*23	05/03/94	05/04/94	SCREEN, ALPHA/BETA	NA	05/10/94	NA	1/2	G48925
				PERCENT MOISTURE - ASTM D2216	NA	05/04/94	NA	1/180	G48753
				ARSENIC - EPA 7060	NA	05/04/94	NA	1/180	G48771
				SELENIUM - EPA 7740	NA	05/04/94	NA	1/180	G48804
				MERCURY - EPA 7471 (MOD)	NA	05/04/94	NA	1/28	G48760
				ICAP METALS, EPA 6010	NA	05/05/94	NA	2/180	G48783
				VOCS - EPA 8260	NA	05/04/94	NA	1/14	G48853
				SVOCS - EPA 8270/3540 (SOX)	05/03/94	05/05/94	0/14	2/40	G48825
				OCPS/PCBS - EPA 8080/3540 (SOX)	05/04/94	05/08/94	1/14	4/40	G48835
				HYDROCARBONS,PETROL-SW3550/E418.1	NA	05/05/94	NA	2/28	G48781
BOBSY9 ESV1-1-01	CDMHNSS*25	05/03/94	05/05/94	SCREEN, ALPHA/BETA	NA	05/10/94	NA	2/2	G48925
				PERCENT MOISTURE - ASTM D2216	NA	05/05/94	NA	2/180	G48778
				ARSENIC - EPA 7060	NA	05/06/94	NA	3/180	G48832
				SELENIUM - EPA 7740	NA	05/05/94	NA	2/180	G48830
				MERCURY - EPA 7471 (MOD)	NA	05/06/94	NA	3/28	G48828
				ICAP METALS, EPA 6010	NA	05/06/94	NA	3/180	G48819
				VOCS - EPA 8260	NA	05/06/94	NA	3/14	G48887
				SVOCS - EPA 8270/3540 (SOX)	05/05/94	05/06/94	2/14	1/40	G48857
				OCPS/PCBS - EPA 8080/3540 (SOX)	05/05/94	05/08/94	2/14	3/40	G48837
				HYDROCARBONS,PETROL-SW3550/E418.1	NA	05/06/94	NA	3/28	G48892
BOBSZ4 WSV2-1-01	CDMHNSS*30	05/04/94	05/06/94	SCREEN, ALPHA/BETA	NA	05/10/94	NA	2/2	G48925
				PERCENT MOISTURE - ASTM D2216	NA	05/06/94	NA	2/180	G48815
				ARSENIC - EPA 7060	NA	05/09/94	NA	5/180	G48918
				SELENIUM - EPA 7740	NA	05/09/94	NA	5/180	G48873
				MERCURY - EPA 7471 (MOD)	NA	05/10/94	NA	6/28	G48905
				ICAP METALS, EPA 6010	NA	05/09/94	NA	5/180	G48889
				VOAS - CLP SOW OLM01.8	NA	05/06/94	NA	2/14	G48933
				SVOCS - CLP SOW OLM01.8	05/06/94	05/09/94	2/14	3/40	G48916

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SAMPLE DATE AND CROSS REFERENCE REPORT FOR CDM - HANFORD NORTH SLOPE LABORATORY ANALYSES

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				OCPS/PCBS - CLP SOW OLM01.8	05/06/94	05/09/94	2/14	3/40	G49096
				HYDROCARBONS, PETROL-SW3550/E418.1	NA	05/09/94	NA	5/28	G48928
BOB527 EWC1-1-00	CDMHNSS*32	05/05/94	05/06/94	SCREEN, ALPHA/BETA	NA	05/10/94	NA	1/2	G48925
				PERCENT MOISTURE - ASTM D2216	NA	05/06/94	NA	1/180	G48815
				ARSENIC - EPA 7060	NA	05/09/94	NA	4/180	G48918
				SELENIUM - EPA 7740	NA	05/09/94	NA	4/180	G48873
				MERCURY - EPA 7471 (MOD)	NA	05/10/94	NA	5/28	G48905
				ICAP METALS, EPA 6010	NA	05/09/94	NA	4/180	G48889
				VOCS - EPA 8260	NA	05/09/94	NA	4/14	G49000
				SVOCS - EPA 8270/3540 (SOX)	05/06/94	05/10/94	1/14	4/40	G48891
				OCPS/PCBS - EPA 8080/3540 (SOX)	05/06/94	05/10/94	1/14	4/40	G48847
				HYDROCARBONS, PETROL-SW3550/E418.1	NA	05/09/94	NA	4/28	G48928
BOB528 WWC2-1-00	CDMHNSS*33	05/05/94	05/06/94	SCREEN, ALPHA/BETA	NA	05/10/94	NA	1/2	G48925
				PERCENT MOISTURE - ASTM D2216	NA	05/06/94	NA	1/180	G48815
				ARSENIC - EPA 7060	NA	05/09/94	NA	4/180	G48918
				SELENIUM - EPA 7740	NA	05/09/94	NA	4/180	G48873
				MERCURY - EPA 7471 (MOD)	NA	05/10/94	NA	5/28	G48905
				ICAP METALS, EPA 6010	NA	05/09/94	NA	4/180	G48889
				VOCS - EPA 8260	NA	05/09/94	NA	4/14	G49000
				SVOCS - EPA 8270/3540 (SOX)	05/06/94	05/10/94	1/14	4/40	G48891
				OCPS/PCBS - EPA 8080/3540 (SOX)	05/06/94	05/10/94	1/14	4/40	G48847
				HYDROCARBONS, PETROL-SW3550/E418.1	NA	05/09/94	NA	4/28	G48928

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ENVIRONMENTAL SCIENCE & ENGINEERING, INC.

SAMPLE DATE AND CROSS REFERENCE REPORT FOR CDM - HANFORD NORTH SLOPE LABORATORY ANALYSES

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WA05-1-EB1	CDMHNSW*1	04/23/94	04/26/94	ARSENIC - EPA 7060	NA	04/27/94	NA	4/180	G48511
				SELENIUM - EPA 7740	NA	04/27/94	NA	4/180	G48512
				MERCURY - EPA 7470	NA	04/27/94	NA	4/28	G48474
				ICAP METALS - EPA 6010	NA	04/27/94	NA	4/180	G48491
				VOCS - EPA 8260	NA	04/26/94	NA	3/14	G48483
				SVOCS - EPA 8270/3520 (CLL)	04/26/94	05/01/94	3/7	5/40	G48568
				OCPS/PCBS - EPA 8080/3520 (CLL)	04/26/94	04/28/94	3/7	2/40	G48520
				TRPH - EPA 418.1	NA	04/28/94	NA	5/28	G48587
WA05-1-TB1	CDMHNSW*2	04/25/94	04/26/94	VOCS - EPA 8260	NA	04/26/94	NA	1/14	G48483
WBG3-1-TB2	CDMHNSW*4	05/04/94	05/06/94	VOCS - EPA 8260	NA	05/06/94	NA	2/14	G48856
WSV2-1-EB2	CDMHNSW*11	05/09/94	05/10/94	ARSENIC - EPA 7060	NA	05/11/94	NA	2/180	G49080
				SELENIUM - EPA 7740	NA	05/12/94	NA	3/180	G49082
				MERCURY - EPA 7470	NA	05/11/94	NA	2/28	G49076
				ICAP METALS - EPA 6010	NA	05/11/94	NA	2/180	G49069
				SVOCS - EPA 8270/3520 (CLL)	05/10/94	05/12/94	1/7	2/40	G49125
				OCPS/PCBS - EPA 8080/3520 (CLL)	05/10/94	05/12/94	1/7	2/40	G49097
				TRPH - EPA 418.1	NA	05/10/94	NA	1/28	G49060
EWW1-1-00	CDMHNSW*13	05/13/94	05/14/94	ARSENIC - EPA 7060	NA	05/16/94	NA	3/180	G49193
				SELENIUM - EPA 7740	NA	05/16/94	NA	3/180	G49189
				MERCURY - EPA 7470	NA	05/16/94	NA	3/28	G49181
				ICAP METALS - EPA 6010	NA	05/16/94	NA	3/180	G49164
				SVOCS - EPA 8270/3520 (CLL)	05/14/94	05/16/94	1/7	2/40	G49230
				OCPS/PCBS - EPA 8080/3520 (CLL)	NA	NA	NA	NA	NA
				TRPH - EPA 418.1	NA	05/16/94	NA	3/28	G49240

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Analytical Data

Soils Data

Sorted on Site ID

Environmental Science & Engineering DATE 05/24/94 STATUS :FINAL
PROJECT NUMBER 19440220 0201 PROJECT NAME CDM - HANFORD N. SLOPE
FIELD GROUP CDMHNSS PROJECT MANAGER E.H. MANSFIELD
CDMHNSS.SID ALL LAB COORDINATOR EDWARD MANSFIELD

SAMPLE ID'S		EA01-1-10	EA01-2-05	EA01-3-05	EA01-4-14	EA01-5-12	EA01-6-10	WA04-1-05	WA04-2-12	WA04-3-20	WA04-4-08	WA05-1-04	WA05-2-03	WA05-3-04	WA07-1-01
PARAMETERS	STORET	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS
UNITS	METHOD	22	34	35	36	37	38	15	16	28	29	12	13	14	10
DATE		05/02/94	05/11/94	05/11/94	05/13/94	05/13/94	05/13/94	04/25/94	04/25/94	05/04/94	05/04/94	04/23/94	04/25/94	04/25/94	04/22/94
TIME		11:15	12:54	13:30	08:40	09:00	10:55	13:15	14:00	08:25	10:50	16:00	09:00	09:10	15:45
SITE #	96274 0	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L
CHAIN OF CUSTODY #	96793 0	10	17	17	19	19	19	7	7	13	13	3	7	7	3
SCREEN,GR. ALPHA, (ESTIMATE)NCI/KG-WET	96636 R	2.0	25.4	<2.0	22.9	<2.0	21.9	45.8	<2.0	<2.0	2.8	11.8	29.2	43.6	18.5
SCREEN,GR. BETA, (ESTIMATE)NCI/KG-WET	96637 R	35.0	16.0	21.2	34.1	18.9	23.3	27.0	<6.0	31.8	26.6	17.0	37.6	8.1	12.6
MOISTURE %WET WT	70320 1	8.9	4.4	4.2	5.4	4.9	4.4	3.8	4.5	2.6	4.9	2.8	3.2	5.4	[illegible]
HYDROCARBONS,PETROL MG/KG-DRY	98233 AISON	4920	437	428	<8.84	<8.79	<8.74	2040	381	<8.58	82.0	<8.60	128	<8.84	125
ARSENIC MG/KG-DRY	1003 7060-G	8.12	5.42	5.54	7.97	7.75	7.42	5.02	3.96	1.44	4.00	2.54	1.89	4.68	3.68
SELENIUM MG/KG-DRY	1148 7740-G	0.514	<0.255	0.340	<0.258	<0.257	<0.255	<0.255	<0.257	<0.255	<0.241	<0.256	<0.256	<0.249	<0.258
MERCURY MG/KG-DRY	71921 7471M-G	0.124	<0.097	<0.091	<0.105	<0.103	<0.086	<0.100	<0.101	<0.097	<0.099	<0.103	<0.100	<0.103	<0.103
BARIUM MG/KG-DRY	1008 6010-G	119	125	107	151	139	131	112	101	79.9	109	82.3	82.9	125	96.0
CADMIUM MG/KG-DRY	1028 6010-G	<0.547	<0.510	<0.513	<0.516	<0.513	<0.509	<0.511	<0.504	<0.490	<0.510	<0.512	<0.513	<0.524	<0.517
CHROMIUM MG/KG-DRY	1029 6010-G	15.4	14.9	16.0	20.3	21.3	17.0	10.4	9.20	10.3	10.2	9.22	14.6	7.67	11.3
LEAD MG/KG-DRY	1052 6010-G	11.2	24.5	23.6	13.9	12.1	10.6	15.6	12.0	<9.80	<10.2	<10.2	111	<10.5	39.6
SILVER MG/KG-DRY	1078 6010-G	<0.547	<0.510	<0.513	<0.516	<0.513	<0.509	<0.511	<0.504	<0.490	<0.510	<0.512	<0.513	<0.524	<0.517
ACETONE UG/KG-DRY	75059 8260-G	<11	<10.0	<10.0	<11	<11	<10.0	<10.0	11	<10.0	<11	<10.0	<10.0	<11	<10.0
BENZENE UG/KG-DRY	34237 8260-G	<5.5	<5.2	<5.2	<11	<5.3	<5.2	<5.2	<5.2	<5.1	<11	<5.1	<5.2	<5.3	<5.2
BROMODICHLOROMETHANE UG/KG-DRY	34330 8260-G	<5.5	<5.2	<5.2	<11	<5.3	<5.2	<5.2	<5.2	<5.1	<11	<5.1	<5.2	<5.3	<5.2
BROMOFORM UG/KG-DRY	34290 8260-G	<5.5	<5.2	<5.2	<11	<5.3	<5.2	<5.2	<5.2	<5.1	<11	<5.1	<5.2	<5.3	<5.2
BROMOMETHANE UG/KG-DRY	34416 8260-G	<11	<10.0	<10.0	<11	<11	<10.0	<10.0	<10.0	<10.0	<11	<10.0	<10.0	<11	<10.0
CARBON DISULFIDE UG/KG-DRY	78544 8260-G	<5.5	<5.2	<5.2	<11	<5.3	<5.2	<5.2	<5.2	<5.1	<11	<5.1	<5.2	<5.3	<5.2

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PROJECT NUMBER 19440220 0201 PROJECT NAME CDM - HANFORD N. SLOPE
FIELD GROUP CDMHNSS PROJECT MANAGER E.H. MANSFIELD
CDMHNSS.SID ALL LAB COORDINATOR EDWARD MANSFIELD

SAMPLE ID'S PARAMETERS	STORET METHOD	EA01 1 10 CDMHNSS 22	EA01-2-05 CDMHNSS 34	EA01-3-05 CDMHNSS 35	EA01-4-14 CDMHNSS 36	EA01-5-12 CDMHNSS 37	EA01-6-10 CDMHNSS 38	WA04-1-05 CDMHNSS 15	WA04-2-12 CDMHNSS 16	WA04-3-20 CDMHNSS 28	WA04-4-08 CDMHNSS 29	WA05-1-04 CDMHNSS 12	WA05-2-03 CDMHNSS 13	WA05-3-04 CDMHNSS 14	WA07-1-01 CDMHNSS 10
DATE		05/02/94	05/11/94	05/11/94	05/13/94	05/13/94	05/13/94	04/25/94	04/25/94	05/04/94	05/04/94	04/23/94	04/25/94	04/25/94	04/22/94
TIME		11:15	12:54	13:30	08:40	09:00	10:55	13:15	14:00	08:25	10:50	16:00	09:00	09:10	15:45
CARBON TETRACHLORIDE UG/KG-DRY	34299 8260-G	<5.5	<5.2	<5.2	<11	<5.3	<5.2	<5.2	<5.2	<5.1	<11	<5.1	<5.2	<5.3	<5.2
CHLOROBENZENE UG/KG-DRY	34304 8260-G	<5.5	<5.2	<5.2	<11	<5.3	<5.2	<5.2	<5.2	<5.1	<11	<5.1	<5.2	<5.3	<5.2
CHLOROETHANE UG/KG-DRY	34314 8260-G	<11	<10.0	<10.0	<11	<11	<10.0	<10.0	<10.0	<10.0	<11	<10.0	<10.0	<11	<10.0
2-CHLOROETHYLVINYL-ETHER UG/KG-DRY	34579 8260-G	<5.5	<5.2	<5.2	NRQ	<5.3	<5.2	<5.2	<5.2	<5.1	NRQ	<5.1	<5.2	<5.3	<5.2
CHLOROFORM UG/KG-DRY	34318 8260-G	<5.5	<5.2	<5.2	<11	<5.3	<5.2	<5.2	<5.2	<5.1	<11	<5.1	<5.2	<5.3	<5.2
CHLOROMETHANE UG/KG-DRY	34421 8260-G	<11	<10.0	<10.0	<11	<11	<10.0	<10.0	<10.0	<10.0	<11	<10.0	<10.0	<11	<10.0
DIBROMOCHLOROMETHANE UG/KG-DRY	34309 8260-G	<5.5	<5.2	<5.2	<11	<5.3	<5.2	<5.2	<5.2	<5.1	<11	<5.1	<5.2	<5.3	<5.2
1,1-DICHLOROETHANE UG/KG-DRY	34499 8260-G	<5.5	<5.2	<5.2	<11	<5.3	<5.2	<5.2	<5.2	<5.1	<11	<5.1	<5.2	<5.3	<5.2
1,2-DICHLOROETHANE UG/KG-DRY	34534 8260-G	<5.5	<5.2	<5.2	<11	<5.3	<5.2	<5.2	<5.2	<5.1	<11	<5.1	<5.2	<5.3	<5.2
1,1 DICHLOROETHYLENE UG/KG-DRY	34504 8260-G	<5.5	<5.2	<5.2	<11	<5.3	<5.2	<5.2	<5.2	<5.1	<11	<5.1	<5.2	<5.3	<5.2
1,2-DICHLOROETHENE(TOTAL) UG/KG-DRY	96464 8260-G	<5.5	<5.2	<5.2	<11	<5.3	<5.2	<5.2	<5.2	<5.1	<11	<5.1	<5.2	<5.3	<5.2
1,2-DICHLOROPROPANE UG/KG-DRY	34544 8260-G	<5.5	<5.2	<5.2	<11	<5.3	<5.2	<5.2	<5.2	<5.1	<11	<5.1	<5.2	<5.3	<5.2
CIS-1,3-DICHLORO-PROPENE UG/KG-DRY	34702 8260-G	<5.5	<5.2	<5.2	<11	<5.3	<5.2	<5.2	<5.2	<5.1	<11	<5.1	<5.2	<5.3	<5.2
TRANS-1,3-DICHLORO-PROPENE UG/KG-DRY	34697 8260-G	<5.5	<5.2	<5.2	<11	<5.3	<5.2	<5.2	<5.2	<5.1	<11	<5.1	<5.2	<5.3	<5.2
ETHYLBENZENE UG/KG-DRY	34374 8260-G	<5.5	<5.2	<5.2	<11	<5.3	<5.2	<5.2	<5.2	<5.1	<11	<5.1	<5.2	<5.3	<5.2
2-HEXANONE UG/KG-DRY	75166 8260-G	<11	<10.0	<10.0	<11	<11	<10.0	<10.0	<10.0	<10.0	<11	<10.0	<10.0	<11	<10.0
METHYLENE CHLORIDE UG/KG-DRY	34426 8260-G	<5.5	<5.2	<5.2	<11	<5.3	<5.2	<5.2	<5.2	<5.1	<11	<5.1	<5.2	<5.3	<5.2
METHYL ETHYL KETONE UG/KG-DRY	75078 8260-G	<11	<10.0	<10.0	<11	<11	<10.0	<10.0	<10.0	<10.0	<11	<10.0	<10.0	<11	<10.0
METHYLISOBUTYLKETONE UG/KG-DRY	75169 8260-G	<11	<10.0	<10.0	<11	<11	<10.0	<10.0	<10.0	<10.0	<11	<10.0	<10.0	<11	<10.0
STYRENE UG/KG-DRY	75192 8260-G	<5.5	<5.2	<5.2	<11	<5.3	<5.2	<5.2	<5.2	<5.1	<11	<5.1	<5.2	<5.3	<5.2
1,1,2,2-TETRACHLORO-ETHANE UG/KG-DRY	34519 8260-G	<5.5	<5.2	<5.2	<11	<5.3	<5.2	<5.2	<5.2	<5.1	<11	<5.1	<5.2	<5.3	<5.2

Environmental Science & Engineering DATE 05/24/94 STATUS :FINAL
PROJECT NUMBER 1944022G 0201 PROJECT NAME CDM - HANFORD N. SLOPE
FIELD GROUP CDMHNSS PROJECT MANAGER E.H. MANSFIELD
CDMHNSS.SID ALL LAB COORDINATOR EDWARD MANSFIELD

SAMPLE ID'S		EA01-1-10	EA01-2-05	EA01-3-05	EA01-4-14	EA01-5-12	EA01-6-10	WA04-1-05	WA04-2-12	WA04-3-20	WA04-4-08	WA05-1-04	WA05-2-03	WA05-3-04	WA07-1-01
PARAMETERS	STORET	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS
UNITS	METHOD	22	34	35	36	37	38	15	16	28	29	12	13	14	10
DATE		05/02/94	05/11/94	05/11/94	05/13/94	05/13/94	05/13/94	04/25/94	04/25/94	05/04/94	05/04/94	04/23/94	04/25/94	04/25/94	04/22/94
TIME		11:15	12:54	13:30	08:40	09:00	10:55	13:15	14:00	08:25	10:50	16:00	09:00	09:10	15:45
TETRACHLOROETHENE	34478	<5.5	<5.2	<5.2	<11	<5.3	<5.2	<5.2	<5.2	<5.1	<11	<5.1	<5.2	<5.3	<5.2
UG/KG-DRY	8260-G														
TOLUENE	34483	<5.5	<5.2	<5.2	<11	<5.3	<5.2	<5.2	<5.2	<5.1	<11	<5.1	<5.2	<5.3	<5.2
UG/KG-DRY	8260-G														
1,1,1-TRICHL'ETHANE	34509	<5.5	<5.2	<5.2	<11	<5.3	<5.2	<5.2	<5.2	<5.1	<11	<5.1	<5.2	<5.3	<5.2
UG/KG-DRY	8260-G														
1,1,2-TRICHL'ETHANE	34514	<5.5	<5.2	<5.2	<11	<5.3	<5.2	<5.2	<5.2	<5.1	<11	<5.1	<5.2	<5.3	<5.2
UG/KG-DRY	8260-G														
TRICHLOROETHENE	34487	<5.5	<5.2	<5.2	<11	<5.3	<5.2	<5.2	<5.2	<5.1	<11	<5.1	<5.2	<5.3	<5.2
UG/KG-DRY	8260-G														
VINYL CHLORIDE	34495	<11	<10.0	<10.0	<11	<11	<10.0	<10.0	<10.0	<10.0	<11	<10.0	<10.0	<11	<10.0
UG/KG-DRY	8260-G														
VINYL ACETATE	98583	<11	<10.0	<10.0	NRQ	<11	<10.0	<10.0	<10.0	<10.0	NRQ	<10.0	<10.0	<11	<10.0
UG/KG-DRY	8260-G														
XYLENE,TOTAL	45510	<5.5	<5.2	<5.2	NRQ	<5.3	<5.2	<5.2	<5.2	<5.1	NRQ	<5.1	<5.2	<5.3	<5.2
UG/KG-DRY	8260-G														
ACENAPHTHENE	34208	<770	<73	220	<350	<74	<73	<73	<73	<72	<350	<72	<720	<74	<72
UG/KG-DRY	8270/3540-G														
ACENAPHTHYLENE	34203	<1600	<160	<160	<350	<160	<160	<160	<160	<150	<350	<150	<1500	<160	<160
UG/KG-DRY	8270/3540-G														
ANTHRACENE	34223	<770	<73	<73	<350	<74	<73	<73	<73	<72	<350	<72	<720	<74	<72
UG/KG-DRY	8270/3540-G														
BENZYL ALCOHOL	75212	<1500	<150	<150	NRQ	<150	<150	<150	<150	<140	NRQ	<140	<1400	<150	<140
UG/KG-DRY	8270/3540-G														
BENZOIC ACID	75315	<30000	<2800	<2800	NRQ	<2800	<2800	<2800	<2800	<2800	NRQ	<2800	<28000	<2900	<2800
UG/KG-DRY	8270/3540-G														
BENZO(A)ANTHRACENE	34529	<1100	<100	<100	<350	<110	<100	<100	<100	<100	<350	<100	<1000	<110	<100
UG/KG-DRY	8270/3540-G														
BENZO(B)FLUORANTHENE	34233	<1100	<100	<100	<350	<110	<100	<100	<100	<100	<350	<100	<1000	<110	<100
UG/KG-DRY	8270/3540-G														
BENZO(K)FLUORANTHENE	34245	<1100	<100	<100	<350	<110	<100	<100	<100	<100	<350	<100	<1000	<110	<100
UG/KG-DRY	8270/3540-G														
BENZO(A)PYRENE	34250	<1500	<150	<150	<350	<150	<150	<150	<150	<140	<350	<140	<1400	<150	<140
UG/KG-DRY	8270/3540-G														
BENZO(GHI)PERYLENE	34524	<1800	<170	<170	<350	<170	<170	<170	<170	<160	<350	<160	<1700	<170	<170
UG/KG-DRY	8270/3540-G														
BUTYLBENZYLPHTHALATE	34295	<1100	<100	<100	<350	<110	<100	<100	<100	<100	<350	<100	<1000	<110	<100
UG/KG-DRY	8270/3540-G														
BIS(2-CHLOROETHYL)	34276	<770	<73	<73	<350	<74	<73	<73	<73	<72	<350	<72	<720	<74	<72
ETHER UG/KG-DRY	8270/3540-G														
BIS(2-CHLOROETHOXY)	34281	<1500	<150	<150	<350	<150	<150	<150	<150	<140	<350	<140	<1400	<150	<140
METHANE UG/KG-DRY	8270/3540-G														

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PROJECT NUMBER 19440220 0201 PROJECT NAME CDM - HANFORD N. SLOPE
FIELD GROUP CDMHNSS PROJECT MANAGER E.H. MANSFIELD
CDMHNSS.SID ALL LAB COORDINATOR EDWARD MANSFIELD

SAMPLE ID'S		EA01-1-10	EA01-2-05	EA01-3-05	EA01-4-14	EA01-5-12	EA01-6-10	WA04-1-05	WA04-2-12	WA04-3-20	WA04-4-08	WA05-1-04	WA05-2-03	WA05-3-04	WA07-1-01
PARAMETERS	STORET	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS
UNITS	METHOD	22	34	35	36	37	38	15	16	28	29	12	13	14	10
DATE		05/02/94	05/11/94	05/11/94	05/13/94	05/13/94	05/13/94	04/25/94	04/25/94	05/04/94	05/04/94	04/23/94	04/25/94	04/25/94	04/22/94
TIME		11:15	12:54	13:30	08:40	09:00	10:55	13:15	14:00	08:25	10:50	16:00	09:00	09:10	15:45
BIS(2-ETHYLHEXYL) PHTHALATE UG/KG-DRY	39102 8270/3540-G	<1100	<100	<100	<350	<110	<100	<100	160	<100	<350	<100	<1000	<110	<100
BIS(2-CHL'ISOPROPYL) ETHER UG/KG-DRY	34286 8270/3540-G	<770	<73	<73	<350	<74	<73	<73	<73	<72	<350	<72	<720	<74	<72
4-BROMOPHENYL PHENYL ETHER UG/KG-DRY	34639 8270/3540-G	<1500	<150	<150	<350	<150	<150	<150	<150	<140	<350	<140	<1400	<150	<140
4-CHLOROANILINE UG/KG-DRY	78867 8270/3540-G	<3300	<310	<310	<350	<320	<310	<310	<310	<310	<350	<310	<3100	<320	<310
2-CHLORONAPHTHALENE UG/KG-DRY	34584 8270/3540-G	<770	<73	<73	<350	<74	<73	<73	<73	<72	<350	<72	<720	<74	<72
2-CHLOROPHENOL UG/KG-DRY	34589 8270/3540-G	<1500	<150	<150	<350	<150	<150	<150	<150	<140	<350	<140	<1400	<150	<140
4-CHLORO-3-METHYL PHENOL UG/KG-DRY	34455 8270/3540-G	<1500	<150	<150	<350	<150	<150	<150	<150	<140	<350	<140	<1400	<150	<140
4-CHLOROPHENYLPHENYL ETHER UG/KG-DRY	34644 8270/3540-G	<1100	<100	<100	<350	<110	<100	<100	<100	<100	<350	<100	<1000	<110	<100
CHRYSENE UG/KG-DRY	34323 8270/3540-G	<1100	<100	<100	<350	<110	<100	<100	<100	<100	<350	<100	<1000	<110	<100
DIBEN(A,H)ANTH'CENE UG/KG-DRY	34559 8270/3540-G	<1800	<170	<170	<350	<170	<170	<170	<170	<160	<350	<160	<1700	<170	<170
DIBENZOFURAN UG/KG-DRY	75647 8270/3540-G	<1300	<130	<130	<350	<130	<130	380	<130	<120	<350	<120	<1200	<130	<120
DI-N-BUTYL PHTHALATE UG/KG-DRY	39112 8270/3540-G	<770	<73	<73	<350	<74	<73	<73	<73	<72	<350	<72	<720	<74	<72
1,3-DICHLOROBENZENE UG/KG-DRY	34569 8270/3540-G	<770	<73	<73	<350	<74	<73	<73	<73	<72	<350	<72	<720	<74	<72
1,2-DICHLOROBENZENE UG/KG-DRY	34539 8270/3540-G	<770	<73	<73	<350	<74	<73	<73	<73	<72	<350	<72	<720	<74	<72
1,4-DICHLOROBENZENE UG/KG-DRY	34574 8270/3540-G	<770	<73	<73	<350	<74	<73	<73	<73	<72	<350	<72	<720	<74	<72
3,3-DICHL'BENZIDINE UG/KG-DRY	34634 8270/3540-G	<5500	<520	<520	<350	<530	<520	<520	<520	<510	<350	<510	<5200	<530	<520
2,4-DICHLOROPHENOL UG/KG-DRY	34604 8270/3540-G	<1500	<150	<150	<350	<150	<150	<150	<150	<140	<350	<140	<1400	<150	<140
DIETHYL PHTHALATE UG/KG-DRY	34339 8270/3540-G	<770	<73	<73	<350	<74	<73	<73	<73	<72	<350	<72	<720	<74	<72
2,4-DIMETHYLPHENOL UG/KG-DRY	34609 8270/3540-G	<1500	<150	<150	<350	<150	<150	<150	<150	<140	<350	<140	<1400	<150	<140
DIMETHYL PHTHALATE UG/KG-DRY	34344 8270/3540-G	<1100	<100	<100	<350	<110	<100	<100	<100	<100	<350	<100	<1000	<110	<100
2,4-DINITROPHENOL UG/KG-DRY	34619 8270/3540-G	<14000	<1400	<1400	<850	<1400	<1400	<1400	<1400	<1300	<840	<1300	<13000	<1400	<1300

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PROJECT NUMBER 1944022G 0201 PROJECT NAME CDM - HANFORD N. SLOPE
FIELD GROUP CDMHNSS PROJECT MANAGER E.H. MANSFIELD
CDMHNSS.STD ALL LAB COORDINATOR EDWARD MANSFIELD

SAMPLE ID'S		EA01-1-10	EA01-2-05	EA01-3-05	EA01-4-14	EA01-5-12	EA01-6-10	WA04-1-05	WA04-2-12	WA04-3-20	WA04-4-08	WA05-1-04	WA05-2-03	WA05-3-04	WA07-1-01
PARAMETERS	STORET	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS
UNITS	METHOD	22	34	35	36	37	38	15	16	28	29	12	13	14	10
DATE		05/02/94	05/11/94	05/11/94	05/13/94	05/13/94	05/13/94	04/25/94	04/25/94	05/04/94	05/04/94	04/23/94	04/25/94	04/25/94	04/22/94
TIME		11:15	12:54	13:30	08:40	09:00	10:55	13:15	14:00	08:25	10:50	16:00	09:00	09:10	15:45
2,4-DINITROTOLUENE	34614	<1500	<150	<150	<350	<150	<150	<150	<150	<140	<350	<140	<1400	<150	<140
UG/KG-DRY	8270/3540-G														
2,6-DINITROTOLUENE	34629	<1500	<150	<150	<350	<150	<150	<150	<150	<140	<350	<140	<1400	<150	<140
UG/KG-DRY	8270/3540-G														
DI-N-OCTYL PHTHALATE	34599	<1500	<150	<150	<350	<150	<150	<150	<150	<140	<350	<140	<1400	<150	<140
UG/KG-DRY	8270/3540-G														
FLUORANTHENE	34379	<770	<73	<73	<350	<74	<73	<73	<73	<72	<350	<72	<720	<74	<72
UG/KG-DRY	8270/3540-G														
FLUORENE	34384	<770	<73	<73	<350	<74	<73	<73	<73	<72	<350	<72	<720	<74	<72
UG/KG-DRY	8270/3540-G														
HEXACHLOROBENZENE	39701	<1100	<100	<100	<350	<110	<100	<100	<100	<100	<350	<100	<1000	<110	<100
UG/KG-DRY	8270/3540-G														
HEXACHLOROBUTADIENE	39705	<1500	<150	<150	<350	<150	<150	<150	<150	<140	<350	<140	<1400	<150	<140
UG/KG-DRY	8270/3540-G														
HEXACHLOROCYCLOPENTA	34389	<11000	<1000	<1000	<350	<1100	<1000	<1000	<1000	<1000	<350	<1000	<10000	<1100	<1000
DIENE UG/KG-DRY	8270/3540-G														
HEXACHLOROETHANE	34399	<1100	<100	<100	<350	<110	<100	<100	<100	<100	<350	<100	<1000	<110	<100
UG/KG-DRY	8270/3540-G														
INDENO(1,2,3-CD)	34406	<1800	<170	<170	<350	<170	<170	<170	<170	<160	<350	<160	<1700	<170	<170
PYRENE UG/KG-DRY	8270/3540-G														
ISOPHORONE	34411	<770	<73	<73	<350	<74	<73	<73	<73	<72	<350	<72	<720	<74	<72
UG/KG-DRY	8270/3540-G														
2-METHYLNAPHTHALENE	78868	77000	3800	2900	<350	<110	<100	3600	<100	<100	<350	<100	<1000	<110	<100
UG/KG-DRY	8270/3540-G														
2-METHYL-4,6-DINITRO	34660	<7400	<700	<700	<850	<700	<700	<700	<700	<690	<840	<690	<6900	<710	<690
PHENOL UG/KG-DRY	8270/3540-G														
2-METHYLPHENOL	78872	<1500	<150	<150	<350	<150	<150	<150	<150	<140	<350	<140	<1400	<150	<140
UG/KG-DRY	8270/3540-G														
4-METHYLPHENOL	78803	<1500	<150	<150	<350	<150	<150	<150	<150	<140	<350	<140	<1400	<150	<140
UG/KG-DRY	8270/3540-G														
NAPHTHALENE	34445	3200	<73	<73	<350	<74	<73	960	<73	<72	<350	<72	<720	<74	<72
UG/KG-DRY	8270/3540-G														
2-NITROANILINE	98588	<3300	<310	<310	<850	<320	<310	<310	<310	<310	<840	<310	<3100	<320	<310
UG/KG-DRY	8270/3540-G														
3-NITROANILINE	78869	<3300	<310	<310	<850	<320	<310	<310	<310	<310	<840	<310	<3100	<320	<310
UG/KG-DRY	8270/3540-G														
4-NITROANILINE	78870	<4400	<420	<420	<850	<420	<420	<420	<420	<410	<840	<410	<4100	<420	<410
UG/KG-DRY	8270/3540-G														
NITROBENZENE	34450	<770	<73	<73	<350	<74	<73	<73	<73	<72	<350	<72	<720	<74	<72
UG/KG-DRY	8270/3540-G														
2-NITROPHENOL	34594	<1500	<150	<150	<350	<150	<150	<150	<150	<140	<350	<140	<1400	<150	<140
UG/KG-DRY	8270/3540-G														

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Environmental Science & Engineering DATE 05/24/94 STATUS :FINAL PAGE 6
PROJECT NUMBER 1944022G 0201 PROJECT NAME CDM - HANFORD N. SLOPE
FIELD GROUP CDMHNSS PROJECT MANAGER E.H. MANSFIELD
CDMHNSS.SID ALL LAB COORDINATOR EDWARD MANSFIELD

SAMPLE ID'S		EA01-1-10	EA01-2-05	EA01-3-05	EA01-4-14	EA01-5-12	EA01-6-10	WA04-1-05	WA04-2-12	WA04-3-20	WA04-4-08	WA05-1-04	WA05-2-03	WA05-3-04	WA07-1-01
PARAMETERS	STORET	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS
UNITS	METHOD	22	34	35	36	37	38	15	16	28	29	12	13	14	10
DATE		05/02/94	05/11/94	05/11/94	05/13/94	05/13/94	05/13/94	04/25/94	04/25/94	05/04/94	05/04/94	04/23/94	04/25/94	04/25/94	04/22/94
TIME		11:15	12:54	13:30	08:40	09:00	10:55	13:15	14:00	08:25	10:50	16:00	09:00	09:10	15:45
4-NITROPHENOL	34649	<5500	<520	<520	<850	<530	<520	<520	<520	<510	<840	<510	<5200	<530	<520
UG/KG-DRY	8270/3540-G														
N-NITROSODI-N-PROPYL	34431	<1100	<100	<100	<350	<110	<100	<100	<100	<100	<350	<100	<1000	<110	<100
AMINE UG/KG-DRY	8270/3540-G														
N-NITROSODIPHE'AMINE	34436	<770	<73	<73	<350	<74	<73	<73	<73	<72	<350	<72	<720	<74	<72
UG/KG-DRY	8270/3540-G														
PENTACHLOROPHENOL	39061	<2700	<260	<260	<850	<260	<260	<260	<260	<260	<840	<260	<2600	<260	<260
UG/KG-DRY	8270/3540-G														
PHENANTHRENE	34464	16000	2700	2500	<350	<74	<73	570	<73	<72	<350	<72	<720	<74	<72
UG/KG-DRY	8270/3540-G														
PHENOL	34695	<1500	<150	<150	<350	<150	<150	<150	<150	<140	<350	<140	<1400	<150	<140
UG/KG-DRY	8270/3540-G														
PYRENE	34472	5400	750	850	<350	<74	<73	<73	<73	<72	<350	<72	<720	<74	<72
UG/KG-DRY	8270/3540-G														
1,2,4-TRICH'BENZENE	34554	<1100	<100	<100	<350	<110	<100	<100	<100	<100	<350	<100	<1000	<110	<100
UG/KG-DRY	8270/3540-G														
2,4,6-TRICH'PHENOL	34624	<1900	<180	<180	<350	<180	<180	<180	<180	<170	<350	<170	<1800	<180	<180
UG/KG-DRY	8270/3540-G														
2,4,5-TRICH'PHENOL	98587	<1900	<180	<180	<850	<180	<180	<180	<180	<170	<840	<170	<1800	<180	<180
UG/KG-DRY	8270/3540-G														
ALDRIN	39333	<0.732	52.7	54.9	<1.76	<0.701	<0.697	<0.832	<0.838	<0.890	<1.75	<0.686	<0.826	<0.846	<0.689
UG/KG-DRY	8080/3540-G														
BHC,A	39076	<0.732	<0.697	<0.696	<1.76	<0.701	<0.697	<0.693	<0.698	<0.684	<1.75	<0.686	<0.689	<0.705	<0.689
UG/KG-DRY	8080/3540-G														
BHC,B	34257	<0.732	<0.697	<0.696	<1.76	<0.701	<0.697	<0.693	<0.698	<1.30	<1.75	<0.686	<0.689	<0.705	<0.689
UG/KG-DRY	8080/3540-G														
BHC,D	34262	<0.732	<0.697	<0.696	<1.76	<0.701	<0.697	<0.693	<0.698	<0.684	<1.75	<0.686	<0.689	<0.705	<0.689
UG/KG-DRY	8080/3540-G														
BHC,G(LINDANE)	39783	<0.732	<0.697	<0.696	<1.76	<0.701	<0.697	<0.693	<0.698	<0.684	<1.75	<0.686	<0.689	<0.705	<0.689
UG/KG-DRY	8080/3540-G														
CHLORDANE	39351	<3.66	<3.49	<3.48	NRQ	<3.51	<3.49	<3.47	<3.49	<3.42	NRQ	<3.43	<3.44	<3.52	37700
UG/KG-DRY	8080/3540-G														
DDD,PP'	39311	786000	269000	276000	4.78	<0.701	<0.697	31.0	115	<0.726	<3.51	<0.686	<0.689	<0.705	42700
UG/KG-DRY	8080/3540-G														
DDE,PP'	39321	44400	22100	28000	16.6	<0.701	0.862	8.92	79.0	<0.684	<3.51	3.18	5.23	<0.705	3330
UG/KG-DRY	8080/3540-G														
DDT,PP'	39301	2080000	695000	611000	184	4.31	7.16	67.8	284	<0.726	<3.51	6.72	5.54	<0.846	254000
UG/KG-DRY	8080/3540-G														
DIELDRIN	39383	<0.732	1980	2630	8.34	<0.701	0.856	<0.693	<0.698	<0.821	<3.51	<0.686	<0.689	<0.705	<0.689
UG/KG-DRY	8080/3540-G														
ENDOSULFAN,A	34364	<0.732	<0.697	<0.696	<1.76	<0.701	<0.697	<0.693	<0.698	<0.684	<1.75	<0.686	<0.689	<0.705	<0.689
UG/KG-DRY	8080/3540-G														

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Environmental Science & Engineering DATE 05/24/94 STATUS :FINAL PAGE 7
PROJECT NUMBER 1944022G 0201 PROJECT NAME CDM - HANFORD N. SLOPE
FIELD GROUP CDMHNSS PROJECT MANAGER E.H. MANSFIELD
CDMHNSS.SID ALL LAB COORDINATOR EDWARD MANSFIELD

SAMPLE ID'S		EA01-1-10	EA01-2-05	EA01-3-05	EA01-4-14	EA01-5-12	EA01-6-10	WA04-1-05	WA04-2-12	WA04-3-20	WA04-4-08	WA05-1-04	WA05-2-03	WA05-3-04	WA07-1-01
PARAMETERS	STORET	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS
UNITS	METHOD	22	34	35	36	37	38	15	16	28	29	12	13	14	10
DATE		05/02/94	05/11/94	05/11/94	05/13/94	05/13/94	05/13/94	04/25/94	04/25/94	05/04/94	05/04/94	04/23/94	04/25/94	04/25/94	04/22/94
TIME		11:15	12:54	13:30	08:40	09:00	10:55	13:15	14:00	08:25	10:50	16:00	09:00	09:10	15:45
ENDOSULFAN,B	34359	<0.732	<0.697	<0.696	<3.52	<0.701	<0.697	<0.693	<0.698	<0.684	<3.51	<0.686	<0.689	<0.705	<0.689
UG/KG-DRY	8080/3540-G														
ENDOSULFAN SULFATE	34354	<0.732	<0.697	<0.696	<3.52	<0.701	<0.697	<0.693	<0.698	<0.684	<3.51	<0.686	<0.689	<0.705	<0.689
UG/KG-DRY	8080/3540-G														
ENDRIN	39393	<0.805	<0.697	<0.696	<3.52	<0.701	<0.697	<0.693	<0.698	<0.719	<3.51	<0.686	<0.689	<0.705	<0.689
UG/KG-DRY	8080/3540-G														
ENDRIN ALDEHYDE	34369	<0.732	<0.697	<0.696	<3.52	<0.701	<0.697	<0.693	<0.698	<0.684	<3.51	<0.686	<0.689	<0.705	<0.689
UG/KG-DRY	8080/3540-G														
HEPTACHLOR	39413	<0.732	<0.697	<0.696	<1.76	<0.701	<0.697	<0.693	<0.698	<0.684	<1.75	<0.686	<0.689	<0.705	<0.689
UG/KG-DRY	8080/3540-G														
HEPTACHLOR EPOXIDE	39423	<0.732	<0.697	<0.696	<1.76	<0.701	<0.697	<0.693	<0.698	<0.684	<1.75	<0.686	<0.689	<0.705	<0.689
UG/KG-DRY	8080/3540-G														
METHOXYCHLOR	39481	<0.805	<0.697	<0.696	<17.6	<0.701	<0.697	<1.25	<1.26	<1.10	<17.5	<0.686	<1.24	<1.27	<0.689
UG/KG-DRY	8080/3540-G														
TOXAPHENE	39403	<73.2	<69.7	<69.6	<176	<70.1	<69.7	<69.3	<69.8	<68.4	<175	<68.6	<68.9	<70.5	<68.9
UG/KG-DRY	8080/3540-G														
PCB-1016	39514	<14.6	<13.9	<13.9	<35.2	<14.0	<13.9	<13.9	<14.0	<13.7	<35.1	<13.7	<13.8	<14.1	<13.8
UG/KG-DRY	8080/3540-G														
PCB-1221	39491	<14.6	<13.9	<13.9	<70.5	<14.0	<13.9	<13.9	<14.0	<13.7	<70.1	<13.7	<13.8	<14.1	<13.8
UG/KG-DRY	8080/3540-G														
PCB-1232	39495	<14.6	<13.9	<13.9	<35.2	<14.0	<13.9	<13.9	<14.0	<13.7	<35.1	<13.7	<13.8	<14.1	<13.8
UG/KG-DRY	8080/3540-G														
PCB-1242	39499	<14.6	<13.9	<13.9	<35.2	<14.0	<13.9	<13.9	<14.0	<13.7	<35.1	<13.7	<13.8	<14.1	<13.8
UG/KG-DRY	8080/3540-G														
PCB-1248	39503	<14.6	<13.9	<13.9	<35.2	<14.0	<13.9	<13.9	<14.0	<13.7	<35.1	<13.7	<13.8	<14.1	<13.8
UG/KG-DRY	8080/3540-G														
PCB-1254	39507	<14.6	<13.9	<13.9	<35.2	<14.0	<13.9	<13.9	<14.0	<13.7	<35.1	0.0	<13.8	<14.1	0.0
UG/KG-DRY	8080/3540-G														
PCB-1260	39511	<14.6	<13.9	<13.9	<35.2	<14.0	<13.9	<13.9	<14.0	<13.7	<35.1	<13.7	<13.8	<14.1	<13.8
UG/KG-DRY	8080/3540-G														

Environmental Science & Engineering DATE 05/24/94 STATUS :FINAL
PROJECT NUMBER 19440220 0201 PROJECT NAME CDM - HANFORD N. SLOPE
FIELD GROUP CDMHNSS PROJECT MANAGER E.H. MANSFIELD
CDMHNSS.SID ALL LAB COORDINATOR EDWARD MANSFIELD

SAMPLE ID'S		WA07-2-05	EA11-1-07	EA12-1-10	EA12-2-12	EA14-1-01	EA14-2-01	WA16-1-02	WA16-2-03	WA17-1-03	WA19-1-08	WA19-2-07	WA19-3-05	WA19-4-05	WA20-1-04
PARAMETERS	STORET	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS
UNITS	METHOD	11	21	19	20	17	18	8	9	7	3	4	5	6	1
DATE		04/23/94	04/29/94	04/27/94	04/27/94	04/27/94	04/27/94	04/22/94	04/22/94	04/21/94	04/19/94	04/20/94	04/20/94	04/20/94	04/19/94
TIME		10:00	08:22	14:00	15:10	11:50	12:10	09:30	10:05	15:45	16:48	08:40	13:45	14:15	13:25
SITE #	96274	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L
	0														
CHAIN OF CUSTODY	96793	3	10	8	8	8	8	4	4	4	1	1	2	2	1
#	0														
SCREEN,GR. ALPHA,	96636	27.0	11.8	<2.0	<2.0	14.0	<2.0	NA	NA	NA	<2.0	18.7	11.0	<2.0	20.9
(ESTIMATE)NCI/KG-WET	R														
SCREEN,GR. BETA,	96637	22.8	21.9	<6.0	23.1	25.5	<6.0	NA	NA	NA	<6.0	16.4	17.2	27.7	29.2
(ESTIMATE)NCI/KG-WET	R														
MOISTURE	70320	5.4	3.8	3.8	4.2	3.8	3.6	4.5	5.5	14.8	4.8	3.0	3.0	3.0	2.7
%WET WT	1														
HYDROCARBONS,PETROL	98233	<8.84	43.2	165000	<8.73	<8.69	<8.67	3610	<8.85	85900	<8.99	5850	<8.62	<8.62	<8.79
MG/KG-DRY	AISON														
ARSENIC	1003	8.20	7.67	5.84	6.94	6.88	6.98	4.32	8.18	41.6	3.21	2.86	3.75	3.52	2.26
MG/KG-DRY	7060-G														
SELENIUM	1148	<0.263	<0.258	<0.259	<0.259	<0.258	<0.258	<0.259	<0.260	<0.290	<0.252	<0.254	<0.244	<0.245	<0.252
MG/KG-DRY	7740-G														
MERCURY	71921	<0.104	<0.101	<0.101	<0.101	<0.104	<0.102	<0.092	<0.094	0.116	<0.104	<0.102	<0.093	<0.093	<0.099
MG/KG-DRY	7471M-G														
BARIUM	1008	147	120	119	145	105	111	90.9	105	91.9	87.4	96.2	100.0	107	80.0
MG/KG-DRY	6010-G														
CADMIUM	1028	<0.524	<0.516	<0.519	<0.521	<0.518	<0.515	0.671	<0.527	<0.583	<0.510	1.38	<0.513	<0.500	<0.503
MG/KG-DRY	6010-G														
CHROMIUM	1029	18.2	19.1	13.8	15.6	14.1	14.9	25.0	10.7	14.5	9.02	7.66	7.45	5.56	6.40
MG/KG-DRY	6010-G														
LEAD	1052	11.9	<10.3	36.0	13.8	10.4	<10.3	217	<10.5	<11.7	<10.2	61.8	<10.3	11.6	<10.1
MG/KG-DRY	6010-G														
SILVER	1078	<0.524	<0.516	1.05	<0.521	<0.518	<0.515	<0.523	<0.527	<0.583	<0.510	<0.509	<0.513	<0.500	<0.503
MG/KG-DRY	6010-G														
ACETONE	75059	<11	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<11	<12	<11	<10.0	<10.0	<10.0	<10.0
UG/KG-DRY	8260-G														
BENZENE	34237	<5.3	<10.0	<5.2	<5.2	<5.2	<5.2	<5.2	<5.3	<5.9	<5.3	<5.2	<5.2	<5.2	<5.1
UG/KG-DRY	8260-G														
BROMODICHLOROMETHANE	34330	<5.3	<10.0	<5.2	<5.2	<5.2	<5.2	<5.2	<5.3	<5.9	<5.3	<5.2	<5.2	<5.2	<5.1
UG/KG-DRY	8260-G														
BROMOFORM	34290	<5.3	<10.0	<5.2	<5.2	<5.2	<5.2	<5.2	<5.3	<5.9	<5.3	<5.2	<5.2	<5.2	<5.1
UG/KG-DRY	8260-G														
BROMOMETHANE	34416	<11	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<11	<12	<11	<10.0	<10.0	<10.0	<10.0
UG/KG-DRY	8260-G														
CARBON DISULFIDE *	78544	<5.3	<10.0	<5.2	<5.2	<5.2	<5.2	<5.2	<5.3	<5.9	<5.3	<5.2	<5.2	<5.2	<5.1
UG/KG-DRY	8260-G														

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PROJECT NUMBER 1944022G 0201 PROJECT NAME CDM - HANFORD N. SLOPE
FIELD GROUP CDMHNSS PROJECT MANAGER E.H. MANSFIELD
CDMHNSS.SID ALL LAB COORDINATOR EDWARD MANSFIELD

SAMPLE ID'S		WA07-2-05	EA11-1-07	EA12-1-10	EA12-2-12	EA14-1-01	EA14-2-01	WA16-1-02	WA16-2-03	WA17-1-03	WA19-1-08	WA19-2-07	WA19-3-05	WA19-4-05	WA20-1-04
PARAMETERS	STORET	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS
UNITS	METHOD	11	21	19	20	17	18	8	9	7	3	4	5	6	1
DATE		04/23/94	04/29/94	04/27/94	04/27/94	04/27/94	04/27/94	04/22/94	04/22/94	04/21/94	04/19/94	04/20/94	04/20/94	04/20/94	04/19/94
TIME		10:00	08:22	14:00	15:10	11:50	12:10	09:30	10:05	15:45	16:48	08:40	13:45	14:15	13:25
CARBON TETRACHLORIDE	34299	<5.3	<10.0	<5.2	<5.2	<5.2	<5.2	<5.2	<5.3	<5.9	<5.3	<5.2	<5.2	<5.2	<5.1
UG/KG-DRY	8260-G														
CHLOROBENZENE	34304	<5.3	<10.0	<5.2	<5.2	<5.2	<5.2	<5.2	<5.3	<5.9	<5.3	<5.2	<5.2	<5.2	<5.1
UG/KG-DRY	8260-G														
CHLOROETHANE	34314	<11	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<11	<12	<11	<10.0	<10.0	<10.0	<10.0
UG/KG-DRY	8260-G														
2-CHLOROETHYLVINYL-	34579	<5.3	NRQ	<5.2	<5.2	<5.2	<5.2	<5.2	<5.3	<5.9	<5.3	<5.2	<5.2	<5.2	<5.1
ETHER UG/KG-DRY	8260-G														
CHLOROFORM	34318	<5.3	<10.0	<5.2	<5.2	<5.2	<5.2	<5.2	<5.3	<5.9	<5.3	<5.2	<5.2	<5.2	<5.1
UG/KG-DRY	8260-G														
CHLOROMETHANE	34421	<11	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<11	<12	<11	<10.0	<10.0	<10.0	<10.0
UG/KG-DRY	8260-G														
DIBROMOCHLOROMETHANE	34309	<5.3	<10.0	<5.2	<5.2	<5.2	<5.2	<5.2	<5.3	<5.9	<5.3	<5.2	<5.2	<5.2	<5.1
UG/KG-DRY	8260-G														
1,1-DICHLOROETHANE	34499	<5.3	<10.0	<5.2	<5.2	<5.2	<5.2	<5.2	<5.3	<5.9	<5.3	<5.2	<5.2	<5.2	<5.1
UG/KG-DRY	8260-G														
1,2-DICHLOROETHANE	34534	<5.3	<10.0	<5.2	<5.2	<5.2	<5.2	<5.2	<5.3	<5.9	<5.3	<5.2	<5.2	<5.2	<5.1
UG/KG-DRY	8260-G														
1,1-DICHLOROETHYLENE	34504	<5.3	<10.0	<5.2	<5.2	<5.2	<5.2	<5.2	<5.3	<5.9	<5.3	<5.2	<5.2	<5.2	<5.1
UG/KG-DRY	8260-G														
1,2-DICHLOROETHENE(T	96464	<5.3	<10.0	<5.2	<5.2	<5.2	<5.2	<5.2	<5.3	<5.9	<5.3	<5.2	<5.2	<5.2	<5.1
OTAL) UG/KG-DRY	8260-G														
1,2-DICHLOROPROPANE	34544	<5.3	<10.0	<5.2	<5.2	<5.2	<5.2	<5.2	<5.3	<5.9	<5.3	<5.2	<5.2	<5.2	<5.1
UG/KG-DRY	8260-G														
CIS-1,3-DICHLORO-	34702	<5.3	<10.0	<5.2	<5.2	<5.2	<5.2	<5.2	<5.3	<5.9	<5.3	<5.2	<5.2	<5.2	<5.1
PROPENE UG/KG-DRY	8260-G														
TRANS-1,3-DICHLORO-	34697	<5.3	<10.0	<5.2	<5.2	<5.2	<5.2	<5.2	<5.3	<5.9	<5.3	<5.2	<5.2	<5.2	<5.1
PROPENE UG/KG-DRY	8260-G														
ETHYLBENZENE	34374	<5.3	<10.0	<5.2	<5.2	<5.2	<5.2	<5.2	<5.3	<5.9	<5.3	<5.2	<5.2	<5.2	<5.1
UG/KG-DRY	8260-G														
2-HEXANONE	75166	<11	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<11	<12	<11	<10.0	<10.0	<10.0	<10.0
UG/KG-DRY	8260-G														
METHYLENE CHLORIDE	34426	<5.3	<10.0	<5.2	<5.2	<5.2	<5.2	<5.2	<5.3	<5.9	<5.3	<5.2	<5.2	<5.2	7.0
UG/KG-DRY	8260-G														
METHYL ETHYL KETONE	75078	<11	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<11	<12	<11	<10.0	<10.0	<10.0	<10.0
UG/KG-DRY	8260-G														
METHYLISOBUTYLKETONE	75169	<11	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<11	78	<11	<10.0	<10.0	<10.0	<10.0
UG/KG-DRY	8260-G														
STYRENE	75192	<5.3	<10.0	<5.2	<5.2	<5.2	<5.2	<5.2	<5.3	<5.9	<5.3	<5.2	<5.2	<5.2	<5.1
UG/KG-DRY	8260-G														
1,1,2,2-TETRACHLORO-	34519	<5.3	<10.0	<5.2	<5.2	<5.2	<5.2	<5.2	<5.3	<5.9	<5.3	<5.2	<5.2	<5.2	<5.1
ETHANE UG/KG-DRY	8260-G														

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PROJECT NUMBER 19440220 0201 PROJECT NAME CDM - HANFORD N. SLOPE
FIELD GROUP CDMHNSS PROJECT MANAGER E.H. MANSFIELD
CDMHNSS.SID ALL LAB COORDINATOR EDWARD MANSFIELD

SAMPLE ID'S		WA07-2-05	EA11-1-07	EA12-1-10	EA12-2-12	EA14-1-01	EA14-2-01	WA16-1-02	WA16-2-03	WA17-1-03	WA19-1-08	WA19-2-07	WA19-3-05	WA19-4-05	WA20-1-04
PARAMETERS	STORET	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS
UNITS	METHOD	11	21	19	20	17	18	8	9	7	3	4	5	6	1
DATE		04/23/94	04/29/94	04/27/94	04/27/94	04/27/94	04/27/94	04/22/94	04/22/94	04/21/94	04/19/94	04/20/94	04/20/94	04/20/94	04/19/94
TIME		10:00	08:22	14:00	15:10	11:50	12:10	09:30	10:05	15:45	16:48	08:40	13:45	14:15	13:25
TETRACHLOROETHENE	34478	<5.3	<10.0	<5.2	<5.2	<5.2	<5.2	<5.2	<5.3	<5.9	<5.3	<5.2	<5.2	<5.2	<5.1
UG/KG-DRY	8260-G														
TOLUENE	34483	<5.3	<10.0	<5.2	<5.2	<5.2	<5.2	<5.2	<5.3	<5.9	<5.3	<5.2	<5.2	<5.2	<5.1
UG/KG-DRY	8260-G														
1,1,1-TRICHL'ETHANE	34509	<5.3	<10.0	<5.2	<5.2	<5.2	<5.2	<5.2	<5.3	<5.9	<5.3	<5.2	<5.2	<5.2	<5.1
UG/KG-DRY	8260-G														
1,1,2-TRICHL'ETHANE	34514	<5.3	<10.0	<5.2	<5.2	<5.2	<5.2	<5.2	<5.3	<5.9	<5.3	<5.2	<5.2	<5.2	<5.1
UG/KG-DRY	8260-G														
TRICHLOROETHENE	34487	<5.3	<10.0	<5.2	<5.2	<5.2	<5.2	<5.2	<5.3	<5.9	<5.3	<5.2	<5.2	<5.2	<5.1
UG/KG-DRY	8260-G														
VINYL CHLORIDE	34495	<11	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<11	<12	<11	<10.0	<10.0	<10.0	<10.0
UG/KG-DRY	8260-G														
VINYL ACETATE	98583	<11	NRQ	<10.0	<10.0	<10.0	<10.0	<10.0	<11	<12	<11	<10.0	<10.0	<10.0	<10.0
UG/KG-DRY	8260-G														
XYLENE,TOTAL	45510	<5.3	NRQ	<5.2	<5.2	<5.2	<5.2	<5.2	<5.3	<5.9	<5.3	<5.2	<5.2	5.2	<5.1
UG/KG-DRY	8260-G														
ACENAPHTHENE	34208	<74	<340	<73	<73	<73	<73	<7300	<74	<8200	<74	<1400	<72	<72	<72
UG/KG-DRY	8270/3540-G														
ACENAPHTHYLENE	34203	<160	<340	<160	<160	<160	<160	<16000	<160	<18000	<160	<3100	<150	<150	<150
UG/KG-DRY	8270/3540-G														
ANTHRACENE	34223	<74	<340	<73	<73	<73	<73	<7300	<74	<8200	<74	<1400	<72	<72	<72
UG/KG-DRY	8270/3540-G														
BENZYL ALCOHOL	75212	<150	NRQ	<150	<150	<150	<150	<15000	<150	<16000	<150	<2900	<140	<140	<140
UG/KG-DRY	8270/3540-G														
BENZOIC ACID	75315	<2900	NRQ	<2800	<2800	<2800	<2800	<280000	<2900	<320000	<2800	<56000	<2800	<2800	<2800
UG/KG-DRY	8270/3540-G														
BENZO(A)ANTHRACENE	34529	<110	<340	<100	<100	<100	<100	<10000	<110	<12000	<110	<2100	<100	<100	<100
UG/KG-DRY	8270/3540-G														
BENZO(B)FLUORANTHENE	34233	<110	<340	<100	<100	<100	<100	<10000	<110	<12000	<110	<2100	<100	<100	<100
UG/KG-DRY	8270/3540-G														
BENZO(K)FLUORANTHENE	34245	<110	<340	<100	<100	<100	<100	<10000	<110	<12000	<110	<2100	<100	<100	<100
UG/KG-DRY	8270/3540-G														
BENZO(A)PYRENE	34250	<150	<340	<150	<150	<150	<150	<15000	<150	<16000	<150	<2900	<140	<140	<140
UG/KG-DRY	8270/3540-G														
BENZO(GHI)PERYLENE	34524	<170	<340	<170	<170	<170	<170	<17000	<170	<19000	<170	<3300	<160	<160	<160
UG/KG-DRY	8270/3540-G														
BUTYLBENZYLPHTHALATE	34295	<110	<340	<100	<100	<100	<100	<10000	<110	<12000	<110	<2100	<100	<100	<100
UG/KG-DRY	8270/3540-G														
BIS(2-CHLOROETHYL)	34276	<74	<340	<73	<73	<73	<73	<7300	<74	<8200	<74	<1400	<72	<72	<72
ETHER UG/KG-DRY	8270/3540-G														
BIS(2-CHLOROETHOXY)	34281	<150	<340	<150	<150	<150	<150	<15000	<150	<16000	<150	<2900	<140	<140	<140
METHANE UG/KG-DRY	8270/3540-G														

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Environmental Science & Engineering DATE 05/24/94 STATUS :FINAL
PROJECT NUMBER 1944022G 0201 PROJECT NAME CDM - HANFORD N. SLOPE
FIELD GROUP CDMHNSS PROJECT MANAGER E.H. MANSFIELD
CDMHNSS.SID ALL LAB COORDINATOR EDWARD MANSFIELD

SAMPLE ID'S		WA07-2-05	EA11-1-07	EA12-1-10	EA12-2-12	EA14-1-01	EA14-2-01	WA16-1-02	WA16-2-03	WA17-1-03	WA19-1-08	WA19-2-07	WA19-3-05	WA19-4-05	WA20-1-04
PARAMETERS	STORET	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS
UNITS	METHOD	11	21	19	20	17	18	8	9	7	3	4	5	6	1
DATE		04/23/94	04/29/94	04/27/94	04/27/94	04/27/94	04/27/94	04/22/94	04/22/94	04/21/94	04/19/94	04/20/94	04/20/94	04/20/94	04/19/94
TIME		10:00	08:22	14:00	15:10	11:50	12:10	09:30	10:05	15:45	16:48	08:40	13:45	14:15	13:25
BIS(2-ETHYLHEXYL) PHTHALATEUG/KG-DRY	39102 8270/3540-G	<110	<340	<100	<100	<100	<100	<10000	<110	<12000	<110	<2100	<100	<100	<100
BIS(2-CHL'ISOPROPYL) ETHER UG/KG-DRY	34286 8270/3540-G	<74	<340	<73	<73	<73	<73	<7300	<74	<8200	<74	<1400	<72	<72	<72
4-BROMOPHENYL PHENYL ETHER UG/KG-DRY	34639 8270/3540-G	<150	<340	<150	<150	<150	<150	<15000	<150	<16000	<150	<2900	<140	<140	<140
4-CHLOROANILINE UG/KG-DRY	78867 8270/3540-G	<320	<340	<310	<310	<310	<310	<31000	<320	<35000	<320	<6200	<310	<310	<310
2-CHLORONAPHTHALENE UG/KG-DRY	34584 8270/3540-G	<74	<340	<73	<73	<73	<73	<7300	<74	<8200	<74	<1400	<72	<72	<72
2-CHLOROPHENOL UG/KG-DRY	34589 8270/3540-G	<150	<340	<150	<150	<150	<150	<15000	<150	<16000	<150	<2900	<140	<140	<140
4-CHLORO-3-METHYL PHENOL UG/KG-DRY	34455 8270/3540-G	<150	<340	<150	<150	<150	<150	<15000	<150	<16000	<150	<2900	<140	<140	<140
4-CHLOROPHENYLPHENYL ETHER UG/KG-DRY	34644 8270/3540-G	<110	<340	<100	<100	<100	<100	<10000	<110	<12000	<110	<2100	<100	<100	<100
CHRYSENE UG/KG-DRY	34323 8270/3540-G	<110	<340	<100	<100	<100	<100	<10000	<110	<12000	<110	<2100	<100	<100	<100
DIBEN(A,H)ANTH'CENE UG/KG-DRY	34559 8270/3540-G	<170	<340	<170	<170	<170	<170	<17000	<170	<19000	<170	<3300	<160	<160	<160
DIBENZOFURAN UG/KG-DRY	75647 8270/3540-G	<130	<340	<120	<130	<120	<120	<13000	<130	<14000	<130	<2500	<120	<120	<120
DI-N-BUTYL PHTHALATE UG/KG-DRY	39112 8270/3540-G	<74	<340	<73	<73	<73	<73	<7300	<74	<8200	<74	<1400	<72	<72	<72
1,3-DICHLOROBENZENE UG/KG-DRY	34569 8270/3540-G	<74	<340	<73	<73	<73	<73	<7300	<74	<8200	<74	<1400	<72	<72	<72
1,2-DICHLOROBENZENE UG/KG-DRY	34539 8270/3540-G	<74	<340	<73	<73	<73	<73	<7300	<74	<8200	<74	<1400	<72	<72	<72
1,4-DICHLOROBENZENE UG/KG-DRY	34574 8270/3540-G	<74	<340	<73	<73	<73	<73	<7300	<74	<8200	<74	<1400	<72	<72	<72
3,3-DICHL'BENZIDINE UG/KG-DRY	34634 8270/3540-G	<530	<340	<520	<520	<520	<520	<52000	<530	<59000	<530	<10000	<520	<520	<510
2,4-DICHLOROPHENOL UG/KG-DRY	34604 8270/3540-G	<150	<340	<150	<150	<150	<150	<15000	<150	<16000	<150	<2900	<140	<140	<140
DIETHYL PHTHALATE UG/KG-DRY	34339 8270/3540-G	<74	<340	<73	<73	<73	<73	<7300	<74	<8200	<74	<1400	<72	<72	<72
2,4-DIMETHYLPHENOL UG/KG-DRY	34609 8270/3540-G	<150	<340	<150	<150	<150	<150	<15000	<150	<16000	<150	<2900	<140	<140	<140
DIMETHYL PHTHALATE UG/KG-DRY	34344 8270/3540-G	<110	<340	<100	<100	<100	<100	<10000	<110	<12000	<110	<2100	<100	<100	<100
2,4-DINITROPHENOL UG/KG-DRY	34619 8270/3540-G	<1400	<830	<1400	<1400	<1400	<1300	<140000	<1400	<150000	<1400	<27000	<1300	<1300	<1300

PROJECT NUMBER 1944022G 0201 PROJECT NAME CDM - HANFORD N. SLOPE
FIELD GROUP CDMHNSS PROJECT MANAGER E.H. MANSFIELD
CDMHNSS.SID ALL LAB COORDINATOR EDWARD MANSFIELD

SAMPLE ID'S / PARAMETERS	UNITS	STORET / METHOD	WA07-2-05 CDMHNSS 11	EA11-1-07 CDMHNSS 21	EA12-1-10 CDMHNSS 19	EA12-2-12 CDMHNSS 20	EA14-1-01 CDMHNSS 17	EA14-2-01 CDMHNSS 18	WA16-1-02 CDMHNSS 8	WA16-2-03 CDMHNSS 9	WA17-1-03 CDMHNSS 7	WA19-1-08 CDMHNSS 3	WA19-2-07 CDMHNSS 4	WA19-3-05 CDMHNSS 5	WA19-4-05 CDMHNSS 6	WA20-1-04 CDMHNSS 1
DATE			04/23/94	04/29/94	04/27/94	04/27/94	04/27/94	04/27/94	04/22/94	04/22/94	04/21/94	04/19/94	04/20/94	04/20/94	04/20/94	04/19/94
TIME			10:00	08:22	14:00	15:10	11:50	12:10	09:30	10:05	15:45	16:48	08:40	13:45	14:15	13:25
2,4-DINITROTOLUENE	UG/KG-DRY	34614 / 8270/3540-G	<150	<340	<150	<150	<150	<150	<15000	<150	<16000	<150	<2900	<140	<140	<140
2,6-DINITROTOLUENE	UG/KG-DRY	34629 / 8270/3540-G	<150	<340	<150	<150	<150	<150	<15000	<150	<16000	<150	<2900	<140	<140	<140
DI-N-OCTYL PHTHALATE	UG/KG-DRY	34599 / 8270/3540-G	<150	<340	<150	<150	<150	<150	<15000	<150	<16000	<150	<2900	<140	<140	<140
FLUORANTHENE	UG/KG-DRY	34379 / 8270/3540-G	<74	<340	<73	<73	<73	<73	<7300	<74	<8200	<74	<1400	<72	<72	<72
FLUORENE	UG/KG-DRY	34384 / 8270/3540-G	<74	<340	<73	<73	<73	<73	<7300	<74	<8200	<74	<1400	<72	<72	<72
HEXACHLOROBENZENE	UG/KG-DRY	39701 / 8270/3540-G	<110	<340	<100	<100	<100	<100	<10000	<110	<12000	<110	<2100	<100	<100	<100
HEXACHLOROBUTADIENE	UG/KG-DRY	39705 / 8270/3540-G	<150	<340	<150	<150	<150	<150	<15000	<150	<16000	<150	<2900	<140	<140	<140
HEXACHLOROCYCLOPENTA DIENE	UG/KG-DRY	34389 / 8270/3540-G	<1100	<340	<1000	<1000	<1000	<1000	<100000	<1100	<120000	<1100	<21000	<1000	<1000	<1000
HEXACHLOROETHANE	UG/KG-DRY	34399 / 8270/3540-G	<110	<340	<100	<100	<100	<100	<10000	<110	<12000	<110	<2100	<100	<100	<100
INDENO(1,2,3-CD) PYRENE	UG/KG-DRY	34406 / 8270/3540-G	<170	<340	<170	<170	<170	<170	<17000	<170	<19000	<170	<3300	<160	<160	<160
ISOPHORONE	UG/KG-DRY	34411 / 8270/3540-G	<74	<340	<73	<73	<73	<73	<7300	<74	<8200	<74	<1400	<72	<72	<72
2-METHYLNAPHTHALENE	UG/KG-DRY	78868 / 8270/3540-G	<110	<340	<100	<100	<100	<100	<10000	<110	<12000	<110	<2100	<100	<100	<100
2-METHYL-4,6-DINITRO PHENOL	UG/KG-DRY	34660 / 8270/3540-G	<710	<830	<700	<700	<700	<700	<70000	<710	<79000	<700	<14000	<690	<690	<690
2-METHYLPHENOL	UG/KG-DRY	78872 / 8270/3540-G	<150	<340	<150	<150	<150	<150	<15000	<150	<16000	<150	<2900	<140	<140	<140
4-METHYLPHENOL	UG/KG-DRY	78803 / 8270/3540-G	<150	<340	<150	<150	<150	<150	<15000	<150	<16000	<150	<2900	<140	<140	<140
NAPHTHALENE	UG/KG-DRY	34445 / 8270/3540-G	<74	<340	<73	<73	<73	<73	<7300	<74	<8200	<74	<1400	<72	<72	<72
2-NITROANILINE	UG/KG-DRY	98588 / 8270/3540-G	<320	<830	<310	<310	<310	<310	<31000	<320	<35000	<320	<6200	<310	<310	<310
3-NITROANILINE	UG/KG-DRY	78869 / 8270/3540-G	<320	<830	<310	<310	<310	<310	<31000	<320	<35000	<320	<6200	<310	<310	<310
4-NITROANILINE	UG/KG-DRY	78870 / 8270/3540-G	<420	<830	<420	<420	<420	<410	<42000	<420	<47000	<420	<8200	<410	<410	<410
NITROBENZENE	UG/KG-DRY	34450 / 8270/3540-G	<74	<340	<73	<73	<73	<73	<7300	<74	<8200	<74	<1400	<72	<72	<72
2-NITROPHENOL	UG/KG-DRY	34594 / 8270/3540-G	<150	<340	<150	<150	<150	<150	<15000	<150	<16000	<150	<2900	<140	<140	<140

PROJECT NUMBER 1944022G 0201 PROJECT NAME CDM - HANFORD N. SLOPE
FIELD GROUP CDMHNSS PROJECT MANAGER E.H. MANSFIELD
CDMHNSS.SID ALL LAB COORDINATOR EDWARD MANSFIELD

SAMPLE ID'S		WA07-2-05	EA11-1-07	EA12-1-10	EA12-2-12	EA14-1-01	EA14-2-01	WA16-1-02	WA16 2-03	WA17-1-03	WA19-1-08	WA19-2-07	WA19-3-05	WA19-4-05	WA20-1-04
PARAMETERS	STORET	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS
UNITS	METHOD	11	21	19	20	17	18	8	9	7	3	4	5	6	1
DATE		04/23/94	04/29/94	04/27/94	04/27/94	04/27/94	04/27/94	04/22/94	04/22/94	04/21/94	04/19/94	04/20/94	04/20/94	04/20/94	04/19/94
TIME		10:00	08:22	14:00	15:10	11:50	12:10	09:30	10:05	15:45	16:48	08:40	13:45	14:15	13:25
4-NITROPHENOL	34649	<530	<830	<520	<520	<520	<520	<52000	<530	<59000	<530	<10000	<520	<520	<510
UG/KG-DRY	8270/3540-G														
N-NITROSODI-N-PROPYL	34431	<110	<340	<100	<100	<100	<100	<10000	<110	<12000	<110	<2100	<100	<100	<100
AMINE UG/KG-DRY	8270/3540-G														
N-NITROSODIPHE'AMINE	34436	<74	<340	<73	<73	<73	<73	<7300	<74	<8200	<74	<1400	<72	<72	<72
UG/KG-DRY	8270/3540-G														
PENTACHLOROPHENOL	39061	<260	<830	<260	<260	<260	<260	<26000	<260	<29000	<260	<5200	<260	<260	<260
UG/KG-DRY	8270/3540-G														
PHENANTHRENE	34464	<74	<340	<73	<73	<73	<73	<7300	<74	<8200	<74	<1400	<72	<72	<72
UG/KG-DRY	8270/3540-G														
PHENOL	34695	<150	<340	<150	<150	<150	<150	<15000	<150	<16000	<150	<2900	<140	<140	<140
UG/KG-DRY	8270/3540-G														
PYRENE	34472	<74	<340	<73	<73	<73	<73	<7300	<74	<8200	<74	<1400	<72	<72	<72
UG/KG-DRY	8270/3540-G														
1,2,4-TRICH'BENZENE	34554	<110	<340	<100	<100	<100	<100	<10000	<110	<12000	<110	<2100	<100	<100	<100
UG/KG-DRY	8270/3540-G														
2,4,6-TRICH'PHENOL	34624	<180	<340	<180	<180	<180	<180	<18000	<180	<20000	<180	<3500	<180	<180	<170
UG/KG-DRY	8270/3540-G														
2,4,5-TRICH'PHENOL	98587	<180	<830	<180	<180	<180	<180	<18000	<180	<20000	<180	<3500	<180	<180	<170
UG/KG-DRY	8270/3540-G														
ALDRIN	39333	<0.705	<1.73	<0.693	<0.696	<0.693	<0.692	<0.698	<0.705	<7.82	<0.700	<0.687	<0.687	<0.687	<0.685
UG/KG-DRY	8080/3540-G														
BHC,A	39076	<0.705	<1.73	<0.693	<0.696	<0.693	<0.692	<0.698	<0.705	<7.82	<0.700	<0.687	<0.687	<0.687	<0.685
UG/KG-DRY	8080/3540-G														
BHC,B	34257	<0.705	<1.73	<0.693	<0.696	<0.693	<0.692	<0.698	<0.705	<7.82	<0.700	<0.687	<0.687	<0.687	<0.685
UG/KG-DRY	8080/3540-G														
BHC,D	34262	<0.705	<1.73	<0.693	<0.696	<0.693	<0.692	<0.698	<0.705	<7.82	<0.700	<0.687	<0.687	<0.687	<0.685
UG/KG-DRY	8080/3540-G														
BHC,G(LINDANE)	39783	<0.705	<1.73	5.38	<0.696	<0.693	<0.692	<0.698	<0.705	<7.82	<0.700	<0.687	<0.687	<0.687	<0.685
UG/KG-DRY	8080/3540-G														
CHLORDANE	39351	<3.52	NRQ	<3.47	<3.48	<3.47	<3.46	<3.49	<3.53	<39.1	<3.50	<3.44	<3.44	<3.44	<3.43
UG/KG-DRY	8080/3540-G														
DDD,PP'	39311	<0.705	<3.47	2780	<0.696	3790	1630	<0.698	<0.705	<7.82	<0.700	54.7	<0.687	<0.687	62.7
UG/KG-DRY	8080/3540-G														
DDE,PP'	39321	<0.705	<3.47	3650	146	2130	1870	34.4	1.59	83.1	<0.700	37.4	74.0	85.5	298
UG/KG-DRY	8080/3540-G														
DDT,PP'	39301	<0.705	<3.47	5910	167	11600	5600	39.0	<0.705	879	<0.700	177	64.6	78.6	125
UG/KG-DRY	8080/3540-G														
DIELDRIN	39383	<0.705	<3.47	64.3	3.53	<0.693	<0.692	<0.698	<0.705	<7.82	<0.700	<0.687	<0.687	<0.687	<0.685
UG/KG-DRY	8080/3540-G														
ENDOSULFAN,A	34364	<0.705	<1.73	<0.693	<0.696	<0.693	<0.692	<0.698	<0.705	<7.82	<0.700	<0.687	<0.687	<0.687	<0.685
UG/KG-DRY	8080/3540-G														

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SAMPLE ID'S			WA07-2-05	EA11-1-07	EA12-1-10	EA12-2-12	EA14-1-01	EA14-2-01	WA16-1-02	WA16-2-03	WA17-1-03	WA19-1-08	WA19-2-07	WA19-3-05	WA19-4-05	WA20-1-04
PARAMETERS		STORET	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS
	UNITS	METHOD	11	21	19	20	17	18	8	9	7	3	4	5	6	1
DATE			04/23/94	04/29/94	04/27/94	04/27/94	04/27/94	04/27/94	04/22/94	04/22/94	04/21/94	04/19/94	04/20/94	04/20/94	04/20/94	04/19/94
TIME			10:00	08:22	14:00	15:10	11:50	12:10	09:30	10:05	15:45	16:48	08:40	13:45	14:15	13:25
ENDOSULFAN,B		34359	<0.705	<3.47	<0.693	<0.696	<0.693	<0.692	<0.698	<0.705	<7.82	<0.700	4.52	<0.687	<0.687	<0.685
	UG/KG-DRY	8080/3540-G														
ENDOSULFAN SULFATE		34354	<0.705	<3.47	<0.693	<0.696	<0.693	<0.692	<0.698	<0.705	<7.82	<0.700	<0.687	<0.687	<0.687	<0.685
	UG/KG-DRY	8080/3540-G														
ENDRIN		39393	<0.705	<3.47	<0.693	<0.696	<0.693	<0.692	<0.698	<0.705	<7.82	<0.700	<0.687	<0.687	<0.687	<0.685
	UG/KG-DRY	8080/3540-G														
ENDRIN ALDEHYDE		34369	<0.705	<3.47	<0.693	<0.696	<0.693	<0.692	<0.698	<0.705	<7.82	<0.700	<0.687	<0.687	<0.687	<0.685
	UG/KG-DRY	8080/3540-G														
HEPTACHLOR		39413	<0.705	<1.73	<0.693	<0.696	<0.693	<0.692	<0.698	<0.705	<7.82	<0.700	<0.687	<0.687	<0.687	<0.685
	UG/KG-DRY	8080/3540-G														
HEPTACHLOR EPOXIDE		39423	<0.705	<1.73	<0.693	<0.696	<0.693	<0.692	<0.698	<0.705	<7.82	<0.700	<0.687	<0.687	<0.687	<0.685
	UG/KG-DRY	8080/3540-G														
METHOXYCHLOR		39481	<0.705	<17.3	<0.693	<0.696	<0.693	<0.692	<0.698	<0.705	<7.82	<0.700	1.92	<0.687	<0.687	<0.685
	UG/KG-DRY	8080/3540-G														
TOXAPHENE		39403	<70.5	<173	<69.3	<69.6	<69.3	<69.2	<69.8	<70.5	<782	<70.0	<68.7	<68.7	<68.7	<68.5
	UG/KG-DRY	8080/3540-G														
PCB-1016		39514	<14.1	<34.7	<13.9	<13.9	<13.9	<13.8	<14.0	<14.1	<15.6	<14.0	<13.7	<13.7	<13.7	<13.7
	UG/KG-DRY	8080/3540-G														
PCB-1221		39491	<14.1	<69.3	<13.9	<13.9	<13.9	<13.8	<14.0	<14.1	<15.6	<14.0	<13.7	<13.7	<13.7	<13.7
	UG/KG-DRY	8080/3540-G														
PCB-1232		39495	<14.1	<34.7	<13.9	<13.9	<13.9	<13.8	<14.0	<14.1	<15.6	<14.0	<13.7	<13.7	<13.7	<13.7
	UG/KG-DRY	8080/3540-G														
PCB-1242		39499	<14.1	<34.7	<13.9	<13.9	<13.9	<13.8	<14.0	<14.1	<15.6	<14.0	<13.7	<13.7	<13.7	<13.7
	UG/KG-DRY	8080/3540-G														
PCB-1248		39503	<14.1	<34.7	<13.9	<13.9	<13.9	<13.8	<14.0	<14.1	<15.6	<14.0	344	<13.7	<13.7	<13.7
	UG/KG-DRY	8080/3540-G														
PCB-1254		39507	0.0	<34.7	<13.9	<13.9	<13.9	<13.8	<14.0	<14.1	<15.6	<14.0	344	<13.7	<13.7	<13.7
	UG/KG-DRY	8080/3540-G														
PCB-1260		39511	<14.1	<34.7	<13.9	<13.9	<13.9	<13.8	<14.0	<14.1	<15.6	<14.0	<13.7	<13.7	<13.7	<13.7
	UG/KG-DRY	8080/3540-G														

PROJECT NUMBER 1944022G 0201 PROJECT NAME CDM - HANFORD N. SLOPE
FIELD GROUP CDMHNSS PROJECT MANAGER E.H. MANSFIELD
CDMHNSS.SID ALL LAB COORDINATOR EDWARD MANSFIELD

SAMPLE ID'S / PARAMETERS	STORET METHOD	WA20-2-06 CDMHNSS 2	FBG1-1-02 CDMHNSS 24	WBG2-1-02 CDMHNSS 26	WBG2-2-02 CDMHNSS 27	WBG3-1-02 CDMHNSS 31	OCS1-1-00 CDMHNSS 23	ESV1-1-01 CDMHNSS 25	WSV2-1-01 CDMHNSS 30	EWC1-1-00 CDMHNSS 32	WWC2-1-00 CDMHNSS 33
UNITS											
DATE		04/19/94	05/03/94	05/03/94	05/03/94	05/04/94	05/03/94	05/03/94	05/04/94	05/05/94	05/05/94
TIME		14:10	11:30	15:00	15:25	14:30	08:15	12:35	13:05	10:35	12:20
SITE #	96274 0	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L
CHAIN OF CUSTODY #	96793 0	1	12	12	12	13	11	12	13	15	15
SCREEN,GR. ALPHA, (ESTIMATE)NCI/KG-WET	96636 R	<2.0	9.2	<2.0	<2.0	<2.0	24.3	10.9	<2.0	<2.0	4.2
SCREEN,GR. BETA, (ESTIMATE)NCI/KG-WET	96637 R	<6.0	17.3	<6.0	<6.0	21.0	24.5	25.9	<6.0	<6.0	10.4
MOISTURE %WET WT	70320 I	3.2	6.5	5.8	6.0	6.1	5.5	2.8	2.4	2.3	2.1
HYDROCARBONS,PETROL MG/KG-DRY	98233 AISON	<8.84	<8.94	<8.87	<8.89	<8.90	<8.85	<8.60	<8.57	255	57.2
ARSENIC MG/KG-DRY	1003 7060-G	3.01	6.71	4.71	5.11	3.07	4.87	3.89	1.64	3.64	1.82
SELENIUM MG/KG-DRY	1148 7740-G	<0.251	<0.262	<0.259	<0.260	<0.263	<0.260	<0.253	<0.254	<0.255	<0.255
MERCURY MG/KG-DRY	71921 7471M-G	<0.100	<0.098	<0.091	<0.099	<0.093	<0.104	<0.096	<0.096	<0.099	<0.093
BARIUM MG/KG-DRY	1008 6010-G	61.9	120	114	117	133	96.2	73.2	87.9	142	171
CADMIUM MG/KG-DRY	1028 6010-G	<0.507	<0.531	<0.521	<0.523	<0.511	<0.521	<0.509	<0.492	1.55	1.77
CHROMIUM MG/KG-DRY	1029 6010-G	6.21	7.15	7.69	7.47	7.66	11.3	8.15	6.44	9.42	56.4
LEAD MG/KG-DRY	1052 6010-G	<10.1	<10.6	<10.4	<10.5	<10.2	<10.4	27.2	<9.84	1140	1810
SILVER MG/KG-DRY	1078 6010-G	<0.507	<0.531	<0.521	<0.523	<0.511	<0.521	<0.509	<0.492	<0.507	<0.504
ACETONE UG/KG-DRY	75059 8260-G	<10.0	<11	<11	<11	<11	<11	<10.0	<10.0	<10.0	<10.0
BENZENE UG/KG-DRY	34237 8260-G	<5.2	<5.3	<5.3	<5.3	<5.3	<5.3	<5.1	<10.0	<5.1	<5.1
BROMODICHLOROMETHANE UG/KG-DRY	34330 8260-G	<5.2	<5.3	<5.3	<5.3	<5.3	<5.3	<5.1	<10.0	<5.1	<5.1
BROMOFORM UG/KG-DRY	34290 8260-G	<5.2	<5.3	<5.3	<5.3	<5.3	<5.3	<5.1	<10.0	<5.1	<5.1
BROMOMETHANE UG/KG-DRY	34416 8260-G	<10.0	<11	<11	<11	<11	<11	<10.0	<10.0	<10.0	<10.0
CARBON DISULFIDE UG/KG-DRY	78544 8260-G	<5.2	<5.3	<5.3	<5.3	<5.3	<5.3	<5.1	<10.0	<5.1	<5.1

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SAMPLE ID'S		WA20-2-06	EBG1-1-02	WBG2-1-02	WBG2-2-02	WBG3-1-02	OCS1-1-00	ESV1-1-01	WSV2-1-01	EWC1-1-00	WWC2-1-00
PARAMETERS	STORET	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS
UNITS	METHOD	2	24	26	27	31	23	25	30	32	33
DATE		04/19/94	05/03/94	05/03/94	05/03/94	05/04/94	05/03/94	05/03/94	05/04/94	05/05/94	05/05/94
TIME		14:10	11:30	15:00	15:25	14:30	08:15	12:35	13:05	10:35	12:20
CARBON TETRACHLORIDE UG/KG-DRY	34299 8260-G	<5.2	<5.3	<5.3	<5.3	<5.3	<5.3	<5.1	<10.0	<5.1	<5.1
CHLOROBENZENE UG/KG-DRY	34304 8260-G	<5.2	<5.3	<5.3	<5.3	<5.3	<5.3	<5.1	<10.0	<5.1	<5.1
CHLOROETHANE UG/KG-DRY	34314 8260-G	<10.0	<11	<11	<11	<11	<11	<10.0	<10.0	<10.0	<10.0
2-CHLOROETHYLVINYL-ETHER UG/KG-DRY	34579 8260-G	<5.2	<5.3	<5.3	<5.3	<5.3	<5.3	<5.1	NRQ	<5.1	<5.1
CHLOROFORM UG/KG-DRY	34318 8260-G	<5.2	<5.3	<5.3	<5.3	<5.3	<5.3	<5.1	<10.0	<5.1	<5.1
CHLOROMETHANE UG/KG-DRY	34421 8260-G	<10.0	<11	<11	<11	<11	<11	<10.0	<10.0	<10.0	<10.0
DIBROMOCHLOROMETHANE UG/KG-DRY	34309 8260-G	<5.2	<5.3	<5.3	<5.3	<5.3	<5.3	<5.1	<10.0	<5.1	<5.1
1,1-DICHLOROETHANE UG/KG-DRY	34499 8260-G	<5.2	<5.3	<5.3	<5.3	<5.3	<5.3	<5.1	<10.0	<5.1	<5.1
1,2-DICHLOROETHANE UG/KG-DRY	34534 8260-G	<5.2	<5.3	<5.3	<5.3	<5.3	<5.3	<5.1	<10.0	<5.1	<5.1
1,1-DICHLOROETHYLENE UG/KG-DRY	34504 8260-G	<5.2	<5.3	<5.3	<5.3	<5.3	<5.3	<5.1	<10.0	<5.1	<5.1
1,2-DICHLOROETHENE(TOTAL) UG/KG-DRY	96464 8260-G	<5.2	<5.3	<5.3	<5.3	<5.3	<5.3	<5.1	<10.0	<5.1	<5.1
1,2-DICHLOROPROPANE UG/KG-DRY	34544 8260-G	<5.2	<5.3	<5.3	<5.3	<5.3	<5.3	<5.1	<10.0	<5.1	<5.1
CIS-1,3-DICHLORO-PROPENE UG/KG-DRY	34702 8260-G	<5.2	<5.3	<5.3	<5.3	<5.3	<5.3	<5.1	<10.0	<5.1	<5.1
TRANS-1,3-DICHLORO-PROPENE UG/KG-DRY	34697 8260-G	<5.2	<5.3	<5.3	<5.3	<5.3	<5.3	<5.1	<10.0	<5.1	<5.1
ETHYLBENZENE UG/KG-DRY	34374 8260-G	<5.2	<5.3	<5.3	<5.3	<5.3	<5.3	<5.1	<10.0	<5.1	<5.1
2-HEXANONE UG/KG-DRY	75166 8260-G	<10.0	<11	<11	<11	<11	<11	<10.0	<10.0	<10.0	<10.0
METHYLENE CHLORIDE UG/KG-DRY	34426 8260-G	7.1	<5.3	<5.3	<5.3	<5.3	<5.3	<5.1	<10.0	<5.1	<5.1
METHYL ETHYL KETONE UG/KG-DRY	75078 8260-G	<10.0	<11	<11	<11	<11	<11	<10.0	<10.0	<10.0	<10.0
METHYLISOBUTYLKETONE UG/KG-DRY	75169 8260-G	<10.0	<11	<11	<11	<11	<11	<10.0	<10.0	<10.0	<10.0
STYRENE UG/KG-DRY	75192 8260-G	<5.2	<5.3	<5.3	<5.3	<5.3	<5.3	<5.1	<10.0	<5.1	<5.1
1,1,2,2-TETRACHLORO-ETHANE UG/KG-DRY	34519 8260-G	<5.2	<5.3	<5.3	<5.3	<5.3	<5.3	<5.1	<10.0	<5.1	<5.1

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SAMPLE ID'S		WA20-2-06	EBG1-1-02	WBG2-1-02	WBG2-2-02	WBG3-1-02	OCS1-1-00	ESV1-1-01	WSV2-1-01	EWC1-1-00	WWC2-1-00
PARAMETERS	STORET	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS
UNITS	METHOD	2	24	26	27	31	23	25	30	32	33
DATE		04/19/94	05/03/94	05/03/94	05/03/94	05/04/94	05/03/94	05/03/94	05/04/94	05/05/94	05/05/94
TIME		14:10	11:30	15:00	15:25	14:30	08:15	12:35	13:05	10:35	12:20
TETRACHLOROETHENE	34478	<5.2	<5.3	<5.3	<5.3	<5.3	<5.3	<5.1	<10.0	<5.1	<5.1
UG/KG-DRY	8260-G										
TOLUENE	34483	<5.2	<5.3	<5.3	<5.3	<5.3	<5.3	<5.1	<10.0	<5.1	<5.1
UG/KG-DRY	8260-G										
1,1,1-TRICHL'ETHANE	34509	<5.2	<5.3	<5.3	<5.3	<5.3	<5.3	<5.1	<10.0	<5.1	<5.1
UG/KG-DRY	8260-G										
1,1,2-TRICHL'ETHANE	34514	<5.2	<5.3	<5.3	<5.3	<5.3	<5.3	<5.1	<10.0	<5.1	<5.1
UG/KG-DRY	8260-G										
TRICHLOROETHENE	34487	<5.2	<5.3	<5.3	<5.3	<5.3	<5.3	<5.1	<10.0	<5.1	<5.1
UG/KG-DRY	8260-G										
VINYL CHLORIDE	34495	<10.0	<11	<11	<11	<11	<11	<10.0	<10.0	<10.0	<10.0
UG/KG-DRY	8260-G										
VINYL ACETATE	98583	<10.0	<11	<11	<11	<11	<11	<10.0	NRQ	<10.0	<10.0
UG/KG-DRY	8260-G										
XYLENE,TOTAL	45510	<5.2	<5.3	<5.3	<5.3	<5.3	<5.3	<5.1	NRQ	<5.1	220
UG/KG-DRY	8260-G										
ACENAPHTHENE	34208	<72	<75	<74	<74	<75	<74	<72	<340	9700	<72
UG/KG-DRY	8270/3540-G										
ACENAPHTHYLENE	34203	<150	<160	<160	<160	<160	<160	<150	<340	<3100	<150
UG/KG-DRY	8270/3540-G										
ANTHRACENE	34223	<72	<75	<74	<74	<75	<74	<72	<340	14000	<72
UG/KG-DRY	8270/3540-G										
BENZYL ALCOHOL	75212	<140	<150	<150	<150	<150	<150	<140	NRQ	<2900	<140
UG/KG-DRY	8270/3540-G										
BENZOIC ACID	75315	<2800	<2900	<2900	<2900	<2900	<2900	<2800	NRQ	<55000	<2800
UG/KG-DRY	8270/3540-G										
BENZO(A)ANTHRACENE	34529	<100	<110	<110	<110	<110	<110	<100	<340	8300	<100
UG/KG-DRY	8270/3540-G										
BENZO(B)FLUORANTHENE	34233	<100	<110	<110	<110	<110	<110	<100	<340	6800	<100
UG/KG-DRY	8270/3540-G										
BENZO(K)FLUORANTHENE	34245	<100	<110	<110	<110	<110	<110	<100	<340	2300	<100
UG/KG-DRY	8270/3540-G										
BENZO(A)PYRENE	34250	<140	<150	<150	<150	<150	<150	<140	<340	5300	<140
UG/KG-DRY	8270/3540-G										
BENZO(GHI)PERYLENE	34524	<170	<170	<170	<170	<170	<170	<160	<340	<3300	<160
UG/KG-DRY	8270/3540-G										
BUTYLBENZYLPHTHALATE	34295	<100	<110	<110	<110	<110	<110	<100	<340	<2000	<100
UG/KG-DRY	8270/3540-G										
BIS(2-CHLOROETHYL)	34276	<72	<75	<74	<74	<75	<74	<72	<340	<1400	<72
ETHER UG/KG-DRY	8270/3540-G										
BIS(2-CHLOROETHOXY)	34281	<140	<150	<150	<150	<150	<150	<140	<340	<2900	<140
METHANE UG/KG-DRY	8270/3540-G										

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PROJECT NUMBER 1944022G 0201 PROJECT NAME CDM - HANFORD N. SLOPE
FIELD GROUP CDMHNSS PROJECT MANAGER E.H. MANSFIELD
CDMHNSS.SID ALL LAB COORDINATOR EDWARD MANSFIELD

SAMPLE ID'S		WA20-2-06	EBG1-1-02	WBG2-1-02	WBG2-2-02	WBG3-1-02	OCS1-1-00	ESV1-1-01	WSV2-1-01	EWC1-1-00	WWC2-1-00
PARAMETERS	STORET	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS
UNITS	METHOD	2	24	26	27	31	23	25	30	32	33
DATE		04/19/94	05/03/94	05/03/94	05/03/94	05/04/94	05/03/94	05/03/94	05/04/94	05/05/94	05/05/94
TIME		14:10	11:30	15:00	15:25	14:30	08:15	12:35	13:05	10:35	12:20
BIS(2-ETHYLHEXYL) PHTHALATE UG/KG-DRY	39102 8270/3540-G	<100	<110	<110	120	4500	<110	<100	<340	<2000	1400
BIS(2-CHL'ISOPROPYL) ETHER UG/KG-DRY	34286 8270/3540-G	<72	<75	<74	<74	<75	<74	<72	<340	<1400	<72
4-BROMOPHENYL PHENYL ETHER UG/KG-DRY	34639 8270/3540-G	<140	<150	<150	<150	<150	<150	<140	<340	<2900	<140
4-CHLOROANILINE UG/KG-DRY	78867 8270/3540-G	<310	<320	<320	<320	<320	<320	<310	<340	<6100	<310
2-CHLORONAPHTHALENE UG/KG-DRY	34584 8270/3540-G	<72	<75	<74	<74	<75	<74	<72	<340	<1400	<72
2-CHLOROPHENOL UG/KG-DRY	34589 8270/3540-G	<140	<150	<150	<150	<150	<150	<140	<340	<2900	<140
4-CHLORO-3-METHYL PHENOL UG/KG-DRY	34455 8270/3540-G	<140	<150	<150	<150	<150	<150	<140	<340	<2900	<140
4-CHLOROPHENYLPHENYL ETHER UG/KG-DRY	34644 8270/3540-G	<100	<110	<110	<110	<110	<110	<100	<340	<2000	<100
CHRYSENE UG/KG-DRY	34323 8270/3540-G	<100	<110	<110	<110	<110	<110	<100	<340	8600	<100
DIBEN(A,H)ANTH'CENE UG/KG-DRY	34559 8270/3540-G	<170	<170	<170	<170	<170	<170	<160	<340	<3300	<160
DIBENZOFURAN UG/KG-DRY	75647 8270/3540-G	<120	<130	<130	<130	<130	<130	<120	<340	8500	<120
DI-N-BUTYL PHTHALATE UG/KG-DRY	39112 8270/3540-G	<72	<75	<74	<74	<75	<74	<72	<340	<1400	530
1,3-DICHLOROBENZENE UG/KG-DRY	34569 8270/3540-G	<72	<75	<74	<74	<75	<74	<72	<340	<1400	<72
1,2-DICHLOROBENZENE UG/KG-DRY	34539 8270/3540-G	<72	<75	<74	<74	<75	<74	<72	<340	<1400	<72
1,4-DICHLOROBENZENE UG/KG-DRY	34574 8270/3540-G	<72	<75	<74	<74	<75	<74	<72	<340	<1400	<72
3,3-DICHL'BENZIDINE UG/KG-DRY	34634 8270/3540-G	<520	<530	<530	<530	<530	<530	<510	<340	<10000	<510
2,4-DICHLOROPHENOL UG/KG-DRY	34604 8270/3540-G	<140	<150	<150	<150	<150	<150	<140	<340	<2900	<140
DIETHYL PHTHALATE UG/KG-DRY	34339 8270/3540-G	<72	<75	<74	<74	<75	<74	<72	<340	<1400	<72
2,4-DIMETHYLPHENOL UG/KG-DRY	34609 8270/3540-G	<140	<150	<150	<150	<150	<150	<140	<340	<2900	<140
DIMETHYL PHTHALATE UG/KG-DRY	34344 8270/3540-G	<100	<110	<110	<110	<110	<110	<100	<340	<2000	<100
2,4-DINITROPHENOL UG/KG-DRY	34619 8270/3540-G	<1300	<1400	<1400	<1400	<1400	<1400	<1300	<820	<27000	<1300

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PROJECT NUMBER 1944022G 0201 PROJECT NAME CDM - HANFORD N. SLOPE
FIELD GROUP CDMHNSS PROJECT MANAGER E.H. MANSFIELD
CDMHNSS.SID ALL LAB COORDINATOR EDWARD MANSFIELD

SAMPLE ID'S		WA20-2-06	EBG1-1-02	WBG2-1-02	WBG2-2-02	WBG3-1-02	OCS1-1-00	ESV1-1-01	WSV2-1-01	EWC1-1-00	WWC2-1-00
PARAMETERS	STORET	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS
UNITS	METHOD	2	24	26	27	31	23	25	30	32	33
DATE		04/19/94	05/03/94	05/03/94	05/03/94	05/04/94	05/03/94	05/03/94	05/04/94	05/05/94	05/05/94
TIME		14:10	11:30	15:00	15:25	14:30	08:15	12:35	13:05	10:35	12:20
2,4-DINITROTOLUENE	34614	<140	<150	<150	<150	<150	<150	<140	<340	<2900	<140
UG/KG-DRY	8270/3540-G										
2,6-DINITROTOLUENE	34629	<140	<150	<150	<150	<150	<150	<140	<340	<2900	<140
UG/KG-DRY	8270/3540-G										
DI-N-OCTYL PHTHALATE	34599	<140	<150	<150	<150	<150	<150	<140	<340	<2900	1600
UG/KG-DRY	8270/3540-G										
FLUORANTHENE	34379	<72	<75	<74	<74	<75	<74	<72	<340	24000	<72
UG/KG-DRY	8270/3540-G										
FLUORENE	34384	<72	<75	<74	<74	<75	<74	<72	<340	14000	<72
UG/KG-DRY	8270/3540-G										
HEXACHLOROBENZENE	39701	<100	<110	<110	<110	<110	<110	<100	<340	<2000	<100
UG/KG-DRY	8270/3540-G										
HEXACHLOROBUTADIENE	39705	<140	<150	<150	<150	<150	<150	<140	<340	<2900	<140
UG/KG-DRY	8270/3540-G										
HEXACHLOROCYCLOPENTA	34389	<1000	<1100	<1100	<1100	<1100	<1100	<1000	<340	<20000	<1000
DIENE UG/KG-DRY	8270/3540-G										
HEXACHLOROETHANE	34399	<100	<110	<110	<110	<110	<110	<100	<340	<2000	<100
UG/KG-DRY	8270/3540-G										
INDENO(1,2,3-CD)	34406	<170	<170	<170	<170	<170	<170	<160	<340	<3300	<160
PYRENE UG/KG-DRY	8270/3540-G										
ISOPHORONE	34411	<72	<75	<74	<74	<75	<74	<72	<340	<1400	<72
UG/KG-DRY	8270/3540-G										
2-METHYLNAPHTHALENE	78860	<100	<110	<110	<110	<110	<110	<100	<340	12000	140
UG/KG-DRY	8270/3540-G										
2-METHYL-4,6-DINITRO	34660	<690	<720	<710	<710	<710	<710	<690	<820	<14000	<680
PHENOL UG/KG-DRY	8270/3540-G										
2-METHYLPHENOL	78872	<140	<150	<150	<150	<150	<150	<140	<340	<2900	<140
UG/KG-DRY	8270/3540-G										
4-METHYLPHENOL	78803	<140	<150	<150	<150	<150	<150	<140	<340	<2900	<140
UG/KG-DRY	8270/3540-G										
NAPHTHALENE	34445	<72	<75	<74	<74	<75	<74	<72	<340	8000	250
UG/KG-DRY	8270/3540-G										
2-NITROANILINE	98588	<310	<320	<320	<320	<320	<320	<310	<820	<6100	<310
UG/KG-DRY	8270/3540-G										
3-NITROANILINE	78869	<310	<320	<320	<320	<320	<320	<310	<820	<6100	<310
UG/KG-DRY	8270/3540-G										
4-NITROANILINE	78870	<410	<430	<420	<430	<430	<420	<410	<820	<8200	<410
UG/KG-DRY	8270/3540-G										
NITROBENZENE	34450	<72	<75	<74	<74	<75	<74	<72	<340	<1400	<72
UG/KG-DRY	8270/3540-G										
2-NITROPHENOL	34594	<140	<150	<150	<150	<150	<150	<140	<340	<2900	<140
UG/KG-DRY	8270/3540-G										

PROJECT NUMBER 1944022G 0201 PROJECT NAME CDM - HANFORD N. SLOPE
FIELD GROUP CDMHNSS PROJECT MANAGER E.H. MANSFIELD
CDMHNSS.SID ALL LAB COORDINATOR EDWARD MANSFIELD

SAMPLE ID'S		WA20-2-06	EBG1-1-02	WBG2-1-02	WBG2-2-02	WBG3-1-02	OCS1-1-00	ESV1-1-01	WSV2-1-01	EWC1-1-00	WWC2-1-00
PARAMETERS	STORET	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS
UNITS	METHOD	2	24	26	27	31	23	25	30	32	33
DATE		04/19/94	05/03/94	05/03/94	05/03/94	05/04/94	05/03/94	05/03/94	05/04/94	05/05/94	05/05/94
TIME		14:10	11:30	15:00	15:25	14:30	08:15	12:35	13:05	10:35	12:20
4-NITROPHENOL	34649	<520	<530	<530	<530	<530	<530	<510	<820	<10000	<510
UG/KG-DRY	8270/3540-G										
N-NITROSODI-N-PROPYL	34431	<100	<110	<110	<110	<110	<110	<100	<340	<2000	<100
AMINE UG/KG-DRY	8270/3540-G										
N-NITROSODIPHE'AMINE	34436	<72	<75	<74	<74	<75	<74	<72	<340	<1400	<72
UG/KG-DRY	8270/3540-G										
PENTACHLOROPHENOL	39061	<260	<270	<270	<270	<270	<260	<260	<820	<5100	<260
UG/KG-DRY	8270/3540-G										
PHENANTHRENE	34464	<72	<75	<74	<74	<75	<74	<72	<340	57000	<72
UG/KG-DRY	8270/3540-G										
PHENOL	34695	<140	<150	<150	<150	<150	<150	<140	<340	<2900	<140
UG/KG-DRY	8270/3540-G										
PYRENE	34472	<72	<75	<74	<74	<75	<74	<72	<340	18000	<72
UG/KG-DRY	8270/3540-G										
1,2,4-TRICH'BENZENE	34554	<100	<110	<110	<110	<110	<110	<100	<340	<2000	<100
UG/KG-DRY	8270/3540-G										
2,4,6-TRICH'PHENOL	34624	<180	<180	<180	<180	<180	<180	<170	<340	<3500	<170
UG/KG-DRY	8270/3540-G										
2,4,5-TRICH'PHENOL	98587	<180	<180	<180	<180	<180	<180	<170	<820	<3500	<170
UG/KG-DRY	8270/3540-G										
ALDRIN	39333	<0.689	<0.927	<0.920	<0.922	<0.923	<0.917	<0.892	<1.71	<0.887	<0.885
UG/KG-DRY	8080/3540-G										
BHC,A	39076	<0.689	<0.713	<0.708	<0.709	<0.710	<0.705	<0.686	<1.71	<0.682	<0.681
UG/KG-DRY	8080/3540-G										
BHC,B	34257	<0.689	<1.35	<1.34	<1.35	<1.35	<1.34	<1.30	<1.71	<1.30	<1.29
UG/KG-DRY	8080/3540-G										
BHC,D	34262	<0.689	<0.713	<0.708	<0.709	<0.710	<0.705	<0.686	<1.71	<0.682	<0.681
UG/KG-DRY	8080/3540-G										
BHC,G(LINDANE)	39783	<0.689	<0.713	<0.708	<0.709	<0.710	<0.705	<0.686	<1.71	<0.682	<0.681
UG/KG-DRY	8080/3540-G										
CHLORDANE	39351	<3.44	<3.57	<3.54	<3.55	<3.55	<3.53	<3.43	NRQ	<3.41	<3.40
UG/KG-DRY	8080/3540-G										
DDD,PP'	39311	<0.689	8.02	<0.750	<0.752	<0.753	<0.748	597	<3.42	150	15.1
UG/KG-DRY	8080/3540-G										
DDE,PP'	39321	<0.689	1.57	<0.708	<0.709	<0.710	<0.705	1660	37.2	422	25.0
UG/KG-DRY	8080/3540-G										
DDT,PP'	39301	<0.689	12.9	1.66	1.47	<0.753	<0.748	806	14.5	356	161
UG/KG-DRY	8080/3540-G										
DIELDRIN	39383	<0.689	<0.856	<0.849	<0.851	<0.852	<0.847	<0.823	<3.42	<0.819	<0.817
UG/KG-DRY	8080/3540-G										
ENDOSULFAN,A	34364	<0.689	<0.713	<0.708	<0.709	<0.710	<0.705	<0.686	<1.71	<0.682	<0.681
UG/KG-DRY	8080/3540-G										

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PROJECT NUMBER 1944022G 0201 PROJECT NAME CDM - HANFORD N. SLOPE
FIELD GROUP CDMHNSS PROJECT MANAGER E.H. MANSFIELD
CDMHNSS.SID ALL LAB COORDINATOR EDWARD MANSFIELD

SAMPLE ID'S			WA20-2-06	EBG1-1-02	WBG2-1-02	WBG2-2-02	WBG3-1-02	OCS1-1-00	ESV1-1-01	WSV2-1-01	EWC1-1-00	WWC2-1-00
PARAMETERS		STORET	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS
	UNITS	METHOD	2	24	26	27	31	23	25	30	32	33
DATE			04/19/94	05/03/94	05/03/94	05/03/94	05/04/94	05/03/94	05/03/94	05/04/94	05/05/94	05/05/94
TIME			14:10	11:30	15:00	15:25	14:30	08:15	12:35	13:05	10:35	12:20
ENDOSULFAN,B		34359	<0.689	<0.713	<0.708	<0.709	<0.710	<0.705	<0.686	<3.42	<0.682	<0.681
	UG/KG-DRY	8080/3540-G										
ENDOSULFAN SULFATE		34354	<0.689	<0.713	<0.708	<0.709	<0.710	<0.705	<0.686	<3.42	<0.682	<0.681
	UG/KG-DRY	8080/3540-G										
ENDRIN		39393	<0.689	<0.749	<0.743	<0.745	<0.745	<0.741	<0.720	<3.42	<0.716	<0.715
	UG/KG-DRY	8080/3540-G										
ENDRIN ALDEHYDE		34369	<0.689	<0.713	<0.708	<0.709	<0.710	<0.705	<0.686	<3.42	<0.682	<0.681
	UG/KG-DRY	8080/3540-G										
HEPTACHLOR		39413	<0.689	<0.713	<0.708	<0.709	<0.710	<0.705	<0.686	<1.71	<0.682	<0.681
	UG/KG-DRY	8080/3540-G										
HEPTACHLOR EPOXIDE		39423	<0.689	<0.713	<0.708	<0.709	<0.710	<0.705	<0.686	<1.71	<0.682	<0.681
	UG/KG-DRY	8080/3540-G										
METHOXYCHLOR		39481	<0.689	<1.15	<1.14	<1.14	<1.14	<1.14	<1.10	<17.1	<1.10	<1.10
	UG/KG-DRY	8080/3540-G										
TOXAPHENE		39403	<68.9	<71.3	<70.8	<70.9	<71.0	<70.5	<68.6	<171	<68.2	<68.1
	UG/KG-DRY	8080/3540-G										
PCB-1016		39514	<13.8	<14.3	<14.2	<14.2	<14.2	<14.1	<13.7	<34.2	<13.6	<13.6
	UG/KG-DRY	8080/3540-G										
PCB-1221		39491	<13.8	<14.3	<14.2	<14.2	<14.2	<14.1	<13.7	<68.3	<13.6	<13.6
	UG/KG-DRY	8080/3540-G										
PCB-1232		39495	<13.8	<14.3	<14.2	<14.2	<14.2	<14.1	<13.7	<34.2	<13.6	<13.6
	UG/KG-DRY	8080/3540-G										
PCB-1242		39499	<13.8	<14.3	<14.2	<14.2	<14.2	<14.1	<13.7	<34.2	<13.6	<13.6
	UG/KG-DRY	8080/3540-G										
PCB-1248		39503	<13.8	<14.3	<14.2	<14.2	<14.2	<14.1	<13.7	<34.2	<13.6	<13.6
	UG/KG-DRY	8080/3540-G										
PCB-1254		39507	<13.8	<14.3	<14.2	<14.2	<14.2	<14.1	<13.7	<34.2	<13.6	<13.6
	UG/KG-DRY	8080/3540-G										
PCB-1260		39511	<13.8	<14.3	<14.2	<14.2	<14.2	<14.1	<13.7	<34.2	<13.6	<13.6
	UG/KG-DRY	8080/3540-G										

Soils Data

Sorted on Collection Date

Environmental Science & Engineering DATE 05/24/94 STATUS :FINAL
PROJECT NUMBER 1944022G 0201 PROJECT NAME CDM - HANFORD N. SLOPE
FIELD GROUP CDMHNSS PROJECT MANAGER E.H. MANSFIELD
CDMHNSS.NUM ALL LAB COORDINATOR EDWARD MANSFIELD

SAMPLE ID'S / PARAMETERS / UNITS	STORET / METHOD	WA20-1-04 CDMHNSS 1	WA20-2-06 CDMHNSS 2	WA19-1-08 CDMHNSS 3	WA19-2-07 CDMHNSS 4	WA19-3-05 CDMHNSS 5	WA19-4-05 CDMHNSS 6	WA17-1-03 CDMHNSS 7	WA16-1-02 CDMHNSS 8	WA16-2-03 CDMHNSS 9	WA07-1-01 CDMHNSS 10	WA07-2-05 CDMHNSS 11	WA05-1-04 CDMHNSS 12	WA05-2-03 CDMHNSS 13	WA05-3-04 CDMHNSS 14
DATE		04/19/94	04/19/94	04/19/94	04/20/94	04/20/94	04/20/94	04/21/94	04/22/94	04/22/94	04/22/94	04/23/94	04/23/94	04/25/94	04/25/94
TIME		13:25	14:10	16:48	08:40	13:45	14:15	15:45	09:30	10:05	15:45	10:00	16:00	09:00	09:10
SITE #	96274 0	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L
CHAIN OF CUSTODY #	96793 0	1	1	1	1	2	2	4	4	4	3	3	3	7	7
SCREEN.GR. ALPHA, (ESTIMATE)NCI/KG-WET	96636 R	20.9	<2.0	<2.0	18.7	11.0	<2.0	NA	NA	NA	18.5	27.0	11.8	29.2	43.6
SCREEN.GR. BETA, (ESTIMATE)NCI/KG-WET	96637 R	29.2	<6.0	<6.0	16.4	17.2	27.7	NA	NA	NA	12.6	22.8	17.0	37.6	8.1
MOISTURE %WET WT	70320 1	2.7	3.2	4.8	3.0	3.0	3.0	14.8	4.5	5.5	3.3	5.4	2.8	3.2	5.4
HYDROCARBONS,PETROL MG/KG-DRY	98233 AISON	<8.79	<8.84	<8.99	5850	<8.62	<8.62	85900	3610	<8.85	125	<8.84	<8.60	128	<8.84
ARSENIC MG/KG-DRY	1003 7060-G	2.26	3.01	3.21	2.86	3.75	3.52	41.6	4.32	8.18	3.68	8.20	2.54	1.89	4.68
SELENIUM MG/KG-DRY	1148 7740-G	<0.252	<0.251	<0.252	<0.254	<0.244	<0.245	<0.290	<0.259	<0.260	<0.258	<0.263	<0.256	<0.256	<0.249
MERCURY MG/KG-DRY	71921 7471M-G	<0.099	<0.100	<0.104	<0.102	<0.093	<0.093	0.116	<0.092	<0.094	<0.103	<0.104	<0.103	<0.100	<0.103
BARIUM MG/KG-DRY	1008 6010-G	80.0	61.9	87.4	96.2	100.0	107	91.9	90.9	105	96.0	147	82.2	82.9	125
CADMIUM MG/KG-DRY	1028 6010-G	<0.503	<0.507	<0.510	1.38	<0.513	<0.500	<0.583	0.671	<0.527	<0.517	<0.524	<0.512	<0.513	<0.524
CHROMIUM MG/KG-DRY	1029 6010-G	6.40	6.21	9.02	7.66	7.45	5.56	14.5	25.0	10.7	11.3	18.2	9.22	14.6	7.67
LEAD MG/KG-DRY	1052 6010-G	<10.1	<10.1	<10.2	61.8	<10.3	11.6	<11.7	217	<10.5	39.6	11.9	<10.2	111	<10.5
SILVER MG/KG-DRY	1078 6010-G	<0.503	<0.507	<0.510	<0.509	<0.513	<0.500	<0.583	<0.523	<0.527	<0.517	<0.524	<0.512	<0.513	<0.524
ACETONE UG/KG-DRY	75059 8260-G	<10.0	<10.0	<11	<10.0	<10.0	<10.0	<12	<10.0	<11	<10.0	<11	<10.0	<10.0	<11
BENZENE UG/KG-DRY	34237 8260-G	<5.1	<5.2	<5.3	<5.2	<5.2	<5.2	<5.9	<5.2	<5.3	<5.2	<5.3	<5.1	<5.2	<5.3
BROMODICHLOROMETHANE UG/KG-DRY	34330 8260-G	<5.1	<5.2	<5.3	<5.2	<5.2	<5.2	<5.9	<5.2	<5.3	<5.2	<5.3	<5.1	<5.2	<5.3
BROMOFORM UG/KG-DRY	34290 8260-G	<5.1	<5.2	<5.3	<5.2	<5.2	<5.2	<5.9	<5.2	<5.3	<5.2	<5.3	<5.1	<5.2	<5.3
BROMOMETHANE UG/KG-DRY	34416 8260-G	<10.0	<10.0	<11	<10.0	<10.0	<10.0	<12	<10.0	<11	<10.0	<11	<10.0	<10.0	<11
CARBON DISULFIDE UG/KG-DRY	78544 8260-G	<5.1	<5.2	<5.3	<5.2	<5.2	<5.2	<5.9	<5.2	<5.3	<5.2	<5.3	<5.1	<5.2	<5.3

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Environmental Science & Engineering DATE 05/24/94 STATUS :FINAL
PROJECT NUMBER 1944022G 0201 PROJECT NAME CDM - HANFORD N. SLOPE
FIELD GROUP CDMHNSS PROJECT MANAGER E.H. MANSFIELD
CDMHNSS.NUM ALL LAB COORDINATOR EDWARD MANSFIELD

SAMPLE ID'S PARAMETERS UNITS	STORET METHOD	WA20-1-04 CDMHNSS 1	WA20-2-06 CDMHNSS 2	WA19-1-08 CDMHNSS 3	WA19-2-07 CDMHNSS 4	WA19-3-05 CDMHNSS 5	WA19-4-05 CDMHNSS 6	WA17-1-03 CDMHNSS 7	WA16-1-02 CDMHNSS 8	WA16-2-03 CDMHNSS 9	WA07-1-01 CDMHNSS 10	WA07-2-05 CDMHNSS 11	WA05-1-04 CDMHNSS 12	WA05-2-03 CDMHNSS 13	WA05-3-04 CDMHNSS 14
DATE		04/19/94	04/19/94	04/19/94	04/20/94	04/20/94	04/20/94	04/21/94	04/22/94	04/22/94	04/22/94	04/23/94	04/23/94	04/25/94	04/25/94
TIME		13:25	14:10	16:48	08:40	13:45	14:15	15:45	09:30	10:05	15:45	10:00	16:00	09:00	09:10
CARBON TETRACHLORIDE UG/KG-DRY	34299 8260-G	<5.1	<5.2	<5.3	<5.2	<5.2	<5.2	<5.9	<5.2	<5.3	<5.2	<5.3	<5.1	<5.2	<5.3
CHLOROBENZENE UG/KG-DRY	34304 8260-G	<5.1	<5.2	<5.3	<5.2	<5.2	<5.2	<5.9	<5.2	<5.3	<5.2	<5.3	<5.1	<5.2	<5.3
CHLOROETHANE UG/KG-DRY	34314 8260-G	<10.0	<10.0	<11	<10.0	<10.0	<10.0	<12	<10.0	<11	<10.0	<11	<10.0	<10.0	<11
2-CHLOROETHYLVINYL-ETHER UG/KG-DRY	34579 8260-G	<5.1	<5.2	<5.3	<5.2	<5.2	<5.2	<5.9	<5.2	<5.3	<5.2	<5.3	<5.1	<5.2	<5.3
CHLOROFORM UG/KG-DRY	34318 8260-G	<5.1	<5.2	<5.3	<5.2	<5.2	<5.2	<5.9	<5.2	<5.3	<5.2	<5.3	<5.1	<5.2	<5.3
CHLOROMETHANE UG/KG-DRY	34421 8260-G	<10.0	<10.0	<11	<10.0	<10.0	<10.0	<12	<10.0	<11	<10.0	<11	<10.0	<10.0	<11
DIBROMOCHLOROMETHANE UG/KG-DRY	34309 8260-G	<5.1	<5.2	<5.3	<5.2	<5.2	<5.2	<5.9	<5.2	<5.3	<5.2	<5.3	<5.1	<5.2	<5.3
1,1-DICHLOROETHANE UG/KG-DRY	34499 8260-G	<5.1	<5.2	<5.3	<5.2	<5.2	<5.2	<5.9	<5.2	<5.3	<5.2	<5.3	<5.1	<5.2	<5.3
1,2-DICHLOROETHANE UG/KG-DRY	34534 8260-G	<5.1	<5.2	<5.3	<5.2	<5.2	<5.2	<5.9	<5.2	<5.3	<5.2	<5.3	<5.1	<5.2	<5.3
1,1-DICHLOROETHYLENE UG/KG-DRY	34504 8260-G	<5.1	<5.2	<5.3	<5.2	<5.2	<5.2	<5.9	<5.2	<5.3	<5.2	<5.3	<5.1	<5.2	<5.3
1,2-DICHLOROETHENE(TOTAL) UG/KG-DRY	96464 8260-G	<5.1	<5.2	<5.3	<5.2	<5.2	<5.2	<5.9	<5.2	<5.3	<5.2	<5.3	<5.1	<5.2	<5.3
1,2-DICHLOROPROPANE UG/KG-DRY	34544 8260-G	<5.1	<5.2	<5.3	<5.2	<5.2	<5.2	<5.9	<5.2	<5.3	<5.2	<5.3	<5.1	<5.2	<5.3
CIS-1,3-DICHLORO-PROPENE UG/KG-DRY	34702 8260-G	<5.1	<5.2	<5.3	<5.2	<5.2	<5.2	<5.9	<5.2	<5.3	<5.2	<5.3	<5.1	<5.2	<5.3
TRANS-1,3-DICHLORO-PROPENE UG/KG-DRY	34697 8260-G	<5.1	<5.2	<5.3	<5.2	<5.2	<5.2	<5.9	<5.2	<5.3	<5.2	<5.3	<5.1	<5.2	<5.3
ETHYLBENZENE UG/KG-DRY	34374 8260-G	<5.1	<5.2	<5.3	<5.2	<5.2	<5.2	<5.9	<5.2	<5.3	<5.2	<5.3	<5.1	<5.2	<5.3
2-HEXANONE UG/KG-DRY	75166 8260-G	<10.0	<10.0	<11	<10.0	<10.0	<10.0	<12	<10.0	<11	<10.0	<11	<10.0	<10.0	<11
METHYLENE CHLORIDE UG/KG-DRY	34426 8260-G	7.0	7.1	<5.3	<5.2	<5.2	<5.2	<5.9	<5.2	<5.3	<5.2	<5.3	<5.1	<5.2	<5.3
METHYL ETHYL KETONE UG/KG-DRY	75078 8260-G	<10.0	<10.0	<11	<10.0	<10.0	<10.0	<12	<10.0	<11	<10.0	<11	<10.0	<10.0	<11
METHYLISOBUTYLKETONE UG/KG-DRY	75169 8260-G	<10.0	<10.0	<11	<10.0	<10.0	<10.0	78	<10.0	<11	<10.0	<11	<10.0	<10.0	<11
STYRENE UG/KG-DRY	75192 8260-G	<5.1	<5.2	<5.3	<5.2	<5.2	<5.2	<5.9	<5.2	<5.3	<5.2	<5.3	<5.1	<5.2	<5.3
1,1,2,2-TETRACHLORO-ETHANE UG/KG-DRY	34519 8260-G	<5.1	<5.2	<5.3	<5.2	<5.2	<5.2	<5.9	<5.2	<5.3	<5.2	<5.3	<5.1	<5.2	<5.3

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PROJECT NUMBER 1944022G 0201 PROJECT NAME CDM - HANFORD N. SLOPE
FIELD GROUP CDMHNSS PROJECT MANAGER E.H. MANSFIELD
CDMHNSS.NUM ALL LAB COORDINATOR EDWARD MANSFIELD

SAMPLE ID'S PARAMETERS UNITS	STORET METHOD	WA20-1-04 CDMHNSS 1	WA20-2-06 CDMHNSS 2	WA19-1-08 CDMHNSS 3	WA19-2-07 CDMHNSS 4	WA19-3-05 CDMHNSS 5	WA19-4-05 CDMHNSS 6	WA17-1-03 CDMHNSS 7	WA16-1-02 CDMHNSS 8	WA16-2-03 CDMHNSS 9	WA07-1-01 CDMHNSS 10	WA07-2-05 CDMHNSS 11	WA05-1-04 CDMHNSS 12	WA05-2-03 CDMHNSS 13	WA05-3-04 CDMHNSS 14
DATE		04/19/94	04/19/94	04/19/94	04/20/94	04/20/94	04/20/94	04/21/94	04/22/94	04/22/94	04/22/94	04/23/94	04/23/94	04/25/94	04/25/94
TIME		13:25	14:10	16:48	08:40	13:45	14:15	15:45	09:30	10:05	15:45	10:00	16:00	09:00	09:10
TETRACHLOROETHENE	34478	<5.1	<5.2	<5.3	<5.2	<5.2	<5.2	<5.9	<5.2	<5.3	<5.2	<5.3	<5.1	<5.2	<5.3
UG/KG-DRY	8260-G														
TOLUENE	34483	<5.1	<5.2	<5.3	<5.2	<5.2	<5.2	<5.9	<5.2	<5.3	<5.2	<5.3	<5.1	<5.2	<5.3
UG/KG-DRY	8260-G														
1,1,1-TRICHL'ETHANE	34509	<5.1	<5.2	<5.3	<5.2	<5.2	<5.2	<5.9	<5.2	<5.3	<5.2	<5.3	<5.1	<5.2	<5.3
UG/KG-DRY	8260-G														
1,1,2-TRICHL'ETHANE	34514	<5.1	<5.2	<5.3	<5.2	<5.2	<5.2	<5.9	<5.2	<5.3	<5.2	<5.3	<5.1	9.5	<5.3
UG/KG-DRY	8260-G														
TRICHLOROETHENE	34487	<5.1	<5.2	<5.3	<5.2	<5.2	<5.2	<5.9	<5.2	<5.3	<5.2	<5.3	<5.1	<5.2	<5.3
UG/KG-DRY	8260-G														
VINYL CHLORIDE	34495	<10.0	<10.0	<11	<10.0	<10.0	<10.0	<12	<10.0	<11	<10.0	<11	<10.0	<10.0	<11
UG/KG-DRY	8260-G														
VINYL ACETATE	98583	<10.0	<10.0	<11	<10.0	<10.0	<10.0	<12	<10.0	<11	<10.0	<11	<10.0	<10.0	<11
UG/KG-DRY	8260-G														
XYLENE,TOTAL	45510	<5.1	<5.2	<5.3	<5.2	<5.2	5.2	<5.9	<5.2	<5.3	<5.2	<5.3	<5.1	<5.2	<5.3
UG/KG-DRY	8260-G														
ACENAPHTHENE	34208	<72	<72	<74	<1400	<72	<72	<8200	<7300	<74	<72	<74	<72	<720	<74
UG/KG-DRY	8270/3540-G														
ACENAPHTHYLENE	34203	<150	<150	<160	<3100	<150	<150	<18000	<16000	<160	<160	<160	<150	<1500	<160
UG/KG-DRY	8270/3540-G														
ANTHRACENE	34223	<72	<72	<74	<1400	<72	<72	<8200	<7300	<74	<72	<74	<72	<720	<74
UG/KG-DRY	8270/3540-G														
BENZYL ALCOHOL	75212	<140	<140	<150	<2900	<140	<140	<16000	<15000	<150	<140	<150	<140	<1400	<150
UG/KG-DRY	8270/3540-G														
BENZOIC ACID	75315	<2800	<2800	<2800	<56000	<2800	<2800	<320000	<280000	<2900	<2800	<2900	<2800	<28000	<2900
UG/KG-DRY	8270/3540-G														
BENZO(A)ANTHRACENE	34529	<100	<100	<110	<2100	<100	<100	<12000	<10000	<110	<100	<110	<100	<1000	<110
UG/KG-DRY	8270/3540-G														
BENZO(B)FLUORANTHENE	34233	<100	<100	<110	<2100	<100	<100	<12000	<10000	<110	<100	<110	<100	<1000	<110
UG/KG-DRY	8270/3540-G														
BENZO(K)FLUORANTHENE	34245	<100	<100	<110	<2100	<100	<100	<12000	<10000	<110	<100	<110	<100	<1000	<110
UG/KG-DRY	8270/3540-G														
BENZO(A)PYRENE	34250	<140	<140	<150	<2900	<140	<140	<16000	<15000	<150	<140	<150	<140	<1400	<150
UG/KG-DRY	8270/3540-G														
BENZO(GHI)PERYLENE	34524	<160	<170	<170	<3300	<160	<160	<19000	<17000	<170	<170	<170	<160	<1700	<170
UG/KG-DRY	8270/3540-G														
BUTYLBENZYLPHTHALATE	34295	<100	<100	<110	<2100	<100	<100	<12000	<10000	<110	<100	<110	<100	<1000	<110
UG/KG-DRY	8270/3540-G														
BIS(2-CHLOROETHYL)	34276	<72	<72	<74	<1400	<72	<72	<8200	<7300	<74	<72	<74	<72	<720	<74
ETHER UG/KG-DRY	8270/3540-G														
BIS(2-CHLOROETHOXY)	34281	<140	<140	<150	<2900	<140	<140	<16000	<15000	<150	<140	<150	<140	<1400	<150
METHANE UG/KG-DRY	8270/3540-G														

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PROJECT NUMBER 19440220 0201 PROJECT NAME CDM - HANFORD N. SLOPE
FIELD GROUP CDMHNSS PROJECT MANAGER E.H. MANSFIELD
CDMHNSS.NUM ALL LAB COORDINATOR EDWARD MANSFIELD

SAMPLE ID'S		WA20-1-04	WA20-2-06	WA19-1-08	WA19-2-07	WA19-3-05	WA19-4-05	WA17-1-03	WA16-1-02	WA16-2-03	WA07-1-01	WA07-2-05	WA05-1-04	WA05-2-03	WA05-3-04
PARAMETERS	STORET	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS
UNITS	METHOD	1	2	3	4	5	6	7	8	9	10	11	12	13	14
DATE		04/19/94	04/19/94	04/19/94	04/20/94	04/20/94	04/20/94	04/21/94	04/22/94	04/22/94	04/22/94	04/23/94	04/23/94	04/25/94	04/25/94
TIME		13:25	14:10	16:48	08:40	13:45	14:15	15:45	09:30	10:05	15:45	10:00	16:00	09:00	09:10
BIS(2-ETHYLHEXYL) PHTHALATE UG/KG-DRY	39102 8270/3540-G	<100	<100	<110	<2100	<100	<100	<12000	<10000	<110	<100	<110	<100	<1000	<110
BIS(2-CHL'ISOPROPYL) ETHER UG/KG-DRY	34286 8270/3540-G	<72	<72	<74	<1400	<72	<72	<8200	<7300	<74	<72	<74	<72	<720	<74
4-BROMOPHENYL PHENYL ETHER UG/KG-DRY	34639 8270/3540-G	<140	<140	<150	<2900	<140	<140	<16000	<15000	<150	<140	<150	<140	<1400	<150
4-CHLOROANILINE UG/KG-DRY	78867 8270/3540-G	<310	<310	<320	<6200	<310	<310	<35000	<31000	<320	<310	<320	<310	<3100	<320
2-CHLORONAPHTHALENE UG/KG-DRY	34584 8270/3540-G	<72	<72	<74	<1400	<72	<72	<8200	<7300	<74	<72	<74	<72	<720	<74
2-CHLOROPHENOL UG/KG-DRY	34589 8270/3540-G	<140	<140	<150	<2900	<140	<140	<16000	<15000	<150	<140	<150	<140	<1400	<150
4-CHLORO-3-METHYL PHENOL UG/KG-DRY	34455 8270/3540-G	<140	<140	<150	<2900	<140	<140	<16000	<15000	<150	<140	<150	<140	<1400	<150
4-CHLOROPHENYLPHENYL ETHER UG/KG-DRY	34644 8270/3540-G	<100	<100	<110	<2100	<100	<100	<12000	<10000	<110	<100	<110	<100	<1000	<110
CHRYSENE UG/KG-DRY	34323 8270/3540-G	<100	<100	<110	<2100	<100	<100	<12000	<10000	<110	<100	<110	<100	<1000	<110
DIBEN(A,H)ANTH'CENE UG/KG-DRY	34559 8270/3540-G	<160	<170	<170	<3300	<160	<160	<19000	<17000	<170	<170	<170	<160	<1700	<170
DIBENZOFURAN UG/KG-DRY	75647 8270/3540-G	<120	<120	<130	<2500	<120	<120	<14000	<13000	<130	<120	<130	<120	<1200	<130
DI-N-BUTYL PHTHALATE UG/KG-DRY	39112 8270/3540-G	<72	<72	<74	<1400	<72	<72	<8200	<7300	<74	<72	<74	<72	<720	<74
1,3-DICHLOROBENZENE UG/KG-DRY	34569 8270/3540-G	<72	<72	<74	<1400	<72	<72	<8200	<7300	<74	<72	<74	<72	<720	<74
1,2-DICHLOROBENZENE UG/KG-DRY	34539 8270/3540-G	<72	<72	<74	<1400	<72	<72	<8200	<7300	<74	<72	<74	<72	<720	<74
1,4-DICHLOROBENZENE UG/KG-DRY	34574 8270/3540-G	<72	<72	<74	<1400	<72	<72	<8200	<7300	<74	<72	<74	<72	<720	<74
3,3-DICHL'BENZIDINE UG/KG-DRY	34634 8270/3540-G	<510	<520	<530	<10000	<520	<520	<59000	<52000	<530	<520	<530	<510	<5200	<530
2,4-DICHLOROPHENOL UG/KG-DRY	34604 8270/3540-G	<140	<140	<150	<2900	<140	<140	<16000	<15000	<150	<140	<150	<140	<1400	<150
DIETHYL PHTHALATE UG/KG-DRY	34339 8270/3540-G	<72	<72	<74	<1400	<72	<72	<8200	<7300	<74	<72	<74	<72	<720	<74
2,4-DIMETHYLPHENOL UG/KG-DRY	34609 8270/3540-G	<140	<140	<150	<2900	<140	<140	<16000	<15000	<150	<140	<150	<140	<1400	<150
DIMETHYL PHTHALATE UG/KG-DRY	34344 8270/3540-G	<100	<100	<110	<2100	<100	<100	<12000	<10000	<110	<100	<110	<100	<1000	<110
2,4-DINITROPHENOL UG/KG-DRY	34619 8270/3540-G	<1300	<1300	<1400	<27000	<1300	<1300	<150000	<140000	<1400	<1300	<1400	<1300	<13000	<1400

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PROJECT NUMBER 1944022G 0201 PROJECT NAME CDM - HANFORD N. SLOPE
FIELD GROUP CDMHNSS PROJECT MANAGER E.H. MANSFIELD
CDMHNSS.NUM ALL LAB COORDINATOR EDWARD MANSFIELD

SAMPLE ID'S PARAMETERS	UNITS	STORET METHOD	WA20-1-04 CDMHNSS 1	WA20-2-06 CDMHNSS 2	WA19-1-08 CDMHNSS 3	WA19-2-07 CDMHNSS 4	WA19-3-05 CDMHNSS 5	WA19-4-05 CDMHNSS 6	WA17-1-03 CDMHNSS 7	WA16-1-02 CDMHNSS 8	WA16-2-03 CDMHNSS 9	WA07-1-01 CDMHNSS 10	WA07-2-05 CDMHNSS 11	WA05-1-04 CDMHNSS 12	WA05-2-03 CDMHNSS 13	WA05-3-04 CDMHNSS 14
DATE			04/19/94	04/19/94	04/19/94	04/20/94	04/20/94	04/20/94	04/21/94	04/22/94	04/22/94	04/22/94	04/23/94	04/23/94	04/25/94	04/25/94
TIME			13:25	14:10	16:48	08:40	13:45	14:15	15:45	09:30	10:05	15:45	10:00	16:00	09:00	09:10
2,4-DINITROTOLUENE	UG/KG-DRY	34614 8270/3540-G	<140	<140	<150	<2900	<140	<140	<16000	<15000	<150	<140	<150	<140	<1400	<150
2,6-DINITROTOLUENE	UG/KG-DRY	34629 8270/3540-G	<140	<140	<150	<2900	<140	<140	<16000	<15000	<150	<140	<150	<140	<1400	<150
DI-N-OCTYL PHTHALATE	UG/KG-DRY	34599 8270/3540-G	<140	<140	<150	<2900	<140	<140	<16000	<15000	<150	<140	<150	<140	<1400	<150
FLUORANTHENE	UG/KG-DRY	34379 8270/3540-G	<72	<72	<74	<1400	<72	<72	<8200	<7300	<74	<72	<74	<72	<720	<74
FLUORENE	UG/KG-DRY	34384 8270/3540-G	<72	<72	<74	<1400	<72	<72	<8200	<7300	<74	<72	<74	<72	<720	<74
HEXACHLOROBENZENE	UG/KG-DRY	39701 8270/3540-G	<100	<100	<110	<2100	<100	<100	<12000	<10000	<110	<100	<110	<100	<1000	<110
HEXACHLOROBUTADIENE	UG/KG-DRY	39705 8270/3540-G	<140	<140	<150	<2900	<140	<140	<16000	<15000	<150	<140	<150	<140	<1400	<150
HEXACHLOROCYCLOPENTA DIENE	UG/KG-DRY	34389 8270/3540-G	<1000	<1000	<1100	<21000	<1000	<1000	<120000	<100000	<1100	<1000	<1100	<1000	<10000	<1100
HEXACHLOROETHANE	UG/KG-DRY	34399 8270/3540-G	<100	<100	<110	<2100	<100	<100	<12000	<10000	<110	<100	<110	<100	<1000	<110
INDENO(1,2,3-CD) PYRENE	UG/KG-DRY	34406 8270/3540-G	<160	<170	<170	<3300	<160	<160	<19000	<17000	<170	<170	<170	<160	<1700	<170
ISOPHORONE	UG/KG-DRY	34411 8270/3540-G	<72	<72	<74	<1400	<72	<72	<8200	<7300	<74	<72	<74	<72	<720	<74
2-METHYLNAPHTHALENE	UG/KG-DRY	78868 8270/3540-G	<100	<100	<110	<2100	<100	<100	<12000	<10000	<110	<100	<110	<100	<1000	<110
2-METHYL-4,6-DINITRO PHENOL	UG/KG-DRY	34660 8270/3540-G	<690	<690	<700	<14000	<690	<690	<79000	<70000	<710	<690	<710	<690	<6900	<710
2-METHYLPHENOL	UG/KG-DRY	78872 8270/3540-G	<140	<140	<150	<2900	<140	<140	<16000	<15000	<150	<140	<150	<140	<1400	<150
4-METHYLPHENOL	UG/KG-DRY	78803 8270/3540-G	<140	<140	<150	<2900	<140	<140	<16000	<15000	<150	<140	<150	<140	<1400	<150
NAPHTHALENE	UG/KG-DRY	34445 8270/3540-G	<72	<72	<74	<1400	<72	<72	<8200	<7300	<74	<72	<74	<72	<720	<74
2-NITROANILINE	UG/KG-DRY	98588 8270/3540-G	<310	<310	<320	<6200	<310	<310	<35000	<31000	<320	<310	<320	<310	<3100	<320
3-NITROANILINE	UG/KG-DRY	78869 8270/3540-G	<310	<310	<320	<6200	<310	<310	<35000	<31000	<320	<310	<320	<310	<3100	<320
4-NITROANILINE	UG/KG-DRY	78870 8270/3540-G	<410	<410	<420	<8200	<410	<410	<47000	<42000	<420	<410	<420	<410	<4100	<420
NITROBENZENE	UG/KG-DRY	34450 8270/3540-G	<72	<72	<74	<1400	<72	<72	<8200	<7300	<74	<72	<74	<72	<720	<74
2-NITROPHENOL	UG/KG-DRY	34594 8270/3540-G	<140	<140	<150	<2900	<140	<140	<16000	<15000	<150	<140	<150	<140	<1400	<150

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PROJECT NUMBER 19440220 0201 PROJECT NAME CDM - HANFORD N. SLOPE
FIELD GROUP CDMHNSS PROJECT MANAGER E.H. MANSFIELD
CDMHNSS.NUM ALL LAB COORDINATOR EDWARD MANSFIELD

SAMPLE ID'S		WA20-1-04	WA20-2-06	WA19-1-08	WA19-2-07	WA19-3-05	WA19-4-05	WA17-1-03	WA16-1-02	WA16-2-03	WA07-1-01	WA07-2-05	WA05-1-04	WA05-2-03	WA05-3-04
PARAMETERS	STORET	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS
UNITS	METHOD	1	2	3	4	5	6	7	8	9	10	11	12	13	14
DATE		04/19/94	04/19/94	04/19/94	04/20/94	04/20/94	04/20/94	04/21/94	04/22/94	04/22/94	04/22/94	04/23/94	04/23/94	04/25/94	04/25/94
TIME		13:25	14:10	16:48	08:40	13:45	14:15	15:45	09:30	10:05	15:45	10:00	16:00	09:00	09:10
4-NITROPHENOL	34649	<510	<520	<530	<10000	<520	<520	<59000	<52000	<530	<520	<530	<510	<5200	<530
UG/KG-DRY	8270/3540-G														
N-NITROSODI-N-PROPYL	34431	<100	<100	<110	<2100	<100	<100	<12000	<10000	<110	<100	<110	<100	<1000	<110
AMINE UG/KG-DRY	8270/3540-G														
N-NITROSODIPHE'AMINE	34436	<72	<72	<74	<1400	<72	<72	<8200	<7300	<74	<72	<74	<72	<720	<74
UG/KG-DRY	8270/3540-G														
PENTACHLOROPHENOL	39061	<260	<260	<260	<5200	<260	<260	<29000	<26000	<260	<260	<260	<260	<2600	<260
UG/KG-DRY	8270/3540-G														
PHENANTHRENE	34464	<72	<72	<74	<1400	<72	<72	<8200	<7300	<74	<72	<74	<72	<720	<74
UG/KG-DRY	8270/3540-G														
PHENOL	34695	<140	<140	<150	<2900	<140	<140	<16000	<15000	<150	<140	<150	<140	<1400	<150
UG/KG-DRY	8270/3540-G														
PYRENE	34472	<72	<72	<74	<1400	<72	<72	<8200	<7300	<74	<72	<74	<72	<720	<74
UG/KG-DRY	8270/3540-G														
1,2,4-TRICH'BENZENE	34554	<100	<100	<110	<2100	<100	<100	<12000	<10000	<110	<100	<110	<100	<1000	<110
UG/KG-DRY	8270/3540-G														
2,4,6-TRICH'PHENOL	34624	<170	<180	<180	<3500	<180	<180	<20000	<18000	<180	<180	<180	<170	<1800	<180
UG/KG-DRY	8270/3540-G														
2,4,5-TRICH'PHENOL	98587	<170	<180	<180	<3500	<180	<180	<20000	<18000	<180	<180	<180	<170	<1800	<180
UG/KG-DRY	8270/3540-G														
ALDRIN	39333	<0.685	<0.689	<0.700	<0.687	<0.687	<0.687	<7.82	<0.698	<0.705	<0.689	<0.705	<0.686	<0.826	<0.846
UG/KG-DRY	8080/3540-G														
BHC,A	39076	<0.685	<0.689	<0.700	<0.687	<0.687	<0.687	<7.82	<0.698	<0.705	<0.689	<0.705	<0.686	<0.689	<0.705
UG/KG-DRY	8080/3540-G														
BHC,B	34257	<0.685	<0.689	<0.700	<0.687	<0.687	<0.687	<7.82	<0.698	<0.705	<0.689	<0.705	<0.686	<0.689	<0.705
UG/KG-DRY	8080/3540-G														
BHC,D	34262	<0.685	<0.689	<0.700	<0.687	<0.687	<0.687	<7.82	<0.698	<0.705	<0.689	<0.705	<0.686	<0.689	<0.705
UG/KG-DRY	8080/3540-G														
BHC,G(LINDANE)	39783	<0.685	<0.689	<0.700	<0.687	<0.687	<0.687	<7.82	<0.698	<0.705	<0.689	<0.705	<0.686	<0.689	<0.705
UG/KG-DRY	8080/3540-G														
CHLORDANE	39351	<3.43	<3.44	<3.50	<3.44	<3.44	<3.44	<39.1	<3.49	<3.53	37700	<3.52	<3.43	<3.44	<3.52
UG/KG-DRY	8080/3540-G														
DDD,PP'	39311	62.7	<0.689	<0.700	54.7	<0.687	<0.687	<7.82	<0.698	<0.705	42700	<0.705	<0.686	<0.689	<0.705
UG/KG-DRY	8080/3540-G														
DDE,PP'	39321	298	<0.689	<0.700	37.4	74.0	85.5	83.1	34.4	1.59	3330	<0.705	3.18	5.23	<0.705
UG/KG-DRY	8080/3540-G														
DDT,PP'	39301	125	<0.689	<0.700	177	64.6	78.6	879	39.0	<0.705	254000	<0.705	6.72	5.54	<0.846
UG/KG-DRY	8080/3540-G														
DIELDRIN	39383	<0.685	<0.689	<0.700	<0.687	<0.687	<0.687	<7.82	<0.698	<0.705	<0.689	<0.705	<0.686	<0.689	<0.705
UG/KG-DRY	8080/3540-G														
ENDOSULFAN,A	34364	<0.685	<0.689	<0.700	<0.687	<0.687	<0.687	<7.82	<0.698	<0.705	<0.689	<0.705	<0.686	<0.689	<0.705
UG/KG-DRY	8080/3540-G														

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Environmental Science & Engineering DATE 05/24/94 STATUS :FINAL PAGE 7
PROJECT NUMBER 1944022G 0201 PROJECT NAME CDM - HANFORD N. SLOPE
FIELD GROUP CDMHNSS PROJECT MANAGER E.H. MANSFIELD
CDMHNSS.NUM ALL LAB COORDINATOR EDWARD MANSFIELD

SAMPLE ID'S		WA20-1-04	WA20-2-06	WA19-1-08	WA19-2-07	WA19-3-05	WA19-4-05	WA17-1-03	WA16-1-02	WA16-2-03	WA07-1-01	WA07-2-05	WA05-1-04	WA05-2-03	WA05-3-04
PARAMETERS	STORET	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS
UNITS	METHOD	1	2	3	4	5	6	7	8	9	10	11	12	13	14
DATE		04/19/94	04/19/94	04/19/94	04/20/94	04/20/94	04/20/94	04/21/94	04/22/94	04/22/94	04/22/94	04/23/94	04/23/94	04/25/94	04/25/94
TIME		13:25	14:10	16:48	08:40	13:45	14:15	15:45	09:30	10:05	15:45	10:00	16:00	09:00	09:10
ENDOSULFAN,B	34359	<0.685	<0.689	<0.700	4.52	<0.687	<0.687	<7.82	<0.698	<0.705	<0.689	<0.705	<0.686	<0.689	<0.705
UG/KG-DRY	8080/3540-G														
ENDOSULFAN SULFATE	34354	<0.685	<0.689	<0.700	<0.687	<0.687	<0.687	<7.82	<0.698	<0.705	<0.689	<0.705	<0.686	<0.689	<0.705
UG/KG-DRY	8080/3540-G														
ENDRIN	39393	<0.685	<0.689	<0.700	<0.687	<0.687	<0.687	<7.82	<0.698	<0.705	<0.689	<0.705	<0.686	<0.689	<0.705
UG/KG-DRY	8080/3540-G														
ENDRIN ALDEHYDE	34369	<0.685	<0.689	<0.700	<0.687	<0.687	<0.687	<7.82	<0.698	<0.705	<0.689	<0.705	<0.686	<0.689	<0.705
UG/KG-DRY	8080/3540-G														
HEPTACHLOR	39413	<0.685	<0.689	<0.700	<0.687	<0.687	<0.687	<7.82	<0.698	<0.705	<0.689	<0.705	<0.686	<0.689	<0.705
UG/KG-DRY	8080/3540-G														
HEPTACHLOR EPOXIDE	39423	<0.685	<0.689	<0.700	<0.687	<0.687	<0.687	<7.82	<0.698	<0.705	<0.689	<0.705	<0.686	<0.689	<0.705
UG/KG-DRY	8080/3540-G														
METHOXYCHLOR	39481	<0.685	<0.689	<0.700	1.92	<0.687	<0.687	<7.82	<0.698	<0.705	<0.689	<0.705	<0.686	<1.24	<1.27
UG/KG-DRY	8080/3540-G														
TOXAPHENE	39403	<68.5	<68.9	<70.0	<68.7	<68.7	<68.7	<782	<69.8	<70.5	<68.9	<70.5	<68.6	<68.9	<70.5
UG/KG-DRY	8080/3540-G														
PCB-1016	39514	<13.7	<13.8	<14.0	<13.7	<13.7	<13.7	<15.6	<14.0	<14.1	<13.8	<14.1	<13.7	<13.8	<14.1
UG/KG-DRY	8080/3540-G														
PCB-1221	39491	<13.7	<13.8	<14.0	<13.7	<13.7	<13.7	<15.6	<14.0	<14.1	<13.8	<14.1	<13.7	<13.8	<14.1
UG/KG-DRY	8080/3540-G														
PCB-1232	39495	<13.7	<13.8	<14.0	<13.7	<13.7	<13.7	<15.6	<14.0	<14.1	<13.8	<14.1	<13.7	<13.8	<14.1
UG/KG-DRY	8080/3540-G														
PCB-1242	39499	<13.7	<13.8	<14.0	<13.7	<13.7	<13.7	<15.6	<14.0	<14.1	<13.8	<14.1	<13.7	<13.8	<14.1
UG/KG-DRY	8080/3540-G														
PCB-1248	39503	<13.7	<13.8	<14.0	344	<13.7	<13.7	<15.6	<14.0	<14.1	<13.8	<14.1	<13.7	<13.8	<14.1
UG/KG-DRY	8080/3540-G														
PCB-1254	39507	<13.7	<13.8	<14.0	344	<13.7	<13.7	<15.6	<14.0	<14.1	0.0	0.0	0.0	<13.8	<14.1
UG/KG-DRY	8080/3540-G														
PCB-1260	39511	<13.7	<13.8	<14.0	<13.7	<13.7	<13.7	<15.6	<14.0	<14.1	<13.8	<14.1	<13.7	<13.8	<14.1
UG/KG-DRY	8080/3540-G														

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Environmental Science & Engineering DATE 05/24/94 STATUS :FINAL
PROJECT NUMBER 1944022G 0201 PROJECT NAME CDM - HANFORD N. SLOPE
FIELD GROUP CDMHNSS PROJECT MANAGER E.H. MANSFIELD
CDMHNSS.NUM ALL LAB COORDINATOR EDWARD MANSFIELD

SAMPLE ID'S		WA04-1 05	WA04-2-12	EA14-1-01	EA14-2-01	EA12-1-10	EA12-2-12	EA11-1-07	EA01-1-10	OCS1-1-00	EBG1-1-02	ESV1-1-01	WBG2-1-02	WBG2-2-02	WA04-3-20
PARAMETERS	STORET	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS
UNITS	METHOD	15	16	17	18	19	20	21	22	23	24	25	26	27	28
DATE		04/25/94	04/25/94	04/27/94	04/27/94	04/27/94	04/27/94	04/29/94	05/02/94	05/03/94	05/03/94	05/03/94	05/03/94	05/03/94	05/04/94
TIME		13:15	14:00	11:50	12:10	14:00	15:10	06:22	11:15	08:15	11:30	12:35	15:00	15:25	08:25
SITE #	96274 0	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L
CHAIN OF CUSTODY #	96793 0	7	7	8	8	8	8	10	10	11	12	12	12	12	13
SCREEN.GR. ALPHA, (ESTIMATE)NCI/KG-WET	96636 R	45.8	<2.0	14.0	<2.0	<2.0	<2.0	11.8	2.0	24.3	9.2	10.9	<2.0	<2.0	<2.0
SCREEN.GR. BETA, (ESTIMATE)NCI/KG-WET	96637 R	27.0	<6.0	25.5	<6.0	<6.0	23.1	21.9	35.0	24.5	17.3	25.9	<6.0	<6.0	31.8
MOISTURE %WET WT	70320 I	3.8	4.5	3.8	3.6	3.8	4.2	3.8	8.9	5.5	6.5	2.8	5.8	6.0	2.6
HYDROCARBONS,PETROL MG/KG-DRY	98233 AISON	2040	381	<8.69	<8.67	165000	<8.73	43.2	4920	<8.85	<8.94	<8.60	<8.87	<8.89	<8.58
ARSENIC MG/KG-DRY	1003 7060-G	5.02	3.96	6.88	6.98	5.84	6.94	7.67	8.12	4.87	6.71	3.89	4.71	5.11	1.44
SELENIUM MG/KG-DRY	1148 7740-G	<0.255	<0.257	<0.258	<0.258	<0.259	<0.259	<0.258	0.514	<0.260	<0.262	<0.253	<0.259	<0.260	<0.255
MERCURY MG/KG-DRY	71921 7471M-G	<0.100	<0.101	<0.104	<0.102	<0.101	<0.101	<0.101	0.124	<0.104	<0.098	<0.096	<0.091	<0.099	<0.097
BARIUM MG/KG-DRY	1008 6010-G	112	101	105	111	119	145	120	119	96.2	120	73.2	114	117	79.9
CADMIUM MG/KG-DRY	1028 6010-G	<0.511	<0.504	<0.518	<0.515	<0.519	<0.521	<0.516	<0.547	<0.521	<0.531	<0.509	<0.521	<0.523	<0.490
CHROMIUM MG/KG-DRY	1029 6010-G	10.4	9.20	14.1	14.9	13.8	15.6	19.1	15.4	11.3	7.15	8.15	7.69	7.47	10.3
LEAD MG/KG-DRY	1052 6010-G	15.6	12.0	10.4	<10.3	36.0	13.8	<10.3	11.2	<10.4	<10.6	27.2	<10.4	<10.5	<9.80
SILVER MG/KG-DRY	1078 6010-G	<0.511	<0.504	<0.518	<0.515	1.05	<0.521	<0.516	<0.547	<0.521	<0.531	<0.509	<0.521	<0.523	<0.490
ACETONE UG/KG-DRY	75059 8260-G	<10.0	11	<10.0	<10.0	<10.0	<10.0	<10.0	<11	<11	<11	<10.0	<11	<11	<10.0
BENZENE UG/KG-DRY	34237 8260-G	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<10.0	<5.5	<5.3	<5.3	<5.1	<5.3	<5.3	<5.1
BROMODICHLOROMETHANE UG/KG-DRY	34330 8260-G	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<10.0	<5.5	<5.3	<5.3	<5.1	<5.3	<5.3	<5.1
BROMOFORM UG/KG-DRY	34290 8260-G	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<10.0	<5.5	<5.3	<5.3	<5.1	<5.3	<5.3	<5.1
BROMOMETHANE UG/KG-DRY	34416 8260-G	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<11	<11	<11	<10.0	<11	<11	<10.0
CARBON DISULFIDE UG/KG-DRY	78544 8260-G	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<10.0	<5.5	<5.3	<5.3	<5.1	<5.3	<5.3	<5.1

PROJECT NUMBER 19440220 0201 PROJECT NAME CDM - HANFORD N. SLOPE
FIELD GROUP CDMHNSS PROJECT MANAGER E.H. MANSFIELD
CDMHNSS.NUM ALL LAB COORDINATOR EDWARD MANSFIELD

SAMPLE ID'S		WA04-1-05	WA04-2-12	EA14-1-01	EA14-2-01	EA12-1-10	EA12-2-12	EA11-1-07	EA01-1-10	OCS1-1-00	EBG1-1-02	ESV1-1-01	WBG2-1-02	WBG2-2-02	WA04-3-20
PARAMETERS	STORET	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS
UNITS	METHOD	15	16	17	18	19	20	21	22	23	24	25	26	27	28
DATE		04/25/94	04/25/94	04/27/94	04/27/94	04/27/94	04/27/94	04/29/94	05/02/94	05/03/94	05/03/94	05/03/94	05/03/94	05/03/94	05/04/94
TIME		13:15	14:00	11:50	12:10	14:00	15:10	08:22	11:15	08:15	11:30	12:35	15:00	15:25	08:25
CARBON TETRACHLORIDE	34299	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<10.0	<5.5	<5.3	<5.3	<5.1	<5.3	<5.3	<5.1
UG/KG-DRY	8260-G														
CHLOROBENZENE	34304	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<10.0	<5.5	<5.3	<5.3	<5.1	<5.3	<5.3	<5.1
UG/KG-DRY	8260-G														
CHLOROETHANE	34314	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<11	<11	<11	<10.0	<11	<11	<10.0
UG/KG-DRY	8260-G														
2-CHLOROETHYLVINYL-	34579	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	NRQ	<5.5	<5.3	<5.3	<5.1	<5.3	<5.3	<5.1
ETHER UG/KG-DRY	8260-G														
CHLOROFORM	34318	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<10.0	<5.5	<5.3	<5.3	<5.1	<5.3	<5.3	<5.1
UG/KG-DRY	8260-G														
CHLOROMETHANE	34421	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<11	<11	<11	<10.0	<11	<11	<10.0
UG/KG-DRY	8260-G														
DIBROMOCHLOROMETHANE	34309	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<10.0	<5.5	<5.3	<5.3	<5.1	<5.3	<5.3	<5.1
UG/KG-DRY	8260-G														
1,1-DICHLOROETHANE	34499	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<10.0	<5.5	<5.3	<5.3	<5.1	<5.3	<5.3	<5.1
UG/KG-DRY	8260-G														
1,2-DICHLOROETHANE	34534	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<10.0	<5.5	<5.3	<5.3	<5.1	<5.3	<5.3	<5.1
UG/KG-DRY	8260-G														
1,1-DICHLOROETHYLENE	34504	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<10.0	<5.5	<5.3	<5.3	<5.1	<5.3	<5.3	<5.1
UG/KG-DRY	8260-G														
1,2-DICHLOROETHENE(T	96464	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<10.0	<5.5	<5.3	<5.3	<5.1	<5.3	<5.3	<5.1
OTAL) UG/KG-DRY	8260-G														
1,2-DICHLOROPROPANE	34544	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<10.0	<5.5	<5.3	<5.3	<5.1	<5.3	<5.3	<5.1
UG/KG-DRY	8260-G														
CIS-1,3-DICHLORO-	34702	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<10.0	<5.5	<5.3	<5.3	<5.1	<5.3	<5.3	<5.1
PROPENE UG/KG-DRY	8260-G														
TRANS-1,3-DICHLORO-	34697	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<10.0	<5.5	<5.3	<5.3	<5.1	<5.3	<5.3	<5.1
PROPENE UG/KG-DRY	8260-G														
ETHYLBENZENE	34374	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<10.0	<5.5	<5.3	<5.3	<5.1	<5.3	<5.3	<5.1
UG/KG-DRY	8260-G														
2-HEXANONE	75166	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<11	<11	<11	<10.0	<11	<11	<10.0
UG/KG-DRY	8260-G														
METHYLENE CHLORIDE	34426	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<10.0	<5.5	<5.3	<5.3	<5.1	<5.3	<5.3	<5.1
UG/KG-DRY	8260-G														
METHYL ETHYL KETONE	75078	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<11	<11	<11	<10.0	<11	<11	<10.0
UG/KG-DRY	8260-G														
METHYLISOBUTYLKETONE	75169	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<11	<11	<11	<10.0	<11	<11	<10.0
UG/KG-DRY	8260-G														
STYRENE	75192	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<10.0	<5.5	<5.3	<5.3	<5.1	<5.3	<5.3	<5.1
UG/KG-DRY	8260-G														
1,1,2,2-TETRACHLORO-	34519	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<10.0	<5.5	<5.3	<5.3	<5.1	<5.3	<5.3	<5.1
ETHANE UG/KG-DRY	8260-G														

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PROJECT NUMBER 1944022G 020i PROJECT NAME CDM - HANFORD N. SLOPE
FIELD GROUP CDMHNSS PROJECT MANAGER E.H. MANSFIELD
CDMHNSS.NUM ALL LAB COORDINATOR EDWARD MANSFIELD

SAMPLE ID'S		WA04-1-05	WA04-2-12	EA14-1-01	EA14-2-01	EA12-1-10	EA12-2-12	EA11-1-07	EA01-1-10	OCS1-1-00	EBG1-1-02	ESV1-1-01	WBG2-1-02	WBG2-2-02	WA04-3-20
PARAMETERS	STORET	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS
UNITS	METHOD	15	16	17	18	19	20	21	22	23	24	25	26	27	28
DATE		04/25/94	04/25/94	04/27/94	04/27/94	04/27/94	04/27/94	04/29/94	05/02/94	05/03/94	05/03/94	05/03/94	05/03/94	05/03/94	05/04/94
TIME		13:15	14:00	11:50	12:10	14:00	15:10	08:22	11:15	08:15	11:30	12:35	15:00	15:25	08:25
TETRACHLOROETHENE	34478	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<10.0	<5.5	<5.3	<5.3	<5.1	<5.3	<5.3	<5.1
UG/KG-DRY	8260-G														
TOLUENE	34483	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<10.0	<5.5	<5.3	<5.3	<5.1	<5.3	<5.3	<5.1
UG/KG-DRY	8260-G														
1,1,1-TRICHL'ETHANE	34509	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<10.0	<5.5	<5.3	<5.3	<5.1	<5.3	<5.3	<5.1
UG/KG-DRY	8260-G														
1,1,2-TRICHL'ETHANE	34514	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<10.0	<5.5	<5.3	<5.3	<5.1	<5.3	<5.3	<5.1
UG/KG-DRY	8260-G														
TRICHLOROETHENE	34487	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	<10.0	<5.5	<5.3	<5.3	<5.1	<5.3	<5.3	<5.1
UG/KG-DRY	8260-G														
VINYL CHLORIDE	34495	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<11	<11	<11	<10.0	<11	<11	<10.0
UG/KG-DRY	8260-G														
VINYL ACETATE	98583	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	NRQ	<11	<11	<11	<10.0	<11	<11	<10.0
UG/KG-DRY	8260-G														
XYLENE,TOTAL	45510	<5.2	<5.2	<5.2	<5.2	<5.2	<5.2	NRQ	<5.5	<5.3	<5.3	<5.1	<5.3	<5.3	<5.1
UG/KG-DRY	8260-G														
ACENAPHTHENE	34208	<73	<73	<73	<73	<73	<73	<340	<770	<74	<75	<72	<74	<74	<72
UG/KG-DRY	8270/3540-G														
ACENAPHTHYLENE	34203	<160	<160	<160	<160	<160	<160	<340	<1600	<160	<160	<150	<160	<160	<150
UG/KG-DRY	8270/3540-G														
ANTHRACENE	34223	<73	<73	<73	<73	<73	<73	<340	<770	<74	<75	<72	<74	<74	<72
UG/KG-DRY	8270/3540-G														
BENZYL ALCOHOL	75212	<150	<150	<150	<150	<150	<150	NRQ	<1500	<150	<150	<140	<150	<150	<140
UG/KG-DRY	8270/3540-G														
BENZOIC ACID	75315	<2800	<2800	<2800	<2800	<2800	<2800	NRQ	<30000	<2900	<2900	<2800	<2900	<2900	<2800
UG/KG-DRY	8270/3540-G														
BENZO(A)ANTHRACENE	34529	<100	<100	<100	<100	<100	<100	<340	<1100	<110	<110	<100	<110	<110	<100
UG/KG-DRY	8270/3540-G														
BENZO(B)FLUORANTHENE	34233	<100	<100	<100	<100	<100	<100	<340	<1100	<110	<110	<100	<110	<110	<100
UG/KG-DRY	8270/3540-G														
BENZO(K)FLUORANTHENE	34245	<100	<100	<100	<100	<100	<100	<340	<1100	<110	<110	<100	<110	<110	<100
UG/KG-DRY	8270/3540-G														
BENZO(A)PYRENE	34250	<150	<150	<150	<150	<150	<150	<340	<1500	<150	<150	<140	<150	<150	<140
UG/KG-DRY	8270/3540-G														
BENZO(GHI)PERYLENE	34524	<170	<170	<170	<170	<170	<170	<340	<1800	<170	<170	<160	<170	<170	<160
UG/KG-DRY	8270/3540-G														
BUTYLBENZYLPHTHALATE	34295	<100	<100	<100	<100	<100	<100	<340	<1100	<110	<110	<100	<110	<110	<100
UG/KG-DRY	8270/3540-G														
BIS(2-CHLOROETHYL)	34276	<73	<73	<73	<73	<73	<73	<340	<770	<74	<75	<72	<74	<74	<72
ETHER UG/KG-DRY	8270/3540-G														
BIS(2-CHLOROETHOXY)	34281	<150	<150	<150	<150	<150	<150	<340	<1500	<150	<150	<140	<150	<150	<140
METHANE UG/KG-DRY	8270/3540-G														

PROJECT NUMBER 19440220 0201 PROJECT NAME CDM - HANFORD N. SLOPE
FIELD GROUP CDMHNSS PROJECT MANAGER E.H. MANSFIELD
CDMHNSS.NUM ALL LAB COORDINATOR EDWARD MANSFIELD

SAMPLE ID'S PARAMETERS	UNITS	STORET METHOD	WA04-1-05 CDMHNSS 15	WA04-2-12 CDMHNSS 16	EA14-1-01 CDMHNSS 17	EA14-2-01 CDMHNSS 18	EA12-1-10 CDMHNSS 19	EA12-2-12 CDMHNSS 20	EA11-1-07 CDMHNSS 21	EA01-1-10 CDMHNSS 22	OCS1-1-00 CDMHNSS 23	EBG1-1-02 CDMHNSS 24	ESV1-1-01 CDMHNSS 25	WBG2-1-02 CDMHNSS 26	WBG2-2-02 CDMHNSS 27	WA04-3-20 CDMHNSS 28
DATE			04/25/94	04/25/94	04/27/94	04/27/94	04/27/94	04/27/94	04/29/94	05/02/94	05/03/94	05/03/94	05/03/94	05/03/94	05/03/94	05/04/94
TIME			13:15	14:00	11:50	12:10	14:00	15:10	08:22	11:15	08:15	11:30	12:35	15:00	15:25	08:25
BIS(2-ETHYLHEXYL) PHTHALATE	UG/KG-DRY	39102 8270/3540-G	<100	160	<100	<100	<100	<100	<340	<1100	<110	<110	<100	<110	120	<100
BIS(2-CHL'ISOPROPYL) ETHER	UG/KG-DRY	34286 8270/3540-G	<73	<73	<73	<73	<73	<73	<340	<770	<74	<75	<72	<74	<74	<72
4-BROMOPHENYL PHENYL ETHER	UG/KG-DRY	34639 8270/3540-G	<150	<150	<150	<150	<150	<150	<340	<1500	<150	<150	<140	<150	<150	<140
4-CHLOROANILINE	UG/KG-DRY	78867 8270/3540-G	<310	<310	<310	<310	<310	<310	<340	<3300	<320	<320	<310	<320	<320	<310
2-CHLORONAPHTHALENE	UG/KG-DRY	34584 8270/3540-G	<73	<73	<73	<73	<73	<73	<340	<770	<74	<75	<72	<74	<74	<72
2-CHLOROPHENOL	UG/KG-DRY	34589 8270/3540-G	<150	<150	<150	<150	<150	<150	<340	<1500	<150	<150	<140	<150	<150	<140
4-CHLORO-3-METHYL PHENOL	UG/KG-DRY	34455 8270/3540-G	<150	<150	<150	<150	<150	<150	<340	<1500	<150	<150	<140	<150	<150	<140
4-CHLOROPHENYLPHENYL ETHER	UG/KG-DRY	34644 8270/3540-G	<100	<100	<100	<100	<100	<100	<340	<1100	<110	<110	<100	<110	<110	<100
CHRYSENE	UG/KG-DRY	34323 8270/3540-G	<100	<100	<100	<100	<100	<100	<340	<1100	<110	<110	<100	<110	<110	<100
DIBEN(A,H)ANTH'CENE	UG/KG-DRY	34559 8270/3540-G	<170	<170	<170	<170	<170	<170	<340	<1800	<170	<170	<160	<170	<170	<160
DIBENZOFURAN	UG/KG-DRY	75647 8270/3540-G	380	<130	<120	<120	<120	<130	<340	<1300	<130	<130	<120	<130	<130	<120
DI-N-BUTYL PHTHALATE	UG/KG-DRY	39112 8270/3540-G	<73	<73	<73	<73	<73	<73	<340	<770	<74	<75	<72	<74	<74	<72
1,3-DICHLOROBENZENE	UG/KG-DRY	34569 8270/3540-G	<73	<73	<73	<73	<73	<73	<340	<770	<74	<75	<72	<74	<74	<72
1,2-DICHLOROBENZENE	UG/KG-DRY	34539 8270/3540-G	<73	<73	<73	<73	<73	<73	<340	<770	<74	<75	<72	<74	<74	<72
1,4-DICHLOROBENZENE	UG/KG-DRY	34574 8270/3540-G	<73	<73	<73	<73	<73	<73	<340	<770	<74	<75	<72	<74	<74	<72
3,3-DICHL'BENZIDINE	UG/KG-DRY	34634 8270/3540-G	<520	<520	<520	<520	<520	<520	<340	<5500	<530	<530	<510	<530	<530	<510
2,4-DICHLOROPHENOL	UG/KG-DRY	34604 8270/3540-G	<150	<150	<150	<150	<150	<150	<340	<1500	<150	<150	<140	<150	<150	<140
DIETHYL PHTHALATE	UG/KG-DRY	34339 8270/3540-G	<73	<73	<73	<73	<73	<73	<340	<770	<74	<75	<72	<74	<74	<72
2,4-DIMETHYLPHENOL	UG/KG-DRY	34609 8270/3540-G	<150	<150	<150	<150	<150	<150	<340	<1500	<150	<150	<140	<150	<150	<140
DIMETHYL PHTHALATE	UG/KG-DRY	34344 8270/3540-G	<100	<100	<100	<100	<100	<100	<340	<1100	<110	<110	<100	<110	<110	<100
2,4-DINITROPHENOL	UG/KG-DRY	34619 8270/3540-G	<1400	<1400	<1400	<1300	<1400	<1400	<830	<14000	<1400	<1400	<1300	<1400	<1400	<1300

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PROJECT NUMBER 1944022G 0201 PROJECT NAME CDM - HANFORD N. SLOPE
FIELD GROUP CDMHNSS PROJECT MANAGER E.H. MANSFIELD
CDMHNSS.NUM ALL LAB COORDINATOR EDWARD MANSFIELD

SAMPLE ID'S		WA04-1-05	WA04-2-12	EA14-1-01	EA14-2-01	EA12-1-10	EA12-2-12	EA11-1-07	EA01-1-10	OCS1-1-00	EBG1-1-02	ESV1-1-01	WBG2-1-02	WBG2-2-02	WA04-3-20
PARAMETERS	STORET	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS
UNITS	METHOD	15	16	17	18	19	20	21	22	23	24	25	26	27	28
DATE		04/25/94	04/25/94	04/27/94	04/27/94	04/27/94	04/27/94	04/29/94	05/02/94	05/03/94	05/03/94	05/03/94	05/03/94	05/03/94	05/04/94
TIME		13:15	14:00	11:50	12:10	14:00	15:10	08:22	11:15	08:15	11:30	12:35	15:00	15:25	08:25
2,4-DINITROTOLUENE	34614	<150	<150	<150	<150	<150	<150	<340	<1500	<150	<150	<140	<150	<150	<140
UG/KG-DRY	8270/3540-G														
2,6-DINITROTOLUENE	34629	<150	<150	<150	<150	<150	<150	<340	<1500	<150	<150	<140	<150	<150	<140
UG/KG-DRY	8270/3540-G														
DI-N-OCTYL PHTHALATE	34599	<150	<150	<150	<150	<150	<150	<340	<1500	<150	<150	<140	<150	<150	<140
UG/KG-DRY	8270/3540-G														
FLUORANTHENE	34379	<73	<73	<73	<73	<73	<73	<340	<770	<74	<75	<72	<74	<74	<72
UG/KG-DRY	8270/3540-G														
FLUORENE	34384	<73	<73	<73	<73	<73	<73	<340	<770	<74	<75	<72	<74	<74	<72
UG/KG-DRY	8270/3540-G														
HEXACHLOROBENZENE	39701	<100	<100	<100	<100	<100	<100	<340	<1100	<110	<110	<100	<110	<110	<100
UG/KG-DRY	8270/3540-G														
HEXACHLOROBUTADIENE	39705	<150	<150	<150	<150	<150	<150	<340	<1500	<150	<150	<140	<150	<150	<140
UG/KG-DRY	8270/3540-G														
HEXACHLOROCYCLOPENTA	34389	<1000	<1000	<1000	<1000	<1000	<1000	<340	<11000	<1100	<1100	<1000	<1100	<1100	<1000
DIENE UG/KG-DRY	8270/3540-G														
HEXACHLOROETHANE	34399	<100	<100	<100	<100	<100	<100	<340	<1100	<110	<110	<100	<110	<110	<100
UG/KG-DRY	8270/3540-G														
INDENO(1,2,3-CD)	34406	<170	<170	<170	<170	<170	<170	<340	<1800	<170	<170	<160	<170	<170	<160
PYRENE UG/KG-DRY	8270/3540-G														
ISOPHORONE	34411	<73	<73	<73	<73	<73	<73	<340	<770	<74	<75	<72	<74	<74	<72
UG/KG-DRY	8270/3540-G														
2-METHYLNAPHTHALENE	78868	3600	<100	<100	<100	<100	<100	<340	77000	<110	<110	<100	<110	<110	<100
UG/KG-DRY	8270/3540-G														
2-METHYL-4,6-DINITRO	34660	<700	<700	<700	<700	<700	<700	<830	<7400	<710	<720	<690	<710	<710	<690
PHENOL UG/KG-DRY	8270/3540-G														
2-METHYLPHENOL	78872	<150	<150	<150	<150	<150	<150	<340	<1500	<150	<150	<140	<150	<150	<140
UG/KG-DRY	8270/3540-G														
4-METHYLPHENOL	78803	<150	<150	<150	<150	<150	<150	<340	<1500	<150	<150	<140	<150	<150	<140
UG/KG-DRY	8270/3540-G														
NAPHTHALENE	34445	960	<73	<73	<73	<73	<73	<340	3200	<74	<75	<72	<74	<74	<72
UG/KG-DRY	8270/3540-G														
2-NITROANILINE	98588	<310	<310	<310	<310	<310	<310	<830	<3300	<320	<320	<310	<320	<320	<310
UG/KG-DRY	8270/3540-G														
3-NITROANILINE	78869	<310	<310	<310	<310	<310	<310	<830	<3300	<320	<320	<310	<320	<320	<310
UG/KG-DRY	8270/3540-G														
4-NITROANILINE	78870	<420	<420	<420	<410	<420	<420	<830	<4400	<420	<430	<410	<420	<430	<410
UG/KG-DRY	8270/3540-G														
NITROBENZENE	34450	<73	<73	<73	<73	<73	<73	<340	<770	<74	<75	<72	<74	<74	<72
UG/KG-DRY	8270/3540-G														
2-NITROPHENOL	34594	<150	<150	<150	<150	<150	<150	<340	<1500	<150	<150	<140	<150	<150	<140
UG/KG-DRY	8270/3540-G														

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PROJECT NUMBER 1944022G 0201 PROJECT NAME CDM - HANFORD N. SLOPE
FIELD GROUP CDMHNSS PROJECT MANAGER E.H. MANSFIELD
CDMHNSS.NUM ALL LAB COORDINATOR EDWARD MANSFIELD

SAMPLE ID'S			WA04-1-05	WA04-2-12	EA14-1-01	EA14-2-01	EA12-1-10	EA12-2-12	EA11-1-07	EA01-1-10	OCS1-1-00	EBG1-1-02	ESV1-1-01	WBG2-1-02	WBG2-2-02	WA04-3-20
PARAMETERS		STORET	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS
	UNITS	METHOD	15	16	17	18	19	20	21	22	23	24	25	26	27	28
DATE			04/25/94	04/25/94	04/27/94	04/27/94	04/27/94	04/27/94	04/29/94	05/02/94	05/03/94	05/03/94	05/03/94	05/03/94	05/03/94	05/04/94
TIME			13:15	14:00	11:50	12:10	14:00	15:10	08:22	11:15	08:15	11:30	12:35	15:00	15:25	08:25
4-NITROPHENOL		34649	<520	<520	<520	<520	<520	<520	<830	<5500	<530	<530	<510	<530	<530	<510
	UG/KG-DRY	8270/3540-G														
N-NITROSODI-N-PROPYL		34431	<100	<100	<100	<100	<100	<100	<340	<1100	<110	<110	<100	<110	<110	<100
AMINE	UG/KG-DRY	8270/3540-G														
N-NITROSODIPHE'AMINE		34436	<73	<73	<73	<73	<73	<73	<340	<770	<74	<75	<72	<74	<74	<72
	UG/KG-DRY	8270/3540-G														
PENTACHLOROPHENOL		39061	<260	<260	<260	<260	<260	<260	<830	<2700	<260	<270	<260	<270	<270	<260
	UG/KG-DRY	8270/3540-G														
PHENANTHRENE		34464	570	<73	<73	<73	<73	<73	<340	16000	<74	<75	<72	<74	<74	<72
	UG/KG-DRY	8270/3540-G														
PHENOL		34695	<150	<150	<150	<150	<150	<150	<340	<1500	<150	<150	<140	<150	<150	<140
	UG/KG-DRY	8270/3540-G														
PYRENE		34472	<73	<73	<73	<73	<73	<73	<340	5400	<74	<75	<72	<74	<74	<72
	UG/KG-DRY	8270/3540-G														
1,2,4-TRICH'BENZENE		34554	<100	<100	<100	<100	<100	<100	<340	<1100	<110	<110	<100	<110	<110	<100
	UG/KG-DRY	8270/3540-G														
2,4,6-TRICH'PHENOL		34624	<180	<180	<180	<180	<180	<180	<340	<1900	<180	<180	<170	<180	<180	<170
	UG/KG-DRY	8270/3540-G														
2,4,5-TRICH'PHENOL		98587	<180	<180	<180	<180	<180	<180	<830	<1900	<180	<180	<170	<180	<180	<170
	UG/KG-DRY	8270/3540-G														
ALDRIN		39333	<0.832	<0.838	<0.693	<0.692	<0.693	<0.696	<1.73	<0.732	<0.917	<0.927	<0.892	<0.920	<0.922	<0.890
	UG/KG-DRY	8080/3540-G														
BHC,A		39076	<0.693	<0.698	<0.693	<0.692	<0.693	<0.696	<1.73	<0.732	<0.705	<0.713	<0.686	<0.708	<0.709	<0.684
	UG/KG-DRY	8080/3540-G														
BHC,B		34257	<0.693	<0.698	<0.693	<0.692	<0.693	<0.696	<1.73	<0.732	<1.34	<1.35	<1.30	<1.34	<1.35	<1.30
	UG/KG-DRY	8080/3540-G														
BHC,D		34262	<0.693	<0.698	<0.693	<0.692	<0.693	<0.696	<1.73	<0.732	<0.705	<0.713	<0.686	<0.708	<0.709	<0.684
	UG/KG-DRY	8080/3540-G														
BHC,G(LINDANE)		39783	<0.693	<0.698	<0.693	<0.692	5.38	<0.696	<1.73	<0.732	<0.705	<0.713	<0.686	<0.708	<0.709	<0.684
	UG/KG-DRY	8080/3540-G														
CHLORDANE		39351	<3.47	<3.49	<3.47	<3.46	<3.47	<3.48	NRQ	<3.66	<3.53	<3.57	<3.43	<3.54	<3.55	<3.42
	UG/KG-DRY	8080/3540-G														
DDD,PP'		39311	31.0	115	3790	1630	2780	<0.696	<3.47	786000	<0.748	8.02	597	<0.750	<0.752	<0.726
	UG/KG-DRY	8080/3540-G														
DDE,PP'		39321	8.92	79.0	2130	1870	3650	146	<3.47	44400	<0.705	1.57	1660	<0.708	<0.709	<0.684
	UG/KG-DRY	8080/3540-G														
DDT,PP'		39301	67.8	284	11600	5600	5910	167	<3.47	2080000	<0.748	12.9	806	1.66	1.47	<0.726
	UG/KG-DRY	8080/3540-G														
DIELDRIN		39383	<0.693	<0.698	<0.693	<0.692	64.3	3.53	<3.47	<0.732	<0.847	<0.856	<0.823	<0.849	<0.851	<0.821
	UG/KG-DRY	8080/3540-G														
ENDOSULFAN,A		34364	<0.693	<0.698	<0.693	<0.692	<0.693	<0.696	<1.73	<0.732	<0.705	<0.713	<0.686	<0.708	<0.709	<0.684
	UG/KG-DRY	8080/3540-G														

PROJECT NUMBER 1944022G 0201 PROJECT NAME CDM - HANFORD N. SLOPE
FIELD GROUP CDMHNSS PROJECT MANAGER E.H. MANSFIELD
CDMHNSS.NUM ALL LAB COORDINATOR EDWARD MANSFIELD

SAMPLE ID'S			WA04-1-05	WA04-2-12	EA14-1-01	EA14-2-01	EA12-1-10	EA12-2-12	EA11-1-07	EA01-1-10	OCS1-1-00	EBG1-1-02	ESV1-1-01	WBG2-1-02	WBG2-2-02	WA04-3-20
PARAMETERS		STORET	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS
	UNITS	METHOD	15	16	17	18	19	20	21	22	23	24	25	26	27	28
DATE			04/25/94	04/25/94	04/27/94	04/27/94	04/27/94	04/27/94	04/29/94	05/02/94	05/03/94	05/03/94	05/03/94	05/03/94	05/03/94	05/04/94
TIME			13:15	14:00	11:50	12:10	14:00	15:10	08:22	11:15	08:15	11:30	12:35	15:00	15:25	08:25
ENDOSULFAN,B		34359	<0.693	<0.698	<0.693	<0.692	<0.693	<0.696	<3.47	<0.732	<0.705	<0.713	<0.686	<0.708	<0.709	<0.684
	UG/KG-DRY	8080/3540-G														
ENDOSULFAN SULFATE		34354	<0.693	<0.698	<0.693	<0.692	<0.693	<0.696	<3.47	<0.732	<0.705	<0.713	<0.686	<0.708	<0.709	<0.684
	UG/KG-DRY	8080/3540-G														
ENDRIN		39393	<0.693	<0.698	<0.693	<0.692	<0.693	<0.696	<3.47	<0.805	<0.741	<0.749	<0.720	<0.743	<0.745	<0.718
	UG/KG-DRY	8080/3540-G														
ENDRIN ALDEHYDE		34369	<0.693	<0.698	<0.693	<0.692	<0.693	<0.696	<3.47	<0.732	<0.705	<0.713	<0.686	<0.708	<0.709	<0.684
	UG/KG-DRY	8080/3540-G														
HEPTACHLOR		39413	<0.693	<0.698	<0.693	<0.692	<0.693	<0.696	<1.73	<0.732	<0.705	<0.713	<0.686	<0.708	<0.709	<0.684
	UG/KG-DRY	8080/3540-G														
HEPTACHLOR EPOXIDE		39423	<0.693	<0.698	<0.693	<0.692	<0.693	<0.696	<1.73	<0.732	<0.705	<0.713	<0.686	<0.708	<0.709	<0.684
	UG/KG-DRY	8080/3540-G														
METHOXYCHLOR		39481	<1.25	<1.26	<0.693	<0.692	<0.693	<0.696	<17.3	<0.805	<1.14	<1.15	<1.10	<1.14	<1.14	<1.10
	UG/KG-DRY	8080/3540-G														
TOXAPHENE		39403	<69.3	<69.8	<69.3	<69.2	<69.3	<69.6	<173	<73.2	<70.5	<71.3	<68.6	<70.8	<70.9	<68.4
	UG/KG-DRY	8080/3540-G														
PCB-1016		39514	<13.9	<14.0	<13.9	<13.8	<13.9	<13.9	<34.7	<14.6	<14.1	<14.3	<13.7	<14.2	<14.2	<13.7
	UG/KG-DRY	8080/3540-G														
PCB-1221		39491	<13.9	<14.0	<13.9	<13.8	<13.9	<13.9	<69.3	<14.6	<14.1	<14.3	<13.7	<14.2	<14.2	<13.7
	UG/KG-DRY	8080/3540-G														
PCB-1232		39495	<13.9	<14.0	<13.9	<13.8	<13.9	<13.9	<34.7	<14.6	<14.1	<14.3	<13.7	<14.2	<14.2	<13.7
	UG/KG-DRY	8080/3540-G														
PCB-1242		39499	<13.9	<14.0	<13.9	<13.8	<13.9	<13.9	<34.7	<14.6	<14.1	<14.3	<13.7	<14.2	<14.2	<13.7
	UG/KG-DRY	8080/3540-G														
PCB-1248		39503	<13.9	<14.0	<13.9	<13.8	<13.9	<13.9	<34.7	<14.6	<14.1	<14.3	<13.7	<14.2	<14.2	<13.7
	UG/KG-DRY	8080/3540-G														
PCB-1254		39507	<13.9	<14.0	<13.9	<13.8	<13.9	<13.9	<34.7	<14.6	<14.1	<14.3	<13.7	<14.2	<14.2	<13.7
	UG/KG-DRY	8080/3540-G														
PCB-1260		39511	<13.9	<14.0	<13.9	<13.8	<13.9	<13.9	<34.7	<14.6	<14.1	<14.3	<13.7	<14.2	<14.2	<13.7
	UG/KG-DRY	8080/3540-G														

PROJECT NUMBER 1944022G 0201 PROJECT NAME CDM - HANFORD N. SLOPE
FIELD GROUP CDMHNSS PROJECT MANAGER E.H. MANSFIELD
CDMHNSS.NUM ALL LAB COORDINATOR EDWARD MANSFIELD

SAMPLE ID'S		WA04-4-08	WSV2-1-01	WBG3-1-02	EWC1-1-00	WWC2-1-00	EA01-2-05	EA01-3-05	EA01-4-14	EA01-5-12	EA01-6-10
PARAMETERS	STORET	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS
UNITS	METHOD	29	30	31	32	33	34	35	36	37	38
DATE		05/04/94	05/04/94	05/04/94	05/05/94	05/05/94	05/11/94	05/11/94	05/13/94	05/13/94	05/13/94
TIME		10:50	13:05	14:30	10:35	12:20	12:54	13:30	08:40	09:00	10:55
SITE #	96274	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L
	0										
CHAIN OF CUSTODY	96793	13	13	13	15	15	17	17	19	19	19
#	0										
SCREEN.GR. ALPHA,	96636	2.8	<2.0	<2.0	<2.0	4.2	25.4	<2.0	22.9	<2.0	21.9
(ESTIMATE)NCI/KG-WET	R										
SCREEN.GR. BETA,	96637	26.6	<6.0	21.0	<6.0	10.4	16.0	21.2	34.1	18.9	23.3
(ESTIMATE)NCI/KG-WET	R										
MOISTURE	70320	4.9	2.4	6.1	2.3	2.1	4.4	4.2	5.4	4.9	4.4
%WET WT	I										
HYDROCARBONS.PETROL	98233	82.0	<8.57	<8.90	255	57.2	437	428	<8.84	<8.79	<8.74
MG/KG-DRY	AISON										
ARSENIC	1003	4.00	1.64	3.07	3.64	1.82	5.42	5.54	7.97	7.75	7.42
MG/KG-DRY	7060-G										
SELENIUM	1148	<0.241	<0.254	<0.263	<0.255	<0.255	<0.255	0.340	<0.258	<0.257	<0.255
MG/KG-DRY	7740-G										
MERCURY	71921	<0.099	<0.096	<0.093	<0.099	<0.093	<0.097	<0.091	<0.105	<0.103	<0.086
MG/KG-DRY	7471M-G										
BARIUM	1008	109	87.9	133	142	171	125	107	151	139	131
MG/KG-DRY	6010-G										
CADMIUM	1028	<0.510	<0.492	<0.511	1.55	1.77	<0.510	<0.513	<0.516	<0.513	<0.509
MG/KG-DRY	6010-G										
CHROMIUM	1029	10.2	6.44	7.66	9.42	56.4	14.9	16.0	20.3	21.3	17.0
MG/KG-DRY	6010-G										
LEAD	1052	<10.2	<9.84	<10.2	1140	1810	24.5	23.6	13.9	12.1	10.6
MG/KG-DRY	6010-G										
SILVER	1078	<0.510	<0.492	<0.511	<0.507	<0.504	<0.510	<0.513	<0.516	<0.513	<0.509
MG/KG-DRY	6010-G										
ACETONE	75059	<11	<10.0	<11	<10.0	<10.0	<10.0	<10.0	<11	<11	<10.0
UG/KG-DRY	8260-G										
BENZENE	34237	<11	<10.0	<5.3	<5.1	<5.1	<5.2	<5.2	<11	<5.3	<5.2
UG/KG-DRY	8260-G										
BROMODICHLOROMETHANE	34330	<11	<10.0	<5.3	<5.1	<5.1	<5.2	<5.2	<11	<5.3	<5.2
UG/KG-DRY	8260-G										
BROMOFORM	34290	<11	<10.0	<5.3	<5.1	<5.1	<5.2	<5.2	<11	<5.3	<5.2
UG/KG-DRY	8260-G										
BROMOMETHANE	34416	<11	<10.0	<11	<10.0	<10.0	<10.0	<10.0	<11	<11	<10.0
UG/KG-DRY	8260-G										
CARBON DISULFIDE	78544	<11	<10.0	<5.3	<5.1	<5.1	<5.2	<5.2	<11	<5.3	<5.2
UG/KG-DRY	8260-G										

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PROJECT NUMBER 19440220 0201 PROJECT NAME CDM - HANFORD N. SLOPE
FIELD GROUP CDMHNSS PROJECT MANAGER E.H. MANSFIELD
CDMHNSS.NUM ALL LAB COORDINATOR EDWARD MANSFIELD

SAMPLE ID'S		WA04-4-08	WSV2-1-01	WBC3-1-02	EWC1-1-00	WWC2-1-00	EA01-2-05	EA01-3-05	EA01-4-14	EA01-5-12	EA01-6-10
PARAMETERS	STORET	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS
UNITS	METHOD	29	30	31	32	33	34	35	36	37	38
DATE		05/04/94	05/04/94	05/04/94	05/05/94	05/05/94	05/11/94	05/11/94	05/13/94	05/13/94	05/13/94
TIME		10:50	13:05	14:30	10:35	12:20	12:54	13:30	08:40	09:00	10:55
CARBON TETRACHLORIDE UG/KG-DRY	34299 8260-G	<11	<10.0	<5.3	<5.1	<5.1	<5.2	<5.2	<11	<5.3	<5.2
CHLOROBENZENE UG/KG-DRY	34304 8260-G	<11	<10.0	<5.3	<5.1	<5.1	<5.2	<5.2	<11	<5.3	<5.2
CHLOROETHANE UG/KG-DRY	34314 8260-G	<11	<10.0	<11	<10.0	<10.0	<10.0	<10.0	<11	<11	<10.0
2-CHLOROETHYLVINYL-ETHER UG/KG-DRY	34579 8260-G	NRQ	NRQ	<5.3	<5.1	<5.1	<5.2	<5.2	NRQ	<5.3	<5.2
CHLOROFORM UG/KG-DRY	34318 8260-G	<11	<10.0	<5.3	<5.1	<5.1	<5.2	<5.2	<11	<5.3	<5.2
CHLOROMETHANE UG/KG-DRY	34421 8260-G	<11	<10.0	<11	<10.0	<10.0	<10.0	<10.0	<11	<11	<10.0
DIBROMOCHLOROMETHANE UG/KG-DRY	34309 8260-G	<11	<10.0	<5.3	<5.1	<5.1	<5.2	<5.2	<11	<5.3	<5.2
1,1-DICHLOROETHANE UG/KG-DRY	34499 8260-G	<11	<10.0	<5.3	<5.1	<5.1	<5.2	<5.2	<11	<5.3	<5.2
1,2-DICHLOROETHANE UG/KG-DRY	34534 8260-G	<11	<10.0	<5.3	<5.1	<5.1	<5.2	<5.2	<11	<5.3	<5.2
1,1-DICHLOROETHYLENE UG/KG-DRY	34504 8260-G	<11	<10.0	<5.3	<5.1	<5.1	<5.2	<5.2	<11	<5.3	<5.2
1,2-DICHLOROETHENE(TOTAL) UG/KG-DRY	96464 8260-G	<11	<10.0	<5.3	<5.1	<5.1	<5.2	<5.2	<11	<5.3	<5.2
1,2-DICHLOROPROPANE UG/KG-DRY	34544 8260-G	<11	<10.0	<5.3	<5.1	<5.1	<5.2	<5.2	<11	<5.3	<5.2
CIS-1,3-DICHLORO-PROPENE UG/KG-DRY	34702 8260-G	<11	<10.0	<5.3	<5.1	<5.1	<5.2	<5.2	<11	<5.3	<5.2
TRANS-1,3-DICHLORO-PROPENE UG/KG-DRY	34697 8260-G	<11	<10.0	<5.3	<5.1	<5.1	<5.2	<5.2	<11	<5.3	<5.2
ETHYLBENZENE UG/KG-DRY	34374 8260-G	<11	<10.0	<5.3	<5.1	<5.1	<5.2	<5.2	<11	<5.3	<5.2
2-HEXANONE UG/KG-DRY	75166 8260-G	<11	<10.0	<11	<10.0	<10.0	<10.0	<10.0	<11	<11	<10.0
METHYLENE CHLORIDE UG/KG-DRY	34426 8260-G	<11	<10.0	<5.3	<5.1	<5.1	<5.2	<5.2	<11	<5.3	<5.2
METHYL ETHYL KETONE UG/KG-DRY	75078 8260-G	<11	<10.0	<11	<10.0	<10.0	<10.0	<10.0	<11	<11	<10.0
METHYLISOBUTYLKETONE UG/KG-DRY	75169 8260-G	<11	<10.0	<11	<10.0	<10.0	<10.0	<10.0	<11	<11	<10.0
STYRENE UG/KG-DRY	75192 8260-G	<11	<10.0	<5.3	<5.1	<5.1	<5.2	<5.2	<11	<5.3	<5.2
1,1,2,2-TETRACHLORO-ETHANE UG/KG-DRY	34519 8260-G	<11	<10.0	<5.3	<5.1	<5.1	<5.2	<5.2	<11	<5.3	<5.2

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SAMPLE ID'S		WA04-4-08	WSV2-1-01	WBG3-1-02	EWC1-1-00	WWC2-1-00	EA01-2-05	EA01-3-05	EA01-4-14	EA01-5-12	EA01-6-10
PARAMETERS	STORET	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS
UNITS	METHOD	29	30	31	32	33	34	35	36	37	38
DATE		05/04/94	05/04/94	05/04/94	05/05/94	05/05/94	05/11/94	05/11/94	05/13/94	05/13/94	05/13/94
TIME		10:50	13:05	14:30	10:35	12:20	12:54	13:30	08:40	09:00	10:55
TETRACHLOROETHENE	34478	<11	<10.0	<5.3	<5.1	<5.1	<5.2	<5.2	<11	<5.3	<5.2
UG/KG-DRY	8260-G										
TOLUENE	34483	<11	<10.0	<5.3	<5.1	<5.1	<5.2	<5.2	<11	<5.3	<5.2
UG/KG-DRY	8260-G										
1,1,1-TRICHL'ETHANE	34509	<11	<10.0	<5.3	<5.1	<5.1	<5.2	<5.2	<11	<5.3	<5.2
UG/KG-DRY	8260-G										
1,1,2-TRICHL'ETHANE	34514	<11	<10.0	<5.3	<5.1	<5.1	<5.2	<5.2	<11	<5.3	<5.2
UG/KG-DRY	8260-G										
TRICHLOROETHENE	34487	<11	<10.0	<5.3	<5.1	<5.1	<5.2	<5.2	<11	<5.3	<5.2
UG/KG-DRY	8260-G										
VINYL CHLORIDE	34495	<11	<10.0	<11	<10.0	<10.0	<10.0	<10.0	<11	<11	<10.0
UG/KG-DRY	8260-G										
VINYL ACETATE	98583	NRQ	NRQ	<11	<10.0	<10.0	<10.0	<10.0	NRQ	<11	<10.0
UG/KG-DRY	8260-G										
XYLENE,TOTAL	45510	NRQ	NRQ	<5.3	<5.1	220	<5.2	<5.2	NRQ	<5.3	<5.2
UG/KG-DRY	8260-G										
ACENAPHTHENE	34208	<350	<340	<75	9700	<72	<73	220	<350	<74	<73
UG/KG-DRY	8270/3540-G										
ACENAPHTHYLENE	34203	<350	<340	<160	<3100	<150	<160	<160	<350	<160	<160
UG/KG-DRY	8270/3540-G										
ANTHRACENE	34223	<350	<340	<75	14000	<72	<73	<73	<350	<74	<73
UG/KG-DRY	8270/3540-G										
BENZYL ALCOHOL	75212	NRQ	NRQ	<150	<2900	<140	<150	<150	NRQ	<150	<150
UG/KG-DRY	8270/3540-G										
BENZOIC ACID	75315	NRQ	NRQ	<2900	<55000	<2800	<2800	<2800	NRQ	<2800	<2800
UG/KG-DRY	8270/3540-G										
BENZO(A)ANTHRACENE	34529	<350	<340	<110	8300	<100	<100	<100	<350	<110	<100
UG/KG-DRY	8270/3540-G										
BENZO(B)FLUORANTHENE	34233	<350	<340	<110	6800	<100	<100	<100	<350	<110	<100
UG/KG-DRY	8270/3540-G										
BENZO(K)FLUORANTHENE	34245	<350	<340	<110	2300	<100	<100	<100	<350	<110	<100
UG/KG-DRY	8270/3540-G										
BENZO(A)PYRENE	34250	<350	<340	<150	5300	<140	<150	<150	<350	<150	<150
UG/KG-DRY	8270/3540-G										
BENZO(GHI)PERYLENE	34524	<350	<340	<170	<3300	<160	<170	<170	<350	<170	<170
UG/KG-DRY	8270/3540-G										
BUTYLBENZYLPHTHALATE	34295	<350	<340	<110	<2000	<100	<100	<100	<350	<110	<100
UG/KG-DRY	8270/3540-G										
BIS(2-CHLOROETHYL)	34276	<350	<340	<75	<1400	<72	<73	<73	<350	<74	<73
ETHER UG/KG-DRY	8270/3540-G										
BIS(2-CHLOROETHOXY)	34281	<350	<340	<150	<2900	<140	<150	<150	<350	<150	<150
METHANE UG/KG-DRY	8270/3540-G										

PROJECT NUMBER 1944022G 0201 PROJECT NAME CDM - HANFORD N. SLOPE
FIELD GROUP CDMHNSS PROJECT MANAGER E.H. MANSFIELD
CDMHNSS.NUM ALL LAB COORDINATOR EDWARD MANSFIELD

SAMPLE ID'S		WA04-4-08	WSV2-1-01	WBG3-1-02	EWC1-1-00	WWC2-1-00	EA01-2-05	EA01-3-05	EA01-4-14	EA01-5-12	EA01-6-10
PARAMETERS	STORET	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS
UNITS	METHOD	29	30	31	32	33	34	35	36	37	38
DATE		05/04/94	05/04/94	05/04/94	05/05/94	05/05/94	05/11/94	05/11/94	05/13/94	05/13/94	05/13/94
TIME		10:50	13:05	14:30	10:35	12:20	12:54	13:30	08:40	09:00	10:55
BIS(2-ETHYLHEXYL) PHTHALATEUG/KG-DRY	39102 8270/3540-G	<350	<340	4500	<2000	1400	<100	<100	<350	<110	<100
BIS(2-CHL'ISOPROPYL) ETHER UG/KG-DRY	34286 8270/3540-G	<350	<340	<75	<1400	<72	<73	<73	<350	<74	<73
4-BROMOPHENYL PHENYL ETHER UG/KG-DRY	34639 8270/3540-G	<350	<340	<150	<2900	<140	<150	<150	<350	<150	<150
4-CHLOROANILINE UG/KG-DRY	78867 8270/3540-G	<350	<340	<320	<6100	<310	<310	<310	<350	<320	<310
2-CHLORONAPHTHALENE UG/KG-DRY	34584 8270/3540-G	<350	<340	<75	<1400	<72	<73	<73	<350	<74	<73
2-CHLOROPHENOL UG/KG-DRY	34589 8270/3540-G	<350	<340	<150	<2900	<140	<150	<150	<350	<150	<150
4-CHLORO-3-METHYL PHENOL UG/KG-DRY	34455 8270/3540-G	<350	<340	<150	<2900	<140	<150	<150	<350	<150	<150
4-CHLOROPHENYLPHENYL ETHER UG/KG-DRY	34644 8270/3540-G	<350	<340	<110	<2000	<100	<100	<100	<350	<110	<100
CHRYSENE UG/KG-DRY	34323 8270/3540-G	<350	<340	<110	8600	<100	<100	<100	<350	<110	<100
DIBEN(A,H)ANTH'CENE UG/KG-DRY	34559 8270/3540-G	<350	<340	<170	<3300	<160	<170	<170	<350	<170	<170
DIBENZOFURAN UG/KG-DRY	75647 8270/3540-G	<350	<340	<130	8500	<120	<130	<130	<350	<130	<130
DI-N-BUTYL PHTHALATE UG/KG-DRY	39112 8270/3540-G	<350	<340	<75	<1400	530	<73	<73	<350	<74	<73
1,3-DICHLOROBENZENE UG/KG-DRY	34569 8270/3540-G	<350	<340	<75	<1400	<72	<73	<73	<350	<74	<73
1,2-DICHLOROBENZENE UG/KG-DRY	34539 8270/3540-G	<350	<340	<75	<1400	<72	<73	<73	<350	<74	<73
1,4-DICHLOROBENZENE UG/KG-DRY	34574 8270/3540-G	<350	<340	<75	<1400	<72	<73	<73	<350	<74	<73
3,3-DICHL'BENZIDINE UG/KG-DRY	34634 8270/3540-G	<350	<340	<530	<10000	<510	<520	<520	<350	<530	<520
2,4-DICHLOROPHENOL UG/KG-DRY	34604 8270/3540-G	<350	<340	<150	<2900	<140	<150	<150	<350	<150	<150
DIETHYL PHTHALATE UG/KG-DRY	34339 8270/3540-G	<350	<340	<75	<1400	<72	<73	<73	<350	<74	<73
2,4-DIMETHYLPHENOL UG/KG-DRY	34609 8270/3540-G	<350	<340	<150	<2900	<140	<150	<150	<350	<150	<150
DIMETHYL PHTHALATE UG/KG-DRY	34344 8270/3540-G	<350	<340	<110	<2000	<100	<100	<100	<350	<110	<100
2,4-DINITROPHENOL UG/KG-DRY	34619 8270/3540-G	<840	<820	<1400	<27000	<1300	<1400	<1400	<850	<1400	<1400

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SAMPLE ID'S		WA04-4-08	WSV2-1-01	WBG3-1-02	EWC1-1-00	WWC2-1-00	EA01-2-05	EA01-3-05	EA01-4-14	EA01-5-12	EA01-6-10
PARAMETERS	STORET	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS
UNITS	METHOD	29	30	31	32	33	34	35	36	37	38
DATE		05/04/94	05/04/94	05/04/94	05/05/94	05/05/94	05/11/94	05/11/94	05/13/94	05/13/94	05/13/94
TIME		10:50	13:05	14:30	10:35	12:20	12:54	13:30	08:40	09:00	10:55
2,4-DINITROTOLUENE	34614	<350	<340	<150	<2900	<140	<150	<150	<350	<150	<150
UG/KG-DRY	8270/3540-G										
2,6-DINITROTOLUENE	34629	<350	<340	<150	<2900	<140	<150	<150	<350	<150	<150
UG/KG-DRY	8270/3540-G										
DI-N-OCTYL PHTHALATE	34599	<350	<340	<150	<2900	1600	<150	<150	<350	<150	<150
UG/KG-DRY	8270/3540-G										
FLUORANTHENE	34379	<350	<340	<75	24000	<72	<73	<73	<350	<74	<73
UG/KG-DRY	8270/3540-G										
FLUORENE	34384	<350	<340	<75	14000	<72	<73	<73	<350	<74	<73
UG/KG-DRY	8270/3540-G										
HEXACHLOROBENZENE	39701	<350	<340	<110	<2000	<100	<100	<100	<350	<110	<100
UG/KG-DRY	8270/3540-G										
HEXACHLOROBUTADIENE	39705	<350	<340	<150	<2900	<140	<150	<150	<350	<150	<150
UG/KG-DRY	8270/3540-G										
HEXACHLOROCYCLOPENTA	34389	<350	<340	<1100	<20000	<1000	<1000	<1000	<350	<1100	<1000
DIENE UG/KG-DRY	8270/3540-G										
HEXACHLOROETHANE	34399	<350	<340	<110	<2000	<100	<100	<100	<350	<110	<100
UG/KG-DRY	8270/3540-G										
INDENO(1,2,3-CD)	34406	<350	<340	<170	<3300	<160	<170	<170	<350	<170	<170
PYRENE UG/KG-DRY	8270/3540-G										
ISOPHORONE	34411	<350	<340	<75	<1400	<72	<73	<73	<350	<74	<73
UG/KG-DRY	8270/3540-G										
2-METHYLNAPHTHALENE	78868	<350	<340	<110	12000	140	3800	2900	<350	<110	<100
UG/KG-DRY	8270/3540-G										
2-METHYL-4,6-DINITRO	34660	<840	<820	<710	<14000	<680	<700	<700	<850	<700	<700
PHENOL UG/KG-DRY	8270/3540-G										
2-METHYLPHENOL	78872	<350	<340	<150	<2900	<140	<150	<150	<350	<150	<150
UG/KG-DRY	8270/3540-G										
4-METHYLPHENOL	78803	<350	<340	<150	<2900	<140	<150	<150	<350	<150	<150
UG/KG-DRY	8270/3540-G										
NAPHTHALENE	34445	<350	<340	<75	8000	250	<73	<73	<350	<74	<73
UG/KG-DRY	8270/3540-G										
2-NITROANILINE	98588	<840	<820	<320	<6100	<310	<310	<310	<850	<320	<310
UG/KG-DRY	8270/3540-G										
3-NITROANILINE	78869	<840	<820	<320	<6100	<310	<310	<310	<850	<320	<310
UG/KG-DRY	8270/3540-G										
4-NITROANILINE	78870	<840	<820	<430	<8200	<410	<420	<420	<850	<420	<420
UG/KG-DRY	8270/3540-G										
NITROBENZENE	34450	<350	<340	<75	<1400	<72	<73	<73	<350	<74	<73
UG/KG-DRY	8270/3540-G										
2-NITROPHENOL	34594	<350	<340	<150	<2900	<140	<150	<150	<350	<150	<150
UG/KG-DRY	8270/3540-G										

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SAMPLE ID'S			WA04-4-08	WSV2-1-01	WBG3-1-02	EWC1-1-00	WWC2-1-00	EA01-2-05	EA01-3-05	EA01-4-14	EA01-5-12	EA01-6-10
PARAMETERS		STORET	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS
	UNITS	METHOD	29	30	31	32	33	34	35	36	37	38
DATE			05/04/94	05/04/94	05/04/94	05/05/94	05/05/94	05/11/94	05/11/94	05/13/94	05/13/94	05/13/94
TIME			10:50	13:05	14:30	10:35	12:20	12:54	13:30	08:40	09:00	10:55
4-NITROPHENOL		34649	<840	<820	<530	<10000	<510	<520	<520	<850	<530	<520
	UG/KG-DRY	8270/3540-G										
N-NITROSODI-N-PROPYL		34431	<350	<340	<110	<2000	<100	<100	<100	<350	<110	<100
AMINE	UG/KG-DRY	8270/3540-G										
N-NITROSODIPHE'AMINE		34436	<350	<340	<75	<1400	<72	<73	<73	<350	<74	<73
	UG/KG-DRY	8270/3540-G										
PENTACHLOROPHENOL		39061	<840	<820	<270	<5100	<260	<260	<260	<850	<260	<260
	UG/KG-DRY	8270/3540-G										
PHENANTHRENE		34464	<350	<340	<75	57000	<72	2700	2500	<350	<74	<73
	UG/KG-DRY	8270/3540-G										
PHENOL		34695	<350	<340	<150	<2900	<140	<150	<150	<350	<150	<150
	UG/KG-DRY	8270/3540-G										
PYRENE		34472	<350	<340	<75	18000	<72	750	850	<350	<74	<73
	UG/KG-DRY	8270/3540-G										
1,2,4-TRICH'BENZENE		34554	<350	<340	<110	<2000	<100	<100	<100	<350	<110	<100
	UG/KG-DRY	8270/3540-G										
2,4,6-TRICH'PHENOL		34624	<350	<340	<180	<3500	<170	<180	<180	<350	<180	<180
	UG/KG-DRY	8270/3540-G										
2,4,5-TRICH'PHENOL		98587	<840	<820	<180	<3500	<170	<180	<180	<850	<180	<180
	UG/KG-DRY	8270/3540-G										
ALDRIN		39333	<1.75	<1.71	<0.923	<0.887	<0.885	52.7	54.9	<1.76	<0.701	<0.697
	UG/KG-DRY	8080/3540-G										
BHC,A		39076	<1.75	<1.71	<0.710	<0.682	<0.681	<0.697	<0.696	<1.76	<0.701	<0.697
	UG/KG-DRY	8080/3540-G										
BHC,B		34257	<1.75	<1.71	<1.35	<1.30	<1.29	<0.697	<0.696	<1.76	<0.701	<0.697
	UG/KG-DRY	8080/3540-G										
BHC,D		34262	<1.75	<1.71	<0.710	<0.682	<0.681	<0.697	<0.696	<1.76	<0.701	<0.697
	UG/KG-DRY	8080/3540-G										
BHC,G(LINDANE)		39783	<1.75	<1.71	<0.710	<0.682	<0.681	<0.697	<0.696	<1.76	<0.701	<0.697
	UG/KG-DRY	8080/3540-G										
CHLORDANE		39351	NRQ	NRQ	<3.55	<3.41	<3.40	<3.49	<3.48	NRQ	<3.51	<3.49
	UG/KG-DRY	8080/3540-G										
DDD,PP'		39311	<3.51	<3.42	<0.753	150	15.1	269000	276000	4.78	<0.701	<0.697
	UG/KG-DRY	8080/3540-G										
DDE,PP'		39321	<3.51	37.2	<0.710	422	25.0	22100	28000	16.6	<0.701	0.862
	UG/KG-DRY	8080/3540-G										
DDT,PP'		39301	<3.51	14.5	<0.753	356	161	695000	611000	184	4.31	7.16
	UG/KG-DRY	8080/3540-G										
DIELDRIN		39383	<3.51	<3.42	<0.852	<0.819	<0.817	1980	2630	8.34	<0.701	0.856
	UG/KG-DRY	8080/3540-G										
ENDOSULFAN,A		34364	<1.75	<1.71	<0.710	<0.682	<0.681	<0.697	<0.696	<1.76	<0.701	<0.697
	UG/KG-DRY	8080/3540-G										

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PROJECT NUMBER 1944022G 0201 PROJECT NAME CDM - HANFORD N. SLOPE
FIELD GROUP CDMHNSS PROJECT MANAGER E.H. MANSFIELD
CDMHNSS.NUM ALL LAB COORDINATOR EDWARD MANSFIELD

SAMPLE ID'S			WA04-4-08	WSV2-1-01	WBG3-1-02	EWC1-1-00	WWC2-1-00	EA01-2-05	EA01-3-05	EA01-4-14	EA01-5-12	EA01-6-10
PARAMETERS		STORET	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS
	UNITS	METHOD	29	30	31	32	33	34	35	36	37	38
DATE			05/04/94	05/04/94	05/04/94	05/05/94	05/05/94	05/11/94	05/11/94	05/13/94	05/13/94	05/13/94
TIME			10:50	13:05	14:30	10:35	12:20	12:54	13:30	08:40	09:00	10:55
ENDOSULFAN B		34359	<3.51	<3.42	<0.710	<0.682	<0.681	<0.697	<0.696	<3.52	<0.701	<0.697
	UG/KG-DRY	8080/3540-G										
ENDOSULFAN SULFATE		34354	<3.51	<3.42	<0.710	<0.682	<0.681	<0.697	<0.696	<3.52	<0.701	<0.697
	UG/KG-DRY	8080/3540-G										
ENDRIN		39393	<3.51	<3.42	<0.745	<0.716	<0.715	<0.697	<0.696	<3.52	<0.701	<0.697
	UG/KG-DRY	8080/3540-G										
ENDRIN ALDEHYDE		34369	<3.51	<3.42	<0.710	<0.682	<0.681	<0.697	<0.696	<3.52	<0.701	<0.697
	UG/KG-DRY	8080/3540-G										
HEPTACHLOR		39413	<1.75	<1.71	<0.710	<0.682	<0.681	<0.697	<0.696	<1.76	<0.701	<0.697
	UG/KG-DRY	8080/3540-G										
HEPTACHLOR EPOXIDE		39423	<1.75	<1.71	<0.710	<0.682	<0.681	<0.697	<0.696	<1.76	<0.701	<0.697
	UG/KG-DRY	8080/3540-G										
METHOXYCHLOR		39481	<17.5	<17.1	<1.14	<1.10	<1.10	<0.697	<0.696	<17.6	<0.701	<0.697
	UG/KG-DRY	8080/3540-G										
TOXAPHENE		39403	<175	<171	<71.0	<68.2	<68.1	<69.7	<69.6	<176	<70.1	<69.7
	UG/KG-DRY	8080/3540-G										
PCB-1016		39514	<35.1	<34.2	<14.2	<13.6	<13.6	<13.9	<13.9	<35.2	<14.0	<13.9
	UG/KG-DRY	8080/3540-G										
PCB-1221		39491	<70.1	<68.3	<14.2	<13.6	<13.6	<13.9	<13.9	<70.5	<14.0	<13.9
	UG/KG-DRY	8080/3540-G										
PCB-1232		39495	<35.1	<34.2	<14.2	<13.6	<13.6	<13.9	<13.9	<35.2	<14.0	<13.9
	UG/KG-DRY	8080/3540-G										
PCB-1242		39499	<35.1	<34.2	<14.2	<13.6	<13.6	<13.9	<13.9	<35.2	<14.0	<13.9
	UG/KG-DRY	8080/3540-G										
PCB-1248		39503	<35.1	<34.2	<14.2	<13.6	<13.6	<13.9	<13.9	<35.2	<14.0	<13.9
	UG/KG-DRY	8080/3540-G										
PCB-1254		39507	<35.1	<34.2	<14.2	<13.6	<13.6	<13.9	<13.9	<35.2	<14.0	<13.9
	UG/KG-DRY	8080/3540-G										
PCB-1260		39511	<35.1	<34.2	<14.2	<13.6	<13.6	<13.9	<13.9	<35.2	<14.0	<13.9
	UG/KG-DRY	8080/3540-G										

Soils Data, Hits Only

Sorted on Site ID

Environmental Science & Engineering DATE 05/24/94 STATUS : PAGE 1
PROJECT NUMBER 1944022G 0201 PROJECT NAME CDM - HANFORD N. SLOPE
FIELD GROUP CDMHNSS PROJECT MANAGER E.H. MANSFIELD
CDMHNSS.SID ALL LAB COORDINATOR EDWARD MANSFIELD

SAMPLE ID'S		EA01-1-10	EA01-2-05	EA01-3-05	EA01-4-14	EA01-5-12	EA01-6-10	WA04-1-05	WA04-2-12	WA04-3-20	WA04-4-08	WA05-1-04	WA05-2-03	WA05-3-04	WA07-1-01
PARAMETERS	STORET	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS
UNITS	METHOD	22	34	35	36	37	38	15	16	28	29	12	13	14	10
DATE		05/02/94	05/11/94	05/11/94	05/13/94	05/13/94	05/13/94	04/25/94	04/25/94	05/04/94	05/04/94	04/23/94	04/25/94	04/25/94	04/22/94
TIME		11:15	12:54	13:30	08:40	09:00	10:55	13:15	14:00	08:25	10:50	16:00	09:00	09:10	15:45
SITE #	96274	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L
	0														
CHAIN OF CUSTODY	96793	10	17	17	19	19	19	7	7	13	13	3	7	7	3
#	0														
SCREEN,GR. ALPHA,	96636	2.0	25.4	--	22.9	--	21.9	45.8	--	--	2.8	11.8	29.2	43.6	18.5
(ESTIMATE)NCI/KG-WET	R														
SCREEN,GR. BETA,	96637	35.0	16.0	21.2	34.1	18.9	23.3	27.0	--	31.8	26.6	17.0	37.6	8.1	12.5
(ESTIMATE)NCI/KG-WET	R														
MOISTURE	70320	8.9	4.4	4.2	5.4	4.9	4.4	3.8	4.5	2.6	4.9	2.8	3.2	5.4	3.3
%WET WT	I														
HYDROCARBONS,PETROL	98233	4920	437	428	--	--	--	2040	381	--	82.0	--	128		125
MG/KG-DRY	AISON														
ARSENIC	1003	8.12	5.42	5.54	7.97	7.75	7.42	5.02	3.96	1.44	4.00	2.54	1.89	4.68	3.68
MG/KG-DRY	7060-G														
SELENIUM	1148	0.514	--	0.340	--	--	--	--	--	--	--	--	--	--	--
MG/KG-DRY	7740-G														
MERCURY	71921	0.124	--	--	--	--	--	--	--	--	--	--	--	--	--
MG/KG-DRY	7471M-G														
BARIUM	1008	119	125	107	151	139	131	112	101	79.9	109	82.3	82.9	125	96.0
MG/KG-DRY	6010-G														
CHROMIUM	1029	15.4	14.9	16.0	20.3	21.3	17.0	10.4	9.20	10.3	10.2	9.22	14.6	7.67	11.3
MG/KG-DRY	6010-G														
LEAD	1052	11.2	24.5	23.6	13.9	12.1	10.6	15.6	12.0	--	--	--	111	--	39.6
MG/KG-DRY	6010-G														
ACETONE	75059	--	--	--	--	--	--	--	11	--	--	--	--	--	--
UG/KG-DRY	8260-G														
1,1,2-TRICHL'ETHANE	34514	--	--	--	--	--	--	--	--	--	--	--	9.5	--	--
UG/KG-DRY	8260-G														
ACENAPHTHENE	34208	--	--	220	--	--	--	--	--	--	--	--	--	--	--
UG/KG-DRY	8270/3540-G														
BIS(2-ETHYLHEXYL)	39102	--	--	--	--	--	--	--	160	--	--	--	--	--	--
PHTHALATEUG/KG-DRY	8270/3540-G														
DIBENZOFURAN	75647	--	--	--	--	--	--	380	--	--	--	--	--	--	--
UG/KG-DRY	8270/3540-G														
2-METHYLNAPHTHALENE	78868	77000	3800	2900	--	--	--	3600	--	--	--	--	--	--	--
UG/KG-DRY	8270/3540-G														
NAPHTHALENE	34445	3200	--	--	--	--	--	960	--	--	--	--	--	--	--
UG/KG-DRY	8270/3540-G														
PHENANTHRENE	34464	16000	2700	2500	--	--	--	570	--	--	--	--	--	--	--
UG/KG-DRY	8270/3540-G														
PYRENE	34472	5400	750	850	--	--	--	--	--	--	--	--	--	--	--
UG/KG-DRY	8270/3540-G														

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Environmental Science & Engineering DATE 05/24/94 STATUS : PAGE 2
PROJECT NUMBER 1944022G 0201 PROJECT NAME CDM - HANFORD N. SLOPE
FIELD GROUP CDMHNSS PROJECT MANAGER E.H. MANSFIELD
CDMHNSS.SID ALL LAB COORDINATOR EDWARD MANSFIELD

SAMPLE ID'S			EA01-1-10	EA01-2-05	EA01-3-05	EA01-4-14	EA01-5-12	EA01-6-10	WA04-1-05	WA04-2-12	WA04-3-20	WA04-4-08	WA05-1-04	WA05-2-03	WA05-3-04	WA07-1-01
PARAMETERS		STORET	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS
	UNITS	METHOD	22	34	35	36	37	38	15	16	28	29	12	13	14	10
DATE			05/02/94	05/11/94	05/11/94	05/13/94	05/13/94	05/13/94	04/25/94	04/25/94	05/04/94	05/04/94	04/23/94	04/25/94	04/25/94	04/22/94
TIME			11:15	12:54	13:30	08:40	09:00	10:55	13:15	14:00	08:25	10:50	16:00	09:00	09:10	15:45
ALDRIN		39333	--	52.7	54.9	--	--	--	--	--	--	--	--	--	--	--
	UG/KG-DRY	8080/3540-G														
CHLORDANE		39351	--	--	--	NRQ	--	--	--	--	--	NRQ	--	--	--	37700
	UG/KG-DRY	8080/3540-G														
DDD,PP'		39311	786000	269000	276000	4.78	--	--	31.0	115	--	--	--	--	--	42700
	UG/KG-DRY	8080/3540-G														
DDE,PP'		39321	44400	22100	28000	16.6	--	0.862	8.92	79.0	--	--	3.18	5.23	--	3330
	UG/KG-DRY	8080/3540-G														
DDT,PP'		39301	2080000	695000	611000	184	4.31	7.16	67.8	284	--	--	6.72	5.54	--	254000
	UG/KG-DRY	8080/3540-G														
DIELDRIN		39383	--	1980	2630	8.34	--	0.856	--	--	--	--	--	--	--	--
	UG/KG-DRY	8080/3540-G														
PCB-1254		39507	--	--	--	--	--	--	--	--	--	--	0.0			0.0
	UG/KG-DRY	8080/3540-G														

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Environmental Science & Engineering DATE 05/24/94 STATUS : PAGE 3
PROJECT NUMBER 19440226 0201 PROJECT NAME CDM - HANFORD N. SLOPE
FIELD GROUP CDMHNSS PROJECT MANAGER E.H. MANSFIELD
CDMHNSS.SID ALL LAB COORDINATOR EDWARD MANSFIELD

SAMPLE ID'S		WA07-2-05	EA11-1-07	EA12-1-10	EA12-2-12	EA14-1-01	EA14-2-01	WA16-1-02	WA16-2-03	WA17-1-03	WA19-1-08	WA19-2-07	WA19-3-05	WA19-4-05	WA20-1-04
PARAMETERS	STORET	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS
UNITS	METHOD	11	21	19	20	17	18	8	9	7	3	4	5	6	1
DATE		04/23/94	04/29/94	04/27/94	04/27/94	04/27/94	04/27/94	04/22/94	04/22/94	04/21/94	04/19/94	04/20/94	04/20/94	04/20/94	04/19/94
TIME		10:00	08:22	14:00	15:10	11:50	12:10	09:30	10:05	15:45	16:48	08:40	13:45	14:15	13:25
SITE #	96274 0	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L
CHAIN OF CUSTODY #	96793 0	3	10	8	8	8	8	4	4	4	1	1	2	2	1
SCREEN,GR. ALPHA, (ESTIMATE)NCI/KG-WET	96636 R	27.0	11.8	--	--	14.0	--	NA	NA	NA	--	18.7	11.0	--	20.9
SCREEN,GR. BETA, (ESTIMATE)NCI/KG-WET	96637 R	22.8	21.9	--	23.1	25.5	--	NA	NA	NA	--	16.4	17.2	27.7	29.2
MOISTURE %WET WT	70320 1	5.4	3.8	3.8	4.2	3.8	3.6	4.5	5.5	14.8	4.8	3.0	3.0	3.0	2.7
HYDROCARBONS,PETROL MG/KG-DRY	98233 AISON	--	43.2	165000	--	--	--	3610	--	85900	--	5850	--	--	--
ARSENIC MG/KG-DRY	1003 7060-G	8.20	7.67	5.84	6.94	6.88	6.98	4.32	8.18	41.6	3.21	2.86	3.75	3.52	2.26
MERCURY MG/KG-DRY	71921 7471M-G	--	--	--	--	--	--	--	--	0.116	--	--	--	--	--
BARIUM MG/KG-DRY	1008 6010-G	147	120	119	145	105	111	90.9	105	91.9	87.4	96.2	100.0	107	80.0
CADMIUM MG/KG-DRY	1028 6010-G	--	--	--	--	--	--	0.671	--	--	--	1.38	--	--	--
CHROMIUM MG/KG-DRY	1029 6010-G	18.2	19.1	13.8	15.6	14.1	14.9	25.0	10.7	14.5	9.02	7.66	7.45	5.56	6.40
LEAD MG/KG-DRY	1052 6010-G	11.9	--	36.0	13.8	10.4	--	217	--	--	--	61.8	--	11.6	--
SILVER MG/KG-DRY	1078 6010-G	--	--	1.05	--	--	--	--	--	--	--	--	--	--	--
METHYLENE CHLORIDE UG/KG-DRY	34426 8260-G	--	--	--	--	--	--	--	--	--	--	--	--	--	7.0
METHYLISOBUTYLKETONE UG/KG-DRY	75169 8260-G	--	--	--	--	--	--	--	--	78	--	--	--	--	--
XYLENE,TOTAL UG/KG-DRY	45510 8260-G	--	NRQ	--	--	--	--	--	--	--	--	--	--	5.2	--
BHC,G(LINDANE) UG/KG-DRY	39783 8080/3540-G	--	--	5.38	--	--	--	--	--	--	--	--	--	--	--
DDD,PP' UG/KG-DRY	39311 8080/3540-G	--	--	2780	--	3790	1630	--	--	--	--	54.7	--	--	62.7
DDE,PP' UG/KG-DRY	39321 8080/3540-G	--	--	3650	146	2130	1870	34.4	1.59	83.1	--	37.4	74.0	85.5	298
DDT,PP' UG/KG-DRY	39301 8080/3540-G	--	--	5910	167	11600	5600	39.0	--	879	--	177	64.6	78.6	125
DIELDRIN UG/KG-DRY	39383 8080/3540-G	--	--	64.3	3.53	--	--	--	--	--	--	--	--	--	--

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Environmental Science & Engineering DATE 05/24/94 STATUS : PAGE 4
PROJECT NUMBER 1944022G 0201 PROJECT NAME CDM - HANFORD N. SLOPE
FIELD GROUP CDMHNSS PROJECT MANAGER E.H. MANSFIELD
CDMHNSS.SID ALL LAB COORDINATOR EDWARD MANSFIELD

SAMPLE ID'S		WA07-2-05	EA11-1-07	EA12-1-10	EA12-2-12	EA14-1-01	EA14-2-01	WA16-1-02	WA16-2-03	WA17-1-03	WA19-1-08	WA19-2-07	WA19-3-05	WA19-4-05	WA20-1-04
PARAMETERS	STORET	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS
UNITS	METHOD	11	21	19	20	17	18	8	9	7	3	4	5	6	1
DATE		04/23/94	04/29/94	04/27/94	04/27/94	04/27/94	04/27/94	04/22/94	04/22/94	04/21/94	04/19/94	04/20/94	04/20/94	04/20/94	04/19/94
TIME		10:00	08:22	14:00	15:10	11:50	12:10	09:30	10:05	15:45	16:48	08:40	13:45	14:15	13:25
ENDOSULFAN,B	34359	--	--	--	--	--	--	--	--	--	--	4.52	--	--	--
UG/KG-DRY	8080/3540-C														
METHOXYCHLOR	39481	--	--	--	--	--	--	--	--	--	--	1.92	--	--	--
UG/KG-DRY	8080/3540-C														
PCB-1248	39503	--	--	--	--	--	--	--	--	--	--	344	--	--	--
UG/KG-DRY	8080/3540-C														
PCB-1254	39507	0.0	--	--	--	--	--	--	--	--	--	344	--	--	--
UG/KG-DRY	8080/3540-C														

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PROJECT NUMBER 1944022G 0201 PROJECT NAME CDM - HANFORD N. SLOPE
FIELD GROUP CDMHNSS PROJECT MANAGER E.H. MANSFIELD
CDMHNSS.SID ALL LAB COORDINATOR EDWARD MANSFIELD

SAMPLE ID'S		WA20-2-06	EBG1-1-02	WBG2-1-02	WBG2-2-02	WBG3-1-02	OCS1-1-00	ESV1-1-01	WSV2-1-01	EWC1-1-00	WWC2-1-00
PARAMETERS	STORET	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS
UNITS	METHOD	2	24	26	27	31	23	25	30	32	33
DATE		04/19/94	05/03/94	05/03/94	05/03/94	05/04/94	05/03/94	05/03/94	05/04/94	05/05/94	05/05/94
TIME		14:10	11:30	15:00	15:25	14:30	08:15	12:35	13:05	10:35	12:20
SITE #	96274	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L
	0										
CHAIN OF CUSTODY	96793	1	12	12	12	13	11	12	13	15	15
#	0										
SCREEN,GR. ALPHA,	96636	--	9.2	--	--	--	24.3	10.9	--	--	4.2
(ESTIMATE)NCI/KG-WET	R										
SCREEN,GR. BETA,	96637	--	17.3	--	--	21.0	24.5	25.9	--	--	10.4
(ESTIMATE)NCI/KG-WET	R										
MOISTURE	70320	3.2	6.5	5.8	6.0	6.1	5.5	2.8	2.4	2.3	2.1
%WET WT	I										
HYDROCARBONS,PETROL	98233	--	--	--	--	--	--	--	--	255	57.2
MG/KG-DRY	AISON										
ARSENIC	1003	3.01	6.71	4.71	5.11	3.07	4.87	3.89	1.64	3.64	1.82
MG/KG-DRY	7060-G										
BARIUM	1008	61.9	120	114	117	133	96.2	73.2	87.9	142	171
MG/KG-DRY	6010-G										
CADMIUM	1028	--	--	--	--	--	--	--	--	1.55	1.77
MG/KG-DRY	6010-G										
CHROMIUM	1029	6.21	7.15	7.69	7.47	7.66	11.3	8.15	6.44	9.42	56.4
MG/KG-DRY	6010-G										
LEAD	1052			--	--	--	--	27.2	--	1140	1810
MG/KG-DRY	6010-G										
METHYLENE CHLORIDE	34426	7.1	--	--	--	--	--	--	--	--	--
UG/KG-DRY	8260-G										
XYLENE,TOTAL	45510	--	--	--	--	--	--	--	NRQ	--	220
UG/KG-DRY	8260-G										
ACENAPHTHENE	34208	--	--	--	--	--	--	--	--	9700	--
UG/KG-DRY	8270/3540-G										
ANTHRACENE	34223	--	--	--	--	--	--	--	--	14000	--
UG/KG-DRY	8270/3540-G										
BENZO(A)ANTHRACENE	34529	--	--	--	--	--	--	--	--	8300	--
UG/KG-DRY	8270/3540-G										
BENZO(B)FLUORANTHENE	34233	--	--	--	--	--	--	--	--	6800	--
UG/KG-DRY	8270/3540-G										
BENZO(K)FLUORANTHENE	34245	--	--	--	--	--	--	--	--	2300	--
UG/KG-DRY	8270/3540-G										
BENZO(A)PYRENE	34250	--	--	--	--	--	--	--	--	5300	--
UG/KG-DRY	8270/3540-G										
BIS(2-ETHYLHEXYL)	39102	--	--	--	120	4500	--	--	--	--	1400
PHTHALATEUG/KG-DRY	8270/3540-G										
CHRYSENE	34323	--	--	--	--	--	--	--	--	8600	--
UG/KG-DRY	8270/3540-G										

PROJECT NUMBER 1944022G 0201 PROJECT NAME CDM - HANFORD N. SLOPE
FIELD GROUP CDMHNSS PROJECT MANAGER E.H. MANSFIELD
CDMHNSS.SID ALL LAB COORDINATOR EDWARD MANSFIELD

SAMPLE ID'S		WA20-2-06	EBG1-1-02	WBG2-1-02	WBG2-2-02	WBG3-1-02	OCS1-1-00	ESV1-1-01	WSV2-1-01	EWC1-1-00	WWC2-1-00
PARAMETERS	STORET	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS
UNITS	METHOD	2	24	26	27	31	23	25	30	32	33
DATE		04/19/94	05/03/94	05/03/94	05/03/94	05/04/94	05/03/94	05/03/94	05/04/94	05/05/94	05/05/94
TIME		14:10	11:30	15:00	15:25	14:30	08:15	12:35	13:05	10:35	12:20
DIBENZOFURAN	75647	--	--	--	--	--	--	--	--	8500	--
UG/KG-DRY	8270/3540-G										
DI-N-BUTYL PHTHALATE	39112	--	--	--	--	--	--	--	--	--	530
UG/KG-DRY	8270/3540-G										
DI-N-OCTYL PHTHALATE	34599	--	--	--	--	--	--	--	--	--	1600
UG/KG-DRY	8270/3540-G										
FLUORANTHENE	34379	--	--	--	--	--	--	--	--	24000	--
UG/KG-DRY	8270/3540-G										
FLUORENE	34384	--	--	--	--	--	--	--	--	14000	--
UG/KG-DRY	8270/3540-G										
2-METHYLNAPHTHALENE	78868	--	--	--	--	--	--	--	--	12000	140
UG/KG-DRY	8270/3540-G										
NAPHTHALENE	34445	--	--	--	--	--	--	--	--	8000	250
UG/KG-DRY	8270/3540-G										
PHENANTHRENE	34464	--	--	--	--	--	--	--	--	57000	--
UG/KG-DRY	8270/3540-G										
PYRENE	34472	--	--	--	--	--	--	--	--	18000	--
UG/KG-DRY	8270/3540-G										
DDD,PP'	39311	--	8.02	--	--	--	--	597	--	150	15.1
UG/KG-DRY	8080/3540-G										
DDE,PP'	39321	--	1.57	--	--	--	--	1660	37.2	422	25.0
UG/KG-DRY	8080/3540-G										
DDT,PP'	39301	--	12.9	1.66	1.47	--	--	806	14.5	356	161
UG/KG-DRY	8080/3540-G										

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Soils Data, Hits Only

Sorted on Collection Date

Environmental Science & Engineering DATE 05/24/94 STATUS : PAGE 1
PROJECT NUMBER 19440226 0201 PROJECT NAME CDM - HANFORD N. SLOPE
FIELD GROUP CDMHNSS PROJECT MANAGER E.H. MANSFIELD
CDMHNSS.NUM ALL LAB COORDINATOR EDWARD MANSFIELD

SAMPLE ID'S		WA20-1-04	WA20-2-06	WA19-1-08	WA19-2-07	WA19-3-05	WA19-4-05	WA17-1-03	WA16-1-02	WA16-2-03	WA07-1-01	WA07-2-05	WA05-1-04	WA05-2-03	WA05-3-04
PARAMETERS	STORET	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS
UNITS	METHOD	1	2	3	4	5	6	7	8	9	10	11	12	13	14
DATE		04/19/94	04/19/94	04/19/94	04/20/94	04/20/94	04/20/94	04/21/94	04/22/94	04/22/94	04/22/94	04/23/94	04/23/94	04/25/94	04/25/94
TIME		13:25	14:10	16:48	08:40	13:45	14:15	15:45	09:30	10:05	15:45	10:00	16:00	09:00	09:10
SITE #	96274 0	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L
CHAIN OF CUSTODY #	96793 0	1	1	1	1	2	2	4	4	4	3	3	3	7	7
SCREEN,GR. ALPHA, (ESTIMATE)NCI/KG-WET	96636 R	20.9	--	--	18.7	11.0	--	NA	NA	NA	18.5	27.0	11.8	29.2	43.5
SCREEN,GR. BETA, (ESTIMATE)NCI/KG-WET	96637 R	29.2	--	--	16.4	17.2	27.7	NA	NA	NA	12.6	22.8	17.0	37.6	8.1
MOISTURE %WET WT	70320 I	2.7	3.2	4.8	3.0	3.0	3.0	14.8	4.5	5.5	3.3	5.4	2.8	3.2	5.4
HYDROCARBONS,PETROL MG/KG-DRY	98233 AISON	--	--	--	5850	--	--	85900	3610	--	125	--	--	128	--
ARSENIC MG/KG-DRY	1003 7060-G	2.26	3.01	3.21	2.86	3.75	3.52	41.6	4.32	8.18	3.68	8.20	2.54	1.89	4.68
MERCURY MG/KG-DRY	71921 7471M-G	--	--	--	--	--	--	0.116	--	--	--	--	--	--	--
BARIUM MG/KG-DRY	1008 6010-G	80.0	61.9	87.4	96.2	100.0	107	91.9	90.9	105	96.0	147	82.3	82.9	125
CADMIUM MG/KG-DRY	1028 6010-G	--	--	--	1.38	-	--	--	0.671	--	--	--	--	--	--
CHROMIUM MG/KG-DRY	1029 6010-G	6.40	6.21	9.02	7.66	7.45	5.56	14.5	25.0	10.7	11.3	18.2	9.22	14.6	7.67
LEAD MG/KG-DRY	1052 6010-G	--	--	--	61.8	--	11.6	--	217	--	39.6	11.9	--	111	--
METHYLENE CHLORIDE UG/KG-DRY	34426 8260-G	7.0	7.1	--	--	--	--	--	--	--	--	--	--	--	--
METHYLISOBUTYLKETONE UG/KG-DRY	75169 8260-G	--	--	--	--	--	--	78	--	--	--	--	--	--	--
1,1,2-TRICHL'ETHANE UG/KG-DRY	34514 8260-G	--	--	--	--	--	--	--	--	--	--	--	--	9.5	--
XYLENE,TOTAL UG/KG-DRY	45510 8260-G	--	--	--	--	--	5.2	--	--	--	--	--	--	--	--
CHLORDANE UG/KG-DRY	39351 8080/3540-G	--	--	--	--	--	--	--	--	--	37700	--	--	--	--
DDD,PP' UG/KG-DRY	39311 8080/3540-G	62.7	--	--	54.7	--	--	--	--	--	42700	--	--	--	--
DDE,PP' UG/KG-DRY	39321 8080/3540-G	298	--	--	37.4	74.0	85.5	83.1	34.4	1.59	3330	--	3.18	5.23	--
DDT,PP' UG/KG-DRY	39301 8080/3540-G	125	--	--	177	64.6	78.6	879	39.0	--	254000	--	6.72	5.54	--
ENDOSULFAN,B UG/KG-DRY	34359 8080/3540-G	--	--	--	4.52	--	--	--	--	--	--	--	--	--	--

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Environmental Science & Engineering DATE 05/24/94 STATUS : PAGE 2
PROJECT NUMBER 19440220 0201 PROJECT NAME CDM - HANFORD N. SLOPE
FIELD GROUP CDMHNSS PROJECT MANAGER E.H. MANSFIELD
CDMHNSS.NUM ALL LAB COORDINATOR EDWARD MANSFIELD

SAMPLE ID'S			WA20-1-04	WA20-2-06	WA19-1-08	WA19-2-07	WA19-3-05	WA19-4-05	WA17-1-03	WA16-1-02	WA16-2-03	WA07-1-01	WA07-2-05	WA05-1-04	WA05-2-03	WA05-3-04
PARAMETERS		STORET	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS
	UNITS	METHOD	1	2	3	4	5	6	7	8	9	10	11	12	13	14
DATE			04/19/94	04/19/94	04/19/94	04/20/94	04/20/94	04/20/94	04/21/94	04/22/94	04/22/94	04/22/94	04/23/94	04/23/94	04/25/94	04/25/94
TIME			13:25	14:10	16:48	08:40	13:45	14:15	15:45	09:30	10:05	15:45	10:00	16:00	09:00	09:10
METHOXYCHLOR		39481	--	--	--	1.92	--	--	--	--	--	--	--	--	--	--
	UG/KG-DRY	8080/3540-G														
PCB-1248		39503	--	--	--	344	--	--	--	--	--	--	--	--	--	--
	UG/KG-DRY	8080/3540-G														
PCB-1254		39507	--	--	--	344	--	--	--	--	--	0.0	0.0	0.0		
	UG/KG-DRY	8080/3540-G														

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Environmental Science & Engineering DATE 05/24/94 STATUS : PAGE 3
PROJECT NUMBER 1944022G 0201 PROJECT NAME CDM - HANFORD N. SLOPE
FIELD GROUP CDMHNSS PROJECT MANAGER E.H. MANSFIELD
CDMHNSS.NUM ALL LAB COORDINATOR EDWARD MANSFIELD

SAMPLE ID'S		WA04-1-05	WA04-2-12	EA14-1-01	EA14-2-01	EA12-1-10	EA12-2-12	EA11-1-07	EA01-1-10	OCS1-1-00	EBG1-1-02	ESV1-1-01	WBG2-1-02	WBG2-2-02	WA04-3-20
PARAMETERS	STORET	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS
UNITS	METHOD	15	16	17	18	19	20	21	22	23	24	25	26	27	28
DATE		04/25/94	04/25/94	04/27/94	04/27/94	04/27/94	04/27/94	04/29/94	05/02/94	05/03/94	05/03/94	05/03/94	05/03/94	05/03/94	05/04/94
TIME		13:15	14:00	11:50	12:10	14:00	15:10	08:22	11:15	08:15	11:30	12:35	15:00	15:25	08:25
SITE #	96274 0	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L
CHAIN OF CUSTODY #	96793 0	7	7	8	8	8	8	10	10	11	12	12	12	12	13
SCREEN,GR. ALPHA, (ESTIMATE)NCI/KG-WET	96636 R	45.8	--	14.0	--	--	--	11.8	2.0	24.3	9.2	10.9	--	--	--
SCREEN,GR. BETA, (ESTIMATE)NCI/KG-WET	96637 R	27.0	--	25.5	--	--	23.1	21.9	35.0	24.5	17.3	25.9	--	--	31.9
MOISTURE %WET WT	70320 1	3.8	4.5	3.8	3.6	3.8	4.2	3.8	8.9	5.5	6.5	2.8	5.8	6.0	2.6
HYDROCARBONS,PETROL MG/KG-DRY	98233 AISON	2040	381	--	--	165000	--	43.2	4920	--	--	--	--		
ARSENIC MG/KG-DRY	1003 7060-G	5.02	3.96	6.88	6.98	5.84	6.94	7.67	8.12	4.87	6.71	3.89	4.71	5.11	1.44
SELENIUM MG/KG-DRY	1148 7740-G	--	--	--	--	--	--	--	0.514	--	--	--	--	--	--
MERCURY MG/KG-DRY	71921 7471M-G	--	--	--	--	--	--	--	0.124	--	--	--	--	--	--
BARIUM MG/KG-DRY	1008 6010-G	112	101	105	111	119	145	120	119	96.2	120	73.2	114	117	79.9
CHROMIUM MG/KG-DRY	1029 6010-G	10.4	9.20	14.1	14.9	13.8	15.6	19.1	15.4	11.3	7.15	8.15	7.69	7.47	10.3
LEAD MG/KG-DRY	1052 6010-G	15.6	12.0	10.4	--	36.0	13.8	--	11.2	--	--	27.2	--	--	--
SILVER MG/KG-DRY	1078 6010-G	--	--	--	--	1.05	--	--	--	--	--	--	--	--	--
ACETONE UG/KG-DRY	75059 8260-G	--	11	--	--	--	--	--	--	--	--	--	--	--	--
BIS(2-ETHYLHEXYL) PHTHALATEUG/KG-DRY	39102 8270/3540-G	--	160	--	--	--	--	--	--	--	--	--	--	120	--
DIBENZOFURAN UG/KG-DRY	75647 8270/3540-G	380	--	--	--	--	--	--	--	--	--	--	--	--	--
2-METHYLNAPHTHALENE UG/KG-DRY	78868 8270/3540-G	3600	--	--	--	--	--	--	77000	--	--	--	--	--	--
NAPHTHALENE UG/KG-DRY	34445 8270/3540-G	960	--	--	--	--	--	--	3200	--	--	--	--	--	--
PHENANTHRENE UG/KG-DRY	34464 8270/3540-G	570	--	--	--	--	--	--	16000	--	--	--	--	--	--
PYRENE UG/KG-DRY	34472 8270/3540-G	--	--	--	--	--	--	--	5400	--	--	--	--	--	--
BHC,G(LINDANE) UG/KG-DRY	39783 8080/3540-G	--	--	--	--	5.38	--	--	--	--	--	--	--	--	--

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Environmental Science & Engineering DATE 05/24/94 STATUS : PAGE 4
PROJECT NUMBER 1944022G 0201 PROJECT NAME CDM - HANFORD N. SLOPE
FIELD GROUP CDMHNSS PROJECT MANAGER E.H. MANSFIELD
CDMHNSS.NUM ALL LAB COORDINATOR EDWARD MANSFIELD

SAMPLE ID'S			WA04-1-05	WA04-2-12	EA14-1-01	EA14-2-01	EA12-1-10	EA12-2-12	EA11-1-07	EA01-1-10	OCS1-1-00	EBG1-1-02	ESV1-1-01	WBG2-1-02	WBG2-2-02	WA04-3-20
PARAMETERS		STORET	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS
	UNITS	METHOD	15	16	17	18	19	20	21	22	23	24	25	26	27	28
DATE			04/25/94	04/25/94	04/27/94	04/27/94	04/27/94	04/27/94	04/29/94	05/02/94	05/03/94	05/03/94	05/03/94	05/03/94	05/03/94	05/04/94
TIME			13:15	14:00	11:50	12:10	14:00	15:10	08:22	11:15	08:15	11:30	12:35	15:00	15:25	08:25
DDD,PP'		39311	31.0	115	3790	1630	2780	--	--	786000	--	8.02	597	--	--	--
	UG/KG-DRY	8080/3540-G														
DDE,PP'		39321	8.92	79.0	2130	1870	3650	146	--	44400	--	1.57	1660	--	--	--
	UG/KG-DRY	8080/3540-G														
DDT,PP'		39301	67.8	284	11600	5600	5910	167	--	2080000	--	12.9	806	1.66	1.47	--
	UG/KG-DRY	8080/3540-G														
DIELDRIN		39383	--	--	--	--	64.3	3.53	--	--	--	--	--	--	--	--
	UG/KG-DRY	8080/3540-G														

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PROJECT NUMBER 1944022G 0201 PROJECT NAME CDM - HANFORD N. SLOPE
FIELD GROUP CDMHNSS PROJECT MANAGER E.H. MANSFIELD
CDMHNSS.NUM ALL LAB COORDINATOR EDWARD MANSFIELD

SAMPLE ID'S		WA04-4-08	WSV2-1-01	WBG3-1-02	EWC1-1-00	WWC2-1-00	EA01-2-05	EA01-3-05	EA01-4-14	EA01-5-12	EA01-6-10
PARAMETERS	STORET	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS
UNITS	METHOD	29	30	31	32	33	34	35	36	37	38
DATE		05/04/94	05/04/94	05/04/94	05/05/94	05/05/94	05/11/94	05/11/94	05/13/94	05/13/94	05/13/94
TIME		10:50	13:05	14:30	10:35	12:20	12:54	13:30	08:40	09:00	10:55
SITE #	96274	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L	94H06L
	0										
CHAIN OF CUSTODY	96793	13	13	13	15	15	17	17	19	19	19
#	0										
SCREEN,GR. ALPHA,	96636	2.8	--	--	--	4.2	25.4	--	22.9	--	21.9
(ESTIMATE)NCI/KG-WET	R										
SCREEN,GR. BETA,	96637	26.6	--	21.0	--	10.4	16.0	21.2	34.1	18.9	23.3
(ESTIMATE)NCI/KG-WET	R										
MOISTURE	70320	4.9	2.4	6.1	2.3	2.1	4.4	4.2	5.4	4.9	4.4
%WET WT	1										
HYDROCARBONS,PETROL	98233	82.0	--	--	255	57.2	437	428	--	--	--
MG/KG-DRY	AISON										
ARSENIC	1003	4.00	1.64	3.07	3.64	1.82	5.42	5.54	7.97	7.75	7.42
MG/KG-DRY	7060-G										
SELENIUM	1148	--	--	--	--	--	--	0.340	--	--	--
MG/KG-DRY	7740-G										
BARIUM	1008	109	87.9	133	142	171	125	107	151	139	131
MG/KG-DRY	6010-G										
CADMIUM	1028	-	-	--	1.55	1.77	-	-			--
MG/KG-DRY	6010-G										
CHROMIUM	1029	10.2	6.44	7.66	9.42	56.4	14.9	16.8	20.3	21.3	17.0
MG/KG-DRY	6010-G										
LEAD	1052	--	--	--	1140	1810	24.5	23.6	13.9	12.1	10.6
MG/KG-DRY	6010-G										
XYLENE,TOTAL	45510	NRQ	NRQ	--	--	220	--	--	NRQ	--	--
UG/KG-DRY	8260-G										
ACENAPHTHENE	34208	--	--	--	9700	--	--	220	--	--	--
UG/KG-DRY	8270/3540-G										
ANTHRACENE	34223	--	--	--	14000	--	--	--	--	--	--
UG/KG-DRY	8270/3540-G										
BENZO(A)ANTHRACENE	34529	--	--	--	8300	--	--	--	--	--	--
UG/KG-DRY	8270/3540-G										
BENZO(B)FLUORANTHENE	34233	--	--	--	6800	--	--	--	--	--	--
UG/KG-DRY	8270/3540-G										
BENZO(K)FLUORANTHENE	34245	--	--	--	2300	--	--	--	--	--	--
UG/KG-DRY	8270/3540-G										
BENZO(A)PYRENE	34250	--	--	--	5300	--	--	--	--	--	--
UG/KG-DRY	8270/3540-G										
BIS(2-ETHYLHEXYL)	39102	--	--	4500	--	1400	--	--	--	--	--
PHTHALATEUG/KG-DRY	8270/3540-G										
CHRYSENE	34323	--	--	--	8600	--	--	--	--	--	--
UG/KG-DRY	8270/3540-G										

PROJECT NUMBER 1944022G 0201 PROJECT NAME CDM - HANFORD N. SLOPE
FIELD GROUP CDMHNSS PROJECT MANAGER E.H. MANSFIELD
CDMHNSS.NUM ALL LAB COORDINATOR EDWARD MANSFIELD

SAMPLE ID'S			WA04-4-08	WSV2-1-01	WBG3-1-02	EWC1-1-00	WWC2-1-00	EA01-2-05	EA01-3-05	EA01-4-14	EA01-5-12	EA01-6-10
PARAMETERS		STORET	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS	CDMHNSS
	UNITS	METHOD	29	30	31	32	33	34	35	36	37	38
DATE			05/04/94	05/04/94	05/04/94	05/05/94	05/05/94	05/11/94	05/11/94	05/13/94	05/13/94	05/13/94
TIME			10:50	13:05	14:30	10:35	12:20	12:54	13:30	08:40	09:00	10:55
DIBENZOFURAN		75647	--	--	--	8500	--	--	--	--	--	--
	UG/KG-DRY	8270/3540-G										
DI-N-BUTYL PHTHALATE		39112	--	--	--	--	530	--	--	--	--	--
	UG/KG-DRY	8270/3540-G										
DI-N-OCTYL PHTHALATE		34599	--	--	--	--	1600	--	--	--	--	--
	UG/KG-DRY	8270/3540-G										
FLUORANTHENE		34379	--	--	--	24000	--	--	--	--	--	--
	UG/KG-DRY	8270/3540-G										
FLUORENE		34384	--	--	--	14000	--	--	--	--	--	--
	UG/KG-DRY	8270/3540-G										
2-METHYLNAPHTHALENE		78868	--	--	--	12000	140	3800	2900	--	--	--
	UG/KG-DRY	8270/3540-G										
NAPHTHALENE		34445	--	--	--	8000	250	--	--	--	--	--
	UG/KG-DRY	8270/3540-G										
PHENANTHRENE		34464	--	--	--	57000	--	2700	2500	--	--	--
	UG/KG-DRY	8270/3540-G										
PYRENE		34472	--	--	--	18000	--	750	850	--	--	--
	UG/KG-DRY	8270/3540-G										
ALDRIN		39333	--	--	--	--	--	52.7	54.9	--	--	--
	UG/KG-DRY	8080/3540-G										
DDD,PP'		39311	--	--	--	150	15.1	269000	276000	4.78	--	--
	UG/KG-DRY	8080/3540-G										
DDE,PP'		39321	--	37.2	--	422	25.0	22100	28000	16.6	--	0.862
	UG/KG-DRY	8080/3540-G										
DDT,PP'		39301	--	14.5	--	356	161	695000	611000	184	4.31	7.16
	UG/KG-DRY	8080/3540-G										
DIELDRIN		39383	--	--	--	--	--	1980	2630	8.34	--	0.856
	UG/KG-DRY	8080/3540-G										

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Waters Data

Environmental Science & Engineering DATE 05/24/94 STATUS :FINAL
PROJECT NUMBER 1944022G 0201 PROJECT NAME CDM - HANFORD N. SLOPE
FIELD GROUP CDMHNSW PROJECT MANAGER E.H. MANSFIELD
ALL LAB COORDINATOR EDWARD MANSFIELD

SAMPLE ID'S		WA05-1-EB1	WA05-1-TB1	WBG3-1-TB2	WSV2-1-EB2	EWW1-1-00
PARAMETERS	STORET	CDMHNSW	CDMHNSW	CDMHNSW	CDMHNSW	CDMHNSW
UNITS	METHOD	1	2	4	11	13
DATE		04/23/94	04/25/94	05/04/94	05/09/94	05/13/94
TIME		15:15	08:15	15:30	08:35	12:15
SITE #	96274	94H06L	94H06L	94H06L	94H06L	94H06L
	0					
CHAIN OF CUSTODY	96793	6	3	13	16	20
#	0					
HYDROCARBONS,PETRO	45501	<0.17	NRQ	NRQ	<0.17	4.21
(TRPH) MG/L	418.1-G					
ARSENIC,TOTAL	1002	<2.5	NRQ	NRQ	<2.5	3.9
UG/L	7060-G					
SELENIUM,TOTAL	1147	<2.5	NRQ	NRQ	<2.5	<2.5
UG/L	7740-G					
MERCURY,TOTAL	71900	<0.20	NRQ	NRQ	<0.20	<0.20
UG/L	7470-G					
BARIUM,TOTAL	1007	<20.0	NRQ	NRQ	<20.0	87.2
UG/L	6010-G					
CADMIUM,TOTAL	1027	<5.0	NRQ	NRQ	<5.0	<5.0
UG/L	6010-G					
CHROMIUM,TOTAL	1034	<10.0	NRQ	NRQ	<10.0	19.5
UG/L	6010-G					
LEAD,TOTAL	1051	<50.0	NRQ	NRQ	<50.0	<50.0
UG/L	6010-G					
SILVER,TOTAL	1077	<5.0	NRQ	NRQ	<5.0	<5.0
UG/L	6010-G					
ACETONE	81552	<9.0	<9.0	<9.0	NRQ	NRQ
UG/L	8260-G					
BENZENE	34030	<1.0	<1.0	<1.0	NRQ	NRQ
UG/L	8260-G					
BROMODICHLOROMETHANE	32101	<2.2	<2.2	<2.2	NRQ	NRQ
UG/L	8260-G					
BROMOFORM	32104	<2.6	<2.6	<2.6	NRQ	NRQ
UG/L	8260-G					
BROMOMETHANE	34413	<3.5	<3.5	<3.5	NRQ	NRQ
UG/L	8260-G					
CARBON DISULFIDE	77041	<4.4	<4.4	<4.4	NRQ	NRQ
UG/L	8260-G					
CARBON TETRACHLORIDE	32102	<2.6	<2.6	<2.6	NRQ	NRQ
UG/L	8260-G					
CHLOROBENZENE	34301	<1.4	<1.4	<1.4	NRQ	NRQ
UG/L	8260-G					
CHLOROETHANE	34311	<8.2	<8.2	<8.2	NRQ	NRQ
UG/L	8260-G					

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PROJECT NUMBER 1944022G 0201 PROJECT NAME CDM - HANFORD N. SLOPE
FIELD GROUP CDMHNSW PROJECT MANAGER E.H. MANSFIELD
ALL LAB COORDINATOR EDWARD MANSFIELD

SAMPLE ID'S		WA05-1-EB1	WA05-1-TB1	WBG3-1-TB2	WSV2-1-EB2	EWW1-1-00
PARAMETERS	STORET	CDMHNSW	CDMHNSW	CDMHNSW	CDMHNSW	CDMHNSW
UNITS	METHOD	1	2	4	11	13
DATE		04/23/94	04/25/94	05/04/94	05/09/94	05/13/94
TIME		15:15	08:15	15:30	08:35	12:15
CHLOROFORM	32106	<2.5	<2.5	<2.5	NRQ	NRQ
UG/L	8260-G					
2-CHLOROETHYLVINYL-	34576	<3.1	<3.1	<3.1	NRQ	NRQ
ETHER UG/L	8260-G					
CHLOROMETHANE	34418	<4.4	<4.4	<4.4	NRQ	NRQ
UG/L	8260-G					
DIBROMOCHLOROMETHANE	32105	<2.3	<2.3	<2.3	NRQ	NRQ
UG/L	8260-G					
1,1-DICHLOROETHANE	34496	<2.5	<2.5	<2.5	NRQ	NRQ
UG/L	8260-G					
1,2-DICHLOROETHANE	34531	<2.5	<2.5	<2.5	NRQ	NRQ
UG/L	8260-G					
1,1-DICHLOROETHYLENE	34501	<3.2	<3.2	<3.2	NRQ	NRQ
UG/L	8260-G					
1,2-DICHLOROETHENE	96463	<2.4	<2.4	<2.4	NRQ	NRQ
(TOTAL) UG/L	8260-G					
1,2-DICHLOROPROPANE	34541	<2.0	<2.0	<2.0	NRQ	NRQ
UG/L	8260-G					
CIS-1,3-DICHLORO-	34704	<2.0	<2.0	<2.0	NRQ	NRQ
PROPENE UG/L	8260-G					
TRANS-1,3-DICHLORO-	34699	<1.6	<1.6	<1.6	NRQ	NRQ
PROPENE UG/L	8260-G					
ETHYLBENZENE	34371	<1.3	<1.3	<1.3	NRQ	NRQ
UG/L	8260-G					
2-HEXANONE	77103	<21	<21	<21	NRQ	NRQ
UG/L	8260-G					
METHYLENE CHLORIDE	34423	<6.4	<6.4	<6.4	NRQ	NRQ
UG/L	8260-G					
METHYL ETHYL KETONE	81595	<10.0	<10.0	<10.0	NRQ	NRQ
UG/L	8260-G					
METHYL ISOBUT'KETONE	81596	<12	<12	<12	NRQ	NRQ
UG/L	8260-G					
STYRENE	77128	<0.50	<0.50	<0.50	NRQ	NRQ
UG/L	8260-G					
1,1,2,2-TETRACHLORO-	34516	<1.5	<1.5	<1.5	NRQ	NRQ
ETHANE UG/L	8260-G					
TETRACHLOROETHENE	34475	<1.9	<1.9	<1.9	NRQ	NRQ
UG/L	8260-G					
TOLUENE	34010	<1.7	<1.7	<1.7	NRQ	NRQ
UG/L	8260-G					
1,1,1-TRICHL'ETHANE	34506	<2.5	<2.5	<2.5	NRQ	NRQ
UG/L	8260-G					

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PROJECT NUMBER 1944022G 0201 PROJECT NAME CDM - HANFORD N. SLOPE
FIELD GROUP CDMHNSW PROJECT MANAGER E.H. MANSFIELD
ALL LAB COORDINATOR EDWARD MANSFIELD

SAMPLE ID'S		WA05-1-EB1	WA05-1-TB1	WBG3-1-TB2	WSV2-1-EB2	EWW1-1-00
PARAMETERS	STORET	CDMHNSW	CDMHNSW	CDMHNSW	CDMHNSW	CDMHNSW
UNITS	METHOD	1	2	4	11	13
DATE		04/23/94	04/25/94	05/04/94	05/09/94	05/13/94
TIME		15:15	08:15	15:30	08:35	12:15
1,1,2-TRICHL'ETHANE	34511	<2.8	<2.8	<2.8	NRQ	NRQ
UG/L	8260-G					
TRICHLOROETHENE	39180	<3.0	<3.0	<3.0	NRQ	NRQ
UG/L	8260-G					
VINYL CHLORIDE	39175	<4.6	<4.6	<4.6	NRQ	NRQ
UG/L	8260-G					
VINYL ACETATE	77057	<10.0	<10.0	<10.0	NRQ	NRQ
UG/L	8260-G					
XYLENES,TOTAL	81551	<3.7	<3.7	<3.7	NRQ	NRQ
UG/L	8260-G					
ACENAPHTHENE	34205	<1.0	NRQ	NRQ	<1.0	<1.0
UG/L	8270/3520-G					
ACENAPHTHYLENE	34200	<1.0	NRQ	NRQ	<1.0	<1.0
UG/L	8270/3520-G					
ANTHRACENE	34220	<1.0	NRQ	NRQ	<1.0	<1.0
UG/L	8270/3520-G					
BENZO(A)ANTHRACENE	34526	<1.5	NRQ	NRQ	<1.5	<1.5
UG/L	8270/3520-G					
BENZO(B)FLUORANTHENE	34230	<1.5	NRQ	NRQ	<1.5	<1.5
UG/L	8270/3520-G					
BENZO(K)FLUORANTHENE	34242	<1.5	NRQ	NRQ	<1.5	<1.5
UG/L	8270/3520-G					
BENZO(A)PYRENE	34247	<2.0	NRQ	NRQ	<2.0	<2.0
UG/L	8270/3520-G					
BENZO(GHI)PERYLENE	34521	<2.5	NRQ	NRQ	<2.5	<2.5
UG/L	8270/3520-G					
BUTYLBENZYLPHTHALATE	34292	<1.5	NRQ	NRQ	<1.5	<1.5
UG/L	8270/3520-G					
BIS(2-CHLOROETHYL)	34273	<1.5	NRQ	NRQ	<1.5	<1.5
ETHER UG/L	8270/3520-G					
BIS(2-CHLOROETHOXY)	34278	<1.0	NRQ	NRQ	<1.0	<1.0
METHANE UG/L	8270/3520-G					
BIS(2-ETHYLHEXYL)	39100	2.2	NRQ	NRQ	<2.0	<2.0
PHTHALATEUG/L	8270/3520-G					
BIS(2-CHL'ISOPROPYL)	34283	<1.0	NRQ	NRQ	<1.0	<1.0
ETHER UG/L	8270/3520-G					
4-BROMOPHENYLPHENYL	34636	<1.0	NRQ	NRQ	<1.0	<1.0
ETHER UG/L	8270/3520-G					
2-CHLORONAPHTHALENE	34581	<1.0	NRQ	NRQ	<1.0	<1.0
UG/L	8270/3520-G					
2-CHLOROPHENOL	34586	<2.0	NRQ	NRQ	<2.0	<2.0
UG/L	8270/3520-G					

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PROJECT NUMBER 19440220 0201 PROJECT NAME CDM - HANFORD N. SLOPE
FIELD GROUP CDMHNSW PROJECT MANAGER E.H. MANSFIELD
ALL LAB COORDINATOR EDWARD MANSFIELD

SAMPLE ID'S		WA05-1-EB1	WA05-1-TB1	WBG3-1-TB2	WSV2-1-EB2	EWW1-1-00
PARAMETERS	STORET	CDMHNSW	CDMHNSW	CDMHNSW	CDMHNSW	CDMHNSW
UNITS	METHOD	1	2	4	11	13
DATE		04/23/94	04/25/94	05/04/94	05/09/94	05/13/94
TIME		15:15	08:15	15:30	08:35	12:15
4-CHLORO-3-METHYL	34452	<1.5	NRQ	NRQ	<1.5	<1.5
PHENOL UG/L	8270/3520-G					
4-CHLOROPHENYLPHENYL	34641	<1.0	NRQ	NRQ	<1.0	<1.0
ETHER UG/L	8270/3520-G					
CHRYSENE	34320	<1.5	NRQ	NRQ	<1.5	<1.5
UG/L	8270/3520-G					
DIBEN'(A,H)ANTH'CENE	34556	<2.5	NRQ	NRQ	<2.5	<2.5
UG/L	8270/3520-G					
DI-N-BUTYLPHTHALATE	39110	<1.0	NRQ	NRQ	<1.0	<1.0
UG/L	8270/3520-G					
1,3,DICHLOROBENZENE	34566	<1.0	NRQ	NRQ	<1.0	<1.0
UG/L	8270/3520-G					
1,2-DICHLOROBENZENE	34536	<1.0	NRQ	NRQ	<1.0	<1.0
UG/L	8270/3520-G					
1,4-DICHLOROBENZENE	34571	<1.0	NRQ	NRQ	<1.0	<1.0
UG/L	8270/3520-G					
3,3'-DICHL'BENZIDINE	34631	<5.0	NRQ	NRQ	<5.0	<5.0
UG/L	8270/3520-G					
2,4-DICHLOROPHENOL	34601	<2.0	NRQ	NRQ	<2.0	<2.0
UG/L	8270/3520-G					
DIETHYLPHTHALATE	34336	<1.0	NRQ	NRQ	<1.0	<1.0
UG/L	8270/3520-G					
2,4-DIMETHYLPHENOL	34606	<2.0	NRQ	NRQ	<2.0	<2.0
UG/L	8270/3520-G					
DIMETHYLPTHALATE	34341	<2.0	NRQ	NRQ	<2.0	<2.0
UG/L	8270/3520-G					
2,4-DINITROPHENOL	34616	<20	NRQ	NRQ	<20	<20
UG/L	8270/3520-G					
2,4-DINITROTOLUENE	34611	<2.0	NRQ	NRQ	<2.0	<2.0
UG/L	8270/3520-G					
2,6-DINITROTOLUENE	34626	<2.0	NRQ	NRQ	<2.0	<2.0
UG/L	8270/3520-G					
DI-N-OCTYLPHTHALATE	34596	<2.4	NRQ	NRQ	<2.4	<2.4
UG/L	8270/3520-G					
FLUORANTHENE	34376	<1.0	NRQ	NRQ	<1.0	<1.0
UG/L	8270/3520-G					
FLUORENE	34381	<1.0	NRQ	NRQ	<1.0	<1.0
UG/L	8270/3520-G					
HEXACHLOROBENZENE	39700	<2.0	NRQ	NRQ	<2.0	<2.0
UG/L	8270/3520-G					
HEXACHLOROBUTADIENE	34391	<2.0	NRQ	NRQ	<2.0	<2.0
UG/L	8270/3520-G					

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PROJECT NUMBER 1944022G 0201 PROJECT NAME CDM - HANFORD N. SLOPE
FIELD GROUP CDMHNSW PROJECT MANAGER E.H. MANSFIELD
ALL LAB COORDINATOR EDWARD MANSFIELD

SAMPLE ID'S		WA05-1-EB1	WA05-1-TB1	WBG3-1-TB2	WSV2-1-EB2	EWW1-1-00
PARAMETERS	STORET	CDMHNSW	CDMHNSW	CDMHNSW	CDMHNSW	CDMHNSW
UNITS	METHOD	1	2	4	11	13
DATE		04/23/94	04/25/94	05/04/94	05/09/94	05/13/94
TIME		15:15	08:15	15:30	08:35	12:15
HEXACHLOROCYCLOPENTA DIENE UG/L	34386 8270/3520-G	<14	NRQ	NRQ	<14	<14
HEXACHLOROETHANE UG/L	34396 8270/3520-G	<1.5	NRQ	NRQ	<1.5	<1.5
INDENO(1,2,3-CD) PYRENE UG/L	34403 8270/3520-G	<2.5	NRQ	NRQ	<2.5	<2.5
ISOPHORONE UG/L	34408 8270/3520-G	<1.0	NRQ	NRQ	<1.0	<1.0
2-METHYL-4,6-DINITRO PHENOL UG/L	34657 8270/3520-G	<10.0	NRQ	NRQ	<10.0	<10.0
2-METHYL PHENOL UG/L	99073 8270/3520-G	<2.0	NRQ	NRQ	<2.0	<2.0
4-METHYL PHENOL UG/L	99074 8270/3520-G	<2.0	NRQ	NRQ	<2.0	<2.0
NAPHTHALENE UG/L	34696 8270/3520-G	<1.0	NRQ	NRQ	<1.0	<1.0
NITROBENZENE UG/L	34447 8270/3520-G	<1.0	NRQ	NRQ	<1.0	<1.0
2-NITROPHENOL UG/L	34591 8270/3520-G	<2.0	NRQ	NRQ	<2.0	<2.0
4-NITROPHENOL UG/L	34646 8270/3520-G	<10.0	NRQ	NRQ	<10.0	<10.0
N-NITROSODI-N-PROPYL AMINE UG/L	34428 8270/3520-G	<1.0	NRQ	NRQ	<1.0	<1.0
N-NITROSODIPHE'AMINE UG/L	34433 8270/3520-G	<1.0	NRQ	NRQ	<1.0	<1.0
PENTACHLOROPHENOL UG/L	39032 8270/3520-G	<3.5	NRQ	NRQ	<3.5	<3.5
PHENANTHRENE UG/L	34461 8270/3520-G	<1.0	NRQ	NRQ	<1.0	<1.0
PHENOL UG/L	34694 8270/3520-G	<2.0	NRQ	NRQ	<2.0	<2.0
PYRENE UG/L	34469 8270/3520-G	<1.0	NRQ	NRQ	<1.0	<1.0
1,2,4-TRICH'BENZENE UG/L	34551 8270/3520-G	<1.0	NRQ	NRQ	<1.0	<1.0
2,4,6-TRICHL'PHENOL UG/L	34621 8270/3520-G	<2.5	NRQ	NRQ	<2.5	<2.5
BENZYL ALCOHOL UG/L	77147 8270/3520-G	<2.0	NRQ	NRQ	<2.0	<2.0
BENZOIC ACID UG/L	77247 8270/3520-G	<5.0	NRQ	NRQ	<5.0	<5.0

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PROJECT NUMBER 1944022G 0201 PROJECT NAME CDM - HANFORD N. SLOPE
FIELD GROUP CDMHNSW PROJECT MANAGER E.H. MANSFIELD
ALL LAB COORDINATOR EDWARD MANSFIELD

SAMPLE ID'S		WA05-1-EB1	WA05-1-TB1	WBG3-1-TB2	WSV2-1-EB2	EWW1-1-00
PARAMETERS	STORET	CDMHNSW	CDMHNSW	CDMHNSW	CDMHNSW	CDMHNSW
UNITS	METHOD	1	2	4	11	13
DATE		04/23/94	04/25/94	05/04/94	05/09/94	05/13/94
TIME		15:15	08:15	15:30	08:35	12:15
4-CHLOROANILINE	99075	<2.0	NRQ	NRQ	<2.0	<2.0
UG/L	8270/3520-G					
2-NITROANILINE	99077	<2.0	NRQ	NRQ	<2.0	<2.0
UG/L	8270/3520-G					
3-NITROANILINE	99078	<2.0	NRQ	NRQ	<2.0	<2.0
UG/L	8270/3520-G					
4-NITROANILINE	99079	<2.0	NRQ	NRQ	<2.0	<2.0
UG/L	8270/3520-G					
2-METHLYNAPHTHALENE	77416	<1.0	NRQ	NRQ	<1.0	<1.0
UG/L	8270/3520-G					
2,4,5-TRICHL'PHENOL	77687	<2.5	NRQ	NRQ	<2.5	<2.5
UG/L	8270/3520-G					
DIBENZOFURAN	81302	<1.0	NRQ	NRQ	<1.0	<1.0
UG/L	8270/3520-G					
ALDRIN	39330	<0.005	NRQ	NRQ	<0.005	NA
UG/L	8080/3520-G					
BHC,A	39337	<0.005	NRQ	NRQ	<0.005	NA
UG/L	8080/3520-G					
BHC,B	39338	<0.005	NRQ	NRQ	<0.005	NA
UG/L	8080/3520-G					
BHC,D	34259	<0.005	NRQ	NRQ	<0.005	NA
UG/L	8080/3520-G					
BHC,G(LINDANE)	39340	<0.005	NRQ	NRQ	<0.005	NA
UG/L	8080/3520-G					
CHLORDANE	39350	<0.025	NRQ	NRQ	<0.025	NA
UG/L	8080/3520-G					
DDD,PP'	39310	<0.005	NRQ	NRQ	<0.005	NA
UG/L	8080/3520-G					
DDE,PP'	39320	<0.005	NRQ	NRQ	<0.005	NA
UG/L	8080/3520-G					
DDT,PP'	39300	<0.005	NRQ	NRQ	<0.005	NA
UG/L	8080/3520-G					
DIELDRIN	39380	<0.005	NRQ	NRQ	<0.005	NA
UG/L	8080/3520-G					
ENDOSULFAN,A	34361	<0.005	NRQ	NRQ	<0.005	NA
UG/L	8080/3520-G					
ENDOSULFAN,B	34356	<0.005	NRQ	NRQ	<0.005	NA
UG/L	8080/3520-G					
ENDOSULFAN SULFATE	34351	<0.005	NRQ	NRQ	<0.005	NA
UG/L	8080/3520-G					
ENDRIN	39390	<0.005	NRQ	NRQ	<0.005	NA
UG/L	8080/3520-G					

000077

PROJECT NUMBER 1944022G 0201 PROJECT NAME CDM - HANFORD N. SLOPE
FIELD GROUP CDMHNSW PROJECT MANAGER E.H. MANSFIELD
ALL LAB COORDINATOR EDWARD MANSFIELD

SAMPLE ID'S			WA05-1-EB1	WA05-1-TB1	WBG3-1-TB2	WSV2-1-EB2	EWW1-1-00
PARAMETERS		STORET	CDMHNSW	CDMHNSW	CDMHNSW	CDMHNSW	CDMHNSW
	UNITS	METHOD	1	2	4	11	13
DATE			04/23/94	04/25/94	05/04/94	05/09/94	05/13/94
TIME			15:15	08:15	15:30	08:35	12:15
ENDRIN ALDEHYDE		34366	<0.005	NRQ	NRQ	<0.005	NA
	UG/L	8080/3520-G					
HEPTACHLOR		39410	<0.005	NRQ	NRQ	<0.005	NA
	UG/L	8080/3520-G					
METHOXYCHLOR		39480	<0.005	NRQ	NRQ	<0.005	NA
	UG/L	8080/3520-G					
HEPTACHLOR EPOXIDE		39420	<0.005	NRQ	NRQ	<0.005	NA
	UG/L	8080/3520-G					
TOXAPHENE		39400	<0.500	NRQ	NRQ	<0.500	NA
	UG/L	8080/3520-G					
PCB-1016		34671	<0.100	NRQ	NRQ	<0.100	NA
	UG/L	8080/3520-G					
PCB-1221		39488	<0.100	NRQ	NRQ	<0.100	NA
	UG/L	8080/3520-G					
PCB-1232		39492	<0.100	NRQ	NRQ	<0.100	NA
	UG/L	8080/3520-G					
PCB-1242		39496	<0.100	NRQ	NRQ	<0.100	NA
	UG/L	8080/3520-G					
PCB 1248		39500	<0.100	NRQ	NRQ	<0.100	NA
	UG/L	8080/3520-G					
PCB-1254		39504	<0.100	NRQ	NRQ	<0.100	NA
	UG/L	8080/3520-G					
PCB-1260		39508	<0.100	NRQ	NRQ	<0.100	NA
	UG/L	8080/3520-G					

Waters Data, Hits Only

Environmental Science & Engineering DATE 05/24/94 STATUS : PAGE 1
PROJECT NUMBER 1944022G 0201 PROJECT NAME CDM - HANFORD N. SLOPE
FIELD GROUP CDMHNSW PROJECT MANAGER E.H. MANSFIELD
ALL LAB COORDINATOR EDWARD MANSFIELD

SAMPLE ID'S		WA05-1-EB1	WA05-1-TB1	WBG3-1-TB2	WSV2-1-EB2	EWW1-1-00
PARAMETERS	STORET	CDMHNSW	CDMHNSW	CDMHNSW	CDMHNSW	CDMHNSW
UNITS	METHOD	1	2	4	11	13
DATE		04/23/94	04/25/94	05/04/94	05/09/94	05/13/94
TIME		15:15	08:15	15:30	08:35	12:15
SITE #	96274	94H06L	94H06L	94H06L	94H06L	94H06L
	0					
CHAIN OF CUSTODY	96793	6	3	13	16	20
#	0					
HYDROCARBONS,PETRO	45501	--	NRQ	NRQ	--	4.21
(TRPH) MG/L	418.1-G					
ARSENIC,TOTAL	1002	--	NRQ	NRQ	--	3.9
UG/L	7060-G					
BARIUM,TOTAL	1007	--	NRQ	NRQ	--	87.2
UG/L	6010-G					
CHROMIUM,TOTAL	1034	--	NRQ	NRQ	--	19.5
UG/L	6010-G					
BIS(2-ETHYLHEXYL)	39100	2.2	NRQ	NRQ	--	--
PHTHALATEUG/L	8270/3520-G					
ALDRIN	39330	--	NRQ	NRQ	--	NA
UG/L	8080/3520-G					
BHC,A	39337	--	NRQ	NRQ	--	NA
UG/L	8080/3520-G					
BHC,B	39338	--	NRQ	NRQ	--	NA
UG/L	8080/3520-G					
BHC,D	34259	--	NRQ	NRQ	--	NA
UG/L	8080/3520-G					
BHC,G(LINDANE)	39340	--	NRQ	NRQ	--	NA
UG/L	8080/3520-G					
CHLORDANE	39350	--	NRQ	NRQ	--	NA
UG/L	8080/3520-G					
DDD,PP'	39310	--	NRQ	NRQ	--	NA
UG/L	8080/3520-G					
DDE,PP'	39320	--	NRQ	NRQ	--	NA
UG/L	8080/3520-G					
DDT,PP'	39300	--	NRQ	NRQ	--	NA
UG/L	8080/3520-G					
DIELDRIN	39380	--	NRQ	NRQ	--	NA
UG/L	8080/3520-G					
ENDOSULFAN,A	34361	--	NRQ	NRQ	--	NA
UG/L	8080/3520-G					
ENDOSULFAN,B	34356	--	NRQ	NRQ	--	NA
UG/L	8080/3520-G					
ENDOSULFAN SULFATE	34351	--	NRQ	NRQ	--	NA
UG/L	8080/3520-G					
ENDRIN	39390	--	NRQ	NRQ	--	NA
UG/L	8080/3520-G					

000080

PROJECT NUMBER 1944022G 0201 PROJECT NAME CDM - HANFORD N. SLOPE
FIELD GROUP CDMHNSW PROJECT MANAGER E.H. MANSFIELD
ALL LAB COORDINATOR EDWARD MANSFIELD

SAMPLE ID'S			WA05-1-EB1	WA05-1-TB1	WBG3-1-TB2	WSV2-1-EB2	EWW1-1-00
PARAMETERS		STORET	CDMHNSW	CDMHNSW	CDMHNSW	CDMHNSW	CDMHNSW
	UNITS	METHOD	1	2	4	11	13
DATE			04/23/94	04/25/94	05/04/94	05/09/94	05/13/94
TIME			15:15	08:15	15:30	08:35	12:15
ENDRIN ALDEHYDE		34366	--	NRQ	NRQ	--	NA
	UG/L	8080/3520-G					
HEPTACHLOR		39410	--	NRQ	NRQ	--	NA
	UG/L	8080/3520-G					
METHOXYCHLOR		39480	--	NRQ	NRQ	--	NA
	UG/L	8080/3520-G					
HEPTACHLOR EPOXIDE		39420	--	NRQ	NRQ	--	NA
	UG/L	8080/3520-G					
TOXAPHENE		39400	--	NRQ	NRQ	--	NA
	UG/L	8080/3520-G					
PCB-1016		34671	--	NRQ	NRQ	--	NA
	UG/L	8080/3520-G					
PCB-1221		39488	--	NRQ	NRQ	--	NA
	UG/L	8080/3520-G					
PCB-1232		39492	--	NRQ	NRQ	--	NA
	UG/L	8080/3520-G					
PCB-1242		39496	--	NRQ	NRQ	--	NA
	UG/L	8080/3520-G					
PCB 1248		39500	--	NRQ	NRQ	--	NA
	UG/L	8080/3520-G					
PCB-1254		39504	--	NRQ	NRQ	--	NA
	UG/L	8080/3520-G					
PCB-1260		39508	--	NRQ	NRQ	--	NA
	UG/L	8080/3520-G					

Quality Control Summary Reports

An ESE Batch Summary Example and Description

ESE Data Batch - QC Summary - A Description

1. The ESE batch number appears at the top of each page. A general description of and the method number appear after the batch number on the first page of the batch.

2. This item contains information concerning the batch status, method blank correction (if any), batch notes, the ESE field group name, and lab coordinator responsible for those field groups.

3. This item lists the laboratory and client sample identification. In CLASS (ESE's LIMS), samples are identified using the combination of the field group name and sequence number. For example in the attached batch summary, the field group name is CDMHNSS; a sequence number is 36.

The interpretation of the field group name is as follows:

CDM - Client abbreviation
HNS - Site abbreviation (Hanford N. Slope)
S - Solid Samples

The date of analysis is always recorded; and in this report, these dates are summarized in the "Sample Date Report" section. For selected methods, the date and time of analysis for each sample is recorded in the data batch file; this information is displayed in section 3 of this summary.

4. This section includes the holding time check information and then lists each compound analyzed in the batch and the curve detection limit for that compound.

5. Section 5 summarizes the QC data for that batch of samples and analysis; this section of the report is segregated by QC type. Each area details the samples, units, found, target, percent recovery, and criteria used for the acceptance of the data.

For QC performed on environmental samples, the field group * sequence number of the sample used is encoded in the series under the header "SAMPLE". For example under Sample Matrix Spike Recovery Summary, SPM1*CDMHNSS*36 can be read as the matrix spike for sample CDMHNSS*36.

The following abbreviations are used in the QC section:

MB = Method Blank
SP = Standard Matrix Spike (equivalent to LCS)
LCS = Laboratory Control Sample (equivalent to SP)
RP = Replicate
RF = Reference
SPM = Sample Matrix Spike
SUR = Surrogate
SPX = Analytical (post-digestion) Spike

6. Section 6 summarizes the automated computer checks that are performed for each batch (as appropriate to the method). Each and every "no" answer requires a comment by the analyst and/or their supervisor. The explanation is printed at the bottom of the page.

ESE BATCH : G49285
CLASSIFICATION : PHENOLICS - CLP SOW OLM01.8

QC TYPE : FDER/SW
ANALYST : TOM TOMARAS
EXTRACTOR : ABRAHAM JACOB
DATA ENTRY : TODD ROMERO

REPORT DATE/TIME : 05/24/94 10:31:07
ANALYSIS DATE : 05/16/94
EXTRACT DATE : 05/14/94

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

BATCH NOTES
DOWNLOAD FILE ATHAN3

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS		1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*36	EA01-4-14	05/16/94	03:15PM

(4)

ESE BATCH : G49285

HOLDING TIMES CHECK

SAMPLE	ANALYTE	AN. DATE	EXT DATE	SMP DATE	H.T.	OVER

ALL HOLDING TIMES MET

STORET: 95004 METHOD: SUR 2-FLUOROPHENOL (CLP90/SON), UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT= DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 95003 METHOD: SUR PHENOL-D(5) (CLP90/SON), UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT= DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34695 METHOD: CLP90/SON-G PHENOL, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=330 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34276 METHOD: CLP90/SON-G BIS(2-CHLOROETHYL)ETHER, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=330 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 95007 METHOD: SUR 2-CHLOROPHENOL-D4 (CLP90/SON) UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT= DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34589 METHOD: CLP90/SON-G 2-CHLOROPHENOL, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=330 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34569 METHOD: CLP90/SON-G 1,3-DICHLOROBENZENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=330 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34574 METHOD: CLP90/SON-G 1,4-DICHLOROBENZENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=330 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 95009 METHOD: SUR 1,2-DICHLOROBENZENE-D4 (CLP90/SON), UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT= DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34539 METHOD: CLP90/SON-G 1,2-DICHLOROBENZENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=330 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 78872 METHOD: CLP90/SON-G 2-METHYLPHENOL, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=330 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 78803 METHOD: CLP90/SON-G 4-METHYLPHENOL, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=330 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34286 METHOD: CLP90/SON-G 2,2'-OXYBIS(1-CHLOROPROPANE), UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=330 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34431 METHOD: CLP90/SON-G N-NITROSODI-N-PROPYLAMINE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=330 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34399 METHOD: CLP90/SON-G HEXACHLOROETHANE, UG/KG-DRY GCMS

ESE BATCH : G49285

CALIBRATION CURVE # 1
DETECTION LIMIT=330 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 95051 METHOD: SUR NITROBENZENE D 5 (CLP90/SON), UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT= DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34450 METHOD: CLP90/SON-G NITROBENZENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=330 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34411 METHOD: CLP90/SON-G ISOPHORONE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=330 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34594 METHOD: CLP90/SON-G 2-NITROPHENOL, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=330 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34609 METHOD: CLP90/SON-G 2,4-DIMETHYLPHENOL, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=330 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34281 METHOD: CLP90/SON-G BIS(2-CHLOROETHOXY)METHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=330 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34604 METHOD: CLP90/SON-G 2,4-DICHLOROPHENOL, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=330 DATE: LARGEST RESP= %RSD= RT WINDOW:

TORET: 34554 METHOD: CLP90/SON-G 1,2,4-TRICH'BENZENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=330 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34445 METHOD: CLP90/SON-G NAPHTHALENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=330 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 78867 METHOD: CLP90/SON-G 4-CHLOROANILINE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=330 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 39705 METHOD: CLP90/SON-G HEXACHLOROBUTADIENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=330 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34455 METHOD: CLP90/SON-G 4-CHLORO-3-METHYLPHENOL, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=330 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 78868 METHOD: CLP90/SON-G 2-METHYLNAPHTHALENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=330 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34389 METHOD: CLP90/SON-G HEXACHLOROCYCLOPENTADIENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=330 DATE: LARGEST RESP= %RSD= RT WINDOW

TORET: 34624 METHOD: CLP90/SON-G 2,4,6-TRICH'PHENOL, UG/KG-DRY GCMS

CALIBRATION CURVE # 1

ESE BATCH : G49285
DETECTION LIMIT=330 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 98587 METHOD: CLP90/SON-G 2,4,5-TRICHLOROPHENOL, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=800 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 95052 METHOD: SUR 2-FLUOROBIPHENYL (CLP90/SON), UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT= DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34584 METHOD: CLP90/SON-G 2-CHLORONAPHTHALENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=330 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 98588 METHOD: CLP90/SON-G 2-NITROANILINE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=800 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34344 METHOD: CLP90/SON-G DIMETHYL PHTHALATE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=330 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34203 METHOD: CLP90/SON-G ACENAPHTHYLENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=330 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34629 METHOD: CLP90/SON-G 2,6-DINITROTOLUENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=330 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 78869 METHOD: CLP90/SON-G 3-NITROANILINE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=800 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34208 METHOD: CLP90/SON-G ACENAPHTHENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=330 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34619 METHOD: CLP90/SON-G 2,4-DINITROPHENOL, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=800 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34649 METHOD: CLP90/SON-G 4-NITROPHENOL, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=800 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 75647 METHOD: CLP90/SON-G DIBENZOFURAN, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=330 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34614 METHOD: CLP90/SON-G 2,4-DINITROTOLUENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=330 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34339 METHOD: CLP90/SON-G DIETHYL PHTHALATE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=330 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34644 METHOD: CLP90/SON-G 4-CHLOROPHENYLPHENYL ETHER, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=330 DATE: LARGEST RESP= %RSD= RT WINDOW:

ESE BATCH : G49285
STORET: 34384 METHOD: CLP90/SON-G FLUORENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=330 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 78870 METHOD: CLP90/SON-G 4-NITROANILINE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=800 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 95005 METHOD: SUR 2,4,6-TRIBROMOPHENOL (CLP90/SON), UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT= DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34660 METHOD: CLP90/SON-G 2-METHYL-4,6-DINITROPHENOL, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=800 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34436 METHOD: CLP90/SON-G N-NITROSODIPHENYLAMINE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=330 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34639 METHOD: CLP90/SON-G 4-BROMOPHENYL PHENYL ETHER, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=330 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 39701 METHOD: CLP90/SON-G HEXACHLOROBENZENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=330 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 39061 METHOD: CLP90/SON-G PENTACHLPHENOL, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=800 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34464 METHOD: CLP90/SON-G PHENANTHRENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=330 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34223 METHOD: CLP90/SON-G ANTHRACENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=330 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 96242 METHOD: CLP90/SON-G CARBAZOLE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=330 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 39112 METHOD: CLP90/SON-G DI-N-BUTYL PHTHALATE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=330 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34379 METHOD: CLP90/SON-G FLUORANTHENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=330 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34472 METHOD: CLP90/SON-G PYRENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=330 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 95002 METHOD: SUR TERPHENYL-D(14) (CLP90/SON), UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT= DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34295 METHOD: CLP90/SON-G BUTYLBENZYLPHTHALATE, UG/KG-DRY GCMS

(4)

ESE BATCH : G49285
CALIBRATION CURVE # 1
DETECTION LIMIT=330 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34634 METHOD: CLP90/SON-G 3,3-DICHLOROBENZIDINE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=330 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34529 METHOD: CLP90/SON-G BENZO(A)ANTHRACENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=330 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34323 METHOD: CLP90/SON-G CHRYSENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=330 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 39102 METHOD: CLP90/SON-G BIS(2-ETHYLHEXYL)PHTHALATE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=330 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34599 METHOD: CLP90/SON-G DI-N-OCTYL PHTHALATE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=330 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34233 METHOD: CLP90/SON-G BENZO(B)FLUORANTHENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=330 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34245 METHOD: CLP90/SON-G BENZO(K)FLUORANTHENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=330 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34250 METHOD: CLP90/SON-G BENZO(A)PYRENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=330 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34406 METHOD: CLP90/SON-G INDENO(1,2,3-CD)PYRENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=330 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34559 METHOD: CLP90/SON-G DIBEN(A,H)ANTHRACENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=330 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34524 METHOD: CLP90/SON-G BENZO(GHI)PERYLENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=330 DATE: LARGEST RESP= %RSD= RT WINDOW:

ESE BATCH : G49285

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/16/94	MB*NONE*1	34695*CLP90/SON-G	PHENOL	UG/KG-	ND
05/16/94	MB*NONE*1	34276*CLP90/SON-G	BIS(2-CHLOROETHYL ETHER	UG/KG-	ND
05/16/94	MB*NONE*1	34589*CLP90/SON-G	2-CHLOROPHENOL	UG/KG-	ND
05/16/94	MB*NONE*1	34569*CLP90/SON-G	1,3-DICHLOROBENZENE	UG/KG-	ND
05/16/94	MB*NONE*1	34574*CLP90/SON-G	1,4-DICHLOROBENZENE	UG/KG-	ND
05/16/94	MB*NONE*1	34539*CLP90/SON-G	1,2-DICHLOROBENZENE	UG/KG-	ND
05/16/94	MB*NONE*1	78872*CLP90/SON-G	2-METHYLPHENOL	UG/KG-	ND
05/16/94	MB*NONE*1	78803*CLP90/SON-G	4-METHYLPHENOL	UG/KG-	ND
05/16/94	MB*NONE*1	34286*CLP90/SON-G	2,2'-OXYBIS(1-CHLOROPROPANE)	UG/KG-	ND
05/16/94	MB*NONE*1	34431*CLP90/SON-G	N-NITROSODI-N-PROPYLAMINE	UG/KG-	ND
05/16/94	MB*NONE*1	34399*CLP90/SON-G	HEXACHLOROETHANE	UG/KG-	ND
05/16/94	MB*NONE*1	34450*CLP90/SON-G	NITROBENZENE	UG/KG-	ND
05/16/94	MB*NONE*1	34411*CLP90/SON-G	ISOPHORONE	UG/KG-	ND
05/16/94	MB*NONE*1	34594*CLP90/SON-G	2-NITROPHENOL	UG/KG-	ND
05/16/94	MB*NONE*1	34609*CLP90/SON-G	2,4-DIMETHYLPHENOL	UG/KG-	ND
05/16/94	MB*NONE*1	34281*CLP90/SON-G	BIS(2-CHLOROETHOXY)METHANE	UG/KG-	ND
05/16/94	MB*NONE*1	34604*CLP90/SON-G	2,4-DICHLOROPHENOL	UG/KG-	ND
05/16/94	MB*NONE*1	34554*CLP90/SON-G	1,2,4-TRICH'BENZENE	UG/KG-	ND
05/16/94	MB*NONE*1	34445*CLP90/SON-G	NAPHTHALENE	UG/KG-	ND
05/16/94	MB*NONE*1	78867*CLP90/SON-G	4-CHLOROANILINE	UG/KG-	ND
05/16/94	MB*NONE*1	39705*CLP90/SON-G	HEXACHLOROBUTADIENE	UG/KG-	ND
05/16/94	MB*NONE*1	34455*CLP90/SON-G	4-CHLORO-3-METHYLPHENOL	UG/KG-	ND
05/16/94	MB*NONE*1	78868*CLP90/SON-G	2-METHYLNAPHTHALENE	UG/KG-	ND
05/16/94	MB*NONE*1	34389*CLP90/SON-G	HEXACHLOROCYCLOPENTADIENE	UG/KG-	ND
05/16/94	MB*NONE*1	34624*CLP90/SON-G	2,4,6-TRICH'PHENOL	UG/KG-	ND
05/16/94	MB*NONE*1	98587*CLP90/SON-G	2,4,5-TRICH'PHENOL	UG/KG-	ND
05/16/94	MB*NONE*1	34584*CLP90/SON-G	2-CHLORONAPHTHALENE	UG/KG-	ND
05/16/94	MB*NONE*1	98588*CLP90/SON-G	2-NITROANILINE	UG/KG-	ND
05/16/94	MB*NONE*1	34344*CLP90/SON-G	DIMETHYL PHTHALATE	UG/KG-	ND
05/16/94	MB*NONE*1	34203*CLP90/SON-G	ACENAPHTHYLENE	UG/KG-	ND
05/16/94	MB*NONE*1	34629*CLP90/SON-G	2,6-DINITROTOLUENE	UG/KG-	ND
05/16/94	MB*NONE*1	78869*CLP90/SON-G	3-NITROANILINE	UG/KG-	ND
05/16/94	MB*NONE*1	34208*CLP90/SON-G	ACENAPHTHENE	UG/KG-	ND
05/16/94	MB*NONE*1	34619*CLP90/SON-G	2,4-DINITROPHENOL	UG/KG-	ND
05/16/94	MB*NONE*1	34649*CLP90/SON-G	4-NITROPHENOL	UG/KG-	ND
05/16/94	MB*NONE*1	75647*CLP90/SON-G	DIBENZOFURAN	UG/KG-	ND
05/16/94	MB*NONE*1	34614*CLP90/SON-G	2,4-DINITROTOLUENE	UG/KG-	ND
05/16/94	MB*NONE*1	34339*CLP90/SON-G	DIETHYL PHTHALATE	UG/KG-	ND
05/16/94	MB*NONE*1	34644*CLP90/SON-G	4-CHLOROPHENYLPHENYL ETHER	UG/KG-	ND
05/16/94	MB*NONE*1	34384*CLP90/SON-G	FLUORENE	UG/KG-	ND
05/16/94	MB*NONE*1	78870*CLP90/SON-G	4-NITROANILINE	UG/KG-	ND
05/16/94	MB*NONE*1	34660*CLP90/SON-G	2-METHYL-4,6-DINITROPHENOL	UG/KG-	ND
05/16/94	MB*NONE*1	34436*CLP90/SON-G	N-NITROSODIPHE'AMINE	UG/KG-	ND
05/16/94	MB*NONE*1	34639*CLP90/SON-G	4-BROMOPHENYL PHENYL ETHER	UG/KG-	ND
05/16/94	MB*NONE*1	39701*CLP90/SON-G	HEXACHLOROBENZENE	UG/KG-	ND
05/16/94	MB*NONE*1	39061*CLP90/SON-G	PENTACHLPHENOL	UG/KG-	ND
05/16/94	MB*NONE*1	34464*CLP90/SON-G	PHENANTHRENE	UG/KG-	ND
05/16/94	MB*NONE*1	34223*CLP90/SON-G	ANTHRACENE	UG/KG-	ND
05/16/94	MB*NONE*1	96242*CLP90/SON-G	CARBAZOLE	UG/KG-	ND
05/16/94	MB*NONE*1	39112*CLP90/SON-G	DI-N-BUTYL PHTHALATE	UG/KG-	ND
05/16/94	MB*NONE*1	34379*CLP90/SON-G	FLUORANTHENE	UG/KG-	ND
05/16/94	MB*NONE*1	34472*CLP90/SON-G	PYRENE	UG/KG-	ND
05/16/94	MB*NONE*1	34295*CLP90/SON-G	BUTYLBENZYLPHTHALATE	UG/KG-	ND
05/16/94	MB*NONE*1	34634*CLP90/SON-G	3,3-DICHL'BENZIDINE	UG/KG-	ND
05/16/94	MB*NONE*1	34529*CLP90/SON-G	BENZO(A)ANTHRACENE	UG/KG-	ND
05/16/94	MB*NONE*1	34323*CLP90/SON-G	CHRYSENE	UG/KG-	ND
05/16/94	MB*NONE*1	39102*CLP90/SON-G	BIS(2-ETHYLHEXYL)PHTHALATE	UG/KG-	130
05/16/94	MB*NONE*1	34599*CLP90/SON-G	DI-N-OCTYL PHTHALATE	UG/KG-	ND
05/16/94	MB*NONE*1	34233*CLP90/SON-G	BENZO(B)FLUORANTHENE	UG/KG-	ND
05/16/94	MB*NONE*1	34245*CLP90/SON-G	BENZO(K)FLUORANTHENE	UG/KG-	ND
05/16/94	MB*NONE*1	34250*CLP90/SON-G	BENZO(A)PYRENE	UG/KG-	ND
05/16/94	MB*NONE*1	34406*CLP90/SON-G	INDENO(1,2,3-CD)PYRENE	UG/KG-	ND
05/16/94	MB*NONE*1	34559*CLP90/SON-G	DIBEN(A,H)ANTHRACENE	UG/KG-	ND
05/16/94	MB*NONE*1	34524*CLP90/SON-G	BENZO(GHI)PERYLENE	UG/KG-	ND

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
05/16/94	SPM1*CDMHNSS*36	34695*CLP90/SON-G	PHENOL	104	26-90	0.0	UG/KG-	2600	2700
05/16/94	SPM1*CDMHNSS*36	34589*CLP90/SON-G	2-CHLOROPHENOL	96	25-102	0.0	UG/KG-	2600	2500
05/16/94	SPM1*CDMHNSS*36	34574*CLP90/SON-G	1,4-DICHLOROBENZENE	89	28-104	0.0	UG/KG-	1800	1600
05/16/94	SPM1*CDMHNSS*36	34431*CLP90/SON-G	N-NITROSODI-N-PROPYLAMINE	89	41-126	0.0	UG/KG-	1800	1600
05/16/94	SPM1*CDMHNSS*36	34554*CLP90/SON-G	1,2,4-TRICH'BENZENE	94	38-107	0.0	UG/KG-	1800	1700

ESE BATCH : G49285

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
05/16/94	SPM1*CDMHNSS*36	34455*CLP90/SON-G	4-CHLORO-3-METHYLPHENOL	119	26-103	0.0	UG/KG-	2600	3100
05/16/94	SPM1*CDMHNSS*36	34208*CLP90/SON-G	ACENAPHTHENE	94	31-137	0.0	UG/KG-	1800	1700
05/16/94	SPM1*CDMHNSS*36	34649*CLP90/SON-G	4-NITROPHENOL	115	11-114	0.0	UG/KG-	2600	3000
05/16/94	SPM1*CDMHNSS*36	34614*CLP90/SON-G	2,4-DINITROTOLUENE	111	28-89	0.0	UG/KG-	1800	2000
05/16/94	SPM1*CDMHNSS*36	39061*CLP90/SON-G	PENTACHLPHENOL	158	17-109	0.0	UG/KG-	2600	4100
05/16/94	SPM1*CDMHNSS*36	34472*CLP90/SON-G	PYRENE	122	35-142	0.0	UG/KG-	1800	2200
05/16/94	SPM2*CDMHNSS*36	34695*CLP90/SON-G	PHENOL	115	26-90	0.0	UG/KG-	2600	3000
05/16/94	SPM2*CDMHNSS*36	34589*CLP90/SON-G	2-CHLOROPHENOL	104	25-102	0.0	UG/KG-	2600	2700
05/16/94	SPM2*CDMHNSS*36	34574*CLP90/SON-G	1,4-DICHLOROBENZENE	94	28-104	0.0	UG/KG-	1800	1700
05/16/94	SPM2*CDMHNSS*36	34431*CLP90/SON-G	N-NITROSODI-N-PROPYLAMINE	100	41-126	0.0	UG/KG-	1800	1800
05/16/94	SPM2*CDMHNSS*36	34554*CLP90/SON-G	1,2,4-TRICHLOBENZENE	106	38-107	0.0	UG/KG-	1800	1900
05/16/94	SPM2*CDMHNSS*36	34455*CLP90/SON-G	4-CHLORO-3-METHYLPHENOL	119	26-103	0.0	UG/KG-	2600	3100
05/16/94	SPM2*CDMHNSS*36	34208*CLP90/SON-G	ACENAPHTHENE	106	31-137	0.0	UG/KG-	1800	1900
05/16/94	SPM2*CDMHNSS*36	34649*CLP90/SON-G	4-NITROPHENOL	138	11-114	0.0	UG/KG-	2600	3600
05/16/94	SPM2*CDMHNSS*36	34614*CLP90/SON-G	2,4-DINITROTOLUENE	128	28-89	0.0	UG/KG-	1800	2300
05/16/94	SPM2*CDMHNSS*36	39061*CLP90/SON-G	PENTACHLPHENOL	196	17-109	0.0	UG/KG-	2600	5100
05/16/94	SPM2*CDMHNSS*36	34472*CLP90/SON-G	PYRENE	133	35-142	0.0	UG/KG-	1800	2400

Surrogate Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/16/94	MB*NONE*1	95004*SUR	2-FLUOROPHENOL (CLP90/SON)	UG/KG-	2500	2200	88	25-121
05/16/94	MB*NONE*1	95003*SUR	PHENOL-D(5) (CLP90/SON)	UG/KG-	2500	2400	96.0	24-113
05/16/94	MB*NONE*1	95007*SUR	2-CHLOROPHENOL-D4 (CLP90/SON)	UG/KG-	2500	2200	88	20-130
05/16/94	MB*NONE*1	95009*SUR	1,2-DICHLOROBENZENE-D4 (CLP90/	UG/KG-	1700	1600	94	20-130
05/16/94	MB*NONE*1	95051*SUR	NITROBENZENE-D(5) (CLP90/SON)	UG/KG-	1700	2000	120	23-120
05/16/94	MB*NONE*1	95052*SUR	2-FLUOROBIPHENYL (CLP90/SON)	UG/KG-	1700	1500	88	30-115
05/16/94	MB*NONE*1	95005*SUR	2,4,6-TRIBROMOPHENOL (CLP90/SO	UG/KG-	2500	2100	84.0	19-122
05/16/94	MB*NONE*1	95002*SUR	TERPHENYL-D(14) (CLP90/SON)	UG/KG-	1670	1900	114	18-137
05/16/94	DA*CDMHNSS*36	95004*SUR	2-FLUOROPHENOL (CLP90/SON)	UG/KG-	2500	2300	92	25-121
05/16/94	DA*CDMHNSS*36	95003*SUR	PHENOL-D(5) (CLP90/SON)	UG/KG-	2500	2400	96.0	24-113
05/16/94	DA*CDMHNSS*36	95007*SUR	2-CHLOROPHENOL-D4 (CLP90/SON)	UG/KG-	2500	2200	88	20-130
05/16/94	DA*CDMHNSS*36	95009*SUR	1,2-DICHLOROBENZENE-D4 (CLP90/	UG/KG-	1700	1700	100	20-130
05/16/94	DA*CDMHNSS*36	95051*SUR	NITROBENZENE-D(5) (CLP90/SON)	UG/KG-	1700	1800	110	23-120
05/16/94	DA*CDMHNSS*36	95052*SUR	2-FLUOROBIPHENYL (CLP90/SON)	UG/KG-	1700	1800	110	30-115
05/16/94	DA*CDMHNSS*36	95005*SUR	2,4,6-TRIBROMOPHENOL (CLP90/SO	UG/KG-	2500	2600	104	19-122
05/16/94	DA*CDMHNSS*36	95002*SUR	TERPHENYL-D(14) (CLP90/SON)	UG/KG-	1670	2100	126	18-137
05/16/94	SPM1*CDMHNSS*36	95004*SUR	2-FLUOROPHENOL (CLP90/SON)	UG/KG-	2500	2100	84	25-121
05/16/94	SPM1*CDMHNSS*36	95003*SUR	PHENOL-D(5) (CLP90/SON)	UG/KG-	2500	2400	96.0	24-113
05/16/94	SPM1*CDMHNSS*36	95007*SUR	2-CHLOROPHENOL-D4 (CLP90/SON)	UG/KG-	2500	2200	88	20-130
05/16/94	SPM1*CDMHNSS*36	95009*SUR	1,2-DICHLOROBENZENE-D4 (CLP90/	UG/KG-	1700	1600	94	20-130
05/16/94	SPM1*CDMHNSS*36	95051*SUR	NITROBENZENE-D(5) (CLP90/SON)	UG/KG-	1700	1600	94	23-120
05/16/94	SPM1*CDMHNSS*36	95052*SUR	2-FLUOROBIPHENYL (CLP90/SON)	UG/KG-	1700	1600	94	30-115
05/16/94	SPM1*CDMHNSS*36	95005*SUR	2,4,6-TRIBROMOPHENOL (CLP90/SO	UG/KG-	2500	2600	104	19-122
05/16/94	SPM1*CDMHNSS*36	95002*SUR	TERPHENYL-D(14) (CLP90/SON)	UG/KG-	1670	2100	126	18-137
05/16/94	SPM2*CDMHNSS*36	95004*SUR	2-FLUOROPHENOL (CLP90/SON)	UG/KG-	2500	2300	92	25-121
05/16/94	SPM2*CDMHNSS*36	95003*SUR	PHENOL-D(5) (CLP90/SON)	UG/KG-	2500	2500	100.0	24-113
05/16/94	SPM2*CDMHNSS*36	95007*SUR	2-CHLOROPHENOL-D4 (CLP90/SON)	UG/KG-	2500	2300	92	20-130
05/16/94	SPM2*CDMHNSS*36	95009*SUR	1,2-DICHLOROBENZENE-D4 (CLP90/	UG/KG-	1700	1700	100	20-130
05/16/94	SPM2*CDMHNSS*36	95051*SUR	NITROBENZENE-D(5) (CLP90/SON)	UG/KG-	1700	1800	110	23-120
05/16/94	SPM2*CDMHNSS*36	95052*SUR	2-FLUOROBIPHENYL (CLP90/SON)	UG/KG-	1700	1800	110	30-115
05/16/94	SPM2*CDMHNSS*36	95005*SUR	2,4,6-TRIBROMOPHENOL (CLP90/SO	UG/KG-	2500	2800	112	19-122
05/16/94	SPM2*CDMHNSS*36	95002*SUR	TERPHENYL-D(14) (CLP90/SON)	UG/KG-	1670	2200	132	18-137

ESE BATCH : G49285

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G49285 Analysis Date: 05/16/94 Analyst: TOM TOMAFAS

	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		
Sample matrix spike present?	X		
Sample matrix spike within acceptance criteria?		X	PHENOL
			4CL3MEHPH
			4NITROPHE
			24DINITOL
			PENTCLPHE
Sample matrix spike duplicate present?	X		
Sample matrix spike duplicate within acceptance criteria?		X	PHENOL
			2CHLOROPH
			4CL3MEHPH
			4NITROPHE
			24DINITOL
			PENTCLPHE
Surrogate present?	X		
Surrogate within acceptance criteria?		X	95004*SUR
			95003*SUR
			95007*SUR
			12DICLBEN
			95051*SUR
			95052*SUR
			95005*SUR
			95002*SUR

Note: Any "NO" answer requires a comment.

OVERRIDE COMMENTS

BATCH OVERRIDE BY: DWIGHT ROBERTS 515
PROB:SAMPLE MATRIX SPIKE NOT WITHIN ACCEPTANCE CRITERIA.
EXPL:THE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERIES WERE ABOVE THE UPPER LIMIT FOR PHENOL, 4-CHLOROR-3-METHYLPHENOL, 4-NITROPHENOL,2,4-DINITROTOLUENE, PENTACHLOROPHENOL, AND/OR 2-CHLOROPHENOL. THESE RECOVERIES ARE GOOD FOR THIS METHOD. FOLLOWING THE CLP 3/90 SOW MATRIX SPIKE RECOVERIES ARE ONLY ADVISORY AND THEIR FAILUR DOES NOT INDICATE A QC PROBLEM./AT./05-23-94.
PROB:SAMPLE MATRIX SPIKE DUPLICATE NOT WITHIN ACCEPTANCE CRITERIA.
EXPL:SAME AS ABOVE.
EM./05-23-94.

ESE BATCH : G49285

TABLE OF ABBREVIATIONS

```
%RECV       : % Recovery for spiked sample. (FOUND/TARGET * 100)
ANLY DATE   : Analysis Date
ANLY TIME   : Analysis Time
CURVE       : Curve Regression Number
DILUTION    : Sample Dilution Factor
EXT DATE    : Extract Date
EXT VOL     : Extract Volume
FOUND       : Spiked Sample Conc. - Unspiked Sample Conc.
INJ VOL     : Injection Volume
REL%DIFF    : % Difference between current and previous spike.
RESPONSE    : Sample Response
R.T.        : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID   : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
      DA  -- Data Sample
      MB  -- Method Blank
      RF  -- Reference (from commercially known standard)
      RP  -- Replicate Sample
      SP  -- Standard Matrix Spike
      SPM -- Sample Matrix Spike
      STD -- Internal Standard
      SUR -- Surrogate Sample
      UN  -- Unspiked Sample
SAMP VOL    : Sample Volume
SPK CONC    : Spike Concentration
ST          : Sample response explanation or validity. (listed below)
      BK  -- No sample response.
      NA  -- Sample not analyzed.
      NR  -- Not reserved for this batch.  Batch containing the response
             for this sample is listed in the target field.
      OK  -- Sample response shown is correct.
      !   -- Sample response shown is invalid.
      <   -- Sample response < detection limit. Detection limit is shown
             in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET      : Spike Target (SAMPLE LISTING SECTION)
TARGET      : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE        : Response Type ("FINAL" or empty.)
UNSP CONC   : Unspiked Sample Concentration
```

Soils

% Moisture

ESE BATCH : G48292
CLASSIFICATION : PERCENT MOISTURE - ASTM D2216

QC TYPE : FDER/SW
ANALYST : JULIE HALL
EXTRACTOR : JULIE HALL
DATA ENTRY : BALANCE UPLOAD

REPORT DATE/TIME : 05/20/94 06:12:08
ANALYSIS DATE : 04/22/94
EXTRACT DATE : 04/21/94

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

BATCH NOTES
BALANCE #24, RUN #10

FIELD GRP QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS	1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*1	WA20-1-04	04/21/94	03:47PM
CDMHNSS*2	WA20-2-06	04/21/94	03:48PM
CDMHNSS*3	WA19-1-08	04/21/94	03:49PM
CDMHNSS*4	WA19-2-07	04/21/94	03:50PM

ESE BATCH : G48292

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H.T. OVER

ALL HOLDING TIMES MET

STORET: 96041 METHOD: 0 PAN, GM %M

STORET: 96042 METHOD: 0 PAN+SAMPLE (WET), GM %M

STORET: 96043 METHOD: 0 PAN+SAMPLE (DRY), GM %M

STORET: 70320 METHOD: I MOISTURE, %WET WT %M

CALIBRATION CURVE # 1
DETECTION LIMIT=0.50 DATE: 04/21/94 LARGEST RESP= %RSD= RT WINDOW:

STORET: 70320 METHOD: ASTM-G MOISTURE, %WET WT %M

CALIBRATION CURVE # 1
DETECTION LIMIT=0.50 DATE: 04/21/94 LARGEST RESP= %RSD= RT WINDOW:

ESE BATCH : G48292

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
04/21/94	MB*QC*1	96041*0	PAN	GM	1.59270
04/21/94	MB*QC*1	96042*0	PAN+SAMPLE (WET)	GM	1.59260
04/21/94	MB*QC*1	96043*0	PAN+SAMPLE (DRY)	GM	1.59220
04/21/94	MB*QC*1	70320*I	MOISTURE	%WET W	ND
04/21/94	MB*QC*1	70320*ASTM-G	MOISTURE	%WET W	ND
04/21/94	MB*QC*2	96041*0	PAN	GM	1.59230
04/21/94	MB*QC*2	96042*0	PAN+SAMPLE (WET)	GM	1.59260
04/21/94	MB*QC*2	96043*0	PAN+SAMPLE (DRY)	GM	1.59190
04/21/94	MB*QC*2	70320*I	MOISTURE	%WET W	100.0
04/21/94	MB*QC*2	70320*ASTM-G	MOISTURE	%WET W	100.0

Replicate Analysis Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	REP #1	REP #2	RPD	RPD CRIT
04/21/94	RP*CDMHNSS*2	96041*0	PAN	GM	1.58500	1.58700	0.10000	N/A
04/21/94	RP*CDMHNSS*2	96042*0	PAN+SAMPLE (WET)	GM	15.64300	15.74980	0.70000	N/A
04/21/94	RP*CDMHNSS*2	96043*0	PAN+SAMPLE (DRY)	GM	15.20000	15.31360	0.70000	N/A
04/21/94	RP*CDMHNSS*2	70320*I	MOISTURE	%WET W	3.2	3.1	3.2	23
04/21/94	RP*CDMHNSS*2	70320*ASTM-G	MOISTURE	%WET W	3.2	3.1	3.2	23

ESE BATCH : G48292

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G48292 Analysis Date 04/22/96 Analyst: JULIE HALL

	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		
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.

OVERRIDE COMMENTS

BATCH OVERRIDE BY:

ESE BATCH : G48292

TABLE OF ABBREVIATIONS

```
%RECV       : % Recovery for spiked sample. (FOUND/TARGET * 100)
ANLY DATE   : Analysis Date
ANLY TIME   : Analysis Time
CURVE       : Curve Regression Number
DILUTION    : Sample Dilution Factor
EXT DATE    : Extract Date
EXT VOL     : Extract Volume
FOUND       : Spiked Sample Conc. - Unspiked Sample Conc.
INJ VOL     : Injection Volume
REL%DIFF    : % Difference between current and previous spike.
RESPONSE    : Sample Response
R.T.        : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID   : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
      DA  -- Data Sample
      MB  -- Method Blank
      RF  -- Reference (from commercially known standard)
      RP  -- Replicate Sample
      SP  -- Standard Matrix Spike
      SPM -- Sample Matrix Spike
      STD -- Internal Standard
      SUR -- Surrogate Sample
      UN  -- Unspiked Sample
SAMP VOL    : Sample Volume
SPK CONC    : Spike Concentration
ST          : Sample response explanation or validity. (listed below)
      BK  -- No sample response.
      NA  -- Sample not analyzed.
      NR  -- Not reserved for this batch.  Batch containing the response
             for this sample is listed in the target field.
      OK  -- Sample response shown is correct.
      !   -- Sample response shown is invalid.
      <   -- Sample response < detection limit. Detection limit is shown
             in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET      : Spike Target (SAMPLE LISTING SECTION)
TARGET      : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE        : Response Type ("FINAL" or empty.)
UNSP CONC   : Unspiked Sample Concentration
```

ESE BATCH : G48332
CLASSIFICATION : PERCENT MOISTURE - ASTM D2216

QC TYPE : FDER/SW
ANALYST : JULIE HALL
EXTRACTOR : JULIE HALL
DATA ENTRY : BALANCE UPLOAD

REPORT DATE/TIME : 05/20/94 06:12:34
ANALYSIS DATE : 04/25/94
EXTRACT DATE : 04/22/94

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

BATCH NOTES
BALANCE #24, RUN #11

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS		1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*5	WA19-3-05	04/22/94	02:21PM
CDMHNSS*6	WA19-4-05	04/22/94	02:23PM

ESE BATCH : G48332

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H.T.	OVER

ALL HOLDING TIMES MET

STORET: 96041 METHOD: 0 PAN, GM %M

STORET: 96042 METHOD: 0 PAN+SAMPLE (WET), GM %M

STORET: 96043 METHOD: 0 PAN+SAMPLE (DRY), GM %M

STORET: 70320 METHOD: I MOISTURE, %WET WT %M

CALIBRATION CURVE # 1
DETECTION LIMIT=0.50 DATE: 04/22/94 LARGEST RESP= %RSD= RT WINDOW:

STORET: 70320 METHOD: ASTM-G MOISTURE, %WET WT %M

CALIBRATION CURVE # 1
DETECTION LIMIT=0.50 DATE: 04/22/94 LARGEST RESP= %RSD= RT WINDOW:

ESE BATCH G48332

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
04/22/94	MB*QC*1	96041*0	PAN	GM	1.57200
04/22/94	MB*QC*1	96042*0	PAN+SAMPLE (WET)	GM	1.57260
04/22/94	MB*QC*1	96043*0	PAN+SAMPLE (DRY)	GM	1.57170
04/22/94	MB*QC*1	70320*I	MOISTURE	%WET W	100.0
04/22/94	MB*QC*1	70320*ASTM-G	MOISTURE	%WET W	100.0

Replicate Analysis Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	REP #1	REP #2	RPD	RPD CRIT
04/22/94	RP*CDMHNSS*5	96041*0	PAN	GM	1.58500	1.57820	0.40000	N/A
04/22/94	RP*CDMHNSS*5	96042*0	PAN+SAMPLE (WET)	GM	13.58800	13.47390	0.80000	N/A
04/22/94	RP*CDMHNSS*5	96043*0	PAN+SAMPLE (DRY)	GM	13.22500	13.11830	0.80000	N/A
04/22/94	RP*CDMHNSS*5	70320*I	MOISTURE	%WET W	3.0	3.0	0.0	23
04/22/94	RP*CDMHNSS*5	70320*ASTM-G	MOISTURE	%WET W	3.0	3.0	0.0	23

ESE BATCH : G48332

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G48332 Analysis Date 04/25/94 Analyst: JULIE HALL

	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		
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.

OVERRIDE COMMENTS

BATCH OVERRIDE BY:

ESE BATCH : G48332

TABLE OF ABBREVIATIONS

```
%RECV       : % Recovery for spiked sample  (FOUND/TARGET * 100)
ANLY DATE   : Analysis Date
ANLY TIME   : Analysis Time
CURVE       : Curve Regression Number
DILUTION    : Sample Dilution Factor
EXT DATE    : Extract Date
EXT VOL     : Extract Volume
FOUND       : Spiked Sample Conc. - Unspiked Sample Conc
INJ VOL     : Injection Volume
REL%DIFF    : % Difference between current and previous spike.
RESPONSE    : Sample Response
R.T.        : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID   : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
      DA  -- Data Sample
      MB  -- Method Blank
      RF  -- Reference (from commercially known standard)
      RP  -- Replicate Sample
      SP  -- Standard Matrix Spike
      SPM -- Sample Matrix Spike
      STD -- Internal Standard
      SUR -- Surrogate Sample
      UN  -- Unspiked Sample
SAMP VOL    : Sample Volume
SPK CONC    : Spike Concentration
ST          : Sample response explanation or validity. (listed below)
      BK  -- No sample response.
      NA  -- Sample not analyzed.
      NR  -- Not reserved for this batch.  Batch containing the response
             for this sample is listed in the target field.
      OK  -- Sample response shown is correct.
      !   -- Sample response shown is invalid.
      <   -- Sample response < detection limit. Detection limit is shown
             in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET      : Spike Target (SAMPLE LISTING SECTION)
TARGET      : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE        : Response Type ("FINAL" or empty.)
UNSP CONC   : Unspiked Sample Concentration
```

ESE BATCH : G48375
CLASSIFICATION : PERCENT MOISTURE - ASTM D2216

QC TYPE : FDER/SW
ANALYST : JULIE HALL
EXTRACTOR : JULIE HALL
DATA ENTRY : BALANCE UPLOAD

REPORT DATE/TIME : 05/20/94 06:12:50
ANALYSIS DATE : 04/26/94
EXTRACT DATE : 04/25/94

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

BATCH NOTES
BALANCE #24, RUN #13

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS		1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*7	WA17-1-03	04/25/94	10:39AM
CDMHNSS*8	WA16-1-02	04/25/94	10:40AM
CDMHNSS*9	WA16-2-03	04/25/94	10:41AM

ESE BATCH : G48375

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H.T. OVER

ALL HOLDING TIMES MET

STORET: 96041 METHOD: 0 PAN, GM %M

STORET: 96042 METHOD: 0 PAN+SAMPLE (WET), GM %M

STORET: 96043 METHOD: 0 PAN+SAMPLE (DRY), GM %M

STORET: 70320 METHOD: I MOISTURE, %WET WT %M

CALIBRATION CURVE # 1
DETECTION LIMIT=0.50 DATE: 04/25/94 LARGEST RESP= %RSD= RT WINDOW:

STORET: 70320 METHOD: ASTM-G MOISTURE, %WET WT %M

CALIBRATION CURVE # 1
DETECTION LIMIT=0.50 DATE: 04/25/94 LARGEST RESP= %RSD= RT WINDOW:

ESE BATCH : G48375

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
04/25/94	MB*QC*1	96041*0	PAN	GM	1.58590
04/25/94	MB*QC*1	96042*0	PAN+SAMPLE (WET)	GM	1.58540
04/25/94	MB*QC*1	96043*0	PAN+SAMPLE (DRY)	GM	1.58480
04/25/94	MB*QC*1	70320*I	MOISTURE	%WET W	ND
04/25/94	MB*QC*1	70320*ASTM-G	MOISTURE	%WET W	ND

Replicate Analysis Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	REP #1	REP #2	RPD	RPD CRIT
04/25/94	RP*CDMHNSS*7	96041*0	PAN	GM	1.56900	1.59610	1.70000	N/A
04/25/94	RP*CDMHNSS*7	96042*0	PAN+SAMPLE (WET)	GM	13.04400	13.39540	2.70000	N/A
04/25/94	RP*CDMHNSS*7	96043*0	PAN+SAMPLE (DRY)	GM	11.34600	11.69250	3.00000	N/A
04/25/94	RP*CDMHNSS*7	70320*I	MOISTURE	%WET W	14.8	14.4	2.7	23
04/25/94	RP*CDMHNSS*7	70320*ASTM-G	MOISTURE	%WET W	14.8	14.4	2.7	23

ESE BATCH : G48375

UNITS AND EXAMPLE CALCULATIONS

	UNITS ENTERED
FINAL CONCENTRATION	%
INJECTION VOLUME	NA
SAMPLE VOLUME	NA
EXTRACT VOLUME	NA
CURVE CONCENTRATION	NA
SPIKE SOLN CONCENTRATION	NA
SPIKE VOLUME	NA
SPIKE SAMPLE VOLUME	NA
TARGET CONCENTRATION	NA
RESPONSE DESCRIPTION	GM
CONVERSION FACTOR	NA

$$\text{FINAL CONC} = \frac{\text{CURV CONC * EXT VOL * DIL}}{\text{INJ VOL * SAMP VOL * ((100 - \%MOISTURE) / 100)}}$$

$$\% = \frac{\text{(NA) * (NA)}}{\text{(NA) * (NA)}}$$

$$\text{(\qquad)} = \frac{\text{(\qquad) * (\qquad) * (\qquad)}}{\text{(\qquad) * (\qquad) * ((100 - (\qquad)) / 100)}}$$

$$\text{TARGET CONC} = \frac{\text{SPIKE SOLN CONC * SPIKE VOL}}{\text{SPIKE SAMP VOL * ((100 - \%MOISTURE) / 100)}}$$

$$\text{NA} = \frac{\text{(NA) * (NA)}}{\text{(NA)}}$$

ESE BATCH : G48375

TABLE OF ABBREVIATIONS

```
%RECV       : % Recovery for spiked sample  (FOUND/TARGET * 100)
ANLY DATE   : Analysis Date
ANLY TIME   : Analysis Time
CURVE       : Curve Regression Number
DILUTION    : Sample Dilution Factor
EXT DATE    : Extract Date
EXT VOL     : Extract Volume
FOUND       : Spiked Sample Conc. - Unspiked Sample Conc
INJ VOL     : Injection Volume
REL%DIFF    : % Difference between current and previous spike.
RESPONSE    : Sample Response
R.T.        : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID   : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below
      DA  -- Data Sample
      MB  -- Method Blank
      RF  -- Reference (from commercially known standard)
      RP  -- Replicate Sample
      SP  -- Standard Matrix Spike
      SPM -- Sample Matrix Spike
      STD -- Internal Standard
      SUR -- Surrogate Sample
      UN  -- Unspiked Sample
SAMP VOL    : Sample Volume
SPK CONC    : Spike Concentration
ST          : Sample response explanation or validity. (listed below)
      BK  -- No sample response.
      NA  -- Sample not analyzed.
      NR  -- Not reserved for this batch.  Batch containing the response
             for this sample is listed in the target field.
      OK  -- Sample response shown is correct.
      !   -- Sample response shown is invalid.
      <   -- Sample response < detection limit. Detection limit is shown
             in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET      : Spike Target (SAMPLE LISTING SECTION)
TARGET      : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE        : Response Type ("FINAL" or empty.)
UNSP CONC   : Unspiked Sample Concentration
```

ESE BATCH : G48433
CLASSIFICATION : PERCENT MOISTURE - ASTM D22:6

QC TYPE : FDER/SW
ANALYST : JULIE HALL
EXTRACTOR : JULIE HALL
DATA ENTRY : JULIE HALL

REPORT DATE/TIME : 05/20/94 06:13:18
ANALYSIS DATE : 04/27/94
EXTRACT DATE : 04/26/94

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

BATCH NOTES
BALANCE #24, RUN #12, NOTEBOOK 94-2, PG 31

FIELD GRP QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS	1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*10	WA07-1-01	04/26/94	01:52PM
CDMHNSS*11	WA07-2-05	04/26/94	01:52PM
CDMHNSS*12	WA05-1-04	04/26/94	01:53PM

ESE BATCH : G48433

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H.T. OVER

ALL HOLDING TIMES MET

STORET: 96041 METHOD: 0 PAN, GM %M

STORET: 96042 METHOD: 0 PAN+SAMPLE (WET), GM %M

STORET: 96043 METHOD: 0 PAN+SAMPLE (DRY), GM %M

STORET: 70320 METHOD: I MOISTURE, %WET WT %M

CALIBRATION CURVE # 1
DETECTION LIMIT=0.50 DATE: 04/26/94 LARGEST RESP= %RSD= RT WINDOW:

STORET: 70320 METHOD: ASTM-G MOISTURE, %WET WT %M

CALIBRATION CURVE # 1
DETECTION LIMIT=0.50 DATE: 04/26/94 LARGEST RESP= %RSD= RT WINDOW:

ESE BATCH : G48433

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
04/26/94	MB*QC*1	96041*0	PAN	GM	1.58210
04/26/94	MB*QC*1	96042*0	PAN+SAMPLE (WET)	GM	1.58190
04/26/94	MB*QC*1	96043*0	PAN+SAMPLE (DRY)	GM	1.58140
04/26/94	MB*QC*1	70320*1	MOISTURE	%WET W	ND
04/26/94	MB*QC*1	70320*ASTM-G	MOISTURE	%WET W	ND

Replicate Analysis Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	REP #1	REP #2	RPD	RPD CRIT
04/26/94	RP*CDMHNSS*11	96041*0	PAN	GM	1.59200	1.59120	0.05000	N/A
04/26/94	RP*CDMHNSS*11	96042*0	PAN+SAMPLE (WET)	GM	14.46200	14.98240	3.50000	N/A
04/26/94	RP*CDMHNSS*11	96043*0	PAN+SAMPLE (DRY)	GM	13.76300	14.24520	3.40000	N/A
04/26/94	RP*CDMHNSS*11	70320*I	MOISTURE	%WET W	5.4	5.5	1.8	23
04/26/94	RP*CDMHNSS*11	70320*ASTM-G	MOISTURE	%WET W	5.4	5.5	1.8	23

ESE BATCH : G48433

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G48433 Analysis Date: 04/27/94 Analyst: JULIE HALL

	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		
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.

OVERRIDE COMMENTS

BATCH OVERRIDE BY:

ESE BATCH : G48433

TABLE OF ABBREVIATIONS

```
%RECV       : % Recovery for spiked sample. (FOUND/TARGET * 100)
ANLY DATE   : Analysis Date
ANLY TIME   : Analysis Time
CURVE       : Curve Regression Number
DILUTION    : Sample Dilution Factor
EXT DATE    : Extract Date
EXT VOL     : Extract Volume
FOUND       : Spiked Sample Conc. - Unspiked Sample Conc.
INJ VOL     : Injection Volume
REL%DIFF    : % Difference between current and previous spike.
RESPONSE    : Sample Response
R.T.        : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID   : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
      DA  -- Data Sample
      MB  -- Method Blank
      RF  -- Reference (from commercially known standard)
      RP  -- Replicate Sample
      SP  -- Standard Matrix Spike
      SPM -- Sample Matrix Spike
      STD -- Internal Standard
      SUR -- Surrogate Sample
      UN  -- Unspiked Sample
SAMP VOL    : Sample Volume
SPK CONC    : Spike Concentration
ST          : Sample response explanation or validity. (listed below)
      BK  -- No sample response.
      NA  -- Sample not analyzed.
      NR  -- Not reserved for this batch.  Batch containing the response
             for this sample is listed in the target field.
      OK  -- Sample response shown is correct.
      !   -- Sample response shown is invalid.
      <   -- Sample response < detection limit. Detection limit is shown
             in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET      : Spike Target (SAMPLE LISTING SECTION)
TARGET      : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE        : Response Type ("FINAL" or empty.)
UNSP CONC   : Unspiked Sample Concentration
```

ESE BATCH : G48469
CLASSIFICATION : PERCENT MOISTURE - ASTM D2216

QC TYPE : FDER/SW
ANALYST : JULIE HALL
EXTRACTOR : JULIE HALL
DATA ENTRY : BALANCE UPLOAD

REPORT DATE/TIME : 05/20/94 06:15:28
ANALYSIS DATE : 04/28/94
EXTRACT DATE : 04/27/94

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

BATCH NOTES
BALANCE #24, RUN #14

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS		1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*13	WA05-2-03	04/27/94	01:56PM
CDMHNSS*14	WA05-3-04	04/27/94	01:56PM
CDMHNSS*15	WA04-1-05	04/27/94	01:57PM
CDMHNSS*16	WA04-2-12	04/27/94	01:58PM

ESE BATCH : G48469

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H.T. OVER

ALL HOLDING TIMES MET

STORET: 96041 METHOD: 0 PAN, GM %M

STORET: 96042 METHOD: 0 PAN+SAMPLE (WET), GM %M

STORET: 96043 METHOD: 0 PAN+SAMPLE (DRY), GM %M

STORET: 70320 METHOD: I MOISTURE, %WET WT %M

CALIBRATION CURVE # 1
DETECTION LIMIT=0.50 DATE: 04/27/94 LARGEST RESP= %RSD= RT WINDOW:

ESE BATCH : G48469

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
04/27/94	MB*QC*1	96041*0	PAN	GM	1.57630
04/27/94	MB*QC*1	96042*0	PAN+SAMPLE (WET)	GM	1.57660
04/27/94	MB*QC*1	96043*0	PAN+SAMPLE (DRY)	GM	1.57650
04/27/94	MB*QC*1	70320*I	MOISTURE	%WET W	33.3
04/27/94	MB*QC*2	96041*0	PAN	GM	1.57020
04/27/94	MB*QC*2	96042*0	PAN+SAMPLE (WET)	GM	1.57020
04/27/94	MB*QC*2	96043*0	PAN+SAMPLE (DRY)	GM	1.56940
04/27/94	MB*QC*2	70320*I	MOISTURE	%WET W	0.05

Replicate Analysis Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	REP #1	REP #2	RPD	RPD CRIT
04/27/94	RP*CDMHNSS*15	96041*0	PAN	GM	1.58500	1.57560	0.60000	N/A
04/27/94	RP*CDMHNSS*15	96042*0	PAN+SAMPLE (WET)	GM	14.11400	14.46420	2.50000	N/A
04/27/94	RP*CDMHNSS*15	96043*0	PAN+SAMPLE (DRY)	GM	13.63200	13.93540	2.20000	N/A
04/27/94	RP*CDMHNSS*15	70320*I	MOISTURE	%WET W	3.8	4.1	7.6	23

ESE BATCH : G48469

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G48469 Analysis Date: 04/28/94 Analyst: JULIE HALL

	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		
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.

OVERRIDE COMMENTS

BATCH OVERRIDE BY:

ESE BATCH : G48469

TABLE OF ABBREVIATIONS

```
%RECV       : % Recovery for spiked sample. (FOUND/TARGET * 100)
ANLY DATE   : Analysis Date
ANLY TIME   : Analysis Time
CURVE       : Curve Regression Number
DILUTION    : Sample Dilution Factor
EXT DATE    : Extract Date
EXT VOL     : Extract Volume
FOUND       : Spiked Sample Conc. - Unspiked Sample Conc.
INJ VOL     : Injection Volume
REL%DIFF    : % Difference between current and previous spike.
RESPONSE    : Sample Response
R.T.        : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID   : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
      DA  -- Data Sample
      MB  -- Method Blank
      RF  -- Reference (from commercially known standard)
      RP  -- Replicate Sample
      SP  -- Standard Matrix Spike
      SPM -- Sample Matrix Spike
      STD -- Internal Standard
      SUR -- Surrogate Sample
      UN  -- Unspiked Sample
SAMP VOL    : Sample Volume
SPK CONC    : Spike Concentration
ST          : Sample response explanation or validity. (listed below)
      BK  -- No sample response.
      NA  -- Sample not analyzed.
      NR  -- Not reserved for this batch. Batch containing the response
             for this sample is listed in the target field.
      OK  -- Sample response shown is correct.
      !   -- Sample response shown is invalid.
      <   -- Sample response < detection limit. Detection limit is shown
             in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET      : Spike Target (SAMPLE LISTING SECTION)
TARGET      : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE        : Response Type ("FINAL" or empty.)
UNSP CONC   : Unspiked Sample Concentration
```

ESE BATCH : G48562
CLASSIFICATION : PERCENT MOISTURE - ASTM D2216

QC TYPE : FDER/SW
ANALYST : JULIE HALL
EXTRACTOR : JULIE HALL
DATA ENTRY : BALANCE UPLOAD

REPORT DATE/TIME : 05/20/94 06:14:58
ANALYSIS DATE : 04/01/94
EXTRACT DATE : 04/29/94

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

BATCH NOTES
BALANCE #24, RUN #16

FIELD GRP QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS	1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*17	EA14-1-01	04/29/94	12:37PM
CDMHNSS*18	EA14-2-01	04/29/94	12:38PM
CDMHNSS*19	EA12-1-10	04/29/94	12:38PM
CDMHNSS*20	EA12-2-12	04/29/94	12:39PM

ESE BATCH : G48562

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H.T.	OVER

ALL HOLDING TIMES MET

STORET: 96041 METHOD: 0 PAN, GM %M

STORET: 96042 METHOD: 0 PAN+SAMPLE (WET), GM %M

STORET: 96043 METHOD: 0 PAN+SAMPLE (DRY), GM %M

STORET: 70320 METHOD: I MOISTURE, %WET WT %M

CALIBRATION CURVE # 1
DETECTION LIMIT=0.50 DATE: 04/29/94 LARGEST RESP= %RSD= RT WINDOW:

ESE BATCH : G48562

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
04/29/94	MB*QC*1	96041*0	PAN	GM	1.58550
04/29/94	MB*QC*1	96042*0	PAN+SAMPLE (WET)	GM	1.58540
04/29/94	MB*QC*1	96043*0	PAN+SAMPLE (DRY)	GM	1.58490
04/29/94	MB*QC*1	70320*I	MOISTURE	%WET W	ND
04/29/94	MB*QC*2	96041*0	PAN	GM	1.58670
04/29/94	MB*QC*2	96042*0	PAN+SAMPLE (WET)	GM	1.58750
04/29/94	MB*QC*2	96043*0	PAN+SAMPLE (DRY)	GM	1.58640
04/29/94	MB*QC*2	70320*I	MOISTURE	%WET W	100.0

Replicate Analysis Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	REP #1	REP #2	RPD	RPD CRIT
04/29/94	RP*CDMHNSS*20	96041*0	PAN	GM	1.58000	1.58480	0.30000	N/A
04/29/94	RP*CDMHNSS*20	96042*0	PAN+SAMPLE (WET)	GM	13.54900	13.29500	1.90000	N/A
04/29/94	RP*CDMHNSS*20	96043*0	PAN+SAMPLE (DRY)	GM	13.04900	12.82080	1.80000	N/A
04/29/94	RP*CDMHNSS*20	70320*I	MOISTURE	%WET W	4.2	4.0	4.9	23

ESE BATCH : G48562

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G48562 Analysis Date: 04/01/94 Analyst: JULIE HALL

	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		
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.

OVERRIDE COMMENTS

BATCH OVERRIDE BY:

TABLE OF ABBREVIATIONS

```
%RECV       : % Recovery for spiked sample. (FOUND/TARGET * 100)
ANLY DATE   : Analysis Date
ANLY TIME   : Analysis Time
CURVE       : Curve Regression Number
DILUTION    : Sample Dilution Factor
EXT DATE    : Extract Date
EXT VOL     : Extract Volume
FOUND       : Spiked Sample Conc. - Unspiked Sample Conc.
INJ VOL     : Injection Volume
REL%DIFF    : % Difference between current and previous spike.
RESPONSE    : Sample Response
R.T.        : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID   : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
      DA  -- Data Sample
      MB  -- Method Blank
      RF  -- Reference (from commercially known standard)
      RP  -- Replicate Sample
      SP  -- Standard Matrix Spike
      SPM -- Sample Matrix Spike
      STD -- Internal Standard
      SUR -- Surrogate Sample
      UN  -- Unspiked Sample
SAMP VOL    : Sample Volume
SPK CONC    : Spike Concentration
ST          : Sample response explanation or validity. (listed below)
      BK  -- No sample response.
      NA  -- Sample not analyzed.
      NR  -- Not reserved for this batch.  Batch containing the response
             for this sample is listed in the target field.
      OK  -- Sample response shown is correct.
      !   -- Sample response shown is invalid.
      <   -- Sample response < detection limit. Detection limit is shown
             in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET      : Spike Target (SAMPLE LISTING SECTION)
TARGET      : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE        : Response Type ("FINAL" or empty.)
UNSP CONC   : Unspiked Sample Concentration
```

ESE BATCH : G48700
CLASSIFICATION : PERCENT MOISTURE - ASTM D2216

QC TYPE : FDER/SW
ANALYST : JULIE HALL
EXTRACTOR : JULIE HALL
DATA ENTRY : BALANCE UPLOAD

REPORT DATE/TIME : 05/20/94 06:15:59
ANALYSIS DATE : 05/04/94
EXTRACT DATE : 05/03/94

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

BATCH NOTES
BALANCE #24, RUN #18

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS		1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*21	EA11-1-07	05/03/94	01:14PM
CDMHNSS*22	EA01-1-10	05/03/94	01:16PM

ESE BATCH : G48700

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H.T	OVER

ALL HOLDING TIMES MET

STORET: 96041 METHOD: 0 PAN, GM %M

STORET: 96042 METHOD: 0 PAN+SAMPLE (WET), GM %M

STORET: 96043 METHOD: 0 PAN+SAMPLE (DRY), GM %M

STORET: 70320 METHOD: I MOISTURE, %WET WT %M

CALIBRATION CURVE # 1
DETECTION LIMIT=0.50 DATE: 05/03/94 LARGEST RESP= %RSD= RT WINDOW:

ESE BATCH : G48700

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/03/94	MB*QC*1	96041*0	PAN	GM	1.56520
05/03/94	MB*QC*1	96042*0	PAN+SAMPLE (WET)	GM	1.56560
05/03/94	MB*QC*1	96043*0	PAN+SAMPLE (DRY)	GM	1.56520
05/03/94	MB*QC*1	70320*I	MOISTURE	%WET W	100.0
05/03/94	MB*QC*2	96041*0	PAN	GM	1.59730
05/03/94	MB*QC*2	96042*0	PAN+SAMPLE (WET)	GM	1.59750
05/03/94	MB*QC*2	96043*0	PAN+SAMPLE (DRY)	GM	1.59700
05/03/94	MB*QC*2	70320*I	MOISTURE	%WET W	100.0
05/03/94	MB*QC*3	96041*0	PAN	GM	1.59100
05/03/94	MB*QC*3	96042*0	PAN+SAMPLE (WET)	GM	1.59110
05/03/94	MB*QC*3	96043*0	PAN+SAMPLE (DRY)	GM	1.59070
05/03/94	MB*QC*3	70320*I	MOISTURE	%WET W	100.0
05/03/94	MB*QC*4	96041*0	PAN	GM	1.56620
05/03/94	MB*QC*4	96042*0	PAN+SAMPLE (WET)	GM	1.56650
05/03/94	MB*QC*4	96043*0	PAN+SAMPLE (DRY)	GM	1.56580
05/03/94	MB*QC*4	70320*I	MOISTURE	%WET W	100.0

Replicate Analysis Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	REP #1	REP #2	RPD	RPD CRIT
05/03/94	RP*CDMHNSS*21	96041*0	PAN	GM	1.56300	1.57550	0.80000	N/A
05/03/94	RP*CDMHNSS*21	96042*0	PAN+SAMPLE (WET)	GM	12.83600	12.75580	0.60000	N/A
05/03/94	RP*CDMHNSS*21	96043*0	PAN+SAMPLE (DRY)	GM	12.41300	12.29790	0.90000	N/A
05/03/94	RP*CDMHNSS*21	70320*I	MOISTURE	%WET W	3.8	4.1	7.6	23

ESE BATCH : G48700

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G48700 Analysis Date: 05/04/94 Analyst: JULIE HALL

	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		
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.

OVERRIDE COMMENTS

BATCH OVERRIDE BY:

ESE BATCH : G48700

TABLE OF ABBREVIATIONS

```
%RECV       : % Recovery for spiked sample. (FOUND/TARGET * 100)
ANLY DATE   : Analysis Date
ANLY TIME   : Analysis Time
CURVE       : Curve Regression Number
DILUTION    : Sample Dilution Factor
EXT DATE    : Extract Date
EXT VOL     : Extract Volume
FOUND       : Spiked Sample Conc. - Unspiked Sample Conc.
INJ VOL     : Injection Volume
REL%DIFF    : % Difference between current and previous spike.
RESPONSE    : Sample Response
R.T.        : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID   : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
      DA  -- Data Sample
      MB  -- Method Blank
      RF  -- Reference (from commercially known standard)
      RP  -- Replicate Sample
      SP  -- Standard Matrix Spike
      SPM -- Sample Matrix Spike
      STD -- Internal Standard
      SUR -- Surrogate Sample
      UN  -- Unspiked Sample
SAMP VOL    : Sample Volume
SPK CONC    : Spike Concentration
ST          : Sample response explanation or validity. (listed below)
      BK  -- No sample response.
      NA  -- Sample not analyzed.
      NR  -- Not reserved for this batch.  Batch containing the response
             for this sample is listed in the target field.
      OK  -- Sample response shown is correct.
      !   -- Sample response shown is invalid.
      <   -- Sample response < detection limit. Detection limit is shown
             in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET      : Spike Target (SAMPLE LISTING SECTION)
TARGET      : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE        : Response Type ("FINAL" or empty.)
UNSP CONC   : Unspiked Sample Concentration
```

ESE BATCH : G48753
CLASSIFICATION : PERCENT MOISTURE - ASTM D2216

QC TYPE : FDER/SW
ANALYST : JULIE HALL
EXTRACTOR : JULIE HALL
DATA ENTRY : BALANCE UPLOAD

REPORT DATE/TIME : 05/20/94 06:16:54
ANALYSIS DATE : 05/05/94
EXTRACT DATE : 05/04/94

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

BATCH NOTES
BALANCE #24, RUN #19

FIELD GRP QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS	1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*23	OCS1-1-00	05/04/94	01:39PM

ESE BATCH : G48753

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H T. OVER

ALL HOLDING TIMES MET

STORET: 96041 METHOD: 0 PAN, GM %M

STORET: 96042 METHOD: 0 PAN+SAMPLE (WET), GM %M

STORET: 96043 METHOD: 0 PAN+SAMPLE (DRY), GM %M

STORET: 70320 METHOD: I MOISTURE, %WET WT %M

CALIBRATION CURVE # 1
DETECTION LIMIT=0.50 DATE: 05/04/94 LARGEST RESP= %RSD= RT WINDOW:

ESE BATCH : G48753

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/04/94	MB*QC*1	96041*0	PAN	GM	1.56430
05/04/94	MB*QC*1	96042*0	PAN+SAMPLE (WET)	GM	1.56430
05/04/94	MB*QC*1	96043*0	PAN+SAMPLE (DRY)	GM	1.56380
05/04/94	MB*QC*1	70320*I	MOISTURE	%WET W	0.03
05/04/94	MB*QC*2	96041*0	PAN	GM	1.57620
05/04/94	MB*QC*2	96042*0	PAN+SAMPLE (WET)	GM	1.57660
05/04/94	MB*QC*2	96043*0	PAN+SAMPLE (DRY)	GM	1.57520
05/04/94	MB*QC*2	70320*I	MOISTURE	%WET W	100.0

Replicate Analysis Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	REP #1	REP #2	RPD	RPD CRIT
05/04/94	RP*CDMHNSS*23	96041*0	PAN	GM	1.58000	1.57430	0.40000	N/A
05/04/94	RP*CDMHNSS*23	96042*0	PAN+SAMPLE (WET)	GM	15.34100	15.57880	1.50000	N/A
05/04/94	RP*CDMHNSS*23	96043*0	PAN+SAMPLE (DRY)	GM	14.58800	14.74210	1.10000	N/A
05/04/94	RP*CDMHNSS*23	70320*I	MOISTURE	%WET W	5.5	6.0	8.7	23

ESE BATCH : G48753

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G48753 Analysis Date 05/05/94 Analyst: JULIE HALL

	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		
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.

OVERRIDE COMMENTS

BATCH OVERRIDE BY:

TABLE OF ABBREVIATIONS

```
%RECV       : % Recovery for spiked sample. (FOUND/TARGET * 100)
ANLY DATE   : Analysis Date
ANLY TIME   : Analysis Time
CURVE       : Curve Regression Number
DILUTION    : Sample Dilution Factor
EXT DATE    : Extract Date
EXT VOL     : Extract Volume
FOUND       : Spiked Sample Conc. - Unspiked Sample Conc.
INJ VOL     : Injection Volume
REL%DIFF    : % Difference between current and previous spike.
RESPONSE    : Sample Response
R.T.        : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID   : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
      DA  -- Data Sample
      MB  -- Method Blank
      RF  -- Reference (from commercially known standard)
      RP  -- Replicate Sample
      SP  -- Standard Matrix Spike
      SPM -- Sample Matrix Spike
      STD -- Internal Standard
      SUR -- Surrogate Sample
      UN  -- Unspiked Sample
SAMP VOL    : Sample Volume
SPK CONC    : Spike Concentration
ST          : Sample response explanation or validity. (listed below)
      BK  -- No sample response.
      NA  -- Sample not analyzed.
      NR  -- Not reserved for this batch.  Batch containing the response
             for this sample is listed in the target field.
      OK  -- Sample response shown is correct.
      !   -- Sample response shown is invalid.
      <   -- Sample response < detection limit. Detection limit is shown
             in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET      : Spike Target (SAMPLE LISTING SECTION)
TARGET      : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE        : Response Type ("FINAL" or empty.)
UNSP CONC   : Unspiked Sample Concentration
```

ESE BATCH : G48778
CLASSIFICATION : PERCENT MOISTURE - ASTM D2216

QC TYPE : FDER/SW
ANALYST : JULIE HALL
EXTRACTOR : JULIE HALL
DATA ENTRY : BALANCE UPLOAD

REPORT DATE/TIME : 05/20/94 06:13:33
ANALYSIS DATE : 05/06/94
EXTRACT DATE : 05/05/94

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

BATCH NOTES
BALANCE #24, RUN #20

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS		1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*24	EBG1-1-02	05/05/94	03:39PM
CDMHNSS*25	ESV1-1-01	05/05/94	03:40PM
CDMHNSS*26	WBG2-1-02	05/05/94	03:40PM
CDMHNSS*27	WBG2-2-02	05/05/94	03:41PM

ESE BATCH : G48778

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H.T. OVER

ALL HOLDING TIMES MET

STORET: 96041 METHOD: 0 PAN, GM %M

STORET: 96042 METHOD: 0 PAN+SAMPLE (WET), GM %M

STORET: 96043 METHOD: 0 PAN+SAMPLE (DRY), GM %M

STORET: 70320 METHOD: I MOISTURE, %WET WT %M

CALIBRATION CURVE # 1
DETECTION LIMIT=0.50 DATE: 05/05/94 LARGEST RESP= %RSD= RT WINDOW:

STORET: 70320 METHOD: ASTM-G MOISTURE, %WET WT %M

CALIBRATION CURVE # 1
DETECTION LIMIT=0.50 DATE: 05/05/94 LARGEST RESP= %RSD= RT WINDOW:

ESE BATCH : G48778

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/05/94	MB*QC*1	96041*0	PAN	GM	1.57420
05/05/94	MB*QC*1	96042*0	PAN+SAMPLE (WET)	GM	1.57410
05/05/94	MB*QC*1	96043*0	PAN+SAMPLE (DRY)	GM	1.57340
05/05/94	MB*QC*1	70320*I	MOISTURE	%WET W	ND
05/05/94	MB*QC*1	70320*ASTM-G	MOISTURE	%WET W	ND
05/05/94	MB*QC*2	96041*0	PAN	GM	1.57510
05/05/94	MB*QC*2	96042*0	PAN+SAMPLE (WET)	GM	1.57540
05/05/94	MB*QC*2	96043*0	PAN+SAMPLE (DRY)	GM	1.57460
05/05/94	MB*QC*2	70320*I	MOISTURE	%WET W	100.0
05/05/94	MB*QC*2	70320*ASTM-G	MOISTURE	%WET W	100.0

Replicate Analysis Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	REP #1	REP #2	RPD	RPD CRIT
05/05/94	RP*CDMHNSS*24	96041*0	PAN	GM	1.57800	1.57710	0.06000	N/A
05/05/94	RP*CDMHNSS*24	96042*0	PAN+SAMPLE (WET)	GM	12.77800	12.91710	1.10000	N/A
05/05/94	RP*CDMHNSS*24	96043*0	PAN+SAMPLE (DRY)	GM	12.05400	12.17130	1.00000	N/A
05/05/94	RP*CDMHNSS*24	70320*I	MOISTURE	%WET W	6.5	6.6	1.5	23
05/05/94	RP*CDMHNSS*24	70320*ASTM-G	MOISTURE	%WET W	6.5	6.6	1.5	23

ESE BATCH G48778

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G48778 Analysis Date: 05/06/94 Analyst: JULIE HALL

	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		
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.

OVERRIDE COMMENTS

BATCH OVERRIDE BY:

ESE BATCH : G48778

TABLE OF ABBREVIATIONS

```
%RECV       : % Recovery for spiked sample. (FOUND/TARGET * 100)
ANLY DATE   : Analysis Date
ANLY TIME   : Analysis Time
CURVE       : Curve Regression Number
DILUTION    : Sample Dilution Factor
EXT DATE    : Extract Date
EXT VOL     : Extract Volume
FOUND       : Spiked Sample Conc. - Unspiked Sample Conc
INJ VOL     : Injection Volume
REL%DIFF    : % Difference between current and previous spike.
RESPONSE    : Sample Response
R.T.        : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID   : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
      DA  -- Data Sample
      MB  -- Method Blank
      RF  -- Reference (from commercially known standard)
      RP  -- Replicate Sample
      SP  -- Standard Matrix Spike
      SPM -- Sample Matrix Spike
      STD -- Internal Standard
      SUR -- Surrogate Sample
      UN  -- Unspiked Sample
SAMP VOL    : Sample Volume
SPK CONC    : Spike Concentration
ST          : Sample response explanation or validity. (listed below)
      BK  -- No sample response.
      NA  -- Sample not analyzed.
      NR  -- Not reserved for this batch.  Batch containing the response
             for this sample is listed in the target field.
      OK  -- Sample response shown is correct.
      !   -- Sample response shown is invalid.
      <   -- Sample response < detection limit. Detection limit is shown
             in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET      : Spike Target (SAMPLE LISTING SECTION)
TARGET      : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE        : Response Type ("FINAL" or empty.)
UNSP CONC   : Unspiked Sample Concentration
```

ESE BATCH : G48815
CLASSIFICATION : PERCENT MOISTURE - ASTM D2216

QC TYPE : FDER/SW
ANALYST : JULIE HALL
EXTRACTOR : JULIE HALL
DATA ENTRY : BALANCE UPLOAD

REPORT DATE/TIME : 05/20/94 06:17:18
ANALYSIS DATE : 05/09/94
EXTRACT DATE : 05/06/94

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

BATCH NOTES
94-2 PG.46-47 BALANCE #24, RUN #21

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS		1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*28	WA04-3-20	05/06/94	12:58PM
CDMHNSS*29	WA04-4-08	05/06/94	12:59PM
CDMHNSS*30	WSV2-1-01	05/06/94	12:59PM
CDMHNSS*31	WBG3-1-02	05/06/94	12:59PM
CDMHNSS*32	EWC1-1-00	05/06/94	01:00PM
CDMHNSS*33	WWC2-1-00	05/06/94	01:01PM

ESE BATCH : G48815

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H.T.	OVER

ALL HOLDING TIMES MET

STORET: 96041 METHOD: 0 PAN, GM %M

STORET: 96042 METHOD: 0 PAN+SAMPLE (WET), GM %M

STORET: 96043 METHOD: 0 PAN+SAMPLE (DRY), GM %M

STORET: 70320 METHOD: I MOISTURE, %WET WT %M

CALIBRATION CURVE # 1
DETECTION LIMIT=0.50 DATE: 05/06/94 LARGEST RESP= %RSD= RT WINDOW:

ESE BATCH : G48815

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/06/94	MB*QC*1	96041*0	PAN	GM	1.56610
05/06/94	MB*QC*1	96042*0	PAN+SAMPLE (WET)	GM	1.56660
05/06/94	MB*QC*1	96043*0	PAN+SAMPLE (DRY)	GM	1.56590
05/06/94	MB*QC*1	70320*I	MOISTURE	%WET W	100.0
05/06/94	MB*QC*2	96041*0	PAN	GM	1.58320
05/06/94	MB*QC*2	96042*0	PAN+SAMPLE (WET)	GM	1.58370
05/06/94	MB*QC*2	96043*0	PAN+SAMPLE (DRY)	GM	1.58280
05/06/94	MB*QC*2	70320*I	MOISTURE	%WET W	100.0

Replicate Analysis Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	REP #1	REP #2	RPD	RPD CRIT
05/06/94	RP*CDMHNSS*28	96041*0	PAN	GM	1.57900	1.57270	0.40000	N/A
05/06/94	RP*CDMHNSS*28	96042*0	PAN+SAMPLE (WET)	GM	16.79500	16.83800	0.30000	N/A
05/06/94	RP*CDMHNSS*28	96043*0	PAN+SAMPLE (DRY)	GM	16.39800	16.42840	0.20000	N/A
05/06/94	RP*CDMHNSS*28	70320*I	MOISTURE	%WET W	2.6	2.7	3.8	23

ESE BATCH : G48815

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G48815 Analysis Date: 05/09/94 Analyst: JULIE HALL

	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		
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.

OVERRIDE COMMENTS

BATCH OVERRIDE BY:

ESE BATCH : G48815

TABLE OF ABBREVIATIONS

%RECV : % Recovery for spiked sample. (FOUND/TARGET * 100)
ANLY DATE : Analysis Date
ANLY TIME : Analysis Time
CURVE : Curve Regression Number
DILUTION : Sample Dilution Factor
EXT DATE : Extract Date
EXT VOL : Extract Volume
FOUND : Spiked Sample Conc. - Unspiked Sample Conc.
INJ VOL : Injection Volume
REL%DIFF : % Difference between current and previous spike.
RESPONSE : Sample Response
R.T. : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
DA -- Data Sample
MB -- Method Blank
RF -- Reference (from commercially known standard)
RP -- Replicate Sample
SP -- Standard Matrix Spike
SPM -- Sample Matrix Spike
STD -- Internal Standard
SUR -- Surrogate Sample
UN -- Unspiked Sample
SAMP VOL : Sample Volume
SPK CONC : Spike Concentration
ST : Sample response explanation or validity. (listed below)
BK -- No sample response.
NA -- Sample not analyzed.
NR -- Not reserved for this batch. Batch containing the response for this sample is listed in the target field.
OK -- Sample response shown is correct.
! -- Sample response shown is invalid.
< -- Sample response < detection limit. Detection limit is shown in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET : Spike Target (SAMPLE LISTING SECTION)
TARGET : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE : Response Type ("FINAL" or empty.)
UNSP CONC : Unspiked Sample Concentration

ESE BATCH : G49118
CLASSIFICATION : PERCENT MOISTURE - ASTM D2216

QC TYPE : FDER/SW
ANALYST : JULIE HALL
EXTRACTOR : JULIE HALL
DATA ENTRY : BALANCE UPLOAD

REPORT DATE/TIME : 05/20/94 06:14:08
ANALYSIS DATE : 05/16/94
EXTRACT DATE : 05/13/94

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

BATCH NOTES
94-2 PG.56 BALANCE #24, RUN #27

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS		1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*34	EA01-2-05	05/13/94	12:47PM
CDMHNSS*35	EA01-3-05	05/13/94	12:48PM

ESE BATCH : G49118

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H.T. OVER

ALL HOLDING TIMES MET

STORET: 96041 METHOD:- 0 PAN, GM %M

STORET: 96042 METHOD: 0 PAN+SAMPLE (WET), GM %M

STORET: 96043 METHOD: 0 PAN+SAMPLE (DRY), GM %M

STORET: 70320 METHOD: I MOISTURE, %WET WT %M

CALIBRATION CURVE # 1
DETECTION LIMIT=0.50 DATE: 05/13/94 LARGEST RESP= %RSD= RT WINDOW:

STORET: 70320 METHOD: ASTM-G MOISTURE, %WET WT %M

CALIBRATION CURVE # 1
DETECTION LIMIT=0.50 DATE: 05/13/94 LARGEST RESP= %RSD= RT WINDOW:

ESE BATCH : G49118

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/13/94	MB*QC*1	96041*0	PAN	GM	1.59540
05/13/94	MB*QC*1	96042*0	PAN+SAMPLE (WET)	GM	1.59560
05/13/94	MB*QC*1	96043*0	PAN+SAMPLE (DRY)	GM	1.59500
05/13/94	MB*QC*1	70320*I	MOISTURE	%WET W	100.0
05/13/94	MB*QC*1	70320*ASTM-G	MOISTURE	%WET W	100.0

Replicate Analysis Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	REP #1	REP #2	RPD	RPD CRIT
05/13/94	RP*CDMHNSS*34	96041*0	PAN	GM	1.59700	1.57830	1.20000	N/A
05/13/94	RP*CDMHNSS*34	96042*0	PAN+SAMPLE (WET)	GM	14.33900	14.25020	0.60000	N/A
05/13/94	RP*CDMHNSS*34	96043*0	PAN+SAMPLE (DRY)	GM	13.78400	13.68630	0.70000	N/A
05/13/94	RP*CDMHNSS*34	70320*I	MOISTURE	%WET W	4.4	4.5	2.2	23
05/13/94	RP*CDMHNSS*34	70320*ASTM-G	MOISTURE	%WET W	4.4	4.5	2.2	23

ESE BATCH : G49118

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G49118 Analysis Date: 05/16/94 Analyst: JULIE HALL

	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		
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.

OVERRIDE COMMENTS

BATCH OVERRIDE BY:

ESE BATCH : G49118

TABLE OF ABBREVIATIONS

```
%RECV       : % Recovery for spiked sample. (FOUND/TARGET * 100)
ANLY DATE   : Analysis Date
ANLY TIME   : Analysis Time
CURVE       : Curve Regression Number
DILUTION    : Sample Dilution Factor
EXT DATE    : Extract Date
EXT VOL     : Extract Volume
FOUND       : Spiked Sample Conc. - Unspiked Sample Conc.
INJ VOL     : Injection Volume
REL%DIFF    : % Difference between current and previous spike.
RESPONSE    : Sample Response
R.T.        : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID   : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
      DA  -- Data Sample
      MB  -- Method Blank
      RF  -- Reference (from commercially known standard)
      RP  -- Replicate Sample
      SP  -- Standard Matrix Spike
      SPM -- Sample Matrix Spike
      STD -- Internal Standard
      SUR -- Surrogate Sample
      UN  -- Unspiked Sample
SAMP VOL    : Sample Volume
SPK CONC    : Spike Concentration
ST          : Sample response explanation or validity. (listed below)
      BK  -- No sample response.
      NA  -- Sample not analyzed.
      NR  -- Not reserved for this batch.  Batch containing the response
             for this sample is listed in the target field.
      OK  -- Sample response shown is correct.
      !   -- Sample response shown is invalid.
      <   -- Sample response < detection limit. Detection limit is shown
             in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET      : Spike Target (SAMPLE LISTING SECTION)
TARGET      : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE        : Response Type ("FINAL" or empty.)
UNSP CONC   : Unspiked Sample Concentration
```

ESE BATCH : G49144
CLASSIFICATION : PERCENT MOISTURE - ASTM D2216

QC TYPE : FDER/SW
ANALYST : JULIE HALL
EXTRACTOR : JULIE HALL
DATA ENTRY : BALANCE UPLOAD

REPORT DATE/TIME : 05/20/94 06:14:29
ANALYSIS DATE : 05/17/94
EXTRACT DATE : 05/16/94

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

BATCH NOTES
94-2 PG.57-58 BALANCE #24, RUN #28

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS		1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*36	EA01-4-14	05/16/94	09:55AM
CDMHNSS*37	EA01-5-12	05/16/94	09:55AM
CDMHNSS*38	EA01-6-10	05/16/94	09:56AM

ESE BATCH : G49144

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H T. OVER

ALL HOLDING TIMES MET

STORET: 96041 METHOD: 0 PAN, GM %M

STORET: 96042 METHOD: 0 PAN+SAMPLE (WET), GM %M

STORET: 96043 METHOD: 0 PAN+SAMPLE (DRY), GM %M

STORET: 70320 METHOD: I MOISTURE, %WET WT %M

CALIBRATION CURVE # 1
DETECTION LIMIT=0.50 DATE: 05/16/94 LARGEST RESP= %RSD= RT WINDOW:

STORET: 70320 METHOD: ASTM-G MOISTURE, %WET WT %M

CALIBRATION CURVE # 1
DETECTION LIMIT=0.50 DATE: 05/16/94 LARGEST RESP= %RSD= RT WINDOW:

ESE BATCH : G49144

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/16/94	MB*QC*1	96041*0	PAN	GM	1.59920
05/16/94	MB*QC*1	96042*0	PAN+SAMPLE (WET)	GM	1.59900
05/16/94	MB*QC*1	96043*0	PAN+SAMPLE (DRY)	GM	1.59830
05/16/94	MB*QC*1	70320*I	MOISTURE	%WET W	ND
05/16/94	MB*QC*1	70320*ASTM-G	MOISTURE	%WET W	ND
05/16/94	MB*QC*2	96041*0	PAN	GM	1.57700
05/16/94	MB*QC*2	96042*0	PAN+SAMPLE (WET)	GM	1.57700
05/16/94	MB*QC*2	96043*0	PAN+SAMPLE (DRY)	GM	1.57640
05/16/94	MB*QC*2	70320*I	MOISTURE	%WET W	0.04
05/16/94	MB*QC*2	70320*ASTM-G	MOISTURE	%WET W	0.04

Replicate Analysis Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	REP #1	REP #2	RPD	RPD CRIT
05/16/94	RP*CDMHNSS*36	96041*0	PAN	GM	1.57800	1.57820	0.01000	N/A
05/16/94	RP*CDMHNSS*36	96042*0	PAN+SAMPLE (WET)	GM	13.59500	13.60320	0.06000	N/A
05/16/94	RP*CDMHNSS*36	96043*0	PAN+SAMPLE (DRY)	GM	12.94200	12.93530	0.05000	N/A
05/16/94	RP*CDMHNSS*36	70320*I	MOISTURE	%WET W	5.4	5.6	3.6	23
05/16/94	RP*CDMHNSS*36	70320*ASTM-G	MOISTURE	%WET W	5.4	5.6	3.6	23

ESE BATCH : G49144

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G49144 Analysis Date: 05/17/94 Analyst: JULIE HALL

	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		
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.

OVERRIDE COMMENTS

BATCH OVERRIDE BY:

ESE BATCH : G49144

TABLE OF ABBREVIATIONS

```
%RECV       : % Recovery for spiked sample. (FOUND/TARGET * 100)
ANLY DATE   : Analysis Date
ANLY TIME   : Analysis Time
CURVE       : Curve Regression Number
DILUTION    : Sample Dilution Factor
EXT DATE    : Extract Date
EXT VOL     : Extract Volume
FOUND       : Spiked Sample Conc. - Unspiked Sample Conc.
INJ VOL     : Injection Volume
REL%DIFF    : % Difference between current and previous spike.
RESPONSE    : Sample Response
R.T.        : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID   : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
      DA  -- Data Sample
      MB  -- Method Blank
      RF  -- Reference (from commercially known standard)
      RP  -- Replicate Sample
      SP  -- Standard Matrix Spike
      SPM -- Sample Matrix Spike
      STD -- Internal Standard
      SUR -- Surrogate Sample
      UN  -- Unspiked Sample
SAMP VOL    : Sample Volume
SPK CONC    : Spike Concentration
ST          : Sample response explanation or validity. (listed below)
      BK  -- No sample response.
      NA  -- Sample not analyzed.
      NR  -- Not reserved for this batch.  Batch containing the response
             for this sample is listed in the target field.
      OK  -- Sample response shown is correct.
      !   -- Sample response shown is invalid.
      <   -- Sample response < detection limit. Detection limit is shown
             in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET      : Spike Target (SAMPLE LISTING SECTION)
TARGET      : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE        : Response Type ("FINAL" or empty.)
UNSP CONC   : Unspiked Sample Concentration
```

Total Recoverable Petroleum Hydrocarbons

ESE BATCH : G48314
CLASSIFICATION : HYDROCARBONS, PETROL-SW3550/E418.1

QC TYPE : FDER/SW
ANALYST : KATHLEEN ALLEN
EXTRACTOR : BETSY DEEDRICK
DATA ENTRY : KATHLEEN ALLEN

REPORT DATE/TIME : 05/23/94 13:04:48
ANALYSIS DATE : 04/22/94
EXTRACT DATE :

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS		1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*1	WA20-1-04		
CDMHNSS*2	WA20-2-06		
CDMHNSS*3	WA19-1-08		
CDMHNSS*4	WA19-2-07		

ESE BATCH : G48314

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H.T.	OVER

ALL HOLDING TIMES MET

STORET: 98233 METHOD: AISON HYDROCARBONS,PETROL, MG/KG-DRY TRPH

CALIBRATION CURVE # 1 (MG/L)
DETECTION LIMIT=1.711 DATE: 04/22/94 LARGEST RESP=16 %RSD=132.2603 RT WINDOW:

CONC :	0.0000	1.711	3.422	8.555	17.110	34.22	85.55
%T :	90	87	84	76	64	45	16
RESP :	0.0	0.014	0.030	0.073	0.148	0.301	0.750
CONC':	10300	9910	9570	8660	7290	5130	1820

CONC = 6.8090E-02+ 1.1394E+02*RESP+ *RESP**2+ *RESP**3
95% C.I.= 1.1398E-01 3.6522E-01
CORRELATION COEFFICIENT = 1.0000

STORET: 95129 METHOD: 0 %T OF BASELINE, TRPH

STORET: 95130 METHOD: 0 %T OF SAMPLE, TRPH

STORET: 95167 METHOD: 0 DELTA ABSORBANCE, ABSORBANCE TRPH

ESE BATCH : G48314

Continuing Calibration Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
04/22/94	CCB*QC*1	98233*AISON	HYDROCARBONS, PETROL	MG/KG-	0.068
04/22/94	CCB*QC*1	95129*0	%T OF BASELINE		90
04/22/94	CCB*QC*1	95130*0	%T OF SAMPLE		90.0
04/22/94	CCB*QC*1	95167*0	DELTA ABSORBANCE	ABSORB	ND

Continuing Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/22/94	CCV*QC*1	98233*AISON	HYDROCARBONS, PETROL	MG/KG-	34.2	31.2	91.2	67-135
04/22/94	CCV*QC*1	95129*0	%T OF BASELINE			T*1		80-120
04/22/94	CCV*QC*1	95130*0	%T OF SAMPLE			T*1		80-120
04/22/94	CCV*QC*1	95167*0	DELTA ABSORBANCE	ABSORB		T*1		80-120

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
04/22/94	MB*QC*1	98233*AISON	HYDROCARBONS, PETROL	MG/KG-	0.340
04/22/94	MB*QC*1	95129*0	%T OF BASELINE		500
04/22/94	MB*QC*1	95130*0	%T OF SAMPLE		450
04/22/94	MB*QC*1	95167*0	DELTA ABSORBANCE	ABSORB	ND

Replicate Analysis Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	REP #1	REP #2	RPD	RPD CRIT
04/22/94	RP*CDMHNSS*4	98233*AISON	HYDROCARBONS, PETROL	MG/KG-	5850	5850	0.0	N/A
04/22/94	RP*CDMHNSS*4	95129*0	%T OF BASELINE		90	500	100	N/A
04/22/94	RP*CDMHNSS*4	95130*0	%T OF SAMPLE		57.0	294	135	N/A
04/22/94	RP*CDMHNSS*4	95167*0	DELTA ABSORBANCE	ABSORB	1.023	1.023	0.0	N/A

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
04/22/94	SP1*QC*1	98233*AISON	HYDROCARBONS, PETROL	97.2	67-135	MG/KG-	425	413
04/22/94	SP2*QC*1	98233*AISON	HYDROCARBONS, PETROL	100.7	67-135	MG/KG-	425	428

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
04/22/94	SPM1*CDMHNSS*1	98233*AISON	HYDROCARBONS, PETROL	92.7	67-135	6.06	MG/KG-	436	404
04/22/94	SPM2*CDMHNSS*1	98233*AISON	HYDROCARBONS, PETROL	92.7	67-135	6.06	MG/KG-	436	404

ESE BATCH : G48314

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G48314 Analysis Date: 04/22/94 Analyst: KATHLEEN ALLEN

	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		
CCV present?	X		
CCV 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.

OVERRIDE COMMENTS

BATCH OVERRIDE BY:

ESE BATCH : G48314

TABLE OF ABBREVIATIONS

%RECV : % Recovery for spiked sample. (FOUND/TARGET * 100)
ANLY DATE : Analysis Date
ANLY TIME : Analysis Time
CURVE : Curve Regression Number
DILUTION : Sample Dilution Factor
EXT DATE : Extract Date
EXT VOL : Extract Volume
FOUND : Spiked Sample Conc. - Unspiked Sample Conc.
INJ VOL : Injection Volume
REL%DIFF : % Difference between current and previous spike.
RESPONSE : Sample Response
R.T. : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
DA -- Data Sample
MB -- Method Blank
RF -- Reference (from commercially known standard)
RP -- Replicate Sample
SP -- Standard Matrix Spike
SPM -- Sample Matrix Spike
STD -- Internal Standard
SUR -- Surrogate Sample
UN -- Unspiked Sample
SAMP VOL : Sample Volume
SPK CONC : Spike Concentration
ST : Sample response explanation or validity. (listed below)
BK -- No sample response.
NA -- Sample not analyzed.
NR -- Not reserved for this batch. Batch containing the response for this sample is listed in the target field.
OK -- Sample response shown is correct.
! -- Sample response shown is invalid.
< -- Sample response < detection limit. Detection limit is shown in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET : Spike Target (SAMPLE LISTING SECTION)
TARGET : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE : Response Type ("FINAL" or empty.)
UNSP CONC : Unspiked Sample Concentration

ESE BATCH : G48406
CLASSIFICATION : HYDROCARBONS,PETROL-SW3550/E418.1

QC TYPE : FDER/SW
ANALYST : ERIC ANDERSON
EXTRACTOR : BETSY DEEDRICK
DATA ENTRY : ERIC ANDERSON

REPORT DATE/TIME : 05/23/94 13:05:11
ANALYSIS DATE : 04/25/94
EXTRACT DATE : 04/22/94

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS		1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*5	WA19-3-05		
CDMHNSS*6	WA19-4-05		
CDMHNSS*7	WA17-1-03		
CDMHNSS*8	WA16-1-02		
CDMHNSS*9	WA16-2-03		

ESE BATCH : G48406

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H.T.	OVER

ALL HOLDING TIMES MET

STORET: 95129 METHOD: 0 %T OF BASELINE, TRPH

STORET: 95130 METHOD: 0 %T OF SAMPLE, TRPH

STORET: 95167 METHOD: 0 DELTA ABSORBANCE, ABSORBANCE TRPH

STORET: 98233 METHOD: AISON HYDROCARBONS,PETROL, MG/KG-DRY TRPH

CALIBRATION CURVE # 1 (MG/L)
DETECTION LIMIT=1.672 DATE: 04/25/94 LARGEST RESP=15 %RSD=131.6327 RT WINDOW:

CONC :	0.00	1.672	3.344	8.36	16.72	33.44	83.60
%T :	90	87	85	77	65	46	15
RESP :	0.0	0.014	0.025	0.068	0.141	0.291	0.778
CONC':	9650	9330	9110	8260	6970	4930	1610

CONC = 8.3127E-01+ 1.0720E+02*RESP+ *RESP**2+ *RESP**3
95% C.I.= 8.3485E-01 2.6106E+00
CORRELATION COEFFICIENT = .9996

ESE BATCH : G48406

Continuing Calibration Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
04/25/94	CCB*QC*1	95129*0	%T OF BASELINE		90
04/25/94	CCB*QC*1	95130*0	%T OF SAMPLE		90.0
04/25/94	CCB*QC*1	95167*0	DELTA ABSORBANCE	ABSORB	ND
04/25/94	CCB*QC*1	98233*AISON	HYDROCARBONS, PETROL	MG/KG-	0.831
04/25/94	CCB*QC*2	95129*0	%T OF BASELINE		90
04/25/94	CCB*QC*2	95130*0	%T OF SAMPLE		90.0
04/25/94	CCB*QC*2	95167*0	DELTA ABSORBANCE	ABSORB	ND
04/25/94	CCB*QC*2	98233*AISON	HYDROCARBONS, PETROL	MG/KG-	0.831

Continuing Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/25/94	CCV*QC*1	95129*0	%T OF BASELINE			T*1		80-120
04/25/94	CCV*QC*1	95130*0	%T OF SAMPLE			T*1		80-120
04/25/94	CCV*QC*1	95167*0	DELTA ABSORBANCE	ABSORB		T*1		80-120
04/25/94	CCV*QC*1	98233*AISON	HYDROCARBONS, PETROL	MG/KG-	33.4	32.1	96.1	67-135
04/25/94	CCV*QC*2	95129*0	%T OF BASELINE			T*1		80-120
04/25/94	CCV*QC*2	95130*0	%T OF SAMPLE			T*1		80-120
04/25/94	CCV*QC*2	95167*0	DELTA ABSORBANCE	ABSORB		T*1		80-120
04/25/94	CCV*QC*2	98233*AISON	HYDROCARBONS, PETROL	MG/KG-	33.4	32.1	96.1	67-135

Initial Calibration Blank Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
04/25/94	ICB*QC*1	95129*0	%T OF BASELINE		90
04/25/94	ICB*QC*1	95130*0	%T OF SAMPLE		90.0
04/25/94	ICB*QC*1	95167*0	DELTA ABSORBANCE	ABSORB	ND
04/25/94	ICB*QC*1	98233*AISON	HYDROCARBONS, PETROL	MG/KG-	0.831

Initial Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/25/94	ICV*QC*1	95129*0	%T OF BASELINE			T*1		80-120
04/25/94	ICV*QC*1	95130*0	%T OF SAMPLE			T*1		80-120
04/25/94	ICV*QC*1	95167*0	DELTA ABSORBANCE	ABSORB		T*1		80-120
04/25/94	ICV*QC*1	98233*AISON	HYDROCARBONS, PETROL	MG/KG-	34.0	32.1	94.4	80-120

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
04/25/94	MB*QC*1	95129*0	%T OF BASELINE		500
04/25/94	MB*QC*1	95130*0	%T OF SAMPLE		450
04/25/94	MB*QC*1	95167*0	DELTA ABSORBANCE	ABSORB	ND
04/25/94	MB*QC*1	98233*AISON	HYDROCARBONS, PETROL	MG/KG-	4.16
04/25/94	MB*QC*2	95129*0	%T OF BASELINE		500
04/25/94	MB*QC*2	95130*0	%T OF SAMPLE		450
04/25/94	MB*QC*2	95167*0	DELTA ABSORBANCE	ABSORB	ND
04/25/94	MB*QC*2	98233*AISON	HYDROCARBONS, PETROL	MG/KG-	4.16

Replicate Analysis Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	REP #1	REP #2	RPD	RPD CRIT
04/25/94	RP*CDMHNSS*6	95129*0	%T OF BASELINE		90	500	100	N/A
04/25/94	RP*CDMHNSS*6	95130*0	%T OF SAMPLE		89.0	454	134	N/A
04/25/94	RP*CDMHNSS*6	95167*0	DELTA ABSORBANCE	ABSORB	R	0.0505	200.0	N/A
04/25/94	RP*CDMHNSS*6	98233*AISON	HYDROCARBONS, PETROL	MG/KG-	<8.62	9.69		N/A
04/25/94	RP*CDMHNSS*8	95129*0	%T OF BASELINE		90	500	100	N/A
04/25/94	RP*CDMHNSS*8	95130*0	%T OF SAMPLE		79.0	445	140	N/A
04/25/94	RP*CDMHNSS*8	95167*0	DELTA ABSORBANCE	ABSORB	0.2963	0.1298	78.20	N/A
04/25/94	RP*CDMHNSS*8	98233*AISON	HYDROCARBONS, PETROL	MG/KG-	3610	1830	65.4	N/A

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
04/25/94	SP1*QC*1	98233*AISON	HYDROCARBONS, PETROL	82.6	67-135	MG/KG-	425	351
04/25/94	SP2*QC*1	98233*AISON	HYDROCARBONS, PETROL	82.6	67-135	MG/KG-	425	351
04/25/94	SP1*QC*2	98233*AISON	HYDROCARBONS, PETROL	82.6	67-135	MG/KG-	425	351
04/25/94	SP2*QC*2	98233*AISON	HYDROCARBONS, PETROL	85.2	67-135	MG/KG-	425	362

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
04/25/94	SPM1*CDMHNSS*5	98233*AISON	HYDROCARBONS, PETROL	77.2	67-135	4.28	MG/KG-	438	338

ESE BATCH : G48406

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
04/25/94	SPM2*CDMHNSS*5	98233*AISON	HYDROCARBONS, PETROL	79.9	67-135	4.28	MG/KG-	438	350
04/25/94	SPM1*CDMHNSS*9	98233*AISON	HYDROCARBONS, PETROL	74.2	67-135	7.14	MG/KG-	449	333
04/25/94	SPM2*CDMHNSS*9	98233*AISON	HYDROCARBONS, PETROL	76.6	67-135	7.14	MG/KG-	449	344

ESE BATCH : G48406

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G48406 Analysis Date: 04/25/94 Analyst: ERIC ANDERSON

	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		
CCV present?	X		
CCV 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.

OVERRIDE COMMENTS

BATCH OVERRIDE BY:

TABLE OF ABBREVIATIONS

```
%RECV       : % Recovery for spiked sample. (FOUND/TARGET * 100)
ANLY DATE   : Analysis Date
ANLY TIME   : Analysis Time
CURVE       : Curve Regression Number
DILUTION    : Sample Dilution Factor
EXT DATE    : Extract Date
EXT VOL     : Extract Volume
FOUND       : Spiked Sample Conc. - Unspiked Sample Conc.
INJ VOL     : Injection Volume
REL%DIFF    : % Difference between current and previous spike.
RESPONSE    : Sample Response
R.T.        : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID   : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
      DA  -- Data Sample
      MB  -- Method Blank
      RF  -- Reference (from commercially known standard)
      RP  -- Replicate Sample
      SP  -- Standard Matrix Spike
      SPM -- Sample Matrix Spike
      STD -- Internal Standard
      SUR -- Surrogate Sample
      UN  -- Unspiked Sample
SAMP VOL    : Sample Volume
SPK CONC    : Spike Concentration
ST          : Sample response explanation or validity. (listed below)
      BK  -- No sample response.
      NA  -- Sample not analyzed.
      NR  -- Not reserved for this batch.  Batch containing the response
             for this sample is listed in the target field.
      OK  -- Sample response shown is correct.
      !   -- Sample response shown is invalid.
      <   -- Sample response < detection limit. Detection limit is shown
             in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET      : Spike Target (SAMPLE LISTING SECTION)
TARGET      : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE        : Response Type ("FINAL" or empty.)
UNSP CONC   : Unspiked Sample Concentration
```

ESE BATCH : G48544
CLASSIFICATION : HYDROCARBONS,PETROL-SW3550/E418.1

QC TYPE : FDER/SW
ANALYST : ERIC ANDERSON
EXTRACTOR : DONNA CREWS
DATA ENTRY : ERIC ANDERSON

REPORT DATE/TIME : 05/23/94 13:05:49
ANALYSIS DATE : 04/26/94
EXTRACT DATE : 04/26/94

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS		1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*10	WA07-1-01		
CDMHNSS*11	WA07-2-05		
CDMHNSS*12	WA05-1-04		

ESE BATCH : G48544

HOLDING TIMES CHECK

SAMPLE ANALYTE ANL DATE EXT DATE SMP DATE H.T. OVER

ALL HOLDING TIMES MET

STORET: 95129 METHOD: 0 %T OF BASELINE, TRPH

STORET: 95130 METHOD: 0 %T OF SAMPLE, TRPH

STORET: 95167 METHOD: 0 DELTA ABSORBANCE, ABSORBANCE TRPH

STORET: 98233 METHOD: AISON HYDROCARBONS,PETROL, MG/KG-DRY TRPH

CALIBRATION CURVE # 1 (MG/L)
DETECTION LIMIT=1.672 DATE: 04/26/94 LARGEST RESP=16 %RSD=131.9100 RT WINDOW:

CONC :	0.00	1.672	3.344	8.360	16.72	33.44	83.60
%T :	90	87	84	77	65	45	16
RESP :	0.0	0.014	0.030	0.068	0.141	0.301	0.750
CONC':	10000	9670	9330	8550	7220	5000	1780

CONC = 3.1126E-01+ 1.1109E+02*RESP+ *RESP**2+ *RESP**3
95% C.I.= 4.4044E-01 1.4142E+00
CORRELATION COEFFICIENT = .9999

ESE BATCH G48544

Continuing Calibration Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
04/26/94	CCB*QC*1	95129*0	%T OF BASELINE		90
04/26/94	CCB*QC*1	95130*0	%T OF SAMPLE		90.0
04/26/94	CCB*QC*1	95167*0	DELTA ABSORBANCE	ABSORB	ND
04/26/94	CCB*QC*1	98233*AISON	HYDROCARBONS, PETROL	MG/KG-	0.311

Continuing Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/26/94	CCV*QC*1	95129*0	%T OF BASELINE			T*1		80-120
04/26/94	CCV*QC*1	95130*0	%T OF SAMPLE			T*1		80-120
04/26/94	CCV*QC*1	95167*0	DELTA ABSORBANCE	ABSORB		T*1		80-120
04/26/94	CCV*QC*1	98233*AISON	HYDROCARBONS, PETROL	MG/KG-	33.4	32.7	97.9	67-135

Initial Calibration Blank Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
04/26/94	ICB*QC*1	95129*0	%T OF BASELINE		90
04/26/94	ICB*QC*1	95130*0	%T OF SAMPLE		90.0
04/26/94	ICB*QC*1	95167*0	DELTA ABSORBANCE	ABSORB	ND
04/26/94	ICB*QC*1	98233*AISON	HYDROCARBONS PETROL	MG/KG-	0.311

Initial Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/26/94	ICV*QC*1	95129*0	%T OF BASELINE			T*1		80-120
04/26/94	ICV*QC*1	95130*0	%T OF SAMPLE			T*1		80-120
04/26/94	ICV*QC*1	95167*0	DELTA ABSORBANCE	ABSORB		T*1		80-120
04/26/94	ICV*QC*1	98233*AISON	HYDROCARBONS, PETROL	MG/KG-	34.0	32.7	96.2	80-120

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
04/26/94	MB*QC*1	95129*0	%T OF BASELINE		500
04/26/94	MB*QC*1	95130*0	%T OF SAMPLE		450
04/26/94	MB*QC*1	95167*0	DELTA ABSORBANCE	ABSORB	ND
04/26/94	MB*QC*1	98233*AISON	HYDROCARBONS, PETROL	MG/KG-	1.56

Replicate Analysis Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	REP #1	REP #2	RPD	RPD CRIT
04/26/94	RP*CDMHNSS*12	95129*0	%T OF BASELINE		90	500	100	N/A
04/26/94	RP*CDMHNSS*12	95130*0	%T OF SAMPLE		90.0	458	134	N/A
04/26/94	RP*CDMHNSS*12	95167*0	DELTA ABSORBANCE	ABSORB	0.0	0.0252	200.0	N/A
04/26/94	RP*CDMHNSS*12	98233*AISON	HYDROCARBONS, PETROL	MG/KG-	<8.60	<8.60		N/A

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
04/26/94	SP1*QC*1	98233*AISON	HYDROCARBONS, PETROL	88.2	67-135	MG/KG-	425	375
04/26/94	SP2*QC*1	98233*AISON	HYDROCARBONS, PETROL	88.2	67-135	MG/KG-	425	375

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
04/26/94	SPM1*CDMHNSS*11	98233*AISON	HYDROCARBONS, PETROL	70.4	67-135	1.64	MG/KG-	449	316
04/26/94	SPM2*CDMHNSS*11	98233*AISON	HYDROCARBONS, PETROL	62.4	67-135	1.64	MG/KG-	449	280

ESE BATCH : G48544

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G48544 Analysis Date: 04/26/94 Analyst: ERIC ANDERSON

	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		
CCV present?	X		
CCV 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	98233*AISO

Note: Any "NO" answer requires a comment.

OVERRIDE COMMENTS

BATCH OVERRIDE BY: KATHLEEN ALLEN 2819
PROB.:SAMPLE MATRIX SPIKE DUPLICATE
NOT WITHIN ACCEPTANCE CRITERIA.
EXPL.:BOTH SPM LOW, ALL OTHER QC
IN CONTROL./KKA

TABLE OF ABBREVIATIONS

```
%RECV       : % Recovery for spiked sample. (FOUND/TARGET * 100)
ANLY DATE   : Analysis Date
ANLY TIME   : Analysis Time
CURVE       : Curve Regression Number
DILUTION    : Sample Dilution Factor
EXT DATE    : Extract Date
EXT VOL     : Extract Volume
FOUND       : Spiked Sample Conc. - Unspiked Sample Conc.
INJ VOL     : Injection Volume
REL%DIFF    : % Difference between current and previous spike.
RESPONSE    : Sample Response
R.T.        : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID   : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
      DA  -- Data Sample
      MB  -- Method Blank
      RF  -- Reference (from commercially known standard)
      RP  -- Replicate Sample
      SP  -- Standard Matrix Spike
      SPM -- Sample Matrix Spike
      STD -- Internal Standard
      SUR -- Surrogate Sample
      UN  -- Unspiked Sample
SAMP VOL    : Sample Volume
SPK CONC    : Spike Concentration
ST          : Sample response explanation or validity. (listed below)
      BK  -- No sample response.
      NA  -- Sample not analyzed.
      NR  -- Not reserved for this batch.  Batch containing the response
             for this sample is listed in the target field.
      OK  -- Sample response shown is correct.
      !   -- Sample response shown is invalid.
      <   -- Sample response < detection limit. Detection limit is shown
             in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET      : Spike Target (SAMPLE LISTING SECTION)
TARGET      : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE        : Response Type ("FINAL" or empty.)
UNSP CONC   : Unspiked Sample Concentration
```

ESE BATCH : G48569
CLASSIFICATION : HYDROCARBONS,PETRCL-SW3550/E418.1

QC TYPE : FDER/SW
ANALYST : ERIC ANDERSON
EXTRACTOR : BETSY DEEDRICK
DATA ENTRY : ERIC ANDERSON

REPORT DATE/TIME : 05/23/94 13:06:12
ANALYSIS DATE : 04/28/94
EXTRACT DATE : 04/27/94

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

FIELD GRP QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS	1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*13	WA05-2-03		
CDMHNSS*14	WA05-3-04		
CDMHNSS*15	WA04-1-05		
CDMHNSS*16	WA04-2-12		

ESE BATCH G48569

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H T.	OVER

ALL HOLDING TIMES MET

STORET: 95129 METHOD: 0 %T OF BASELINE, TRPH

STORET: 95130 METHOD: 0 %T OF SAMPLE, TRPH

STORET: 95167 METHOD: 0 DELTA ABSORBANCE, ABSORBANCE TRPH

STORET: 98233 METHOD: AISON HYDROCARBONS,PETROL, MG/KG-DRY TRPH

CALIBRATION CURVE # 1 (MG/L)
DETECTION LIMIT=1.672 DATE: 04/28/94 LARGEST RESP=16 %RSD=32.2603 RT WINDOW:

CONC :	0.0	1.672	3.344	8.360	16.72	33.44	83.60
%T :	90	87	84	76	64	45	16
RESP :	0.0	0.014	0.030	0.073	0.148	0.301	0.750
CONC':	10000	9690	9350	8460	7130	5010	1780

CONC = 6.6538E-02+ 1.1134E+02*RESP+ *RESP**2+ *RESP**3
95% C.I.= 1.1138E-01 3.5690E-01
CORRELATION COEFFICIENT = 1.0000

ESE BATCH : G48569

Continuing Calibration Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
04/28/94	CCB*QC*1	95129*0	%T OF BASELINE		90
04/28/94	CCB*QC*1	95130*0	%T OF SAMPLE		90.0
04/28/94	CCB*QC*1	95167*0	DELTA ABSORBANCE	ABSORB	ND
04/28/94	CCB*QC*1	98233*AISON	HYDROCARBONS, PETROL	MG/KG-	0.067

Continuing Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/28/94	CCV*QC*1	95129*0	%T OF BASELINE			T*1		80-120
04/28/94	CCV*QC*1	95130*0	%T OF SAMPLE			T*1		80-120
04/28/94	CCV*QC*1	95167*0	DELTA ABSORBANCE	ABSORB		T*1		80-120
04/28/94	CCV*QC*1	98233*AISON	HYDROCARBONS, PETROL	MG/KG-	33.4	33.6	101	67-135

Initial Calibration Blank Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
04/28/94	ICB*QC*1	95129*0	%T OF BASELINE		90
04/28/94	ICB*QC*1	95130*0	%T OF SAMPLE		90.0
04/28/94	ICB*QC*1	95167*0	DELTA ABSORBANCE	ABSORB	ND
04/28/94	ICB*QC*1	98233*AISON	HYDROCARBONS, PETROL	MG/KG-	0.067

Initial Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/28/94	ICV*QC*1	95129*0	%T OF BASELINE			T*1		80-120
04/28/94	ICV*QC*1	95130*0	%T OF SAMPLE			T*1		80-120
04/28/94	ICV*QC*1	95167*0	DELTA ABSORBANCE	ABSORB		T*1		80-120
04/28/94	ICV*QC*1	98233*AISON	HYDROCARBONS, PETROL	MG/KG-	33.8	33.6	99.4	80-120

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
04/28/94	MB*QC*1	95129*0	%T OF BASELINE		500
04/28/94	MB*QC*1	95130*0	%T OF SAMPLE		450
04/28/94	MB*QC*1	95167*0	DELTA ABSORBANCE	ABSORB	ND
04/28/94	MB*QC*1	98233*AISON	HYDROCARBONS, PETROL	MG/KG-	0.335

Replicate Analysis Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	REP #1	REP #2	RPD	RPD CRIT
04/28/94	RP*CDMHNSS*16	95129*0	%T OF BASELINE		90	500	100	N/A
04/28/94	RP*CDMHNSS*16	95130*0	%T OF SAMPLE		20.0	131	147	N/A
04/28/94	RP*CDMHNSS*16	95167*0	DELTA ABSORBANCE	ABSORB	R	2.913	200.0	N/A
04/28/94	RP*CDMHNSS*16	98233*AISON	HYDROCARBONS, PETROL	MG/KG-	381	325	15.9	N/A

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
04/28/94	SP1*QC*1	98233*AISON	HYDROCARBONS, PETROL	82.8	67-135	MG/KG-	425	352
04/28/94	SP2*QC*1	98233*AISON	HYDROCARBONS, PETROL	82.8	67-135	MG/KG-	425	352

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
04/28/94	SPM1*CDMHNSS*13	98233*AISON	HYDROCARBONS, PETROL	127.3	67-135	128	MG/KG-	439	559
04/28/94	SPM2*CDMHNSS*13	98233*AISON	HYDROCARBONS, PETROL	101.4	67-135	128	MG/KG-	439	445

ESE BATCH : G48569

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G48569 Analysis Date: 04/28/94 Analyst: ERIC ANDERSON

	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		
CCV present?	X		
CCV 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.

OVERRIDE COMMENTS

BATCH OVERRIDE BY:

TABLE OF ABBREVIATIONS

```
%RECV       : % Recovery for spiked sample. (FOUND/TARGET * 100)
ANLY DATE   : Analysis Date
ANLY TIME   : Analysis Time
CURVE       : Curve Regression Number
DILUTION    : Sample Dilution Factor
EXT DATE    : Extract Date
EXT VOL     : Extract Volume
FOUND       : Spiked Sample Conc. - Unspiked Sample Conc.
INJ VOL     : Injection Volume
REL%DIFF    : % Difference between current and previous spike.
RESPONSE    : Sample Response
R.T.        : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID   : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
      DA  -- Data Sample
      MB  -- Method Blank
      RF  -- Reference (from commercially known standard)
      RP  -- Replicate Sample
      SP  -- Standard Matrix Spike
      SPM -- Sample Matrix Spike
      STD -- Internal Standard
      SUR -- Surrogate Sample
      UN  -- Unspiked Sample
SAMP VOL    : Sample Volume
SPK CONC    : Spike Concentration
ST          : Sample response explanation or validity. (listed below)
      BK  -- No sample response.
      NA  -- Sample not analyzed.
      NR  -- Not reserved for this batch.  Batch containing the response
             for this sample is listed in the target field.
      OK  -- Sample response shown is correct.
      !   -- Sample response shown is invalid.
      <   -- Sample response < detection limit. Detection limit is shown
             in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET      : Spike Target (SAMPLE LISTING SECTION)
TARGET      : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE        : Response Type ("FINAL" or empty.)
UNSP CONC   : Unspiked Sample Concentration
```

ESE BATCH : G48667
CLASSIFICATION : HYDROCARBONS,PETRCL-SW3550/E4.H.1

QC TYPE : FDER/SW
ANALYST : KATHLEEN ALLEN
EXTRACTOR : ABRAHAM JACOB
DATA ENTRY : KATHLEEN ALLEN

REPORT DATE/TIME : 05/23/94 13:06:37
ANALYSIS DATE : 05/02/94
EXTRACT DATE : 04/29/94

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS		1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*17	EA14-1-01		
CDMHNSS*18	EA14-2-01		
CDMHNSS*19	EA12-1-10		
CDMHNSS*20	EA12-2-12		

ESE BATCH : G48667

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H. T.	OVER

ALL HOLDING TIMES MET

STORET: 95129 METHOD: 0 %T OF BASELINE, TRPH

STORET: 95130 METHOD: 0 %T OF SAMPLE, TRPH

STORET: 95167 METHOD: 0 DELTA ABSORBANCE, ABSORBANCE TRPH

STORET: 98233 METHOD: AISON HYDROCARBONS,PETROL, MG/KG-DRY TRPH

CALIBRATION CURVE # 1 (MG/L)
DETECTION LIMIT=1.672 DATE: 05/02/94 LARGEST RESP=16 %RSD=132.3714 RT WINDOW:

CONC :	0.000	1.672	3.334	8.360	16.72	33.44	83.60
%T :	90	86	83	75	63	43	16
RESP :	0.0	0.020	0.035	0.079	0.155	0.321	0.750
CONC':	10000	9580	9240	8350	7020	4790	1780

CONC = -6.1871E-01+ 1.1137E+02*RESP+ *RESP**2+ *RESP**3
95% C.I.= 8.0417E-01 2.5476E+00
CORRELATION COEFFICIENT = .9997

ESE BATCH : G48667

Continuing Calibration Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/02/94	CCB*QC*1	95129*0	%T OF BASELINE		90
05/02/94	CCB*QC*1	95130*0	%T OF SAMPLE		89.0
05/02/94	CCB*QC*1	95167*0	DELTA ABSORBANCE	ABSORB	0.0049
05/02/94	CCB*QC*1	98233*AISON	HYDROCARBONS, PETROL	MG/KG-	ND

Continuing Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/02/94	CCV*QC*1	95129*0	%T OF BASELINE			T*1		80-120
05/02/94	CCV*QC*1	95130*0	%T OF SAMPLE			T*1		80-120
05/02/94	CCV*QC*1	95167*0	DELTA ABSORBANCE	ABSORB		T*1		80-120
05/02/94	CCV*QC*1	98233*AISON	HYDROCARBONS, PETROL	MG/KG-	33.4	35.1	105	67-135

Initial Calibration Blank Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/02/94	ICB*QC*1	95129*0	%T OF BASELINE		90
05/02/94	ICB*QC*1	95130*0	%T OF SAMPLE		90.0
05/02/94	ICB*QC*1	95167*0	DELTA ABSORBANCE	ABSORB	ND
05/02/94	ICB*QC*1	98233*AISON	HYDROCARBONS, PETROL	MG/KG-	ND

Initial Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/02/94	ICV*QC*1	95129*0	%T OF BASELINE			T*1		80-120
05/02/94	ICV*QC*1	95130*0	%T OF SAMPLE			T*1		80-120
05/02/94	ICV*QC*1	95167*0	DELTA ABSORBANCE	ABSORB		T*1		80-120
05/02/94	ICV*QC*1	98233*AISON	HYDROCARBONS, PETROL	MG/KG-	33.4	32.9	98.5	80-120

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/02/94	MB*QC*1	95129*0	%T OF BASELINE		500
05/02/94	MB*QC*1	95130*0	%T OF SAMPLE		450
05/02/94	MB*QC*1	95167*0	DELTA ABSORBANCE	ABSORB	ND
05/02/94	MB*QC*1	98233*AISON	HYDROCARBONS, PETROL	MG/KG-	ND

Replicate Analysis Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	REP #1	REP #2	RPD	RPD CRIT
05/02/94	RP*CDMHNSS*17	95129*0	%T OF BASELINE		90	500	100	N/A
05/02/94	RP*CDMHNSS*17	95130*0	%T OF SAMPLE		90.0	468	136	N/A
05/02/94	RP*CDMHNSS*17	95167*0	DELTA ABSORBANCE	ABSORB	0.0	ND		N/A
05/02/94	RP*CDMHNSS*17	98233*AISON	HYDROCARBONS, PETROL	MG/KG-	<8.69	<8.69		N/A

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
05/02/94	SP1*QC*1	98233*AISON	HYDROCARBONS, PETROL	90.8	67-135	MG/KG-	425	385
05/02/94	SP2*QC*1	98233*AISON	HYDROCARBONS, PETROL	97.6	67-135	MG/KG-	425	415

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
05/02/94	SPM1*CDMHNSS*18	98233*AISON	HYDROCARBONS, PETROL	90.7	67-135	0.0	MG/KG-	441	400
05/02/94	SPM2*CDMHNSS*18	98233*AISON	HYDROCARBONS, PETROL	87.8	67-135	0.0	MG/KG-	441	387

ESE BATCH : G48667

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G48667 Analysis Date: 05/02/9[illegible] Analyst: KATHLEEN ALLEN

	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		
CCV present?	X		
CCV 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.

OVERRIDE COMMENTS

BATCH OVERRIDE BY:

TABLE OF ABBREVIATIONS

```
%RECV       : % Recovery for spiked sample. (FOUND/TARGET * 100)
ANLY DATE   : Analysis Date
ANLY TIME   : Analysis Time
CURVE       : Curve Regression Number
DILUTION    : Sample Dilution Factor
EXT DATE    : Extract Date
EXT VOL     : Extract Volume
FOUND       : Spiked Sample Conc. - Unspiked Sample Conc.
INJ VOL     : Injection Volume
REL%DIFF    : % Difference between current and previous spike.
RESPONSE    : Sample Response
R.T.        : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID   : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
      DA  -- Data Sample
      MB  -- Method Blank
      RF  -- Reference (from commercially known standard)
      RP  -- Replicate Sample
      SP  -- Standard Matrix Spike
      SPM -- Sample Matrix Spike
      STD -- Internal Standard
      SUR -- Surrogate Sample
      UN  -- Unspiked Sample
SAMP VOL    : Sample Volume
SPK CONC    : Spike Concentration
ST          : Sample response explanation or validity. (listed below)
      BK  -- No sample response.
      NA  -- Sample not analyzed.
      NR  -- Not reserved for this batch.  Batch containing the response
             for this sample is listed in the target field.
      OK  -- Sample response shown is correct.
      !   -- Sample response shown is invalid.
      <   -- Sample response < detection limit. Detection limit is shown
             in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET      : Spike Target (SAMPLE LISTING SECTION)
TARGET      : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE        : Response Type ("FINAL" or empty.)
UNSP CONC   : Unspiked Sample Concentration
```

ESE BATCH : G48781
CLASSIFICATION : HYDROCARBONS,PETROL-SW3550/E418 1

QC TYPE : FDER/SW
ANALYST : KATHLEEN ALLEN
EXTRACTOR : DONNA CREWS
DATA ENTRY : KATHLEEN ALLEN

REPORT DATE/TIME : 05/23/94 13:07:01
ANALYSIS DATE : 05/05/94
EXTRACT DATE : 05/04/94

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

FIELD GRP QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS	1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*21	EA11-1-07		
CDMHNSS*22	EA01-1-10		
CDMHNSS*23	OCS1-1-00		

ESE BATCH : G48781

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H.T	OVER

ALL HOLDING TIMES MET

STORET: 95129 METHOD: 0 %T OF BASELINE, TRPH

STORET: 95130 METHOD: 0 %T OF SAMPLE, TRPH

STORET: 95167 METHOD: 0 DELTA ABSORBANCE, ABSORBANCE TRPH

STORET: 98233 METHOD: AISON HYDROCARBONS,PETROL, MG/KG-DRY TRPH

CALIBRATION CURVE # 1 (MG/L)
DETECTION LIMIT=1.672 DATE: 05/05/94 LARGEST RESP=16 %RSD=132.2997 RT WINDOW:

CONC :	0.0000	1.672	3.344	8.360	16.72	33.44	83.60
%T :	90	86	83	75	64	43	16
RESP :	0.0	0.020	0.035	0.079	0.148	0.321	0.750
CONC':	10000	9570	9240	8350	7120	4780	1780

CONC = -4.9214E-01+ 1.1129E+02*RESP+ *RESP**2+ *RESP**3
95% C.I.= 8.6823E-01 2.7547E+00
CORRELATION COEFFICIENT = .9996

ESE BATCH : G48781

Continuing Calibration Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/05/94	CCB*QC*1	95129*0	%T OF BASELINE		90
05/05/94	CCB*QC*1	95130*0	%T OF SAMPLE		90.0
05/05/94	CCB*QC*1	95167*0	DELTA ABSORBANCE	ABSORB	ND
05/05/94	CCB*QC*1	98233*AISON	HYDROCARBONS, PETROL	MG/KG-	ND
05/05/94	CCB*QC*2	95129*0	%T OF BASELINE		90
05/05/94	CCB*QC*2	95130*0	%T OF SAMPLE		90.0
05/05/94	CCB*QC*2	95167*0	DELTA ABSORBANCE	ABSORB	ND
05/05/94	CCB*QC*2	98233*AISON	HYDROCARBONS, PETROL	MG/KG-	ND

Continuing Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/05/94	CCV*QC*1	95129*0	%T OF BASELINE			T*1		80-120
05/05/94	CCV*QC*1	95130*0	%T OF SAMPLE			T*1		80-120
05/05/94	CCV*QC*1	95167*0	DELTA ABSORBANCE	ABSORB		T*1		80-120
05/05/94	CCV*QC*1	98233*AISON	HYDROCARBONS, PETROL	MG/KG-	16.7	16.7	100.0	67-135
05/05/94	CCV*QC*2	95129*0	%T OF BASELINE			T*1		80-120
05/05/94	CCV*QC*2	95130*0	%T OF SAMPLE			T*1		80-120
05/05/94	CCV*QC*2	95167*0	DELTA ABSORBANCE	ABSORB		T*1		80-120
05/05/94	CCV*QC*2	98233*AISON	HYDROCARBONS, PETROL	MG/KG-	16.7	16.0	95.8	67-135

Initial Calibration Blank Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/05/94	ICB*QC*1	95129*0	%T OF BASELINE		90
05/05/94	ICB*QC*1	95130*0	%T OF SAMPLE		90.0
05/05/94	ICB*QC*1	95167*0	DELTA ABSORBANCE	ABSORB	ND
05/05/94	ICB*QC*1	98233*AISON	HYDROCARBONS, PETROL	MG/KG-	ND

Initial Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/05/94	ICV*QC*1	95129*0	%T OF BASELINE			T*1		80-120
05/05/94	ICV*QC*1	95130*0	%T OF SAMPLE			T*1		80-120
05/05/94	ICV*QC*1	95167*0	DELTA ABSORBANCE	ABSORB		T*1		80-120
05/05/94	ICV*QC*1	98233*AISON	HYDROCARBONS, PETROL	MG/KG-	33.4	33.0	98.8	80-120

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/05/94	MB*5/3/94*1	95129*0	%T OF BASELINE		500
05/05/94	MB*5/3/94*1	95130*0	%T OF SAMPLE		450
05/05/94	MB*5/3/94*1	95167*0	DELTA ABSORBANCE	ABSORB	ND
05/05/94	MB*5/3/94*1	98233*AISON	HYDROCARBONS, PETROL	MG/KG-	ND
05/05/94	MB*5/4/94*1	95129*0	%T OF BASELINE		500
05/05/94	MB*5/4/94*1	95130*0	%T OF SAMPLE		450
05/05/94	MB*5/4/94*1	95167*0	DELTA ABSORBANCE	ABSORB	ND
05/05/94	MB*5/4/94*1	98233*AISON	HYDROCARBONS, PETROL	MG/KG-	ND

Replicate Analysis Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	REP #1	REP #2	RPD	RPD CRIT
05/05/94	RP*CDMHNSS*22	95129*0	%T OF BASELINE		90	500	100	N/A
05/05/94	RP*CDMHNSS*22	95130*0	%T OF SAMPLE		74.0	406	138	N/A
05/05/94	RP*CDMHNSS*22	95167*0	DELTA ABSORBANCE	ABSORB	0.4665	0.4665	0.0	N/A
05/05/94	RP*CDMHNSS*22	98233*AISON	HYDROCARBONS, PETROL	MG/KG-	4920	4920	0.0	N/A
05/05/94	RP*CDMHNSS*23	95129*0	%T OF BASELINE		90	500	100	N/A
05/05/94	RP*CDMHNSS*23	95130*0	%T OF SAMPLE		90.0	450	133	N/A
05/05/94	RP*CDMHNSS*23	95167*0	DELTA ABSORBANCE	ABSORB	0.0	0.1312	200.0	N/A
05/05/94	RP*CDMHNSS*23	98233*AISON	HYDROCARBONS, PETROL	MG/KG-	<8.85	12.0		N/A

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
05/05/94	SP1*5/3/94*1	98233*AISON	HYDROCARBONS, PETROL	94.4	67-135	MG/KG-	425	401
05/05/94	SP2*5/3/94*1	98233*AISON	HYDROCARBONS, PETROL	91.1	67-135	MG/KG-	425	387
05/05/94	SP1*5/4/94*1	98233*AISON	HYDROCARBONS, PETROL	94.4	67-135	MG/KG-	425	401
05/05/94	SP2*5/4/94*1	98233*AISON	HYDROCARBONS, PETROL	91.1	67-135	MG/KG-	425	387

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
05/05/94	SPM1*CDMHNSS*21	98233*AISON	HYDROCARBONS, PETROL	69.8	67-135	43.2	MG/KG-	441	308

ESE BATCH : G48781

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
05/05/94	SPM2*CDMHNSS*21	98233*AISON	HYDROCARBONS, PETROL	72.6	67-135	43.2	MG/KG-	441	320
05/05/94	SPM1*CDMHNSS*23	98233*AISON	HYDROCARBONS, PETROL	85.1	67-135	0.0	MG/KG-	449	382
05/05/94	SPM2*CDMHNSS*23	98233*AISON	HYDROCARBONS, PETROL	85.1	67-135	0.0	MG/KG-	449	382

ESE BATCH : G48781

TABLE OF ABBREVIATIONS

```
%RECV       : % Recovery for spiked sample. (FOUND/TARGET * 100)
ANLY DATE   : Analysis Date
ANLY TIME   : Analysis Time
CURVE       : Curve Regression Number
DILUTION    : Sample Dilution Factor
EXT DATE    : Extract Date
EXT VOL     : Extract Volume
FOUND       : Spiked Sample Conc. - Unspiked Sample Conc.
INJ VOL     : Injection Volume
REL%DIFF    : % Difference between current and previous spike.
RESPONSE    : Sample Response
R.T.        : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID   : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
      DA  -- Data Sample
      MB  -- Method Blank
      RF  -- Reference (from commercially known standard)
      RP  -- Replicate Sample
      SP  -- Standard Matrix Spike
      SPM -- Sample Matrix Spike
      STD -- Internal Standard
      SUR -- Surrogate Sample
      UN  -- Unspiked Sample
SAMP VOL    : Sample Volume
SPK CONC    : Spike Concentration
ST          : Sample response explanation or validity. (listed below)
      BK  -- No sample response.
      NA  -- Sample not analyzed.
      NR  -- Not reserved for this batch.  Batch containing the response
             for this sample is listed in the target field.
      OK  -- Sample response shown is correct.
      !   -- Sample response shown is invalid.
      <   -- Sample response < detection limit. Detection limit is shown
             in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET      : Spike Target (SAMPLE LISTING SECTION)
TARGET      : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE        : Response Type ("FINAL" or empty.)
UNSP CONC   : Unspiked Sample Concentration
```

ESE BATCH : G48892
CLASSIFICATION : HYDROCARBONS,PETROL-SW3550/E418 1

QC TYPE : FDER/SW
ANALYST : ERIC ANDERSON
EXTRACTOR : DONNA CREWS
DATA ENTRY : ERIC ANDERSON

REPORT DATE/TIME : 05/23/94 13:07:40
ANALYSIS DATE : 05/06/94
EXTRACT DATE : 05/05/94

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS		1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*24	EBG1-1-02		
CDMHNSS*25	ESV1-1-01		
CDMHNSS*26	WBG2-1-02		
CDMHNSS*27	WBG2-2-02		

ESE BATCH : G48892

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H.T.	OVER

ALL HOLDING TIMES MET

STORET: 95129 METHOD: 0 %T OF BASELINE, TRPH

STORET: 95130 METHOD: 0 %T OF SAMPLE, TRPH

STORET: 95167 METHOD: 0 DELTA ABSORBANCE, ABSORBANCE TRPH

STORET: 98233 METHOD: AISON HYDROCARBONS,PETROL, MG/KG-DRY TRPH

CALIBRATION CURVE # 1 (MG/L)
DETECTION LIMIT=1.672 DATE: 05/06/94 LARGEST RESP=16 %RSD=132.3010 RT WINDOW:

CONC :	0.00	1.672	3.344	8.360	16.72	33.44	83.60
%T :	90	88	85	77	65	44	16
RESP :	0.0	0.010	0.025	0.068	0.141	0.312	0.750
CONC':	9930	9710	9380	8500	7170	4860	1770

CONC = 4.5378E-01+ 1.1035E+02*RESP+ *RESP**2+ *RESP**3
95% C.I.= 6.8227E-01 2.1817E+00
CORRELATION COEFFICIENT = .9997

ESE BATCH : G48892

Continuing Calibration Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/06/94	CCB*QC*1	95129*0	%T OF BASELINE		90
05/06/94	CCB*QC*1	95130*0	%T OF SAMPLE		90.0
05/06/94	CCB*QC*1	95167*0	DELTA ABSORBANCE	ABSORB	ND
05/06/94	CCB*QC*1	98233*AISON	HYDROCARBONS, PETROL	MG/KG-	0.454

Continuing Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/06/94	CCV*QC*1	95129*0	%T OF BASELINE			T*1		80-120
05/06/94	CCV*QC*1	95130*0	%T OF SAMPLE			T*1		80-120
05/06/94	CCV*QC*1	95167*0	DELTA ABSORBANCE	ABSORB		T*1		80-120
05/06/94	CCV*QC*1	98233*AISON	HYDROCARBONS, PETROL	MG/KG-	33.4	35.9	107	67-135

Initial Calibration Blank Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/06/94	ICB*QC*1	95129*0	%T OF BASELINE		90
05/06/94	ICB*QC*1	95130*0	%T OF SAMPLE		90.0
05/06/94	ICB*QC*1	95167*0	DELTA ABSORBANCE	ABSORB	ND
05/06/94	ICB*QC*1	98233*AISON	HYDROCARBONS, PETROL	MG/KG-	0.454

Initial Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/06/94	ICV*QC*1	95129*0	%T OF BASELINE			T*1		80-120
05/06/94	ICV*QC*1	95130*0	%T OF SAMPLE			T*1		80-120
05/06/94	ICV*QC*1	95167*0	DELTA ABSORBANCE	ABSORB		T*1		80-120
05/06/94	ICV*QC*1	98233*AISON	HYDROCARBONS, PETROL	MG/KG-	34.0	32.6	95.9	80-120

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/06/94	MB*QC*1	95129*0	%T OF BASELINE		500
05/06/94	MB*QC*1	95130*0	%T OF SAMPLE		450
05/06/94	MB*QC*1	95167*0	DELTA ABSORBANCE	ABSORB	ND
05/06/94	MB*QC*1	98233*AISON	HYDROCARBONS, PETROL	MG/KG-	2.27

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
05/06/94	SP1*QC*1	98233*AISON	HYDROCARBONS, PETROL	79.5	67-135	MG/KG-	425	338
05/06/94	SP2*QC*1	98233*AISON	HYDROCARBONS, PETROL	79.5	67-135	MG/KG-	425	338

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
05/06/94	SPM1*CDMHNSS*24	98233*AISON	HYDROCARBONS, PETROL	60.1	67-135	2.43	MG/KG-	454	273
05/06/94	SPM2*CDMHNSS*24	98233*AISON	HYDROCARBONS, PETROL	68.1	67-135	2.43	MG/KG-	454	309

ESE BATCH : G48892

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G48892 Analysis Date: 05/06/94 Analyst: ERIC ANDERSON

	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		
CCV present?	X		
CCV 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	98233*AISO
Sample matrix spike duplicate present?	X		
Sample matrix spike duplicate within acceptance criteria?	X		

Note: Any "NO" answer requires a comment.

OVERRIDE COMMENTS

BATCH OVERRIDE BY: KATHLEEN ALLEN 2819
PROB.:SAMPLE MATRIX SPIKE NOT WITHIN
ACCEPTANCE CRITERIA.
EXPL.:SAMPLE INTERFERENCE WITH SPIKE
SOLUTION./EBA
BOTH SPM'S LOW. POSSIBLE MATRIX
INTERFERENCE. ALL OTHER QC IN
CONTROL./KKA

ESE BATCH : G48928
CLASSIFICATION : HYDROCARBONS,PETROL-SW3550/E418.1

QC TYPE : FDER/SW
ANALYST : ERIC ANDERSON
EXTRACTOR : DONNA CREWS
DATA ENTRY : ERIC ANDERSON

REPORT DATE/TIME : 05/23/94 13:08:02
ANALYSIS DATE : 05/09/94
EXTRACT DATE : 05/06/94

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS		1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*28	WA04-3-20		
CDMHNSS*29	WA04-4-08		
CDMHNSS*30	WSV2-1-01		
CDMHNSS*31	WBG3-1-02		
CDMHNSS*32	EWC1-1-00		
CDMHNSS*33	WWC2-1-00		

ESE BATCH : G48928

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H.T.	OVER

ALL HOLDING TIMES MET

STORET: 95129 METHOD: 0 %T OF BASELINE, TRPH

STORET: 95130 METHOD: 0 %T OF SAMPLE, TRPH

STORET: 95167 METHOD: 0 DELTA ABSORBANCE, ABSORBANCE TRPH

STORET: 98233 METHOD: AISON HYDROCARBONS,PETROL, MG/KG-DRY TRPH

CALIBRATION CURVE # 1 (MG/L)
DETECTION LIMIT=1.672 DATE: 05/09/94 LARGEST RESP=17 %RSD=132.2724 RT WINDOW:

CONC :	0.00	1.672	3.344	8.360	16.72	33.44	83.60
%T :	90	88	85	77	65	44	17
RESP :	0.0	0.010	0.025	0.068	0.141	0.311	0.724
CONC':	10300	10000	9700	8790	7420	5020	1940

CONC = 1.7680E-01+ 1.1414E+02*RESP+ *RESP**2+ *RESP**3
95% C.I.= 1.0324E+00 3.3992E+00
CORRELATION COEFFICIENT = .9994

ESE BATCH : G48928

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G48928 Analysis Date: 05/09/94 Analyst: ERIC ANDERSON

	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		
CCV present?	X		
CCV 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.

OVERRIDE COMMENTS

BATCH OVERRIDE BY:

ESE BATCH : G48928

TABLE OF ABBREVIATIONS

```
%RECV       : % Recovery for spiked sample. (FOUND/TARGET * 100)
ANLY DATE   : Analysis Date
ANLY TIME   : Analysis Time
CURVE       : Curve Regression Number
DILUTION    : Sample Dilution Factor
EXT DATE    : Extract Date
EXT VOL     : Extract Volume
FOUND       : Spiked Sample Conc. - Unspiked Sample Conc.
INJ VOL     : Injection Volume
REL%DIFF    : % Difference between current and previous spike.
RESPONSE    : Sample Response
R.T.        : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID   : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
      DA  -- Data Sample
      MB  -- Method Blank
      RF  -- Reference (from commercially known standard)
      RP  -- Replicate Sample
      SP  -- Standard Matrix Spike
      SPM -- Sample Matrix Spike
      STD -- Internal Standard
      SUR -- Surrogate Sample
      UN  -- Unspiked Sample
SAMP VOL    : Sample Volume
SPK CONC    : Spike Concentration
ST          : Sample response explanation or validity. (listed below)
      BK  -- No sample response.
      NA  -- Sample not analyzed.
      NR  -- Not reserved for this batch.  Batch containing the response
             for this sample is listed in the target field.
      OK  -- Sample response shown is correct.
      !   -- Sample response shown is invalid.
      <   -- Sample response < detection limit. Detection limit is shown
             in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET      : Spike Target (SAMPLE LISTING SECTION)
TARGET      : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE        : Response Type ("FINAL" or empty.)
UNSP CONC   : Unspiked Sample Concentration
```

ESE BATCH : G49238
CLASSIFICATION : HYDROCARBONS,PETROL-SW3550/E418.1

QC TYPE : FDER/SW
ANALYST : DANIEL DUNCAN
EXTRACTOR : DONNA CREWS
DATA ENTRY : KATHLEEN ALLEN

REPORT DATE/TIME : 05/23/94 13:08:26
ANALYSIS DATE : 05/16/94
EXTRACT DATE : 05/11/94

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

FIELD GRP QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS	1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*34	EA01-2-05		
CDMHNSS*35	EA01-3-05		
CDMHNSS*36	EA01-4-14		
CDMHNSS*37	EA01-5-12		
CDMHNSS*38	EA01-6-10		

ESE BATCH : G49238

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H.T.	OVER

ALL HOLDING TIMES MET

STORET: 95129 METHOD: 0 %T OF BASELINE, TRPH

STORET: 95130 METHOD: 0 %T OF SAMPLE, TRPH

STORET: 95167 METHOD: 0 DELTA ABSORBANCE, ABSORBANCE TRPH

STORET: 98233 METHOD: AISON HYDROCARBONS,PETROL, MG/KG-DRY TRPH

CALIBRATION CURVE # 1 (MG/L)
DETECTION LIMIT=1.672 DATE: 05/16/94 LARGEST RESP=17 %RSD=132.5093 RT WINDOW:

CONC :	0.000	1.672	3.344	8.360	16.72	33.44	83.60
%T :	90	89	86	78	65	42	17
RESP :	0.0	0.005	0.020	0.062	0.141	0.331	0.724
CONC':	10100	10000	9680	8780	7320	4730	1910

CONC = 3.8939E-01+ 1.1257E+02*RESP+ *RESP**2+ *RESP**3
95% C.I.= 1.9856E+00 6.4778E+00
CORRELATION COEFFICIENT = .9979

ESE BATCH : G49238

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
05/16/94	SPM2*CDMHNSS*35	98233*AISON	HYDROCARBONS, PETROL	80.6	67-135	428	MG/KG-	443	357
05/16/94	SPM1*CDMHNSS*38	98233*AISON	HYDROCARBONS, PETROL	72.6	67-135	2.03	MG/KG-	496	360
05/16/94	SPM2*CDMHNSS*38	98233*AISON	HYDROCARBONS, PETROL	78.6	67-135	2.03	MG/KG-	444	349

ESE BATCH : G49238

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G49238 Analysis Date: 05/16/94 Analyst: DANIEL DUNCAN

	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		
CCV present?	X		
CCV 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	98233*AISO
Sample matrix spike duplicate present?	X		
Sample matrix spike duplicate within acceptance criteria?		X	98233*AISO

Note: Any "NO" answer requires a comment.

OVERRIDE COMMENTS

BATCH OVERRIDE BY: KATHLEEN ALLEN 2819
PROB: SAMPLE MATRIX SPIKE AND MATRIX SPIKE DUP
NOT WITHIN ACCEPTANCE CRITERIA (98233*AISO).
EXPL: LARGE DILUTIONS ON SAMPLES CAUSED LOW
RECOVERY OF SPIKES. / KKA 05-17-94

ICAP Metals

ESE BATCH : G48323

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
04/22/94	MB*QC*1	1028*6010-G	CADMIUM	MG/KG-	ND
04/22/94	MB*QC*1	1029*6010-G	CHROMIUM	MG/KG-	ND
04/22/94	MB*QC*1	1052*6010-G	LEAD	MG/KG-	ND

Serial Dilution Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	REP #1	REP #2	RPD	RPD CRIT
04/22/94	SD*CDMHNSS*4	1078*6010-G	SILVER	MG/KG-	0.0	0.102	NC	10
04/22/94	SD*CDMHNSS*4	1008*6010-G	BARIUM	MG/KG-	96.2	98.3	2.20	10
04/22/94	SD*CDMHNSS*4	1028*6010-G	CADMIUM	MG/KG-	1.38	1.60	14.8	10
04/22/94	SD*CDMHNSS*4	1029*6010-G	CHROMIUM	MG/KG-	7.66	6.17	21.5	10
04/22/94	SD*CDMHNSS*4	1052*6010-G	LEAD	MG/KG-	61.8	61.6	0.300	10

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
04/22/94	SP*QC*1	1078*6010-G	SILVER	101.9	73-107	MG/KG-	4.77	4.86
04/22/94	SP*QC*1	1008*6010-G	BARIUM	98.4	86-106	MG/KG-	191	188
04/22/94	SP*QC*1	1028*6010-G	CADMIUM	98.1	80-108	MG/KG-	4.77	4.68
04/22/94	SP*QC*1	1029*6010-G	CHROMIUM	99.5	79-109	MG/KG-	19.1	19.0
04/22/94	SP*QC*1	1052*6010-G	LEAD	100.0	79-109	MG/KG-	47.7	47.7

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
04/22/94	SPM1*CDMHNSS*4	1078*6010-G	SILVER	93.3	73-107	0.0	MG/KG-	4.89	4.56
04/22/94	SPM1*CDMHNSS*4	1008*6010-G	BARIUM	94.4	86-106	96.2	MG/KG-	196	185
04/22/94	SPM1*CDMHNSS*4	1028*6010-G	CADMIUM	102.0	80-108	1.38	MG/KG-	4.89	4.99
04/22/94	SPM1*CDMHNSS*4	1029*6010-G	CHROMIUM	103.6	79-109	7.66	MG/KG-	19.6	20.3
04/22/94	SPM1*CDMHNSS*4	1052*6010-G	LEAD	82.2	79-109	61.8	MG/KG-	48.9	40.2
04/22/94	SPM2*CDMHNSS*4	1078*6010-G	SILVER	101.0	73-107	0.0	MG/KG-	4.87	4.92
04/22/94	SPM2*CDMHNSS*4	1008*6010-G	BARIUM	89.2	86-106	96.2	MG/KG-	195	174
04/22/94	SPM2*CDMHNSS*4	1028*6010-G	CADMIUM	125.5	80-108	1.38	MG/KG-	4.87	6.11
04/22/94	SPM2*CDMHNSS*4	1029*6010-G	CHROMIUM	91.8	79-109	7.66	MG/KG-	19.5	17.9
04/22/94	SPM2*CDMHNSS*4	1052*6010-G	LEAD	94.9	79-109	61.8	MG/KG-	48.7	46.2

Spike into Matrix Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
04/22/94	SPX*CDMHNSS*4	1078*6010-G	SILVER	101.2	85-115	MG/KG-	50.9	51.5
04/22/94	SPX*CDMHNSS*4	1008*6010-G	BARIUM	101.8	85-115	MG/KG-	50.9	51.8
04/22/94	SPX*CDMHNSS*4	1028*6010-G	CADMIUM	101.8	85-115	MG/KG-	50.9	51.8
04/22/94	SPX*CDMHNSS*4	1029*6010-G	CHROMIUM	96.9	85-115	MG/KG-	50.9	49.3
04/22/94	SPX*CDMHNSS*4	1052*6010-G	LEAD	94.7	85-115	MG/KG-	50.9	48.2

ESE BATCH : G48323

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G48323 Analysis Date: 04/22/94 Analyst: GARRY PRICE

	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		
CCV present?	X		
CCV within acceptance criteria?	X		
ICS present?	X		
ICS 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	CI
Analytical spike present?	X		
Analytical spike within acceptance criteria?	X		

Note: Any "NO" answer requires a comment.

OVERRIDE COMMENTS

- BATCH OVERRIDE BY: KATHY BARRY 1708
  PROB:SAMPLE MATRIX SPIKE DUPLICATE NOT WITHIN ACCEPTANCE CRITERIA.
  EXPL:LACK OF HOMOGENEITY./GP./04-22-94.
  EM./04-25-94.

ESE BATCH : G48391
CLASSIFICATION : PR. POLL. ICAP METALS - EPA 6010

QC TYPE : FDER/SW
ANALYST : ELIZABETH CREARY
EXTRACTOR : DAVID NICHOLS
DATA ENTRY : ICAP UPLOAD

REPORT DATE/TIME : 05/20/94 06:18:33
ANALYSIS DATE : 04/25/94
EXTRACT DATE : 04/22/94

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

FIELD GRP QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS	1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*5	WA19-3-05	04/25/94	10:07AM
CDMHNSS*6	WA19-4-05	04/25/94	10:10AM

ESE BATCH : G48391

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H.T.	OVER

ALL HOLDING TIMES MET

STORET: 1078 METHOD: 6010-G SILVER, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=.005 DATE: 04/25/94 LARGEST RESP= %RSD= RT WINDOW:

STORET: 1008 METHOD: 6010-G BARIUM, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=.02 DATE: 04/25/94 LARGEST RESP= %RSD= RT WINDOW:

STORET: 1028 METHOD: 6010-G CADMIUM, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=.005 DATE: 04/25/94 LARGEST RESP= %RSD= RT WINDOW:

STORET: 1029 METHOD: 6010-G CHROMIUM, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=.01 DATE: 04/25/94 LARGEST RESP= %RSD= RT WINDOW:

STORET: 1052 METHOD: 6010-G LEAD, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=.1 DATE: 04/25/94 LARGEST RESP= %RSD= RT WINDOW:

ESE BATCH : G48391

Continuing Calibration Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
04/25/94	CCB*QC*1	1078*6010-G	SILVER	MG/KG-	ND
04/25/94	CCB*QC*1	1008*6010-G	BARIUM	MG/KG-	ND
04/25/94	CCB*QC*1	1028*6010-G	CADMIUM	MG/KG-	ND
04/25/94	CCB*QC*1	1029*6010-G	CHROMIUM	MG/KG-	ND
04/25/94	CCB*QC*1	1052*6010-G	LEAD	MG/KG-	ND
04/25/94	CCB*QC*2	1078*6010-G	SILVER	MG/KG-	ND
04/25/94	CCB*QC*2	1008*6010-G	BARIUM	MG/KG-	0.0002
04/25/94	CCB*QC*2	1028*6010-G	CADMIUM	MG/KG-	ND
04/25/94	CCB*QC*2	1029*6010-G	CHROMIUM	MG/KG-	ND
04/25/94	CCB*QC*2	1052*6010-G	LEAD	MG/KG-	0.005

Continuing Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/25/94	CCV*STD4*1	1078*6010-G	SILVER	MG/KG-	1.00	0.978	97.8	80-120
04/25/94	CCV*STD4*1	1008*6010-G	BARIUM	MG/KG-		ND		90-110
04/25/94	CCV*STD4*1	1028*6010-G	CADMIUM	MG/KG-		ND		90-110
04/25/94	CCV*STD4*1	1029*6010-G	CHROMIUM	MG/KG-		ND		90-110
04/25/94	CCV*STD4*1	1052*6010-G	LEAD	MG/KG-		ND		90-110
04/25/94	CCV*STD2*1	1078*6010-G	SILVER	MG/KG-		ND		80-120
04/25/94	CCV*STD2*1	1008*6010-G	BARIUM	MG/KG-	1.00	0.989	98.9	90-110
04/25/94	CCV*STD2*1	1028*6010-G	CADMIUM	MG/KG-	1.00	1.01	101	90-110
04/25/94	CCV*STD2*1	1029*6010-G	CHROMIUM	MG/KG-	1.00	0.997	99.7	90-110
04/25/94	CCV*STD2*1	1052*6010-G	LEAD	MG/KG-	1.00	1.02	102	90-110
04/25/94	CCV*QC*1	1078*6010-G	SILVER	MG/KG-	0.500	0.497	99.4	80-120
04/25/94	CCV*QC*1	1008*6010-G	BARIUM	MG/KG-	0.500	0.499	99.8	90-110
04/25/94	CCV*QC*1	1028*6010-G	CADMIUM	MG/KG-	0.500	0.500	100.0	90-110
04/25/94	CCV*QC*1	1029*6010-G	CHROMIUM	MG/KG-	0.500	0.492	98.4	90-110
04/25/94	CCV*QC*1	1052*6010-G	LEAD	MG/KG-	0.500	0.504	101	90-110
04/25/94	CCV*QC*2	1078*6010-G	SILVER	MG/KG-	0.500	0.501	100	80-120
04/25/94	CCV*QC*2	1008*6010-G	BARIUM	MG/KG-	0.500	0.503	101	90-110
04/25/94	CCV*QC*2	1028*6010-G	CADMIUM	MG/KG-	0.500	0.508	102	90-110
04/25/94	CCV*QC*2	1029*6010-G	CHROMIUM	MG/KG-	0.500	0.502	100	90-110
04/25/94	CCV*QC*2	1052*6010-G	LEAD	MG/KG-	0.500	0.506	101	90-110

Interference Check Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/25/94	ICS*A*1	1078*6010-G	SILVER	MG/KG-		ND		80-120
04/25/94	ICS*A*1	1008*6010-G	BARIUM	MG/KG-		ND		80-120
04/25/94	ICS*A*1	1028*6010-G	CADMIUM	MG/KG-		ND		80-120
04/25/94	ICS*A*1	1029*6010-G	CHROMIUM	MG/KG-		ND		80-120
04/25/94	ICS*A*1	1052*6010-G	LEAD	MG/KG-		ND		80-120
04/25/94	ICS*AB*1	1078*6010-G	SILVER	MG/KG-	1.00	0.972	97.2	80-120
04/25/94	ICS*AB*1	1008*6010-G	BARIUM	MG/KG-	0.500	0.492	98.4	80-120
04/25/94	ICS*AB*1	1028*6010-G	CADMIUM	MG/KG-	1.00	0.980	98.0	80-120
04/25/94	ICS*AB*1	1029*6010-G	CHROMIUM	MG/KG-	0.500	0.469	93.8	80-120
04/25/94	ICS*AB*1	1052*6010-G	LEAD	MG/KG-	1.00	0.935	93.5	80-120
04/25/94	ICS*A*2	1078*6010-G	SILVER	MG/KG-		ND		80-120
04/25/94	ICS*A*2	1008*6010-G	BARIUM	MG/KG-		ND		80-120
04/25/94	ICS*A*2	1028*6010-G	CADMIUM	MG/KG-		ND		80-120
04/25/94	ICS*A*2	1029*6010-G	CHROMIUM	MG/KG-		ND		80-120
04/25/94	ICS*A*2	1052*6010-G	LEAD	MG/KG-		ND		80-120
04/25/94	ICS*AB*2	1078*6010-G	SILVER	MG/KG-	1.00	0.973	97.3	80-120
04/25/94	ICS*AB*2	1008*6010-G	BARIUM	MG/KG-	0.500	0.489	97.8	80-120
04/25/94	ICS*AB*2	1028*6010-G	CADMIUM	MG/KG-	1.00	0.995	99.5	80-120
04/25/94	ICS*AB*2	1029*6010-G	CHROMIUM	MG/KG-	0.500	0.473	94.6	80-120
04/25/94	ICS*AB*2	1052*6010-G	LEAD	MG/KG-	1.00	0.956	95.6	80-120

Initial Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/25/94	ICV*ICAP19*1	1078*6010-G	SILVER	MG/KG-		ND		90-110
04/25/94	ICV*ICAP19*1	1008*6010-G	BARIUM	MG/KG-		ND		90-110
04/25/94	ICV*ICAP19*1	1028*6010-G	CADMIUM	MG/KG-	1.00	1.01	101	90-110
04/25/94	ICV*ICAP19*1	1029*6010-G	CHROMIUM	MG/KG-	1.00	1.00	100.0	90-110
04/25/94	ICV*ICAP19*1	1052*6010-G	LEAD	MG/KG-	1.00	1.01	101	90-110
04/25/94	ICV*ICAP7*1	1078*6010-G	SILVER	MG/KG-	1.00	0.992	99.2	90-110
04/25/94	ICV*ICAP7*1	1008*6010-G	BARIUM	MG/KG-	1.00	0.977	97.7	90-110
04/25/94	ICV*ICAP7*1	1028*6010-G	CADMIUM	MG/KG-		ND		90-110
04/25/94	ICV*ICAP7*1	1029*6010-G	CHROMIUM	MG/KG-		ND		90-110
04/25/94	ICV*ICAP7*1	1052*6010-G	LEAD	MG/KG-		ND		90-110

ESE BATCH : G48391

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
04/25/94	MB*REAGENT*1	1078*6010-G	SILVER	MG/KG-	ND
04/25/94	MB*REAGENT*1	1008*6010-G	BARIUM	MG/KG-	ND
04/25/94	MB*REAGENT*1	1028*6010-G	CADMIUM	MG/KG-	0.0006
04/25/94	MB*REAGENT*1	1029*6010-G	CHROMIUM	MG/KG-	ND
04/25/94	MB*REAGENT*1	1052*6010-G	LEAD	MG/KG-	ND
04/25/94	MB*QC*1	1078*6010-G	SILVER	MG/KG-	ND
04/25/94	MB*QC*1	1008*6010-G	BARIUM	MG/KG-	ND
04/25/94	MB*QC*1	1028*6010-G	CADMIUM	MG/KG-	ND
04/25/94	MB*QC*1	1029*6010-G	CHROMIUM	MG/KG-	ND
04/25/94	MB*QC*1	1052*6010-G	LEAD	MG/KG-	ND

Serial Dilution Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	REP #1	REP #2	RPD	RPD CRIT
04/25/94	SD*CDMHNSS*6	1078*6010-G	SILVER	MG/KG-	0.0	0.250	NC	10
04/25/94	SD*CDMHNSS*6	1008*6010-G	BARIUM	MG/KG-	107	106	0.900	10
04/25/94	SD*CDMHNSS*6	1028*6010-G	CADMIUM	MG/KG-	0.0	ND	NC	10
04/25/94	SD*CDMHNSS*6	1029*6010-G	CHROMIUM	MG/KG-	5.56	5.69	2.30	10
04/25/94	SD*CDMHNSS*6	1052*6010-G	LEAD	MG/KG-	11.6	10.6	9.00	10

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
04/25/94	SP1*QC*1	1078*6010-G	SILVER	94.0	73-107	MG/KG-	4.66	4.38
04/25/94	SP1*QC*1	1008*6010-G	BARIUM	94.6	86-106	MG/KG-	186	176
04/25/94	SP1*QC*1	1028*6010-G	CADMIUM	92.5	80-108	MG/KG-	4.66	4.31
04/25/94	SP1*QC*1	1029*6010-G	CHROMIUM	95.2	79-109	MG/KG-	18.6	17.7
04/25/94	SP1*QC*1	1052*6010-G	LEAD	99.8	79-109	MG/KG-	46.6	46.5

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
04/25/94	SPM1*CDMHNSS*6	1078*6010-G	SILVER	96.7	73-107	0.0	MG/KG-	5.09	4.92
04/25/94	SPM1*CDMHNSS*6	1008*6010-G	BARIUM	86.8	86-106	107	MG/KG-	204	177
04/25/94	SPM1*CDMHNSS*6	1028*6010-G	CADMIUM	91.7	80-108	0.0	MG/KG-	5.09	4.67
04/25/94	SPM1*CDMHNSS*6	1029*6010-G	CHROMIUM	99.0	79-109	5.56	MG/KG-	20.4	20.2
04/25/94	SPM1*CDMHNSS*6	1052*6010-G	LEAD	85.5	79-109	11.6	MG/KG-	50.9	43.5
04/25/94	SPM2*CDMHNSS*6	1078*6010-G	SILVER	93.9	73-107	0.0	MG/KG-	5.06	4.75
04/25/94	SPM2*CDMHNSS*6	1008*6010-G	BARIUM	84.2	86-106	107	MG/KG-	202	170
04/25/94	SPM2*CDMHNSS*6	1028*6010-G	CADMIUM	91.5	80-108	0.0	MG/KG-	5.06	4.63
04/25/94	SPM2*CDMHNSS*6	1029*6010-G	CHROMIUM	95.0	79-109	5.56	MG/KG-	20.2	19.2
04/25/94	SPM2*CDMHNSS*6	1052*6010-G	LEAD	87.2	79-109	11.6	MG/KG-	50.6	44.1

Spike into Matrix Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
04/25/94	SPX*CDMHNSS*6	1078*6010-G	SILVER	96.8	85-115	MG/KG-	50.0	48.4
04/25/94	SPX*CDMHNSS*6	1008*6010-G	BARIUM	93.8	85-115	MG/KG-	50.0	46.9
04/25/94	SPX*CDMHNSS*6	1028*6010-G	CADMIUM	98.2	85-115	MG/KG-	50.0	49.1
04/25/94	SPX*CDMHNSS*6	1029*6010-G	CHROMIUM	96.6	85-115	MG/KG-	50.0	48.3
04/25/94	SPX*CDMHNSS*6	1052*6010-G	LEAD	100.2	85-115	MG/KG-	50.0	50.1

ESE BATCH : G48391

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G48391 Analysis Date: 04/25/94 Analyst: ELIZABETH CREARY

	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		
CCV present?	X		
CCV within acceptance criteria?	X		
ICS present?	X		
ICS 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	BA
Analytical spike present?	X		
Analytical spike within acceptance criteria?	X		

Note: Any "NO" answer requires a comment.

OVERRIDE COMMENTS

BATCH OVERRIDE BY: KATHY BARRY 1708
PROB.:SAMPLE MATRIX SPIKE DUPLICATE NOT WITHIN
ACCEPTANCE CRITERIA.
EXPL.:LACK OF HOMOGENEITY./BL

ESE BATCH : G48432
CLASSIFICATION : PR. POLL. ICAP METALS - EPA 6010

QC TYPE : FDER/SW
ANALYST : ELIZABETH CREARY
EXTRACTOR : DEBRA ZUCKERMAN
DATA ENTRY : ICAP UPLOAD

REPORT DATE/TIME : 05/20/94 06:19:18
ANALYSIS DATE : 04/26/94
EXTRACT DATE : 04/25/94

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

FIELD GRP QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS	1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*7	WA17-1-03	04/26/94	10:24AM
CDMHNSS*8	WA16-1-02	04/26/94	10:27AM
CDMHNSS*9	WA16-2-03	04/26/94	10:30AM

ESE BATCH : G48432

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H.T.	OVER

ALL HOLDING TIMES MET

STORET: 1078 METHOD: 6010-G SILVER, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=.005 DATE: 04/26/94 LARGEST RESP= %RSD= RT WINDOW:

STORET: 1008 METHOD: 6010-G BARIUM, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=.02 DATE: 04/26/94 LARGEST RESP= %RSD= RT WINDOW:

STORET: 1028 METHOD: 6010-G CADMIUM, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=.005 DATE: 04/26/94 LARGEST RESP= %RSD= RT WINDOW:

STORET: 1029 METHOD: 6010-G CHROMIUM, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=.01 DATE: 04/26/94 LARGEST RESP= %RSD= RT WINDOW:

STORET: 1052 METHOD: 6010-G LEAD, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=.1 DATE: 04/26/94 LARGEST RESP= %RSD= RT WINDOW:

ESE BATCH G48432

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
04/26/94	MB*REAGENT*1	1078*6010-G	SILVER	MG/KG-	ND
04/26/94	MB*REAGENT*1	1008*6010-G	BARIUM	MG/KG-	0.0003
04/26/94	MB*REAGENT*1	1028*6010-G	CADMIUM	MG/KG-	ND
04/26/94	MB*REAGENT*1	1029*6010-G	CHROMIUM	MG/KG-	0.0004
04/26/94	MB*REAGENT*1	1052*6010-G	LEAD	MG/KG-	0.008
04/26/94	MB*QC*1	1078*6010-G	SILVER	MG/KG-	ND
04/26/94	MB*QC*1	1008*6010-G	BARIUM	MG/KG-	ND
04/26/94	MB*QC*1	1028*6010-G	CADMIUM	MG/KG-	ND
04/26/94	MB*QC*1	1029*6010-G	CHROMIUM	MG/KG-	ND
04/26/94	MB*QC*1	1052*6010-G	LEAD	MG/KG-	ND

Serial Dilution Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	REP #1	REP #2	RPD	RPD CRIT
04/26/94	SD*CDMHNSS*9	1078*6010-G	SILVER	MG/KG-	0.0	ND	NC	10
04/26/94	SD*CDMHNSS*9	1008*6010-G	BARIUM	MG/KG-	105	109	3.70	10
04/26/94	SD*CDMHNSS*9	1028*6010-G	CADMIUM	MG/KG-	0.0	ND	NC	10
04/26/94	SD*CDMHNSS*9	1029*6010-G	CHROMIUM	MG/KG-	10.7	11.7	8.90	10
04/26/94	SD*CDMHNSS*9	1052*6010-G	LEAD	MG/KG-	5.29	10.8	68.5	10

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
04/26/94	SP1*QC*1	1078*6010-G	SILVER	99.4	73-107	MG/KG-	4.98	4.95
04/26/94	SP1*QC*1	1008*6010-G	BARIUM	97.0	86-106	MG/KG-	199	193
04/26/94	SP1*QC*1	1028*6010-G	CADMIUM	101.0	80-108	MG/KG-	4.98	5.03
04/26/94	SP1*QC*1	1029*6010-G	CHROMIUM	96.0	79-109	MG/KG-	19.9	19.1
04/26/94	SP1*QC*1	1052*6010-G	LEAD	97.8	79-109	MG/KG-	49.8	48.7

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
04/26/94	SPM1*CDMHNSS*9	1078*6010-G	SILVER	97.5	73-107	0.0	MG/KG-	5.29	5.16
04/26/94	SPM1*CDMHNSS*9	1008*6010-G	BARIUM	94.3	86-106	105	MG/KG-	212	200
04/26/94	SPM1*CDMHNSS*9	1028*6010-G	CADMIUM	85.6	80-108	0.0	MG/KG-	5.29	4.53
04/26/94	SPM1*CDMHNSS*9	1029*6010-G	CHROMIUM	92.9	79-109	10.7	MG/KG-	21.2	19.7
04/26/94	SPM1*CDMHNSS*9	1052*6010-G	LEAD	92.1	79-109	5.29	MG/KG-	52.9	48.7
04/26/94	SPM2*CDMHNSS*9	1078*6010-G	SILVER	97.9	73-107	0.0	MG/KG-	5.21	5.10
04/26/94	SPM2*CDMHNSS*9	1008*6010-G	BARIUM	101.4	86-106	105	MG/KG-	208	211
04/26/94	SPM2*CDMHNSS*9	1028*6010-G	CADMIUM	96.4	80-108	0.0	MG/KG-	5.21	5.02
04/26/94	SPM2*CDMHNSS*9	1029*6010-G	CHROMIUM	102.4	79-109	10.7	MG/KG-	20.8	21.3
04/26/94	SPM2*CDMHNSS*9	1052*6010-G	LEAD	91.2	79-109	5.29	MG/KG-	52.1	47.5

Spike into Matrix Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
04/26/94	SPX*CDMHNSS*9	1078*6010-G	SILVER	99.2	85-115	MG/KG-	52.7	52.3
04/26/94	SPX*CDMHNSS*9	1008*6010-G	BARIUM	103.8	85-115	MG/KG-	52.7	54.7
04/26/94	SPX*CDMHNSS*9	1028*6010-G	CADMIUM	95.6	85-115	MG/KG-	52.7	50.4
04/26/94	SPX*CDMHNSS*9	1029*6010-G	CHROMIUM	96.0	85-115	MG/KG-	52.7	50.6
04/26/94	SPX*CDMHNSS*9	1052*6010-G	LEAD	98.1	85-115	MG/KG-	52.7	51.7

ESE BATCH : G48432

TABLE OF ABBREVIATIONS

%RECV : % Recovery for spiked sample (FOUND/TARGET * 100)
ANLY DATE : Analysis Date
ANLY TIME : Analysis Time
CURVE : Curve Regression Number
DILUTION : Sample Dilution Factor
EXT DATE : Extract Date
EXT VOL : Extract Volume
FOUND : Spiked Sample Conc. - Unspiked Sample Conc.
INJ VOL : Injection Volume
REL%DIFF : % Difference between current and previous spike.
RESPONSE : Sample Response
R.T. : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
- DA -- Data Sample
- MB -- Method Blank
- RF -- Reference (from commercially known standard)
- RP -- Replicate Sample
- SP -- Standard Matrix Spike
- SPM -- Sample Matrix Spike
- STD -- Internal Standard
- SUR -- Surrogate Sample
- UN -- Unspiked Sample

SAMP VOL : Sample Volume
SPK CONC : Spike Concentration
ST : Sample response explanation or validity. (listed below)
- BK -- No sample response.
- NA -- Sample not analyzed.
- NR -- Not reserved for this batch. Batch containing the response for this sample is listed in the target field.
- OK -- Sample response shown is correct.
- ! -- Sample response shown is invalid.
- < -- Sample response < detection limit. Detection limit is shown in the response field.

STORET*MTHD: Storet ID * Method Code
TARGET : Spike Target (SAMPLE LISTING SECTION)
TARGET : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE : Response Type ("FINAL" or empty.)
UNSP CONC : Unspiked Sample Concentration

ESE BATCH : G48468
CLASSIFICATION : PR. POLL. ICAP METALS - EPA 6010

QC TYPE : FDER/SW
ANALYST : KENT BRAKEFIELD
EXTRACTOR : DENISE RODRIGUEZ
DATA ENTRY : ICAP UPLOAD

REPORT DATE/TIME : 05/20/94 06:20:05
ANALYSIS DATE : 04/27/94
EXTRACT DATE : 04/26/94

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS		1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*10	WA07-1-01	04/27/94	10:21AM
CDMHNSS*11	WA07-2-05	04/27/94	10:23AM
CDMHNSS*12	WA05-1-04	04/27/94	10:25AM

ESE BATCH : G48468

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H.T.	OVER

ALL HOLDING TIMES MET

STORET: 1078 METHOD: 6010-G SILVER, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=.005 DATE: 04/27/94 LARGEST RESP= %RSD= RT WINDOW:

STORET: 1008 METHOD: 6010-G BARIUM, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=.02 DATE: 04/27/94 LARGEST RESP= %RSD= RT WINDOW:

STORET: 1028 METHOD: 6010-G CADMIUM, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=.005 DATE: 04/27/94 LARGEST RESP= %RSD= RT WINDOW:

STORET: 1029 METHOD: 6010-G CHROMIUM, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=.01 DATE: 04/27/94 LARGEST RESP= %RSD= RT WINDOW:

STORET: 1052 METHOD: 6010-G LEAD, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=.1 DATE: 04/27/94 LARGEST RESP= %RSD= RT WINDOW:

ESE BATCH : G48468

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G48468 Analysis Date: 04/27/94 Analyst: KENT BRAKEFIELD

	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		
CCV present?	X		
CCV within acceptance criteria?	X		
ICS present?	X		
ICS 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	ID _____
			IR _____
Analytical spike present?	X		
Analytical spike within acceptance criteria?	X		

Note: Any "NO" answer requires a comment.

OVERRIDE COMMENTS

BATCH OVERRIDE BY: KATHY BARRY 1708
PROB.:SAMPLE MATRIX SPIKE DUPLICATE NOT
WITHIN ACCEPTANCE CRITERIA.
EXPL.:POSSIBLE LACK OF HOMOGENEITY./KSB

ESE BATCH : G48468

TABLE OF ABBREVIATIONS

```
%RECV       : % Recovery for spiked sample. (FOUND/TARGET * 100)
ANLY DATE   : Analysis Date
ANLY TIME   : Analysis Time
CURVE       : Curve Regression Number
DILUTION    : Sample Dilution Factor
EXT DATE    : Extract Date
EXT VOL     : Extract Volume
FOUND       : Spiked Sample Conc. - Unspiked Sample Conc.
INJ VOL     : Injection Volume
REL%DIFF    : % Difference between current and previous spike.
RESPONSE    : Sample Response
R.T.        : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID   : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
      DA  -- Data Sample
      MB  -- Method Blank
      RF  -- Reference (from commercially known standard)
      RP  -- Replicate Sample
      SP  -- Standard Matrix Spike
      SPM -- Sample Matrix Spike
      STD -- Internal Standard
      SUR -- Surrogate Sample
      UN  -- Unspiked Sample
SAMP VOL    : Sample Volume
SPK CONC    : Spike Concentration
ST          : Sample response explanation or validity. (listed below)
      BK  -- No sample response.
      NA  -- Sample not analyzed.
      NR  -- Not reserved for this batch.  Batch containing the response
             for this sample is listed in the target field.
      OK  -- Sample response shown is correct.
      !   -- Sample response shown is invalid.
      <   -- Sample response < detection limit. Detection limit is shown
             in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET      : Spike Target (SAMPLE LISTING SECTION)
TARGET      : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE        : Response Type ("FINAL" or empty.)
UNSP CONC   : Unspiked Sample Concentration
```

ESE BATCH : G48528
CLASSIFICATION : PR. POLL. ICAP METALS - EPA 6010

QC TYPE : FDER/SW
ANALYST : GARRY PRICE
EXTRACTOR : DAVID NICHOLS
DATA ENTRY : ICAP UPLOAD

REPORT DATE/TIME : 05/20/94 06:20:49
ANALYSIS DATE : 04/28/94
EXTRACT DATE : 04/27/94

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

FIELD GRP QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS	1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*13	WA05-2-03	04/28/94	11:01AM
CDMHNSS*14	WA05-3-04	04/28/94	11:03AM
CDMHNSS*15	WA04-1-05	04/28/94	11:07AM
CDMHNSS*16	WA04-2-12	04/28/94	11:09AM

ESE BATCH : G48528

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H.T.	OVER

ALL HOLDING TIMES MET

STORET: 1078 METHOD: 6010-G SILVER, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=.005 DATE: 04/28/94 LARGEST RESP= %RSD= RT WINDOW:

STORET: 1008 METHOD: 6010-G BARIUM, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=.02 DATE: 04/28/94 LARGEST RESP= %RSD= RT WINDOW:

STORET: 1028 METHOD: 6010-G CADMIUM, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=.005 DATE: 04/28/94 LARGEST RESP= %RSD= RT WINDOW:

STORET: 1029 METHOD: 6010-G CHROMIUM, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=.01 DATE: 04/28/94 LARGEST RESP= %RSD= RT WINDOW:

STORET: 1052 METHOD: 6010-G LEAD, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=.1 DATE: 04/28/94 LARGEST RESP= %RSD= RT WINDOW:

ESE BATCH G48528

Continuing Calibration Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
04/28/94	CCB*QC*1	1078*6010-G	SILVER	MG/KG-	0.001
04/28/94	CCB*QC*1	1008*6010-G	BARIUM	MG/KG-	0.0001
04/28/94	CCB*QC*1	1028*6010-G	CADMIUM	MG/KG-	ND
04/28/94	CCB*QC*1	1029*6010-G	CHROMIUM	MG/KG-	0.0006
04/28/94	CCB*QC*1	1052*6010-G	LEAD	MG/KG-	0.005

Continuing Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/28/94	CCV*STD2*1	1078*6010-G	SILVER	MG/KG-		ND		80-120
04/28/94	CCV*STD2*1	1008*6010-G	BARIUM	MG/KG-	1.00	0.990	99.0	90-110
04/28/94	CCV*STD2*1	1028*6010-G	CADMIUM	MG/KG-	1.00	0.995	99.5	90-110
04/28/94	CCV*STD2*1	1029*6010-G	CHROMIUM	MG/KG-	1.00	0.992	99.2	90-110
04/28/94	CCV*STD2*1	1052*6010-G	LEAD	MG/KG-	1.00	1.01	101	90-110
04/28/94	CCV*STD4*1	1078*6010-G	SILVER	MG/KG-	1.00	1.00	100.0	80-120
04/28/94	CCV*STD4*1	1008*6010-G	BARIUM	MG/KG-		ND		90-110
04/28/94	CCV*STD4*1	1028*6010-G	CADMIUM	MG/KG-		ND		90-110
04/28/94	CCV*STD4*1	1029*6010-G	CHROMIUM	MG/KG-		ND		90-110
04/28/94	CCV*STD4*1	1052*6010-G	LEAD	MG/KG-		ND		90-110
04/28/94	CCV*QC*1	1078*6010-G	SILVER	MG/KG-	0.500	0.514	103	80-120
04/28/94	CCV*QC*1	1008*6010-G	BARIUM	MG/KG-	0.500	0.500	100.0	90-110
04/28/94	CCV*QC*1	1028*6010-G	CADMIUM	MG/KG-	0.500	0.506	101	90-110
04/28/94	CCV*QC*1	1029*6010-G	CHROMIUM	MG/KG-	0.500	0.503	101	90-110
04/28/94	CCV*QC*1	1052*6010-G	LEAD	MG/KG-	0.500	0.501	100	90-110

Interference Check Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/28/94	ICS*A*1	1078*6010-G	SILVER	MG/KG-		ND		80-120
04/28/94	ICS*A*1	1008*6010-G	BARIUM	MG/KG-		ND		80-120
04/28/94	ICS*A*1	1028*6010-G	CADMIUM	MG/KG-		ND		80-120
04/28/94	ICS*A*1	1029*6010-G	CHROMIUM	MG/KG-		ND		80-120
04/28/94	ICS*A*1	1052*6010-G	LEAD	MG/KG-		ND		80-120
04/28/94	ICS*AB*1	1078*6010-G	SILVER	MG/KG-	1.00	0.993	99.3	80-120
04/28/94	ICS*AB*1	1008*6010-G	BARIUM	MG/KG-	0.500	0.495	99.0	80-120
04/28/94	ICS*AB*1	1028*6010-G	CADMIUM	MG/KG-	1.00	0.939	93.9	80-120
04/28/94	ICS*AB*1	1029*6010-G	CHROMIUM	MG/KG-	0.500	0.468	93.6	80-120
04/28/94	ICS*AB*1	1052*6010-G	LEAD	MG/KG-	1.00	0.898	89.8	80-120
04/28/94	ICS*A*2	1078*6010-G	SILVER	MG/KG-		ND		80-120
04/28/94	ICS*A*2	1008*6010-G	BARIUM	MG/KG-		ND		80-120
04/28/94	ICS*A*2	1028*6010-G	CADMIUM	MG/KG-		ND		80-120
04/28/94	ICS*A*2	1029*6010-G	CHROMIUM	MG/KG-		ND		80-120
04/28/94	ICS*A*2	1052*6010-G	LEAD	MG/KG-		ND		80-120
04/28/94	ICS*AB*2	1078*6010-G	SILVER	MG/KG-	1.00	0.998	99.8	80-120
04/28/94	ICS*AB*2	1008*6010-G	BARIUM	MG/KG-	0.500	0.492	98.4	80-120
04/28/94	ICS*AB*2	1028*6010-G	CADMIUM	MG/KG-	1.00	0.979	97.9	80-120
04/28/94	ICS*AB*2	1029*6010-G	CHROMIUM	MG/KG-	0.500	0.468	93.6	80-120
04/28/94	ICS*AB*2	1052*6010-G	LEAD	MG/KG-	1.00	0.912	91.2	80-120

Initial Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/28/94	ICV*ICAP19*1	1078*6010-G	SILVER	MG/KG-		ND		90-110
04/28/94	ICV*ICAP19*1	1008*6010-G	BARIUM	MG/KG-		ND		90-110
04/28/94	ICV*ICAP19*1	1028*6010-G	CADMIUM	MG/KG-	1.00	0.986	98.6	90-110
04/28/94	ICV*ICAP19*1	1029*6010-G	CHROMIUM	MG/KG-	1.00	1.01	101	90-110
04/28/94	ICV*ICAP19*1	1052*6010-G	LEAD	MG/KG-	1.00	1.01	101	90-110
04/28/94	ICV*ICAP7*1	1078*6010-G	SILVER	MG/KG-	1.00	1.04	104	90-110
04/28/94	ICV*ICAP7*1	1008*6010-G	BARIUM	MG/KG-	1.00	1.01	101	90-110
04/28/94	ICV*ICAP7*1	1028*6010-G	CADMIUM	MG/KG-		ND		90-110
04/28/94	ICV*ICAP7*1	1029*6010-G	CHROMIUM	MG/KG-		ND		90-110
04/28/94	ICV*ICAP7*1	1052*6010-G	LEAD	MG/KG-		ND		90-110

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
04/28/94	MB*REGENTS*1	1078*6010-G	SILVER	MG/KG-	ND
04/28/94	MB*REGENTS*1	1008*6010-G	BARIUM	MG/KG-	0.0003
04/28/94	MB*REGENTS*1	1028*6010-G	CADMIUM	MG/KG-	0.0003
04/28/94	MB*REGENTS*1	1029*6010-G	CHROMIUM	MG/KG-	0.002
04/28/94	MB*REGENTS*1	1052*6010-G	LEAD	MG/KG-	0.008
04/28/94	MB*QC*1	1078*6010-G	SILVER	MG/KG-	ND
04/28/94	MB*QC*1	1008*6010-G	BARIUM	MG/KG-	ND

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Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
04/28/94	MB*QC*1	1028*6010-G	CADMIUM	MG/KG-	ND
04/28/94	MB*QC*1	1029*6010-G	CHROMIUM	MG/KG-	ND
04/28/94	MB*QC*1	1052*6010-G	LEAD	MG/KG-	ND

Serial Dilution Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	REP #1	REP #2	RPD	RPD CRIT
04/28/94	SD*CDMHNSS*16	1078*6010-G	SILVER	MG/KG-	0.0	ND	NC	10
04/28/94	SD*CDMHNSS*16	1008*6010-G	BARIUM	MG/KG-	101	109	7.60	10
04/28/94	SD*CDMHNSS*16	1028*6010-G	CADMIUM	MG/KG-	0.0	ND	NC	10
04/28/94	SD*CDMHNSS*16	1029*6010-G	CHROMIUM	MG/KG-	9.20	9.86	6.90	10
04/28/94	SD*CDMHNSS*16	1052*6010-G	LEAD	MG/KG-	12.0	13.3	10.3	10

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
04/28/94	SP*QC*1	1078*6010-G	SILVER	99.0	73-107	MG/KG-	4.95	4.90
04/28/94	SP*QC*1	1008*6010-G	BARIUM	99.5	86-106	MG/KG-	198	197
04/28/94	SP*QC*1	1028*6010-G	CADMIUM	100.2	80-108	MG/KG-	4.95	4.96
04/28/94	SP*QC*1	1029*6010-G	CHROMIUM	98.5	79-109	MG/KG-	19.8	19.5
04/28/94	SP*QC*1	1052*6010-G	LEAD	98.8	79-109	MG/KG-	49.5	48.9

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
04/28/94	SPM1*CDMHNSS*16	1078*6010-G	SILVER	96.6	73-107	0.0	MG/KG-	5.06	4.89
04/28/94	SPM1*CDMHNSS*16	1008*6010-G	BARIUM	99.5	86-106	101	MG/KG-	202	201
04/28/94	SPM1*CDMHNSS*16	1028*6010-G	CADMIUM	104.2	80-108	0.0	MG/KG-	5.06	5.27
04/28/94	SPM1*CDMHNSS*16	1029*6010-G	CHROMIUM	93.1	79-109	9.20	MG/KG-	20.2	18.8
04/28/94	SPM1*CDMHNSS*16	1052*6010-G	LEAD	95.5	79-109	12.0	MG/KG-	50.6	48.3
04/28/94	SPM2*CDMHNSS*16	1078*6010-G	SILVER	95.3	73-107	0.0	MG/KG-	5.15	4.91
04/28/94	SPM2*CDMHNSS*16	1008*6010-G	BARIUM	101.0	86-106	101	MG/KG-	206	208
04/28/94	SPM2*CDMHNSS*16	1028*6010-G	CADMIUM	100.6	80-108	0.0	MG/KG-	5.15	5.18
04/28/94	SPM2*CDMHNSS*16	1029*6010-G	CHROMIUM	102.4	79-109	9.20	MG/KG-	20.6	21.1
04/28/94	SPM2*CDMHNSS*16	1052*6010-G	LEAD	96.5	79-109	12.0	MG/KG-	51.5	49.7

Spike into Matrix Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
04/28/94	SPX*CDMHNSS*16	1078*6010-G	SILVER	103.8	85-115	MG/KG-	50.4	52.3
04/28/94	SPX*CDMHNSS*16	1008*6010-G	BARIUM	108.7	85-115	MG/KG-	50.4	54.8
04/28/94	SPX*CDMHNSS*16	1028*6010-G	CADMIUM	100.8	85-115	MG/KG-	50.4	50.8
04/28/94	SPX*CDMHNSS*16	1029*6010-G	CHROMIUM	102.2	85-115	MG/KG-	50.4	51.5
04/28/94	SPX*CDMHNSS*16	1052*6010-G	LEAD	102.8	85-115	MG/KG-	50.4	51.8

ESE BATCH : G48528

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G48528 Analysis Date 04/28/94 Analyst: GARRY PRICE

	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		
CCV present?	X		
CCV within acceptance criteria?	X		
ICS present?	X		
ICS 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		
Analytical spike present?	X		
Analytical spike within acceptance criteria?	X		

Note: Any "NO" answer requires a comment.

OVERRIDE COMMENTS

BATCH OVERRIDE BY:

ESE BATCH : G48528

TABLE OF ABBREVIATIONS

```
%RECV       : % Recovery for spiked sample. (FOUND/TARGET * 100)
ANLY DATE   : Analysis Date
ANLY TIME   : Analysis Time
CURVE       : Curve Regression Number
DILUTION    : Sample Dilution Factor
EXT DATE    : Extract Date
EXT VOL     : Extract Volume
FOUND       : Spiked Sample Conc. - Unspiked Sample Conc
INJ VOL     : Injection Volume
REL%DIFF    : % Difference between current and previous spike.
RESPONSE    : Sample Response
R.T.        : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID   : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
      DA  -- Data Sample
      MB  -- Method Blank
      RF  -- Reference (from commercially known standard)
      RP  -- Replicate Sample
      SP  -- Standard Matrix Spike
      SPM -- Sample Matrix Spike
      STD -- Internal Standard
      SUR -- Surrogate Sample
      UN  -- Unspiked Sample
SAMP VOL    : Sample Volume
SPK CONC    : Spike Concentration
ST          : Sample response explanation or validity. (listed below)
      BK  -- No sample response.
      NA  -- Sample not analyzed.
      NR  -- Not reserved for this batch.  Batch containing the response
             for this sample is listed in the target field.
      OK  -- Sample response shown is correct.
      !   -- Sample response shown is invalid.
      <   -- Sample response < detection limit. Detection limit is shown
             in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET      : Spike Target (SAMPLE LISTING SECTION)
TARGET      : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE        : Response Type ("FINAL" or empty.)
UNSP CONC   : Unspiked Sample Concentration
```

ESE BATCH : G48672
CLASSIFICATION : PR. POLL. ICAP METALS - EPA 6010

QC TYPE : FDER/SW
ANALYST : GARRY PRICE
EXTRACTOR : DENISE RODRIGUEZ
DATA ENTRY : ICAP UPLOAD

REPORT DATE/TIME : 05/20/94 06:21:32
ANALYSIS DATE : 05/02/94
EXTRACT DATE : 04/29/94

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS		1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*17	EA14-1-01	05/02/94	11:12AM
CDMHNSS*18	EA14-2-01	05/02/94	11:15AM
CDMHNSS*19	EA12-1-10	05/02/94	11:17AM
CDMHNSS*20	EA12-2-12	05/02/94	11:19AM

ESE BATCH : G48672

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H T. OVER

ALL HOLDING TIMES MET

STORET: 1078 METHOD: 6010-G SILVER, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=.005 DATE: 05/02/94 LARGEST RESP= %RSD= RT WINDOW:

STORET: 1008 METHOD: 6010-G BARIUM, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=.02 DATE: 05/02/94 LARGEST RESP= %RSD= RT WINDOW:

STORET: 1028 METHOD: 6010-G CADMIUM, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=.005 DATE: 05/02/94 LARGEST RESP= %RSD= RT WINDOW:

STORET: 1029 METHOD: 6010-G CHROMIUM, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=.01 DATE: 05/02/94 LARGEST RESP= %RSD= RT WINDOW:

STORET: 1052 METHOD: 6010-G LEAD, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=.1 DATE: 05/02/94 LARGEST RESP= %RSD= RT WINDOW:

ESE BATCH : G48672

Continuing Calibration Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/02/94	CCB*QC*1	1078*6010-G	SILVER	MG/KG-	ND
05/02/94	CCB*QC*1	1008*6010-G	BARIUM	MG/KG-	ND
05/02/94	CCB*QC*1	1028*6010-G	CADMIUM	MG/KG-	ND
05/02/94	CCB*QC*1	1029*6010-G	CHROMIUM	MG/KG-	ND
05/02/94	CCB*QC*1	1052*6010-G	LEAD	MG/KG-	ND

Continuing Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/02/94	CCV*STD2*1	1078*6010-G	SILVER	MG/KG-		ND		80-120
05/02/94	CCV*STD2*1	1008*6010-G	BARIUM	MG/KG-	1.00	0.981	98.1	90-110
05/02/94	CCV*STD2*1	1028*6010-G	CADMIUM	MG/KG-	1.00	1.00	100.0	90-110
05/02/94	CCV*STD2*1	1029*6010-G	CHROMIUM	MG/KG-	1.00	0.984	98.4	90-110
05/02/94	CCV*STD2*1	1052*6010-G	LEAD	MG/KG-	1.00	1.01	101	90-110
05/02/94	CCV*STD4*1	1078*6010-G	SILVER	MG/KG-	1.00	1.01	101	80-120
05/02/94	CCV*STD4*1	1008*6010-G	BARIUM	MG/KG-		ND		90-110
05/02/94	CCV*STD4*1	1028*6010-G	CADMIUM	MG/KG-		ND		90-110
05/02/94	CCV*STD4*1	1029*6010-G	CHROMIUM	MG/KG-		ND		90-110
05/02/94	CCV*STD4*1	1052*6010-G	LEAD	MG/KG-		ND		90-110
05/02/94	CCV*QC*1	1078*6010-G	SILVER	MG/KG-	0.500	0.521	104	80-120
05/02/94	CCV*QC*1	1008*6010-G	BARIUM	MG/KG-	0.500	0.489	97.8	90-110
05/02/94	CCV*QC*1	1028*6010-G	CADMIUM	MG/KG-	0.500	0.515	103	90-110
05/02/94	CCV*QC*1	1029*6010-G	CHROMIUM	MG/KG-	0.500	0.493	98.6	90-110
05/02/94	CCV*QC*1	1052*6010-G	LEAD	MG/KG-	0.500	0.488	97.6	90-110

Interference Check Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/02/94	ICS*A*1	1078*6010-G	SILVER	MG/KG-		ND		80-120
05/02/94	ICS*A*1	1008*6010-G	BARIUM	MG/KG-		ND		80-120
05/02/94	ICS*A*1	1028*6010-G	CADMIUM	MG/KG-		ND		80-120
05/02/94	ICS*A*1	1029*6010-G	CHROMIUM	MG/KG-		ND		80-120
05/02/94	ICS*A*1	1052*6010-G	LEAD	MG/KG-		ND		80-120
05/02/94	ICS*AB*1	1078*6010-G	SILVER	MG/KG-	1.00	1.02	102	80-120
05/02/94	ICS*AB*1	1008*6010-G	BARIUM	MG/KG-	0.500	0.496	99.2	80-120
05/02/94	ICS*AB*1	1028*6010-G	CADMIUM	MG/KG-	1.00	0.985	98.5	80-120
05/02/94	ICS*AB*1	1029*6010-G	CHROMIUM	MG/KG-	0.500	0.468	93.6	80-120
05/02/94	ICS*AB*1	1052*6010-G	LEAD	MG/KG-	1.00	0.918	91.8	80-120
05/02/94	ICS*A*2	1078*6010-G	SILVER	MG/KG-		ND		80-120
05/02/94	ICS*A*2	1008*6010-G	BARIUM	MG/KG-		ND		80-120
05/02/94	ICS*A*2	1028*6010-G	CADMIUM	MG/KG-		ND		80-120
05/02/94	ICS*A*2	1029*6010-G	CHROMIUM	MG/KG-		ND		80-120
05/02/94	ICS*A*2	1052*6010-G	LEAD	MG/KG-		ND		80-120
05/02/94	ICS*AB*2	1078*6010-G	SILVER	MG/KG-	1.00	1.01	101	80-120
05/02/94	ICS*AB*2	1008*6010-G	BARIUM	MG/KG-	0.500	0.483	96.6	80-120
05/02/94	ICS*AB*2	1028*6010-G	CADMIUM	MG/KG-	1.00	0.987	98.7	80-120
05/02/94	ICS*AB*2	1029*6010-G	CHROMIUM	MG/KG-	0.500	0.460	92.0	80-120
05/02/94	ICS*AB*2	1052*6010-G	LEAD	MG/KG-	1.00	0.915	91.5	80-120

Initial Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/02/94	ICV*ICAP19*1	1078*6010-G	SILVER	MG/KG-		ND		90-110
05/02/94	ICV*ICAP19*1	1008*6010-G	BARIUM	MG/KG-		ND		90-110
05/02/94	ICV*ICAP19*1	1028*6010-G	CADMIUM	MG/KG-	1.00	1.02	102	90-110
05/02/94	ICV*ICAP19*1	1029*6010-G	CHROMIUM	MG/KG-	1.00	0.992	99.2	90-110
05/02/94	ICV*ICAP19*1	1052*6010-G	LEAD	MG/KG-	1.00	1.00	100.0	90-110
05/02/94	ICV*ICAP7*1	1078*6010-G	SILVER	MG/KG-	1.00	1.05	105	90-110
05/02/94	ICV*ICAP7*1	1008*6010-G	BARIUM	MG/KG-	1.00	0.986	98.6	90-110
05/02/94	ICV*ICAP7*1	1028*6010-G	CADMIUM	MG/KG-		ND		90-110
05/02/94	ICV*ICAP7*1	1029*6010-G	CHROMIUM	MG/KG-		ND		90-110
05/02/94	ICV*ICAP7*1	1052*6010-G	LEAD	MG/KG-		ND		90-110

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/02/94	MB*REAGENTS*1	1078*6010-G	SILVER	MG/KG-	ND
05/02/94	MB*REAGENTS*1	1008*6010-G	BARIUM	MG/KG-	ND
05/02/94	MB*REAGENTS*1	1028*6010-G	CADMIUM	MG/KG-	ND
05/02/94	MB*REAGENTS*1	1029*6010-G	CHROMIUM	MG/KG-	ND
05/02/94	MB*REAGENTS*1	1052*6010-G	LEAD	MG/KG-	ND
05/02/94	MB*QC*1	1078*6010-G	SILVER	MG/KG-	ND
05/02/94	MB*QC*1	1008*6010-G	BARIUM	MG/KG-	ND

ESE BATCH : G48672

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/02/94	MB*QC*1	1028*6010-G	CADMIUM	MG/KG-	ND
05/02/94	MB*QC*1	1029*6010-G	CHROMIUM	MG/KG-	ND
05/02/94	MB*QC*1	1052*6010-G	LEAD	MG/KG-	ND

Serial Dilution Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	REP #1	REP #2	RPD	RPD CRIT
05/02/94	SD*CDMHNSS*20	1078*6010-G	SILVER	MG/KG-	0.0	ND	NC	10
05/02/94	SD*CDMHNSS*20	1008*6010-G	BARIUM	MG/KG-	145	154	6.00	10
05/02/94	SD*CDMHNSS*20	1028*6010-G	CADMIUM	MG/KG-	0.0	ND	NC	10
05/02/94	SD*CDMHNSS*20	1029*6010-G	CHROMIUM	MG/KG-	15.6	17.5	11.5	10
05/02/94	SD*CDMHNSS*20	1052*6010-G	LEAD	MG/KG-	13.8	15.1	9.00	10

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
05/02/94	SP*QC*1	1078*6010-G	SILVER	103.0	73-107	MG/KG-	5.00	5.15
05/02/94	SP*QC*1	1008*6010-G	BARIUM	98.0	86-106	MG/KG-	200	196
05/02/94	SP*QC*1	1028*6010-G	CADMIUM	105.2	80-108	MG/KG-	5.00	5.26
05/02/94	SP*QC*1	1029*6010-G	CHROMIUM	99.0	79-109	MG/KG-	20.0	19.8
05/02/94	SP*QC*1	1052*6010-G	LEAD	99.0	79-109	MG/KG-	50.0	49.5

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
05/02/94	SPM1*CDMHNSS*20	1078*6010-G	SILVER	97.5	73-107	0.0	MG/KG-	5.21	5.08
05/02/94	SPM1*CDMHNSS*20	1008*6010-G	BARIUM	88.9	86-106	145	MG/KG-	208	185
05/02/94	SPM1*CDMHNSS*20	1028*6010-G	CADMIUM	102.1	80-108	0.0	MG/KG-	5.21	5.32
05/02/94	SPM1*CDMHNSS*20	1029*6010-G	CHROMIUM	101.0	79-109	15.6	MG/KG-	20.8	21.0
05/02/94	SPM1*CDMHNSS*20	1052*6010-G	LEAD	92.9	79-109	13.8	MG/KG-	52.1	48.4
05/02/94	SPM2*CDMHNSS*20	1078*6010-G	SILVER	95.4	73-107	0.0	MG/KG-	5.21	4.97
05/02/94	SPM2*CDMHNSS*20	1008*6010-G	BARIUM	77.9	86-106	145	MG/KG-	208	162
05/02/94	SPM2*CDMHNSS*20	1028*6010-G	CADMIUM	98.8	80-108	0.0	MG/KG-	5.21	5.15
05/02/94	SPM2*CDMHNSS*20	1029*6010-G	CHROMIUM	84.6	79-109	15.6	MG/KG-	20.8	17.6
05/02/94	SPM2*CDMHNSS*20	1052*6010-G	LEAD	92.7	79-109	13.8	MG/KG-	52.1	48.3

Spike into Matrix Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
05/02/94	SPX*CDMHNSS*20	1078*6010-G	SILVER	104.2	85-115	MG/KG-	52.1	54.3
05/02/94	SPX*CDMHNSS*20	1008*6010-G	BARIUM	109.6	85-115	MG/KG-	52.1	57.1
05/02/94	SPX*CDMHNSS*20	1028*6010-G	CADMIUM	102.3	85-115	MG/KG-	52.1	53.3
05/02/94	SPX*CDMHNSS*20	1029*6010-G	CHROMIUM	99.2	85-115	MG/KG-	52.1	51.7
05/02/94	SPX*CDMHNSS*20	1052*6010-G	LEAD	94.2	85-115	MG/KG-	52.1	49.1

ESE BATCH : G48672

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G48672 Analysis Date 06/02/94 Analyst: GARRY PRICE

	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		
CCV present?	X		
CCV within acceptance criteria?	X		
ICS present?	X		
ICS 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	BA _____
			TR _____
Analytical spike present?	X		
Analytical spike within acceptance criteria?	X		

Note: Any "NO" answer requires a comment.

OVERRIDE COMMENTS

BATCH OVERRIDE BY: KATHY BARRY 1708
PROB.:SAMPLE MATRIX SPIKE DUPLICATE
NOT WITHIN ACCEPTANCE CRITERIA.
EXPL.:LACK OF HOMOGENEITY./GP

TABLE OF ABBREVIATIONS

```
%RECV       : % Recovery for spiked sample. (FOUND/TARGET * 100)
ANLY DATE   : Analysis Date
ANLY TIME   : Analysis Time
CURVE       : Curve Regression Number
DILUTION    : Sample Dilution Factor
EXT DATE    : Extract Date
EXT VOL     : Extract Volume
FOUND       : Spiked Sample Conc. - Unspiked Sample Conc.
INJ VOL     : Injection Volume
REL%DIFF    : % Difference between current and previous spike.
RESPONSE    : Sample Response
R.T.        : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID   : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
      DA  -- Data Sample
      MB  -- Method Blank
      RF  -- Reference (from commercially known standard)
      RP  -- Replicate Sample
      SP  -- Standard Matrix Spike
      SPM -- Sample Matrix Spike
      STD -- Internal Standard
      SUR -- Surrogate Sample
      UN  -- Unspiked Sample
SAMP VOL    : Sample Volume
SPK CONC    : Spike Concentration
ST          : Sample response explanation or validity. (listed below)
      BK  -- No sample response.
      NA  -- Sample not analyzed.
      NR  -- Not reserved for this batch.  Batch containing the response
             for this sample is listed in the target field.
      OK  -- Sample response shown is correct.
      !   -- Sample response shown is invalid.
      <   -- Sample response < detection limit. Detection limit is shown
             in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET      : Spike Target (SAMPLE LISTING SECTION)
TARGET      : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE        : Response Type ("FINAL" or empty.)
UNSP CONC   : Unspiked Sample Concentration
```

ESE BATCH : G48756
CLASSIFICATION : PR. POLL. ICAP METALS - EPA 6010

QC TYPE : FDER/SW
ANALYST : GARRY PRICE
EXTRACTOR : DENISE RODRIGUEZ
DATA ENTRY : ICAP UPLOAD

REPORT DATE/TIME : 05/20/94 06:22:16
ANALYSIS DATE : 05/04/94
EXTRACT DATE : 05/03/94

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS		1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*21	EA11-1-07	05/04/94	10:37AM
CDMHNSS*22	EA01-1-10	05/04/94	10:39AM

ESE BATCH : G48756

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H.T.	CVER

ALL HOLDING TIMES MET

STORET: 1078 METHOD: 6010-G SILVER, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=.005 DATE: 05/04/94 LARGEST RESP= %RSD= RT WINDOW:

STORET: 1008 METHOD: 6010-G BARIUM, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=.02 DATE: 05/04/94 LARGEST RESP= %RSD= RT WINDOW:

STORET: 1028 METHOD: 6010-G CADMIUM, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=.005 DATE: 05/04/94 LARGEST RESP= %RSD= RT WINDOW:

STORET: 1029 METHOD: 6010-G CHROMIUM, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=.01 DATE: 05/04/94 LARGEST RESP= %RSD= RT WINDOW:

STORET: 1052 METHOD: 6010-G LEAD, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=.1 DATE: 05/04/94 LARGEST RESP= %RSD= RT WINDOW:

ESE BATCH : G48756

Continuing Calibration Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/04/94	CCB*QC*1	1078*6010-G	SILVER	MG/KG-	0.0003
05/04/94	CCB*QC*1	1008*6010-G	BARIUM	MG/KG-	ND
05/04/94	CCB*QC*1	1028*6010-G	CADMIUM	MG/KG-	0.0005
05/04/94	CCB*QC*1	1029*6010-G	CHROMIUM	MG/KG-	0.0006
05/04/94	CCB*QC*1	1052*6010-G	LEAD	MG/KG-	0.003

Continuing Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/04/94	CCV*STD2*1	1078*6010-G	SILVER	MG/KG-		ND		80-120
05/04/94	CCV*STD2*1	1008*6010-G	BARIUM	MG/KG-	1.00	0.988	98.8	90-110
05/04/94	CCV*STD2*1	1028*6010-G	CADMIUM	MG/KG-	1.00	0.986	98.6	90-110
05/04/94	CCV*STD2*1	1029*6010-G	CHROMIUM	MG/KG-	1.00	0.987	98.7	90-110
05/04/94	CCV*STD2*1	1052*6010-G	LEAD	MG/KG-	1.00	1.00	100.0	90-110
05/04/94	CCV*STD4*1	1078*6010-G	SILVER	MG/KG-	1.00	0.996	99.6	80-120
05/04/94	CCV*STD4*1	1008*6010-G	BARIUM	MG/KG-		ND		90-110
05/04/94	CCV*STD4*1	1028*6010-G	CADMIUM	MG/KG-		ND		90-110
05/04/94	CCV*STD4*1	1029*6010-G	CHROMIUM	MG/KG-		ND		90-110
05/04/94	CCV*STD4*1	1052*6010-G	LEAD	MG/KG-		ND		90-110
05/04/94	CCV*QC*1	1078*6010-G	SILVER	MG/KG-	0.500	0.515	103	80-120
05/04/94	CCV*QC*1	1008*6010-G	BARIUM	MG/KG-	0.500	0.503	101	90-110
05/04/94	CCV*QC*1	1028*6010-G	CADMIUM	MG/KG-	0.500	0.506	101	90-110
05/04/94	CCV*QC*1	1029*6010-G	CHROMIUM	MG/KG-	0.500	0.506	101	90-110
05/04/94	CCV*QC*1	1052*6010-G	LEAD	MG/KG-	0.500	0.518	104	90-110

Interference Check Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/04/94	ICS*A*1	1078*6010-G	SILVER	MG/KG-		ND		80-120
05/04/94	ICS*A*1	1008*6010-G	BARIUM	MG/KG-		ND		80-120
05/04/94	ICS*A*1	1028*6010-G	CADMIUM	MG/KG-		ND		80-120
05/04/94	ICS*A*1	1029*6010-G	CHROMIUM	MG/KG-		ND		80-120
05/04/94	ICS*A*1	1052*6010-G	LEAD	MG/KG-		ND		80-120
05/04/94	ICS*AB*1	1078*6010-G	SILVER	MG/KG-	1.00	1.01	101	80-120
05/04/94	ICS*AB*1	1008*6010-G	BARIUM	MG/KG-	0.500	0.506	101	80-120
05/04/94	ICS*AB*1	1028*6010-G	CADMIUM	MG/KG-	1.00	0.967	96.7	80-120
05/04/94	ICS*AB*1	1029*6010-G	CHROMIUM	MG/KG-	0.500	0.479	95.8	80-120
05/04/94	ICS*AB*1	1052*6010-G	LEAD	MG/KG-	1.00	0.942	94.2	80-120
05/04/94	ICS*A*2	1078*6010-G	SILVER	MG/KG-		ND		80-120
05/04/94	ICS*A*2	1008*6010-G	BARIUM	MG/KG-		ND		80-120
05/04/94	ICS*A*2	1028*6010-G	CADMIUM	MG/KG-		ND		80-120
05/04/94	ICS*A*2	1029*6010-G	CHROMIUM	MG/KG-		ND		80-120
05/04/94	ICS*A*2	1052*6010-G	LEAD	MG/KG-		ND		80-120
05/04/94	ICS*AB*2	1078*6010-G	SILVER	MG/KG-	1.00	1.02	102	80-120
05/04/94	ICS*AB*2	1008*6010-G	BARIUM	MG/KG-	0.500	0.504	101	80-120
05/04/94	ICS*AB*2	1028*6010-G	CADMIUM	MG/KG-	1.00	0.993	99.3	80-120
05/04/94	ICS*AB*2	1029*6010-G	CHROMIUM	MG/KG-	0.500	0.480	96.0	80-120
05/04/94	ICS*AB*2	1052*6010-G	LEAD	MG/KG-	1.00	0.957	95.7	80-120

Initial Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/04/94	ICV*ICAP19*1	1078*6010-G	SILVER	MG/KG-		ND		90-110
05/04/94	ICV*ICAP19*1	1008*6010-G	BARIUM	MG/KG-		ND		90-110
05/04/94	ICV*ICAP19*1	1028*6010-G	CADMIUM	MG/KG-	1.00	1.00	100.0	90-110
05/04/94	ICV*ICAP19*1	1029*6010-G	CHROMIUM	MG/KG-	1.00	1.01	101	90-110
05/04/94	ICV*ICAP19*1	1052*6010-G	LEAD	MG/KG-	1.00	1.02	102	90-110
05/04/94	ICV*ICAP7*1	1078*6010-G	SILVER	MG/KG-	1.00	1.03	103	90-110
05/04/94	ICV*ICAP7*1	1008*6010-G	BARIUM	MG/KG-	1.00	1.01	101	90-110
05/04/94	ICV*ICAP7*1	1028*6010-G	CADMIUM	MG/KG-		ND		90-110
05/04/94	ICV*ICAP7*1	1029*6010-G	CHROMIUM	MG/KG-		ND		90-110
05/04/94	ICV*ICAP7*1	1052*6010-G	LEAD	MG/KG-		ND		90-110

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/04/94	MB*REAGENTS*1	1078*6010-G	SILVER	MG/KG-	ND
05/04/94	MB*REAGENTS*1	1008*6010-G	BARIUM	MG/KG-	ND
05/04/94	MB*REAGENTS*1	1028*6010-G	CADMIUM	MG/KG-	ND
05/04/94	MB*REAGENTS*1	1029*6010-G	CHROMIUM	MG/KG-	ND
05/04/94	MB*REAGENTS*1	1052*6010-G	LEAD	MG/KG-	ND
05/04/94	MB*QC*1	1078*6010-G	SILVER	MG/KG-	ND
05/04/94	MB*QC*1	1008*6010-G	BARIUM	MG/KG-	ND

ESE BATCH : G48756

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/04/94	MB*QC*1	1028*6010-G	CADMIUM	MG/KG-	ND
05/04/94	MB*QC*1	1029*6010-G	CHROMIUM	MG/KG-	ND
05/04/94	MB*QC*1	1052*6010-G	LEAD	MG/KG-	ND

Serial Dilution Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	REP #1	REP #2	RPD	RPD CRIT
05/04/94	SD*CDMHNSS*22	1078*6010-G	SILVER	MG/KG-	0.0	ND	NC	10
05/04/94	SD*CDMHNSS*22	1008*6010-G	BARIUM	MG/KG-	119	117	1.70	10
05/04/94	SD*CDMHNSS*22	1028*6010-G	CADMIUM	MG/KG-	0.0	0.328	NC	10
05/04/94	SD*CDMHNSS*22	1029*6010-G	CHROMIUM	MG/KG-	15.4	16.5	6.90	10
05/04/94	SD*CDMHNSS*22	1052*6010-G	LEAD	MG/KG-	11.2	11.9	6.10	10

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
05/04/94	SP*QC*1	1078*6010-G	SILVER	102.6	73-107	MG/KG-	5.00	5.13
05/04/94	SP*QC*1	1008*6010-G	BARIUM	97.5	86-106	MG/KG-	200	195
05/04/94	SP*QC*1	1028*6010-G	CADMIUM	102.2	80-108	MG/KG-	5.00	5.11
05/04/94	SP*QC*1	1029*6010-G	CHROMIUM	99.0	79-109	MG/KG-	20.0	19.8
05/04/94	SP*QC*1	1052*6010-G	LEAD	99.8	79-109	MG/KG-	50.0	49.9

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
05/04/94	SPM1*CDMHNSS*22	1078*6010-G	SILVER	96.0	73-107	0.0	MG/KG-	5.48	5.26
05/04/94	SPM1*CDMHNSS*22	1008*6010-G	BARIUM	95.4	86-106	119	MG/KG-	219	209
05/04/94	SPM1*CDMHNSS*22	1028*6010-G	CADMIUM	97.6	80-108	0.0	MG/KG-	5.48	5.35
05/04/94	SPM1*CDMHNSS*22	1029*6010-G	CHROMIUM	95.4	79-109	15.4	MG/KG-	21.9	20.9
05/04/94	SPM1*CDMHNSS*22	1052*6010-G	LEAD	95.3	79-109	11.2	MG/KG-	54.8	52.2
05/04/94	SPM2*CDMHNSS*22	1078*6010-G	SILVER	92.3	73-107	0.0	MG/KG-	5.48	5.06
05/04/94	SPM2*CDMHNSS*22	1008*6010-G	BARIUM	97.7	86-106	119	MG/KG-	219	214
05/04/94	SPM2*CDMHNSS*22	1028*6010-G	CADMIUM	97.1	80-108	0.0	MG/KG-	5.48	5.32
05/04/94	SPM2*CDMHNSS*22	1029*6010-G	CHROMIUM	99.5	79-109	15.4	MG/KG-	21.9	21.8
05/04/94	SPM2*CDMHNSS*22	1052*6010-G	LEAD	94.3	79-109	11.2	MG/KG-	54.8	51.7

Spike into Matrix Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
05/04/94	SPX*CDMHNSS*22	1078*6010-G	SILVER	102.4	85-115	MG/KG-	54.7	56.0
05/04/94	SPX*CDMHNSS*22	1008*6010-G	BARIUM	101.8	85-115	MG/KG-	54.7	55.7
05/04/94	SPX*CDMHNSS*22	1028*6010-G	CADMIUM	99.6	85-115	MG/KG-	54.7	54.5
05/04/94	SPX*CDMHNSS*22	1029*6010-G	CHROMIUM	99.5	85-115	MG/KG-	54.7	54.4
05/04/94	SPX*CDMHNSS*22	1052*6010-G	LEAD	99.3	85-115	MG/KG-	54.7	54.3

ESE BATCH : G48756

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G48756 Analysis Date 05/04/94 Analyst: GARRY PRICE

	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		
CCV present?	X		
CCV within acceptance criteria?	X		
ICS present?	X		
ICS 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		
Analytical spike present?	X		
Analytical spike within acceptance criteria?	X		

Note: Any "NO" answer requires a comment.

OVERRIDE COMMENTS

BATCH OVERRIDE BY:

ESE BATCH : G48756

TABLE OF ABBREVIATIONS

```
%RECV       : % Recovery for spiked sample. (FOUND/TARGET * 100)
ANLY DATE   : Analysis Date
ANLY TIME   : Analysis Time
CURVE       : Curve Regression Number
DILUTION    : Sample Dilution Factor
EXT DATE    : Extract Date
EXT VOL     : Extract Volume
FOUND       : Spiked Sample Conc. - Unspiked Sample Conc.
INJ VOL     : Injection Volume
REL%DIFF    : % Difference between current and previous spike.
RESPONSE    : Sample Response
R.T.        : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID   : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
      DA  -- Data Sample
      MB  -- Method Blank
      RF  -- Reference (from commercially known standard)
      RP  -- Replicate Sample
      SP  -- Standard Matrix Spike
      SPM -- Sample Matrix Spike
      STD -- Internal Standard
      SUR -- Surrogate Sample
      UN  -- Unspiked Sample
SAMP VOL    : Sample Volume
SPK CONC    : Spike Concentration
ST          : Sample response explanation or validity. (listed below)
      BK  -- No sample response.
      NA  -- Sample not analyzed.
      NR  -- Not reserved for this batch.  Batch containing the response
             for this sample is listed in the target field.
      OK  -- Sample response shown is correct.
      !   -- Sample response shown is invalid.
      <   -- Sample response < detection limit. Detection limit is shown
             in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET      : Spike Target (SAMPLE LISTING SECTION)
TARGET      : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE        : Response Type ("FINAL" or empty.)
UNSP CONC   : Unspiked Sample Concentration
```

ESE BATCH : G48783
CLASSIFICATION : PR. POLL. ICAP METALS - EPA 6010

QC TYPE : FDER/SW
ANALYST : GARRY PRICE
EXTRACTOR : DEBRA ZUCKERMAN
DATA ENTRY : ICAP UPLOAD

REPORT DATE/TIME : 05/20/94 06:22:58
ANALYSIS DATE : 05/05/94
EXTRACT DATE : 05/04/94

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS		1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*23	OCS1-1-00	05/05/94	11:03AM

ESE BATCH : G48783

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H.T.	OVER

ALL HOLDING TIMES MET

STORET: 1078 METHOD: 6010-G SILVER, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=.005 DATE: 05/05/94 LARGEST RESP= %RSD= RT WINDOW:

STORET: 1008 METHOD: 6010-G BARIUM, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=.02 DATE: 05/05/94 LARGEST RESP= %RSD= RT WINDOW:

STORET: 1028 METHOD: 6010-G CADMIUM, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=.005 DATE: 05/05/94 LARGEST RESP= %RSD= RT WINDOW:

STORET: 1029 METHOD: 6010-G CHROMIUM, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=.01 DATE: 05/05/94 LARGEST RESP= %RSD= RT WINDOW:

STORET: 1052 METHOD: 6010-G LEAD, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=.1 DATE: 05/05/94 LARGEST RESP= %RSD= RT WINDOW:

ESE BATCH : G48783

Continuing Calibration Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/05/94	CCB*QC*1	1078*6010-G	SILVER	MG/KG-	0.0004
05/05/94	CCB*QC*1	1008*6010-G	BARIUM	MG/KG-	ND
05/05/94	CCB*QC*1	1028*6010-G	CADMIUM	MG/KG-	ND
05/05/94	CCB*QC*1	1029*6010-G	CHROMIUM	MG/KG-	ND
05/05/94	CCB*QC*1	1052*6010-G	LEAD	MG/KG-	ND

Continuing Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/05/94	CCV*STD2*1	1078*6010-G	SILVER	MG/KG-		ND		80-120
05/05/94	CCV*STD2*1	1008*6010-G	BARIUM	MG/KG-	1.00	1.02	102	90-110
05/05/94	CCV*STD2*1	1028*6010-G	CADMIUM	MG/KG-	1.00	0.993	99.3	90-110
05/05/94	CCV*STD2*1	1029*6010-G	CHROMIUM	MG/KG-	1.00	1.02	102	90-110
05/05/94	CCV*STD2*1	1052*6010-G	LEAD	MG/KG-	1.00	1.02	102	90-110
05/05/94	CCV*STD4*1	1078*6010-G	SILVER	MG/KG-	1.00	0.991	99.1	80-120
05/05/94	CCV*STD4*1	1008*6010-G	BARIUM	MG/KG-		ND		90-110
05/05/94	CCV*STD4*1	1028*6010-G	CADMIUM	MG/KG-		ND		90-110
05/05/94	CCV*STD4*1	1029*6010-G	CHROMIUM	MG/KG-		ND		90-110
05/05/94	CCV*STD4*1	1052*6010-G	LEAD	MG/KG-		ND		90-110
05/05/94	CCV*QC*1	1078*6010-G	SILVER	MG/KG-	0.500	0.508	102	80-120
05/05/94	CCV*QC*1	1008*6010-G	BARIUM	MG/KG-	0.500	0.505	101	90-110
05/05/94	CCV*QC*1	1028*6010-G	CADMIUM	MG/KG-	0.500	0.507	101	90-110
05/05/94	CCV*QC*1	1029*6010-G	CHROMIUM	MG/KG-	0.500	0.513	103	90-110
05/05/94	CCV*QC*1	1052*6010-G	LEAD	MG/KG-	0.500	0.503	101	90-110

Interference Check Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/05/94	ICS*A*1	1078*6010-G	SILVER	MG/KG-		ND		80-120
05/05/94	ICS*A*1	1008*6010-G	BARIUM	MG/KG-		ND		80-120
05/05/94	ICS*A*1	1028*6010-G	CADMIUM	MG/KG-		ND		80-120
05/05/94	ICS*A*1	1029*6010-G	CHROMIUM	MG/KG-		ND		80-120
05/05/94	ICS*A*1	1052*6010-G	LEAD	MG/KG-		ND		80-120
05/05/94	ICS*AB*1	1078*6010-G	SILVER	MG/KG-	1.00	0.976	97.6	80-120
05/05/94	ICS*AB*1	1008*6010-G	BARIUM	MG/KG-	0.500	0.489	97.8	80-120
05/05/94	ICS*AB*1	1028*6010-G	CADMIUM	MG/KG-	1.00	0.980	98.0	80-120
05/05/94	ICS*AB*1	1029*6010-G	CHROMIUM	MG/KG-	0.500	0.465	93.0	80-120
05/05/94	ICS*AB*1	1052*6010-G	LEAD	MG/KG-	1.00	0.904	90.4	80-120
05/05/94	ICS*A*2	1078*6010-G	SILVER	MG/KG-		ND		80-120
05/05/94	ICS*A*2	1008*6010-G	BARIUM	MG/KG-		ND		80-120
05/05/94	ICS*A*2	1028*6010-G	CADMIUM	MG/KG-		ND		80-120
05/05/94	ICS*A*2	1029*6010-G	CHROMIUM	MG/KG-		ND		80-120
05/05/94	ICS*A*2	1052*6010-G	LEAD	MG/KG-		ND		80-120
05/05/94	ICS*AB*2	1078*6010-G	SILVER	MG/KG-	1.00	1.01	101	80-120
05/05/94	ICS*AB*2	1008*6010-G	BARIUM	MG/KG-	0.500	0.501	100	80-120
05/05/94	ICS*AB*2	1028*6010-G	CADMIUM	MG/KG-	1.00	1.01	101	80-120
05/05/94	ICS*AB*2	1029*6010-G	CHROMIUM	MG/KG-	0.500	0.479	95.8	80-120
05/05/94	ICS*AB*2	1052*6010-G	LEAD	MG/KG-	1.00	0.956	95.6	80-120

Initial Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/05/94	ICV*ICAP19*1	1078*6010-G	SILVER	MG/KG-		ND		90-110
05/05/94	ICV*ICAP19*1	1008*6010-G	BARIUM	MG/KG-		ND		90-110
05/05/94	ICV*ICAP19*1	1028*6010-G	CADMIUM	MG/KG-	1.00	1.01	101	90-110
05/05/94	ICV*ICAP19*1	1029*6010-G	CHROMIUM	MG/KG-	1.00	1.02	102	90-110
05/05/94	ICV*ICAP19*1	1052*6010-G	LEAD	MG/KG-	1.00	1.01	101	90-110
05/05/94	ICV*ICAP7*1	1078*6010-G	SILVER	MG/KG-	1.00	1.01	101	90-110
05/05/94	ICV*ICAP7*1	1008*6010-G	BARIUM	MG/KG-	1.00	1.00	100.0	90-110
05/05/94	ICV*ICAP7*1	1028*6010-G	CADMIUM	MG/KG-		ND		90-110
05/05/94	ICV*ICAP7*1	1029*6010-G	CHROMIUM	MG/KG-		ND		90-110
05/05/94	ICV*ICAP7*1	1052*6010-G	LEAD	MG/KG-		ND		90-110

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/05/94	MB*REAGENTS*1	1078*6010-G	SILVER	MG/KG-	ND
05/05/94	MB*REAGENTS*1	1008*6010-G	BARIUM	MG/KG-	ND
05/05/94	MB*REAGENTS*1	1028*6010-G	CADMIUM	MG/KG-	ND
05/05/94	MB*REAGENTS*1	1029*6010-G	CHROMIUM	MG/KG-	ND
05/05/94	MB*REAGENTS*1	1052*6010-G	LEAD	MG/KG-	ND
05/05/94	MB*QC*1	1078*6010-G	SILVER	MG/KG-	ND
05/05/94	MB*QC*1	1008*6010-G	BARIUM	MG/KG-	ND

ESE BATCH : G48783

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/05/94	MB*QC*1	1028*6010-G	CADMIUM	MG/KG-	ND
05/05/94	MB*QC*1	1029*6010-G	CHROMIUM	MG/KG-	ND
05/05/94	MB*QC*1	1052*6010-G	LEAD	MG/KG-	ND

Serial Dilution Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	REP #1	REP #2	RPD	RPD CRIT
05/05/94	SD*CDMHNSS*23	1078*6010-G	SILVER	MG/KG-	0.0	ND	NC	10
05/05/94	SD*CDMHNSS*23	1008*6010-G	BARIUM	MG/KG-	96.2	97.8	1.60	10
05/05/94	SD*CDMHNSS*23	1028*6010-G	CADMIUM	MG/KG-	0.0	0.209	NC	10
05/05/94	SD*CDMHNSS*23	1029*6010-G	CHROMIUM	MG/KG-	11.3	12.2	7.70	10
05/05/94	SD*CDMHNSS*23	1052*6010-G	LEAD	MG/KG-	5.88	1.94	NC	10

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
05/05/94	SP*QC*1	1078*6010-G	SILVER	95.2	73-107	MG/KG-	4.98	4.74
05/05/94	SP*QC*1	1008*6010-G	BARIUM	96.0	86-106	MG/KG-	199	191
05/05/94	SP*QC*1	1028*6010-G	CADMIUM	96.4	80-108	MG/KG-	4.98	4.80
05/05/94	SP*QC*1	1029*6010-G	CHROMIUM	101.0	79-109	MG/KG-	19.9	20.1
05/05/94	SP*QC*1	1052*6010-G	LEAD	97.0	79-109	MG/KG-	49.8	48.3

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
05/05/94	SPM1*CDMHNSS*23	1078*6010-G	SILVER	89.3	73-107	0.0	MG/KG-	5.21	4.65
05/05/94	SPM1*CDMHNSS*23	1008*6010-G	BARIUM	87.5	86-106	96.2	MG/KG-	208	182
05/05/94	SPM1*CDMHNSS*23	1028*6010-G	CADMIUM	89.1	80-108	0.0	MG/KG-	5.21	4.64
05/05/94	SPM1*CDMHNSS*23	1029*6010-G	CHROMIUM	97.6	79-109	11.3	MG/KG-	20.8	20.3
05/05/94	SPM1*CDMHNSS*23	1052*6010-G	LEAD	91.9	79-109	5.88	MG/KG-	52.1	47.9
05/05/94	SPM2*CDMHNSS*23	1078*6010-G	SILVER	90.8	73-107	0.0	MG/KG-	5.22	4.74
05/05/94	SPM2*CDMHNSS*23	1008*6010-G	BARIUM	92.8	86-106	96.2	MG/KG-	209	194
05/05/94	SPM2*CDMHNSS*23	1028*6010-G	CADMIUM	88.3	80-108	0.0	MG/KG-	5.22	4.61
05/05/94	SPM2*CDMHNSS*23	1029*6010-G	CHROMIUM	108.6	79-109	11.3	MG/KG-	20.9	22.7
05/05/94	SPM2*CDMHNSS*23	1052*6010-G	LEAD	95.0	79-109	5.88	MG/KG-	52.2	49.6

Spike into Matrix Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
05/05/94	SPX*CDMHNSS*23	1078*6010-G	SILVER	97.9	85-115	MG/KG-	52.1	51.0
05/05/94	SPX*CDMHNSS*23	1008*6010-G	BARIUM	103.3	85-115	MG/KG-	52.1	53.8
05/05/94	SPX*CDMHNSS*23	1028*6010-G	CADMIUM	98.3	85-115	MG/KG-	52.1	51.2
05/05/94	SPX*CDMHNSS*23	1029*6010-G	CHROMIUM	97.5	85-115	MG/KG-	52.1	50.8
05/05/94	SPX*CDMHNSS*23	1052*6010-G	LEAD	97.7	85-115	MG/KG-	52.1	50.9

ESE BATCH : G48783

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G48783 Analysis Date: 05/06/94 Analyst: GARRY PRICE

	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		
CCV present?	X		
CCV within acceptance criteria?	X		
ICS present?	X		
ICS 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		
Analytical spike present?	X		
Analytical spike within acceptance criteria?	X		

Note: Any "NO" answer requires a comment.

OVERRIDE COMMENTS

BATCH OVERRIDE BY:

ESE BATCH : G48783

TABLE OF ABBREVIATIONS

%RECV : % Recovery for spiked sample. (FOUND/TARGET * 100)
ANLY DATE : Analysis Date
ANLY TIME : Analysis Time
CURVE : Curve Regression Number
DILUTION : Sample Dilution Factor
EXT DATE : Extract Date
EXT VOL : Extract Volume
FOUND : Spiked Sample Conc. - Unspiked Sample Conc
INJ VOL : Injection Volume
REL%DIFF : % Difference between current and previous spike.
RESPONSE : Sample Response
R.T. : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
DA -- Data Sample
MB -- Method Blank
RF -- Reference (from commercially known standard)
RP -- Replicate Sample
SP -- Standard Matrix Spike
SPM -- Sample Matrix Spike
STD -- Internal Standard
SUR -- Surrogate Sample
UN -- Unspiked Sample
SAMP VOL : Sample Volume
SPK CONC : Spike Concentration
ST : Sample response explanation or validity. (listed below)
BK -- No sample response.
NA -- Sample not analyzed.
NR -- Not reserved for this batch. Batch containing the response for this sample is listed in the target field.
OK -- Sample response shown is correct.
! -- Sample response shown is invalid.
< -- Sample response < detection limit. Detection limit is shown in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET : Spike Target (SAMPLE LISTING SECTION)
TARGET : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE : Response Type ("FINAL" or empty.)
UNSP CONC : Unspiked Sample Concentration

ESE BATCH : G48819
CLASSIFICATION : PR. POLL. ICAP METALS - EPA 6010

QC TYPE : FDER/SW
ANALYST : GARRY PRICE
EXTRACTOR : DEBRA ZUCKERMAN
DATA ENTRY : ICAP UPLOAD

REPORT DATE/TIME : 05/20/94 06:23:42
ANALYSIS DATE : 05/06/94
EXTRACT DATE : 05/05/94

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS		1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*24	EBG1-1-02	05/06/94	10:46AM
CDMHNSS*25	ESV1-1-01	05/06/94	10:59AM
CDMHNSS*26	WBG2-1-02	05/06/94	11:03AM
CDMHNSS*27	WBG2-2-02	05/06/94	11:05AM

ESE BATCH : G48819

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H. T. OVER

ALL HOLDING TIMES MET

STORET: 1078 METHOD: 6010-G SILVER, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=.005 DATE: 05/06/94 LARGEST RESP= %RSD= RT WINDOW:

STORET: 1008 METHOD: 6010-G BARIUM, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=.02 DATE: 05/06/94 LARGEST RESP= %RSD= RT WINDOW

STORET: 1028 METHOD: 6010-G CADMIUM, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=.005 DATE: 05/06/94 LARGEST RESP= %RSD= RT WINDOW:

STORET: 1029 METHOD: 6010-G CHROMIUM, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=.01 DATE: 05/06/94 LARGEST RESP= %RSD= RT WINDOW

STORET: 1052 METHOD: 6010-G LEAD, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=.1 DATE: 05/06/94 LARGEST RESP= %RSD= RT WINDOW:

ESE BATCH : G48819

Continuing Calibration Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/06/94	CCB*QC*1	1078*6010-G	SILVER	MG/KG-	0.001
05/06/94	CCB*QC*1	1008*6010-G	BARIUM	MG/KG-	ND
05/06/94	CCB*QC*1	1028*6010-G	CADMIUM	MG/KG-	0.001
05/06/94	CCB*QC*1	1029*6010-G	CHROMIUM	MG/KG-	ND
05/06/94	CCB*QC*1	1052*6010-G	LEAD	MG/KG-	0.003
05/06/94	CCB*QC*2	1078*6010-G	SILVER	MG/KG-	ND
05/06/94	CCB*QC*2	1008*6010-G	BARIUM	MG/KG-	0.0001
05/06/94	CCB*QC*2	1028*6010-G	CADMIUM	MG/KG-	0.001
05/06/94	CCB*QC*2	1029*6010-G	CHROMIUM	MG/KG-	ND
05/06/94	CCB*QC*2	1052*6010-G	LEAD	MG/KG-	0.006

Continuing Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/06/94	CCV*STD2*1	1078*6010-G	SILVER	MG/KG-		ND		80-120
05/06/94	CCV*STD2*1	1008*6010-G	BARIUM	MG/KG-	1.00	0.999	99.9	90-110
05/06/94	CCV*STD2*1	1028*6010-G	CADMIUM	MG/KG-	1.00	0.976	97.6	90-110
05/06/94	CCV*STD2*1	1029*6010-G	CHROMIUM	MG/KG-	1.00	0.996	99.6	90-110
05/06/94	CCV*STD2*1	1052*6010-G	LEAD	MG/KG-	1.00	1.00	100.0	90-110
05/06/94	CCV*STD4*1	1078*6010-G	SILVER	MG/KG-	1.00	0.998	99.8	80-120
05/06/94	CCV*STD4*1	1008*6010-G	BARIUM	MG/KG-		ND		90-110
05/06/94	CCV*STD4*1	1028*6010-G	CADMIUM	MG/KG-		ND		90-110
05/06/94	CCV*STD4*1	1029*6010-G	CHROMIUM	MG/KG-		ND		90-110
05/06/94	CCV*STD4*1	1052*6010-G	LEAD	MG/KG-		ND		90-110
05/06/94	CCV*QC*1	1078*6010-G	SILVER	MG/KG-	0.500	0.523	105	80-120
05/06/94	CCV*QC*1	1008*6010-G	BARIUM	MG/KG-	0.500	0.502	100	90-110
05/06/94	CCV*QC*1	1028*6010-G	CADMIUM	MG/KG-	0.500	0.510	102	90-110
05/06/94	CCV*QC*1	1029*6010-G	CHROMIUM	MG/KG-	0.500	0.511	102	90-110
05/06/94	CCV*QC*1	1052*6010-G	LEAD	MG/KG-	0.500	0.509	102	90-110
05/06/94	CCV*QC*2	1078*6010-G	SILVER	MG/KG-	0.500	0.515	103	80-120
05/06/94	CCV*QC*2	1008*6010-G	BARIUM	MG/KG-	0.500	0.502	100	90-110
05/06/94	CCV*QC*2	1028*6010-G	CADMIUM	MG/KG-	0.500	0.503	101	90-110
05/06/94	CCV*QC*2	1029*6010-G	CHROMIUM	MG/KG-	0.500	0.506	101	90-110
05/06/94	CCV*QC*2	1052*6010-G	LEAD	MG/KG-	0.500	0.501	100	90-110

Interference Check Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/06/94	ICS*A*1	1078*6010-G	SILVER	MG/KG-		ND		80-120
05/06/94	ICS*A*1	1008*6010-G	BARIUM	MG/KG-		ND		80-120
05/06/94	ICS*A*1	1028*6010-G	CADMIUM	MG/KG-		ND		80-120
05/06/94	ICS*A*1	1029*6010-G	CHROMIUM	MG/KG-		ND		80-120
05/06/94	ICS*A*1	1052*6010-G	LEAD	MG/KG-		ND		80-120
05/06/94	ICS*AB*1	1078*6010-G	SILVER	MG/KG-	1.00	0.986	98.6	80-120
05/06/94	ICS*AB*1	1008*6010-G	BARIUM	MG/KG-	0.500	0.489	97.8	80-120
05/06/94	ICS*AB*1	1028*6010-G	CADMIUM	MG/KG-	1.00	0.956	95.6	80-120
05/06/94	ICS*AB*1	1029*6010-G	CHROMIUM	MG/KG-	0.500	0.463	92.6	80-120
05/06/94	ICS*AB*1	1052*6010-G	LEAD	MG/KG-	1.00	0.908	90.8	80-120
05/06/94	ICS*A*2	1078*6010-G	SILVER	MG/KG-		ND		80-120
05/06/94	ICS*A*2	1008*6010-G	BARIUM	MG/KG-		ND		80-120
05/06/94	ICS*A*2	1028*6010-G	CADMIUM	MG/KG-		ND		80-120
05/06/94	ICS*A*2	1029*6010-G	CHROMIUM	MG/KG-		ND		80-120
05/06/94	ICS*A*2	1052*6010-G	LEAD	MG/KG-		ND		80-120
05/06/94	ICS*AB*2	1078*6010-G	SILVER	MG/KG-	1.00	1.01	101	80-120
05/06/94	ICS*AB*2	1008*6010-G	BARIUM	MG/KG-	0.500	0.494	98.8	80-120
05/06/94	ICS*AB*2	1028*6010-G	CADMIUM	MG/KG-	1.00	0.979	97.9	80-120
05/06/94	ICS*AB*2	1029*6010-G	CHROMIUM	MG/KG-	0.500	0.474	94.8	80-120
05/06/94	ICS*AB*2	1052*6010-G	LEAD	MG/KG-	1.00	0.945	94.5	80-120

Initial Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/06/94	ICV*ICAP19*1	1078*6010-G	SILVER	MG/KG-		ND		90-110
05/06/94	ICV*ICAP19*1	1008*6010-G	BARIUM	MG/KG-		ND		90-110
05/06/94	ICV*ICAP19*1	1028*6010-G	CADMIUM	MG/KG-	1.00	0.993	99.3	90-110
05/06/94	ICV*ICAP19*1	1029*6010-G	CHROMIUM	MG/KG-	1.00	1.01	101	90-110
05/06/94	ICV*ICAP19*1	1052*6010-G	LEAD	MG/KG-	1.00	0.994	99.4	90-110
05/06/94	ICV*ICAP7*1	1078*6010-G	SILVER	MG/KG-	1.00	1.02	102	90-110
05/06/94	ICV*ICAP7*1	1008*6010-G	BARIUM	MG/KG-	1.00	0.992	99.2	90-110
05/06/94	ICV*ICAP7*1	1028*6010-G	CADMIUM	MG/KG-		ND		90-110
05/06/94	ICV*ICAP7*1	1029*6010-G	CHROMIUM	MG/KG-		ND		90-110
05/06/94	ICV*ICAP7*1	1052*6010-G	LEAD	MG/KG-		ND		90-110

ESE BATCH : G48819

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/06/94	MB*REAGENTS*1	1078*6010-G	SILVER	MG/KG-	ND
05/06/94	MB*REAGENTS*1	1008*6010-G	BARIUM	MG/KG-	ND
05/06/94	MB*REAGENTS*1	1028*6010-G	CADMIUM	MG/KG-	ND
05/06/94	MB*REAGENTS*1	1029*6010-G	CHROMIUM	MG/KG-	ND
05/06/94	MB*REAGENTS*1	1052*6010-G	LEAD	MG/KG-	ND
05/06/94	MB*QC*1	1078*6010-G	SILVER	MG/KG-	ND
05/06/94	MB*QC*1	1008*6010-G	BARIUM	MG/KG-	ND
05/06/94	MB*QC*1	1028*6010-G	CADMIUM	MG/KG-	ND
05/06/94	MB*QC*1	1029*6010-G	CHROMIUM	MG/KG-	ND
05/06/94	MB*QC*1	1052*6010-G	LEAD	MG/KG-	ND

Serial Dilution Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	REP #1	REP #2	RPD	RPD CRIT
05/06/94	SD*CDMHNSS*24	1078*6010-G	SILVER	MG/KG-	0.0	ND	NC	10
05/06/94	SD*CDMHNSS*24	1008*6010-G	BARIUM	MG/KG-	120	117	2.50	10
05/06/94	SD*CDMHNSS*24	1028*6010-G	CADMIUM	MG/KG-	0.0	0.318	NC	10
05/06/94	SD*CDMHNSS*24	1029*6010-G	CHROMIUM	MG/KG-	7.15	6.62	7.70	10
05/06/94	SD*CDMHNSS*24	1052*6010-G	LEAD	MG/KG-	5.36	8.14	41.2	10

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
05/06/94	SP*QC*1	1078*6010-G	SILVER	94.8	73-107	MG/KG-	4.96	4.70
05/06/94	SP*QC*1	1008*6010-G	BARIUM	94.0	86-106	MG/KG-	199	187
05/06/94	SP*QC*1	1028*6010-G	CADMIUM	95.2	80-108	MG/KG-	4.96	4.72
05/06/94	SP*QC*1	1029*6010-G	CHROMIUM	95.0	79-109	MG/KG-	19.9	18.9
05/06/94	SP*QC*1	1052*6010-G	LEAD	91.7	79-109	MG/KG-	49.6	45.5

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
05/06/94	SPM1*CDMHNSS*24	1078*6010-G	SILVER	83.4	73-107	0.0	MG/KG-	5.25	4.38
05/06/94	SPM1*CDMHNSS*24	1008*6010-G	BARIUM	91.0	86-106	120	MG/KG-	210	191
05/06/94	SPM1*CDMHNSS*24	1028*6010-G	CADMIUM	93.3	80-108	0.0	MG/KG-	5.25	4.90
05/06/94	SPM1*CDMHNSS*24	1029*6010-G	CHROMIUM	92.9	79-109	7.15	MG/KG-	21.0	19.5
05/06/94	SPM1*CDMHNSS*24	1052*6010-G	LEAD	86.9	79-109	5.36	MG/KG-	52.5	45.6
05/06/94	SPM2*CDMHNSS*24	1078*6010-G	SILVER	87.9	73-107	0.0	MG/KG-	5.27	4.63
05/06/94	SPM2*CDMHNSS*24	1008*6010-G	BARIUM	94.3	86-106	120	MG/KG-	211	199
05/06/94	SPM2*CDMHNSS*24	1028*6010-G	CADMIUM	96.4	80-108	0.0	MG/KG-	5.27	5.08
05/06/94	SPM2*CDMHNSS*24	1029*6010-G	CHROMIUM	95.3	79-109	7.15	MG/KG-	21.1	20.1
05/06/94	SPM2*CDMHNSS*24	1052*6010-G	LEAD	89.8	79-109	5.36	MG/KG-	52.7	47.3

Spike into Matrix Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
05/06/94	SPX*CDMHNSS*24	1078*6010-G	SILVER	97.0	85-115	MG/KG-	53.1	51.5
05/06/94	SPX*CDMHNSS*24	1008*6010-G	BARIUM	93.4	85-115	MG/KG-	53.1	49.6
05/06/94	SPX*CDMHNSS*24	1028*6010-G	CADMIUM	96.8	85-115	MG/KG-	53.1	51.4
05/06/94	SPX*CDMHNSS*24	1029*6010-G	CHROMIUM	95.3	85-115	MG/KG-	53.1	50.6
05/06/94	SPX*CDMHNSS*24	1052*6010-G	LEAD	95.7	85-115	MG/KG-	53.1	50.8

ESE BATCH : G48819

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G48819 Analysis Date: 05/06/94 Analyst: GARRY PRICE

	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		
CCV present?	X		
CCV within acceptance criteria?	X		
ICS present?	X		
ICS 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		
Analytical spike present?	X		
Analytical spike within acceptance criteria?	X		

Note: Any "NO" answer requires a comment.

OVERRIDE COMMENTS

BATCH OVERRIDE BY:

ESE BATCH : G48819

TABLE OF ABBREVIATIONS

%RECV : % Recovery for spiked sample (FOUND/TARGET * 100)
ANLY DATE : Analysis Date
ANLY TIME : Analysis Time
CURVE : Curve Regression Number
DILUTION : Sample Dilution Factor
EXT DATE : Extract Date
EXT VOL : Extract Volume
FOUND : Spiked Sample Conc. - Unspiked Sample Conc
INJ VOL : Injection Volume
REL%DIFF : % Difference between current and previous spike.
RESPONSE : Sample Response
R.T. : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
DA -- Data Sample
MB -- Method Blank
RF -- Reference (from commercially known standard)
RP -- Replicate Sample
SP -- Standard Matrix Spike
SPM -- Sample Matrix Spike
STD -- Internal Standard
SUR -- Surrogate Sample
UN -- Unspiked Sample
SAMP VOL : Sample Volume
SPK CONC : Spike Concentration
ST : Sample response explanation or validity. (listed below)
BK -- No sample response.
NA -- Sample not analyzed.
NR -- Not reserved for this batch. Batch containing the response for this sample is listed in the target field.
OK -- Sample response shown is correct.
! -- Sample response shown is invalid.
< -- Sample response < detection limit. Detection limit is shown in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET : Spike Target (SAMPLE LISTING SECTION)
TARGET : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE : Response Type ("FINAL" or empty.)
UNSP CONC : Unspiked Sample Concentration

ESE BATCH : G48889
CLASSIFICATION PR. POLL. ICAP METALS - EPA 6010

QC TYPE : FDER/SW
ANALYST : GARRY PRICE
EXTRACTOR : DAVID NICHOLS
DATA ENTRY : ICAP UPLOAD

REPORT DATE/TIME : 05/20/94 06:24:27
ANALYSIS DATE : 05/09/94
EXTRACT DATE : 05/09/94

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

FIELD GRP QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS	1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*28	WA04-3-20	05/09/94	02:17PM
CDMHNSS*29	WA04-4-08	05/09/94	02:20PM
CDMHNSS*30	WSV2-1-01	05/09/94	02:22PM
CDMHNSS*31	WBG3-1-02	05/09/94	02:24PM
CDMHNSS*32	EWC1-1-00	05/09/94	02:28PM
CDMHNSS*33	WWC2-1-00	05/09/94	02:31PM

ESE BATCH : G48889

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H. T.	OVER

ALL HOLDING TIMES MET

STORET: 1078 METHOD: 6010-G SILVER, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=.005 DATE: 05/09/94 LARGEST RESP= %RSD= RT WINDOW:

STORET: 1008 METHOD: 6010-G BARIUM, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=.02 DATE: 05/09/94 LARGEST RESP= %RSD= RT WINDOW

STORET: 1028 METHOD: 6010-G CADMIUM, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=.005 DATE: 05/09/94 LARGEST RESP= %RSD= RT WINDOW:

STORET: 1029 METHOD: 6010-G CHROMIUM, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=.01 DATE: 05/09/94 LARGEST RESP= %RSD= RT WINDOW

STORET: 1052 METHOD: 6010-G LEAD, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=.1 DATE: 05/09/94 LARGEST RESP= %RSD= RT WINDOW:

ESE BATCH : G48889

Continuing Calibration Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/09/94	CCB*QC*1	1078*6010-G	SILVER	MG/KG-	0.001
05/09/94	CCB*QC*1	1008*6010-G	BARIUM	MG/KG-	ND
05/09/94	CCB*QC*1	1028*6010-G	CADMIUM	MG/KG-	0.0001
05/09/94	CCB*QC*1	1029*6010-G	CHROMIUM	MG/KG-	ND
05/09/94	CCB*QC*1	1052*6010-G	LEAD	MG/KG-	0.012
05/09/94	CCB*QC*2	1078*6010-G	SILVER	MG/KG-	0.0004
05/09/94	CCB*QC*2	1008*6010-G	BARIUM	MG/KG-	ND
05/09/94	CCB*QC*2	1028*6010-G	CADMIUM	MG/KG-	0.0004
05/09/94	CCB*QC*2	1029*6010-G	CHROMIUM	MG/KG-	ND
05/09/94	CCB*QC*2	1052*6010-G	LEAD	MG/KG-	ND

Continuing Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/09/94	CCV*STD2*1	1078*6010-G	SILVER	MG/KG-		ND		80-120
05/09/94	CCV*STD2*1	1008*6010-G	BARIUM	MG/KG-	1.00	1.03	103	90-110
05/09/94	CCV*STD2*1	1028*6010-G	CADMIUM	MG/KG-	1.00	1.00	100.0	90-110
05/09/94	CCV*STD2*1	1029*6010-G	CHROMIUM	MG/KG-	1.00	1.03	103	90-110
05/09/94	CCV*STD2*1	1052*6010-G	LEAD	MG/KG-	1.00	1.01	101	90-110
05/09/94	CCV*STD4*1	1078*6010-G	SILVER	MG/KG-	1.00	1.00	100.0	80-120
05/09/94	CCV*STD4*1	1008*6010-G	BARIUM	MG/KG-		ND		90-110
05/09/94	CCV*STD4*1	1028*6010-G	CADMIUM	MG/KG-		ND		90-110
05/09/94	CCV*STD4*1	1029*6010-G	CHROMIUM	MG/KG-		ND		90-110
05/09/94	CCV*STD4*1	1052*6010-G	LEAD	MG/KG-		ND		90-110
05/09/94	CCV*QC*1	1078*6010-G	SILVER	MG/KG-	0.500	0.506	101	80-120
05/09/94	CCV*QC*1	1008*6010-G	BARIUM	MG/KG-	0.500	0.499	99.8	90-110
05/09/94	CCV*QC*1	1028*6010-G	CADMIUM	MG/KG-	0.500	0.516	103	90-110
05/09/94	CCV*QC*1	1029*6010-G	CHROMIUM	MG/KG-	0.500	0.503	101	90-110
05/09/94	CCV*QC*1	1052*6010-G	LEAD	MG/KG-	0.500	0.521	104	90-110
05/09/94	CCV*QC*2	1078*6010-G	SILVER	MG/KG-	0.500	0.504	101	80-120
05/09/94	CCV*QC*2	1008*6010-G	BARIUM	MG/KG-	0.500	0.500	100.0	90-110
05/09/94	CCV*QC*2	1028*6010-G	CADMIUM	MG/KG-	0.500	0.513	103	90-110
05/09/94	CCV*QC*2	1029*6010-G	CHROMIUM	MG/KG-	0.500	0.503	101	90-110
05/09/94	CCV*QC*2	1052*6010-G	LEAD	MG/KG-	0.500	0.514	103	90-110

Interference Check Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/09/94	ICS*A*1	1078*6010-G	SILVER	MG/KG-		ND		80-120
05/09/94	ICS*A*1	1008*6010-G	BARIUM	MG/KG-		ND		80-120
05/09/94	ICS*A*1	1028*6010-G	CADMIUM	MG/KG-		ND		80-120
05/09/94	ICS*A*1	1029*6010-G	CHROMIUM	MG/KG-		ND		80-120
05/09/94	ICS*A*1	1052*6010-G	LEAD	MG/KG-		ND		80-120
05/09/94	ICS*AB*1	1078*6010-G	SILVER	MG/KG-	1.00	0.995	99.5	80-120
05/09/94	ICS*AB*1	1008*6010-G	BARIUM	MG/KG-	0.500	0.505	101	80-120
05/09/94	ICS*AB*1	1028*6010-G	CADMIUM	MG/KG-	1.00	0.969	96.9	80-120
05/09/94	ICS*AB*1	1029*6010-G	CHROMIUM	MG/KG-	0.500	0.480	96.0	80-120
05/09/94	ICS*AB*1	1052*6010-G	LEAD	MG/KG-	1.00	0.962	96.2	80-120
05/09/94	ICS*A*2	1078*6010-G	SILVER	MG/KG-		ND		80-120
05/09/94	ICS*A*2	1008*6010-G	BARIUM	MG/KG-		ND		80-120
05/09/94	ICS*A*2	1028*6010-G	CADMIUM	MG/KG-		ND		80-120
05/09/94	ICS*A*2	1029*6010-G	CHROMIUM	MG/KG-		ND		80-120
05/09/94	ICS*A*2	1052*6010-G	LEAD	MG/KG-		ND		80-120
05/09/94	ICS*AB*2	1078*6010-G	SILVER	MG/KG-	1.00	0.987	98.7	80-120
05/09/94	ICS*AB*2	1008*6010-G	BARIUM	MG/KG-	0.500	0.491	98.2	80-120
05/09/94	ICS*AB*2	1028*6010-G	CADMIUM	MG/KG-	1.00	0.992	99.2	80-120
05/09/94	ICS*AB*2	1029*6010-G	CHROMIUM	MG/KG-	0.500	0.470	94.0	80-120
05/09/94	ICS*AB*2	1052*6010-G	LEAD	MG/KG-	1.00	0.990	99.0	80-120

Initial Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/09/94	ICV*ICAP19*1	1078*6010-G	SILVER	MG/KG-		ND		90-110
05/09/94	ICV*ICAP19*1	1008*6010-G	BARIUM	MG/KG-		ND		90-110
05/09/94	ICV*ICAP19*1	1028*6010-G	CADMIUM	MG/KG-	1.00	1.01	101	90-110
05/09/94	ICV*ICAP19*1	1029*6010-G	CHROMIUM	MG/KG-	1.00	1.04	104	90-110
05/09/94	ICV*ICAP19*1	1052*6010-G	LEAD	MG/KG-	1.00	1.01	101	90-110
05/09/94	ICV*ICAP7*1	1078*6010-G	SILVER	MG/KG-	1.00	1.02	102	90-110
05/09/94	ICV*ICAP7*1	1008*6010-G	BARIUM	MG/KG-	1.00	1.03	103	90-110
05/09/94	ICV*ICAP7*1	1028*6010-G	CADMIUM	MG/KG-		ND		90-110
05/09/94	ICV*ICAP7*1	1029*6010-G	CHROMIUM	MG/KG-		ND		90-110
05/09/94	ICV*ICAP7*1	1052*6010-G	LEAD	MG/KG-		ND		90-110

ESE BATCH : G48889

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/09/94	MB*REAGENTS*1	1078*6010-G	SILVER	MG/KG-	ND
05/09/94	MB*REAGENTS*1	1008*6010-G	BARIUM	MG/KG-	ND
05/09/94	MB*REAGENTS*1	1028*6010-G	CADMIUM	MG/KG-	ND
05/09/94	MB*REAGENTS*1	1029*6010-G	CHROMIUM	MG/KG-	ND
05/09/94	MB*REAGENTS*1	1052*6010-G	LEAD	MG/KG-	ND
05/09/94	MB*QC*1	1078*6010-G	SILVER	MG/KG-	ND
05/09/94	MB*QC*1	1008*6010-G	BARIUM	MG/KG-	ND
05/09/94	MB*QC*1	1028*6010-G	CADMIUM	MG/KG-	ND
05/09/94	MB*QC*1	1029*6010-G	CHROMIUM	MG/KG-	ND
05/09/94	MB*QC*1	1052*6010-G	LEAD	MG/KG-	ND

Serial Dilution Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	REP #1	REP #2	RPD	RPD CRIT
05/09/94	SD*CDMHNSS*33	1078*6010-G	SILVER	MG/KG-	0.0	0.151	NC	10
05/09/94	SD*CDMHNSS*33	1008*6010-G	BARIUM	MG/KG-	171	168	1.80	10
05/09/94	SD*CDMHNSS*33	1028*6010-G	CADMIUM	MG/KG-	1.77	1.77	0.0	10
05/09/94	SD*CDMHNSS*33	1029*6010-G	CHROMIUM	MG/KG-	56.4	57.3	1.60	10
05/09/94	SD*CDMHNSS*33	1052*6010-G	LEAD	MG/KG-	1810	1810	0.0	10

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
05/09/94	SP*QC*1	1078*6010-G	SILVER	97.7	73-107	MG/KG-	4.86	4.75
05/09/94	SP*QC*1	1008*6010-G	BARIUM	101.0	86-106	MG/KG-	194	196
05/09/94	SP*QC*1	1028*6010-G	CADMIUM	105.6	80-108	MG/KG-	4.86	5.13
05/09/94	SP*QC*1	1029*6010-G	CHROMIUM	99.5	79-109	MG/KG-	19.4	19.3
05/09/94	SP*QC*1	1052*6010-G	LEAD	97.5	79-109	MG/KG-	48.6	47.4

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
05/09/94	SPM1*CDMHNSS*33	1078*6010-G	SILVER	88.3	73-107	0.0	MG/KG-	5.05	4.46
05/09/94	SPM1*CDMHNSS*33	1008*6010-G	BARIUM	82.7	86-106	171	MG/KG-	202	167
05/09/94	SPM1*CDMHNSS*33	1028*6010-G	CADMIUM	93.9	80-108	1.77	MG/KG-	5.05	4.74
05/09/94	SPM1*CDMHNSS*33	1029*6010-G	CHROMIUM	60.9	79-109	56.4	MG/KG-	20.2	12.3
05/09/94	SPM1*CDMHNSS*33	1052*6010-G	LEAD	-317	79-109	1810	MG/KG-	50.5	-160
05/09/94	SPM2*CDMHNSS*33	1078*6010-G	SILVER	94.2	73-107	0.0	MG/KG-	4.98	4.69
05/09/94	SPM2*CDMHNSS*33	1008*6010-G	BARIUM	86.4	86-106	171	MG/KG-	199	172
05/09/94	SPM2*CDMHNSS*33	1028*6010-G	CADMIUM	101.6	80-108	1.77	MG/KG-	4.98	5.06
05/09/94	SPM2*CDMHNSS*33	1029*6010-G	CHROMIUM	59.8	79-109	56.4	MG/KG-	19.9	11.9
05/09/94	SPM2*CDMHNSS*33	1052*6010-G	LEAD	-382	79-109	1810	MG/KG-	49.8	-190

Spike into Matrix Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
05/09/94	SPX*CDMHNSS*33	1078*6010-G	SILVER	103.0	85-115	MG/KG-	50.4	51.9
05/09/94	SPX*CDMHNSS*33	1008*6010-G	BARIUM	107.7	85-115	MG/KG-	50.4	54.3
05/09/94	SPX*CDMHNSS*33	1028*6010-G	CADMIUM	103.0	85-115	MG/KG-	50.4	51.9
05/09/94	SPX*CDMHNSS*33	1029*6010-G	CHROMIUM	104.4	85-115	MG/KG-	50.4	52.6
05/09/94	SPX*CDMHNSS*33	1052*6010-G	LEAD	195.0	85-115	MG/KG-	50.4	98.3

ESE BATCH : G48889

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G48889 Analysis Date: 05/09/94 Analyst: GARRY PRICE

	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			
CCV present?	X			
CCV within acceptance criteria?	X			
ICS present?	X			
ICS 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	BA	
			CR	
			PB	
Sample matrix spike duplicate present?	X			
Sample matrix spike duplicate within acceptance criteria?		X	CR	
			PB	
Analytical spike present?	X			
Analytical spike within acceptance criteria?		X	PB	

Note: Any "NO" answer requires a comment.

OVERRIDE COMMENTS

BATCH OVERRIDE BY: KATHY BARRY 1708
PROB.:SAMPLE MATRIX SPIKE NOT WITHIN
ACCEPTANCE CRITERIA.
EXPL.:LACK OF HOMOGENEITY. UNSPIKED
CONCENTRATION OVER 4X SPIKING
LEVEL./GP
PROB.:SAMPLE MATRIX SPIKE DUPLICATE NOT
WITHIN ACCEPTANCE CRITERIA.
EXPL.:SEE ABOVE./GP
PROB.:ANALYTICAL SPIKE NOT WITHIN
ACCEPTANCE CRITERIA.
EXPL.:SEE ABOVE./GP

ESE BATCH : G48889

TABLE OF ABBREVIATIONS

%RECV : % Recovery for spiked sample. (FOUND/TARGET * 100)
ANLY DATE : Analysis Date
ANLY TIME : Analysis Time
CURVE : Curve Regression Number
DILUTION : Sample Dilution Factor
EXT DATE : Extract Date
EXT VOL : Extract Volume
FOUND : Spiked Sample Conc. - Unspiked Sample Conc.
INJ VOL : Injection Volume
REL%DIFF : % Difference between current and previous spike.
RESPONSE : Sample Response
R.T. : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
DA -- Data Sample
MB -- Method Blank
RF -- Reference (from commercially known standard)
RP -- Replicate Sample
SP -- Standard Matrix Spike
SPM -- Sample Matrix Spike
STD -- Internal Standard
SUR -- Surrogate Sample
UN -- Unspiked Sample
SAMP VOL : Sample Volume
SPK CONC : Spike Concentration
ST : Sample response explanation or validity. (listed below)
BK -- No sample response.
NA -- Sample not analyzed.
NR -- Not reserved for this batch. Batch containing the response for this sample is listed in the target field.
OK -- Sample response shown is correct.
! -- Sample response shown is invalid.
< -- Sample response < detection limit. Detection limit is shown in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET : Spike Target (SAMPLE LISTING SECTION)
TARGET : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE : Response Type ("FINAL" or empty.)
UNSP CONC : Unspiked Sample Concentration

ESE BATCH : G49175
CLASSIFICATION : PR. POLL. ICAP METALS - EPA 6010

QC TYPE : FDER/SW
ANALYST : GARRY PRICE
EXTRACTOR : DEBRA ZUCKERMAN
DATA ENTRY : ICAP UPLOAD

REPORT DATE/TIME : 05/20/94 06:25:16
ANALYSIS DATE : 05/16/94
EXTRACT DATE : 05/14/94

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS		1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*34	EA01-2-05	05/16/94	01:30PM
CDMHNSS*35	EA01-3-05	05/16/94	01:32PM
CDMHNSS*36	EA01-4-14	05/16/94	01:34PM
CDMHNSS*37	EA01-5-12	05/16/94	01:56PM
CDMHNSS*38	EA01-6-10	05/16/94	01:58PM

ESE BATCH : G49175

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H.T. OVER

ALL HOLDING TIMES MET

STORET: 1078 METHOD: 6010-G SILVER, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=.005 DATE: 05/16/94 LARGEST RESP= %RSD= RT WINDOW:

STORET: 1008 METHOD: 6010-G BARIUM, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=.02 DATE: 05/16/94 LARGEST RESP= %RSD= RT WINDOW

STORET: 1028 METHOD: 6010-G CADMIUM, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=.005 DATE: 05/16/94 LARGEST RESP= %RSD= RT WINDOW:

STORET: 1029 METHOD: 6010-G CHROMIUM, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=.01 DATE: 05/16/94 LARGEST RESP= %RSD= RT WINDOW

STORET: 1052 METHOD: 6010-G LEAD, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=.1 DATE: 05/16/94 LARGEST RESP= %RSD= RT WINDOW:

ESE BATCH : G49175

Continuing Calibration Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/16/94	CCB*QC*1	1078*6010-G	SILVER	MG/KG-	0.0009
05/16/94	CCB*QC*1	1008*6010-G	BARIUM	MG/KG-	0.0003
05/16/94	CCB*QC*1	1028*6010-G	CADMIUM	MG/KG-	0.0001
05/16/94	CCB*QC*1	1029*6010-G	CHROMIUM	MG/KG-	0.0004
05/16/94	CCB*QC*1	1052*6010-G	LEAD	MG/KG-	0.007
05/16/94	CCB*QC*2	1078*6010-G	SILVER	MG/KG-	0.001
05/16/94	CCB*QC*2	1008*6010-G	BARIUM	MG/KG-	0.0004
05/16/94	CCB*QC*2	1028*6010-G	CADMIUM	MG/KG-	0.001
05/16/94	CCB*QC*2	1029*6010-G	CHROMIUM	MG/KG-	0.0008
05/16/94	CCB*QC*2	1052*6010-G	LEAD	MG/KG-	ND

Continuing Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/16/94	CCV*STD2*1	1078*6010-G	SILVER	MG/KG-		ND		80-120
05/16/94	CCV*STD2*1	1008*6010-G	BARIUM	MG/KG-	1.00	1.00	100.0	90-110
05/16/94	CCV*STD2*1	1028*6010-G	CADMIUM	MG/KG-	1.00	1.00	100.0	90-110
05/16/94	CCV*STD2*1	1029*6010-G	CHROMIUM	MG/KG-	1.00	1.00	100.0	90-110
05/16/94	CCV*STD2*1	1052*6010-G	LEAD	MG/KG-	1.00	1.01	101	90-110
05/16/94	CCV*STD4*1	1078*6010-G	SILVER	MG/KG-	1.00	1.01	101	80-120
05/16/94	CCV*STD4*1	1008*6010-G	BARIUM	MG/KG-		ND		90-110
05/16/94	CCV*STD4*1	1028*6010-G	CADMIUM	MG/KG-		ND		90-110
05/16/94	CCV*STD4*1	1029*6010-G	CHROMIUM	MG/KG-		ND		90-110
05/16/94	CCV*STD4*1	1052*6010-G	LEAD	MG/KG-		ND		90-110
05/16/94	CCV*QC*1	1078*6010-G	SILVER	MG/KG-	0.500	0.531	106	80-120
05/16/94	CCV*QC*1	1008*6010-G	BARIUM	MG/KG-	0.500	0.516	103	90-110
05/16/94	CCV*QC*1	1028*6010-G	CADMIUM	MG/KG-	0.500	0.527	105	90-110
05/16/94	CCV*QC*1	1029*6010-G	CHROMIUM	MG/KG-	0.500	0.522	104	90-110
05/16/94	CCV*QC*1	1052*6010-G	LEAD	MG/KG-	0.500	0.527	105	90-110
05/16/94	CCV*QC*2	1078*6010-G	SILVER	MG/KG-	0.500	0.509	102	80-120
05/16/94	CCV*QC*2	1008*6010-G	BARIUM	MG/KG-	0.500	0.508	102	90-110
05/16/94	CCV*QC*2	1028*6010-G	CADMIUM	MG/KG-	0.500	0.501	100	90-110
05/16/94	CCV*QC*2	1029*6010-G	CHROMIUM	MG/KG-	0.500	0.503	101	90-110
05/16/94	CCV*QC*2	1052*6010-G	LEAD	MG/KG-	0.500	0.503	101	90-110

Interference Check Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/16/94	ICS*A*1	1078*6010-G	SILVER	MG/KG-		ND		80-120
05/16/94	ICS*A*1	1008*6010-G	BARIUM	MG/KG-		ND		80-120
05/16/94	ICS*A*1	1028*6010-G	CADMIUM	MG/KG-		ND		80-120
05/16/94	ICS*A*1	1029*6010-G	CHROMIUM	MG/KG-		ND		80-120
05/16/94	ICS*A*1	1052*6010-G	LEAD	MG/KG-		ND		80-120
05/16/94	ICS*AB*1	1078*6010-G	SILVER	MG/KG-	1.00	0.976	97.6	80-120
05/16/94	ICS*AB*1	1008*6010-G	BARIUM	MG/KG-	0.500	0.491	98.2	80-120
05/16/94	ICS*AB*1	1028*6010-G	CADMIUM	MG/KG-	1.00	0.955	95.5	80-120
05/16/94	ICS*AB*1	1029*6010-G	CHROMIUM	MG/KG-	0.500	0.463	92.6	80-120
05/16/94	ICS*AB*1	1052*6010-G	LEAD	MG/KG-	1.00	0.910	91.0	80-120
05/16/94	ICS*A*2	1078*6010-G	SILVER	MG/KG-		ND		80-120
05/16/94	ICS*A*2	1008*6010-G	BARIUM	MG/KG-		ND		80-120
05/16/94	ICS*A*2	1028*6010-G	CADMIUM	MG/KG-		ND		80-120
05/16/94	ICS*A*2	1029*6010-G	CHROMIUM	MG/KG-		ND		80-120
05/16/94	ICS*A*2	1052*6010-G	LEAD	MG/KG-		ND		80-120
05/16/94	ICS*AB*2	1078*6010-G	SILVER	MG/KG-	1.00	1.00	100.0	80-120
05/16/94	ICS*AB*2	1008*6010-G	BARIUM	MG/KG-	0.500	0.500	100.0	80-120
05/16/94	ICS*AB*2	1028*6010-G	CADMIUM	MG/KG-	1.00	0.991	99.1	80-120
05/16/94	ICS*AB*2	1029*6010-G	CHROMIUM	MG/KG-	0.500	0.475	95.0	80-120
05/16/94	ICS*AB*2	1052*6010-G	LEAD	MG/KG-	1.00	0.933	93.3	80-120

Initial Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/16/94	ICV*ICAP19*1	1078*6010-G	SILVER	MG/KG-		ND		90-110
05/16/94	ICV*ICAP19*1	1008*6010-G	BARIUM	MG/KG-		ND		90-110
05/16/94	ICV*ICAP19*1	1028*6010-G	CADMIUM	MG/KG-	1.00	0.975	97.5	90-110
05/16/94	ICV*ICAP19*1	1029*6010-G	CHROMIUM	MG/KG-	1.00	0.998	99.8	90-110
05/16/94	ICV*ICAP19*1	1052*6010-G	LEAD	MG/KG-	1.00	0.991	99.1	90-110
05/16/94	ICV*ICAP7*1	1078*6010-G	SILVER	MG/KG-	1.00	1.01	101	90-110
05/16/94	ICV*ICAP7*1	1008*6010-G	BARIUM	MG/KG-	1.00	0.996	99.6	90-110
05/16/94	ICV*ICAP7*1	1028*6010-G	CADMIUM	MG/KG-		ND		90-110
05/16/94	ICV*ICAP7*1	1029*6010-G	CHROMIUM	MG/KG-		ND		90-110
05/16/94	ICV*ICAP7*1	1052*6010-G	LEAD	MG/KG-		ND		90-110

ESE BATCH : G49175

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/16/94	MB*REAGENTS*1	1078*6010-G	SILVER	MG/KG-	ND
05/16/94	MB*REAGENTS*1	1008*6010-G	BARIUM	MG/KG-	ND
05/16/94	MB*REAGENTS*1	1028*6010-G	CADMIUM	MG/KG-	ND
05/16/94	MB*REAGENTS*1	1029*6010-G	CHROMIUM	MG/KG-	ND
05/16/94	MB*REAGENTS*1	1052*6010-G	LEAD	MG/KG-	ND
05/16/94	MB*QC*1	1078*6010-G	SILVER	MG/KG-	ND
05/16/94	MB*QC*1	1008*6010-G	BARIUM	MG/KG-	ND
05/16/94	MB*QC*1	1028*6010-G	CADMIUM	MG/KG-	ND
05/16/94	MB*QC*1	1029*6010-G	CHROMIUM	MG/KG-	ND
05/16/94	MB*QC*1	1052*6010-G	LEAD	MG/KG-	ND

Serial Dilution Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	REP #1	REP #2	RPD	RPD CRIT
05/16/94	SD*CDMHNSS*36	1078*6010-G	SILVER	MG/KG-	0.0	ND	NC	10
05/16/94	SD*CDMHNSS*36	1008*6010-G	BARIUM	MG/KG-	151	156	3.30	10
05/16/94	SD*CDMHNSS*36	1028*6010-G	CADMIUM	MG/KG-	0.0	0.496	NC	10
05/16/94	SD*CDMHNSS*36	1029*6010-G	CHROMIUM	MG/KG-	20.3	22.0	8.00	10
05/16/94	SD*CDMHNSS*36	1052*6010-G	LEAD	MG/KG-	13.9	15.1	8.30	10

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
05/16/94	SP*QC*1	1078*6010-G	SILVER	95.0	73-107	MG/KG-	4.98	4.73
05/16/94	SP*QC*1	1008*6010-G	BARIUM	95.0	86-106	MG/KG-	199	189
05/16/94	SP*QC*1	1028*6010-G	CADMIUM	92.6	80-108	MG/KG-	4.98	4.61
05/16/94	SP*QC*1	1029*6010-G	CHROMIUM	94.0	79-109	MG/KG-	19.9	18.7
05/16/94	SP*QC*1	1052*6010-G	LEAD	92.8	79-109	MG/KG-	49.8	46.2

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
05/16/94	SPM1*CDMHNSS*36	1078*6010-G	SILVER	89.3	73-107	0.0	MG/KG-	5.14	4.59
05/16/94	SPM1*CDMHNSS*36	1008*6010-G	BARIUM	96.6	86-106	151	MG/KG-	206	199
05/16/94	SPM1*CDMHNSS*36	1028*6010-G	CADMIUM	95.5	80-108	0.0	MG/KG-	5.14	4.91
05/16/94	SPM1*CDMHNSS*36	1029*6010-G	CHROMIUM	94.7	79-109	20.3	MG/KG-	20.6	19.5
05/16/94	SPM1*CDMHNSS*36	1052*6010-G	LEAD	87.7	79-109	13.9	MG/KG-	51.4	45.1
05/16/94	SPM2*CDMHNSS*36	1078*6010-G	SILVER	87.6	73-107	0.0	MG/KG-	5.16	4.52
05/16/94	SPM2*CDMHNSS*36	1008*6010-G	BARIUM	92.2	86-106	151	MG/KG-	206	190
05/16/94	SPM2*CDMHNSS*36	1028*6010-G	CADMIUM	94.8	80-108	0.0	MG/KG-	5.16	4.89
05/16/94	SPM2*CDMHNSS*36	1029*6010-G	CHROMIUM	88.8	79-109	20.3	MG/KG-	20.6	18.3
05/16/94	SPM2*CDMHNSS*36	1052*6010-G	LEAD	86.4	79-109	13.9	MG/KG-	51.6	44.6

Spike into Matrix Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
05/16/94	SPX*CDMHNSS*36	1078*6010-G	SILVER	98.8	85-115	MG/KG-	51.6	51.0
05/16/94	SPX*CDMHNSS*36	1008*6010-G	BARIUM	106.6	85-115	MG/KG-	51.6	55.0
05/16/94	SPX*CDMHNSS*36	1028*6010-G	CADMIUM	95.9	85-115	MG/KG-	51.6	49.5
05/16/94	SPX*CDMHNSS*36	1029*6010-G	CHROMIUM	98.4	85-115	MG/KG-	51.6	50.8
05/16/94	SPX*CDMHNSS*36	1052*6010-G	LEAD	97.7	85-115	MG/KG-	51.6	50.4

ESE BATCH : G49175

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G49175 Analysis Date: 05/16/94 Analyst: GARRY PRICE

	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		
CCV present?	X		
CCV within acceptance criteria?	X		
ICS present?	X		
ICS 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		
Analytical spike present?	X		
Analytical spike within acceptance criteria?	X		

Note: Any "NO" answer requires a comment.

OVERRIDE COMMENTS

BATCH OVERRIDE BY:

ESE BATCH : G49175

TABLE OF ABBREVIATIONS

```
%RECV       : % Recovery for spiked sample. (FOUND/TARGET * 100)
ANLY DATE   : Analysis Date
ANLY TIME   : Analysis Time
CURVE       : Curve Regression Number
DILUTION    : Sample Dilution Factor
EXT DATE    : Extract Date
EXT VOL     : Extract Volume
FOUND       : Spiked Sample Conc. - Unspiked Sample Conc.
INJ VOL     : Injection Volume
REL%DIFF    : % Difference between current and previous spike.
RESPONSE    : Sample Response
R.T.        : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID   : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
      DA  -- Data Sample
      MB  -- Method Blank
      RF  -- Reference (from commercially known standard)
      RP  -- Replicate Sample
      SP  -- Standard Matrix Spike
      SPM -- Sample Matrix Spike
      STD -- Internal Standard
      SUR -- Surrogate Sample
      UN  -- Unspiked Sample
SAMP VOL    : Sample Volume
SPK CONC    : Spike Concentration
ST          : Sample response explanation or validity. (listed below)
      BK  -- No sample response.
      NA  -- Sample not analyzed.
      NR  -- Not reserved for this batch.  Batch containing the response
             for this sample is listed in the target field.
      OK  -- Sample response shown is correct.
      !   -- Sample response shown is invalid.
      <   -- Sample response < detection limit. Detection limit is shown
             in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET      : Spike Target (SAMPLE LISTING SECTION)
TARGET      : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE        : Response Type ("FINAL" or empty.)
UNSP CONC   : Unspiked Sample Concentration
```

GFAA Metals - Arsenic

ESE BATCH : G48307
CLASSIFICATION : ARSENIC - EPA 7060

QC TYPE : FDER/SW
ANALYST : CHRISTOPHER HORRELL
EXTRACTOR : DAVID NICHOLS
DATA ENTRY : CHRISTOPHER HORRELL

REPORT DATE/TIME : 05/20/94 06:26:13
ANALYSIS DATE : 04/21/94
EXTRACT DATE : 04/21/94

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS		1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*1	WA20-1-04	04/21/94	07:41AM
CDMHNSS*2	WA20-2-06	04/21/94	07:47AM
CDMHNSS*3	WA19-1-08	04/21/94	07:53AM
CDMHNSS*4	WA19-2-07	04/21/94	07:58AM

ESE BATCH : G48307

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H. T. OVER

ALL HOLDING TIMES MET

STORET: 1003 METHOD: 7060-G ARSENIC, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=2.5 DATE: 04/21/94 LARGEST RESP= %RSD= RT WINDOW

CONC :	0	2.5	5	10	25	50	100
RESP :	.001	.016	.028	.051	.13	.262	.502
CONC':							

CONC = + *RESP+ *RESP**2+ *RESP**3
95% C.I.=
CORRELATION COEFFICIENT =

ESE BATCH : G48307

Continuing Calibration Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
04/21/94	CCB*QC*1	1003*7060-G	ARSENIC	MG/KG-	0.400

Continuing Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/21/94	CCV*QC*1	1003*7060-G	ARSENIC	MG/KG-	50.0	47.6	95.2	80-120

Initial Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/21/94	ICV*PE PURE*1	1003*7060-G	ARSENIC	MG/KG-	50.0	47.5	95.0	90-110

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
04/21/94	MB*REAGENT*1	1003*7060-G	ARSENIC	MG/KG-	0.300
04/21/94	MB*QC*1	1003*7060-G	ARSENIC	MG/KG-	ND

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
04/21/94	SP*QC*1	1003*7060-G	ARSENIC	93.3	80-122	MG/KG-	3.89	3.63

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
04/21/94	SPM1*CDMHNSS*4	1003*7060-G	ARSENIC	70.9	80-122	2.86	MG/KG-	3.99	2.83
04/21/94	SPM2*CDMHNSS*4	1003*7060-G	ARSENIC	66.8	80-122	2.86	MG/KG-	4.01	2.68

Spike into Matrix Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
04/21/94	SPX*CDMHNSS*1	1003*7060-G	ARSENIC	93.5	85-115	MG/KG-	10.1	9.44

ESE BATCH : G48307

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G48307 Analysis Date: 04/21/94 Analyst: CHRISTOPHER HORRELL

	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		
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		
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
Sample matrix spike duplicate present?	X		
Sample matrix spike duplicate within acceptance criteria?		X	AS
Analytical spike present?	X		
Analytical spike within acceptance criteria?	X		

Note: Any "NO" answer requires a comment.

OVERRIDE COMMENTS

BATCH OVERRIDE BY: KATHY BARRY 1708
PROB:SAMPLE MATRIX SPIKE NOT WITHIN ACCEPTANCE
CRITERIA.
EXPL:POSSIBLE MATRIX INTERFERENCE./MFB./04-22-94.
PROB:SAMPLE MATRIX SPIKE DUPLICATE NOT WITHIN ACCEPTANCE
CRITERIA.
EXPL:SAME AS ABOVE.
EM./04-25-94.

ESE BATCH : G48307

TABLE OF ABBREVIATIONS

```
%RECV      : % Recovery for spiked sample. (FOUND/TARGET * 100)
ANLY DATE  : Analysis Date
ANLY TIME  : Analysis Time
CURVE      : Curve Regression Number
DILUTION   : Sample Dilution Factor
EXT DATE   : Extract Date
EXT VOL    : Extract Volume
FOUND      : Spiked Sample Conc. - Unspiked Sample Conc.
INJ VOL    : Injection Volume
REL%DIFF   : % Difference between current and previous spike.
RESPONSE   : Sample Response
R.T.       : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID  : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
      DA  -- Data Sample
      MB  -- Method Blank
      RF  -- Reference (from commercially known standard)
      RP  -- Replicate Sample
      SP  -- Standard Matrix Spike
      SPM -- Sample Matrix Spike
      STD -- Internal Standard
      SUR -- Surrogate Sample
      UN  -- Unspiked Sample
SAMP VOL   : Sample Volume
SPK CONC   : Spike Concentration
ST         : Sample response explanation or validity. (listed below)
      BK  -- No sample response.
      NA  -- Sample not analyzed.
      NR  -- Not reserved for this batch.  Batch containing the response
             for this sample is listed in the target field.
      OK  -- Sample response shown is correct.
      !   -- Sample response shown is invalid.
      <   -- Sample response < detection limit. Detection limit is shown
             in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET     : Spike Target (SAMPLE LISTING SECTION)
TARGET     : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE       : Response Type ("FINAL" or empty.)
UNSP CONC  : Unspiked Sample Concentration
```

ESE BATCH : G48393
CLASSIFICATION : ARSENIC - EPA 7060

QC TYPE : FDER/SW
ANALYST : LISA SWAYZE
EXTRACTOR : DAVID NICHOLS
DATA ENTRY : MARLENE BANNER

REPORT DATE/TIME : 05/20/94 06:26:26
ANALYSIS DATE : 04/25/94
EXTRACT DATE : 04/22/94

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS		1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*5	WA19-3-05	04/24/94	11:08PM
CDMHNSS*6	WA19-4-05	04/24/94	11:14PM

ESE BATCH : G48393

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H T. OVER

ALL HOLDING TIMES MET

STORET: 1003 METHOD: 7060-G ARSENIC, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=2.5 DATE: 04/24/94 LARGEST RESP= %RSD= RT WINDOW

CONC :	0	2.5	5	10	25	50	100
RESP :	001	.012	.019	.038	.105	.208	.378
CONC':							

CONC = + *RESP+ *RESP**2 + *RESP**3
95% C.I.=
CORRELATION COEFFICIENT =

ESE BATCH : G48393

Continuing Calibration Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
04/25/94	CCB*QC*1	1003*7060-G	ARSENIC	MG/KG-	ND

Continuing Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/25/94	CCV*QC*1	1003*7060-G	ARSENIC	MG/KG-	50.0	49.8	99.6	80-120

Initial Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/24/94	ICV*PE-PURE*1	1003*7060-G	ARSENIC	MG/KG-	50.0	52.5	105	90-110

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
04/24/94	MB*QC*1	1003*7060-G	ARSENIC	MG/KG-	ND

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
04/24/94	SP*QC*1	1003*7060-G	ARSENIC	99.5	80-122	MG/KG-	3.97	3.95

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
04/24/94	SPM1*CDMHNSS*6	1003*7060-G	ARSENIC	94.4	80-122	3.52	MG/KG-	4.10	3.87
04/24/94	SPM2*CDMHNSS*6	1003*7060-G	ARSENIC	89.5	80-122	3.52	MG/KG-	4.00	3.58

Spike into Matrix Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
04/25/94	SPX*CDMHNSS*6	1003*7060-G	ARSENIC	99.8	85-115	MG/KG-	9.80	9.78

ESE BATCH : G48393

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G48393 Analysis Date: 04/25/94 Analyst: LISA SWAYZE

	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		
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		
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		
Analytical spike present?	X		
Analytical spike within acceptance criteria?	X		

Note: Any "NO" answer requires a comment.

OVERRIDE COMMENTS

BATCH OVERRIDE BY:

ESE BATCH : G48393

TABLE OF ABBREVIATIONS

%RECV : % Recovery for spiked sample. (FOUND/TARGET * 100)
ANLY DATE : Analysis Date
ANLY TIME : Analysis Time
CURVE : Curve Regression Number
DILUTION : Sample Dilution Factor
EXT DATE : Extract Date
EXT VOL : Extract Volume
FOUND : Spiked Sample Conc. - Unspiked Sample Conc
INJ VOL : Injection Volume
REL%DIFF : % Difference between current and previous spike.
RESPONSE : Sample Response
R.T. : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
DA -- Data Sample
MB -- Method Blank
RF -- Reference (from commercially known standard)
RP -- Replicate Sample
SP -- Standard Matrix Spike
SPM -- Sample Matrix Spike
STD -- Internal Standard
SUR -- Surrogate Sample
UN -- Unspiked Sample
SAMP VOL : Sample Volume
SPK CONC : Spike Concentration
ST : Sample response explanation or validity. (listed below)
BK -- No sample response.
NA -- Sample not analyzed.
NR -- Not reserved for this batch. Batch containing the response for this sample is listed in the target field.
OK -- Sample response shown is correct.
! -- Sample response shown is invalid.
< -- Sample response < detection limit. Detection limit is shown in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET : Spike Target (SAMPLE LISTING SECTION)
TARGET : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE : Response Type ("FINAL" or empty.)
UNSP CONC : Unspiked Sample Concentration

ESE BATCH : G48412
CLASSIFICATION : ARSENIC - EPA 7060

QC TYPE : FDER/SW
ANALYST : MARSHALL SEIGLER
EXTRACTOR : DEBRA ZUCKERMAN
DATA ENTRY : MARSHALL SEIGLER

REPORT DATE/TIME : 05/20/94 06:26:40
ANALYSIS DATE : 04/25/94
EXTRACT DATE : 04/25/94

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS		1944022G 0201	CDM - HANFORD N SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*8	WA16-1-02	04/25/94	07:44AM
CDMHNSS*9	WA16-2-03	04/25/94	08:21AM
CDMHNSS*7	WA17-1-03	04/25/94	09:44AM

ESE BATCH : G48412

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H.T.	OVER

ALL HOLDING TIMES MET

STORET: 1003 METHOD: 7060-G ARSENIC, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=2.5 DATE: 04/25/94 LARGEST RESP= %RSD= RT WINDOW:

CONC :	0	2.5	5	10	25	50	100
RESP :	.005	.011	.019	04	.089	.196	.375
CONC':							

CONC = + *RESP+ *RESP**2+ *RESP**3
95% C.I.=
CORRELATION COEFFICIENT =

ESE BATCH : G48412

Continuing Calibration Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
04/25/94	CCB*QC*1	1003*7060-G	ARSENIC	MG/KG-	ND
04/25/94	CCB*QC*2	1003*7060-G	ARSENIC	MG/KG-	0.500
04/25/94	CCB*QC*3	1003*7060-G	ARSENIC	MG/KG-	0.500

Continuing Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/25/94	CCV*QC*1	1003*7060-G	ARSENIC	MG/KG-	50.0	51.5	103	80-120
04/25/94	CCV*QC*2	1003*7060-G	ARSENIC	MG/KG-	50.0	51.1	102	80-120
04/25/94	CCV*QC*3	1003*7060-G	ARSENIC	MG/KG-	50.0	51.5	103	80-120

Initial Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/25/94	ICV*SPEX*1	1003*7060-G	ARSENIC	MG/KG-	50.0	47.4	94.8	90-110

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
04/25/94	MB*REAGENT*1	1003*7060-G	ARSENIC	MG/KG-	ND
04/25/94	MB*QC*1	1003*7060-G	ARSENIC	MG/KG-	ND

Serial Dilution Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	REP #1	REP #2	RPD	RPD CRIT
04/25/94	SD*CDMHNSS*9	1003*7060-G	ARSENIC	MG/KG-	8.18	8.94	NC	10

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
04/25/94	SP*QC*1	1003*7060-G	ARSENIC	103.0	80-122	MG/KG-	3.98	4.10

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
04/25/94	SPM1*CDMHNSS*9	1003*7060-G	ARSENIC	89.4	80-122	8.52	MG/KG-	4.23	3.78
04/25/94	SPM2*CDMHNSS*9	1003*7060-G	ARSENIC	68.6	80-122	8.52	MG/KG-	4.20	2.88

ESE BATCH : G48412

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G48412 Analysis Date: 04/25/94 Analyst: MARSHALL SEIGLER

	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		
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		
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	AS
Analytical spike present?		X	
Analytical spike within acceptance criteria?			

Note: Any "NO" answer requires a comment.

OVERRIDE COMMENTS

BATCH OVERRIDE BY: KATHY BARRY 1708
PROB.:SAMPLE MATRIX SPIKE DUPLICATE
NOT WITHIN ACCEPTANCE CRITERIA.
EXPL.:POSSIBLE LACK OF HOMOGENEITY, SD
DONE PER METHOD./LO
PROB.:ANALYTICAL SPIKE NOT PRESENT.
EXPL.:SEE ABOVE./LO

ESE BATCH : G48412

TABLE OF ABBREVIATIONS

```
%RECV       : % Recovery for spiked sample. (FOUND/TARGET * 100)
ANLY DATE   : Analysis Date
ANLY TIME   : Analysis Time
CURVE       : Curve Regression Number
DILUTION    : Sample Dilution Factor
EXT DATE    : Extract Date
EXT VOL     : Extract Volume
FOUND       : Spiked Sample Conc. - Unspiked Sample Conc.
INJ VOL     : Injection Volume
REL%DIFF    : % Difference between current and previous spike.
RESPONSE    : Sample Response
R.T.        : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID   : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
      DA  -- Data Sample
      MB  -- Method Blank
      RF  -- Reference (from commercially known standard)
      RP  -- Replicate Sample
      SP  -- Standard Matrix Spike
      SPM -- Sample Matrix Spike
      STD -- Internal Standard
      SUR -- Surrogate Sample
      UN  -- Unspiked Sample
SAMP VOL    : Sample Volume
SPK CONC    : Spike Concentration
ST          : Sample response explanation or validity. (listed below)
      BK  -- No sample response.
      NA  -- Sample not analyzed.
      NR  -- Not reserved for this batch.  Batch containing the response
             for this sample is listed in the target field.
      OK  -- Sample response shown is correct.
      !   -- Sample response shown is invalid.
      <   -- Sample response < detection limit. Detection limit is shown
             in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET      : Spike Target (SAMPLE LISTING SECTION)
TARGET      : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE        : Response Type ("FINAL" or empty.)
UNSP CONC   : Unspiked Sample Concentration
```

ESE BATCH : G48451
CLASSIFICATION : ARSENIC - EPA 7060

QC TYPE : FDER/SW
ANALYST : JERI ROPERO
EXTRACTOR : DENISE RODRIGUEZ
DATA ENTRY : JERI ROPERO

REPORT DATE/TIME : 05/20/94 06:26:57
ANALYSIS DATE : 04/26/94
EXTRACT DATE : 04/26/94

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS		1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*10	WA07-1-01	04/26/94	10:35AM
CDMHNSS*11	WA07-2-05	04/26/94	10:40AM
CDMHNSS*12	WA05-1-04	04/26/94	10:46AM

ESE BATCH : G48451

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H.T.	OVER

ALL HOLDING TIMES MET

STORET: 1003 METHOD: 7060-G ARSENIC, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=2.5 DATE: 04/26/94 LARGEST RESP= %RSD= RT WINDOW:

CONC :	0	2.5	5	10	25	50	100
RESP :	.002	.014	.022	.041	.11	.226	.398
CONC':							

CONC = + *RESP+ *RESP**2+ *RESP**3
95% C.I.=
CORRELATION COEFFICIENT =

ESE BATCH : G48451

Continuing Calibration Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
04/26/94	CCB*QC*1	1003*7060-G	ARSENIC	MG/KG-	ND
04/26/94	CCB*QC*2	1003*7060-G	ARSENIC	MG/KG-	0.600

Continuing Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/26/94	CCV*QC*1	1003*7060-G	ARSENIC	MG/KG-	50.0	48.9	97.8	80-120
04/26/94	CCV*QC*2	1003*7060-G	ARSENIC	MG/KG-	50.0	49.8	99.6	80-120

Initial Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/26/94	ICV*PEPURE*1	1003*7060-G	ARSENIC	MG/KG-	50.0	48.6	97.2	90-110

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
04/26/94	MB*REAGENT*1	1003*7060-G	ARSENIC	MG/KG-	0.600
04/26/94	MB*QC*1	1003*7060-G	ARSENIC	MG/KG-	ND

Standard Addition (SA) Sample Summary

DATE	SAMPLE	STORET	PARAMETER	KNOWN CNC	RESP	UNC CNC	FINAL CNC	CORR
04/26/94	SA0*CDMHNSS*10	1003*7060-G	ARSENIC	0.0	.122	35.7	3.68	.9997
04/26/94	SA1*CDMHNSS*10	1003*7060-G	ARSENIC	20.0	.196			
04/26/94	SA2*CDMHNSS*10	1003*7060-G	ARSENIC	40.0	.263			
04/26/94	SA3*CDMHNSS*10	1003*7060-G	ARSENIC	60.0	.331			
04/26/94	SA0*CDMHNSS*11	1003*7060-G	ARSENIC	0.0	.148	38.9	8.20	.9995
04/26/94	SA1*CDMHNSS*11	1003*7060-G	ARSENIC	20.0	.231			
04/26/94	SA2*CDMHNSS*11	1003*7060-G	ARSENIC	40.0	.301			
04/26/94	SA3*CDMHNSS*11	1003*7060-G	ARSENIC	60.0	.381			
04/26/94	SA0*CDMHNSS*12	1003*7060-G	ARSENIC	0.0	.087	24.8	2.54	.9999
04/26/94	SA1*CDMHNSS*12	1003*7060-G	ARSENIC	20.0	.16			
04/26/94	SA2*CDMHNSS*12	1003*7060-G	ARSENIC	40.0	.227			
04/26/94	SA3*CDMHNSS*12	1003*7060-G	ARSENIC	60.0	.3			

Serial Dilution Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	REP #1	REP #2	RPD	RPD CRIT
04/26/94	SD*CDMHNSS*11	1003*7060-G	ARSENIC	MG/KG-	7.21	8.11	NC	10

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
04/26/94	SP1*QC*1	1003*7060-G	ARSENIC	96.3	80-122	MG/KG-	4.00	3.85

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
04/26/94	SPM1*CDMHNSS*12	1003*7060-G	ARSENIC	74.7	80-122	2.08	MG/KG-	4.11	3.07
04/26/94	SPM2*CDMHNSS*12	1003*7060-G	ARSENIC	73.2	80-122	2.08	MG/KG-	4.11	3.01

ESE BATCH G48451

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G48451 Analysis Date 04/26/94 Analyst: JERI ROPERO

	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		
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		
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
Sample matrix spike duplicate present?	X		
Sample matrix spike duplicate within acceptance criteria?		X	AS
Analytical spike present?		X	
Analytical spike within acceptance criteria?			

Note: Any "NO" answer requires a comment.

OVERRIDE COMMENTS

BATCH OVERRIDE BY: KATHY BARRY 1708
PROB.:SAMPLE MATRIX SPIKE NOT WITHIN
ACCEPTANCE CRITERIA.
EXPL.:POSSIBLE MATRIX INTERFERENCE.
MSA'S ON ALL SAMPLES./KWB
PROB.:SAMPLE MATRIX SPIKE DUPLICATE
NOT WITHIN ACCEPTANCE CRITERIA.
EXPL.:SEE ABOVE./KWB
PROB.:ANALYTICAL SPIKE NOT PRESENT.
EXPL.:SEE ABOVE./KWB

ESE BATCH : G48451

TABLE OF ABBREVIATIONS

%RECV : % Recovery for spiked sample (FOUND/TARGET * 100)
ANLY DATE : Analysis Date
ANLY TIME : Analysis Time
CURVE : Curve Regression Number
DILUTION : Sample Dilution Factor
EXT DATE : Extract Date
EXT VOL : Extract Volume
FOUND : Spiked Sample Conc. - Unspiked Sample Conc
INJ VOL : Injection Volume
REL%DIFF : % Difference between current and previous spike.
RESPONSE : Sample Response
R.T. : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below
DA -- Data Sample
MB -- Method Blank
RF -- Reference (from commercially known standard)
RP -- Replicate Sample
SP -- Standard Matrix Spike
SPM -- Sample Matrix Spike
STD -- Internal Standard
SUR -- Surrogate Sample
UN -- Unspiked Sample
SAMP VOL : Sample Volume
SPK CONC : Spike Concentration
ST : Sample response explanation or validity. (listed below)
BK -- No sample response.
NA -- Sample not analyzed.
NR -- Not reserved for this batch. Batch containing the response for this sample is listed in the target field.
OK -- Sample response shown is correct.
! -- Sample response shown is invalid.
< -- Sample response < detection limit. Detection limit is shown in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET : Spike Target (SAMPLE LISTING SECTION)
TARGET : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE : Response Type ("FINAL" or empty.)
UNSP CONC : Unspiked Sample Concentration

ESE BATCH : G48546
CLASSIFICATION : ARSENIC - EPA 7060

QC TYPE : FDER/SW
ANALYST : JERI ROPERO
EXTRACTOR : DAVID NICHOLS
DATA ENTRY : GFAA UPLOAD

REPORT DATE/TIME : 05/20/94 06:27:20
ANALYSIS DATE : 04/27/94
EXTRACT DATE : 04/27/94

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS		1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*13	WA05-2-03	04/27/94	02:00PM
CDMHNSS*14	WA05-3-04	04/27/94	02:05PM
CDMHNSS*15	WA04-1-05	04/27/94	02:10PM
CDMHNSS*16	WA04-2-12	04/27/94	02:14PM

ESE BATCH : G48546

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H.T.	OVER

ALL HOLDING TIMES MET

STORET: 1003 METHOD: 7060-G ARSENIC, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=2.5 DATE: 04/27/94 LARGEST RESP= %RSD= RT WINDOW:

CONC :	0	2.5	5	10	25	50	100
RESP :	.003	.015	.025	.042	.11	186	.37
CONC':							

CONC = + *RESP+ *RESP**2 - *RESP**3
95% C.I.=
CORRELATION COEFFICIENT =

ESE BATCH : G48546

Continuing Calibration Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
04/27/94	CCB*QC*2	1003*7060-G	ARSENIC	MG/KG-	0.700

Continuing Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/27/94	CCV*QC*2	1003*7060-G	ARSENIC	MG/KG-	50.0	50.4	101	80-120

Initial Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/27/94	ICV*PEPURE*3	1003*7060-G	ARSENIC	MG/KG-	50.0	46.4	92.8	90-110

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
04/27/94	MB*REAGENT*1	1003*7060-G	ARSENIC	MG/KG-	ND
04/27/94	MB*QC*1	1003*7060-G	ARSENIC	MG/KG-	ND

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
04/27/94	SP*QC*1	1003*7060-G	ARSENIC	95.2	80-122	MG/KG-	3.93	3.74

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
04/27/94	SPM1*CDMHNSS*16	1003*7060-G	ARSENIC	63.9	80-122	3.96	MG/KG-	4.15	2.65
04/27/94	SPM2*CDMHNSS*16	1003*7060-G	ARSENIC	94.5	80-122	3.96	MG/KG-	4.18	3.95

Spike into Matrix Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
04/27/94	SPX*CDMHNSS*15	1003*7060-G	ARSENIC	103.9	85-115	MG/KG-	10.2	10.6

ESE BATCH : G48546

Environmental Science and Engineering Analytical Services
Computer QC Checks

Batch No.: G48546 Analysis Date: 04/27/94 Analyst: JERI ROPERO

	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		
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		
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
Sample matrix spike duplicate present?	X		
Sample matrix spike duplicate within acceptance criteria?		X	AS
Analytical spike present?	X		
Analytical spike within acceptance criteria?	X		

Note: Any "NO" answer requires a comment.

OVERRIDE COMMENTS

BATCH OVERRIDE BY: KATHY BARRY 1708
PROB.:SAMPLE MATRIX SPIKE NOT WITHIN
ACCEPTANCE CRITERIA.
EXPL.:POSSIBLE LACK OS HOMOGENEITY./KNG
PROB.:SAMPLE MATRIX SPIKE DUPLICATE NOT
WITHIN ACCEPTANCE CRITERIA.
EXPL.:SEE ABOVE./KNG

ESE BATCH : G48546

TABLE OF ABBREVIATIONS

```
%RECV       : % Recovery for spiked sample. (FOUND/TARGET * 100)
ANLY DATE   : Analysis Date
ANLY TIME   : Analysis Time
CURVE       : Curve Regression Number
DILUTION    : Sample Dilution Factor
EXT DATE    : Extract Date
EXT VOL     : Extract Volume
FOUND       : Spiked Sample Conc. - Unspiked Sample Conc.
INJ VOL     : Injection Volume
REL%DIFF    : % Difference between current and previous spike.
RESPONSE    : Sample Response
R.T.        : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID   : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
      DA  -- Data Sample
      MB  -- Method Blank
      RF  -- Reference (from commercially known standard)
      RP  -- Replicate Sample
      SP  -- Standard Matrix Spike
      SPM -- Sample Matrix Spike
      STD -- Internal Standard
      SUR -- Surrogate Sample
      UN  -- Unspiked Sample
SAMP VOL    : Sample Volume
SPK CONC    : Spike Concentration
ST          : Sample response explanation or validity. (listed below)
      BK  -- No sample response.
      NA  -- Sample not analyzed.
      NR  -- Not reserved for this batch.  Batch containing the response
             for this sample is listed in the target field.
      OK  -- Sample response shown is correct.
      !   -- Sample response shown is invalid.
      <   -- Sample response < detection limit. Detection limit is shown
             in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET      : Spike Target (SAMPLE LISTING SECTION)
TARGET      : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE        : Response Type ("FINAL" or empty.)
UNSP CONC   : Unspiked Sample Concentration
```

ESE BATCH : G48701
CLASSIFICATION : ARSENIC - EPA 7060

QC TYPE : FDER/SW
ANALYST : KEITH GEISZLER
EXTRACTOR : DENISE RODRIGUEZ
DATA ENTRY : GFAA UPLOAD

REPORT DATE/TIME : 05/20/94 06:27:34
ANALYSIS DATE : 05/02/94
EXTRACT DATE : 04/29/94

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

FIELD GRP QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS	1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*17	EA14-1-01	05/02/94	04:52PM
CDMHNSS*18	EA14-2-01	05/02/94	04:58PM
CDMHNSS*19	EA12-1-10	05/02/94	05:04PM
CDMHNSS*20	EA12-2-12	05/02/94	05:09PM

ESE BATCH : G48701

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H.T	OVER

ALL HOLDING TIMES MET

STORET: 1003 METHOD: 7060-G ARSENIC, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=2.5 DATE: 05/02/94 LARGEST RESP= %RSD= RT WINDOW:

CONC :	0	2.5	5	10	25	50	100
RESP :	.003	.015	.024	.046	.108	.213	.4
CONC':							

CONC = + *RESP+ *RESP**2+ *RESP**3
95% C.I.=
CORRELATION COEFFICIENT =

ESE BATCH : G48701

Continuing Calibration Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/02/94	CCB*QC*1	1003*7060-G	ARSENIC	MG/KG-	ND
05/02/94	CCB*QC*2	1003*7060-G	ARSENIC	MG/KG-	1.10
05/02/94	CCB*QC*3	1003*7060-G	ARSENIC	MG/KG-	0.300

Continuing Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/02/94	CCV*QC*1	1003*7060-G	ARSENIC	MG/KG-	50.0	50.7	101	80-120
05/02/94	CCV*QC*2	1003*7060-G	ARSENIC	MG/KG-	50.0	49.6	99.2	80-120
05/02/94	CCV*QC*3	1003*7060-G	ARSENIC	MG/KG-	50.0	49.6	99.2	80-120

Initial Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/02/94	ICV*PE-PURE*1	1003*7060-G	ARSENIC	MG/KG-	50.0	47.6	95.2	90-110

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/02/94	MB*REAGENTS*1	1003*7060-G	ARSENIC	MG/KG-	ND
05/02/94	MB*QC*1	1003*7060-G	ARSENIC	MG/KG-	ND

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
05/02/94	SP*QC*1	1003*7060-G	ARSENIC	96.0	80-122	MG/KG-	4.00	3.84

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
05/02/94	SPM1*CDMHNSS*20	1003*7060-G	ARSENIC	73.1	80-122	6.94	MG/KG-	4.16	3.04
05/02/94	SPM2*CDMHNSS*20	1003*7060-G	ARSENIC	64.4	80-122	6.94	MG/KG-	4.16	2.68

Spike into Matrix Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
05/02/94	SPX*CDMHNSS*20	1003*7060-G	ARSENIC	62.1	85-115	MG/KG-	10.4	6.46

ESE BATCH : G48701

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G48701 Analysis Date: 09/02/94 Analyst: KEITH GEISZLER

	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		
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		
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
Sample matrix spike duplicate present?	X		
Sample matrix spike duplicate within acceptance criteria?		X	AS
Analytical spike present?	X		
Analytical spike within acceptance criteria?	X		

Note: Any "NO" answer requires a comment.

OVERRIDE COMMENTS

BATCH OVERRIDE BY: KATHY BARRY 1708
PROB.:SAMPLE MATRIX SPIKE NOT WITHIN
ACCEPTANCE CRITERIA.
EXPL.:POSSIBLE MATRIX INTERFERENCE./MFB
PROB.:SAMPLE MATRIX SPIKE DUPLICATE NOT
WITHIN ACCEPTANCE CRITERIA.
EXPL.:SEE ABOVE./MFB

ESE BATCH : G48701

TABLE OF ABBREVIATIONS

```
%RECV       : % Recovery for spiked sample. (FOUND/TARGET * 100)
ANLY DATE   : Analysis Date
ANLY TIME   : Analysis Time
CURVE       : Curve Regression Number
DILUTION    : Sample Dilution Factor
EXT DATE    : Extract Date
EXT VOL     : Extract Volume
FOUND       : Spiked Sample Conc. - Unspiked Sample Conc.
INJ VOL     : Injection Volume
REL%DIFF    : % Difference between current and previous spike.
RESPONSE    : Sample Response
R.T.        : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID   : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
      DA  -- Data Sample
      MB  -- Method Blank
      RF  -- Reference (from commercially known standard)
      RP  -- Replicate Sample
      SP  -- Standard Matrix Spike
      SPM -- Sample Matrix Spike
      STD -- Internal Standard
      SUR -- Surrogate Sample
      UN  -- Unspiked Sample
SAMP VOL    : Sample Volume
SPK CONC    : Spike Concentration
ST          : Sample response explanation or validity. (listed below)
      BK  -- No sample response.
      NA  -- Sample not analyzed.
      NR  -- Not reserved for this batch.  Batch containing the response
             for this sample is listed in the target field.
      OK  -- Sample response shown is correct.
      !   -- Sample response shown is invalid.
      <   -- Sample response < detection limit. Detection limit is shown
             in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET      : Spike Target (SAMPLE LISTING SECTION)
TARGET      : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE        : Response Type ("FINAL" or empty.)
UNSP CONC   : Unspiked Sample Concentration
```

ESE BATCH : G48747
CLASSIFICATION : ARSENIC - EPA 7060

QC TYPE : FDER/SW
ANALYST : MARSHALL SEIGLER
EXTRACTOR : DENISE RODRIGUEZ
DATA ENTRY : MARSHALL SEIGLER

REPORT DATE/TIME : 05/20/94 06:27:49
ANALYSIS DATE : 05/03/94
EXTRACT DATE : 05/03/94

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS		1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*21	EA11-1-07	05/03/94	07:50PM
CDMHNSS*22	EA01-1-10	05/03/94	07:55PM

ESE BATCH : G48747

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H.T.	OVER

ALL HOLDING TIMES MET

STORET: 1003 METHOD: 7060-G ARSENIC, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT= DATE: 05/03/94 LARGEST RESP=.491 %RSD= RT WINDOW:

CONC :	0	2.5	5	10	25	50	100
RESP :	.003	.013	.026	.053	139	.255	.491
CONC':							

CONC = + *RESP+ *RESP**2+ *RESP**3
95% C.I.=
CORRELATION COEFFICIENT =

ESE BATCH : G48747

Continuing Calibration Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/03/94	CCB*QC*1	1003*7060-G	ARSENIC	MG/KG-	ND
05/03/94	CCB*QC*2	1003*7060-G	ARSENIC	MG/KG-	ND

Continuing Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/03/94	CCV*QC*1	1003*7060-G	ARSENIC	MG/KG-	50.0	48.6	97.2	80-120
05/03/94	CCV*QC*2	1003*7060-G	ARSENIC	MG/KG-	50.0	48.9	97.8	80-120

Initial Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/03/94	ICV*PE-PURE*1	1003*7060-G	ARSENIC	MG/KG-	50.0	48.5	97.0	90-110

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/03/94	MB*REAGENT *1	1003*7060-G	ARSENIC	MG/KG-	ND
05/03/94	MB*QC*1	1003*7060-G	ARSENIC	MG/KG-	ND

Standard Addition (SA) Sample Summary

DATE	SAMPLE	STORET	PARAMETER	KNOWN CNC	RESP	UNC CNC	FINAL CNC	CORR
05/03/94	SA0*CDMHNSS*21	1003*7060-G	ARSENIC	0.0	.168	37.2	7.67	.9998
05/03/94	SA1*CDMHNSS*21	1003*7060-G	ARSENIC	20.0	.262			
05/03/94	SA2*CDMHNSS*21	1003*7060-G	ARSENIC	40.0	.347			
05/03/94	SA3*CDMHNSS*21	1003*7060-G	ARSENIC	60.0	.442			
05/03/94	SA0*CDMHNSS*22	1003*7060-G	ARSENIC	0.0	.165	37.1	8.12	.9994
05/03/94	SA1*CDMHNSS*22	1003*7060-G	ARSENIC	20.0	.258			
05/03/94	SA2*CDMHNSS*22	1003*7060-G	ARSENIC	40.0	.338			
05/03/94	SA3*CDMHNSS*22	1003*7060-G	ARSENIC	60.0	.435			

Serial Dilution Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	REP #1	REP #2	RPD	RPD CRIT
05/03/94	SD*CDMHNSS*22	1003*7060-G	ARSENIC	MG/KG-	6.32	7.33	14.8	10

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
05/03/94	SP*QC*1	1003*7060-G	ARSENIC	94.5	80-122	MG/KG-	4.00	3.78

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
05/03/94	SPM1*CDMHNSS*22	1003*7060-G	ARSENIC	36.3	80-122	8.12	MG/KG-	4.35	1.58
05/03/94	SPM2*CDMHNSS*22	1003*7060-G	ARSENIC	27.5	80-122	8.12	MG/KG-	4.37	1.20

ESE BATCH : G48747

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G48747 Analysis Date: 05/03/94 Analyst: MARSHALL SEIGLER

	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		
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		
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
Sample matrix spike duplicate present?	X		
Sample matrix spike duplicate within acceptance criteria?		X	AS
Analytical spike present?		X	
Analytical spike within acceptance criteria?			

Note: Any "NO" answer requires a comment.

OVERRIDE COMMENTS

BATCH OVERRIDE BY: KATHY BARRY 1708
PROB.:SAMPLE MATRIX SPIKE NOT WITHIN
ACCEPTANCE CRITERIA.
EXPL.:POSSIBLE MATRIX INTERFERENCE./MFB
PROB.:SAMPLE MATRIX SPIKE DUPLICATE
NOT WITHIN ACCEPTANCE CRITERIA.
EXPL.:SEE ABOVE./MFB
PROB.:ANALYTICAL SPIKE NOT PRESENT.
EXPL.:SERIAL DILUTION WAS DONE INSTEAD./MFB

TABLE OF ABBREVIATIONS

```
%RECV       : % Recovery for spiked sample. (FOUND/TARGET * 100)
ANLY DATE   : Analysis Date
ANLY TIME   : Analysis Time
CURVE       : Curve Regression Number
DILUTION    : Sample Dilution Factor
EXT DATE    : Extract Date
EXT VOL     : Extract Volume
FOUND       : Spiked Sample Conc. - Unspiked Sample Conc.
INJ VOL     : Injection Volume
REL%DIFF    : % Difference between current and previous spike.
RESPONSE    : Sample Response
R.T.        : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID   : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
      DA  -- Data Sample
      MB  -- Method Blank
      RF  -- Reference (from commercially known standard)
      RP  -- Replicate Sample
      SP  -- Standard Matrix Spike
      SPM -- Sample Matrix Spike
      STD -- Internal Standard
      SUR -- Surrogate Sample
      UN  -- Unspiked Sample
SAMP VOL    : Sample Volume
SPK CONC    : Spike Concentration
ST          : Sample response explanation or validity. (listed below)
      BK  -- No sample response.
      NA  -- Sample not analyzed.
      NR  -- Not reserved for this batch.  Batch containing the response
             for this sample is listed in the target field.
      OK  -- Sample response shown is correct.
      !   -- Sample response shown is invalid.
      <   -- Sample response < detection limit. Detection limit is shown
             in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET      : Spike Target (SAMPLE LISTING SECTION)
TARGET      : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE        : Response Type ("FINAL" or empty.)
UNSP CONC   : Unspiked Sample Concentration
```

ESE BATCH : G48771
CLASSIFICATION : ARSENIC - EPA 7060

QC TYPE : FDER/SW
ANALYST : JERI ROPERO
EXTRACTOR : DEBRA ZUCKERMAN
DATA ENTRY : GFAA UPLOAD

REPORT DATE/TIME : 05/20/94 06:28:10
ANALYSIS DATE : 05/04/94
EXTRACT DATE : 05/04/94

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS		1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*23	OCS1-1-00	05/04/94	06:52PM

ESE BATCH : G48771

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H.T. OVER

ALL HOLDING TIMES MET

STORET: 1003 METHOD: 7060-G ARSENIC, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=2.5 DATE: 05/04/94 LARGEST RESP= %RSD= RT WINDOW:

CONC :	0	2.5	5	10	25	50	100
RESP :	-.001	.005	.012	.022	052	.103	.206
CONC':							

CONC = + *RESP+ *RESP**2+ *RESP**3
95% C.I.=
CORRELATION COEFFICIENT =

ESE BATCH : G48771

Continuing Calibration Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/04/94	CCB*QC*1	1003*7060-G	ARSENIC	MG/KG-	0.400
05/04/94	CCB*QC*2	1003*7060-G	ARSENIC	MG/KG-	0.500

Continuing Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/04/94	CCV*QC*1	1003*7060-G	ARSENIC	MG/KG-	50.0	52.2	104	80-120
05/04/94	CCV*QC*2	1003*7060-G	ARSENIC	MG/KG-	50.0	51.8	104	80-120

Initial Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/04/94	ICV*PEPURE*1	1003*7060-G	ARSENIC	MG/KG-	50.0	51.0	102	90-110

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/04/94	MB*REAGENT*1	1003*7060-G	ARSENIC	MG/KG-	0.200
05/04/94	MB*QC*1	1003*7060-G	ARSENIC	MG/KG-	ND

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
05/04/94	SP*QC*1	1003*7060-G	ARSENIC	97.0	80-122	MG/KG-	3.96	3.84

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
05/04/94	SPM1*CDMHNSS*23	1003*7060-G	ARSENIC	61.4	80-122	4.87	MG/KG-	4.20	2.58
05/04/94	SPM2*CDMHNSS*23	1003*7060-G	ARSENIC	69.1	80-122	4.87	MG/KG-	4.17	2.88

Spike into Matrix Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
05/04/94	SPX*CDMHNSS*23	1003*7060-G	ARSENIC	92.6	85-115	MG/KG-	10.4	9.63

ESE BATCH G48771

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G48771 Analysis Date: 05/04/94 Analyst: JERI ROPERO

	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		
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		
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
Sample matrix spike duplicate present?	X		
Sample matrix spike duplicate within acceptance criteria?		X	AS
Analytical spike present?	X		
Analytical spike within acceptance criteria?	X		

Note: Any "NO" answer requires a comment.

OVERRIDE COMMENTS

BATCH OVERRIDE BY: KATHY BARRY 1708
PROB.:SAMPLE MATRIX SPIKE NOT WITHIN
ACCEPTANCE CRITERIA.
EXPL.:POSSIBLE MATRIX INTERFERENCE./MFB
PROB.:SAMPLE MATRIX SPIKE DUPLICATE
NOT WITHIN ACCEPTANCE CRITERIA.
EXPL.:SEE ABOVE./MFB

ESE BATCH : G48771

TABLE OF ABBREVIATIONS

```
%RECV       : % Recovery for spiked sample  (FOUND/TARGET * 100)
ANLY DATE   : Analysis Date
ANLY TIME   : Analysis Time
CURVE       : Curve Regression Number
DILUTION    : Sample Dilution Factor
EXT DATE    : Extract Date
EXT VOL     : Extract Volume
FOUND       : Spiked Sample Conc. - Unspiked Sample Conc.
INJ VOL     : Injection Volume
REL%DIFF    : % Difference between current and previous spike.
RESPONSE    : Sample Response
R.T.        : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID   : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
      DA  -- Data Sample
      MB  -- Method Blank
      RF  -- Reference (from commercially known standard)
      RP  -- Replicate Sample
      SP  -- Standard Matrix Spike
      SPM -- Sample Matrix Spike
      STD -- Internal Standard
      SUR -- Surrogate Sample
      UN  -- Unspiked Sample
SAMP VOL    : Sample Volume
SPK CONC    : Spike Concentration
ST          : Sample response explanation or validity. (listed below)
      BK  -- No sample response.
      NA  -- Sample not analyzed.
      NR  -- Not reserved for this batch.  Batch containing the response
             for this sample is listed in the target field.
      OK  -- Sample response shown is correct.
      !   -- Sample response shown is invalid.
      <   -- Sample response < detection limit. Detection limit is shown
             in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET      : Spike Target (SAMPLE LISTING SECTION)
TARGET      : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE        : Response Type ("FINAL" or empty.)
UNSP CONC   : Unspiked Sample Concentration
```

ESE BATCH : G48832
CLASSIFICATION : ARSENIC - EPA 7060

QC TYPE : FDER/SW
ANALYST : JERI ROPERO
EXTRACTOR : DEBRA ZUCKERMAN
DATA ENTRY : JERI ROPERO

REPORT DATE/TIME : 05/20/94 06:28:29
ANALYSIS DATE : 05/05/94
EXTRACT DATE : 05/05/94

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

FIELD GRP QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS	1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*24	EBG1-1-02	05/06/94	12:09AM
CDMHNSS*25	ESV1-1-01	05/06/94	12:46AM
CDMHNSS*26	WBG2-1-02	05/06/94	12:52AM
CDMHNSS*27	WBG2-2-02	05/06/94	12:57AM

ESE BATCH G48832

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H T. OVER

ALL HOLDING TIMES MET

STORET: 1003 METHOD: 7060-G ARSENIC, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=2.5 DATE: 05/05/94 LARGEST RESP= %RSD= RT WINDOW

CONC :	0	2.5	5	10	25	50	100
RESP :	0	.008	.012	.024	.061	.12	.223
CONC':							

CONC = + *RESP+ *RESP**2+ *RESP**3
95% C.I.=
CORRELATION COEFFICIENT =

ESE BATCH : G48832

Continuing Calibration Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/06/94	CCB*QC*1	1003*7060-G	ARSENIC	MG/KG-	0.900
05/06/94	CCB*QC*2	1003*7060-G	ARSENIC	MG/KG-	0.100

Continuing Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/06/94	CCV*QC*1	1003*7060-G	ARSENIC	MG/KG-	50.0	49.3	98.6	80-120
05/06/94	CCV*QC*2	1003*7060-G	ARSENIC	MG/KG-	50.0	48.4	96.8	80-120

Initial Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/05/94	ICV*PEPURE*1	1003*7060-G	ARSENIC	MG/KG-	50.0	49.0	98.0	90-110

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/05/94	MB*REAGENT*1	1003*7060-G	ARSENIC	MG/KG-	0.600
05/05/94	MB*QC*1	1003*7060-G	ARSENIC	MG/KG-	ND

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
05/05/94	SP*QC*1	1003*7060-G	ARSENIC	98.7	80-122	MG/KG-	3.97	3.92

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
05/06/94	SPM1*CDMHNSS*24	1003*7060-G	ARSENIC	97.1	80-122	6.71	MG/KG-	4.21	4.09
05/06/94	SPM2*CDMHNSS*24	1003*7060-G	ARSENIC	101.2	80-122	6.71	MG/KG-	4.24	4.29

Spike into Matrix Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
05/06/94	SPX*CDMHNSS*24	1003*7060-G	ARSENIC	53.2	85-115	MG/KG-	10.5	5.59

ESE BATCH : G48832

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G48832 Analysis Date 05/05/94 Analyst: JERI ROPERO

	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		
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		
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		
Analytical spike present?	X		
Analytical spike within acceptance criteria?	X		

Note: Any "NO" answer requires a comment.

OVERRIDE COMMENTS

BATCH OVERRIDE BY:

ESE BATCH : G48832

TABLE OF ABBREVIATIONS

```
%RECV       : % Recovery for spiked sample. (FOUND/TARGET * 100)
ANLY DATE   : Analysis Date
ANLY TIME   : Analysis Time
CURVE       : Curve Regression Number
DILUTION    : Sample Dilution Factor
EXT DATE    : Extract Date
EXT VOL     : Extract Volume
FOUND       : Spiked Sample Conc. - Unspiked Sample Conc.
INJ VOL     : Injection Volume
REL%DIFF    : % Difference between current and previous spike.
RESPONSE    : Sample Response
R.T.        : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID   : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
      DA  -- Data Sample
      MB  -- Method Blank
      RF  -- Reference (from commercially known standard)
      RP  -- Replicate Sample
      SP  -- Standard Matrix Spike
      SPM -- Sample Matrix Spike
      STD -- Internal Standard
      SUR -- Surrogate Sample
      UN  -- Unspiked Sample
SAMP VOL    : Sample Volume
SPK CONC    : Spike Concentration
ST          : Sample response explanation or validity. (listed below)
      BK  -- No sample response.
      NA  -- Sample not analyzed.
      NR  -- Not reserved for this batch.  Batch containing the response
             for this sample is listed in the target field.
      OK  -- Sample response shown is correct.
      !   -- Sample response shown is invalid.
      <   -- Sample response < detection limit. Detection limit is shown
             in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET      : Spike Target (SAMPLE LISTING SECTION)
TARGET      : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE        : Response Type ("FINAL" or empty.)
UNSP CONC   : Unspiked Sample Concentration
```

ESE BATCH : G48918
CLASSIFICATION : ARSENIC - EPA 7060

QC TYPE : FDER/SW
ANALYST : LISA SWAYZE
EXTRACTOR : DAVID NICHOLS
DATA ENTRY : LISA SWAYZE

REPORT DATE/TIME : 05/20/94 06:28:59
ANALYSIS DATE : 05/09/94
EXTRACT DATE : 05/09/94

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS		1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*28	WA04-3-20	05/09/94	05:07PM
CDMHNSS*29	WA04-4-08	05/09/94	05:13PM
CDMHNSS*30	WSV2-1-01	05/09/94	05:18PM
CDMHNSS*31	WBG3-1-02	05/09/94	05:24PM
CDMHNSS*32	EWC1-1-00	05/09/94	05:30PM
CDMHNSS*33	WWC2-1-00	05/09/94	06:00PM

ESE BATCH : G48918

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H T.	OVER

ALL HOLDING TIMES MET

STORET: 1003 METHOD: 7060-G ARSENIC, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=2.5 DATE: 05/09/94 LARGEST RESP= %RSD= RT WINDOW:

CONC :	0	2.5	5	10	25	50	100
RESP :	.002	.013	.025	.054	.117	.231	.485
CONC':							

CONC = + *RESP+ *RESP**2+ *RESP**3
95% C.I.=
CORRELATION COEFFICIENT =

ESE BATCH G48918

Continuing Calibration Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/09/94	CCB*QC*1	1003*7060-G	ARSENIC	MG/KG-	ND
05/09/94	CCB*QC*2	1003*7060-G	ARSENIC	MG/KG-	0.300

Continuing Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/09/94	CCV*QC*1	1003*7060-G	ARSENIC	MG/KG-	50.0	50.2	100	80-120
05/09/94	CCV*QC*2	1003*7060-G	ARSENIC	MG/KG-	50.0	48.1	96.2	80-120

Initial Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/09/94	ICV*SPEX*1	1003*7060-G	ARSENIC	MG/KG-	50.0	46.7	93.4	90-110

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/09/94	MB*REAGENT*1	1003*7060-G	ARSENIC	MG/KG-	0.500
05/09/94	MB*QC*1	1003*7060-G	ARSENIC	MG/KG-	ND

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
05/09/94	SP*QC*1	1003*7060-G	ARSENIC	88.7	80-122	MG/KG-	3.97	3.52

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
05/09/94	SPM1*CDMHNSS*33	1003*7060-G	ARSENIC	83.9	80-122	1.82	MG/KG-	3.92	3.29
05/09/94	SPM2*CDMHNSS*33	1003*7060-G	ARSENIC	68.0	80-122	1.82	MG/KG-	3.97	2.70

Spike into Matrix Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
05/09/94	SPX*CDMHNSS*33	1003*7060-G	ARSENIC	95.9	85-115	MG/KG-	10.2	9.78

ESE BATCH : G48918

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G48918 Analysis Date: 05/09/94 Analyst: LISA SWAYZE

	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		
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		
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	AS
Analytical spike present?	X		
Analytical spike within acceptance criteria?	X		

Note: Any "NO" answer requires a comment.

OVERRIDE COMMENTS

BATCH OVERRIDE BY: KATHY BARRY 1708
PROB.:SAMPLE MATRIX SPIKE DUPLICATE NOT WITHIN
ACCEPTANCE CRITERIA.
EXPL.:ERRATIC SPIKE RECOVERIES POSSIBLY
DUE TO THE NON-HOMOGENEITY OF THE
SAMPLE./MFB

ESE BATCH : G48918

TABLE OF ABBREVIATIONS

```
%RECV       : % Recovery for spiked sample. (FOUND/TARGET * 100)
ANLY DATE   : Analysis Date
ANLY TIME   : Analysis Time
CURVE       : Curve Regression Number
DILUTION    : Sample Dilution Factor
EXT DATE    : Extract Date
EXT VOL     : Extract Volume
FOUND       : Spiked Sample Conc. - Unspiked Sample Conc.
INJ VOL     : Injection Volume
REL%DIFF    : % Difference between current and previous spike.
RESPONSE    : Sample Response
R.T.        : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID   : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
      DA  -- Data Sample
      MB  -- Method Blank
      RF  -- Reference (from commercially known standard)
      RP  -- Replicate Sample
      SP  -- Standard Matrix Spike
      SPM -- Sample Matrix Spike
      STD -- Internal Standard
      SUR -- Surrogate Sample
      UN  -- Unspiked Sample
SAMP VOL    : Sample Volume
SPK CONC    : Spike Concentration
ST          : Sample response explanation or validity. (listed below)
      BK  -- No sample response.
      NA  -- Sample not analyzed.
      NR  -- Not reserved for this batch.  Batch containing the response
             for this sample is listed in the target field.
      OK  -- Sample response shown is correct.
      !   -- Sample response shown is invalid.
      <   -- Sample response < detection limit. Detection limit is shown
             in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET      : Spike Target (SAMPLE LISTING SECTION)
TARGET      : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE        : Response Type ("FINAL" or empty.)
UNSP CONC   : Unspiked Sample Concentration
```

ESE BATCH : G49191
CLASSIFICATION : ARSENIC - EPA 7060

QC TYPE : FDER/SW
ANALYST : LISA SWAYZE
EXTRACTOR : DEBRA ZUCKERMAN
DATA ENTRY : LISA SWAYZE

REPORT DATE/TIME : 05/20/94 06:29:33
ANALYSIS DATE : 05/16/94
EXTRACT DATE : 05/14/94

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

FIELD GRP QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS	1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*34	EA01-2-05	05/16/94	10:22AM
CDMHNSS*35	EA01-3-05	05/16/94	10:26AM
CDMHNSS*36	EA01-4-14	05/16/94	11:20AM
CDMHNSS*37	EA01-5-12	05/16/94	10:57AM
CDMHNSS*38	EA01-6-10	05/16/94	11:02AM

ESE BATCH : G49191

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H.T.	OVER

ALL HOLDING TIMES MET

STORET: 1003 METHOD: 7060-G ARSENIC, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=2.5 DATE: 05/16/94 LARGEST RESP= %RSD= RT WINDOW:

CONC :	0	2.5	5	10	25	50	100
RESP :	.001	.019	.033	.057	.141	.255	.459
CONC':							

CONC = + *RESP+ *RESP**2+ *RESP**3
95% C.I.=
CORRELATION COEFFICIENT =

ESE BATCH : G49191

Continuing Calibration Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/16/94	CCB*QC*1	1003*7060-G	ARSENIC	MG/KG-	ND
05/16/94	CCB*QC*2	1003*7060-G	ARSENIC	MG/KG-	ND

Continuing Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/16/94	CCV*QC*1	1003*7060-G	ARSENIC	MG/KG-	50.0	48.4	96.8	80-120
05/16/94	CCV*QC*2	1003*7060-G	ARSENIC	MG/KG-	50.0	47.5	95.0	80-120

Initial Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/16/94	ICV*PE-PURE*1	1003*7060-G	ARSENIC	MG/KG-	50.0	45.3	90.6	90-110

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/16/94	MB*REAGENT*1	1003*7060-G	ARSENIC	MG/KG-	ND
05/16/94	MB*QC*1	1003*7060-G	ARSENIC	MG/KG-	ND

Serial Dilution Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	REP #1	REP #2	RPD	RPD CRIT
05/16/94	SD*CDMHNSS*37	1003*7060-G	ARSENIC	MG/KG-	7.75	7.46	NC	10

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
05/16/94	SP*QC*1	1003*7060-G	ARSENIC	95.0	80-122	MG/KG-	3.98	3.78

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
05/16/94	SPM1*CDMHNSS*36	1003*7060-G	ARSENIC	100.2	80-122	7.97	MG/KG-	4.12	4.13
05/16/94	SPM2*CDMHNSS*36	1003*7060-G	ARSENIC	97.8	80-122	7.97	MG/KG-	4.12	4.03

ESE BATCH : G49191

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G49191 Analysis Date 05/16/94 Analyst: LISA SWAYZE

	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		
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		
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		
Analytical spike present?		X	
Analytical spike within acceptance criteria?			

Note: Any "NO" answer requires a comment.

OVERRIDE COMMENTS

BATCH OVERRIDE BY: KATHY BARRY 1708
PROB: ANALYTICAL SPIKE NOT PRESENT.
EXPL: SD WAS DONE INSTEAD, AS PER SOP REQUIREMENTS. / LMS 05-17-94

TABLE OF ABBREVIATIONS

```
%RECV       : % Recovery for spiked sample. (FOUND/TARGET * 100)
ANLY DATE   : Analysis Date
ANLY TIME   : Analysis Time
CURVE       : Curve Regression Number
DILUTION    : Sample Dilution Factor
EXT DATE    : Extract Date
EXT VOL     : Extract Volume
FOUND       : Spiked Sample Conc. - Unspiked Sample Conc.
INJ VOL     : Injection Volume
REL%DIFF    : % Difference between current and previous spike.
RESPONSE    : Sample Response
R.T.        : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID   : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
      DA  -- Data Sample
      MB  -- Method Blank
      RF  -- Reference (from commercially known standard)
      RP  -- Replicate Sample
      SP  -- Standard Matrix Spike
      SPM -- Sample Matrix Spike
      STD -- Internal Standard
      SUR -- Surrogate Sample
      UN  -- Unspiked Sample
SAMP VOL    : Sample Volume
SPK CONC    : Spike Concentration
ST          : Sample response explanation or validity. (listed below)
      BK  -- No sample response.
      NA  -- Sample not analyzed.
      NR  -- Not reserved for this batch.  Batch containing the response
             for this sample is listed in the target field.
      OK  -- Sample response shown is correct.
      !   -- Sample response shown is invalid.
      <   -- Sample response < detection limit. Detection limit is shown
             in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET      : Spike Target (SAMPLE LISTING SECTION)
TARGET      : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE        : Response Type ("FINAL" or empty.)
UNSP CONC   : Unspiked Sample Concentration
```

GFAA Metals - Selenium

ESE BATCH : G48324
CLASSIFICATION : SELENIUM - EPA 7740

QC TYPE : FDER/SW
ANALYST : JERI ROPERO
EXTRACTOR : DAVID NICHOLS
DATA ENTRY : GFAA UPLOAD

REPORT DATE/TIME : 05/20/94 06:32:17
ANALYSIS DATE : 04/21/94
EXTRACT DATE : 04/21/94

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS		1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*1	WA20-1-04	04/21/94	09:01PM
CDMHNSS*2	WA20-2-06	04/21/94	09:07PM
CDMHNSS*3	WA19-1-08	04/21/94	09:12PM
CDMHNSS*4	WA19-2-07	04/21/94	09:18PM

ESE BATCH : G48324

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H T.	OVER

ALL HOLDING TIMES MET

STORET: 1148 METHOD: 7740-G SELENIUM, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=2.5 DATE: 04/21/94 LARGEST RESP= %RSD= RT WINDOW:

CONC :	0	2.5	5	10	25	50	100
RESP :	002	.013	.023	.045	.108	.21[illegible]	.406
CONC':							

CONC = + *RESP+ *RESP**2+ *RESP**3
95% C.I.=
CORRELATION COEFFICIENT =

ESE BATCH : G48324

Continuing Calibration Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
04/21/94	CCB*QC*1	1148*7740-G	SELENIUM	MG/KG-	0.100
04/22/94	CCB*QC*2	1148*7740-G	SELENIUM	MG/KG-	0.500

Continuing Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/21/94	CCV*QC*1	1148*7740-G	SELENIUM	MG/KG-	50.0	47.0	94.0	80-120
04/22/94	CCV*QC*2	1148*7740-G	SELENIUM	MG/KG-	50.0	47.0	94.0	80-120

Initial Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/21/94	ICV*PEPURE*1	1148*7740-G	SELENIUM	MG/KG-	25.0	25.8	103	90-110
04/22/94	ICV*PEPURE*2	1148*7740-G	SELENIUM	MG/KG-	25.0	24.8	99.2	90-110

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
04/21/94	MB*REAGENT*1	1148*7740-G	SELENIUM	MG/KG-	ND
04/21/94	MB*QC*1	1148*7740-G	SELENIUM	MG/KG-	ND

Standard Addition (SA) Sample Summary

DATE	SAMPLE	STORET	PARAMETER	KNOWN CNC	RESP	UNC CNC	FINAL CNC	CORR
04/22/94	SA0*CDMHNSS*1	1148*7740-G	SELENIUM	0.0	.002	1.35	0.136	.9995
04/22/94	SA1*CDMHNSS*1	1148*7740-G	SELENIUM	20.0	.057			
04/22/94	SA2*CDMHNSS*1	1148*7740-G	SELENIUM	40.0	.11			
04/22/94	SA3*CDMHNSS*1	1148*7740-G	SELENIUM	60.0	.158			
04/22/94	SA0*CDMHNSS*2	1148*7740-G	SELENIUM	0.0	0	0.0	0.0	1.0000
04/22/94	SA1*CDMHNSS*2	1148*7740-G	SELENIUM	20.0	.048			
04/22/94	SA2*CDMHNSS*2	1148*7740-G	SELENIUM	40.0	.098			
04/22/94	SA3*CDMHNSS*2	1148*7740-G	SELENIUM	60.0	.146			
04/22/94	SA0*CDMHNSS*3	1148*7740-G	SELENIUM	0.0	0	0.268	0.027	.9994
04/22/94	SA1*CDMHNSS*3	1148*7740-G	SELENIUM	20.0	.048			
04/22/94	SA2*CDMHNSS*3	1148*7740-G	SELENIUM	40.0	.094			
04/22/94	SA3*CDMHNSS*3	1148*7740-G	SELENIUM	60.0	.136			
04/22/94	SA0*CDMHNSS*4	1148*7740-G	SELENIUM	0.0	.002	0.403	0.041	.9998
04/22/94	SA1*CDMHNSS*4	1148*7740-G	SELENIUM	20.0	.049			
04/22/94	SA2*CDMHNSS*4	1148*7740-G	SELENIUM	40.0	.098			
04/22/94	SA3*CDMHNSS*4	1148*7740-G	SELENIUM	60.0	.149			

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
04/21/94	SP*QC*1	1148*7740-G	SELENIUM	95.0	75-123	MG/KG-	0.973	0.924

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
04/21/94	SPM1*CDMHNSS*4	1148*7740-G	SELENIUM	47.0	75-123	0.0	MG/KG-	0.997	0.469
04/21/94	SPM2*CDMHNSS*4	1148*7740-G	SELENIUM	40.1	75-123	0.0	MG/KG-	1.00	0.401

Spike into Matrix Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
04/21/94	SPX*CDMHNSS*1	1148*7740-G	SELENIUM	79.4	85-115	MG/KG-	10.1	8.02

ESE BATCH : G48324

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G48324 Analysis Date: 04/21/94 Analyst: JERI ROFERO

	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		
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		
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
Sample matrix spike duplicate present?	X		
Sample matrix spike duplicate within acceptance criteria?		X	SE
Analytical spike present?	X		
Analytical spike within acceptance criteria?		X	SE

Note: Any "NO" answer requires a comment.

OVERRIDE COMMENTS

BATCH OVERRIDE BY: KATHY BARRY 1708
PROB:SAMPLE MATRIX SPIKE NOT WITHIN ACCEPTANCE CRITERIA.
EXPL:POSSIBLE MATRIX EFFECTS./LLO./04-22-94.
PROB:SAMPLE MATRIX SPIKE DUPLICATE NOT WITHIN ACCEPTANCE CRITERIA.
EXPL:SAME AS ABOVE.
PROB:ANALYTICAL SPIKE NOT WITHIN ACCEPTANCE CRITERIA.
EXPL:MSA'S DONE ON ALL SAMPLES AS PER METHOD./LLO./ 04-22-94.
EM./04-25-94.

TABLE OF ABBREVIATIONS

```
%RECV       : % Recovery for spiked sample. (FOUND/TARGET * 100)
ANLY DATE   : Analysis Date
ANLY TIME   : Analysis Time
CURVE       : Curve Regression Number
DILUTION    : Sample Dilution Factor
EXT DATE    : Extract Date
EXT VOL     : Extract Volume
FOUND       : Spiked Sample Conc. - Unspiked Sample Conc.
INJ VOL     : Injection Volume
REL%DIFF    : % Difference between current and previous spike.
RESPONSE    : Sample Response
R.T.        : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID   : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
      DA  -- Data Sample
      MB  -- Method Blank
      RF  -- Reference (from commercially known standard)
      RP  -- Replicate Sample
      SP  -- Standard Matrix Spike
      SPM -- Sample Matrix Spike
      STD -- Internal Standard
      SUR -- Surrogate Sample
      UN  -- Unspiked Sample
SAMP VOL    : Sample Volume
SPK CONC    : Spike Concentration
ST          : Sample response explanation or validity. (listed below)
      BK  -- No sample response.
      NA  -- Sample not analyzed.
      NR  -- Not reserved for this batch.  Batch containing the response
             for this sample is listed in the target field.
      OK  -- Sample response shown is correct.
      !   -- Sample response shown is invalid.
      <   -- Sample response < detection limit. Detection limit is shown
             in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET      : Spike Target (SAMPLE LISTING SECTION)
TARGET      : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE        : Response Type ("FINAL" or empty.)
UNSP CONC   : Unspiked Sample Concentration
```

ESE BATCH : G48394
CLASSIFICATION : SELENIUM - EPA 7740

QC TYPE : FDER/SW
ANALYST : LISA SWAYZE
EXTRACTOR : DAVID NICHOLS
DATA ENTRY : LISA SWAYZE

REPORT DATE/TIME : 05/20/94 06:32:46
ANALYSIS DATE : 04/25/94
EXTRACT DATE : 04/22/94

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS		1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*5	WA19-3-05	04/25/94	09:23AM
CDMHNSS*6	WA19-4-05	04/25/94	09:29AM

ESE BATCH : G48394

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H.T. OVER

ALL HOLDING TIMES MET

STORET: 1148 METHOD: 7740-G SELENIUM, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=2.5 DATE: 04/25/94 LARGEST RESP= %RSD= RT WINDOW

CONC :	0	2.5	5	10	25	50	100
RESP :	.002	.011	.024	.047	.106	.204	.393
CONC':							

CONC = + *RESP+ *RESP**2+ *RESP**3
95% C.I.=
CORRELATION COEFFICIENT =

ESE BATCH : G48394

Continuing Calibration Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
04/25/94	CCB*QC*1	1148*7740-G	SELENIUM	MG/KG-	0.100
04/25/94	CCB*QC*2	1148*7740-G	SELENIUM	MG/KG-	0.100

Continuing Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/25/94	CCV*QC*1	1148*7740-G	SELENIUM	MG/KG-	50.0	46.3	92.6	80-120
04/25/94	CCV*QC*2	1148*7740-G	SELENIUM	MG/KG-	50.0	46.1	92.2	80-120

Initial Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/25/94	ICV*PE-PURE*1	1148*7740-G	SELENIUM	MG/KG-	25.0	25.1	100	90-110

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
04/25/94	MB*QC*1	1148*7740-G	SELENIUM	MG/KG-	ND

Standard Addition (SA) Sample Summary

DATE	SAMPLE	STORET	PARAMETER	KNOWN CNC	RESP	UNC CNC	FINAL CNC	CORR
04/25/94	SA0*CDMHNSS*5	1148*7740-G	SELENIUM	0.0	.002	0.922	0.090	1.0000
04/25/94	SA1*CDMHNSS*5	1148*7740-G	SELENIUM	20.0	.043			
04/25/94	SA2*CDMHNSS*5	1148*7740-G	SELENIUM	40.0	.085			
04/25/94	SA3*CDMHNSS*5	1148*7740-G	SELENIUM	60.0	.126			
04/25/94	SA0*CDMHNSS*6	1148*7740-G	SELENIUM	0.0	0	0.970	0.095	.9981
04/25/94	SA1*CDMHNSS*6	1148*7740-G	SELENIUM	20.0	.046			
04/25/94	SA2*CDMHNSS*6	1148*7740-G	SELENIUM	40.0	.091			
04/25/94	SA3*CDMHNSS*6	1148*7740-G	SELENIUM	60.0	.126			

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
04/25/94	SP*QC*1	1148*7740-G	SELENIUM	104.7	75-123	MG/KG-	0.993	1.04

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
04/25/94	SPM1*CDMHNSS*6	1148*7740-G	SELENIUM	23.8	75-123	0.095	MG/KG-	1.02	0.243
04/25/94	SPM2*CDMHNSS*6	1148*7740-G	SELENIUM	23.5	75-123	0.095	MG/KG-	1.00	0.235

Spike into Matrix Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
04/25/94	SPX*CDMHNSS*5	1148*7740-G	SELENIUM	74.2	85-115	MG/KG-	9.76	7.24

ESE BATCH : G48394

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G48394 Analysis Date: 04/29/91 Analyst: LISA SWAYZE

	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		
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		
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
Sample matrix spike duplicate present?	X		
Sample matrix spike duplicate within acceptance criteria?		X	SE
Analytical spike present?	X		
Analytical spike within acceptance criteria?		X	SE

Note: Any "NO" answer requires a comment.

OVERRIDE COMMENTS

BATCH OVERRIDE BY: KATHY BARRY 1708
PROB.:SAMPLE MATRIX SPIKE NOT WITHIN
ACCEPTANCE CRITERIA.
EXPL.:POSSIBLE MATRIX INTERFERENCE./LS
PROB.:SAMPLE MATRIX SPIKE DUPLICATE NOT
WITHIN ACCEPTANCE CRITERIA.
EXPL.:SAME AS ABOVE.
PROB.:ANALYTICAL SPIKE NOT WITHIN
ACCEPTANCE CRITERIA.
EXPL.:SAME AS ABOVE.

ESE BATCH : G48394

TABLE OF ABBREVIATIONS

```
%RECV       : % Recovery for spiked sample. (FOUND/TARGET * 100)
ANLY DATE   : Analysis Date
ANLY TIME   : Analysis Time
CURVE       : Curve Regression Number
DILUTION    : Sample Dilution Factor
EXT DATE    : Extract Date
EXT VOL     : Extract Volume
FOUND       : Spiked Sample Conc. - Unspiked Sample Conc
INJ VOL     : Injection Volume
REL%DIFF    : % Difference between current and previous spike.
RESPONSE    : Sample Response
R.T.        : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID   : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
      DA  -- Data Sample
      MB  -- Method Blank
      RF  -- Reference (from commercially known standard)
      RP  -- Replicate Sample
      SP  -- Standard Matrix Spike
      SPM -- Sample Matrix Spike
      STD -- Internal Standard
      SUR -- Surrogate Sample
      UN  -- Unspiked Sample
SAMP VOL    : Sample Volume
SPK CONC    : Spike Concentration
ST          : Sample response explanation or validity. (listed below)
      BK  -- No sample response.
      NA  -- Sample not analyzed.
      NR  -- Not reserved for this batch.  Batch containing the response
             for this sample is listed in the target field.
      OK  -- Sample response shown is correct.
      !   -- Sample response shown is invalid.
      <   -- Sample response < detection limit. Detection limit is shown
             in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET      : Spike Target (SAMPLE LISTING SECTION)
TARGET      : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE        : Response Type ("FINAL" or empty.)
UNSP CONC   : Unspiked Sample Concentration
```

ESE BATCH . G48411
CLASSIFICATION : SELENIUM - EPA 7740

QC TYPE : FDER/SW
ANALYST : MARSHALL SEIGLER
EXTRACTOR : DEBRA ZUCKERMAN
DATA ENTRY : MARSHALL SEIGLER

REPORT DATE/TIME : 05/20/94 06:33:04
ANALYSIS DATE : 04/25/94
EXTRACT DATE : 04/25/94

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS		1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*7	WA17-1-03	04/25/94	06:20PM
CDMHNSS*8	WA16-1-02	04/25/94	06:26PM
CDMHNSS*9	WA16-2-03	04/25/94	06:31PM

ESE BATCH . G48411

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H.T. OVER

ALL HOLDING TIMES MET

STORET: 1148 METHOD: 7740-G SELENIUM, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=2.5 DATE: 04/25/94 LARGEST RESP= %RSD= RT WINDOW

CONC :	0	2.5	5	10	25	50	100
RESP :	.001	.012	.021	.038	.1	.193	.369
CONC':							

CONC = + *RESP+ *RESP**2+ *RESP**3
95% C.I.=
CORRELATION COEFFICIENT =

ESE BATCH G48411

Continuing Calibration Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
04/25/94	CCB*QC*1	1148*7740-G	SELENIUM	MG/KG-	0.300
04/25/94	CCB*QC*2	1148*7740-G	SELENIUM	MG/KG-	0.600

Continuing Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/25/94	CCV*QC*1	1148*7740-G	SELENIUM	MG/KG-	50.0	50.6	101	80-120
04/25/94	CCV*QC*2	1148*7740-G	SELENIUM	MG/KG-	50.0	51.3	103	80-120

Initial Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/25/94	ICV*SPEX*1	1148*7740-G	SELENIUM	MG/KG-	50.0	50.2	100	90-110

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
04/25/94	MB*REAGENT*1	1148*7740-G	SELENIUM	MG/KG-	ND
04/25/94	MB*QC*1	1148*7740-G	SELENIUM	MG/KG-	ND

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
04/25/94	SP*QC*1	1148*7740-G	SELENIUM	104.4	75-123	MG/KG-	0.996	1.04

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
04/25/94	SPM1*CDMHNSS*9	1148*7740-G	SELENIUM	48.9	75-123	0.0	MG/KG-	1.06	0.518
04/25/94	SPM2*CDMHNSS*9	1148*7740-G	SELENIUM	60.0	75-123	0.0	MG/KG-	1.05	0.630

Spike into Matrix Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
04/25/94	SPX*CDMHNSS*9	1148*7740-G	SELENIUM	87.5	85-115	MG/KG-	10.4	9.10

ESE BATCH : G48411

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G48411 Analysis Date: 04/25/94 Analyst: MARSHALL SEIGLER

	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		
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		
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
Sample matrix spike duplicate present?	X		
Sample matrix spike duplicate within acceptance criteria?		X	SE
Analytical spike present?	X		
Analytical spike within acceptance criteria?	X		

Note: Any "NO" answer requires a comment.

OVERRIDE COMMENTS

BATCH OVERRIDE BY: KATHY BARRY 1708
PROB.:SAMPLE MATRIX SPIKE NOT WITHIN
ACCEPTANCE CRITERIA.
EXPL.:POSSIBLE MATRIX EFFECTS./LO
PROB.:SAMPLE MATRIX SPIKE DUPLICATE
NOT WITHIN ACCEPTANCE CRITERIA.
EXPL.:SEE ABOVE./LO

ESE BATCH : G48411

TABLE OF ABBREVIATIONS

```
%RECV       : % Recovery for spiked sample  (FOUND/TARGET * 100)
ANLY DATE   : Analysis Date
ANLY TIME   : Analysis Time
CURVE       : Curve Regression Number
DILUTION    : Sample Dilution Factor
EXT DATE    : Extract Date
EXT VOL     : Extract Volume
FOUND       : Spiked Sample Conc. - Unspiked Sample Conc.
INJ VOL     : Injection Volume
REL%DIFF    : % Difference between current and previous spike.
RESPONSE    : Sample Response
R.T.        : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID   : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
      DA  -- Data Sample
      MB  -- Method Blank
      RF  -- Reference (from commercially known standard)
      RP  -- Replicate Sample
      SP  -- Standard Matrix Spike
      SPM -- Sample Matrix Spike
      STD -- Internal Standard
      SUR -- Surrogate Sample
      UN  -- Unspiked Sample
SAMP VOL    : Sample Volume
SPK CONC    : Spike Concentration
ST          : Sample response explanation or validity. (listed below)
      BK  -- No sample response.
      NA  -- Sample not analyzed.
      NR  -- Not reserved for this batch.  Batch containing the response
             for this sample is listed in the target field.
      OK  -- Sample response shown is correct.
      !   -- Sample response shown is invalid.
      <   -- Sample response < detection limit. Detection limit is shown
             in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET      : Spike Target (SAMPLE LISTING SECTION)
TARGET      : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE        : Response Type ("FINAL" or empty.)
UNSP CONC   : Unspiked Sample Concentration
```

ESE BATCH : G48450
CLASSIFICATION : SELENIUM - EPA 7740

QC TYPE : FDER/SW
ANALYST : JERI ROPERO
EXTRACTOR : DENISE RODRIGUEZ
DATA ENTRY : JERI ROPERO

REPORT DATE/TIME : 05/20/94 06:33:18
ANALYSIS DATE : 04/26/94
EXTRACT DATE : 04/26/94

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS		1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*10	WA07-1-01	04/26/94	09:11PM
CDMHNSS*11	WA07-2-05	04/26/94	09:17PM
CDMHNSS*12	WA05-1-04	04/26/94	09:22PM

ESE BATCH : G48450

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H.T.	OVER

ALL HOLDING TIMES MET

STORET: 1148 METHOD: 7740-G SELENIUM, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=2.5 DATE: 04/26/94 LARGEST RESP= %RSD= RT WINDOW:

CONC :	0	2.5	5	10	25	50	100
RESP :	.002	.012	.027	.046	111	.22	.403
CONC':							

CONC = + *RESP+ *RESP**2. *RESP**3
95% C.I.=
CORRELATION COEFFICIENT =

ESE BATCH : G48450

Continuing Calibration Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
04/26/94	CCB*QC*4	1148*7740-G	SELENIUM	MG/KG-	0.100
04/26/94	CCB*QC*5	1148*7740-G	SELENIUM	MG/KG-	0.300

Continuing Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/26/94	CCV*QC*4	1148*7740-G	SELENIUM	MG/KG-	50.0	46.6	93.2	80-120
04/26/94	CCV*QC*5	1148*7740-G	SELENIUM	MG/KG-	50.0	47.8	95.6	80-120

Initial Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/26/94	ICV*PEPURE*2	1148*7740-G	SELENIUM	MG/KG-	25.0	25.3	101	90-110

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
04/26/94	MB*REAGENT*1	1148*7740-G	SELENIUM	MG/KG-	ND
04/26/94	MB*QC*2	1148*7740-G	SELENIUM	MG/KG-	ND

Standard Addition (SA) Sample Summary

DATE	SAMPLE	STORET	PARAMETER	KNOWN CNC	RESP	UNC CNC	FINAL CNC	CORR
04/26/94	SA0*CDMHNSS*10	1148*7740-G	SELENIUM	0.0	0	0.834	0.086	.9978
04/26/94	SA1*CDMHNSS*10	1148*7740-G	SELENIUM	20.0	.042			
04/26/94	SA2*CDMHNSS*10	1148*7740-G	SELENIUM	40.0	.079			
04/26/94	SA3*CDMHNSS*10	1148*7740-G	SELENIUM	60.0	.111			
04/26/94	SA0*CDMHNSS*11	1148*7740-G	SELENIUM	0.0	.001	0.370	0.039	.9995
04/26/94	SA1*CDMHNSS*11	1148*7740-G	SELENIUM	20.0	.034			
04/26/94	SA2*CDMHNSS*11	1148*7740-G	SELENIUM	40.0	.072			
04/26/94	SA3*CDMHNSS*11	1148*7740-G	SELENIUM	60.0	.104			
04/26/94	SA0*CDMHNSS*12	1148*7740-G	SELENIUM	0.0	.002	0.810	0.083	.9999
04/26/94	SA1*CDMHNSS*12	1148*7740-G	SELENIUM	20.0	.046			
04/26/94	SA2*CDMHNSS*12	1148*7740-G	SELENIUM	40.0	.088			
04/26/94	SA3*CDMHNSS*12	1148*7740-G	SELENIUM	60.0	.134			

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
04/26/94	SP*QC*2	1148*7740-G	SELENIUM	96.0	75-123	MG/KG-	0.999	0.959

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
04/26/94	SPM1*CDMHNSS*12	1148*7740-G	SELENIUM	38.0	75-123	0.0	MG/KG-	1.03	0.391
04/26/94	SPM2*CDMHNSS*12	1148*7740-G	SELENIUM	45.8	75-123	0.0	MG/KG-	1.03	0.472

Spike into Matrix Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
04/26/94	SPX*CDMHNSS*10	1148*7740-G	SELENIUM	61.3	85-115	MG/KG-	10.3	6.31

ESE BATCH : G48450

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G48450 Analysis Date: 04/26/94 Analyst: JERI POPERO

	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		
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		
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
Sample matrix spike duplicate present?	X		
Sample matrix spike duplicate within acceptance criteria?		X	SE
Analytical spike present?	X		
Analytical spike within acceptance criteria?		X	SE

Note: Any "NO" answer requires a comment.

OVERRIDE COMMENTS

BATCH OVERRIDE BY: KATHY BARRY 1708
PROB.:SAMPLE MATRIX SPIKE NOT WITHIN
ACCEPTANCE CRITERIA.
EXPL.:POSSIBLE MATRIX EFFECTS./JDR
PROB.:SAMPLE MATRIX SPIKE DUPLICATE
NOT WITHIN ACCEPTANCE CRITERIA.
EXPL.:SEE ABOVE./JDR
PROB.:ANALYTICAL SPIKE NOT WITHIN
ACCEPTANCE CRITERIA.
EXPL.:MSA'S ON ALL SAMPLES./JDR

ESE BATCH : G48450

TABLE OF ABBREVIATIONS

```
%RECV       : % Recovery for spiked sample  (FOUND/TARGET * 100)
ANLY DATE   : Analysis Date
ANLY TIME   : Analysis Time
CURVE       : Curve Regression Number
DILUTION    : Sample Dilution Factor
EXT DATE    : Extract Date
EXT VOL     : Extract Volume
FOUND       : Spiked Sample Conc. - Unspiked Sample Conc.
INJ VOL     : Injection Volume
REL%DIFF    : % Difference between current and previous spike.
RESPONSE    : Sample Response
R.T.        : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID   : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
      DA  -- Data Sample
      MB  -- Method Blank
      RF  -- Reference (from commercially known standard)
      RP  -- Replicate Sample
      SP  -- Standard Matrix Spike
      SPM -- Sample Matrix Spike
      STD -- Internal Standard
      SUR -- Surrogate Sample
      UN  -- Unspiked Sample
SAMP VOL    : Sample Volume
SPK CONC    : Spike Concentration
ST          : Sample response explanation or validity. (listed below)
      BK  -- No sample response.
      NA  -- Sample not analyzed.
      NR  -- Not reserved for this batch.  Batch containing the response
             for this sample is listed in the target field.
      OK  -- Sample response shown is correct.
      !   -- Sample response shown is invalid.
      <   -- Sample response < detection limit. Detection limit is shown
             in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET      : Spike Target (SAMPLE LISTING SECTION)
TARGET      : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE        : Response Type ("FINAL" or empty.)
UNSP CONC   : Unspiked Sample Concentration
```

ESE BATCH : G48560
CLASSIFICATION : SELENIUM - EPA 7740

QC TYPE : FDER/SW
ANALYST : JERI ROPERO
EXTRACTOR : DAVID NICHOLS
DATA ENTRY : MARSHALL SEIGLER

REPORT DATE/TIME : 05/20/94 06:33:45
ANALYSIS DATE : 04/28/94
EXTRACT DATE : 04/27/94

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS		1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*13	WA05-2-03	04/28/94	05:24PM
CDMHNSS*14	WA05-3-04	04/28/94	05:29PM
CDMHNSS*15	WA04-1-05	04/28/94	05:35PM
CDMHNSS*16	WA04-2-12	04/28/94	05:40PM

ESE BATCH : G48560

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H.T.	OVER

ALL HOLDING TIMES MET

STORET: 1148 METHOD: 7740-G SELENIUM, MG/KG-DRY, FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=2.5 DATE: 04/28/94 LARGEST RESP= %RSD= RT WINDOW:

CONC :	0	2.5	5	10	25	50	100
RESP :	.003	.008	.012	.025	.064	.122	.227
CONC':							

CONC = + *RESP+ *RESP**2+ *RESP**3
95% C.I.=
CORRELATION COEFFICIENT =

ESE BATCH : G48560

Continuing Calibration Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
04/28/94	CCB*QC*1	1148*7740-G	SELENIUM	MG/KG-	ND
04/28/94	CCB*QC*2	1148*7740-G	SELENIUM	MG/KG-	0.100

Continuing Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/28/94	CCV*QC*1	1148*7740-G	SELENIUM	MG/KG-	50.0	51.9	104	80-120
04/28/94	CCV*QC*2	1148*7740-G	SELENIUM	MG/KG-	50.0	52.9	106	80-120

Initial Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/28/94	ICV*PEPURE*1	1148*7740-G	SELENIUM	MG/KG-	25.0	25.4	102	90-110

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
04/28/94	MB*REAGENT*1	1148*7740-G	SELENIUM	MG/KG-	ND
04/28/94	MB*QC*1	1148*7740-G	SELENIUM	MG/KG-	ND

Standard Addition (SA) Sample Summary

DATE	SAMPLE	STORET	PARAMETER	KNOWN CNC	RESP	UNC CNC	FINAL CNC	CORR
04/28/94	SA0*CDMHNSS*13	1148*7740-G	SELENIUM	0.0	0	0.0	0.0	.9956
04/28/94	SA1*CDMHNSS*13	1148*7740-G	SELENIUM	20.0	.031			
04/28/94	SA2*CDMHNSS*13	1148*7740-G	SELENIUM	40.0	.059			
04/28/94	SA3*CDMHNSS*13	1148*7740-G	SELENIUM	60.0	.103			
04/28/94	SA0*CDMHNSS*14	1148*7740-G	SELENIUM	0.0	0	0.0	0.0	.9999
04/28/94	SA1*CDMHNSS*14	1148*7740-G	SELENIUM	20.0	.035			
04/28/94	SA2*CDMHNSS*14	1148*7740-G	SELENIUM	40.0	.071			
04/28/94	SA3*CDMHNSS*14	1148*7740-G	SELENIUM	60.0	.108			
04/28/94	SA0*CDMHNSS*15	1148*7740-G	SELENIUM	0.0	0	0.0	0.0	.9996
04/28/94	SA1*CDMHNSS*15	1148*7740-G	SELENIUM	20.0	.026			
04/28/94	SA2*CDMHNSS*15	1148*7740-G	SELENIUM	40.0	.055			
04/28/94	SA3*CDMHNSS*15	1148*7740-G	SELENIUM	60.0	.08			
04/28/94	SA0*CDMHNSS*16	1148*7740-G	SELENIUM	0.0	0	0.0	0.0	.9992
04/28/94	SA1*CDMHNSS*16	1148*7740-G	SELENIUM	20.0	.031			
04/28/94	SA2*CDMHNSS*16	1148*7740-G	SELENIUM	40.0	.059			
04/28/94	SA3*CDMHNSS*16	1148*7740-G	SELENIUM	60.0	.094			

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
04/28/94	SP1*QC*1	1148*7740-G	SELENIUM	100.0	75-123	MG/KG-	0.982	0.982

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
04/28/94	SPM1*CDMHNSS*16	1148*7740-G	SELENIUM	41.0	75-123	0.0	MG/KG-	1.04	0.426
04/28/94	SPM2*CDMHNSS*16	1148*7740-G	SELENIUM	41.2	75-123	0.0	MG/KG-	1.04	0.428

Spike into Matrix Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
04/28/94	SPX*CDMHNSS*15	1148*7740-G	SELENIUM	68.2	85-115	MG/KG-	10.2	6.96

ESE BATCH : G48560

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G48560 Analysis Date: 04/28/94 Analyst: JERI ROPERO

	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		
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		
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
Sample matrix spike duplicate present?	X		
Sample matrix spike duplicate within acceptance criteria?		X	SE
Analytical spike present?	X		
Analytical spike within acceptance criteria?		X	SE

Note: Any "NO" answer requires a comment.

OVERRIDE COMMENTS

BATCH OVERRIDE BY: KATHY BARRY 1708
PROB.:SAMPLE MATRIX SPIKE NOT WITHIN
ACCEPTANCE CRITERIA.
EXPL.:POSSIBLE MATRIX INTERFERENCE./MFB
PROB.:SAMPLE MATRIX SPIKE DUPLICATE
NOT WITHIN ACCEPTANCE CRITERIA.
EXPL.:SEE ABOVE./MFB
PROB.:ANALYTICAL SPIKE NOT WITHIN
ACCEPTANCE CRITERIA.
EXPL.:MSA REQUIRED./MFB

ESE BATCH : G48560

TABLE OF ABBREVIATIONS

```
%RECV       : % Recovery for spiked sample  (FOUND/TARGET * 100)
ANLY DATE   : Analysis Date
ANLY TIME   : Analysis Time
CURVE       : Curve Regression Number
DILUTION    : Sample Dilution Factor
EXT DATE    : Extract Date
EXT VOL     : Extract Volume
FOUND       : Spiked Sample Conc. - Unspiked Sample Conc.
INJ VOL     : Injection Volume
REL%DIFF    : % Difference between current and previous spike.
RESPONSE    : Sample Response
R.T.        : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID   : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
      DA  -- Data Sample
      MB  -- Method Blank
      RF  -- Reference (from commercially known standard)
      RP  -- Replicate Sample
      SP  -- Standard Matrix Spike
      SPM -- Sample Matrix Spike
      STD -- Internal Standard
      SUR -- Surrogate Sample
      UN  -- Unspiked Sample
SAMP VOL    : Sample Volume
SPK CONC    : Spike Concentration
ST          : Sample response explanation or validity. (listed below)
      BK  -- No sample response.
      NA  -- Sample not analyzed.
      NR  -- Not reserved for this batch.  Batch containing the response
             for this sample is listed in the target field
      OK  -- Sample response shown is correct.
      !   -- Sample response shown is invalid.
      <   -- Sample response < detection limit. Detection limit is shown
             in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET      : Spike Target (SAMPLE LISTING SECTION)
TARGET      : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE        : Response Type ("FINAL" or empty.)
UNSP CONC   : Unspiked Sample Concentration
```

ESE BATCH : G48670
CLASSIFICATION : SELENIUM - EPA 7740

QC TYPE : FDER/SW
ANALYST : KEITH GEISZLER
EXTRACTOR : DENISE RODRIGUEZ
DATA ENTRY : MARLENE BANNER

REPORT DATE/TIME : 05/20/94 06:34:10
ANALYSIS DATE : 05/02/94
EXTRACT DATE : 04/29/94

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

FIELD GRP QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS	1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*17	EA14-1-01	05/02/94	09:27AM
CDMHNSS*18	EA14-2-01	05/02/94	09:33AM
CDMHNSS*19	EA12-1-10	05/02/94	09:38AM
CDMHNSS*20	EA12-2-12	05/02/94	09:44AM

ESE BATCH : G48670

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H.T.	OVER

ALL HOLDING TIMES MET

STORET: 1148 METHOD: 7740-G SELENIUM, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=2.5 DATE: 05/02/94 LARGEST RESP= %RSD= RT WINDOW:

CONC :	0	2.5	5	10	25	50	100
RESP :	-.001	.012	.024	.046	.126	.216	.42
CONC':							

CONC = + *RESP+ *RESP**2+ *RESP**3
95% C.I.=
CORRELATION COEFFICIENT =

ESE BATCH : G48670

Continuing Calibration Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/02/94	CCB*QC*1	1148*7740-G	SELENIUM	MG/KG-	0.200
05/02/94	CCB*QC*2	1148*7740-G	SELENIUM	MG/KG-	0.300
05/02/94	CCB*QC*3	1148*7740-G	SELENIUM	MG/KG-	1.20

Continuing Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/02/94	CCV*QC*1	1148*7740-G	SELENIUM	MG/KG-	50.0	50.6	101	80-120
05/02/94	CCV*QC*2	1148*7740-G	SELENIUM	MG/KG-	50.0	47.0	94.0	80-120
05/02/94	CCV*QC*3	1148*7740-G	SELENIUM	MG/KG-	50.0	46.1	92.2	80-120

Initial Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/02/94	ICV*PE-PURE*1	1148*7740-G	SELENIUM	MG/KG-	25.0	26.0	104	90-110

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/02/94	MB*REAGENTS*1	1148*7740-G	SELENIUM	MG/KG-	0.500
05/02/94	MB*QC*1	1148*7740-G	SELENIUM	MG/KG-	ND

Standard Addition (SA) Sample Summary

DATE	SAMPLE	STORET	PARAMETER	KNOWN CNC	RESP	UNC CNC	FINAL CNC	CORR
05/02/94	SA0*CDMHNSS*17	1148*7740-G	SELENIUM	0.0	.001	0.619	0.064	1.0000
05/02/94	SA1*CDMHNSS*17	1148*7740-G	SELENIUM	20.0	.04			
05/02/94	SA2*CDMHNSS*17	1148*7740-G	SELENIUM	40.0	.079			
05/02/94	SA3*CDMHNSS*17	1148*7740-G	SELENIUM	60.0	.117			
05/02/94	SA0*CDMHNSS*18	1148*7740-G	SELENIUM	0.0	.002	1.72	0.178	.9998
05/02/94	SA1*CDMHNSS*18	1148*7740-G	SELENIUM	20.0	.036			
05/02/94	SA2*CDMHNSS*18	1148*7740-G	SELENIUM	40.0	.068			
05/02/94	SA3*CDMHNSS*18	1148*7740-G	SELENIUM	60.0	.099			
05/02/94	SA0*CDMHNSS*19	1148*7740-G	SELENIUM	0.0	.003	2.05	0.212	.9992
05/02/94	SA1*CDMHNSS*19	1148*7740-G	SELENIUM	20.0	.041			
05/02/94	SA2*CDMHNSS*19	1148*7740-G	SELENIUM	40.0	.072			
05/02/94	SA3*CDMHNSS*19	1148*7740-G	SELENIUM	60.0	.11			
05/02/94	SA0*CDMHNSS*20	1148*7740-G	SELENIUM	0.0	0	0.0	0.0	.9998
05/02/94	SA1*CDMHNSS*20	1148*7740-G	SELENIUM	20.0	.033			
05/02/94	SA2*CDMHNSS*20	1148*7740-G	SELENIUM	40.0	.07			
05/02/94	SA3*CDMHNSS*20	1148*7740-G	SELENIUM	60.0	.105			

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
05/02/94	SP*QC*1	1148*7740-G	SELENIUM	104.1	75-123	MG/KG-	0.999	1.04

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
05/02/94	SPM1*CDMHNSS*20	1148*7740-G	SELENIUM	28.9	75-123	0.0	MG/KG-	1.04	0.301
05/02/94	SPM2*CDMHNSS*20	1148*7740-G	SELENIUM	33.0	75-123	0.0	MG/KG-	1.04	0.343

Spike into Matrix Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
05/02/94	SPX*CDMHNSS*19	1148*7740-G	SELENIUM	68.7	85-115	MG/KG-	10.4	7.14

ESE BATCH : G48670

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G48670 Analysis Date: 05/02/94 Analyst: KEITH GEISZLER

	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			
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			
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	
Sample matrix spike duplicate present?	X			
Sample matrix spike duplicate within acceptance criteria?		X	SE	
Analytical spike present?	X			
Analytical spike within acceptance criteria?		X	SE	

Note: Any "NO" answer requires a comment.

OVERRIDE COMMENTS

BATCH OVERRIDE BY: KATHY BARRY 1708
PROB.:SAMPLE MATRIX SPIKE NOT WITHIN
ACCEPTANCE CRITERIA.
EXPL.:POSSIBLE MATRIX INTERFERENCE./MFB
PROB.:SAMPLE MATRIX SPIKE DUPLICATE
NOT WITHIN ACCEPTANCE CRITERIA.
EXPL.:SEE ABOVE./MFB
PROB.:ANALYTICAL SPIKE NOT WITHIN
ACCEPTANCE CRITERIA.
EXPL.:MSA'S REQUIRED./KNG

ESE BATCH : G48670

TABLE OF ABBREVIATIONS

```
%RECV       : % Recovery for spiked sample. (FOUND/TARGET * 100)
ANLY DATE   : Analysis Date
ANLY TIME   : Analysis Time
CURVE       : Curve Regression Number
DILUTION    : Sample Dilution Factor
EXT DATE    : Extract Date
EXT VOL     : Extract Volume
FOUND       : Spiked Sample Conc. - Unspiked Sample Conc.
INJ VOL     : Injection Volume
REL%DIFF    : % Difference between current and previous spike.
RESPONSE    : Sample Response
R.T.        : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID   : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
      DA  -- Data Sample
      MB  -- Method Blank
      RF  -- Reference (from commercially known standard)
      RP  -- Replicate Sample
      SP  -- Standard Matrix Spike
      SPM -- Sample Matrix Spike
      STD -- Internal Standard
      SUR -- Surrogate Sample
      UN  -- Unspiked Sample
SAMP VOL    : Sample Volume
SPK CONC    : Spike Concentration
ST          : Sample response explanation or validity. (listed below)
      BK  -- No sample response.
      NA  -- Sample not analyzed.
      NR  -- Not reserved for this batch.  Batch containing the response
             for this sample is listed in the target field.
      OK  -- Sample response shown is correct.
      !   -- Sample response shown is invalid.
      <   -- Sample response < detection limit. Detection limit is shown
             in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET      : Spike Target (SAMPLE LISTING SECTION)
TARGET      : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE        : Response Type ("FINAL" or empty.)
UNSP CONC   : Unspiked Sample Concentration
```

ESE BATCH : G48748
CLASSIFICATION : SELENIUM - EPA 7740

QC TYPE : FDER/SW
ANALYST : JERI ROPERO
EXTRACTOR : DENISE RODRIGUEZ
DATA ENTRY : GFAA UPLOAD

REPORT DATE/TIME : 05/20/94 06:34:34
ANALYSIS DATE : 05/03/94
EXTRACT DATE : 05/03/94

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS		1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*21	EA11-1-07	05/03/94	09:17PM
CDMHNSS*22	EA01-1-10	05/03/94	09:22PM

ESE BATCH : G48748

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H.T.	OVER

ALL HOLDING TIMES MET

STORET: 1148 METHOD: 7740-G SELENIUM, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=2.5 DATE: 05/03/94 LARGEST RESP= %RSD= RT WINDOW:

CONC :	0	2.5	5	25	50	75	100
RESP :	-.001	.005	.013	.046	.099	.136	.18
CONC':							

CONC = + *RESP+ *RESP**2+ *RESP**3
95% C.I.=
CORRELATION COEFFICIENT =

ESE BATCH : G48748

Continuing Calibration Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/03/94	CCB*QC*1	1148*7740-G	SELENIUM	MG/KG-	1.20

Continuing Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/03/94	CCV*QC*1	1148*7740-G	SELENIUM	MG/KG-	50.0	47.3	94.6	80-120

Initial Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/03/94	ICV*PEPURE*1	1148*7740-G	SELENIUM	MG/KG-	25.0	23.6	94.4	90-110

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/03/94	MB*REAGENT*1	1148*7740-G	SELENIUM	MG/KG-	1.80
05/03/94	MB*QC*1	1148*7740-G	SELENIUM	MG/KG-	ND

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
05/03/94	SP*QC*1	1148*7740-G	SELENIUM	111.1	75-123	MG/KG-	0.999	1.11

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
05/03/94	SPM1*CDMHNSS*22	1148*7740-G	SELENIUM	67.5	75-123	0.514	MG/KG-	1.09	0.736
05/03/94	SPM2*CDMHNSS*22	1148*7740-G	SELENIUM	88.6	75-123	0.514	MG/KG-	1.09	0.966

Spike into Matrix Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
05/03/94	SPX*CDMHNSS*22	1148*7740-G	SELENIUM	93.6	85-115	MG/KG-	10.9	10.2

ESE BATCH : G48748

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G48748 Analysis Date: 05/03/94 Analyst: JERI ROPERO

	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		
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		
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
Sample matrix spike duplicate present?	X		
Sample matrix spike duplicate within acceptance criteria?		X	SE
Analytical spike present?	X		
Analytical spike within acceptance criteria?	X		

Note: Any "NO" answer requires a comment.

OVERRIDE COMMENTS

BATCH OVERRIDE BY: KATHY BARRY 1708
PROB.:SAMPLE MATRIX SPIKE NOT WITHIN
ACCEPTANCE CRITERIA.
EXPL.:ERRATIC SPIKE RECOVERIES, POSSIBLY
DUE TO THE NON-HOMOGENEITY OF THE
SAMPLE./MFB
PROB.:SAMPLE MATRIX SPIKE DUPLICATE NOT
WITHIN ACCEPTANCE CRITERIA.
EXPL.:SEE ABOVE./MFB

ESE BATCH : G48748

TABLE OF ABBREVIATIONS

```
%RECV       : % Recovery for spiked sample. (FOUND/TARGET * 100)
ANLY DATE   : Analysis Date
ANLY TIME   : Analysis Time
CURVE       : Curve Regression Number
DILUTION    : Sample Dilution Factor
EXT DATE    : Extract Date
EXT VOL     : Extract Volume
FOUND       : Spiked Sample Conc. - Unspiked Sample Conc.
INJ VOL     : Injection Volume
REL%DIFF    : % Difference between current and previous spike.
RESPONSE    : Sample Response
R.T.        : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID   : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
      DA  -- Data Sample
      MB  -- Method Blank
      RF  -- Reference (from commercially known standard)
      RP  -- Replicate Sample
      SP  -- Standard Matrix Spike
      SPM -- Sample Matrix Spike
      STD -- Internal Standard
      SUR -- Surrogate Sample
      UN  -- Unspiked Sample
SAMP VOL    : Sample Volume
SPK CONC    : Spike Concentration
ST          : Sample response explanation or validity. (listed below)
      BK  -- No sample response.
      NA  -- Sample not analyzed.
      NR  -- Not reserved for this batch.  Batch containing the response
             for this sample is listed in the target field.
      OK  -- Sample response shown is correct.
      !   -- Sample response shown is invalid.
      <   -- Sample response < detection limit. Detection limit is shown
             in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET      : Spike Target (SAMPLE LISTING SECTION)
TARGET      : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE        : Response Type ("FINAL" or empty.)
UNSP CONC   : Unspiked Sample Concentration
```

ESE BATCH : G48804
CLASSIFICATION : SELENIUM - EPA 7740

QC TYPE : FDER/SW
ANALYST : CHRISTOPHER HORRELL
EXTRACTOR : DEBRA ZUCKERMAN
DATA ENTRY : MARSHALL SEIGLER

REPORT DATE/TIME : 05/20/94 06:34:47
ANALYSIS DATE : 05/04/94
EXTRACT DATE : 05/04/94

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS		1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*23	OCS1-1-00	05/04/94	09:01PM

ESE BATCH : G48804

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H.T.	OVER

ALL HOLDING TIMES MET

STORET: 1148 METHOD: 7740-G SELENIUM, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=2.5 DATE: 05/04/94 LARGEST RESP= %RSD= RT WINDOW:

CONC :	0	2.5	10	25	50	100
RESP :	.003	.012	.041	.102	.192	.34
CONC':						

CONC = + *RESP+ *RESP**2+ *RESP**3
95% C.I.=
CORRELATION COEFFICIENT =

ESE BATCH G48804

Continuing Calibration Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/04/94	CCB*QC*1	1148*7740-G	SELENIUM	MG/KG-	0.600
05/04/94	CCB*QC*2	1148*7740-G	SELENIUM	MG/KG-	0.300

Continuing Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/04/94	CCV*QC*1	1148*7740-G	SELENIUM	MG/KG-	50.0	48.5	97.0	80-120
05/04/94	CCV*QC*2	1148*7740-G	SELENIUM	MG/KG-	50.0	49.7	99.4	80-120

Initial Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/04/94	ICV*SPEX*1	1148*7740-G	SELENIUM	MG/KG-	50.0	49.8	99.6	90-110

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/04/94	MB*REAGENT*1	1148*7740-G	SELENIUM	MG/KG-	0.400
05/04/94	MB*QC*1	1148*7740-G	SELENIUM	MG/KG-	ND

Standard Addition (SA) Sample Summary

DATE	SAMPLE	STORET	PARAMETER	KNOWN CNC	RESP	UNC CNC	FINAL CNC	CORR
05/04/94	SA0*CDMHNSS*23	1148*7740-G	SELENIUM	0.0	0	0.125	0.013	.9958
05/04/94	SA1*CDMHNSS*23	1148*7740-G	SELENIUM	20.0	.041			
05/04/94	SA2*CDMHNSS*23	1148*7740-G	SELENIUM	40.0	.078			
05/04/94	SA3*CDMHNSS*23	1148*7740-G	SELENIUM	60.0	.107			

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
05/04/94	SP*QC*1	1148*7740-G	SELENIUM	91.0	75-123	MG/KG-	0.991	0.902

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
05/04/94	SPM1*CDMHNSS*23	1148*7740-G	SELENIUM	45.0	75-123	0.0	MG/KG-	1.05	0.473
05/04/94	SPM2*CDMHNSS*23	1148*7740-G	SELENIUM	48.2	75-123	0.0	MG/KG-	1.04	0.501

Spike into Matrix Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
05/04/94	SPX*CDMHNSS*23	1148*7740-G	SELENIUM	72.1	85-115	MG/KG-	10.4	7.50

ESE BATCH : G48804

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G48804 Analysis Date: 05/04/94 Analyst: CHRISTOPHER HORRELL

	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			
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			
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	
Sample matrix spike duplicate present?	X			
Sample matrix spike duplicate within acceptance criteria?		X	SE	
Analytical spike present?	X			
Analytical spike within acceptance criteria?		X	SE	

Note: Any "NO" answer requires a comment.

OVERRIDE COMMENTS

BATCH OVERRIDE BY: KATHY BARRY 1708
PROB.:SAMPLE MATRIX SPIKE NOT WITHIN
ACCEPTANCE CRITERIA.
EXPL.:POSSIBLE MATRIX INTERFERENCE./MFB
PROB.:SAMPLE MATRIX SPIKE DUPLICATE
NOT WITHIN ACCEPTANCE CRITERIA.
EXPL.:SEE ABOVE./MFB
PROB.:ANALYTICAL SPIKE NOT WITHIN ACCEPTANCE
CRITERIA.
EXPL.:SEE ABOVE./MFB

ESE BATCH : G48804

TABLE OF ABBREVIATIONS

```
%RECV       : % Recovery for spiked sample. (FOUND/TARGET * 100)
ANLY DATE   : Analysis Date
ANLY TIME   : Analysis Time
CURVE       : Curve Regression Number
DILUTION    : Sample Dilution Factor
EXT DATE    : Extract Date
EXT VOL     : Extract Volume
FOUND       : Spiked Sample Conc. - Unspiked Sample Conc.
INJ VOL     : Injection Volume
REL%DIFF    : % Difference between current and previous spike.
RESPONSE    : Sample Response
R.T.        : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID   : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
      DA  -- Data Sample
      MB  -- Method Blank
      RF  -- Reference (from commercially known standard)
      RP  -- Replicate Sample
      SP  -- Standard Matrix Spike
      SPM -- Sample Matrix Spike
      STD -- Internal Standard
      SUR -- Surrogate Sample
      UN  -- Unspiked Sample
SAMP VOL    : Sample Volume
SPK CONC    : Spike Concentration
ST          : Sample response explanation or validity. (listed below)
      BK  -- No sample response.
      NA  -- Sample not analyzed.
      NR  -- Not reserved for this batch.  Batch containing the response
             for this sample is listed in the target field.
      OK  -- Sample response shown is correct.
      !   -- Sample response shown is invalid.
      <   -- Sample response < detection limit. Detection limit is shown
             in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET      : Spike Target (SAMPLE LISTING SECTION)
TARGET      : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE        : Response Type ("FINAL" or empty.)
UNSP CONC   : Unspiked Sample Concentration
```

ESE BATCH : G48830
CLASSIFICATION : SELENIUM - EPA 7740

QC TYPE : FDER/SW
ANALYST : JERI ROPERO
EXTRACTOR : DEBRA ZUCKERMAN
DATA ENTRY : JERI ROPERO

REPORT DATE/TIME : 05/20/94 06:35:03
ANALYSIS DATE : 05/05/94
EXTRACT DATE : 05/05/94

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS		1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*24	EBG1-1-02	05/05/94	07:37PM
CDMHNSS*25	ESV1-1-01	05/05/94	07:54PM
CDMHNSS*26	WBG2-1-02	05/05/94	07:59PM
CDMHNSS*27	WBG2-2-02	05/05/94	08:05PM

ESE BATCH : G48830

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H.T. OVER

ALL HOLDING TIMES MET

STORET: 1148 METHOD: 7740-G SELENIUM, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=2.5 DATE: 05/05/94 LARGEST RESP= %RSD= RT WINDOW:

CONC :	0	2.5	10	25	50	100
RESP :	.005	.013	.035	.095	189	331
CONC':						

CONC = + *RESP+ *RESP**2 *RESP**3
95% C.I.=
CORRELATION COEFFICIENT =

ESE BATCH : G48830

Continuing Calibration Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/05/94	CCB*QC*1	1148*7740-G	SELENIUM	MG/KG-	0.300
05/05/94	CCB*QC*2	1148*7740-G	SELENIUM	MG/KG-	ND

Continuing Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/05/94	CCV*QC*1	1148*7740-G	SELENIUM	MG/KG-	50.0	47.3	94.6	80-120
05/05/94	CCV*QC*2	1148*7740-G	SELENIUM	MG/KG-	50.0	46.5	93.0	80-120

Initial Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/05/94	ICV*PEPURE*1	1148*7740-G	SELENIUM	MG/KG-	25.0	25.7	103	90-110

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/05/94	MB*REAGENT*1	1148*7740-G	SELENIUM	MG/KG-	ND
05/05/94	MB*QC*1	1148*7740-G	SELENIUM	MG/KG-	ND

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
05/05/94	SP*QC*1	1148*7740-G	SELENIUM	100.0	75-123	MG/KG-	0.992	0.992

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
05/05/94	SPM1*CDMHNSS*24	1148*7740-G	SELENIUM	58.1	75-123	0.0	MG/KG-	1.05	0.610
05/05/94	SPM2*CDMHNSS*24	1148*7740-G	SELENIUM	50.0	75-123	0.0	MG/KG-	1.06	0.530

Spike into Matrix Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
05/05/94	SPX*CDMHNSS*26	1148*7740-G	SELENIUM	87.6	85-115	MG/KG-	10.3	9.02

ESE BATCH : G48830

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G48830 Analysis Date: 05/06/94 Analyst: JERI ROPERO

	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		
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		
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
Sample matrix spike duplicate present?	X		
Sample matrix spike duplicate within acceptance criteria?		X	SE
Analytical spike present?	X		
Analytical spike within acceptance criteria?	X		

Note: Any "NO" answer requires a comment.

OVERRIDE COMMENTS

BATCH OVERRIDE BY: KATHY BARRY 1708
PROB.:SAMPLE MATRIX SPIKE NOT WITHIN
ACCEPTANCE CRITERIA.
EXPL.:POSSIBLE MATRIX INTERFERENCE./MFB
PROB.:SAMPLE MATRIX SPIKE DUPLICATE NOT
WITHIN ACCEPTANCE CRITERIA.
EXPL.:SEE ABOVE./MFB

ESE BATCH : G48830

TABLE OF ABBREVIATIONS

```
%RECV       : % Recovery for spiked sample. (FOUND/TARGET * 100)
ANLY DATE   : Analysis Date
ANLY TIME   : Analysis Time
CURVE       : Curve Regression Number
DILUTION    : Sample Dilution Factor
EXT DATE    : Extract Date
EXT VOL     : Extract Volume
FOUND       : Spiked Sample Conc. - Unspiked Sample Conc.
INJ VOL     : Injection Volume
REL%DIFF    : % Difference between current and previous spike.
RESPONSE    : Sample Response
R.T.        : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID   : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
      DA  -- Data Sample
      MB  -- Method Blank
      RF  -- Reference (from commercially known standard)
      RP  -- Replicate Sample
      SP  -- Standard Matrix Spike
      SPM -- Sample Matrix Spike
      STD -- Internal Standard
      SUR -- Surrogate Sample
      UN  -- Unspiked Sample
SAMP VOL    : Sample Volume
SPK CONC    : Spike Concentration
ST          : Sample response explanation or validity. (listed below)
      BK  -- No sample response.
      NA  -- Sample not analyzed.
      NR  -- Not reserved for this batch.  Batch containing the response
             for this sample is listed in the target field.
      OK  -- Sample response shown is correct.
      !   -- Sample response shown is invalid.
      <   -- Sample response < detection limit. Detection limit is shown
             in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET      : Spike Target (SAMPLE LISTING SECTION)
TARGET      : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE        : Response Type ("FINAL" or empty.)
UNSP CONC   : Unspiked Sample Concentration
```

ESE BATCH : G48873
CLASSIFICATION : SELENIUM - EPA 7740

QC TYPE : FDER/SW
ANALYST : LISA SWAYZE
EXTRACTOR : DAVID NICHOLS
DATA ENTRY : LISA SWAYZE

REPORT DATE/TIME : 05/20/94 06:35:17
ANALYSIS DATE : 05/09/94
EXTRACT DATE : 05/09/94

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS		1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*28	WA04-3-20	05/09/94	10:16AM
CDMHNSS*29	WA04-4-08	05/09/94	10:21AM
CDMHNSS*30	WSV2-1-01	05/09/94	10:27AM
CDMHNSS*31	WBG3-1-02	05/09/94	10:32AM
CDMHNSS*32	EWC1-1-00	05/09/94	10:38AM
CDMHNSS*33	WWC2-1-00	05/09/94	10:58AM

ESE BATCH . G48873

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H.T. OVER

ALL HOLDING TIMES MET

STORET: 1148 METHOD: 7740-G SELENIUM, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=2.5 DATE: 05/09/94 LARGEST RESP= %RSD= RT WINDOW

CONC :	0	2.5	5	10	25	50	100
RESP :	.003	.013	.027	.048	.114	.211	.413
CONC':							

CONC = + *RESP+ *RESP**2 + *RESP**3
95% C.I.=
CORRELATION COEFFICIENT =

ESE BATCH : G48873

Continuing Calibration Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/09/94	CCB*QC*1	1148*7740-G	SELENIUM	MG/KG-	0.300
05/09/94	CCB*QC*2	1148*7740-G	SELENIUM	MG/KG-	0.500

Continuing Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/09/94	CCV*QC*1	1148*7740-G	SELENIUM	MG/KG-	50.0	47.6	95.2	80-120
05/09/94	CCV*QC*2	1148*7740-G	SELENIUM	MG/KG-	50.0	49.6	99.2	80-120

Initial Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/09/94	ICV*SPEX*1	1148*7740-G	SELENIUM	MG/KG-	50.0	46.6	93.2	90-110

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/09/94	MB*REAGENT*1	1148*7740-G	SELENIUM	MG/KG-	ND
05/09/94	MB*QC*1	1148*7740-G	SELENIUM	MG/KG-	ND

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
05/09/94	SP*QC*1	1148*7740-G	SELENIUM	100.7	75-123	MG/KG-	0.993	1.00

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
05/09/94	SPM1*CDMHNSS*33	1148*7740-G	SELENIUM	39.0	75-123	0.0	MG/KG-	0.981	0.383
05/09/94	SPM2*CDMHNSS*33	1148*7740-G	SELENIUM	42.0	75-123	0.0	MG/KG-	0.992	0.417

Spike into Matrix Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
05/09/94	SPX*CDMHNSS*33	1148*7740-G	SELENIUM	86.2	85-115	MG/KG-	10.2	8.79

ESE BATCH G48873

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G48873 Analysis Date: 05/09/94 Analyst: LISA SWAYZE

	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		
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		
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
Sample matrix spike duplicate present?	X		
Sample matrix spike duplicate within acceptance criteria?		X	SE
Analytical spike present?	X		
Analytical spike within acceptance criteria?	X		

Note: Any "NO" answer requires a comment.

OVERRIDE COMMENTS

BATCH OVERRIDE BY: KATHY BARRY 1708
PROB.:SAMPLE MATRIX SPIKE NOT WITHIN
ACCEPTANCE CRITERIA.
EXPL.:POSSIBLE MATRIX INTERFERENCE./LS
PROB.:SAMPLE MATRIX SPIKE DUPLICATE
NOT WITHIN ACCEPTANCE CRITERIA.
EXPL.:SEE ABOVE./LS

TABLE OF ABBREVIATIONS

```
%RECV       : % Recovery for spiked sample. (FOUND/TARGET * 100)
ANLY DATE   : Analysis Date
ANLY TIME   : Analysis Time
CURVE       : Curve Regression Number
DILUTION    : Sample Dilution Factor
EXT DATE    : Extract Date
EXT VOL     : Extract Volume
FOUND       : Spiked Sample Conc. - Unspiked Sample Conc.
INJ VOL     : Injection Volume
REL%DIFF    : % Difference between current and previous spike.
RESPONSE    : Sample Response
R.T.        : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID   : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
      DA  -- Data Sample
      MB  -- Method Blank
      RF  -- Reference (from commercially known standard)
      RP  -- Replicate Sample
      SP  -- Standard Matrix Spike
      SPM -- Sample Matrix Spike
      STD -- Internal Standard
      SUR -- Surrogate Sample
      UN  -- Unspiked Sample
SAMP VOL    : Sample Volume
SPK CONC    : Spike Concentration
ST          : Sample response explanation or validity. (listed below)
      BK  -- No sample response.
      NA  -- Sample not analyzed.
      NR  -- Not reserved for this batch.  Batch containing the response
             for this sample is listed in the target field.
      OK  -- Sample response shown is correct.
      !   -- Sample response shown is invalid.
      <   -- Sample response < detection limit. Detection limit is shown
             in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET      : Spike Target (SAMPLE LISTING SECTION)
TARGET      : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE        : Response Type ("FINAL" or empty.)
UNSP CONC   : Unspiked Sample Concentration
```

ESE BATCH : G49179
CLASSIFICATION : SELENIUM - EPA 7740

QC TYPE : FDER/SW
ANALYST : LISA SWAYZE
EXTRACTOR : DEBRA ZUCKERMAN
DATA ENTRY : LISA SWAYZE

REPORT DATE/TIME : 05/20/94 06:35:32
ANALYSIS DATE : 05/16/94
EXTRACT DATE : 05/14/94

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

FIELD GRP QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS	1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*34	EA01-2-05	05/16/94	11:06AM
CDMHNSS*35	EA01-3-05	05/16/94	
CDMHNSS*36	EA01-4-14	05/16/94	11:17AM
CDMHNSS*37	EA01-5-12	05/16/94	11:48AM
CDMHNSS*38	EA01-6-10	05/16/94	11:54AM

ESE BATCH : G49179

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H.T. OVER

ALL HOLDING TIMES MET

STORET: 1148 METHOD: 7740-G SELENIUM, MG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=2.5 DATE: 05/16/94 LARGEST RESP= %RSD= RT WINDOW

CONC :	0	2.5	10	25	50	100
RESP :	.003	.015	.047	.103	.193	.383
CONC':						

CONC = + *RESP+ *RESP**2+ *RESP**3
95% C.I.=
CORRELATION COEFFICIENT =

ESE BATCH : G49179

Continuing Calibration Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/16/94	CCB*QC*1	1148*7740-G	SELENIUM	MG/KG-	ND
05/16/94	CCB*QC*2	1148*7740-G	SELENIUM	MG/KG-	ND

Continuing Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/16/94	CCV*QC*1	1148*7740-G	SELENIUM	MG/KG-	50.0	47.7	95.4	80-120
05/16/94	CCV*QC*2	1148*7740-G	SELENIUM	MG/KG-	50.0	46.3	92.6	80-120

Initial Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/16/94	ICV*SPEX*1	1148*7740-G	SELENIUM	MG/KG-	50.0	45.8	91.6	90-110

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/16/94	MB*REAGENT*1	1148*7740-G	SELENIUM	MG/KG-	0.900
05/16/94	MB*QC*1	1148*7740-G	SELENIUM	MG/KG-	ND

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
05/16/94	SP*QC*1	1148*7740-G	SELENIUM	95.0	75-123	MG/KG-	0.996	0.946

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
05/16/94	SPM1*CDMHNSS*36	1148*7740-G	SELENIUM	54.0	75-123	0.0	MG/KG-	1.03	0.556
05/16/94	SPM2*CDMHNSS*36	1148*7740-G	SELENIUM	49.0	75-123	0.0	MG/KG-	1.03	0.505

Spike into Matrix Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
05/16/94	SPX*CDMHNSS*34	1148*7740-G	SELENIUM	90.8	85-115	MG/KG-	10.2	9.26

ESE BATCH : G49179

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G49179 Analysis Date: 05/16/94 Analyst: LISA SWAYZE

	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		
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		
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
Sample matrix spike duplicate present?	X		
Sample matrix spike duplicate within acceptance criteria?		X	SE
Analytical spike present?	X		
Analytical spike within acceptance criteria?	X		

Note: Any "NO" answer requires a comment.

OVERRIDE COMMENTS

BATCH OVERRIDE BY: KATHY BARRY 1708
PROB: SAMPLE MATRIX SPIKE AND MATRIX SPIKE DUP
NOT WITHIN ACCEPTANCE CRITERIA.
EXPL: POSSIBLE MATRIX INTERFERENCE. / LMS 05-17-94

ESE BATCH : G49179

TABLE OF ABBREVIATIONS

```
%RECV       : % Recovery for spiked sample. (FOUND/TARGET * 100)
ANLY DATE   : Analysis Date
ANLY TIME   : Analysis Time
CURVE       : Curve Regression Number
DILUTION    : Sample Dilution Factor
EXT DATE    : Extract Date
EXT VOL     : Extract Volume
FOUND       : Spiked Sample Conc. - Unspiked Sample Conc.
INJ VOL     : Injection Volume
REL%DIFF    : % Difference between current and previous spike.
RESPONSE    : Sample Response
R.T.        : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID   : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
      DA  -- Data Sample
      MB  -- Method Blank
      RF  -- Reference (from commercially known standard)
      RP  -- Replicate Sample
      SP  -- Standard Matrix Spike
      SPM -- Sample Matrix Spike
      STD -- Internal Standard
      SUR -- Surrogate Sample
      UN  -- Unspiked Sample
SAMP VOL    : Sample Volume
SPK CONC    : Spike Concentration
ST          : Sample response explanation or validity. (listed below)
      BK  -- No sample response.
      NA  -- Sample not analyzed.
      NR  -- Not reserved for this batch.  Batch containing the response
             for this sample is listed in the target field.
      OK  -- Sample response shown is correct.
      !   -- Sample response shown is invalid.
      <   -- Sample response < detection limit. Detection limit is shown
             in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET      : Spike Target (SAMPLE LISTING SECTION)
TARGET      : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE        : Response Type ("FINAL" or empty.)
UNSP CONC   : Unspiked Sample Concentration
```

Mercury

ESE BATCH : G48304
CLASSIFICATION : MERCURY - EPA 7471 (MOI)

QC TYPE : FDER/SW
ANALYST : MARSHALL SEIGLER
EXTRACTOR : MARSHALL SEIGLER
DATA ENTRY : MARSHALL SEIGLER

REPORT DATE/TIME : 05/20/94 06:29:50
ANALYSIS DATE : 04/21/94
EXTRACT DATE : 04/21/94

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS		1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*1	WA20-1-04		
CDMHNSS*2	WA20-2-06		
CDMHNSS*3	WA19-1-08		
CDMHNSS*4	WA19-2-07		

ESE BATCH : G48304

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H T. OVER

ALL HOLDING TIMES MET

STORET: 71921 METHOD: 7471M-G MERCURY, MG/KG-DRY QUAL

CALIBRATION CURVE # 1 (UG/L)
DETECTION LIMIT=0.2 DATE: 04/21/94 LARGEST RESP=87.75(USER DEFINED) %RSD=16.2843 RT WINDOW:

CONC :	0.0	0.2	0.5	1.0	2.0	5.0	7.0	10.0
RESP :	0.25	2.75	6.75	12.0	23.25	50.5	70.5	87.75
CONC':	0.037	0.222	0.529	0.953	1.95	4.82	7.36	9.83

CONC = 1.9119E-02+ 7.2462E-02*RESP+ 4.4866E-04*RESP**2+ *RESP**3
95% C.I.= 2.4004E-01 1.8263E-02 2.1150E-04
CORRELATION COEFFICIENT = .9990

ESE BATCH : G48304

Continuing Calibration Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
04/21/94	CCB*QC*1	71921*7471M-G	MERCURY	MG/KG-	0.037

Continuing Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/21/94	CCV*QC*1	71921*7471M-G	MERCURY	MG/KG-	5.00	4.82	96.4	80-120

Initial Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/21/94	ICV*PE-PURE*1	71921*7471M-G	MERCURY	MG/KG-	5.00	4.85	97.0	80-120

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
04/21/94	MB*QC*1	71921*7471M-G	MERCURY	MG/KG-	ND

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
04/21/94	SP*QC*1	71921*7471M-G	MERCURY	98.4	85-125	MG/KG-	2.47	2.43

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
04/21/94	SPM1*CDMHNSS*1	71921*7471M-G	MERCURY	135.9	85-125	0.0	MG/KG-	2.45	3.33
04/21/94	SPM2*CDMHNSS*1	71921*7471M-G	MERCURY	136.4	85-125	0.0	MG/KG-	2.47	3.37

ESE BATCH : G48304

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G48304 Analysis Date: 04/21/94 Analyst: MARSHALL SEIGLER

	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		
CCV present?	X		
CCV 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	HG
Sample matrix spike duplicate present?	X		
Sample matrix spike duplicate within acceptance criteria?		X	HG

Note: Any "NO" answer requires a comment.

OVERRIDE COMMENTS

BATCH OVERRIDE BY: KATHY BARRY 1708
PROB:SAMPLE MATRIX SPIKE NOT WITHIN ACCEPTANCE
CRITERIA.
EXPL:POSSIBLE LACK OF HOMOGENEITY./MS./04-22-94.
PROB:SAMPLE MATRIX SPIKE DUPLICATE NOT WITHIN ACCEPTANCE
CRITERIA.
EXPL:SAME AS ABOVE.
EM./04-25-94.

ESE BATCH : G48304

TABLE OF ABBREVIATIONS

%RECV : % Recovery for spiked sample. (FOUND/TARGET * 100)
ANLY DATE : Analysis Date
ANLY TIME : Analysis Time
CURVE : Curve Regression Number
DILUTION : Sample Dilution Factor
EXT DATE : Extract Date
EXT VOL : Extract Volume
FOUND : Spiked Sample Conc. - Unspiked Sample Conc.
INJ VOL : Injection Volume
REL%DIFF : % Difference between current and previous spike
RESPONSE : Sample Response
R.T. : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
DA -- Data Sample
MB -- Method Blank
RF -- Reference (from commercially known standard)
RP -- Replicate Sample
SP -- Standard Matrix Spike
SPM -- Sample Matrix Spike
STD -- Internal Standard
SUR -- Surrogate Sample
UN -- Unspiked Sample
SAMP VOL : Sample Volume
SPK CONC : Spike Concentration
ST : Sample response explanation or validity. (listed below)
BK -- No sample response.
NA -- Sample not analyzed.
NR -- Not reserved for this batch. Batch containing the response for this sample is listed in the target field.
OK -- Sample response shown is correct.
! -- Sample response shown is invalid.
< -- Sample response < detection limit. Detection limit is shown in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET : Spike Target (SAMPLE LISTING SECTION)
TARGET : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE : Response Type ("FINAL" or empty.)
UNSP CONC : Unspiked Sample Concentration

ESE BATCH : G48388
CLASSIFICATION : MERCURY - EPA 7471 (MOD)

QC TYPE : FDER/SW
ANALYST : KEITH GEISZLER
EXTRACTOR : KEITH GEISZLER
DATA ENTRY : KEITH GEISZLER

REPORT DATE/TIME : 05/20/94 06:30:03
ANALYSIS DATE : 04/25/94
EXTRACT DATE : 04/25/94

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS		1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*5	WA19-3-05	04/25/94	
CDMHNSS*6	WA19-4-05	04/25/94	

ESE BATCH : G48388

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H.T.	OVER

ALL HOLDING TIMES MET

STORET: 71921 METHOD: 7471M-G MERCURY, MG/KG-DRY QUAN

CALIBRATION CURVE # 1 (UG/L)
DETECTION LIMIT=0.2 DATE: 04/25/94 LARGEST RESP=72.0 %RSD=11.6994 RT WINDOW:

CONC :	0.0	0.2	0.5	1.0	2.0	5.0	7.0	10.0
RESP :	0.0	2.0	4.75	9.0	16.5	39.0	56.0	72.0
CONC':	0.011	0.228	0.533	1.02	1.90	4.8	7.32	9.86

CONC = 1.0712E-02+ 1.0802E-01*RESP+ 4.0030E-04*RESP**2+ *RESP**3
95% C.I.= 2.0871E-01 1.9754E-02 2.8068E-04
CORRELATION COEFFICIENT = .9992

ESE BATCH : G48388

Continuing Calibration Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
04/25/94	CCB*QC*1	71921*7471M-G	MERCURY	MG/KG-	0.011

Continuing Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/25/94	CCV*QC*1	71921*7471M-G	MERCURY	MG/KG-	5.00	4.73	94.6	80-120

Initial Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/25/94	ICV*PE-PURE*1	71921*7471M-G	MERCURY	MG/KG-	5.00	4.97	99.4	80-120

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
04/25/94	MB*QC*1	71921*7471M-G	MERCURY	MG/KG-	ND
04/25/94	MB*REAGENTS*1	71921*7471M-G	MERCURY	MG/KG-	0.029

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
04/25/94	SP*QC*1	71921*7471M-G	MERCURY	98.6	85-125	MG/KG-	2.20	2.17

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
04/25/94	SPM1*CDMHNSS*5	71921*7471M-G	MERCURY	99.6	85-125	0.005	MG/KG-	2.42	2.41
04/25/94	SPM2*CDMHNSS*5	71921*7471M-G	MERCURY	99.2	85-125	0.005	MG/KG-	2.55	2.53

ESE BATCH : G48388

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G48388 Analysis Date: 04/25/91 Analyst: KEITH GEISZLER

	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		
CCV present?	X		
CCV 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.

OVERRIDE COMMENTS

BATCH OVERRIDE BY:

ESE BATCH : G48388

TABLE OF ABBREVIATIONS

```
%RECV       : % Recovery for spiked sample. (FOUND/TARGET * 100)
ANLY DATE   : Analysis Date
ANLY TIME   : Analysis Time
CURVE       : Curve Regression Number
DILUTION    : Sample Dilution Factor
EXT DATE    : Extract Date
EXT VOL     : Extract Volume
FOUND       : Spiked Sample Conc. - Unspiked Sample Conc.
INJ VOL     : Injection Volume
REL%DIFF    : % Difference between current and previous spike.
RESPONSE    : Sample Response
R.T.        : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID   : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
      DA  -- Data Sample
      MB  -- Method Blank
      RF  -- Reference (from commercially known standard)
      RP  -- Replicate Sample
      SP  -- Standard Matrix Spike
      SPM -- Sample Matrix Spike
      STD -- Internal Standard
      SUR -- Surrogate Sample
      UN  -- Unspiked Sample
SAMP VOL    : Sample Volume
SPK CONC    : Spike Concentration
ST          : Sample response explanation or validity. (listed below)
      BK  -- No sample response.
      NA  -- Sample not analyzed.
      NR  -- Not reserved for this batch.  Batch containing the response
             for this sample is listed in the target field.
      OK  -- Sample response shown is correct.
      !   -- Sample response shown is invalid.
      <   -- Sample response < detection limit. Detection limit is shown
             in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET      : Spike Target (SAMPLE LISTING SECTION)
TARGET      : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE        : Response Type ("FINAL" or empty.)
UNSP CONC   : Unspiked Sample Concentration
```

ESE BATCH : G48453
CLASSIFICATION : MERCURY - EPA 7471 (MOD)

QC TYPE : FDER/SW
ANALYST : KEITH GEISZLER
EXTRACTOR : KEITH GEISZLER
DATA ENTRY : KEITH GEISZLER

REPORT DATE/TIME : 05/20/94 06:30:16
ANALYSIS DATE : 04/25/94
EXTRACT DATE : 04/25/94

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS		1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*7	WA17-1-03	04/25/94	
CDMHNSS*8	WA16-1-02	04/25/94	
CDMHNSS*9	WA16-2-03	04/25/94	

ESE BATCH : G48453

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H.T.	OVER

ALL HOLDING TIMES MET

STORET: 71921 METHOD: 7471M-G MERCURY, MG/KG-DRY QUAL

CALIBRATION CURVE # 1 (UG/L)
DETECTION LIMIT=0.2 DATE: 04/25/94 LARGEST RESP=72.0 %RSD=11.6994 RT WINDOW:

CONC :	0.0	0.2	0.5	1.0	2.0	5.0	7.0	10.0
RESP :	0.0	2.0	4.75	9.0	16.5	39.0	56.0	72.0
CONC':	0.011	0.228	0.533	1.02	1.90	4.83	7.32	9.86

CONC = 1.0712E-02+ 1.0802E-01*RESP+ 4.0030E-04*RESP**2+ *RESP**3
95% C.I.= 2.0871E-01 1.9754E-02 2.8068E-04
CORRELATION COEFFICIENT = .9992

ESE BATCH : G48453

Continuing Calibration Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
04/25/94	CCB*QC*1	71921*7471M-G	MERCURY	MG/KG-	0.011

Continuing Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/25/94	CCV*QC*1	71921*7471M-G	MERCURY	MG/KG-	5.00	4.73	94.6	80-120

Initial Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/25/94	ICV*PE-PURE*1	71921*7471M-G	MERCURY	MG/KG-	5.00	4.97	99.4	80-120

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
04/25/94	MB*QC*1	71921*7471M-G	MERCURY	MG/KG-	ND
04/25/94	MB*REAGENTS*1	71921*7471M-G	MERCURY	MG/KG-	0.065

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
04/25/94	SP*QC*1	71921*7471M-G	MERCURY	98.6	85-125	MG/KG-	2.20	2.17

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
04/25/94	SPM1*CDMHNSS*5	71921*7471M-G	MERCURY	99.6	85-125	0.0	MG/KG-	2.42	2.41
04/25/94	SPM2*CDMHNSS*5	71921*7471M-G	MERCURY	99.2	85-125	0.0	MG/KG-	2.55	2.53

ESE BATCH : G48453

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G48453 Analysis Date: 04/25/94 Analyst: KEITH GEISZLER

	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		
CCV present?	X		
CCV 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.

OVERRIDE COMMENTS

BATCH OVERRIDE BY:

ESE BATCH : G48453

TABLE OF ABBREVIATIONS

```
%RECV       : % Recovery for spiked sample. (FOUND/TARGET * 100)
ANLY DATE   : Analysis Date
ANLY TIME   : Analysis Time
CURVE       : Curve Regression Number
DILUTION    : Sample Dilution Factor
EXT DATE    : Extract Date
EXT VOL     : Extract Volume
FOUND       : Spiked Sample Conc. - Unspiked Sample Conc.
INJ VOL     : Injection Volume
REL%DIFF    : % Difference between current and previous spike.
RESPONSE    : Sample Response
R.T.        : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID   : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
      DA  -- Data Sample
      MB  -- Method Blank
      RF  -- Reference (from commercially known standard)
      RP  -- Replicate Sample
      SP  -- Standard Matrix Spike
      SPM -- Sample Matrix Spike
      STD -- Internal Standard
      SUR -- Surrogate Sample
      UN  -- Unspiked Sample
SAMP VOL    : Sample Volume
SPK CONC    : Spike Concentration
ST          : Sample response explanation or validity. (listed below)
      BK  -- No sample response.
      NA  -- Sample not analyzed.
      NR  -- Not reserved for this batch.  Batch containing the response
             for this sample is listed in the target field.
      OK  -- Sample response shown is correct.
      !   -- Sample response shown is invalid.
      <   -- Sample response < detection limit. Detection limit is shown
             in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET      : Spike Target (SAMPLE LISTING SECTION)
TARGET      : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE        : Response Type ("FINAL" or empty.)
UNSP CONC   : Unspiked Sample Concentration
```

ESE BATCH : G48473
CLASSIFICATION : MERCURY - EPA 7471 (MOD)

QC TYPE : FDER/SW
ANALYST : ELIZABETH CREARY
EXTRACTOR : ELIZABETH CREARY
DATA ENTRY : ELIZABETH CREARY

REPORT DATE/TIME : 05/20/94 06:30:29
ANALYSIS DATE : 04/27/94
EXTRACT DATE : 04/27/94

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS		1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*10	WA07-1-01	04/27/94	
CDMHNSS*11	WA07-2-05	04/27/94	
CDMHNSS*12	WA05-1-04	04/27/94	

ESE BATCH : G48473

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H.T.	OVER

ALL HOLDING TIMES MET

STORET: 71921 METHOD: 7471M-G MERCURY, MG/KG-DRY QUAD

CALIBRATION CURVE # 1 (UG/L)
DETECTION LIMIT=0.2 DATE: 04/27/94 LARGEST RESP=74.50 %RSD=17.8488 RT WINDOW:

CONC :	0.0	0.1	0.2	0.5	1.0	2.0	5.0	7.0	10.0
RESP :	0.25	1.25	2.00	5.00	9.50	18.5	40.0	53.25	74.50
CONC':	-.046	0.070	0.157	0.509	1.05	2.15	4.99	6.86	10.1

CONC = -7.4655E-02+ 1.1532E-01*RESP+ 2.7930E-04*RESP**2+ *RESP**3
95% C.I.= 9.9133E-02 9.3562E-03 1.3157E-04
CORRELATION COEFFICIENT = .9997

ESE BATCH : G48473

Continuing Calibration Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
04/27/94	CCB*QC*1	71921*7471M-G	MERCURY	MG/KG-	ND

Continuing Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/27/94	CCV*QC*1	71921*7471M-G	MERCURY	MG/KG-	5.00	5.16	103	80-120

Initial Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/27/94	ICV*PE-PURE*1	71921*7471M-G	MERCURY	MG/KG-	5.00	5.05	101	80-120

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
04/27/94	MB*REAGENT*1	71921*7471M-G	MERCURY	MG/KG-	ND
04/27/94	MB*QC*1	71921*7471M-G	MERCURY	MG/KG-	ND

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
04/27/94	SP*QC*1	71921*7471M-G	MERCURY	96.0	85-125	MG/KG-	2.48	2.38

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
04/27/94	SPM1*CDMHNSS*11	71921*7471M-G	MERCURY	100.4	85-125	0.0	MG/KG-	2.57	2.58
04/27/94	SPM2*CDMHNSS*11	71921*7471M-G	MERCURY	102.3	85-125	0.0	MG/KG-	2.62	2.68

ESE BATCH : G48473

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G48473 Analysis Date: 04/27/94 Analyst: ELIZABETH CREARY

	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		
CCV present?	X		
CCV 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.

OVERRIDE COMMENTS

BATCH OVERRIDE BY:

ESE BATCH : G48473

TABLE OF ABBREVIATIONS

```
%RECV       : % Recovery for spiked sample. (FOUND/TARGET * 100)
ANLY DATE   : Analysis Date
ANLY TIME   : Analysis Time
CURVE       : Curve Regression Number
DILUTION    : Sample Dilution Factor
EXT DATE    : Extract Date
EXT VOL     : Extract Volume
FOUND       : Spiked Sample Conc. - Unspiked Sample Conc.
INJ VOL     : Injection Volume
REL%DIFF    : % Difference between current and previous spike.
RESPONSE    : Sample Response
R.T.        : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID   : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
      DA  -- Data Sample
      MB  -- Method Blank
      RF  -- Reference (from commercially known standard)
      RP  -- Replicate Sample
      SP  -- Standard Matrix Spike
      SPM -- Sample Matrix Spike
      STD -- Internal Standard
      SUR -- Surrogate Sample
      UN  -- Unspiked Sample
SAMP VOL    : Sample Volume
SPK CONC    : Spike Concentration
ST          : Sample response explanation or validity. (listed below)
      BK  -- No sample response.
      NA  -- Sample not analyzed.
      NR  -- Not reserved for this batch.  Batch containing the response
             for this sample is listed in the target field.
      OK  -- Sample response shown is correct.
      !   -- Sample response shown is invalid.
      <   -- Sample response < detection limit. Detection limit is shown
             in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET      : Spike Target (SAMPLE LISTING SECTION)
TARGET      : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE        : Response Type ("FINAL" or empty.)
UNSP CONC   : Unspiked Sample Concentration
```

ESE BATCH : G48501
CLASSIFICATION : MERCURY - EPA 7471 (MOD)

QC TYPE : FDER/SW
ANALYST : ADAM NICHOLSON
EXTRACTOR : ADAM NICHOLSON
DATA ENTRY : ADAM NICHOLSON

REPORT DATE/TIME : 05/20/94 06:30:42
ANALYSIS DATE : 04/27/94
EXTRACT DATE : 04/27/94

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

FIELD GRP QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS	1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*13	WA05-2-03	04/27/94	
CDMHNSS*14	WA05-3-04	04/27/94	
CDMHNSS*15	WA04-1-05	04/27/94	
CDMHNSS*16	WA04-2-12	04/27/94	

ESE BATCH : G48501

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H.T.	OVER

ALL HOLDING TIMES MET

STORET: 71921 METHOD: 7471M-G MERCURY, MG/KG-DRY QUAD

CALIBRATION CURVE # 1 (UG/L)
DETECTION LIMIT=0.2 DATE: 04/27/94 LARGEST RESP=72.5 %RSD=10.0897 RT WINDOW:

CONC :	0.0	0.2	0.5	1	2	5.0	7.0	10.0
RESP :	0	1.75	4.75	9.5	18	40	55.25	72.5
CONC':	0.003	0.185	0.503	1.02	2.01	4.88	7.14	9.96

CONC = 3.1119E-03+ 1.0304E-01*RESP+ 4.7215E-04*RESP**2+ *RESP**3
95% C.I.= 9.9692E-02 9.1427E-03 1.2947E-04
CORRELATION COEFFICIENT = .9998

ESE BATCH : G48501

Continuing Calibration Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
04/27/94	CCB*QC*1	71921*7471M-G	MERCURY	MG/KG-	0.003

Continuing Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/27/94	CCV*QC*1	71921*7471M-G	MERCURY	MG/KG-	5.00	4.81	96.2	80-120

Initial Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/27/94	ICV*PE-PURE*1	71921*7471M-G	MERCURY	MG/KG-	5.00	4.15	83.0	80-120

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
04/27/94	MB*QC*1	71921*7471M-G	MERCURY	MG/KG-	ND

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
04/27/94	SP*QC*1	71921*7471M-G	MERCURY	94.8	85-125	MG/KG-	2.49	2.36

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
04/27/94	SPM1*CDMHNSS*13	71921*7471M-G	MERCURY	87.4	85-125	0.002	MG/KG-	2.54	2.22
04/27/94	SPM2*CDMHNSS*13	71921*7471M-G	MERCURY	91.3	85-125	0.002	MG/KG-	2.54	2.32

ESE BATCH : G48501

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G48501 Analysis Date: 04/27/94 Analyst: ADAM NICHOLSON

	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		
CCV present?	X		
CCV 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.

OVERRIDE COMMENTS

BATCH OVERRIDE BY:

ESE BATCH : G48501

TABLE OF ABBREVIATIONS

```
%RECV       : % Recovery for spiked sample. (FOUND/TARGET * 100)
ANLY DATE   : Analysis Date
ANLY TIME   : Analysis Time
CURVE       : Curve Regression Number
DILUTION    : Sample Dilution Factor
EXT DATE    : Extract Date
EXT VOL     : Extract Volume
FOUND       : Spiked Sample Conc. - Unspiked Sample Conc.
INJ VOL     : Injection Volume
REL%DIFF    : % Difference between current and previous spike.
RESPONSE    : Sample Response
R.T.        : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID   : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
      DA  -- Data Sample
      MB  -- Method Blank
      RF  -- Reference (from commercially known standard)
      RP  -- Replicate Sample
      SP  -- Standard Matrix Spike
      SPM -- Sample Matrix Spike
      STD -- Internal Standard
      SUR -- Surrogate Sample
      UN  -- Unspiked Sample
SAMP VOL    : Sample Volume
SPK CONC    : Spike Concentration
ST          : Sample response explanation or validity. listed below)
      BK  -- No sample response.
      NA  -- Sample not analyzed.
      NR  -- Not reserved for this batch. Batch containing the response
             for this sample is listed in the target field.
      OK  -- Sample response shown is correct.
      !   -- Sample response shown is invalid.
      <   -- Sample response < detection limit. Detection limit is shown
             in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET      : Spike Target (SAMPLE LISTING SECTION)
TARGET      : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE        : Response Type ("FINAL" or empty.)
UNSP CONC   : Unspiked Sample Concentration
```

ESE BATCH : G48646
CLASSIFICATION : MERCURY - EPA 7471 (MOD)

QC TYPE : FDER/SW
ANALYST : MARSHALL SEIGLER
EXTRACTOR : MARSHALL SEIGLER
DATA ENTRY : MARSHALL SEIGLER

REPORT DATE/TIME : 05/20/94 06:30:54
ANALYSIS DATE : 04/29/94
EXTRACT DATE : 04/29/94

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS		1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*17	EA14-1-01		
CDMHNSS*18	EA14-2-01		
CDMHNSS*19	EA12-1-10		
CDMHNSS*20	EA12-2-12		

ESE BATCH : G48646

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H.T.	OVER

ALL HOLDING TIMES MET

STORET: 71921 METHOD: 7471M-G MERCURY, MG/KG-DRY QUAL

CALIBRATION CURVE # 1 (UG/L)
DETECTION LIMIT=0.2 DATE: 04/29/94 LARGEST RESP=71.0 %RSD=13.4733 RT WINDOW:

CONC :	0.0	0.2	0.5	1.0	2.0	5.0	7.0	10.0
RESP :	0.25	2.0	5.0	9.25	17.5	41.5	51.5	71.0
CONC':	0.003	0.189	0.514	0.990	1.97	5.22	6.76	10.1

CONC = -2.2727E-02+ 1.0464E-01*RESP+ 5.2483E-04*RESP**2+ *RESP**3
95% C.I.= 1.7773E-01 1.6458E-02 2.3893E-04
CORRELATION COEFFICIENT = .9994

ESE BATCH : G48646

Continuing Calibration Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
04/29/94	CCB*QC*1	71921*7471M-G	MERCURY	MG/KG-	0.003

Continuing Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/29/94	CCV*QC*1	71921*7471M-G	MERCURY	MG/KG-	5.00	5.11	102	80-120

Initial Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/29/94	ICV*PE-PURE*1	71921*7471M-G	MERCURY	MG/KG-		T*1		80-120

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
04/29/94	MB*QC*1	71921*7471M-G	MERCURY	MG/KG-	ND

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
04/29/94	SP*QC*1	71921*7471M-G	MERCURY	98.0	85-125	MG/KG-	2.44	2.39

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
04/29/94	SPM1*CDMHNSS*20	71921*7471M-G	MERCURY	90.9	85-125	0.002	MG/KG-	2.52	2.29
04/29/94	SPM2*CDMHNSS*20	71921*7471M-G	MERCURY	93.0	85-125	0.002	MG/KG-	2.57	2.39

ESE BATCH : G48646

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G48646 Analysis Date: 04/29/94 Analyst: MARSHALL SEIGLER

		"Exceptions"	
	Yes	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		
CCV present?	X		
CCV 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.

OVERRIDE COMMENTS

BATCH OVERRIDE BY:

ESE BATCH : G48646

TABLE OF ABBREVIATIONS

```
%RECV       : % Recovery for spiked sample. (FOUND/TARGET * 100)
ANLY DATE   : Analysis Date
ANLY TIME   : Analysis Time
CURVE       : Curve Regression Number
DILUTION    : Sample Dilution Factor
EXT DATE    : Extract Date
EXT VOL     : Extract Volume
FOUND       : Spiked Sample Conc. - Unspiked Sample Conc.
INJ VOL     : Injection Volume
REL%DIFF    : % Difference between current and previous spike.
RESPONSE    : Sample Response
R.T.        : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID   : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
      DA  -- Data Sample
      MB  -- Method Blank
      RF  -- Reference (from commercially known standard)
      RP  -- Replicate Sample
      SP  -- Standard Matrix Spike
      SPM -- Sample Matrix Spike
      STD -- Internal Standard
      SUR -- Surrogate Sample
      UN  -- Unspiked Sample
SAMP VOL    : Sample Volume
SPK CONC    : Spike Concentration
ST          : Sample response explanation or validity. (listed below)
      BK  -- No sample response.
      NA  -- Sample not analyzed.
      NR  -- Not reserved for this batch.  Batch containing the response
             for this sample is listed in the target field.
      OK  -- Sample response shown is correct.
      !   -- Sample response shown is invalid.
      <   -- Sample response < detection limit. Detection limit is shown
             in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET      : Spike Target (SAMPLE LISTING SECTION)
TARGET      : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE        : Response Type ("FINAL" or empty.)
UNSP CONC   : Unspiked Sample Concentration
```

ESE BATCH : G48770
CLASSIFICATION : MERCURY - EPA 7471 (MOD)

QC TYPE : FDER/SW
ANALYST : CHRISTOPHER HORRELL
EXTRACTOR : CHRISTOPHER HORRELL
DATA ENTRY : CHRISTOPHER HORRELL

REPORT DATE/TIME : 05/20/94 06:31:07
ANALYSIS DATE : 05/03/94
EXTRACT DATE : 05/03/94

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS		1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*21	EA11-1-07	05/04/94	
CDMHNSS*22	EA01-1-10	05/04/94	

ESE BATCH : G48770

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H.T.	OVER

ALL HOLDING TIMES MET

STORET: 71921 METHOD: 7471M-G MERCURY, MG/KG-DRY QUAD

CALIBRATION CURVE # 1 (UG/L)
DETECTION LIMIT=0.2 DATE: 05/03/94 LARGEST RESP=72.0 %RSD=14.6660 RT WINDOW:

CONC :	0.0	0.2	0.5	1.0	2.0	5.0	7.0	10.0
RESP :	0.25	2.0	3.5	7.5	18.5	35.5	55.75	72.0
CONC':	0.036	0.245	0.425	0.911	2.29	4.54	7.40	9.85

CONC = 5.9553E-03+ 1.1883E-01*RESP+ 2.4893E-04*RESP**2+ *RESP**3
95% C.I.= 3.6313E-01 3.4058E-02 4.8393E-04
CORRELATION COEFFICIENT = .9974

ESE BATCH : G48770

Continuing Calibration Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/04/94	CCB*QC*1	71921*7471M-G	MERCURY	MG/KG-	0.125

Continuing Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/04/94	CCV*QC*1	71921*7471M-G	MERCURY	MG/KG-	5.00	4.67	93.4	80-120

Initial Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/04/94	ICV*PE-PURE*1	71921*7471M-G	MERCURY	MG/KG-	5.00	4.88	97.6	80-120

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/04/94	MB*QC*1	71921*7471M-G	MERCURY	MG/KG-	ND

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
05/04/94	SP*QC*1	71921*7471M-G	MERCURY	83.9	85-125	MG/KG-	2.49	2.09

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
05/04/94	SPM1*CDMHNSS*22	71921*7471M-G	MERCURY	60.9	85-125	0.124	MG/KG-	2.71	1.65
05/04/94	SPM2*CDMHNSS*22	71921*7471M-G	MERCURY	62.5	85-125	0.124	MG/KG-	2.56	1.60

ESE BATCH : G48770

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G48770 Analysis Date: 05/03/94 Analyst: CHRISTOPHER HORRELL

	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		
CCV present?	X		
CCV 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	HG
Sample matrix spike present?	X		
Sample matrix spike within acceptance criteria?		X	HG
Sample matrix spike duplicate present?	X		
Sample matrix spike duplicate within acceptance criteria?		X	HG

Note: Any "NO" answer requires a comment.

OVERRIDE COMMENTS

BATCH OVERRIDE BY: KATHY BARRY 1708
PROB.:STANDARD MATRIX SPIKE NOT WITHIN
ACCEPTANCE CRITERIA.
EXPL.:POSSIBLE SPIKING ERROR./CH
PROB.:SAMPLE MATRIX SPIKE NOT WITHIN
ACCEPTANCE CRITERIA.
EXPL.:PROBABLE MATRIX EFFECT./CH
PROB.:SAMPLE MATRIX SPIKE DUPLICATE
NOT WITHIN ACCEPTANCE.
EXPL.:SEE ABOVE./CH

ESE BATCH : G48770

TABLE OF ABBREVIATIONS

```
%RECV       : % Recovery for spiked sample. (FOUND/TARGET * 100)
ANLY DATE   : Analysis Date
ANLY TIME   : Analysis Time
CURVE       : Curve Regression Number
DILUTION    : Sample Dilution Factor
EXT DATE    : Extract Date
EXT VOL     : Extract Volume
FOUND       : Spiked Sample Conc. - Unspiked Sample Conc.
INJ VOL     : Injection Volume
REL%DIFF    : % Difference between current and previous spike.
RESPONSE    : Sample Response
R.T.        : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID   : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
      DA  -- Data Sample
      MB  -- Method Blank
      RF  -- Reference (from commercially known standard)
      RP  -- Replicate Sample
      SP  -- Standard Matrix Spike
      SPM -- Sample Matrix Spike
      STD -- Internal Standard
      SUR -- Surrogate Sample
      UN  -- Unspiked Sample
SAMP VOL    : Sample Volume
SPK CONC    : Spike Concentration
ST          : Sample response explanation or validity. (listed below)
      BK  -- No sample response.
      NA  -- Sample not analyzed.
      NR  -- Not reserved for this batch.  Batch containing the response
             for this sample is listed in the target field.
      OK  -- Sample response shown is correct.
      !   -- Sample response shown is invalid.
      <   -- Sample response < detection limit. Detection limit is shown
             in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET      : Spike Target (SAMPLE LISTING SECTION)
TARGET      : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE        : Response Type ("FINAL" or empty.)
UNSP CONC   : Unspiked Sample Concentration
```

ESE BATCH : G48760
CLASSIFICATION : MERCURY - EPA 7471 (MOD)

QC TYPE : FDER/SW
ANALYST : ELIZABETH CREARY
EXTRACTOR : ELIZABETH CREARY
DATA ENTRY : ELIZABETH CREARY

REPORT DATE/TIME : 05/20/94 06:31:19
ANALYSIS DATE : 05/04/94
EXTRACT DATE : 05/04/94

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS		1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*23	OCS1-1-00	05/04/94	

ESE BATCH : G48760

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H.T.	OVER

ALL HOLDING TIMES MET

STORET: 71921 METHOD: 7471M-G MERCURY, MG/KG-DRY QUAD

CALIBRATION CURVE # 1 (UG/L)
DETECTION LIMIT=0.2 DATE: 05/04/94 LARGEST RESP=76.50(USER DEFINED) %RSD=11.0896 RT WINDOW:

CONC :	0.0	0.5	1.0	2.0	5.0	7.0	10.0
RESP :	0.25	5.0	9.75	18.75	41.75	56.00	76.50
CONC':	-.032	0.486	1.02	2.07	4.98	6.96	10.0

CONC = -5.9237E-02+ 1.0739E-01*RESP+ 3.1938E-04*RESP**2+ *RESP**3
95% C.I.= 6.5500E-02 5.0775E-03 6.6448E-05
CORRELATION COEFFICIENT = .9999

ESE BATCH : G48760

Continuing Calibration Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/04/94	CCB*QC*1	71921*7471M-G	MERCURY	MG/KG-	ND

Continuing Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/04/94	CCV*QC*1	71921*7471M-G	MERCURY	MG/KG-	5.00	4.91	98.2	80-120

Initial Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/04/94	ICV*PE-PURE*1	71921*7471M-G	MERCURY	MG/KG-	5.00	4.88	97.6	80-120

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/04/94	MB*REAGENT*1	71921*7471M-G	MERCURY	MG/KG-	ND
05/04/94	MB*QC*1	71921*7471M-G	MERCURY	MG/KG-	ND

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
05/04/94	SP1*QC*1	71921*7471M-G	MERCURY	98.4	85-125	MG/KG-	2.45	2.41

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
05/04/94	SPM1*CDMHNSS*23	71921*7471M-G	MERCURY	93.5	85-125	0.0	MG/KG-	2.62	2.45
05/04/94	SPM2*CDMHNSS*23	71921*7471M-G	MERCURY	97.7	85-125	0.0	MG/KG-	2.62	2.56

ESE BATCH : G48760

Environmental Science and Engineering Analytical Services
Computer QC Checks

Batch No.: G48760 Analysis Date: 05/04/94 Analyst: ELIZABETH CREARY

	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		
CCV present?	X		
CCV 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.

OVERRIDE COMMENTS

BATCH OVERRIDE BY:

ESE BATCH : G48760

TABLE OF ABBREVIATIONS

```
%RECV       : % Recovery for spiked sample. (FOUND/TARGET * 100)
ANLY DATE   : Analysis Date
ANLY TIME   : Analysis Time
CURVE       : Curve Regression Number
DILUTION    : Sample Dilution Factor
EXT DATE    : Extract Date
EXT VOL     : Extract Volume
FOUND       : Spiked Sample Conc. - Unspiked Sample Conc.
INJ VOL     : Injection Volume
REL%DIFF    : % Difference between current and previous spike.
RESPONSE    : Sample Response
R.T.        : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID   : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
      DA  -- Data Sample
      MB  -- Method Blank
      RF  -- Reference (from commercially known standard)
      RP  -- Replicate Sample
      SP  -- Standard Matrix Spike
      SPM -- Sample Matrix Spike
      STD -- Internal Standard
      SUR -- Surrogate Sample
      UN  -- Unspiked Sample
SAMP VOL    : Sample Volume
SPK CONC    : Spike Concentration
ST          : Sample response explanation or validity. (listed below)
      BK  -- No sample response.
      NA  -- Sample not analyzed.
      NR  -- Not reserved for this batch.  Batch containing the response
             for this sample is listed in the target field.
      OK  -- Sample response shown is correct.
      !   -- Sample response shown is invalid.
      <   -- Sample response < detection limit. Detection limit is shown
             in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET      : Spike Target (SAMPLE LISTING SECTION)
TARGET      : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE        : Response Type ("FINAL" or empty.)
UNSP CONC   : Unspiked Sample Concentration
```

ESE BATCH : G48828
CLASSIFICATION : MERCURY - EPA 7471 (MOD)

QC TYPE : FDER/SW
ANALYST : KEITH GEISZLER
EXTRACTOR : KEITH GEISZLER
DATA ENTRY : KEITH GEISZLER

REPORT DATE/TIME : 05/20/94 06:31:32
ANALYSIS DATE : 05/06/94
EXTRACT DATE : 05/06/94

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS		1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*24	EBG1-1-02	05/06/94	
CDMHNSS*25	ESV1-1-01	05/06/94	
CDMHNSS*26	WBG2-1-02	05/06/94	
CDMHNSS*27	WBG2-2-02	05/06/94	

ESE BATCH : G48828

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H.T.	OVER

ALL HOLDING TIMES MET

STORET: 71921 METHOD: 7471M-G MERCURY, MG/KG-DRY QUAD

CALIBRATION CURVE # 1 (UG/L)
DETECTION LIMIT=0.2 DATE: 05/06/94 LARGEST RESP=64.75 %RSD=5.1153 RT WINDOW:

CONC :	0.0	0.2	0.5	1.0	2.0	5.0	7.0	10.0
RESP :	0.0	1.5	3.5	7.5	14.0	34.25	49.75	64.75
CONC':	0.043	0.234	0.492	1.02	1.90	4.84	7.31	9.87

CONC = 4.2750E-02+ 1.2709E-01*RESP+ 3.8050E-04*RESP**2+ *RESP**3
95% C.I.= 1.9857E-01 2.1230E-02 3.3734E-04
CORRELATION COEFFICIENT = .9992

ESE BATCH : G48828

Continuing Calibration Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/06/94	CCB*QC*1	71921*7471M-G	MERCURY	MG/KG-	0.075

Continuing Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/06/94	CCV*QC*1	71921*7471M-G	MERCURY	MG/KG-	5.00	5.58	112	80-120

Initial Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/06/94	ICV*PE-PURE*1	71921*7471M-G	MERCURY	MG/KG-	5.00	5.70	114	80-120

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/06/94	MB*REAGENTS*1	71921*7471M-G	MERCURY	MG/KG-	0.075
05/06/94	MB*QC*1	71921*7471M-G	MERCURY	MG/KG-	ND

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
05/06/94	SP*QC*1	71921*7471M-G	MERCURY	103.7	85-125	MG/KG-	2.18	2.26

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
05/06/94	SPM1*CDMHNSS*24	71921*7471M-G	MERCURY	108.4	85-125	0.0	MG/KG-	2.49	2.70
05/06/94	SPM2*CDMHNSS*24	71921*7471M-G	MERCURY	105.3	85-125	0.0	MG/KG-	2.62	2.76

ESE BATCH : G48828

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G48828 Analysis Date: 05/06/94 Analyst: KEITH GEISZLER

	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		
CCV present?	X		
CCV 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.

OVERRIDE COMMENTS

BATCH OVERRIDE BY:

ESE BATCH : G48828

TABLE OF ABBREVIATIONS

```
%RECV       : % Recovery for spiked sample. (FOUND/TARGET * 100)
ANLY DATE   : Analysis Date
ANLY TIME   : Analysis Time
CURVE       : Curve Regression Number
DILUTION    : Sample Dilution Factor
EXT DATE    : Extract Date
EXT VOL     : Extract Volume
FOUND       : Spiked Sample Conc. - Unspiked Sample Conc.
INJ VOL     : Injection Volume
REL%DIFF    : % Difference between current and previous spike.
RESPONSE    : Sample Response
R.T.        : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID   : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
      DA  -- Data Sample
      MB  -- Method Blank
      RF  -- Reference (from commercially known standard)
      RP  -- Replicate Sample
      SP  -- Standard Matrix Spike
      SPM -- Sample Matrix Spike
      STD -- Internal Standard
      SUR -- Surrogate Sample
      UN  -- Unspiked Sample
SAMP VOL    : Sample Volume
SPK CONC    : Spike Concentration
ST          : Sample response explanation or validity. (listed below)
      BK  -- No sample response.
      NA  -- Sample not analyzed.
      NR  -- Not reserved for this batch.  Batch containing the response
             for this sample is listed in the target field.
      OK  -- Sample response shown is correct.
      !   -- Sample response shown is invalid.
      <   -- Sample response < detection limit. Detection limit is shown
             in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET      : Spike Target (SAMPLE LISTING SECTION)
TARGET      : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE        : Response Type ("FINAL" or empty.)
UNSP CONC   : Unspiked Sample Concentration
```

ESE BATCH : G48905
CLASSIFICATION : MERCURY - EPA 7471 (MOD)

QC TYPE : FDER/SW
ANALYST : CHRISTOPHER HORRELL
EXTRACTOR : CHRISTOPHER HORRELL
DATA ENTRY : CHRISTOPHER HORRELL

REPORT DATE/TIME : 05/20/94 06:31:48
ANALYSIS DATE : 05/09/94
EXTRACT DATE : 05/09/94

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS		1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*28	WA04-3-20	05/10/94	
CDMHNSS*29	WA04-4-08	05/10/94	
CDMHNSS*30	WSV2-1-01	05/10/94	
CDMHNSS*31	WBG3-1-02	05/10/94	
CDMHNSS*32	EWC1-1-00	05/10/94	
CDMHNSS*33	WWC2-1-00	05/10/94	

ESE BATCH : G48905

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H.T.	OVER

ALL HOLDING TIMES MET

STORET: 71921 METHOD: 7471M-G MERCURY, MG/KG-DRY QUAD

CALIBRATION CURVE # 1 (UG/L)
DETECTION LIMIT=0.2 DATE: 05/09/94 LARGEST RESP=73.25 %RSD=11.6731 RT WINDOW:

CONC :	0.0	0.2	0.5	1.0	2.0	5.0	7.0	10.0
RESP :	0.5	2.0	4.75	8.75	16.25	40.75	52.75	73.25
CONC':	0.022	0.196	0.518	0.995	1.91	5.16	6.88	10.0

CONC = -3.5252E-02+ 1.1508E-01*RESP+ 3.0283E-04*RESP**2+ *RESP**3
95% C.I.= 1.1480E-01 1.0479E-02 1.4738E-04
CORRELATION COEFFICIENT = .9998

ESE BATCH : G48905

Continuing Calibration Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/10/94	CCB*QC*1	71921*7471M-G	MERCURY	MG/KG-	ND
05/10/94	CCB*QC*2	71921*7471M-G	MERCURY	MG/KG-	ND

Continuing Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/10/94	CCV*QC*1	71921*7471M-G	MERCURY	MG/KG-	5.00	4.98	99.6	80-120
05/10/94	CCV*QC*2	71921*7471M-G	MERCURY	MG/KG-	5.00	4.98	99.6	80-120

Initial Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/10/94	ICV*PE-PURE*1	71921*7471M-G	MERCURY	MG/KG-	5.00	4.47	89.4	80-120

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/10/94	MB*REAGENT*1	71921*7471M-G	MERCURY	MG/KG-	ND
05/10/94	MB*QC*1	71921*7471M-G	MERCURY	MG/KG-	ND

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
05/10/94	SP*QC*1	71921*7471M-G	MERCURY	101.2	85-125	MG/KG-	2.42	2.45

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
05/10/94	SPM1*CDMHNSS*28	71921*7471M-G	MERCURY	91.5	85-125	0.0	MG/KG-	2.46	2.25
05/10/94	SPM2*CDMHNSS*28	71921*7471M-G	MERCURY	92.9	85-125	0.0	MG/KG-	2.41	2.24

ESE BATCH : G48905

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G48905 Analysis Date: 05/09/94 Analyst: CHRISTOPHER HORRELL

	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		
CCV present?	X		
CCV 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.

OVERRIDE COMMENTS

BATCH OVERRIDE BY:

ESE BATCH : G48905

TABLE OF ABBREVIATIONS

```
%RECV       : % Recovery for spiked sample. (FOUND/TARGET * 100)
ANLY DATE   : Analysis Date
ANLY TIME   : Analysis Time
CURVE       : Curve Regression Number
DILUTION    : Sample Dilution Factor
EXT DATE    : Extract Date
EXT VOL     : Extract Volume
FOUND       : Spiked Sample Conc. - Unspiked Sample Conc.
INJ VOL     : Injection Volume
REL%DIFF    : % Difference between current and previous spike.
RESPONSE    : Sample Response
R.T.        : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID   : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
      DA  -- Data Sample
      MB  -- Method Blank
      RF  -- Reference (from commercially known standard)
      RP  -- Replicate Sample
      SP  -- Standard Matrix Spike
      SPM -- Sample Matrix Spike
      STD -- Internal Standard
      SUR -- Surrogate Sample
      UN  -- Unspiked Sample
SAMP VOL    : Sample Volume
SPK CONC    : Spike Concentration
ST          : Sample response explanation or validity. (listed below)
      BK  -- No sample response.
      NA  -- Sample not analyzed.
      NR  -- Not reserved for this batch.  Batch containing the response
             for this sample is listed in the target field.
      OK  -- Sample response shown is correct.
      !   -- Sample response shown is invalid.
      <   -- Sample response < detection limit. Detection limit is shown
             in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET      : Spike Target (SAMPLE LISTING SECTION)
TARGET      : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE        : Response Type ("FINAL" or empty.)
UNSP CONC   : Unspiked Sample Concentration
```

ESE BATCH : G49180
CLASSIFICATION : MERCURY - EPA 7471 MOD

QC TYPE : FDER/SW
ANALYST : KEITH GEISZLER
EXTRACTOR : KEITH GEISZLER
DATA ENTRY : KEITH GEISZLER

REPORT DATE/TIME : 05/20/94 06:32:03
ANALYSIS DATE : 05/16/94
EXTRACT DATE : 05/16/94

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS		1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*34	EA01-2-05	05/16/94	
CDMHNSS*35	EA01-3-05	05/16/94	
CDMHNSS*36	EA01-4-14	05/16/94	
CDMHNSS*37	EA01-5-12	05/16/94	
CDMHNSS*38	EA01-6-10	05/16/94	

ESE BATCH : G49180

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H T. OVER

ALL HOLDING TIMES MET

STORET: 71921 METHOD: 7471M-G MERCURY, MG/KG-DRY QUAL

CALIBRATION CURVE # 1 (UG/L)
DETECTION LIMIT=0.2 DATE: 05/16/94 LARGEST RESP=73.75 %RSD=14.0653 RT WINDOW:

CONC :	0.0	0.2	0.5	1.0	2.0	5.0	7.0	10.0
RESP :	0.25	2.25	4.75	9.5	18.5	41.5	56.25	73.75
CONC':	0.024	0.223	0.478	0.979	1.99	4.94	7.11	9.96

CONC = -9.3807E-04+ 9.8497E-02*RESP+ 4.9540E-04*RESP**2+ *RESP**3
95% C.I.= 7.2951E-02 6.5915E-03 9.1658E-05
CORRELATION COEFFICIENT = .9999

ESE BATCH : G49180

Continuing Calibration Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/16/94	CCB*QC*1	71921*7471M-G	MERCURY	MG/KG-	0.024

Continuing Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/16/94	CCV*QC*1	71921*7471M-G	MERCURY	MG/KG-	5.00	4.84	96.8	80-120

Initial Calibration Verification Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/16/94	ICV*PE-PURE*1	71921*7471M-G	MERCURY	MG/KG-	5.00	4.84	96.8	80-120

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/16/94	MB*REAGENTS*1	71921*7471M-G	MERCURY	MG/KG-	0.048
05/16/94	MB*QC*1	71921*7471M-G	MERCURY	MG/KG-	ND

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
05/16/94	SP*QC*1	71921*7471M-G	MERCURY	97.5	85-125	MG/KG-	2.02	1.97

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
05/16/94	SPM1*CDMHNSS*34	71921*7471M-G	MERCURY	96.1	85-125	0.0	MG/KG-	2.31	2.22
05/16/94	SPM2*CDMHNSS*34	71921*7471M-G	MERCURY	97.3	85-125	0.0	MG/KG-	2.58	2.51

ESE BATCH : G49180

Environmental Science and Engineering Analytical Services
Computer QC Checks

Batch No.: G49180 Analysis Date: 05/16/94 Analyst: KEITH BEISZLER

	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		
CCV present?	X		
CCV 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.

OVERRIDE COMMENTS

BATCH OVERRIDE BY:

ESE BATCH : G49180

TABLE OF ABBREVIATIONS

```
%RECV       : % Recovery for spiked sample. (FOUND/TARGET * 100)
ANLY DATE   : Analysis Date
ANLY TIME   : Analysis Time
CURVE       : Curve Regression Number
DILUTION    : Sample Dilution Factor
EXT DATE    : Extract Date
EXT VOL     : Extract Volume
FOUND       : Spiked Sample Conc. - Unspiked Sample Conc.
INJ VOL     : Injection Volume
REL%DIFF    : % Difference between current and previous spike.
RESPONSE    : Sample Response
R.T.        : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID   : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
      DA  -- Data Sample
      MB  -- Method Blank
      RF  -- Reference (from commercially known standard)
      RP  -- Replicate Sample
      SP  -- Standard Matrix Spike
      SPM -- Sample Matrix Spike
      STD -- Internal Standard
      SUR -- Surrogate Sample
      UN  -- Unspiked Sample
SAMP VOL    : Sample Volume
SPK CONC    : Spike Concentration
ST          : Sample response explanation or validity. (listed below)
      BK  -- No sample response.
      NA  -- Sample not analyzed.
      NR  -- Not reserved for this batch.  Batch containing the response
             for this sample is listed in the target field.
      OK  -- Sample response shown is correct.
      !   -- Sample response shown is invalid.
      <   -- Sample response < detection limit. Detection limit is shown
             in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET      : Spike Target (SAMPLE LISTING SECTION)
TARGET      : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE        : Response Type ("FINAL" or empty.)
UNSP CONC   : Unspiked Sample Concentration
```

Volatile Organic Compounds

ESE BATCH : G48315
CLASSIFICATION : VOCS - EPA 8260

QC TYPE : FDER/SW
ANALYST : YAEL HOOGLAND
EXTRACTOR :
DATA ENTRY : TODD ROMERO

REPORT DATE/TIME : 05/20/94 06:36:24
ANALYSIS DATE : 04/21/94
EXTRACT DATE :

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

BATCH NOTES
DOWNLOAD FILE CDMHNSSY

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS		1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*1	WA20-1-04	04/21/94	04:13PM
CDMHNSS*2	WA20-2-06	04/21/94	04:45PM
CDMHNSS*3	WA19-1-08	04/21/94	05:18PM
CDMHNSS*4	WA19-2-07	04/21/94	07:59PM

ESE BATCH : G48315

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H.T	OVER

ALL HOLDING TIMES MET

STORET: 34421 METHOD: 8260-G CHLOROMETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34416 METHOD: 8260-G BROMOMETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34495 METHOD: 8260-G VINYL CHLORIDE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34314 METHOD: 8260-G CHLOROETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34426 METHOD: 8260-G METHYLENE CHLORIDE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW

STORET: 75059 METHOD: 8260-G ACETONE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 78544 METHOD: 8260-G CARBON DISULFIDE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW

STORET: 34504 METHOD: 8260-G 1,1-DICHLOROETHYLENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34499 METHOD: 8260-G 1,1-DICHLOROETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 96464 METHOD: 8260-G 1,2-DICHLOROETHENE(TOTAL), UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34318 METHOD: 8260-G CHLOROFORM, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34534 METHOD: 8260-G 1,2-DICHLOROETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 97031 METHOD: SUR 1,2-DICHLOROETHANE-D(4), UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT= DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 75078 METHOD: 8260-G METHYL ETHYL KETONE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW.

STORET: 34509 METHOD: 8260-G 1,1,1-TRICHLOROETHANE, UG/KG-DRY GCMS

ESE BATCH : G48315

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34299 METHOD: 8260-G CARBON TETRACHLORIDE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 98583 METHOD: 8260-G VINYL ACETATE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34330 METHOD: 8260-G BROMODICHLOROMETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34544 METHOD: 8260-G 1,2-DICHLOROPROPANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW

STORET: 34702 METHOD: 8260-G CIS-1,3-DICHLORO- PROPENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34487 METHOD: 8260-G TRICHLOROETHENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW

STORET: 34309 METHOD: 8260-G DIBROMOCHLOROMETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34237 METHOD: 8260-G BENZENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34514 METHOD: 8260-G 1,1,2-TRICHLOROETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34579 METHOD: 8260-G 2-CHLOROETHYLVINYL- ETHER, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34697 METHOD: 8260-G TRANS-1,3-DICHLORO- PROPENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34290 METHOD: 8260-G BROMOFORM, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 75166 METHOD: 8260-G 2-HEXANONE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 75169 METHOD: 8260-G METHYLISOBUTYLKETONE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34478 METHOD: 8260-G TETRACHLOROETHENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1

ESE BATCH : G48315
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34519 METHOD: 8260-G 1,1,2,2-TETRACHLORO- ETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 97026 METHOD: SUR TOLUENE-D(8), UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT= DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34483 METHOD: 8260-G TOLUENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34304 METHOD: 8260-G CHLOROBENZENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34374 METHOD: 8260-G ETHYLBENZENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 97027 METHOD: SUR BROMOFLUOROBENZENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT= DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 45510 METHOD: 8260-G XYLENE,TOTAL, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 75192 METHOD: 8260-G STYRENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

ESE BATCH : G48315

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
04/21/94	MB*NONE*0421	34421*8260-G	CHLOROMETHANE	UG/KG-	ND
04/21/94	MB*NONE*0421	34416*8260-G	BROMOMETHANE	UG/KG-	ND
04/21/94	MB*NONE*0421	34495*8260-G	VINYL CHLORIDE	UG/KG-	ND
04/21/94	MB*NONE*0421	34314*8260-G	CHLOROETHANE	UG/KG-	ND
04/21/94	MB*NONE*0421	34426*8260-G	METHYLENE CHLORIDE	UG/KG-	2.4
04/21/94	MB*NONE*0421	75059*8260-G	ACETONE	UG/KG-	5.6
04/21/94	MB*NONE*0421	78544*8260-G	CARBON DISULFIDE	UG/KG-	ND
04/21/94	MB*NONE*0421	34504*8260-G	1,1-DICHLOROETHYLENE	UG/KG-	ND
04/21/94	MB*NONE*0421	34499*8260-G	1,1-DICHLOROETHANE	UG/KG-	ND
04/21/94	MB*NONE*0421	96464*8260-G	1,2-DICHLOROETHENE(TOTAL)	UG/KG-	ND
04/21/94	MB*NONE*0421	34318*8260-G	CHLOROFORM	UG/KG-	ND
04/21/94	MB*NONE*0421	34534*8260-G	1,2-DICHLOROETHANE	UG/KG-	ND
04/21/94	MB*NONE*0421	75078*8260-G	METHYL ETHYL KETONE	UG/KG-	ND
04/21/94	MB*NONE*0421	34509*8260-G	1,1,1-TRICHLOROETHANE	UG/KG-	ND
04/21/94	MB*NONE*0421	34299*8260-G	CARBON TETRACHLORIDE	UG/KG-	ND
04/21/94	MB*NONE*0421	98583*8260-G	VINYL ACETATE	UG/KG-	ND
04/21/94	MB*NONE*0421	34330*8260-G	BROMODICHLOROMETHANE	UG/KG-	ND
04/21/94	MB*NONE*0421	34544*8260-G	1,2-DICHLOROPROPANE	UG/KG-	ND
04/21/94	MB*NONE*0421	34702*8260-G	CIS-1,3-DICHLORO- PROPENE	UG/KG-	ND
04/21/94	MB*NONE*0421	34487*8260-G	TRICHLOROETHENE	UG/KG-	ND
04/21/94	MB*NONE*0421	34309*8260-G	DIBROMOCHLOROMETHANE	UG/KG-	ND
04/21/94	MB*NONE*0421	34237*8260-G	BENZENE	UG/KG-	ND
04/21/94	MB*NONE*0421	34514*8260-G	1,1,2-TRICHLOROETHANE	UG/KG-	ND
04/21/94	MB*NONE*0421	34579*8260-G	2-CHLOROETHYLVINYL- ETHER	UG/KG-	ND
04/21/94	MB*NONE*0421	34697*8260-G	TRANS-1,3-DICHLORO- PROPENE	UG/KG-	ND
04/21/94	MB*NONE*0421	34290*8260-G	BROMOFORM	UG/KG-	ND
04/21/94	MB*NONE*0421	75166*8260-G	2-HEXANONE	UG/KG-	ND
04/21/94	MB*NONE*0421	75169*8260-G	METHYLISOBUTYLKETONE	UG/KG-	ND
04/21/94	MB*NONE*0421	34478*8260-G	TETRACHLOROETHENE	UG/KG-	ND
04/21/94	MB*NONE*0421	34519*8260-G	1,1,2,2-TETRACHLORO- ETHANE	UG/KG-	ND
04/21/94	MB*NONE*0421	34483*8260-G	TOLUENE	UG/KG-	ND
04/21/94	MB*NONE*0421	34304*8260-G	CHLOROBENZENE	UG/KG-	ND
04/21/94	MB*NONE*0421	34374*8260-G	ETHYLBENZENE	UG/KG-	ND
04/21/94	MB*NONE*0421	45510*8260-G	XYLENE,TOTAL	UG/KG-	ND
04/21/94	MB*NONE*0421	75192*8260-G	STYRENE	UG/KG-	ND

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
04/21/94	SP1*NONE*0421	34504*8260-G	1,1-DICHLOROETHYLENE	102	59-172	UG/KG-	50	51
04/21/94	SP1*NONE*0421	34487*8260-G	TRICHLOROETHENE	94	62-137	UG/KG-	50	47
04/21/94	SP1*NONE*0421	34237*8260-G	BENZENE	90	66-142	UG/KG-	50	45
04/21/94	SP1*NONE*0421	34483*8260-G	TOLUENE	88	59-139	UG/KG-	50	44
04/21/94	SP1*NONE*0421	34304*8260-G	CHLOROBENZENE	96	60-133	UG/KG-	50	48

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
04/21/94	SPM1*CDMHNSS*4	34504*8260-G	1,1-DICHLOROETHYLENE	96	59-172	0.0	UG/KG-	52	50
04/21/94	SPM1*CDMHNSS*4	34487*8260-G	TRICHLOROETHENE	87	62-137	0.0	UG/KG-	52	45
04/21/94	SPM1*CDMHNSS*4	34237*8260-G	BENZENE	90	66-142	0.0	UG/KG-	52	47
04/21/94	SPM1*CDMHNSS*4	34483*8260-G	TOLUENE	92	59-139	0.0	UG/KG-	52	48
04/21/94	SPM1*CDMHNSS*4	34304*8260-G	CHLOROBENZENE	94	60-133	0.0	UG/KG-	52	49
04/21/94	SPM2*CDMHNSS*4	34504*8260-G	1,1-DICHLOROETHYLENE	102	59-172	0.0	UG/KG-	52	53
04/21/94	SPM2*CDMHNSS*4	34487*8260-G	TRICHLOROETHENE	88	62-137	0.0	UG/KG-	52	46
04/21/94	SPM2*CDMHNSS*4	34237*8260-G	BENZENE	92	66-142	0.0	UG/KG-	52	48
04/21/94	SPM2*CDMHNSS*4	34483*8260-G	TOLUENE	94	59-139	0.0	UG/KG-	52	49
04/21/94	SPM2*CDMHNSS*4	34304*8260-G	CHLOROBENZENE	96	60-133	0.0	UG/KG-	52	50

Surrogate Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/21/94	MB*NONE*0421	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	51	100	70-121
04/21/94	MB*NONE*0421	97026*SUR	TOLUENE-D(8)	UG/KG-	50	49	98	81-117
04/21/94	MB*NONE*0421	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	50	100	74-121
04/21/94	DA*CDMHNSS*1	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	53	110	70-121
04/21/94	DA*CDMHNSS*1	97026*SUR	TOLUENE-D(8)	UG/KG-	50	49	98	81-117
04/21/94	DA*CDMHNSS*1	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	48	96	74-121
04/21/94	DA*CDMHNSS*2	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	53	110	70-121
04/21/94	DA*CDMHNSS*2	97026*SUR	TOLUENE-D(8)	UG/KG-	50	49	98	81-117
04/21/94	DA*CDMHNSS*2	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	48	96	74-121
04/21/94	DA*CDMHNSS*3	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	51	100	70-121
04/21/94	DA*CDMHNSS*3	97026*SUR	TOLUENE-D(8)	UG/KG-	50	49	98	81-117

ESE BATCH : G48315

Surrogate Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/21/94	DA*CDMHNSS*3	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	49	98	74-121
04/21/94	SPM1*CDMHNSS*4	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	51	100	70-121
04/21/94	SPM1*CDMHNSS*4	97026*SUR	TOLUENE-D(8)	UG/KG-	50	51	100	81-117
04/21/94	SPM1*CDMHNSS*4	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	42	84	74-121
04/21/94	SPM2*CDMHNSS*4	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	54	110	70-121
04/21/94	SPM2*CDMHNSS*4	97026*SUR	TOLUENE-D(8)	UG/KG-	50	51	100	81-117
04/21/94	SPM2*CDMHNSS*4	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	44	88	74-121
04/21/94	SP1*NONE*0421	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	52	100	70-121
04/21/94	SP1*NONE*0421	97026*SUR	TOLUENE-D(8)	UG/KG-	50	48	96	81-117
04/21/94	SP1*NONE*0421	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	48	96	74-121
04/21/94	DA*CDMHNSS*4	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	52	100	70-121
04/21/94	DA*CDMHNSS*4	97026*SUR	TOLUENE-D(8)	UG/KG-	50	50	100	81-117
04/21/94	DA*CDMHNSS*4	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	43	86	74-121

ESE BATCH : G48315

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G48315 Analysis Date: 04/21/94 Analyst: YARL HOOGLAND

	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		
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	12DCE-D4
			97026*SUR
			97027*SUR

Note: Any "NO" answer requires a comment.

OVERRIDE COMMENTS

BATCH OVERRIDE BY:

ESE BATCH : G48315

TABLE OF ABBREVIATIONS

```
%RECV       : % Recovery for spiked sample. (FOUND/TARGET * 100)
ANLY DATE   : Analysis Date
ANLY TIME   : Analysis Time
CURVE       : Curve Regression Number
DILUTION    : Sample Dilution Factor
EXT DATE    : Extract Date
EXT VOL     : Extract Volume
FOUND       : Spiked Sample Conc. - Unspiked Sample Conc.
INJ VOL     : Injection Volume
REL%DIFF    : % Difference between current and previous spike.
RESPONSE    : Sample Response
R.T.        : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID   : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
      DA  -- Data Sample
      MB  -- Method Blank
      RF  -- Reference (from commercially known standard)
      RP  -- Replicate Sample
      SP  -- Standard Matrix Spike
      SPM -- Sample Matrix Spike
      STD -- Internal Standard
      SUR -- Surrogate Sample
      UN  -- Unspiked Sample
SAMP VOL    : Sample Volume
SPK CONC    : Spike Concentration
ST          : Sample response explanation or validity. (listed below)
      BK  -- No sample response.
      NA  -- Sample not analyzed.
      NR  -- Not reserved for this batch.  Batch containing the response
             for this sample is listed in the target field
      OK  -- Sample response shown is correct.
      !   -- Sample response shown is invalid.
      <   -- Sample response < detection limit. Detection limit is shown
             in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET      : Spike Target (SAMPLE LISTING SECTION)
TARGET      : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE        : Response Type ("FINAL" or empty.)
UNSP CONC   : Unspiked Sample Concentration
```

ESE BATCH : G48371
CLASSIFICATION : VOCS - EPA 8260

QC TYPE : FDER/SW
ANALYST : YAEL HOOGLAND
EXTRACTOR :
DATA ENTRY : PAUL HESTER

REPORT DATE/TIME : 05/20/94 06:37:48
ANALYSIS DATE : 04/22/94
EXTRACT DATE :

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

BATCH NOTES
UPLOAD FILE CDMHNWCW

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS		19440220 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*5	WA19-3-05	04/22/94	06:32PM
CDMHNSS*6	WA19-4-05	04/22/94	08:10PM

ESE BATCH : G48371

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H.T. OVER

ALL HOLDING TIMES MET

STORET: 34421 METHOD: 8260-G CHLOROMETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34416 METHOD: 8260-G BROMOMETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34495 METHOD: 8260-G VINYL CHLORIDE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34314 METHOD: 8260-G CHLOROETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34426 METHOD: 8260-G METHYLENE CHLORIDE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 75059 METHOD: 8260-G ACETONE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 78544 METHOD: 8260-G CARBON DISULFIDE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34504 METHOD: 8260-G 1,1-DICHLOROETHYLENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34499 METHOD: 8260-G 1,1-DICHLOROETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 96464 METHOD: 8260-G 1,2-DICHLOROETHENE(TOTAL), UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34318 METHOD: 8260-G CHLOROFORM, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34534 METHOD: 8260-G 1,2-DICHLOROETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 97031 METHOD: SUR 1,2-DICHLOROETHANE-D(4), UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT= DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 75078 METHOD: 8260-G METHYL ETHYL KETONE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW

STORET: 34509 METHOD: 8260-G 1,1,1-TRICHLOROETHANE, UG/KG-DRY GCMS

ESE BATCH : G48371

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34299 METHOD: 8260-G CARBON TETRACHLORIDE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 98583 METHOD: 8260-G VINYL ACETATE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34330 METHOD: 8260-G BROMODICHLOROMETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34544 METHOD: 8260-G 1,2-DICHLOROPROPANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34702 METHOD: 8260-G CIS-1,3-DICHLORO- PROPENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34487 METHOD: 8260-G TRICHLOROETHENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34309 METHOD: 8260-G DIBROMOCHLOROMETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34237 METHOD: 8260-G BENZENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34514 METHOD: 8260-G 1,1,2-TRICHLOROETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34579 METHOD: 8260-G 2-CHLOROETHYLVINYL- ETHER, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34697 METHOD: 8260-G TRANS-1,3-DICHLORO- PROPENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34290 METHOD: 8260-G BROMOFORM, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 75166 METHOD: 8260-G 2-HEXANONE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 75169 METHOD: 8260-G METHYLISOBUTYLKETONE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW

STORET: 34478 METHOD: 8260-G TETRACHLOROETHENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1

ESE BATCH : G48371
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34519 METHOD: 8260-G 1,1,2,2-TETRACHLORO- ETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 97026 METHOD: SUR TOLUENE-D(8), UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT= DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34483 METHOD: 8260-G TOLUENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34304 METHOD: 8260-G CHLOROBENZENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34374 METHOD: 8260-G ETHYLBENZENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 97027 METHOD: SUR BROMOFLUOROBENZENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT= DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 45510 METHOD: 8260-G XYLENE,TOTAL, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW

STORET: 75192 METHOD: 8260-G STYRENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW

ESE BATCH : G48371

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
04/22/94	MB*NONE*0422	34421*8260-G	CHLOROMETHANE	UG/KG-	ND
04/22/94	MB*NONE*0422	34416*8260-G	BROMOMETHANE	UG/KG-	ND
04/22/94	MB*NONE*0422	34495*8260-G	VINYL CHLORIDE	UG/KG-	ND
04/22/94	MB*NONE*0422	34314*8260-G	CHLOROETHANE	UG/KG-	ND
04/22/94	MB*NONE*0422	34426*8260-G	METHYLENE CHLORIDE	UG/KG-	5.1
04/22/94	MB*NONE*0422	75059*8260-G	ACETONE	UG/KG-	16
04/22/94	MB*NONE*0422	78544*8260-G	CARBON DISULFIDE	UG/KG-	ND
04/22/94	MB*NONE*0422	34504*8260-G	1,1-DICHLOROETHYLENE	UG/KG-	ND
04/22/94	MB*NONE*0422	34499*8260-G	1,1-DICHLOROETHANE	UG/KG-	ND
04/22/94	MB*NONE*0422	96464*8260-G	1,2-DICHLOROETHENE(TOTAL)	UG/KG-	ND
04/22/94	MB*NONE*0422	34318*8260-G	CHLOROFORM	UG/KG-	ND
04/22/94	MB*NONE*0422	34534*8260-G	1,2-DICHLOROETHANE	UG/KG-	ND
04/22/94	MB*NONE*0422	75078*8260-G	METHYL ETHYL KETONE	UG/KG-	ND
04/22/94	MB*NONE*0422	34509*8260-G	1,1,1-TRICHLOROETHANE	UG/KG-	ND
04/22/94	MB*NONE*0422	34299*8260-G	CARBON TETRACHLORIDE	UG/KG-	ND
04/22/94	MB*NONE*0422	98583*8260-G	VINYL ACETATE	UG/KG-	ND
04/22/94	MB*NONE*0422	34330*8260-G	BROMODICHLOROMETHANE	UG/KG-	ND
04/22/94	MB*NONE*0422	34544*8260-G	1,2-DICHLOROPROPANE	UG/KG-	ND
04/22/94	MB*NONE*0422	34702*8260-G	CIS-1,3-DICHLORO- PROPENE	UG/KG-	ND
04/22/94	MB*NONE*0422	34487*8260-G	TRICHLOROETHENE	UG/KG-	ND
04/22/94	MB*NONE*0422	34309*8260-G	DIBROMOCHLOROMETHANE	UG/KG-	ND
04/22/94	MB*NONE*0422	34237*8260-G	BENZENE	UG/KG-	ND
04/22/94	MB*NONE*0422	34514*8260-G	1,1,2-TRICHLOROETHANE	UG/KG-	ND
04/22/94	MB*NONE*0422	34579*8260-G	2-CHLOROETHYLVINYL- ETHER	UG/KG-	ND
04/22/94	MB*NONE*0422	34697*8260-G	TRANS-1,3-DICHLORO- PROPENE	UG/KG-	ND
04/22/94	MB*NONE*0422	34290*8260-G	BROMOFORM	UG/KG-	ND
04/22/94	MB*NONE*0422	75166*8260-G	2-HEXANONE	UG/KG-	ND
04/22/94	MB*NONE*0422	75169*8260-G	METHYLISOBUTYLKETONE	UG/KG-	ND
04/22/94	MB*NONE*0422	34478*8260-G	TETRACHLOROETHENE	UG/KG-	ND
04/22/94	MB*NONE*0422	34519*8260-G	1,1,2,2-TETRACHLORO- ETHANE	UG/KG-	ND
04/22/94	MB*NONE*0422	34483*8260-G	TOLUENE	UG/KG-	ND
04/22/94	MB*NONE*0422	34304*8260-G	CHLOROBENZENE	UG/KG-	ND
04/22/94	MB*NONE*0422	34374*8260-G	ETHYLBENZENE	UG/KG-	ND
04/22/94	MB*NONE*0422	45510*8260-G	XYLENE,TOTAL	UG/KG-	ND
04/22/94	MB*NONE*0422	75192*8260-G	STYRENE	UG/KG-	ND

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
04/22/94	SP1*NONE*0422	34504*8260-G	1,1-DICHLOROETHYLENE	132	59-172	UG/KG-	50	66
04/22/94	SP1*NONE*0422	34487*8260-G	TRICHLOROETHENE	112	62-137	UG/KG-	50	56
04/22/94	SP1*NONE*0422	34237*8260-G	BENZENE	110	66-142	UG/KG-	50	55
04/22/94	SP1*NONE*0422	34483*8260-G	TOLUENE	110	59-139	UG/KG-	50	55
04/22/94	SP1*NONE*0422	34304*8260-G	CHLOROBENZENE	114	60-133	UG/KG-	50	57

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
04/22/94	SPM1*CDMHNSS*5	34504*8260-G	1,1-DICHLOROETHYLENE	129	59-172	0.0	UG/KG-	52	67
04/22/94	SPM1*CDMHNSS*5	34487*8260-G	TRICHLOROETHENE	110	62-137	0.0	UG/KG-	52	57
04/22/94	SPM1*CDMHNSS*5	34237*8260-G	BENZENE	106	66-142	0.0	UG/KG-	52	55
04/22/94	SPM1*CDMHNSS*5	34483*8260-G	TOLUENE	106	59-139	0.0	UG/KG-	52	55
04/22/94	SPM1*CDMHNSS*5	34304*8260-G	CHLOROBENZENE	112	60-133	0.0	UG/KG-	52	58
04/22/94	SPM2*CDMHNSS*5	34504*8260-G	1,1-DICHLOROETHYLENE	119	59-172	0.0	UG/KG-	52	62
04/22/94	SPM2*CDMHNSS*5	34487*8260-G	TRICHLOROETHENE	110	62-137	0.0	UG/KG-	52	57
04/22/94	SPM2*CDMHNSS*5	34237*8260-G	BENZENE	108	66-142	0.0	UG/KG-	52	56
04/22/94	SPM2*CDMHNSS*5	34483*8260-G	TOLUENE	102	59-139	0.0	UG/KG-	52	53
04/22/94	SPM2*CDMHNSS*5	34304*8260-G	CHLOROBENZENE	110	60-133	0.0	UG/KG-	52	57

Surrogate Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/22/94	MB*NONE*0422	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	52	100	70-121
04/22/94	MB*NONE*0422	97026*SUR	TOLUENE-D(8)	UG/KG-	50	52	100	81-117
04/22/94	MB*NONE*0422	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	49	98	74-121
04/22/94	DA*CDMHNSS*5	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	50	100	70-121
04/22/94	DA*CDMHNSS*5	97026*SUR	TOLUENE-D(8)	UG/KG-	50	49	98	81-117
04/22/94	DA*CDMHNSS*5	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	49	98	74-121
04/22/94	SPM1*CDMHNSS*5	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	55	110	70-121
04/22/94	SPM1*CDMHNSS*5	97026*SUR	TOLUENE-D(8)	UG/KG-	50	52	100	81-117
04/22/94	SPM1*CDMHNSS*5	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	52	100	74-121
04/22/94	SPM2*CDMHNSS*5	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	53	110	70-121
04/22/94	SPM2*CDMHNSS*5	97026*SUR	TOLUENE-D(8)	UG/KG-	50	50	100	81-117

ESE BATCH . G48371

Surrogate Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/22/94	SPM2*CDMHNSS*5	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	49	98	74-121
04/22/94	DA*CDMHNSS*6	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	50	100	70-121
04/22/94	DA*CDMHNSS*6	97026*SUR	TOLUENE-D(8)	UG/KG-	50	48	96	81-117
04/22/94	DA*CDMHNSS*6	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	48	96	74-121
04/22/94	SP1*NONE*0422	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	54	110	70-121
04/22/94	SP1*NONE*0422	97026*SUR	TOLUENE-D(8)	UG/KG-	50	51	100	81-117
04/22/94	SP1*NONE*0422	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	51	100	74-121

ESE BATCH : G48371

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G48371 Analysis Date: 04/21/94 Analyst: YAEL HOOGLAND

	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		
Sample matrix spike duplicate present?	X		
Sample matrix spike duplicate within acceptance criteria?	X		
Surrogate present?	X		
Surrogate within acceptance criteria?		X	12DCE-D4
			97026*SUR
			97027*SUR

Note: Any "NO" answer requires a comment.

OVERRIDE COMMENTS

BATCH OVERRIDE BY:

ESE BATCH : G48371

TABLE OF ABBREVIATIONS

```
%RECV       : % Recovery for spiked sample. (FOUND/TARGET * 100)
ANLY DATE   : Analysis Date
ANLY TIME   : Analysis Time
CURVE       : Curve Regression Number
DILUTION    : Sample Dilution Factor
EXT DATE    : Extract Date
EXT VOL     : Extract Volume
FOUND       : Spiked Sample Conc. - Unspiked Sample Conc.
INJ VOL     : Injection Volume
REL%DIFF    : % Difference between current and previous spike.
RESPONSE    : Sample Response
R.T.        : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID   : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
      DA  -- Data Sample
      MB  -- Method Blank
      RF  -- Reference (from commercially known standard)
      RP  -- Replicate Sample
      SP  -- Standard Matrix Spike
      SPM -- Sample Matrix Spike
      STD -- Internal Standard
      SUR -- Surrogate Sample
      UN  -- Unspiked Sample
SAMP VOL    : Sample Volume
SPK CONC    : Spike Concentration
ST          : Sample response explanation or validity. (listed below)
      BK  -- No sample response.
      NA  -- Sample not analyzed.
      NR  -- Not reserved for this batch.  Batch containing the response
             for this sample is listed in the target field.
      OK  -- Sample response shown is correct.
      !   -- Sample response shown is invalid.
      <   -- Sample response < detection limit. Detection limit is shown
             in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET      : Spike Target (SAMPLE LISTING SECTION)
TARGET      : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE        : Response Type ("FINAL" or empty.)
UNSP CONC   : Unspiked Sample Concentration
```

ESE BATCH : G48437
CLASSIFICATION : VOCS - EPA 8260

QC TYPE : FDER/SW
ANALYST : YAEL HOOGLAND
EXTRACTOR :
DATA ENTRY : TODD ROMERO

REPORT DATE/TIME : 05/20/94 06:39:07
ANALYSIS DATE : 04/25/94
EXTRACT DATE :

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

BATCH NOTES
DOWNLOAD FILE CDMHNWC2

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS		1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*7	WA17-1-03	04/25/94	01:52PM
CDMHNSS*8	WA16-1-02	04/25/94	03:20PM
CDMHNSS*9	WA16-2-03	04/25/94	05:49PM

ESE BATCH : G48437

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H.T.	OVER

ALL HOLDING TIMES MET

STORET: 34421 METHOD: 8260-G CHLOROMETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34416 METHOD: 8260-G BROMOMETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34495 METHOD: 8260-G VINYL CHLORIDE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34314 METHOD: 8260-G CHLOROETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34426 METHOD: 8260-G METHYLENE CHLORIDE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 75059 METHOD: 8260-G ACETONE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 78544 METHOD: 8260-G CARBON DISULFIDE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34504 METHOD: 8260-G 1,1-DICHLOROETHYLENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34499 METHOD: 8260-G 1,1-DICHLOROETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 96464 METHOD: 8260-G 1,2-DICHLOROETHENE(TOTAL), UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34318 METHOD: 8260-G CHLOROFORM, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34534 METHOD: 8260-G 1,2-DICHLOROETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 97031 METHOD: SUR 1,2-DICHLOROETHANE-D(4), UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT= DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 75078 METHOD: 8260-G METHYL ETHYL KETONE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34509 METHOD: 8260-G 1,1,1-TRICHLOROETHANE, UG/KG-DRY GCMS

ESE BATCH : G48437

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34299 METHOD: 8260-G CARBON TETRACHLORIDE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 98583 METHOD: 8260-G VINYL ACETATE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34330 METHOD: 8260-G BROMODICHLOROMETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34544 METHOD: 8260-G 1,2-DICHLOROPROPANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34702 METHOD: 8260-G CIS-1,3-DICHLORO- PROPENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34487 METHOD: 8260-G TRICHLOROETHENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34309 METHOD: 8260-G DIBROMOCHLOROMETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34237 METHOD: 8260-G BENZENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34514 METHOD: 8260-G 1,1,2-TRICHLOROETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34579 METHOD: 8260-G 2-CHLOROETHYLVINYL- ETHER, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34697 METHOD: 8260-G TRANS-1,3-DICHLORO- PROPENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34290 METHOD: 8260-G BROMOFORM, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 75166 METHOD: 8260-G 2-HEXANONE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 75169 METHOD: 8260-G METHYLISOBUTYLKETONE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34478 METHOD: 8260-G TETRACHLOROETHENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1

ESE BATCH : G48437
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34519 METHOD: 8260-G 1,1,2,2-TETRACHLORO- ETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 97026 METHOD: SUR TOLUENE-D(8), UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT= DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34483 METHOD: 8260-G TOLUENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34304 METHOD: 8260-G CHLOROBENZENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34374 METHOD: 8260-G ETHYLBENZENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 97027 METHOD: SUR BROMOFLUOROBENZENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT= DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 45510 METHOD: 8260-G XYLENE,TOTAL, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 75192 METHOD: 8260-G STYRENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

ESE BATCH : G48437

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
04/25/94	MB*NONE*0425	34421*8260-G	CHLOROMETHANE	UG/KG-	ND
04/25/94	MB*NONE*0425	34416*8260-G	BROMOMETHANE	UG/KG-	ND
04/25/94	MB*NONE*0425	34495*8260-G	VINYL CHLORIDE	UG/KG-	ND
04/25/94	MB*NONE*0425	34314*8260-G	CHLOROETHANE	UG/KG-	ND
04/25/94	MB*NONE*0425	34426*8260-G	METHYLENE CHLORIDE	UG/KG-	2.6
04/25/94	MB*NONE*0425	75059*8260-G	ACETONE	UG/KG-	6.8
04/25/94	MB*NONE*0425	78544*8260-G	CARBON DISULFIDE	UG/KG-	ND
04/25/94	MB*NONE*0425	34504*8260-G	1,1-DICHLOROETHYLENE	UG/KG-	ND
04/25/94	MB*NONE*0425	34499*8260-G	1,1-DICHLOROETHANE	UG/KG-	ND
04/25/94	MB*NONE*0425	96464*8260-G	1,2-DICHLOROETHENE(TOTAL)	UG/KG-	ND
04/25/94	MB*NONE*0425	34318*8260-G	CHLOROFORM	UG/KG-	ND
04/25/94	MB*NONE*0425	34534*8260-G	1,2-DICHLOROETHANE	UG/KG-	ND
04/25/94	MB*NONE*0425	75078*8260-G	METHYL ETHYL KETONE	UG/KG-	ND
04/25/94	MB*NONE*0425	34509*8260-G	1,1,1-TRICHLOROETHANE	UG/KG-	ND
04/25/94	MB*NONE*0425	34299*8260-G	CARBON TETRACHLORIDE	UG/KG-	ND
04/25/94	MB*NONE*0425	98583*8260-G	VINYL ACETATE	UG/KG-	ND
04/25/94	MB*NONE*0425	34330*8260-G	BROMODICHLOROMETHANE	UG/KG-	ND
04/25/94	MB*NONE*0425	34544*8260-G	1,2-DICHLOROPROPANE	UG/KG-	ND
04/25/94	MB*NONE*0425	34702*8260-G	CIS-1,3-DICHLORO- PROPENE	UG/KG-	ND
04/25/94	MB*NONE*0425	34487*8260-G	TRICHLOROETHENE	UG/KG-	ND
04/25/94	MB*NONE*0425	34309*8260-G	DIBROMOCHLOROMETHANE	UG/KG-	ND
04/25/94	MB*NONE*0425	34237*8260-G	BENZENE	UG/KG-	ND
04/25/94	MB*NONE*0425	34514*8260-G	1,1,2-TRICHLOROETHANE	UG/KG-	ND
04/25/94	MB*NONE*0425	34579*8260-G	2-CHLOROETHYLVINYL- ETHER	UG/KG-	ND
04/25/94	MB*NONE*0425	34697*8260-G	TRANS-1,3-DICHLORO- PROPENE	UG/KG-	ND
04/25/94	MB*NONE*0425	34290*8260-G	BROMOFORM	UG/KG-	ND
04/25/94	MB*NONE*0425	75166*8260-G	2-HEXANONE	UG/KG-	ND
04/25/94	MB*NONE*0425	75169*8260-G	METHYLISOBUTYLKETONE	UG/KG-	ND
04/25/94	MB*NONE*0425	34478*8260-G	TETRACHLOROETHENE	UG/KG-	ND
04/25/94	MB*NONE*0425	34519*8260-G	1,1,2,2-TETRACHLORO- ETHANE	UG/KG-	ND
04/25/94	MB*NONE*0425	34483*8260-G	TOLUENE	UG/KG-	ND
04/25/94	MB*NONE*0425	34304*8260-G	CHLOROBENZENE	UG/KG-	ND
04/25/94	MB*NONE*0425	34374*8260-G	ETHYLBENZENE	UG/KG-	ND
04/25/94	MB*NONE*0425	45510*8260-G	XYLENE,TOTAL	UG/KG-	ND
04/25/94	MB*NONE*0425	75192*8260-G	STYRENE	UG/KG-	ND

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
04/25/94	SP1*NONE*0425	34504*8260-G	1,1-DICHLOROETHYLENE	116	59-172	UG/KG-	50	58
04/25/94	SP1*NONE*0425	34487*8260-G	TRICHLOROETHENE	110	62-137	UG/KG-	50	55
04/25/94	SP1*NONE*0425	34237*8260-G	BENZENE	108	66-142	UG/KG-	50	54
04/25/94	SP1*NONE*0425	34483*8260-G	TOLUENE	100	59-139	UG/KG-	50	50
04/25/94	SP1*NONE*0425	34304*8260-G	CHLOROBENZENE	112	60-133	UG/KG-	50	56

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
04/25/94	SPM1*CDMHNSS*7	34504*8260-G	1,1-DICHLOROETHYLENE	115	59-172	0.0	UG/KG-	59	68
04/25/94	SPM1*CDMHNSS*7	34487*8260-G	TRICHLOROETHENE	98	62-137	0.0	UG/KG-	59	58
04/25/94	SPM1*CDMHNSS*7	34237*8260-G	BENZENE	108	66-142	0.0	UG/KG-	59	64
04/25/94	SPM1*CDMHNSS*7	34483*8260-G	TOLUENE	115	59-139	0.0	UG/KG-	59	68
04/25/94	SPM1*CDMHNSS*7	34304*8260-G	CHLOROBENZENE	110	60-133	0.0	UG/KG-	59	65
04/25/94	SPM2*CDMHNSS*7	34504*8260-G	1,1-DICHLOROETHYLENE	100	59-172	0.0	UG/KG-	59	59
04/25/94	SPM2*CDMHNSS*7	34487*8260-G	TRICHLOROETHENE	95	62-137	0.0	UG/KG-	59	56
04/25/94	SPM2*CDMHNSS*7	34237*8260-G	BENZENE	105	66-142	0.0	UG/KG-	59	62
04/25/94	SPM2*CDMHNSS*7	34483*8260-G	TOLUENE	105	59-139	0.0	UG/KG-	59	62
04/25/94	SPM2*CDMHNSS*7	34304*8260-G	CHLOROBENZENE	107	60-133	0.0	UG/KG-	59	63

Surrogate Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/25/94	MB*NONE*0425	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	51	100	70-121
04/25/94	MB*NONE*0425	97026*SUR	TOLUENE-D(8)	UG/KG-	50	50	100	81-117
04/25/94	MB*NONE*0425	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	52	100	74-121
04/25/94	DA*CDMHNSS*7	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	55	110	70-121
04/25/94	DA*CDMHNSS*7	97026*SUR	TOLUENE-D(8)	UG/KG-	50	54	110	81-117
04/25/94	DA*CDMHNSS*7	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	45	90	74-121
04/25/94	DA*CDMHNSS*8	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	55	110	70-121
04/25/94	DA*CDMHNSS*8	97026*SUR	TOLUENE-D(8)	UG/KG-	50	53	110	81-117
04/25/94	DA*CDMHNSS*8	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	47	94	74-121
04/25/94	SP1*NONE*0425	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	53	110	70-121
04/25/94	SP1*NONE*0425	97026*SUR	TOLUENE-D(8)	UG/KG-	50	47	94	81-117

ESE BATCH : G48437

Surrogate Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/25/94	SP1*NONE*0425	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	49	98	74-121
04/25/94	SPM1*CDMHNSS*7	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	52	100	70-121
04/25/94	SPM1*CDMHNSS*7	97026*SUR	TOLUENE-D(8)	UG/KG-	50	54	110	81-117
04/25/94	SPM1*CDMHNSS*7	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	39	78	74-121
04/25/94	SPM2*CDMHNSS*7	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	51	100	70-121
04/25/94	SPM2*CDMHNSS*7	97026*SUR	TOLUENE-D(8)	UG/KG-	50	50	100	81-117
04/25/94	SPM2*CDMHNSS*7	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	42	84	74-121
04/25/94	DA*CDMHNSS*9	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	54	110	70-121
04/25/94	DA*CDMHNSS*9	97026*SUR	TOLUENE-D(8)	UG/KG-	50	52	100	81-117
04/25/94	DA*CDMHNSS*9	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	51	100	74-121

ESE BATCH : G48437

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G48437 Analysis Date 04/25/94 Analyst: YAEL HOOGLAND

	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		
Sample matrix spike duplicate present?	X		
Sample matrix spike duplicate within acceptance criteria?	X		
Surrogate present?	X		
Surrogate within acceptance criteria?		X	12DCE-D4
			97026*SUR
			97027*SUR

Note: Any "NO" answer requires a comment.

OVERRIDE COMMENTS

BATCH OVERRIDE BY:

ESE BATCH : G48437

TABLE OF ABBREVIATIONS

%RECV : % Recovery for spiked sample. (FOUND/TARGET * 100)
ANLY DATE : Analysis Date
ANLY TIME : Analysis Time
CURVE : Curve Regression Number
DILUTION : Sample Dilution Factor
EXT DATE : Extract Date
EXT VOL : Extract Volume
FOUND : Spiked Sample Conc. - Unspiked Sample Conc.
INJ VOL : Injection Volume
REL%DIFF : % Difference between current and previous spike.
RESPONSE : Sample Response
R.T. : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
DA -- Data Sample
MB -- Method Blank
RF -- Reference (from commercially known standard)
RP -- Replicate Sample
SP -- Standard Matrix Spike
SPM -- Sample Matrix Spike
STD -- Internal Standard
SUR -- Surrogate Sample
UN -- Unspiked Sample
SAMP VOL : Sample Volume
SPK CONC : Spike Concentration
ST : Sample response explanation or validity. (listed below)
BK -- No sample response.
NA -- Sample not analyzed.
NR -- Not reserved for this batch. Batch containing the response for this sample is listed in the target field.
OK -- Sample response shown is correct.
! -- Sample response shown is invalid.
< -- Sample response < detection limit. Detection limit is shown in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET : Spike Target (SAMPLE LISTING SECTION)
TARGET : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE : Response Type ("FINAL" or empty.)
UNSP CONC : Unspiked Sample Concentration

ESE BATCH : G48484
CLASSIFICATION : VOCS - EPA 8260

QC TYPE : FDER/SW
ANALYST : YAEL HOOGLAND
EXTRACTOR :
DATA ENTRY : TODD ROMERO

REPORT DATE/TIME : 05/20/94 06:41:05
ANALYSIS DATE : 04/26/94
EXTRACT DATE :

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

BATCH NOTES
DOWNLOAD FILE CDMHNSYH

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS		1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*11	WA07-2-05	04/26/94	04:28PM
CDMHNSS*12	WA05-1-04	04/26/94	04:57PM
CDMHNSS*10	WA07-1-01	04/26/94	06:55PM

ESE BATCH : G48484

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H.T	OVER

ALL HOLDING TIMES MET

STORET: 34421 METHOD: 8260-G CHLOROMETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34416 METHOD: 8260-G BROMOMETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34495 METHOD: 8260-G VINYL CHLORIDE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34314 METHOD: 8260-G CHLOROETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34426 METHOD: 8260-G METHYLENE CHLORIDE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW

STORET: 75059 METHOD: 8260-G ACETONE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 78544 METHOD: 8260-G CARBON DISULFIDE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34504 METHOD: 8260-G 1,1-DICHLOROETHYLENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34499 METHOD: 8260-G 1,1-DICHLOROETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 96464 METHOD: 8260-G 1,2-DICHLOROETHENE(TOTAL), UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34318 METHOD: 8260-G CHLOROFORM, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34534 METHOD: 8260-G 1,2-DICHLOROETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 97031 METHOD: SUR 1,2-DICHLOROETHANE-D(4), UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT= DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 75078 METHOD: 8260-G METHYL ETHYL KETONE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW

STORET: 34509 METHOD: 8260-G 1,1,1-TRICHLOROETHANE, UG/KG-DRY GCMS

ESE BATCH : G48484

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34299 METHOD: 8260-G CARBON TETRACHLORIDE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 98583 METHOD: 8260-G VINYL ACETATE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34330 METHOD: 8260-G BROMODICHLOROMETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34544 METHOD: 8260-G 1,2-DICHLOROPROPANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34702 METHOD: 8260-G CIS-1,3-DICHLORO- PROPENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW

STORET: 34487 METHOD: 8260-G TRICHLOROETHENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW

STORET: 34309 METHOD: 8260-G DIBROMOCHLOROMETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34237 METHOD: 8260-G BENZENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34514 METHOD: 8260-G 1,1,2-TRICHL'ETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34579 METHOD: 8260-G 2-CHLOROETHYLVINYL- ETHER, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34697 METHOD: 8260-G TRANS-1,3-DICHLORO- PROPENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34290 METHOD: 8260-G BROMOFORM, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 75166 METHOD: 8260-G 2-HEXANONE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW

STORET: 75169 METHOD: 8260-G METHYLISOBUTYLKETONE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW

STORET: 34478 METHOD: 8260-G TETRACHLOROETHENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1

ESE BATCH : G48484
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34519 METHOD: 8260-G 1,1,2,2-TETRACHLORO- ETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 97026 METHOD: SUR TOLUENE-D(8), UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT= DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34483 METHOD: 8260-G TOLUENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW

STORET: 34304 METHOD: 8260-G CHLOROBENZENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW

STORET: 34374 METHOD: 8260-G ETHYLBENZENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW

STORET: 97027 METHOD: SUR BROMOFLUOROBENZENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT= DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 45510 METHOD: 8260-G XYLENE,TOTAL, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 75192 METHOD: 8260-G STYRENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

ESE BATCH : G48484

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
04/26/94	MB*NONE*0426	34421*8260-G	CHLOROMETHANE	UG/KG-	ND
04/26/94	MB*NONE*0426	34416*8260-G	BROMOMETHANE	UG/KG-	ND
04/26/94	MB*NONE*0426	34495*8260-G	VINYL CHLORIDE	UG/KG-	ND
04/26/94	MB*NONE*0426	34314*8260-G	CHLOROETHANE	UG/KG-	ND
04/26/94	MB*NONE*0426	34426*8260-G	METHYLENE CHLORIDE	UG/KG-	2.4
04/26/94	MB*NONE*0426	75059*8260-G	ACETONE	UG/KG-	5.7
04/26/94	MB*NONE*0426	78544*8260-G	CARBON DISULFIDE	UG/KG-	ND
04/26/94	MB*NONE*0426	34504*8260-G	1,1-DICHLOROETHYLENE	UG/KG-	ND
04/26/94	MB*NONE*0426	34499*8260-G	1,1-DICHLOROETHANE	UG/KG-	ND
04/26/94	MB*NONE*0426	96464*8260-G	1,2-DICHLOROETHENE(TOTAL)	UG/KG-	ND
04/26/94	MB*NONE*0426	34318*8260-G	CHLOROFORM	UG/KG-	ND
04/26/94	MB*NONE*0426	34534*8260-G	1,2-DICHLOROETHANE	UG/KG-	ND
04/26/94	MB*NONE*0426	75078*8260-G	METHYL ETHYL KETONE	UG/KG-	ND
04/26/94	MB*NONE*0426	34509*8260-G	1,1,1-TRICHLOROETHANE	UG/KG-	ND
04/26/94	MB*NONE*0426	34299*8260-G	CARBON TETRACHLORIDE	UG/KG-	ND
04/26/94	MB*NONE*0426	98583*8260-G	VINYL ACETATE	UG/KG-	ND
04/26/94	MB*NONE*0426	34330*8260-G	BROMODICHLOROMETHANE	UG/KG-	ND
04/26/94	MB*NONE*0426	34544*8260-G	1,2-DICHLOROPROPANE	UG/KG-	ND
04/26/94	MB*NONE*0426	34702*8260-G	CIS-1,3-DICHLORO- PROPENE	UG/KG-	ND
04/26/94	MB*NONE*0426	34487*8260-G	TRICHLOROETHENE	UG/KG-	ND
04/26/94	MB*NONE*0426	34309*8260-G	DIBROMOCHLOROMETHANE	UG/KG-	ND
04/26/94	MB*NONE*0426	34237*8260-G	BENZENE	UG/KG-	ND
04/26/94	MB*NONE*0426	34514*8260-G	1,1,2-TRICHLOROETHANE	UG/KG-	ND
04/26/94	MB*NONE*0426	34579*8260-G	2-CHLOROETHYLVINYL ETHER	UG/KG-	ND
04/26/94	MB*NONE*0426	34697*8260-G	TRANS-1,3-DICHLORO- PROPENE	UG/KG-	ND
04/26/94	MB*NONE*0426	34290*8260-G	BROMOFORM	UG/KG-	ND
04/26/94	MB*NONE*0426	75166*8260-G	2-HEXANONE	UG/KG-	ND
04/26/94	MB*NONE*0426	75169*8260-G	METHYLISOBUTYLKETONE	UG/KG-	ND
04/26/94	MB*NONE*0426	34478*8260-G	TETRACHLOROETHENE	UG/KG-	ND
04/26/94	MB*NONE*0426	34519*8260-G	1,1,2,2-TETRACHLORO- ETHANE	UG/KG-	ND
04/26/94	MB*NONE*0426	34483*8260-G	TOLUENE	UG/KG-	ND
04/26/94	MB*NONE*0426	34304*8260-G	CHLOROBENZENE	UG/KG-	ND
04/26/94	MB*NONE*0426	34374*8260-G	ETHYLBENZENE	UG/KG-	ND
04/26/94	MB*NONE*0426	45510*8260-G	XYLENE,TOTAL	UG/KG-	ND
04/26/94	MB*NONE*0426	75192*8260-G	STYRENE	UG/KG-	ND

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
04/26/94	SP1*NONE*0426	34504*8260-G	1,1-DICHLOROETHYLENE	134	59-172	UG/KG-	50	67
04/26/94	SP1*NONE*0426	34487*8260-G	TRICHLOROETHENE	124	62-137	UG/KG-	50	62
04/26/94	SP1*NONE*0426	34237*8260-G	BENZENE	120	66-142	UG/KG-	50	60
04/26/94	SP1*NONE*0426	34483*8260-G	TOLUENE	116	59-139	UG/KG-	50	58
04/26/94	SP1*NONE*0426	34304*8260-G	CHLOROBENZENE	124	60-133	UG/KG-	50	62

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
04/26/94	SPM1*CDMHNSS*12	34504*8260-G	1,1-DICHLOROETHYLENE	141	59-172	0.0	UG/KG-	51	72
04/26/94	SPM1*CDMHNSS*12	34487*8260-G	TRICHLOROETHENE	114	62-137	0.0	UG/KG-	51	58
04/26/94	SPM1*CDMHNSS*12	34237*8260-G	BENZENE	116	66-142	0.0	UG/KG-	51	59
04/26/94	SPM1*CDMHNSS*12	34483*8260-G	TOLUENE	116	59-139	0.0	UG/KG-	51	59
04/26/94	SPM1*CDMHNSS*12	34304*8260-G	CHLOROBENZENE	116	60-133	0.0	UG/KG-	51	59
04/26/94	SPM2*CDMHNSS*12	34504*8260-G	1,1-DICHLOROETHYLENE	114	59-172	0.0	UG/KG-	51	58
04/26/94	SPM2*CDMHNSS*12	34487*8260-G	TRICHLOROETHENE	102	62-137	0.0	UG/KG-	51	52
04/26/94	SPM2*CDMHNSS*12	34237*8260-G	BENZENE	100	66-142	0.0	UG/KG-	51	51
04/26/94	SPM2*CDMHNSS*12	34483*8260-G	TOLUENE	98	59-139	0.0	UG/KG-	51	50
04/26/94	SPM2*CDMHNSS*12	34304*8260-G	CHLOROBENZENE	104	60-133	0.0	UG/KG-	51	53

Surrogate Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/26/94	MB*NONE*0426	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	50	100	70-121
04/26/94	MB*NONE*0426	97026*SUR	TOLUENE-D(8)	UG/KG-	50	49	98	81-117
04/26/94	MB*NONE*0426	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	50	100	74-121
04/26/94	DA*CDMHNSS*11	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	51	100	70-121
04/26/94	DA*CDMHNSS*11	97026*SUR	TOLUENE-D(8)	UG/KG-	50	48	96	81-117
04/26/94	DA*CDMHNSS*11	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	47	94	74-121
04/26/94	DA*CDMHNSS*12	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	48	96	70-121
04/26/94	DA*CDMHNSS*12	97026*SUR	TOLUENE-D(8)	UG/KG-	50	49	98	81-117
04/26/94	DA*CDMHNSS*12	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	46	92	74-121
04/26/94	SPM1*CDMHNSS*12	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	51	100	70-121
04/26/94	SPM1*CDMHNSS*12	97026*SUR	TOLUENE-D(8)	UG/KG-	50	50	100	81-117

ESE BATCH G48484

Surrogate Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/26/94	SPM1*CDMHNSS*12	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	47	94	74-121
04/26/94	SP1*NONE*0426	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	50	100	70-121
04/26/94	SP1*NONE*0426	97026*SUR	TOLUENE-D(8)	UG/KG-	50	47	94	81-117
04/26/94	SP1*NONE*0426	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	48	96	74-121
04/26/94	DA*CDMHNSS*10	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	50	100	70-121
04/26/94	DA*CDMHNSS*10	97026*SUR	TOLUENE-D(8)	UG/KG-	50	49	98	81-117
04/26/94	DA*CDMHNSS*10	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	47	94	74-121
04/26/94	SPM2*CDMHNSS*12	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	50	100	70-121
04/26/94	SPM2*CDMHNSS*12	97026*SUR	TOLUENE-D(8)	UG/KG-	50	48	96	81-117
04/26/94	SPM2*CDMHNSS*12	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	48	96	74-121

ESE BATCH : G48484

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G48484 Analysis Date: 04/26/94 Analyst: YAEL HOOGLAND

	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		
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	12DCE-D4
			97026*SUR
			97027*SUR

Note: Any "NO" answer requires a comment.

OVERRIDE COMMENTS

BATCH OVERRIDE BY:

ESE BATCH : G48484

TABLE OF ABBREVIATIONS

```
%RECV       : % Recovery for spiked sample. (FOUND/TARGET * 100)
ANLY DATE   : Analysis Date
ANLY TIME   : Analysis Time
CURVE       : Curve Regression Number
DILUTION    : Sample Dilution Factor
EXT DATE    : Extract Date
EXT VOL     : Extract Volume
FOUND       : Spiked Sample Conc. - Unspiked Sample Conc.
INJ VOL     : Injection Volume
REL%DIFF    : % Difference between current and previous spike
RESPONSE    : Sample Response
R.T.        : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID   : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
      DA  -- Data Sample
      MB  -- Method Blank
      RF  -- Reference (from commercially known standard)
      RP  -- Replicate Sample
      SP  -- Standard Matrix Spike
      SPM -- Sample Matrix Spike
      STD -- Internal Standard
      SUR -- Surrogate Sample
      UN  -- Unspiked Sample
SAMP VOL    : Sample Volume
SPK CONC    : Spike Concentration
ST          : Sample response explanation or validity. (listed below)
      BK  -- No sample response.
      NA  -- Sample not analyzed.
      NR  -- Not reserved for this batch.  Batch containing the response
             for this sample is listed in the target field.
      OK  -- Sample response shown is correct.
      !   -- Sample response shown is invalid.
      <   -- Sample response < detection limit. Detection limit is shown
             in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET      : Spike Target (SAMPLE LISTING SECTION)
TARGET      : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE        : Response Type ("FINAL" or empty.)
UNSP CONC   : Unspiked Sample Concentration
```

ESE BATCH : G48570
CLASSIFICATION : VOCS - EPA 8260

QC TYPE : FDER/SW
ANALYST : W WHITEHILL
EXTRACTOR :
DATA ENTRY : TODD ROMERO

REPORT DATE/TIME : 05/20/94 06:42:28
ANALYSIS DATE : 04/27/94
EXTRACT DATE :

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

BATCH NOTES
DOWNLOAD FILE CDMHNWW3

FIELD GRP QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS	1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*16	WA04-2-12	04/27/94	03:16PM
CDMHNSS*15	WA04-1-05	04/27/94	06:44PM
CDMHNSS*13	WA05-2-03	04/27/94	07:17PM
CDMHNSS*14	WA05-3-04	04/27/94	07:50PM

ESE BATCH : G48570

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H T.	OVER

ALL HOLDING TIMES MET

STORET: 34421 METHOD: 8260-G CHLOROMETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34416 METHOD: 8260-G BROMOMETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34495 METHOD: 8260-G VINYL CHLORIDE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34314 METHOD: 8260-G CHLOROETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34426 METHOD: 8260-G METHYLENE CHLORIDE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 75059 METHOD: 8260-G ACETONE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 78544 METHOD: 8260-G CARBON DISULFIDE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34504 METHOD: 8260-G 1,1-DICHLOROETHYLENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34499 METHOD: 8260-G 1,1-DICHLOROETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 96464 METHOD: 8260-G 1,2-DICHLOROETHENE(TOTAL), UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34318 METHOD: 8260-G CHLOROFORM, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34534 METHOD: 8260-G 1,2-DICHLOROETHANE, UG/KG DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 97031 METHOD: SUR 1,2-DICHLOROETHANE-D(4), UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT= DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 75078 METHOD: 8260-G METHYL ETHYL KETONE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34509 METHOD: 8260-G 1,1,1-TRICHLOROETHANE, UG/KG-DRY GCMS

ESE BATCH G48570

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34299 METHOD: 8260-G CARBON TETRACHLORIDE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 98583 METHOD: 8260-G VINYL ACETATE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34330 METHOD: 8260-G BROMODICHLOROMETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34544 METHOD: 8260-G 1,2-DICHLOROPROPANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34702 METHOD: 8260-G CIS-1,3-DICHLORO- PROPENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34487 METHOD: 8260-G TRICHLOROETHENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34309 METHOD: 8260-G DIBROMOCHLOROMETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34237 METHOD: 8260-G BENZENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34514 METHOD: 8260-G 1,1,2-TRICHLOROETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34579 METHOD: 8260-G 2-CHLOROETHYLVINYL- ETHER, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34697 METHOD: 8260-G TRANS-1,3-DICHLORO- PROPENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34290 METHOD: 8260-G BROMOFORM, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 75166 METHOD: 8260-G 2-HEXANONE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 75169 METHOD: 8260-G METHYLISOBUTYLKETONE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34478 METHOD: 8260-G TETRACHLOROETHENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1

ESE BATCH : G48570
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34519 METHOD: 8260-G 1,1,2,2-TETRACHLORO- ETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 97026 METHOD: SUR TOLUENE-D(8), UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT= DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34483 METHOD: 8260-G TOLUENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34304 METHOD: 8260-G CHLOROBENZENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34374 METHOD: 8260-G ETHYLBENZENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 97027 METHOD: SUR BROMOFLUOROBENZENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT= DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 45510 METHOD: 8260-G XYLENE,TOTAL, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW

STORET: 75192 METHOD: 8260-G STYRENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW.

ESE BATCH : G48570

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
04/27/94	MB*NONE*0427	34421*8260-G	CHLOROMETHANE	UG/KG-	ND
04/27/94	MB*NONE*0427	34416*8260-G	BROMOMETHANE	UG/KG-	ND
04/27/94	MB*NONE*0427	34495*8260-G	VINYL CHLORIDE	UG/KG-	ND
04/27/94	MB*NONE*0427	34314*8260-G	CHLOROETHANE	UG/KG-	ND
04/27/94	MB*NONE*0427	34426*8260-G	METHYLENE CHLORIDE	UG/KG-	1.1
04/27/94	MB*NONE*0427	75059*8260-G	ACETONE	UG/KG-	5.1
04/27/94	MB*NONE*0427	78544*8260-G	CARBON DISULFIDE	UG/KG-	ND
04/27/94	MB*NONE*0427	34504*8260-G	1,1-DICHLOROETHYLENE	UG/KG-	ND
04/27/94	MB*NONE*0427	34499*8260-G	1,1-DICHLOROETHANE	UG/KG-	ND
04/27/94	MB*NONE*0427	96464*8260-G	1,2-DICHLOROETHENE(TOTAL)	UG/KG-	ND
04/27/94	MB*NONE*0427	34318*8260-G	CHLOROFORM	UG/KG-	ND
04/27/94	MB*NONE*0427	34534*8260-G	1,2-DICHLOROETHANE	UG/KG-	ND
04/27/94	MB*NONE*0427	75078*8260-G	METHYL ETHYL KETONE	UG/KG-	ND
04/27/94	MB*NONE*0427	34509*8260-G	1,1,1-TRICHLOROETHANE	UG/KG-	ND
04/27/94	MB*NONE*0427	34299*8260-G	CARBON TETRACHLORIDE	UG/KG-	ND
04/27/94	MB*NONE*0427	98583*8260-G	VINYL ACETATE	UG/KG-	ND
04/27/94	MB*NONE*0427	34330*8260-G	BROMODICHLOROMETHANE	UG/KG-	ND
04/27/94	MB*NONE*0427	34544*8260-G	1,2-DICHLOROPROPANE	UG/KG-	ND
04/27/94	MB*NONE*0427	34702*8260-G	CIS-1,3-DICHLORO- PROPENE	UG/KG-	ND
04/27/94	MB*NONE*0427	34487*8260-G	TRICHLOROETHENE	UG/KG-	ND
04/27/94	MB*NONE*0427	34309*8260-G	DIBROMOCHLOROMETHANE	UG/KG-	ND
04/27/94	MB*NONE*0427	34237*8260-G	BENZENE	UG/KG-	ND
04/27/94	MB*NONE*0427	34514*8260-G	1,1,2-TRICHLOROETHANE	UG/KG-	ND
04/27/94	MB*NONE*0427	34579*8260-G	2-CHLOROETHYLVINYL- ETHER	UG/KG-	ND
04/27/94	MB*NONE*0427	34697*8260-G	TRANS-1,3-DICHLORO- PROPENE	UG/KG-	ND
04/27/94	MB*NONE*0427	34290*8260-G	BROMOFORM	UG/KG-	ND
04/27/94	MB*NONE*0427	75166*8260-G	2-HEXANONE	UG/KG-	ND
04/27/94	MB*NONE*0427	75169*8260-G	METHYLISOBUTYLKETONE	UG/KG-	ND
04/27/94	MB*NONE*0427	34478*8260-G	TETRACHLOROETHENE	UG/KG-	ND
04/27/94	MB*NONE*0427	34519*8260-G	1,1,2,2-TETRACHLORO- ETHANE	UG/KG-	ND
04/27/94	MB*NONE*0427	34483*8260-G	TOLUENE	UG/KG-	ND
04/27/94	MB*NONE*0427	34304*8260-G	CHLOROBENZENE	UG/KG-	ND
04/27/94	MB*NONE*0427	34374*8260-G	ETHYLBENZENE	UG/KG-	ND
04/27/94	MB*NONE*0427	45510*8260-G	XYLENE,TOTAL	UG/KG-	ND
04/27/94	MB*NONE*0427	75192*8260-G	STYRENE	UG/KG-	ND

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
04/27/94	SP1*NONE*0427	34504*8260-G	1,1-DICHLOROETHYLENE	112	59-172	UG/KG-	50	56
04/27/94	SP1*NONE*0427	34487*8260-G	TRICHLOROETHENE	112	62-137	UG/KG-	50	56
04/27/94	SP1*NONE*0427	34237*8260-G	BENZENE	112	66-142	UG/KG-	50	56
04/27/94	SP1*NONE*0427	34483*8260-G	TOLUENE	108	59-139	UG/KG-	50	54
04/27/94	SP1*NONE*0427	34304*8260-G	CHLOROBENZENE	112	60-133	UG/KG-	50	56

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
04/27/94	SPM1*CDMHNSS*16	34504*8260-G	1,1-DICHLOROETHYLENE	113	59-172	0.0	UG/KG-	52	59
04/27/94	SPM1*CDMHNSS*16	34487*8260-G	TRICHLOROETHENE	112	62-137	0.0	UG/KG-	52	58
04/27/94	SPM1*CDMHNSS*16	34237*8260-G	BENZENE	113	66-142	0.0	UG/KG-	52	59
04/27/94	SPM1*CDMHNSS*16	34483*8260-G	TOLUENE	112	59-139	0.0	UG/KG-	52	58
04/27/94	SPM1*CDMHNSS*16	34304*8260-G	CHLOROBENZENE	113	60-133	0.0	UG/KG-	52	59
04/27/94	SPM2*CDMHNSS*16	34504*8260-G	1,1-DICHLOROETHYLENE	112	59-172	0.0	UG/KG-	52	58
04/27/94	SPM2*CDMHNSS*16	34487*8260-G	TRICHLOROETHENE	110	62-137	0.0	UG/KG-	52	57
04/27/94	SPM2*CDMHNSS*16	34237*8260-G	BENZENE	108	66-142	0.0	UG/KG-	52	56
04/27/94	SPM2*CDMHNSS*16	34483*8260-G	TOLUENE	108	59-139	0.0	UG/KG-	52	56
04/27/94	SPM2*CDMHNSS*16	34304*8260-G	CHLOROBENZENE	112	60-133	0.0	UG/KG-	52	58

Surrogate Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/27/94	MB*NONE*0427	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	48	96	70-121
04/27/94	MB*NONE*0427	97026*SUR	TOLUENE-D(8)	UG/KG-	50	47	94	81-117
04/27/94	MB*NONE*0427	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	48	96	74-121
04/27/94	DA*CDMHNSS*16	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	46	92	70-121
04/27/94	DA*CDMHNSS*16	97026*SUR	TOLUENE-D(8)	UG/KG-	50	47	94	81-117
04/27/94	DA*CDMHNSS*16	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	47	94	74-121
04/27/94	SPM1*CDMHNSS*16	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	47	94	70-121
04/27/94	SPM1*CDMHNSS*16	97026*SUR	TOLUENE-D(8)	UG/KG-	50	49	98	81-117
04/27/94	SPM1*CDMHNSS*16	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	48	96	74-121
04/27/94	SPM2*CDMHNSS*16	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	43	86	70-121
04/27/94	SPM2*CDMHNSS*16	97026*SUR	TOLUENE-D(8)	UG/KG-	50	45	90	81-117

ESE BATCH : G48570

Surrogate Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
04/27/94	SPM2*CDMHNSS*16	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	45	90	74-121
04/27/94	DA*CDMHNSS*15	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	44	88	70-121
04/27/94	DA*CDMHNSS*15	97026*SUR	TOLUENE-D(8)	UG/KG-	50	48	96	81-117
04/27/94	DA*CDMHNSS*15	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	47	94	74-121
04/27/94	DA*CDMHNSS*13	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	47	94	70-121
04/27/94	DA*CDMHNSS*13	97026*SUR	TOLUENE-D(8)	UG/KG-	50	49	98	81-117
04/27/94	DA*CDMHNSS*13	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	48	96	74-121
04/27/94	DA*CDMHNSS*14	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	48	96	70-121
04/27/94	DA*CDMHNSS*14	97026*SUR	TOLUENE-D(8)	UG/KG-	50	48	96	81-117
04/27/94	DA*CDMHNSS*14	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	48	96	74-121
04/27/94	SP1*NONE*0427	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	50	100	70-121
04/27/94	SP1*NONE*0427	97026*SUR	TOLUENE-D(8)	UG/KG-	50	50	100	81-117
04/27/94	SP1*NONE*0427	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	50	100	74-121

ESE BATCH : G48570

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G48570 Analysis Date: 04/27/94 Analyst: W WHITEHILL

	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		
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	12DCE-D4
			97026*SUR
			97027*SUR

Note: Any "NO" answer requires a comment.

OVERRIDE COMMENTS

BATCH OVERRIDE BY:

TABLE OF ABBREVIATIONS

```
%RECV       : % Recovery for spiked sample. (FOUND/TARGET * 100)
ANLY DATE   : Analysis Date
ANLY TIME   : Analysis Time
CURVE       : Curve Regression Number
DILUTION    : Sample Dilution Factor
EXT DATE    : Extract Date
EXT VOL     : Extract Volume
FOUND       : Spiked Sample Conc. - Unspiked Sample Conc.
INJ VOL     : Injection Volume
REL%DIFF    : % Difference between current and previous spike.
RESPONSE    : Sample Response
R.T.        : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID   : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
      DA  -- Data Sample
      MB  -- Method Blank
      RF  -- Reference (from commercially known standard)
      RP  -- Replicate Sample
      SP  -- Standard Matrix Spike
      SPM -- Sample Matrix Spike
      STD -- Internal Standard
      SUR -- Surrogate Sample
      UN  -- Unspiked Sample
SAMP VOL    : Sample Volume
SPK CONC    : Spike Concentration
ST          : Sample response explanation or validity. (listed below)
      BK  -- No sample response.
      NA  -- Sample not analyzed.
      NR  -- Not reserved for this batch.  Batch containing the response
             for this sample is listed in the target field.
      OK  -- Sample response shown is correct.
      !   -- Sample response shown is invalid.
      <   -- Sample response < detection limit. Detection limit is shown
             in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET      : Spike Target (SAMPLE LISTING SECTION)
TARGET      : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE        : Response Type ("FINAL" or empty.)
UNSP CONC   : Unspiked Sample Concentration
```

ESE BATCH : G48684
CLASSIFICATION : VOCS - EPA 8260

QC TYPE : FDER/SW
ANALYST : YAEL HOOGLAND
EXTRACTOR :
DATA ENTRY : TODD ROMERO

REPORT DATE/TIME : 05/20/94 06:44:11
ANALYSIS DATE : 04/30/94
EXTRACT DATE :

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

BATCH NOTES
DOWNLOAD FILE CDMHNYH3

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS		1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*20	EA12-2-12	05/02/94	05:43PM
CDMHNSS*17	EA14-1-01	05/02/94	07:49PM
CDMHNSS*18	EA14-2-01	05/02/94	08:20PM
CDMHNSS*19	EA12-1-10	05/02/94	08:52PM

ESE BATCH : G48684

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H.T. OVER

ALL HOLDING TIMES MET

STORET: 34421 METHOD: 8260-G CHLOROMETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34416 METHOD: 8260-G BROMOMETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34495 METHOD: 8260-G VINYL CHLORIDE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34314 METHOD: 8260-G CHLOROETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34426 METHOD: 8260-G METHYLENE CHLORIDE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 75059 METHOD: 8260-G ACETONE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 78544 METHOD: 8260-G CARBON DISULFIDE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34504 METHOD: 8260-G 1,1-DICHLOROETHYLENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34499 METHOD: 8260-G 1,1-DICHLOROETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 96464 METHOD: 8260-G 1,2-DICHLOROETHENE(TOTAL) UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34318 METHOD: 8260-G CHLOROFORM, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34534 METHOD: 8260-G 1,2-DICHLOROETHANE, UG/KG DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 97031 METHOD: SUR 1,2-DICHLOROETHANE-D(4), UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT= DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 75078 METHOD: 8260-G METHYL ETHYL KETONE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34509 METHOD: 8260-G 1,1,1-TRICHLOROETHANE, UG/KG-DRY GCMS

ESE BATCH : G48684

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34299 METHOD: 8260-G CARBON TETRACHLORIDE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 98583 METHOD: 8260-G VINYL ACETATE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34330 METHOD: 8260-G BROMODICHLOROMETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34544 METHOD: 8260-G 1,2-DICHLOROPROPANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34702 METHOD: 8260-G CIS-1,3-DICHLORO- PROPENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34487 METHOD: 8260-G TRICHLOROETHENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34309 METHOD: 8260-G DIBROMOCHLOROMETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34237 METHOD: 8260-G BENZENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34514 METHOD: 8260-G 1,1,2-TRICHLOROETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34579 METHOD: 8260-G 2-CHLOROETHYLVINYL- ETHER, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34697 METHOD: 8260-G TRANS-1,3-DICHLORO- PROPENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW

STORET: 34290 METHOD: 8260-G BROMOFORM, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW

STORET: 75166 METHOD: 8260-G 2-HEXANONE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 75169 METHOD: 8260-G METHYLISOBUTYLKETONE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34478 METHOD: 8260-G TETRACHLOROETHENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1

ESE BATCH : G48684
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34519 METHOD: 8260-G 1,1,2,2-TETRACHLORO- ETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 97026 METHOD: SUR TOLUENE-D(8), UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT= DATE: LARGEST RESP= %RSD= RT WINDOW

STORET: 34483 METHOD: 8260-G TOLUENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34304 METHOD: 8260-G CHLOROBENZENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34374 METHOD: 8260-G ETHYLBENZENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 97027 METHOD: SUR BROMOFLUOROBENZENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT= DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 45510 METHOD: 8260-G XYLENE,TOTAL, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 75192 METHOD: 8260-G STYRENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

ESE BATCH : G48684

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/02/94	MB*NONE*0502	34421*8260-G	CHLOROMETHANE	UG/KG-	ND
05/02/94	MB*NONE*0502	34416*8260-G	BROMOMETHANE	UG/KG-	ND
05/02/94	MB*NONE*0502	34495*8260-G	VINYL CHLORIDE	UG/KG-	ND
05/02/94	MB*NONE*0502	34314*8260-G	CHLOROETHANE	UG/KG-	ND
05/02/94	MB*NONE*0502	34426*8260-G	METHYLENE CHLORIDE	UG/KG-	3.7
05/02/94	MB*NONE*0502	75059*8260-G	ACETONE	UG/KG-	7.2
05/02/94	MB*NONE*0502	78544*8260-G	CARBON DISULFIDE	UG/KG-	ND
05/02/94	MB*NONE*0502	34504*8260-G	1,1-DICHLOROETHYLENE	UG/KG-	ND
05/02/94	MB*NONE*0502	34499*8260-G	1,1-DICHLOROETHANE	UG/KG-	ND
05/02/94	MB*NONE*0502	96464*8260-G	1,2-DICHLOROETHENE(TOTAL)	UG/KG-	ND
05/02/94	MB*NONE*0502	34318*8260-G	CHLOROFORM	UG/KG-	ND
05/02/94	MB*NONE*0502	34534*8260-G	1,2-DICHLOROETHANE	UG/KG-	ND
05/02/94	MB*NONE*0502	75078*8260-G	METHYL ETHYL KETONE	UG/KG-	ND
05/02/94	MB*NONE*0502	34509*8260-G	1,1,1-TRICHLOROETHANE	UG/KG-	ND
05/02/94	MB*NONE*0502	34299*8260-G	CARBON TETRACHLORIDE	UG/KG-	ND
05/02/94	MB*NONE*0502	98583*8260-G	VINYL ACETATE	UG/KG-	ND
05/02/94	MB*NONE*0502	34330*8260-G	BROMODICHLOROMETHANE	UG/KG-	ND
05/02/94	MB*NONE*0502	34544*8260-G	1,2-DICHLOROPROPANE	UG/KG-	ND
05/02/94	MB*NONE*0502	34702*8260-G	CIS-1,3-DICHLORO PROPENE	UG/KG-	ND
05/02/94	MB*NONE*0502	34487*8260-G	TRICHLOROETHENE	UG/KG-	ND
05/02/94	MB*NONE*0502	34309*8260-G	DIBROMOCHLOROMETHANE	UG/KG-	ND
05/02/94	MB*NONE*0502	34237*8260-G	BENZENE	UG/KG-	ND
05/02/94	MB*NONE*0502	34514*8260-G	1,1,2-TRICHLOROETHANE	UG/KG-	ND
05/02/94	MB*NONE*0502	34579*8260-G	2-CHLOROETHYLVINYL- ETHER	UG/KG-	ND
05/02/94	MB*NONE*0502	34697*8260-G	TRANS-1,3-DICHLORO- PROPENE	UG/KG-	ND
05/02/94	MB*NONE*0502	34290*8260-G	BROMOFORM	UG/KG-	ND
05/02/94	MB*NONE*0502	75166*8260-G	2-HEXANONE	UG/KG-	ND
05/02/94	MB*NONE*0502	75169*8260-G	METHYLISOBUTYLKETONE	UG/KG-	ND
05/02/94	MB*NONE*0502	34478*8260-G	TETRACHLOROETHENE	UG/KG-	ND
05/02/94	MB*NONE*0502	34519*8260-G	1,1,2,2-TETRACHLORO- ETHANE	UG/KG-	ND
05/02/94	MB*NONE*0502	34483*8260-G	TOLUENE	UG/KG-	ND
05/02/94	MB*NONE*0502	34304*8260-G	CHLOROBENZENE	UG/KG-	ND
05/02/94	MB*NONE*0502	34374*8260-G	ETHYLBENZENE	UG/KG-	ND
05/02/94	MB*NONE*0502	45510*8260-G	XYLENE,TOTAL	UG/KG-	ND
05/02/94	MB*NONE*0502	75192*8260-G	STYRENE	UG/KG-	ND

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
05/02/94	SP1*NONE*0502	34504*8260-G	1,1-DICHLOROETHYLENE	128	59-172	UG/KG-	50	64
05/02/94	SP1*NONE*0502	34487*8260-G	TRICHLOROETHENE	118	62-137	UG/KG-	50	59
05/02/94	SP1*NONE*0502	34237*8260-G	BENZENE	118	66-142	UG/KG-	50	59
05/02/94	SP1*NONE*0502	34483*8260-G	TOLUENE	114	59-139	UG/KG-	50	57
05/02/94	SP1*NONE*0502	34304*8260-G	CHLOROBENZENE	122	60-133	UG/KG-	50	61

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
05/02/94	SPM1*CDMHNSS*20	34504*8260-G	1,1-DICHLOROETHYLENE	129	59-172	0.0	UG/KG-	52	67
05/02/94	SPM1*CDMHNSS*20	34487*8260-G	TRICHLOROETHENE	121	62-137	0.0	UG/KG-	52	63
05/02/94	SPM1*CDMHNSS*20	34237*8260-G	BENZENE	119	66-142	0.0	UG/KG-	52	62
05/02/94	SPM1*CDMHNSS*20	34483*8260-G	TOLUENE	119	59-139	0.0	UG/KG-	52	62
05/02/94	SPM1*CDMHNSS*20	34304*8260-G	CHLOROBENZENE	119	60-133	0.0	UG/KG-	52	62
05/02/94	SPM2*CDMHNSS*20	34504*8260-G	1,1-DICHLOROETHYLENE	129	59-172	0.0	UG/KG-	52	67
05/02/94	SPM2*CDMHNSS*20	34487*8260-G	TRICHLOROETHENE	119	62-137	0.0	UG/KG-	52	62
05/02/94	SPM2*CDMHNSS*20	34237*8260-G	BENZENE	119	66-142	0.0	UG/KG-	52	62
05/02/94	SPM2*CDMHNSS*20	34483*8260-G	TOLUENE	117	59-139	0.0	UG/KG-	52	61
05/02/94	SPM2*CDMHNSS*20	34304*8260-G	CHLOROBENZENE	123	60-133	0.0	UG/KG-	52	64

Surrogate Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/02/94	MB*NONE*0502	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	52	100	70-121
05/02/94	MB*NONE*0502	97026*SUR	TOLUENE-D(8)	UG/KG-	50	52	100	81-117
05/02/94	MB*NONE*0502	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	49	98	74-121
05/02/94	DA*CDMHNSS*20	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	45	90	70-121
05/02/94	DA*CDMHNSS*20	97026*SUR	TOLUENE-D(8)	UG/KG-	50	51	100	81-117
05/02/94	DA*CDMHNSS*20	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	49	98	74-121
05/02/94	SPM1*CDMHNSS*20	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	52	100	70-121
05/02/94	SPM1*CDMHNSS*20	97026*SUR	TOLUENE-D(8)	UG/KG-	50	53	110	81-117
05/02/94	SPM1*CDMHNSS*20	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	49	98	74-121
05/02/94	SPM2*CDMHNSS*20	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	52	100	70-121
05/02/94	SPM2*CDMHNSS*20	97026*SUR	TOLUENE-D(8)	UG/KG-	50	53	110	81-117

ESE BATCH : G48684

Surrogate Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/02/94	SPM2*CDMHNSS*20	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	50	100	74-121
05/02/94	DA*CDMHNSS*17	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	52	100	70-121
05/02/94	DA*CDMHNSS*17	97026*SUR	TOLUENE-D(8)	UG/KG-	50	54	110	81-117
05/02/94	DA*CDMHNSS*17	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	49	98	74-121
05/02/94	DA*CDMHNSS*18	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	50	100	70-121
05/02/94	DA*CDMHNSS*18	97026*SUR	TOLUENE-D(8)	UG/KG-	50	52	100	81-117
05/02/94	DA*CDMHNSS*18	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	49	98	74-121
05/02/94	DA*CDMHNSS*19	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	54	110	70-121
05/02/94	DA*CDMHNSS*19	97026*SUR	TOLUENE-D(8)	UG/KG-	50	53	110	81-117
05/02/94	DA*CDMHNSS*19	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	46	92	74-121
05/02/94	SP1*NONE*0502	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	50	100	70-121
05/02/94	SP1*NONE*0502	97026*SUR	TOLUENE-D(8)	UG/KG-	50	52	100	81-117
05/02/94	SP1*NONE*0502	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	49	98	74-121

ESE BATCH : G48684

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G48684 Analysis Date: 04/30/9- Analyst: YAEL HOOGLAND

	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		
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	12DCE-D4
			97026*SUR
			97027*SUR

Note: Any "NO" answer requires a comment.

OVERRIDE COMMENTS

BATCH OVERRIDE BY:

ESE BATCH : G48684

TABLE OF ABBREVIATIONS

%RECV : % Recovery for spiked sample. (FOUND/TARGET * 100)
ANLY DATE : Analysis Date
ANLY TIME : Analysis Time
CURVE : Curve Regression Number
DILUTION : Sample Dilution Factor
EXT DATE : Extract Date
EXT VOL : Extract Volume
FOUND : Spiked Sample Conc. - Unspiked Sample Conc.
INJ VOL : Injection Volume
REL%DIFF : % Difference between current and previous spike.
RESPONSE : Sample Response
R.T. : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
DA -- Data Sample
MB -- Method Blank
RF -- Reference (from commercially known standard)
RP -- Replicate Sample
SP -- Standard Matrix Spike
SPM -- Sample Matrix Spike
STD -- Internal Standard
SUR -- Surrogate Sample
UN -- Unspiked Sample
SAMP VOL : Sample Volume
SPK CONC : Spike Concentration
ST : Sample response explanation or validity. (listed below)
BK -- No sample response.
NA -- Sample not analyzed.
NR -- Not reserved for this batch. Batch containing the response for this sample is listed in the target field.
OK -- Sample response shown is correct.
! -- Sample response shown is invalid.
< -- Sample response < detection limit. Detection limit is shown in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET : Spike Target (SAMPLE LISTING SECTION)
TARGET : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE : Response Type ("FINAL" or empty.)
UNSP CONC : Unspiked Sample Concentration

ESE BATCH : G48855
CLASSIFICATION : VOAS - CLP SOW OLM01 .8

QC TYPE : FDER/SW
ANALYST : LARRY SHROADS
EXTRACTOR :
DATA ENTRY : TODD ROMERO

REPORT DATE/TIME : 05/20/94 07:25:41
ANALYSIS DATE : 05/05/94
EXTRACT DATE :

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

BATCH NOTES
DOWNLOAD FILE ALS0505A

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS		1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*21	EA11-1-07		

ESE BATCH : G48855

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H.T	OVER

ALL HOLDING TIMES MET

STORET: 34421 METHOD: CLP90-G CHLOROMETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34495 METHOD: CLP90-G VINYL CHLORIDE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34416 METHOD: CLP90-G BROMOMETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34314 METHOD: CLP90-G CHLOROETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34504 METHOD: CLP90-G 1,1-DICHLOROETHYLENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 75059 METHOD: CLP90-G ACETONE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 78544 METHOD: CLP90-G CARBON DISULFIDE, UG/KG DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34426 METHOD: CLP90-G METHYLENE CHLORIDE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 96464 METHOD: CLP90-G 1,2-DICHLOROETHENE(TOTAL), UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34499 METHOD: CLP90-G 1,1-DICHLOROETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 75078 METHOD: CLP90-G 2-BUTANONE (MEK), UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: 05/05/94 LARGEST RESP= %RSD= RT WINDOW:

STORET: 34318 METHOD: CLP90-G CHLOROFORM, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34509 METHOD: CLP90-G 1,1,1-TRICHLOROETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34299 METHOD: CLP90-G CARBON TETRACHLORIDE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 95042 METHOD: SUR 1,2-DICHLOROETHANE-D4 (CLP90 , UG/KG-DRY GCMS

ESE BATCH : G48855

CALIBRATION CURVE # 1
DETECTION LIMIT= DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34237 METHOD: CLP90-G BENZENE UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34534 METHOD: CLP90-G 1,2-DICHLOROETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34487 METHOD: CLP90-G TRICHLOROETHENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW

STORET: 34544 METHOD: CLP90-G 1,2-DICHLOROPROPANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW

STORET: 34330 METHOD: CLP90-G BROMODICHLOROMETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34702 METHOD: CLP90-G CIS-1,3-DICHLOROPROPENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW

STORET: 75169 METHOD: CLP90-G 4-METHYL-2-PENTANONE (MIBK), UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: 05/05/94 LARGEST RESP= %RSD= RT WINDOW:

STORET: 95040 METHOD: SUR TOLUENE-D8 (CLP90), UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT= DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34483 METHOD: CLP90-G TOLUENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34697 METHOD: CLP90-G TRANS-1,3-DICHLOROPROPENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW

STORET: 34514 METHOD: CLP90-G 1,1,2-TRICHLOROETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34478 METHOD: CLP90-G TETRACHLOROETHENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW

STORET: 75166 METHOD: CLP90-G 2-HEXANONE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW

STORET: 34309 METHOD: CLP90-G DIBROMOCHLOROMETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW

STORET: 34304 METHOD: CLP90-G CHLOROBENZENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1

ESE BATCH : G48855
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34374 METHOD: CLP90-G ETHYLBENZENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 97353 METHOD: CLP90-G XYLENES, TOTAL, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 75192 METHOD: CLP90-G STYRENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34290 METHOD: CLP90-G BROMOFORM, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 95041 METHOD: SUR BROMOFLUOROBENZENE (CLP90), UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT= DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34519 METHOD: CLP90-G 1,1,2,2-TETRACHLORO ETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

ESE BATCH : G48855

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/05/94	MB*NONE*0505	34421*CLP90-G	CHLOROMETHANE	UG/KG-	ND
05/05/94	MB*NONE*0505	34495*CLP90-G	VINYL CHLORIDE	UG/KG-	ND
05/05/94	MB*NONE*0505	34416*CLP90-G	BROMOMETHANE	UG/KG-	ND
05/05/94	MB*NONE*0505	34314*CLP90-G	CHLOROETHANE	UG/KG-	ND
05/05/94	MB*NONE*0505	34504*CLP90-G	1,1-DICHLOROETHYLENE	UG/KG-	ND
05/05/94	MB*NONE*0505	75059*CLP90-G	ACETONE	UG/KG-	ND
05/05/94	MB*NONE*0505	78544*CLP90-G	CARBON DISULFIDE	UG/KG-	0.50
05/05/94	MB*NONE*0505	34426*CLP90-G	METHYLENE CHLORIDE	UG/KG-	6.0
05/05/94	MB*NONE*0505	96464*CLP90-G	1,2-DICHLOROETHENE(TOTAL)	UG/KG-	ND
05/05/94	MB*NONE*0505	34499*CLP90-G	1,1-DICHLOROETHANE	UG/KG-	ND
05/05/94	MB*NONE*0505	75078*CLP90-G	2-BUTANONE (MEK)	UG/KG-	ND
05/05/94	MB*NONE*0505	34318*CLP90-G	CHLOROFORM	UG/KG-	ND
05/05/94	MB*NONE*0505	34509*CLP90-G	1,1,1-TRICHLOROETHANE	UG/KG-	ND
05/05/94	MB*NONE*0505	34299*CLP90-G	CARBON TETRACHLORIDE	UG/KG-	ND
05/05/94	MB*NONE*0505	34237*CLP90-G	BENZENE	UG/KG-	ND
05/05/94	MB*NONE*0505	34534*CLP90-G	1,2-DICHLOROETHANE	UG/KG-	ND
05/05/94	MB*NONE*0505	34487*CLP90-G	TRICHLOROETHENE	UG/KG-	ND
05/05/94	MB*NONE*0505	34544*CLP90-G	1,2-DICHLOROPROPANE	UG/KG-	ND
05/05/94	MB*NONE*0505	34330*CLP90-G	BROMODICHLOROMETHANE	UG/KG-	ND
05/05/94	MB*NONE*0505	34702*CLP90-G	CIS-1,3-DICHLOROPROPENE	UG/KG-	ND
05/05/94	MB*NONE*0505	75169*CLP90-G	4-METHYL-2-PENTANONE (MIBK)	UG/KG-	ND
05/05/94	MB*NONE*0505	34483*CLP90-G	TOLUENE	UG/KG-	ND
05/05/94	MB*NONE*0505	34697*CLP90-G	TRANS-1,3-DICHLOROPROPENE	UG/KG-	ND
05/05/94	MB*NONE*0505	34514*CLP90-G	1,1,2-TRICHLOROETHANE	UG/KG-	ND
05/05/94	MB*NONE*0505	34478*CLP90-G	TETRACHLOROETHENE	UG/KG-	ND
05/05/94	MB*NONE*0505	75166*CLP90-G	2-HEXANONE	UG/KG-	ND
05/05/94	MB*NONE*0505	34309*CLP90-G	DIBROMOCHLOROMETHANE	UG/KG-	ND
05/05/94	MB*NONE*0505	34304*CLP90-G	CHLOROBENZENE	UG/KG-	ND
05/05/94	MB*NONE*0505	34374*CLP90-G	ETHYLBENZENE	UG/KG-	ND
05/05/94	MB*NONE*0505	97353*CLP90-G	XYLENES, TOTAL	UG/KG-	ND
05/05/94	MB*NONE*0505	75192*CLP90-G	STYRENE	UG/KG-	ND
05/05/94	MB*NONE*0505	34290*CLP90-G	BROMOFORM	UG/KG-	ND
05/05/94	MB*NONE*0505	34519*CLP90-G	1,1,2,2-TETRACHLORO ETHANE	UG/KG-	ND

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
05/05/94	SPM1*CDMHNSS*21	34504*CLP90-G	1,1-DICHLOROETHYLENE	104	110.5-120.	0.0	UG/KG-	52	54
05/05/94	SPM1*CDMHNSS*21	34237*CLP90-G	BENZENE	108	66-142	0.0	UG/KG-	52	56
05/05/94	SPM1*CDMHNSS*21	34487*CLP90-G	TRICHLOROETHENE	108	62-137	0.0	UG/KG-	52	56
05/05/94	SPM1*CDMHNSS*21	34483*CLP90-G	TOLUENE	69	59-139	0.0	UG/KG-	52	36
05/05/94	SPM1*CDMHNSS*21	34304*CLP90-G	CHLOROBENZENE	110	60-133	0.0	UG/KG-	52	57
05/05/94	SPM2*CDMHNSS*21	34504*CLP90-G	1,1-DICHLOROETHYLENE	108	110.5-120.	0.0	UG/KG-	52	56
05/05/94	SPM2*CDMHNSS*21	34237*CLP90-G	BENZENE	104	66-142	0.0	UG/KG-	52	54
05/05/94	SPM2*CDMHNSS*21	34487*CLP90-G	TRICHLOROETHENE	110	62-137	0.0	UG/KG-	52	57
05/05/94	SPM2*CDMHNSS*21	34483*CLP90-G	TOLUENE	65	59-139	0.0	UG/KG-	52	34
05/05/94	SPM2*CDMHNSS*21	34304*CLP90-G	CHLOROBENZENE	108	60-133	0.0	UG/KG-	52	56

Surrogate Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/05/94	MB*NONE*0505	95042*SUR	1,2-DICHLOROETHANE-D4 (CLP90)	UG/KG-	50	50	100	70-121
05/05/94	MB*NONE*0505	95040*SUR	TOLUENE-D8 (CLP90)	UG/KG-	50	50	100	84-138
05/05/94	MB*NONE*0505	95041*SUR	BROMOFLUOROBENZENE (CLP90)	UG/KG-	50	49	98	59-113
05/05/94	DA*CDMHNSS*21	95042*SUR	1,2-DICHLOROETHANE-D4 (CLP90)	UG/KG-	50	49	98	70-121
05/05/94	DA*CDMHNSS*21	95040*SUR	TOLUENE-D8 (CLP90)	UG/KG-	50	49	98	84-138
05/05/94	DA*CDMHNSS*21	95041*SUR	BROMOFLUOROBENZENE (CLP90)	UG/KG-	50	47	94	59-113
05/05/94	SPM1*CDMHNSS*21	95042*SUR	1,2-DICHLOROETHANE-D4 (CLP90)	UG/KG-	50	49	98	70-121
05/05/94	SPM1*CDMHNSS*21	95040*SUR	TOLUENE-D8 (CLP90)	UG/KG-	50	51	100	84-138
05/05/94	SPM1*CDMHNSS*21	95041*SUR	BROMOFLUOROBENZENE (CLP90)	UG/KG-	50	49	98	59-113
05/05/94	SPM2*CDMHNSS*21	95042*SUR	1,2-DICHLOROETHANE-D4 (CLP90)	UG/KG-	50	47	94	70-121
05/05/94	SPM2*CDMHNSS*21	95040*SUR	TOLUENE-D8 (CLP90)	UG/KG-	50	47	94	84-138
05/05/94	SPM2*CDMHNSS*21	95041*SUR	BROMOFLUOROBENZENE (CLP90)	UG/KG-	50	47	94	59-113

ESE BATCH : G48855

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G48855 Analysis Date: 05/05/94 Analyst: LARRY SHROADS

	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		
Sample matrix spike present?	X		
Sample matrix spike within acceptance criteria?		X	1,1DCETHL
Sample matrix spike duplicate present?	X		
Sample matrix spike duplicate within acceptance criteria?		X	1,1DCETHL
Surrogate present?	X		
Surrogate within acceptance criteria?		X	12DCE-D4
			95040*SUR
			95041*SUR

Note: Any "NO" answer requires a comment.

OVERRIDE COMMENTS

BATCH OVERRIDE BY: DWIGHT ROBERTS 515
FINALIZED PER EHM./DRW 5/9

ESE BATCH : G48855

TABLE OF ABBREVIATIONS

```
%RECV       : % Recovery for spiked sample. (FOUND/TARGET * 100)
ANLY DATE   : Analysis Date
ANLY TIME   : Analysis Time
CURVE       : Curve Regression Number
DILUTION    : Sample Dilution Factor
EXT DATE    : Extract Date
EXT VOL     : Extract Volume
FOUND       : Spiked Sample Conc. - Unspiked Sample Conc.
INJ VOL     : Injection Volume
REL%DIFF    : % Difference between current and previous spike.
RESPONSE    : Sample Response
R.T.        : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID   : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
      DA  -- Data Sample
      MB  -- Method Blank
      RF  -- Reference (from commercially known standard)
      RP  -- Replicate Sample
      SP  -- Standard Matrix Spike
      SPM -- Sample Matrix Spike
      STD -- Internal Standard
      SUR -- Surrogate Sample
      UN  -- Unspiked Sample
SAMP VOL    : Sample Volume
SPK CONC    : Spike Concentration
ST          : Sample response explanation or validity. (listed below)
      BK  -- No sample response.
      NA  -- Sample not analyzed.
      NR  -- Not reserved for this batch.  Batch containing the response
             for this sample is listed in the target field.
      OK  -- Sample response shown is correct.
      !   -- Sample response shown is invalid.
      <   -- Sample response < detection limit. Detection limit is shown
             in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET      : Spike Target (SAMPLE LISTING SECTION)
TARGET      : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE        : Response Type ("FINAL" or empty.)
UNSP CONC   : Unspiked Sample Concentration
```

ESE BATCH : G48758
CLASSIFICATION : VOCS - EPA 8260

QC TYPE : FDER/SW
ANALYST : YAEL HOOGLAND
EXTRACTOR :
DATA ENTRY : TODD ROMERO

REPORT DATE/TIME : 05/20/94 06:45:35
ANALYSIS DATE : 05/03/94
EXTRACT DATE :

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

BATCH NOTES
DOWNLOAD FILE CDMHNYH4

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS		1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*22	EA01-1-10	05/03/94	09:04PM

ESE BATCH : G48758

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H.T.	OVER

ALL HOLDING TIMES MET

STORET: 34421 METHOD: 8260-G CHLOROMETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34416 METHOD: 8260-G BROMOMETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34495 METHOD: 8260-G VINYL CHLORIDE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34314 METHOD: 8260-G CHLOROETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34426 METHOD: 8260-G METHYLENE CHLORIDE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 75059 METHOD: 8260-G ACETONE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 78544 METHOD: 8260-G CARBON DISULFIDE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34504 METHOD: 8260-G 1,1-DICHLOROETHYLENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34499 METHOD: 8260-G 1,1-DICHLOROETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 96464 METHOD: 8260-G 1,2-DICHLOROETHENE(TOTAL), UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34318 METHOD: 8260-G CHLOROFORM, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34534 METHOD: 8260-G 1,2-DICHLOROETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 97031 METHOD: SUR 1,2-DICHLOROETHANE-D(4), UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT= DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 75078 METHOD: 8260-G METHYL ETHYL KETONE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34509 METHOD: 8260-G 1,1,1-TRICHLOROETHANE, UG/KG-DRY GCMS

ESE BATCH : G48758

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34299 METHOD: 8260-G CARBON TETRACHLORIDE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 98583 METHOD: 8260-G VINYL ACETATE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34330 METHOD: 8260-G BROMODICHLOROMETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34544 METHOD: 8260-G 1,2-DICHLOROPROPANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34702 METHOD: 8260-G CIS-1,3-DICHLORO- PROPENE UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW.

STORET: 34487 METHOD: 8260-G TRICHLOROETHENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW

STORET: 34309 METHOD: 8260-G DIBROMOCHLOROMETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW

STORET: 34237 METHOD: 8260-G BENZENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW

STORET: 34514 METHOD: 8260-G 1,1,2-TRICHLOROETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW

STORET: 34579 METHOD: 8260-G 2-CHLOROETHYLVINYL- ETHER, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34697 METHOD: 8260-G TRANS-1,3-DICHLORO- PROPENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34290 METHOD: 8260-G BROMOFORM, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 75166 METHOD: 8260-G 2-HEXANONE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 75169 METHOD: 8260-G METHYLISOBUTYLKETONE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34478 METHOD: 8260-G TETRACHLOROETHENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1

ESE BATCH : G48758
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34519 METHOD: 8260-G 1,1,2,2-TETRACHLORO- ETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW

STORET: 97026 METHOD: SUR TOLUENE-D(8), UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT= DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34483 METHOD: 8260-G TOLUENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW

STORET: 34304 METHOD: 8260-G CHLOROBENZENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW

STORET: 34374 METHOD: 8260-G ETHYLBENZENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW

STORET: 97027 METHOD: SUR BROMOFLUOROBENZENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT= DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 45510 METHOD: 8260-G XYLENE,TOTAL, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 75192 METHOD: 8260-G STYRENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

ESE BATCH : G48758

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/03/94	MB*NONE*0503	34421*8260-G	CHLOROMETHANE	UG/KG-	ND
05/03/94	MB*NONE*0503	34416*8260-G	BROMOMETHANE	UG/KG-	ND
05/03/94	MB*NONE*0503	34495*8260-G	VINYL CHLORIDE	UG/KG-	ND
05/03/94	MB*NONE*0503	34314*8260-G	CHLOROETHANE	UG/KG-	ND
05/03/94	MB*NONE*0503	34426*8260-G	METHYLENE CHLORIDE	UG/KG-	1.8
05/03/94	MB*NONE*0503	75059*8260-G	ACETONE	UG/KG-	9.9
05/03/94	MB*NONE*0503	78544*8260-G	CARBON DISULFIDE	UG/KG-	ND
05/03/94	MB*NONE*0503	34504*8260-G	1,1-DICHLOROETHYLENE	UG/KG-	ND
05/03/94	MB*NONE*0503	34499*8260-G	1,1-DICHLOROETHANE	UG/KG-	ND
05/03/94	MB*NONE*0503	96464*8260-G	1,2-DICHLOROETHENE(TOTAL)	UG/KG-	ND
05/03/94	MB*NONE*0503	34318*8260-G	CHLOROFORM	UG/KG-	ND
05/03/94	MB*NONE*0503	34534*8260-G	1,2-DICHLOROETHANE	UG/KG-	ND
05/03/94	MB*NONE*0503	75078*8260-G	METHYL ETHYL KETONE	UG/KG-	ND
05/03/94	MB*NONE*0503	34509*8260-G	1,1,1-TRICHL'ETHANE	UG/KG-	ND
05/03/94	MB*NONE*0503	34299*8260-G	CARBON TETRACHLORIDE	UG/KG-	ND
05/03/94	MB*NONE*0503	98583*8260-G	VINYL ACETATE	UG/KG-	ND
05/03/94	MB*NONE*0503	34330*8260-G	BROMODICHLOROMETHANE	UG/KG-	ND
05/03/94	MB*NONE*0503	34544*8260-G	1,2-DICHLOROPROPANE	UG/KG-	ND
05/03/94	MB*NONE*0503	34702*8260-G	CIS-1,3-DICHLORO- PROPENE	UG/KG-	ND
05/03/94	MB*NONE*0503	34487*8260-G	TRICHLOROETHENE	UG/KG-	ND
05/03/94	MB*NONE*0503	34309*8260-G	DIBROMOCHLOROMETHANE	UG/KG-	ND
05/03/94	MB*NONE*0503	34237*8260-G	BENZENE	UG/KG-	ND
05/03/94	MB*NONE*0503	34514*8260-G	1,1,2-TRICHL'ETHANE	UG/KG-	ND
05/03/94	MB*NONE*0503	34579*8260-G	2-CHLOROETHYLVINYL- ETHER	UG/KG-	ND
05/03/94	MB*NONE*0503	34697*8260-G	TRANS-1,3-DICHLORO- PROPENE	UG/KG-	ND
05/03/94	MB*NONE*0503	34290*8260-G	BROMOFORM	UG/KG-	ND
05/03/94	MB*NONE*0503	75166*8260-G	2-HEXANONE	UG/KG-	ND
05/03/94	MB*NONE*0503	75169*8260-G	METHYLISOBUTYLKETONE	UG/KG-	ND
05/03/94	MB*NONE*0503	34478*8260-G	TETRACHLOROETHENE	UG/KG-	ND
05/03/94	MB*NONE*0503	34519*8260-G	1,1,2,2-TETRACHLORO- ETHANE	UG/KG-	ND
05/03/94	MB*NONE*0503	34483*8260-G	TOLUENE	UG/KG-	ND
05/03/94	MB*NONE*0503	34304*8260-G	CHLOROBENZENE	UG/KG-	ND
05/03/94	MB*NONE*0503	34374*8260-G	ETHYLBENZENE	UG/KG-	ND
05/03/94	MB*NONE*0503	45510*8260-G	XYLENE,TOTAL	UG/KG-	ND
05/03/94	MB*NONE*0503	75192*8260-G	STYRENE	UG/KG-	ND

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
05/03/94	SP1*NONE*0503	34504*8260-G	1,1-DICHLOROETHYLENE	116	59-172	UG/KG-	50	58
05/03/94	SP1*NONE*0503	34487*8260-G	TRICHLOROETHENE	116	62-137	UG/KG-	50	58
05/03/94	SP1*NONE*0503	34237*8260-G	BENZENE	118	66-142	UG/KG-	50	59
05/03/94	SP1*NONE*0503	34483*8260-G	TOLUENE	114	59-139	UG/KG-	50	57
05/03/94	SP1*NONE*0503	34304*8260-G	CHLOROBENZENE	120	60-133	UG/KG-	50	60

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
05/03/94	SPM1*CDMHNSS*22	34504*8260-G	1,1-DICHLOROETHYLENE	124	59-172	0.0	UG/KG-	55	68
05/03/94	SPM1*CDMHNSS*22	34487*8260-G	TRICHLOROETHENE	109	62-137	0.0	UG/KG-	55	60
05/03/94	SPM1*CDMHNSS*22	34237*8260-G	BENZENE	116	66-142	0.0	UG/KG-	55	64
05/03/94	SPM1*CDMHNSS*22	34483*8260-G	TOLUENE	118	59-139	2.7	UG/KG-	55	65
05/03/94	SPM1*CDMHNSS*22	34304*8260-G	CHLOROBENZENE	118	60-133	0.0	UG/KG-	55	65
05/03/94	SPM2*CDMHNSS*22	34504*8260-G	1,1-DICHLOROETHYLENE	120	59-172	0.0	UG/KG-	55	66
05/03/94	SPM2*CDMHNSS*22	34487*8260-G	TRICHLOROETHENE	109	62-137	0.0	UG/KG-	55	60
05/03/94	SPM2*CDMHNSS*22	34237*8260-G	BENZENE	124	66-142	0.0	UG/KG-	55	68
05/03/94	SPM2*CDMHNSS*22	34483*8260-G	TOLUENE	124	59-139	2.7	UG/KG-	55	68
05/03/94	SPM2*CDMHNSS*22	34304*8260-G	CHLOROBENZENE	122	60-133	0.0	UG/KG-	55	67

Surrogate Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/03/94	MB*NONE*0503	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	50	100	70-121
05/03/94	MB*NONE*0503	97026*SUR	TOLUENE-D(8)	UG/KG-	50	52	100	81-117
05/03/94	MB*NONE*0503	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	50	100	74-121
05/03/94	SP1*NONE*0503	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	48	96	70-121
05/03/94	SP1*NONE*0503	97026*SUR	TOLUENE-D(8)	UG/KG-	50	53	110	81-117
05/03/94	SP1*NONE*0503	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	52	100	74-121
05/03/94	SPM1*CDMHNSS*22	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	50	100	70-121
05/03/94	SPM1*CDMHNSS*22	97026*SUR	TOLUENE-D(8)	UG/KG-	50	55	110	81-117
05/03/94	SPM1*CDMHNSS*22	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	41	82	74-121
05/03/94	SPM2*CDMHNSS*22	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	50	100	70-121
05/03/94	SPM2*CDMHNSS*22	97026*SUR	TOLUENE-D(8)	UG/KG-	50	57	110	81-117

ESE BATCH : G48758

Surrogate Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/03/94	SPM2*CDMHNSS*22	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	42	84	74-121
05/03/94	DA*CDMHNSS*22	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	50	100	70-121
05/03/94	DA*CDMHNSS*22	97026*SUR	TOLUENE-D(8)	UG/KG-	50	56	110	81-117
05/03/94	DA*CDMHNSS*22	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	41	82	74-121

ESE BATCH : G48758

Environmental Science and Engineering Analytical Services
Computer QC Checks

Batch No.: G48758 Analysis Date: 05/03/94 Analyst: YAEL HOOGLAND

	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		
Sample matrix spike duplicate present?	X		
Sample matrix spike duplicate within acceptance criteria?	X		
Surrogate present?	X		
Surrogate within acceptance criteria?		X	12DCE-D4
			97026*SUR
			97027*SUR

Note: Any "NO" answer requires a comment.

OVERRIDE COMMENTS

BATCH OVERRIDE BY:

ESE BATCH : G48758

TABLE OF ABBREVIATIONS

```
%RECV       : % Recovery for spiked sample. (FOUND/TARGET * 100)
ANLY DATE   : Analysis Date
ANLY TIME   : Analysis Time
CURVE       : Curve Regression Number
DILUTION    : Sample Dilution Factor
EXT DATE    : Extract Date
EXT VOL     : Extract Volume
FOUND       : Spiked Sample Conc. - Unspiked Sample Conc.
INJ VOL     : Injection Volume
REL%DIFF    : % Difference between current and previous spike.
RESPONSE    : Sample Response
R.T.        : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID   : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
      DA  -- Data Sample
      MB  -- Method Blank
      RF  -- Reference (from commercially known standard)
      RP  -- Replicate Sample
      SP  -- Standard Matrix Spike
      SPM -- Sample Matrix Spike
      STD -- Internal Standard
      SUR -- Surrogate Sample
      UN  -- Unspiked Sample
SAMP VOL    : Sample Volume
SPK CONC    : Spike Concentration
ST          : Sample response explanation or validity. (listed below)
      BK  -- No sample response.
      NA  -- Sample not analyzed.
      NR  -- Not reserved for this batch.  Batch containing the response
             for this sample is listed in the target field
      OK  -- Sample response shown is correct.
      !   -- Sample response shown is invalid.
      <   -- Sample response < detection limit. Detection limit is shown
             in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET      : Spike Target (SAMPLE LISTING SECTION)
TARGET      : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE        : Response Type ("FINAL" or empty.)
UNSP CONC   : Unspiked Sample Concentration
```

ESE BATCH : G48853
CLASSIFICATION : VOCS - EPA 8260

QC TYPE : FDER/SW
ANALYST : LARRY SHROADS
EXTRACTOR :
DATA ENTRY : TODD ROMERO

REPORT DATE/TIME : 05/20/94 06:47:06
ANALYSIS DATE : 05/04/94
EXTRACT DATE :

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

BATCH NOTES
DOWNLOAD FILE ALS0504A

FIELD GRP QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS	1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*23	OCS1-1-00		

ESE BATCH : G48853

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H.T.	OVER

ALL HOLDING TIMES MET

STORET: 34421 METHOD: 8260-G CHLOROMETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34495 METHOD: 8260-G VINYL CHLORIDE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34416 METHOD: 8260-G BROMOMETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34314 METHOD: 8260-G CHLOROETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34504 METHOD: 8260-G 1,1-DICHLOROETHYLENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 78544 METHOD: 8260-G CARBON DISULFIDE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 75059 METHOD: 8260-G ACETONE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW

STORET: 34426 METHOD: 8260-G METHYLENE CHLORIDE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 96464 METHOD: 8260-G 1,2-DICHLOROETHENE(TOTAL) UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34499 METHOD: 8260-G 1,1-DICHLOROETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 98583 METHOD: 8260-G VINYL ACETATE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW

STORET: 75078 METHOD: 8260-G METHYL ETHYL KETONE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34318 METHOD: 8260-G CHLOROFORM, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34509 METHOD: 8260-G 1,1,1-TRICHLOROETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34299 METHOD: 8260-G CARBON TETRACHLORIDE, UG/KG-DRY GCMS

ESE BATCH G48853

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 97031 METHOD: SUR 1,2-DICHLORCETHANE-D(4), UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT= DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34237 METHOD: 8260-G BENZENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34534 METHOD: 8260-G 1,2-DICHLOROETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34487 METHOD: 8260-G TRICHLOROETHENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34544 METHOD: 8260-G 1,2-DICHLOROPROPANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34330 METHOD: 8260-G BROMODICHLOROMETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34579 METHOD: 8260-G 2-CHLOROETHYLVINYL- ETHER, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34702 METHOD: 8260-G CIS-1,3-DICHLORO- PROPENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 75169 METHOD: 8260-G METHYLISOBUTYLKETONE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW

STORET: 97026 METHOD: SUR TOLUENE-D(8), UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT= DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34483 METHOD: 8260-G TOLUENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34697 METHOD: 8260-G TRANS-1,3-DICHLORO- PROPENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34514 METHOD: 8260-G 1,1,2-TRICHLOROETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34478 METHOD: 8260-G TETRACHLOROETHENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 75166 METHOD: 8260-G 2-HEXANONE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1

ESE BATCH : G48853
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34309 METHOD: 8260-G DIBROMOCHLOROMETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW

STORET: 34304 METHOD: 8260-G CHLOROBENZENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW

STORET: 34374 METHOD: 8260-G ETHYLBENZENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW

STORET: 45510 METHOD: 8260-G XYLENE,TOTAL, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW

STORET: 75192 METHOD: 8260-G STYRENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW

STORET: 34290 METHOD: 8260-G BROMOFORM, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW

STORET: 97027 METHOD: SUR BROMOFLUOROBENZENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT= DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34519 METHOD: 8260-G 1,1,2,2-TETRACHLORO- ETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW

ESE BATCH : G48853

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/04/94	MB*NONE*0504	34421*8260-G	CHLOROMETHANE	UG/KG-	ND
05/04/94	MB*NONE*0504	34495*8260-G	VINYL CHLORIDE	UG/KG-	ND
05/04/94	MB*NONE*0504	34416*8260-G	BROMOMETHANE	UG/KG-	ND
05/04/94	MB*NONE*0504	34314*8260-G	CHLOROETHANE	UG/KG-	ND
05/04/94	MB*NONE*0504	34504*8260-G	1,1-DICHLOROETHYLENE	UG/KG-	ND
05/04/94	MB*NONE*0504	78544*8260-G	CARBON DISULFIDE	UG/KG-	0.70
05/04/94	MB*NONE*0504	75059*8260-G	ACETONE	UG/KG-	ND
05/04/94	MB*NONE*0504	34426*8260-G	METHYLENE CHLORIDE	UG/KG-	ND
05/04/94	MB*NONE*0504	96464*8260-G	1,2-DICHLOROETHENE(TOTAL)	UG/KG-	ND
05/04/94	MB*NONE*0504	34499*8260-G	1,1-DICHLOROETHANE	UG/KG-	ND
05/04/94	MB*NONE*0504	98583*8260-G	VINYL ACETATE	UG/KG-	ND
05/04/94	MB*NONE*0504	75078*8260-G	METHYL ETHYL KETONE	UG/KG-	ND
05/04/94	MB*NONE*0504	34318*8260-G	CHLOROFORM	UG/KG-	ND
05/04/94	MB*NONE*0504	34509*8260-G	1,1,1-TRICHL ETHANE	UG/KG-	ND
05/04/94	MB*NONE*0504	34299*8260-G	CARBON TETRACHLORIDE	UG/KG-	ND
05/04/94	MB*NONE*0504	34237*8260-G	BENZENE	UG/KG-	ND
05/04/94	MB*NONE*0504	34534*8260-G	1,2-DICHLOROETHANE	UG/KG-	ND
05/04/94	MB*NONE*0504	34487*8260-G	TRICHLOROETHENE	UG/KG-	0.50
05/04/94	MB*NONE*0504	34544*8260-G	1,2-DICHLOROPROPANE	UG/KG-	ND
05/04/94	MB*NONE*0504	34330*8260-G	BROMODICHLOROMETHANE	UG/KG-	ND
05/04/94	MB*NONE*0504	34579*8260-G	2-CHLOROETHYLVINYL- ETHER	UG/KG-	ND
05/04/94	MB*NONE*0504	34702*8260-G	CIS-1,3-DICHLORO- PROPENE	UG/KG-	ND
05/04/94	MB*NONE*0504	75169*8260-G	METHYLISOBUTYLKETONE	UG/KG-	ND
05/04/94	MB*NONE*0504	34483*8260-G	TOLUENE	UG/KG-	0.67
05/04/94	MB*NONE*0504	34697*8260-G	TRANS-1,3-DICHLORO- PROPENE	UG/KG-	ND
05/04/94	MB*NONE*0504	34514*8260-G	1,1,2-TRICHL ETHANE	UG/KG-	ND
05/04/94	MB*NONE*0504	34478*8260-G	TETRACHLOROETHENE	UG/KG-	ND
05/04/94	MB*NONE*0504	75166*8260-G	2-HEXANONE	UG/KG-	ND
05/04/94	MB*NONE*0504	34309*8260-G	DIBROMOCHLOROMETHANE	UG/KG-	ND
05/04/94	MB*NONE*0504	34304*8260-G	CHLOROBENZENE	UG/KG-	0.57
05/04/94	MB*NONE*0504	34374*8260-G	ETHYLBENZENE	UG/KG-	ND
05/04/94	MB*NONE*0504	45510*8260-G	XYLENE,TOTAL	UG/KG-	ND
05/04/94	MB*NONE*0504	75192*8260-G	STYRENE	UG/KG-	ND
05/04/94	MB*NONE*0504	34290*8260-G	BROMOFORM	UG/KG-	ND
05/04/94	MB*NONE*0504	34519*8260-G	1,1,2,2-TETRACHLORO- ETHANE	UG/KG-	1.8

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
05/04/94	SPM1*CDMHNSS*23	34504*8260-G	1,1-DICHLOROETHYLENE	102	59-172	0.0	UG/KG-	53	54
05/04/94	SPM1*CDMHNSS*23	34237*8260-G	BENZENE	106	66-142	0.0	UG/KG-	53	56
05/04/94	SPM1*CDMHNSS*23	34487*8260-G	TRICHLOROETHENE	104	62-137	0.0	UG/KG-	53	55
05/04/94	SPM1*CDMHNSS*23	34483*8260-G	TOLUENE	102	59-139	0.0	UG/KG-	53	54
05/04/94	SPM1*CDMHNSS*23	34304*8260-G	CHLOROBENZENE	106	60-133	0.0	UG/KG-	53	56
05/04/94	SPM2*CDMHNSS*23	34504*8260-G	1,1-DICHLOROETHYLENE	100	59-172	0.0	UG/KG-	53	53
05/04/94	SPM2*CDMHNSS*23	34237*8260-G	BENZENE	108	66-142	0.0	UG/KG-	53	57
05/04/94	SPM2*CDMHNSS*23	34487*8260-G	TRICHLOROETHENE	104	62-137	0.0	UG/KG-	53	55
05/04/94	SPM2*CDMHNSS*23	34483*8260-G	TOLUENE	104	59-139	0.0	UG/KG-	53	55
05/04/94	SPM2*CDMHNSS*23	34304*8260-G	CHLOROBENZENE	108	60-133	0.0	UG/KG-	53	57

Surrogate Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/04/94	MB*NONE*0504	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	49	98	70-121
05/04/94	MB*NONE*0504	97026*SUR	TOLUENE-D(8)	UG/KG-	50	45	90	81-117
05/04/94	MB*NONE*0504	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	49	98	74-121
05/04/94	DA*CDMHNSS*23	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	51	100	70-121
05/04/94	DA*CDMHNSS*23	97026*SUR	TOLUENE-D(8)	UG/KG-	50	50	100	81-117
05/04/94	DA*CDMHNSS*23	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	51	100	74-121
05/04/94	SPM1*CDMHNSS*23	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	50	100	70-121
05/04/94	SPM1*CDMHNSS*23	97026*SUR	TOLUENE-D(8)	UG/KG-	50	50	100	81-117
05/04/94	SPM1*CDMHNSS*23	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	49	98	74-121
05/04/94	SPM2*CDMHNSS*23	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	50	100	70-121
05/04/94	SPM2*CDMHNSS*23	97026*SUR	TOLUENE-D(8)	UG/KG-	50	51	100	81-117
05/04/94	SPM2*CDMHNSS*23	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	50	100	74-121

ESE BATCH : G48853

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G48853 Analysis Date: 05/04/94 Analyst: LARRY SHROADS

	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?			
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	12DCE-D4
			97026*SUR
			97027*SUR

Note: Any "NO" answer requires a comment.

OVERRIDE COMMENTS

BATCH OVERRIDE BY: BRAD WEICHERT 1569
FINALIZED PER EHM./DRW 5/9

TABLE OF ABBREVIATIONS

```
%RECV       : % Recovery for spiked sample. (FOUND/TARGET * 100)
ANLY DATE   : Analysis Date
ANLY TIME   : Analysis Time
CURVE       : Curve Regression Number
DILUTION    : Sample Dilution Factor
EXT DATE    : Extract Date
EXT VOL     : Extract Volume
FOUND       : Spiked Sample Conc. - Unspiked Sample Conc.
INJ VOL     : Injection Volume
REL%DIFF    : % Difference between current and previous spike.
RESPONSE    : Sample Response
R.T.        : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID   : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
      DA  -- Data Sample
      MB  -- Method Blank
      RF  -- Reference (from commercially known standard)
      RP  -- Replicate Sample
      SP  -- Standard Matrix Spike
      SPM -- Sample Matrix Spike
      STD -- Internal Standard
      SUR -- Surrogate Sample
      UN  -- Unspiked Sample
SAMP VOL    : Sample Volume
SPK CONC    : Spike Concentration
ST          : Sample response explanation or validity. (listed below)
      BK  -- No sample response.
      NA  -- Sample not analyzed.
      NR  -- Not reserved for this batch.  Batch containing the response
             for this sample is listed in the target field.
      OK  -- Sample response shown is correct.
      !   -- Sample response shown is invalid.
      <   -- Sample response < detection limit. Detection limit is shown
             in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET      : Spike Target (SAMPLE LISTING SECTION)
TARGET      : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE        : Response Type ("FINAL" or empty.)
UNSP CONC   : Unspiked Sample Concentration
```

ESE BATCH : G48887
CLASSIFICATION : VOCS - EPA 8260

QC TYPE : FDER/SW
ANALYST : W WHITEHILL
EXTRACTOR :
DATA ENTRY : TODD ROMERO

REPORT DATE/TIME : 05/20/94 06:48:17
ANALYSIS DATE : 05/06/94
EXTRACT DATE :

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

BATCH NOTES
DOWNLOAD FILE CDMHNWW8

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS		1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*27	WBG2-2-02	05/06/94	02:40PM
CDMHNSS*24	EBG1-1-02	05/06/94	07:08PM
CDMHNSS*25	ESV1-1-01	05/06/94	07:51PM
CDMHNSS*26	WBG2-1-02	05/06/94	08:33PM

ESE BATCH : G48887

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H T. OVER

ALL HOLDING TIMES MET

STORET: 34421 METHOD: 8260-G CHLOROMETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34416 METHOD: 8260-G BROMOMETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34495 METHOD: 8260-G VINYL CHLORIDE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34314 METHOD: 8260-G CHLOROETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34426 METHOD: 8260-G METHYLENE CHLORIDE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 75059 METHOD: 8260-G ACETONE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 78544 METHOD: 8260-G CARBON DISULFIDE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34504 METHOD: 8260-G 1,1-DICHLOROETHYLENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34499 METHOD: 8260-G 1,1-DICHLOROETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 96464 METHOD: 8260-G 1,2-DICHLOROETHENE(TOTAL) UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34318 METHOD: 8260-G CHLOROFORM, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34534 METHOD: 8260-G 1,2-DICHLOROETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 97031 METHOD: SUR 1,2-DICHLOROETHANE-D(4), UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT= DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 75078 METHOD: 8260-G METHYL ETHYL KETONE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34509 METHOD: 8260-G 1,1,1-TRICHLOROETHANE, UG/KG-DRY GCMS

ESE BATCH : G48887

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34299 METHOD: 8260-G CARBON TETRACHLORIDE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 98583 METHOD: 8260-G VINYL ACETATE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW

STORET: 34330 METHOD: 8260-G BROMODICHLOROMETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34544 METHOD: 8260-G 1,2-DICHLOROPROPANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34702 METHOD: 8260-G CIS-1,3-DICHLORO- PROPENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34487 METHOD: 8260-G TRICHLOROETHENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34309 METHOD: 8260-G DIBROMOCHLOROMETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34237 METHOD: 8260-G BENZENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34514 METHOD: 8260-G 1,1,2-TRICHLOROETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34579 METHOD: 8260-G 2-CHLOROETHYLVINYL- ETHER, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34697 METHOD: 8260-G TRANS-1,3-DICHLORO- PROPENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34290 METHOD: 8260-G BROMOFORM, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 75166 METHOD: 8260-G 2-HEXANONE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 75169 METHOD: 8260-G METHYLISOBUTYLKETONE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34478 METHOD: 8260-G TETRACHLOROETHENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1

ESE BATCH : G48887
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34519 METHOD: 8260-G 1,1,2,2-TETRACHLORO- ETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW

STORET: 97026 METHOD: SUR TOLUENE-D(8), UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT= DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34483 METHOD: 8260-G TOLUENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34304 METHOD: 8260-G CHLOROBENZENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34374 METHOD: 8260-G ETHYLBENZENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW

STORET: 97027 METHOD: SUR BROMOFLUOROBENZENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT= DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 45510 METHOD: 8260-G XYLENE,TOTAL, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW

STORET: 75192 METHOD: 8260-G STYRENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW

ESE BATCH : G48887

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/06/94	MB*NONE*0506	34421*8260-G	CHLOROMETHANE	UG/KG-	ND
05/06/94	MB*NONE*0506	34416*8260-G	BROMOMETHANE	UG/KG-	ND
05/06/94	MB*NONE*0506	34495*8260-G	VINYL CHLORIDE	UG/KG-	ND
05/06/94	MB*NONE*0506	34314*8260-G	CHLOROETHANE	UG/KG-	ND
05/06/94	MB*NONE*0506	34426*8260-G	METHYLENE CHLORIDE	UG/KG-	2.3
05/06/94	MB*NONE*0506	75059*8260-G	ACETONE	UG/KG-	5.9
05/06/94	MB*NONE*0506	78544*8260-G	CARBON DISULFIDE	UG/KG-	ND
05/06/94	MB*NONE*0506	34504*8260-G	1,1-DICHLOROETHYLENE	UG/KG-	ND
05/06/94	MB*NONE*0506	34499*8260-G	1,1-DICHLOROETHANE	UG/KG-	ND
05/06/94	MB*NONE*0506	96464*8260-G	1,2-DICHLOROETHENE(TOTAL)	UG/KG-	ND
05/06/94	MB*NONE*0506	34318*8260-G	CHLOROFORM	UG/KG-	ND
05/06/94	MB*NONE*0506	34534*8260-G	1,2-DICHLOROETHANE	UG/KG-	ND
05/06/94	MB*NONE*0506	75078*8260-G	METHYL ETHYL KETONE	UG/KG-	ND
05/06/94	MB*NONE*0506	34509*8260-G	1,1,1-TRICHLOROETHANE	UG/KG-	ND
05/06/94	MB*NONE*0506	34299*8260-G	CARBON TETRACHLORIDE	UG/KG-	ND
05/06/94	MB*NONE*0506	98583*8260-G	VINYL ACETATE	UG/KG-	ND
05/06/94	MB*NONE*0506	34330*8260-G	BROMODICHLOROMETHANE	UG/KG-	ND
05/06/94	MB*NONE*0506	34544*8260-G	1,2-DICHLOROPROPANE	UG/KG-	ND
05/06/94	MB*NONE*0506	34702*8260-G	CIS-1,3-DICHLORO PROPENE	UG/KG-	ND
05/06/94	MB*NONE*0506	34487*8260-G	TRICHLOROETHENE	UG/KG-	ND
05/06/94	MB*NONE*0506	34309*8260-G	DIBROMOCHLOROMETHANE	UG/KG-	ND
05/06/94	MB*NONE*0506	34237*8260-G	BENZENE	UG/KG-	ND
05/06/94	MB*NONE*0506	34514*8260-G	1,1,2-TRICHLOROETHANE	UG/KG-	ND
05/06/94	MB*NONE*0506	34579*8260-G	2-CHLOROETHYLVINYL- ETHER	UG/KG-	ND
05/06/94	MB*NONE*0506	34697*8260-G	TRANS-1,3-DICHLORO- PROPENE	UG/KG-	ND
05/06/94	MB*NONE*0506	34290*8260-G	BROMOFORM	UG/KG-	ND
05/06/94	MB*NONE*0506	75166*8260-G	2-HEXANONE	UG/KG-	ND
05/06/94	MB*NONE*0506	75169*8260-G	METHYLISOBUTYLKETONE	UG/KG-	ND
05/06/94	MB*NONE*0506	34478*8260-G	TETRACHLOROETHENE	UG/KG-	ND
05/06/94	MB*NONE*0506	34519*8260-G	1,1,2,2-TETRACHLORO- ETHANE	UG/KG-	ND
05/06/94	MB*NONE*0506	34483*8260-G	TOLUENE	UG/KG-	ND
05/06/94	MB*NONE*0506	34304*8260-G	CHLOROBENZENE	UG/KG-	ND
05/06/94	MB*NONE*0506	34374*8260-G	ETHYLBENZENE	UG/KG-	ND
05/06/94	MB*NONE*0506	45510*8260-G	XYLENE,TOTAL	UG/KG-	ND
05/06/94	MB*NONE*0506	75192*8260-G	STYRENE	UG/KG-	ND

Surrogate Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/06/94	MB*NONE*0506	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	56	110	70-121
05/06/94	MB*NONE*0506	97026*SUR	TOLUENE-D(8)	UG/KG-	50	56	110	81-117
05/06/94	MB*NONE*0506	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	56	110	74-121
05/06/94	DA*CDMHNSS*27	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	55	110	70-121
05/06/94	DA*CDMHNSS*27	97026*SUR	TOLUENE-D(8)	UG/KG-	50	54	110	81-117
05/06/94	DA*CDMHNSS*27	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	54	110	74-121
05/06/94	DA*CDMHNSS*24	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	60	120	70-121
05/06/94	DA*CDMHNSS*24	97026*SUR	TOLUENE-D(8)	UG/KG-	50	51	100	81-117
05/06/94	DA*CDMHNSS*24	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	50	100	74-121
05/06/94	DA*CDMHNSS*25	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	56	110	70-121
05/06/94	DA*CDMHNSS*25	97026*SUR	TOLUENE-D(8)	UG/KG-	50	53	110	81-117
05/06/94	DA*CDMHNSS*25	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	51	100	74-121
05/06/94	DA*CDMHNSS*26	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	59	120	70-121
05/06/94	DA*CDMHNSS*26	97026*SUR	TOLUENE-D(8)	UG/KG-	50	54	110	81-117
05/06/94	DA*CDMHNSS*26	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	55	110	74-121

ESE BATCH : G48887

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G48887 Analysis Date: 05/06/94 Analyst: W WHITEHILL

	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		
Method blank present?	X		
Method blank within acceptance criteria?	X		
Standard matrix spike present?		X	
Standard matrix spike within acceptance criteria?			
Sample matrix spike present?		X	
Sample matrix spike within acceptance criteria?			
Surrogate present?	X		
Surrogate within acceptance criteria?		X	12DCE-D4
			97026*SUR
			97027*SUR

Note: Any "NO" answer requires a comment.

OVERRIDE COMMENTS

BATCH OVERRIDE BY: DWIGHT ROBERTS 515
PROB.:STANDARD MATRIX SPIKE NOT PRESENT.
EXPL.:MS/MSD NOT UPLOADED WITH THESE
SAMPLES./WW
PROB.:SAMPLE MATRIX SPIKE NOT PRESENT.
EXPL.:SEE ABOVE./WW

ESE BATCH : G48887

TABLE OF ABBREVIATIONS

```
%RECV       : % Recovery for spiked sample. (FOUND/TARGET * 100)
ANLY DATE   : Analysis Date
ANLY TIME   : Analysis Time
CURVE       : Curve Regression Number
DILUTION    : Sample Dilution Factor
EXT DATE    : Extract Date
EXT VOL     : Extract Volume
FOUND       : Spiked Sample Conc. - Unspiked Sample Conc.
INJ VOL     : Injection Volume
REL%DIFF    : % Difference between current and previous spike.
RESPONSE    : Sample Response
R.T.        : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID   : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
      DA  -- Data Sample
      MB  -- Method Blank
      RF  -- Reference (from commercially known standard)
      RP  -- Replicate Sample
      SP  -- Standard Matrix Spike
      SPM -- Sample Matrix Spike
      STD -- Internal Standard
      SUR -- Surrogate Sample
      UN  -- Unspiked Sample
SAMP VOL    : Sample Volume
SPK CONC    : Spike Concentration
ST          : Sample response explanation or validity. (listed below)
      BK  -- No sample response.
      NA  -- Sample not analyzed.
      NR  -- Not reserved for this batch.  Batch containing the response
             for this sample is listed in the target field.
      OK  -- Sample response shown is correct.
      !   -- Sample response shown is invalid.
      <   -- Sample response < detection limit. Detection limit is shown
             in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET      : Spike Target (SAMPLE LISTING SECTION)
TARGET      : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE        : Response Type ("FINAL" or empty.)
UNSP CONC   : Unspiked Sample Concentration
```

ESE BATCH : G49000
CLASSIFICATION : VOCS - EPA 8260

QC TYPE : FDER/SW
ANALYST : NADIA LOMBARDERO
EXTRACTOR :
DATA ENTRY : TODD ROMERO

REPORT DATE/TIME : 05/20/94 06:49:06
ANALYSIS DATE : 05/09/94
EXTRACT DATE :

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

BATCH NOTES
DOWNLOAD FILE NL050994 UPDATED - TO DEFINALIZE PER EHM./DRW 5/11

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS		1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*28	WA04-3-20	05/09/94	05:32PM
CDMHNSS*31	WBG3-1-02	05/09/94	06:03PM
CDMHNSS*32	EWC1-1-00	05/09/94	07:24PM
CDMHNSS*33	WWC2-1-00	05/09/94	08:01PM

ESE BATCH : G49000

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H.T. OVER

ALL HOLDING TIMES MET

STORET: 97031 METHOD: SUR 1,2-DICHLOROETHANE-D(4), UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT= DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 97026 METHOD: SUR TOLUENE-D(8), UG/KG-DRY GCMS

STORET: 97027 METHOD: SUR BROMOFLUOROBENZENE, UG/KG-DRY GCMS

STORET: 34421 METHOD: 8260-G CHLOROMETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34495 METHOD: 8260-G VINYL CHLORIDE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34416 METHOD: 8260-G BROMOMETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34314 METHOD: 8260-G CHLOROETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 75059 METHOD: 8260-G ACETONE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34504 METHOD: 8260-G 1,1-DICHLOROETHYLENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 98583 METHOD: 8260-G VINYL ACETATE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW.

STORET: 34426 METHOD: 8260-G METHYLENE CHLORIDE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 78544 METHOD: 8260-G CARBON DISULFIDE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 96464 METHOD: 8260-G 1,2-DICHLOROETHENE(TOTAL) UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34499 METHOD: 8260-G 1,1-DICHLOROETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 75078 METHOD: 8260-G METHYL ETHYL KETONE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW.

STORET: 34318 METHOD: 8260-G CHLOROFORM, UG/KG-DRY GCMS

ESE BATCH : G49000
CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34509 METHOD: 8260-G 1,1,1-TRICHLOROETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34299 METHOD: 8260-G CARBON TETRACHLORIDE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34534 METHOD: 8260-G 1,2-DICHLOROETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34237 METHOD: 8260-G BENZENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34487 METHOD: 8260-G TRICHLOROETHENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34544 METHOD: 8260-G 1,2-DICHLOROPROPANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34330 METHOD: 8260-G BROMODICHLOROMETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34579 METHOD: 8260-G 2-CHLOROETHYLVINYL- ETHER, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 75169 METHOD: 8260-G METHYLISOBUTYLKETONE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34702 METHOD: 8260-G CIS-1,3-DICHLORO- PROPENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34483 METHOD: 8260-G TOLUENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34697 METHOD: 8260-G TRANS-1,3-DICHLORO- PROPENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 75166 METHOD: 8260-G 2-HEXANONE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34514 METHOD: 8260-G 1,1,2-TRICHLOROETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34478 METHOD: 8260-G TETRACHLOROETHENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

ESE BATCH : G49000

STORET: 34309 METHOD: 8260-G DIBROMOCHLOROMETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW

STORET: 34304 METHOD: 8260-G CHLOROBENZENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34374 METHOD: 8260-G ETHYLBENZENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 45510 METHOD: 8260-G XYLENE,TOTAL, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 75192 METHOD: 8260-G STYRENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34290 METHOD: 8260-G BROMOFORM, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34519 METHOD: 8260-G 1,1,2,2-TETRACHLORO- ETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

ESE BATCH : G49000

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/09/94	MB*0509*1	34421*8260-G	CHLOROMETHANE	UG/KG-	ND
05/09/94	MB*0509*1	34495*8260-G	VINYL CHLORIDE	UG/KG-	ND
05/09/94	MB*0509*1	34416*8260-G	BROMOMETHANE	UG/KG-	ND
05/09/94	MB*0509*1	34314*8260-G	CHLOROETHANE	UG/KG-	ND
05/09/94	MB*0509*1	75059*8260-G	ACETONE	UG/KG-	7.7
05/09/94	MB*0509*1	34504*8260-G	1,1-DICHLOROETHYLENE	UG/KG-	ND
05/09/94	MB*0509*1	98583*8260-G	VINYL ACETATE	UG/KG-	ND
05/09/94	MB*0509*1	34426*8260-G	METHYLENE CHLORIDE	UG/KG-	ND
05/09/94	MB*0509*1	78544*8260-G	CARBON DISULFIDE	UG/KG-	ND
05/09/94	MB*0509*1	96464*8260-G	1,2-DICHLOROETHENE(TOTAL)	UG/KG-	ND
05/09/94	MB*0509*1	34499*8260-G	1,1-DICHLOROETHANE	UG/KG-	ND
05/09/94	MB*0509*1	75078*8260-G	METHYL ETHYL KETONE	UG/KG-	0.71
05/09/94	MB*0509*1	34318*8260-G	CHLOROFORM	UG/KG-	ND
05/09/94	MB*0509*1	34509*8260-G	1,1,1-TRICHL'ETHANE	UG/KG-	ND
05/09/94	MB*0509*1	34299*8260-G	CARBON TETRACHLORIDE	UG/KG-	ND
05/09/94	MB*0509*1	34534*8260-G	1,2-DICHLOROETHANE	UG/KG-	ND
05/09/94	MB*0509*1	34237*8260-G	BENZENE	UG/KG-	ND
05/09/94	MB*0509*1	34487*8260-G	TRICHLOROETHENE	UG/KG-	ND
05/09/94	MB*0509*1	34544*8260-G	1,2-DICHLOROPROPANE	UG/KG-	ND
05/09/94	MB*0509*1	34330*8260-G	BROMODICHLOROMETHANE	UG/KG-	ND
05/09/94	MB*0509*1	34579*8260-G	2-CHLOROETHYLVINYL- ETHER	UG/KG-	ND
05/09/94	MB*0509*1	75169*8260-G	METHYLISOBUTYLKETONE	UG/KG-	ND
05/09/94	MB*0509*1	34702*8260-G	CIS-1,3-DICHLORO PROPENE	UG/KG-	ND
05/09/94	MB*0509*1	34483*8260-G	TOLUENE	UG/KG-	ND
05/09/94	MB*0509*1	34697*8260-G	TRANS-1,3-DICHLORO- PROPENE	UG/KG-	ND
05/09/94	MB*0509*1	75166*8260-G	2-HEXANONE	UG/KG-	ND
05/09/94	MB*0509*1	34514*8260-G	1,1,2-TRICHL'ETHANE	UG/KG-	ND
05/09/94	MB*0509*1	34478*8260-G	TETRACHLOROETHENE	UG/KG-	ND
05/09/94	MB*0509*1	34309*8260-G	DIBROMOCHLOROMETHANE	UG/KG-	ND
05/09/94	MB*0509*1	34304*8260-G	CHLOROBENZENE	UG/KG-	ND
05/09/94	MB*0509*1	34374*8260-G	ETHYLBENZENE	UG/KG-	ND
05/09/94	MB*0509*1	45510*8260-G	XYLENE,TOTAL	UG/KG-	ND
05/09/94	MB*0509*1	75192*8260-G	STYRENE	UG/KG-	ND
05/09/94	MB*0509*1	34290*8260-G	BROMOFORM	UG/KG-	ND
05/09/94	MB*0509*1	34519*8260-G	1,1,2,2-TETRACHLORO- ETHANE	UG/KG-	ND
05/13/94	MB*0513*1	34421*8260-G	CHLOROMETHANE	UG/KG-	ND
05/13/94	MB*0513*1	34495*8260-G	VINYL CHLORIDE	UG/KG-	ND
05/13/94	MB*0513*1	34416*8260-G	BROMOMETHANE	UG/KG-	ND
05/13/94	MB*0513*1	34314*8260-G	CHLOROETHANE	UG/KG-	ND
05/13/94	MB*0513*1	75059*8260-G	ACETONE	UG/KG-	4.8
05/13/94	MB*0513*1	34504*8260-G	1,1-DICHLOROETHYLENE	UG/KG-	ND
05/13/94	MB*0513*1	98583*8260-G	VINYL ACETATE	UG/KG-	ND
05/13/94	MB*0513*1	34426*8260-G	METHYLENE CHLORIDE	UG/KG-	9.9
05/13/94	MB*0513*1	78544*8260-G	CARBON DISULFIDE	UG/KG-	ND
05/13/94	MB*0513*1	96464*8260-G	1,2-DICHLOROETHENE(TOTAL)	UG/KG-	ND
05/13/94	MB*0513*1	34499*8260-G	1,1-DICHLOROETHANE	UG/KG-	ND
05/13/94	MB*0513*1	75078*8260-G	METHYL ETHYL KETONE	UG/KG-	ND
05/13/94	MB*0513*1	34318*8260-G	CHLOROFORM	UG/KG-	ND
05/13/94	MB*0513*1	34509*8260-G	1,1,1-TRICHL'ETHANE	UG/KG-	ND
05/13/94	MB*0513*1	34299*8260-G	CARBON TETRACHLORIDE	UG/KG-	ND
05/13/94	MB*0513*1	34534*8260-G	1,2-DICHLOROETHANE	UG/KG-	ND
05/13/94	MB*0513*1	34237*8260-G	BENZENE	UG/KG-	ND
05/13/94	MB*0513*1	34487*8260-G	TRICHLOROETHENE	UG/KG-	ND
05/13/94	MB*0513*1	34544*8260-G	1,2-DICHLOROPROPANE	UG/KG-	ND
05/13/94	MB*0513*1	34330*8260-G	BROMODICHLOROMETHANE	UG/KG-	ND
05/13/94	MB*0513*1	34579*8260-G	2-CHLOROETHYLVINYL- ETHER	UG/KG-	ND
05/13/94	MB*0513*1	75169*8260-G	METHYLISOBUTYLKETONE	UG/KG-	ND
05/13/94	MB*0513*1	34702*8260-G	CIS-1,3-DICHLORO- PROPENE	UG/KG-	ND
05/13/94	MB*0513*1	34483*8260-G	TOLUENE	UG/KG-	ND
05/13/94	MB*0513*1	34697*8260-G	TRANS-1,3-DICHLORO- PROPENE	UG/KG-	ND
05/13/94	MB*0513*1	75166*8260-G	2-HEXANONE	UG/KG-	ND
05/13/94	MB*0513*1	34514*8260-G	1,1,2-TRICHL'ETHANE	UG/KG-	ND
05/13/94	MB*0513*1	34478*8260-G	TETRACHLOROETHENE	UG/KG-	ND
05/13/94	MB*0513*1	34309*8260-G	DIBROMOCHLOROMETHANE	UG/KG-	ND
05/13/94	MB*0513*1	34304*8260-G	CHLOROBENZENE	UG/KG-	ND
05/13/94	MB*0513*1	34374*8260-G	ETHYLBENZENE	UG/KG-	ND
05/13/94	MB*0513*1	45510*8260-G	XYLENE,TOTAL	UG/KG-	ND
05/13/94	MB*0513*1	75192*8260-G	STYRENE	UG/KG-	ND
05/13/94	MB*0513*1	34290*8260-G	BROMOFORM	UG/KG-	ND
05/13/94	MB*0513*1	34519*8260-G	1,1,2,2-TETRACHLORO- ETHANE	UG/KG-	ND

ESE BATCH : G49000

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
05/13/94	SP1*0513*1	34421*8260-G	CHLOROMETHANE	0.0	80-120	UG/KG-	50	ND
05/13/94	SP1*0513*1	34495*8260-G	VINYL CHLORIDE	0.0	80-120	UG/KG-	50	ND
05/13/94	SP1*0513*1	34416*8260-G	BROMOMETHANE	0.0	80-120	UG/KG-	50	ND
05/13/94	SP1*0513*1	34314*8260-G	CHLOROETHANE	0.0	80-120	UG/KG-	50	ND
05/13/94	SP1*0513*1	75059*8260-G	ACETONE	0.02	80-120	UG/KG-	50	0.01
05/13/94	SP1*0513*1	34504*8260-G	1,1-DICHLOROETHYLENE	120	59-172	UG/KG-	50	60
05/13/94	SP1*0513*1	98583*8260-G	VINYL ACETATE	0.0	80-120	UG/KG-	50	ND
05/13/94	SP1*0513*1	34426*8260-G	METHYLENE CHLORIDE	2.2	80-120	UG/KG-	50	1.1
05/13/94	SP1*0513*1	78544*8260-G	CARBON DISULFIDE	0.0	80-120	UG/KG-	50	ND
05/13/94	SP1*0513*1	96464*8260-G	1,2-DICHLOROETHENE(TOTAL)	0.0	80-120	UG/KG-	50	ND
05/13/94	SP1*0513*1	34499*8260-G	1,1-DICHLOROETHANE	0.0	80-120	UG/KG-	50	ND
05/13/94	SP1*0513*1	75078*8260-G	METHYL ETHYL KETONE	0.0	80-120	UG/KG-	50	ND
05/13/94	SP1*0513*1	34318*8260-G	CHLOROFORM	0.0	80-120	UG/KG-	50	ND
05/13/94	SP1*0513*1	34509*8260-G	1,1,1-TRICHLOROETHANE	0.0	80-120	UG/KG-	50	ND
05/13/94	SP1*0513*1	34299*8260-G	CARBON TETRACHLORIDE	0.0	80-120	UG/KG-	50	ND
05/13/94	SP1*0513*1	34534*8260-G	1,2-DICHLOROETHANE	0.0	80-120	UG/KG-	50	ND
05/13/94	SP1*0513*1	34237*8260-G	BENZENE	98	66-142	UG/KG-	50	49
05/13/94	SP1*0513*1	34487*8260-G	TRICHLOROETHENE	94	62-137	UG/KG-	50	47
05/13/94	SP1*0513*1	34544*8260-G	1,2-DICHLOROPROPANE	0.0	80-120	UG/KG-	50	ND
05/13/94	SP1*0513*1	34330*8260-G	BROMODICHLOROMETHANE	0.0	80-120	UG/KG-	50	ND
05/13/94	SP1*0513*1	34579*8260-G	2-CHLOROETHYLVINYL- ETHER	0.0	80-120	UG/KG-	50	ND
05/13/94	SP1*0513*1	75169*8260-G	METHYLISOBUTYLKETONE	0.0	80-120	UG/KG-	50	ND
05/13/94	SP1*0513*1	34702*8260-G	CIS-1,3-DICHLORO PROPENE	0.0	80-120	UG/KG-	50	ND
05/13/94	SP1*0513*1	34483*8260-G	TOLUENE	92	59-139	UG/KG-	50	46
05/13/94	SP1*0513*1	34697*8260-G	TRANS-1,3-DICHLORO- PROPENE	0.0	80-120	UG/KG-	50	ND
05/13/94	SP1*0513*1	75166*8260-G	2-HEXANONE	0.0	80-120	UG/KG-	50	ND
05/13/94	SP1*0513*1	34514*8260-G	1,1,2-TRICHLOROETHANE	0.0	80-120	UG/KG-	50	ND
05/13/94	SP1*0513*1	34478*8260-G	TETRACHLOROETHENE	0.0	80-120	UG/KG-	50	ND
05/13/94	SP1*0513*1	34309*8260-G	DIBROMOCHLOROMETHANE	0.0	80-120	UG/KG-	50	ND
05/13/94	SP1*0513*1	34304*8260-G	CHLOROBENZENE	94	60-133	UG/KG-	50	47
05/13/94	SP1*0513*1	34374*8260-G	ETHYLBENZENE	0.0	80-120	UG/KG-	50	ND
05/13/94	SP1*0513*1	45510*8260-G	XYLENE,TOTAL	0.0	80-120	UG/KG-	50	ND
05/13/94	SP1*0513*1	75192*8260-G	STYRENE	0.0	80-120	UG/KG-	50	ND
05/13/94	SP1*0513*1	34290*8260-G	BROMOFORM	0.0	80-120	UG/KG-	50	ND
05/13/94	SP1*0513*1	34519*8260-G	1,1,2,2-TETRACHLORO- ETHANE	0.0	80-120	UG/KG-	50	ND

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
05/13/94	SPM1*CDMHNSS*31	34421*8260-G	CHLOROMETHANE	0.0	80-120	0.0	UG/KG-	53	ND
05/13/94	SPM1*CDMHNSS*31	34495*8260-G	VINYL CHLORIDE	0.0	80-120	0.0	UG/KG-	53	ND
05/13/94	SPM1*CDMHNSS*31	34416*8260-G	BROMOMETHANE	0.0	80-120	0.0	UG/KG-	53	ND
05/13/94	SPM1*CDMHNSS*31	34314*8260-G	CHLOROETHANE	0.0	80-120	0.0	UG/KG-	53	ND
05/13/94	SPM1*CDMHNSS*31	75059*8260-G	ACETONE	-2.3	80-120	3.6	UG/KG-	53	-1.2
05/13/94	SPM1*CDMHNSS*31	34504*8260-G	1,1-DICHLOROETHYLENE	128	59-172	0.0	UG/KG-	53	68
05/13/94	SPM1*CDMHNSS*31	98583*8260-G	VINYL ACETATE	0.0	80-120	0.0	UG/KG-	53	ND
05/13/94	SPM1*CDMHNSS*31	34426*8260-G	METHYLENE CHLORIDE	14	80-120	0.0	UG/KG-	53	7.4
05/13/94	SPM1*CDMHNSS*31	78544*8260-G	CARBON DISULFIDE	0.0	80-120	0.0	UG/KG-	53	ND
05/13/94	SPM1*CDMHNSS*31	96464*8260-G	1,2-DICHLOROETHENE(TOTAL)	0.0	80-120	0.0	UG/KG-	53	ND
05/13/94	SPM1*CDMHNSS*31	34499*8260-G	1,1-DICHLOROETHANE	0.0	80-120	0.0	UG/KG-	53	ND
05/13/94	SPM1*CDMHNSS*31	75078*8260-G	METHYL ETHYL KETONE	0.0	80-120	0.0	UG/KG-	53	ND
05/13/94	SPM1*CDMHNSS*31	34318*8260-G	CHLOROFORM	0.0	80-120	0.0	UG/KG-	53	ND
05/13/94	SPM1*CDMHNSS*31	34509*8260-G	1,1,1-TRICHLOROETHANE	0.0	80-120	0.0	UG/KG-	53	ND
05/13/94	SPM1*CDMHNSS*31	34299*8260-G	CARBON TETRACHLORIDE	0.0	80-120	0.0	UG/KG-	53	ND
05/13/94	SPM1*CDMHNSS*31	34534*8260-G	1,2-DICHLOROETHANE	0.0	80-120	0.0	UG/KG-	53	ND
05/13/94	SPM1*CDMHNSS*31	34237*8260-G	BENZENE	96	66-142	0.0	UG/KG-	53	51
05/13/94	SPM1*CDMHNSS*31	34487*8260-G	TRICHLOROETHENE	92	62-137	0.0	UG/KG-	53	49
05/13/94	SPM1*CDMHNSS*31	34544*8260-G	1,2-DICHLOROPROPANE	0.0	80-120	0.0	UG/KG-	53	ND
05/13/94	SPM1*CDMHNSS*31	34330*8260-G	BROMODICHLOROMETHANE	0.0	80-120	0.0	UG/KG-	53	ND
05/13/94	SPM1*CDMHNSS*31	34579*8260-G	2-CHLOROETHYLVINYL- ETHER	0.0	80-120	0.0	UG/KG-	53	ND
05/13/94	SPM1*CDMHNSS*31	75169*8260-G	METHYLISOBUTYLKETONE	0.0	80-120	0.0	UG/KG-	53	ND
05/13/94	SPM1*CDMHNSS*31	34702*8260-G	CIS-1,3-DICHLORO- PROPENE	0.0	80-120	0.0	UG/KG-	53	ND
05/13/94	SPM1*CDMHNSS*31	34483*8260-G	TOLUENE	92	59-139	0.0	UG/KG-	53	49
05/13/94	SPM1*CDMHNSS*31	34697*8260-G	TRANS-1,3-DICHLORO- PROPENE	0.0	80-120	0.0	UG/KG-	53	ND
05/13/94	SPM1*CDMHNSS*31	75166*8260-G	2-HEXANONE	0.0	80-120	0.0	UG/KG-	53	ND
05/13/94	SPM1*CDMHNSS*31	34514*8260-G	1,1,2-TRICHLOROETHANE	0.0	80-120	0.0	UG/KG-	53	ND
05/13/94	SPM1*CDMHNSS*31	34478*8260-G	TETRACHLOROETHENE	0.0	80-120	0.0	UG/KG-	53	ND
05/13/94	SPM1*CDMHNSS*31	34309*8260-G	DIBROMOCHLOROMETHANE	0.0	80-120	0.0	UG/KG-	53	ND
05/13/94	SPM1*CDMHNSS*31	34304*8260-G	CHLOROBENZENE	94	60-133	0.0	UG/KG-	53	50

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Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
05/13/94	SPM1*CDMHNSS*31	34374*8260-G	ETHYLBENZENE	0.0	80-120	0.0	UG/KG-	53	ND
05/13/94	SPM1*CDMHNSS*31	45510*8260-G	XYLENE,TOTAL	0.0	80-120	0.0	UG/KG-	53	ND
05/13/94	SPM1*CDMHNSS*31	75192*8260-G	STYRENE	0.0	80-120	0.0	UG/KG-	53	ND
05/13/94	SPM1*CDMHNSS*31	34290*8260-G	BROMOFORM	0.0	80-120	0.0	UG/KG-	53	ND
05/13/94	SPM1*CDMHNSS*31	34519*8260-G	1,1,2,2-TETRACHLORO- ETHANE	0.0	80-120	0.0	UG/KG-	53	ND
05/13/94	SPM2*CDMHNSS*31	34421*8260-G	CHLOROMETHANE	0.0	80-120	0.0	UG/KG-	53	ND
05/13/94	SPM2*CDMHNSS*31	34495*8260-G	VINYL CHLORIDE	0.0	80-120	0.0	UG/KG-	53	ND
05/13/94	SPM2*CDMHNSS*31	34416*8260-G	BROMOMETHANE	0.0	80-120	0.0	UG/KG-	53	ND
05/13/94	SPM2*CDMHNSS*31	34314*8260-G	CHLOROETHANE	0.0	80-120	0.0	UG/KG-	53	ND
05/13/94	SPM2*CDMHNSS*31	75059*8260-G	ACETONE	-1.9	80-120	3.6	UG/KG-	53	-1.0
05/13/94	SPM2*CDMHNSS*31	34504*8260-G	1,1-DICHLOROETHYLENE	119	59-172	0.0	UG/KG-	53	63
05/13/94	SPM2*CDMHNSS*31	98583*8260-G	VINYL ACETATE	0.0	80-120	0.0	UG/KG-	53	ND
05/13/94	SPM2*CDMHNSS*31	34426*8260-G	METHYLENE CHLORIDE	15	80-120	0.0	UG/KG-	53	8.1
05/13/94	SPM2*CDMHNSS*31	78544*8260-G	CARBON DISULFIDE	0.0	80-120	0.0	UG/KG-	53	ND
05/13/94	SPM2*CDMHNSS*31	96464*8260-G	1,2-DICHLOROETHENE(TOTAL)	0.0	80-120	0.0	UG/KG-	53	ND
05/13/94	SPM2*CDMHNSS*31	34499*8260-G	1,1-DICHLOROETHANE	0.0	80-120	0.0	UG/KG-	53	ND
05/13/94	SPM2*CDMHNSS*31	75078*8260-G	METHYL ETHYL KETONE	0.0	80-120	0.0	UG/KG-	53	ND
05/13/94	SPM2*CDMHNSS*31	34318*8260-G	CHLOROFORM	0.0	80-120	0.0	UG/KG-	53	ND
05/13/94	SPM2*CDMHNSS*31	34509*8260-G	1,1,1-TRICHLOROETHANE	0.0	80-120	0.0	UG/KG-	53	ND
05/13/94	SPM2*CDMHNSS*31	34299*8260-G	CARBON TETRACHLORIDE	0.0	80-120	0.0	UG/KG-	53	ND
05/13/94	SPM2*CDMHNSS*31	34534*8260-G	1,2-DICHLOROETHANE	0.0	80-120	0.0	UG/KG-	53	ND
05/13/94	SPM2*CDMHNSS*31	34237*8260-G	BENZENE	98	66-142	0.0	UG/KG-	53	52
05/13/94	SPM2*CDMHNSS*31	34487*8260-G	TRICHLOROETHENE	92	62-137	0.0	UG/KG-	53	49
05/13/94	SPM2*CDMHNSS*31	34544*8260-G	1,2-DICHLOROPROPANE	0.0	80-120	0.0	UG/KG-	53	ND
05/13/94	SPM2*CDMHNSS*31	34330*8260-G	BROMODICHLOROMETHANE	0.0	80-120	0.0	UG/KG-	53	ND
05/13/94	SPM2*CDMHNSS*31	34579*8260-G	2-CHLOROETHYLVINYL- ETHER	0.0	80-120	0.0	UG/KG-	53	ND
05/13/94	SPM2*CDMHNSS*31	75169*8260-G	METHYLISOBUTYLKETONE	0.0	80-120	0.0	UG/KG-	53	ND
05/13/94	SPM2*CDMHNSS*31	34702*8260-G	CIS-1,3-DICHLORO- PROPENE	0.0	80-120	0.0	UG/KG-	53	ND
05/13/94	SPM2*CDMHNSS*31	34483*8260-G	TOLUENE	91	59-139	0.0	UG/KG-	53	48
05/13/94	SPM2*CDMHNSS*31	34697*8260-G	TRANS-1,3-DICHLORO- PROPENE	0.0	80-120	0.0	UG/KG-	53	ND
05/13/94	SPM2*CDMHNSS*31	75166*8260-G	2-HEXANONE	0.0	80-120	0.0	UG/KG-	53	ND
05/13/94	SPM2*CDMHNSS*31	34514*8260-G	1,1,2-TRICHLOROETHANE	0.0	80-120	0.0	UG/KG-	53	ND
05/13/94	SPM2*CDMHNSS*31	34478*8260-G	TETRACHLOROETHENE	0.0	80-120	0.0	UG/KG-	53	ND
05/13/94	SPM2*CDMHNSS*31	34309*8260-G	DIBROMOCHLOROMETHANE	0.0	80-120	0.0	UG/KG-	53	ND
05/13/94	SPM2*CDMHNSS*31	34304*8260-G	CHLOROBENZENE	94	60-133	0.0	UG/KG-	53	50
05/13/94	SPM2*CDMHNSS*31	34374*8260-G	ETHYLBENZENE	0.0	80-120	0.0	UG/KG-	53	ND
05/13/94	SPM2*CDMHNSS*31	45510*8260-G	XYLENE,TOTAL	0.0	80-120	0.0	UG/KG-	53	ND
05/13/94	SPM2*CDMHNSS*31	75192*8260-G	STYRENE	0.0	80-120	0.0	UG/KG-	53	ND
05/13/94	SPM2*CDMHNSS*31	34290*8260-G	BROMOFORM	0.0	80-120	0.0	UG/KG-	53	ND
05/13/94	SPM2*CDMHNSS*31	34519*8260-G	1,1,2,2-TETRACHLORO- ETHANE	0.0	80-120	0.0	UG/KG-	53	ND

Surrogate Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/09/94	MB*0509*1	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	52	100	70-121
05/09/94	MB*0509*1	97026*SUR	TOLUENE-D(8)	UG/KG-	50	52	100	81-117
05/09/94	MB*0509*1	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	52	100	74-121
05/09/94	DA*CDMHNSS*28	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	53	110	70-121
05/09/94	DA*CDMHNSS*28	97026*SUR	TOLUENE-D(8)	UG/KG-	50	53	110	81-117
05/09/94	DA*CDMHNSS*28	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	56	110	74-121
05/09/94	DA*CDMHNSS*31	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	50	100	70-121
05/09/94	DA*CDMHNSS*31	97026*SUR	TOLUENE-D(8)	UG/KG-	50	52	100	81-117
05/09/94	DA*CDMHNSS*31	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	50	100	74-121
05/09/94	DA*CDMHNSS*32	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	52	100	70-121
05/09/94	DA*CDMHNSS*32	97026*SUR	TOLUENE-D(8)	UG/KG-	50	51	100	81-117
05/09/94	DA*CDMHNSS*32	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	50	100	74-121
05/09/94	DA*CDMHNSS*33	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	50	100	70-121
05/09/94	DA*CDMHNSS*33	97026*SUR	TOLUENE-D(8)	UG/KG-	50	56	110	81-117
05/09/94	DA*CDMHNSS*33	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	350	700	74-121
05/13/94	MB*0513*1	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	46	92	70-121
05/13/94	MB*0513*1	97026*SUR	TOLUENE-D(8)	UG/KG-	50	47	94	81-117
05/13/94	MB*0513*1	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	48	96	74-121
05/13/94	SPM1*CDMHNSS*31	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	46	92	70-121
05/13/94	SPM1*CDMHNSS*31	97026*SUR	TOLUENE-D(8)	UG/KG-	50	46	92	81-117
05/13/94	SPM1*CDMHNSS*31	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	44	88	74-121
05/13/94	SPM2*CDMHNSS*31	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	46	92	70-121
05/13/94	SPM2*CDMHNSS*31	97026*SUR	TOLUENE-D(8)	UG/KG-	50	45	90	81-117
05/13/94	SPM2*CDMHNSS*31	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	44	88	74-121
05/13/94	SP1*0513*1	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	47	94	70-121
05/13/94	SP1*0513*1	97026*SUR	TOLUENE-D(8)	UG/KG-	50	46	92	81-117
05/13/94	SP1*0513*1	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	44	88	74-121

ESE BATCH : G49000

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G49000 Analysis Date: 05/09/94 Analyst: NADIA LOMBARDERO

	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		
Sample matrix spike duplicate present?	X		
Sample matrix spike duplicate within acceptance criteria?	X		
Surrogate present?	X		
Surrogate within acceptance criteria?		X	12DCE-D4
			97026*SUR
			97027*SUR

Note: Any "NO" answer requires a comment.

OVERRIDE COMMENTS

BATCH OVERRIDE BY: DWIGHT ROBERTS 515
PROB:SURROGATE NOT WITHIN ACCEPTANCE CRITERIA.
EXPL:DUE TO INTERFERENCE OF LARGE AMOUNTS OF BENZENE SUBSTITUTED COMPOUNDS AND HYDROCARBONS, THE RECOVERY FOR 4-BROMOFLUOROBENZENE IS ARTIFICIALLY HIGH. A CHROMATOGRAM SHOWING THE RECOVERY AREAS FOR MASSIS 95 AND 174 HAS BEEN PROVIDED FOR BOTH THE CC SAMPLE (05099403) AND SAMPLE CDMHNN5*33 (05099408). IF MASS 174 IS USED TO CALCULATE THE % RECOVERY, 77.467 UG/KG OF 4-BFB WERE RECOVERED. ALTHOUGH HIGHER THAN THE RECOMMENDED RECOVERY (43-57.5 UG/KG) IT IS A MORE ACCURATE REPRESENTATION SINCE THE MATRIX AFFECT IN THIS SAMPLE MAKES IT DIFFICULT TO ACHIEVE PERFECT RECOVERIES. A DUPLICATE SAMPLE WAS ANALYZED IMMEDIATELY AFTER THE INITIAL RUN AND SIMILAR RECOVERIES AS WELL AS CHROMATOGRAPHY WERE OBTAINED. CHROMATOGRAMS SHOWING MORE DETAILED INFORMATION ABOUT THIS ANALYSIS HAVE BEEN INCLUDED WITH THE FINAL DATA./
NL./05-17-94.
EM./05-18-94.

ESE BATCH : G49000

TABLE OF ABBREVIATIONS

```
%RECV       : % Recovery for spiked sample. (FOUND/TARGET * 100)
ANLY DATE   : Analysis Date
ANLY TIME   : Analysis Time
CURVE       : Curve Regression Number
DILUTION    : Sample Dilution Factor
EXT DATE    : Extract Date
EXT VOL     : Extract Volume
FOUND       : Spiked Sample Conc. - Unspiked Sample Conc.
INJ VOL     : Injection Volume
REL%DIFF    : % Difference between current and previous spike.
RESPONSE    : Sample Response
R.T.        : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID   : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
      DA  -- Data Sample
      MB  -- Method Blank
      RF  -- Reference (from commercially known standard)
      RP  -- Replicate Sample
      SP  -- Standard Matrix Spike
      SPM -- Sample Matrix Spike
      STD -- Internal Standard
      SUR -- Surrogate Sample
      UN  -- Unspiked Sample
SAMP VOL    : Sample Volume
SPK CONC    : Spike Concentration
ST          : Sample response explanation or validity. (listed below)
      BK  -- No sample response.
      NA  -- Sample not analyzed.
      NR  -- Not reserved for this batch.  Batch containing the response
             for this sample is listed in the target field.
      OK  -- Sample response shown is correct.
      !   -- Sample response shown is invalid.
      <   -- Sample response < detection limit. Detection limit is shown
             in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET      : Spike Target (SAMPLE LISTING SECTION)
TARGET      : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE        : Response Type ("FINAL" or empty.)
UNSP CONC   : Unspiked Sample Concentration
```

ESE BATCH : G48933
CLASSIFICATION : VOAS - CLP SOW OLMC1.3

QC TYPE : FDER/SW
ANALYST : LARRY SHROADS
EXTRACTOR :
DATA ENTRY : TODD ROMERO

REPORT DATE/TIME : 05/20/94 07:26:45
ANALYSIS DATE : 05/06/94
EXTRACT DATE :

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

BATCH NOTES
DOWNLOAD FILE ALS0506A UPDATED - DEFINALIZE PER EHM./DRW 5/11

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS		1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*29	WA04-4-08		
CDMHNSS*30	WSV2-1-01		

ESE BATCH : G48933

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H.T.	OVER

ALL HOLDING TIMES MET

STORET: 34421 METHOD: CLP90-G CHLOROMETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34495 METHOD: CLP90-G VINYL CHLORIDE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34416 METHOD: CLP90-G BROMOMETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34314 METHOD: CLP90-G CHLOROETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34504 METHOD: CLP90-G 1,1-DICHLOROETHYLENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 75059 METHOD: CLP90-G ACETONE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 78544 METHOD: CLP90-G CARBON DISULFIDE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34426 METHOD: CLP90-G METHYLENE CHLORIDE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 96464 METHOD: CLP90-G 1,2-DICHLOROETHENE(TOTAL), UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34499 METHOD: CLP90-G 1,1-DICHLOROETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 75078 METHOD: CLP90-G 2-BUTANONE (MEK), UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: 05/06/94 LARGEST RESP= %RSD= RT WINDOW:

STORET: 34318 METHOD: CLP90-G CHLOROFORM, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34509 METHOD: CLP90-G 1,1,1-TRICHLOROETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34299 METHOD: CLP90-G CARBON TETRACHLORIDE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 95042 METHOD: SUR 1,2-DICHLOROETHANE-D4 (CLP90), UG/KG-DRY GCMS

ESE BATCH : G48933

CALIBRATION CURVE # 1
DETECTION LIMIT= DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34237 METHOD: CLP90-G BENZENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW.

STORET: 34534 METHOD: CLP90-G 1,2-DICHLOROETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34487 METHOD: CLP90-G TRICHLOROETHENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW

STORET: 34544 METHOD: CLP90-G 1,2-DICHLOROPROPANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34330 METHOD: CLP90-G BROMODICHLOROMETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW

STORET: 34702 METHOD: CLP90-G CIS-1,3-DICHLOROPROPENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW.

STORET: 75169 METHOD: CLP90-G 4-METHYL-2-PENTANONE (MIBK), UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: 05/06/94 LARGEST RESP= %RSD= RT WINDOW:

STORET: 95040 METHOD: SUR TOLUENE-D8 (CLP90), UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT= DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34483 METHOD: CLP90-G TOLUENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34697 METHOD: CLP90-G TRANS-1,3-DICHLOROPROPENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34514 METHOD: CLP90-G 1,1,2-TRICHLOROETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34478 METHOD: CLP90-G TETRACHLOROETHENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 75166 METHOD: CLP90-G 2-HEXANONE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34309 METHOD: CLP90-G DIBROMOCHLOROMETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34304 METHOD: CLP90-G CHLOROBENZENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1

ESE BATCH : G48933
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34374 METHOD: CLP90-G ETHYLBENZENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW

STORET: 97353 METHOD: CLP90-G XYLENES, TOTAL, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 75192 METHOD: CLP90-G STYRENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW

STORET: 34290 METHOD: CLP90-G BROMOFORM, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 95041 METHOD: SUR BROMOFLUOROBENZENE (CLP90), UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT= DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34519 METHOD: CLP90-G 1,1,2,2-TETRACHLORO ETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW

ESE BATCH : G48933

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/06/94	MB*NONE*0506	34421*CLP90-G	CHLOROMETHANE	UG/KG-	ND
05/06/94	MB*NONE*0506	34495*CLP90-G	VINYL CHLORIDE	UG/KG-	ND
05/06/94	MB*NONE*0506	34416*CLP90-G	BROMOMETHANE	UG/KG-	ND
05/06/94	MB*NONE*0506	34314*CLP90-G	CHLOROETHANE	UG/KG-	ND
05/06/94	MB*NONE*0506	34504*CLP90-G	1,1-DICHLOROETHYLENE	UG/KG-	ND
05/06/94	MB*NONE*0506	75059*CLP90-G	ACETONE	UG/KG-	5.0
05/06/94	MB*NONE*0506	78544*CLP90-G	CARBON DISULFIDE	UG/KG-	ND
05/06/94	MB*NONE*0506	34426*CLP90-G	METHYLENE CHLORIDE	UG/KG-	4.0
05/06/94	MB*NONE*0506	96464*CLP90-G	1,2-DICHLOROETHENE(TOTAL)	UG/KG-	ND
05/06/94	MB*NONE*0506	34499*CLP90-G	1,1-DICHLOROETHANE	UG/KG-	ND
05/06/94	MB*NONE*0506	75078*CLP90-G	2-BUTANONE (MEK)	UG/KG-	ND
05/06/94	MB*NONE*0506	34318*CLP90-G	CHLOROFORM	UG/KG-	ND
05/06/94	MB*NONE*0506	34509*CLP90-G	1,1,1-TRICHLOROETHANE	UG/KG-	ND
05/06/94	MB*NONE*0506	34299*CLP90-G	CARBON TETRACHLORIDE	UG/KG-	ND
05/06/94	MB*NONE*0506	34237*CLP90-G	BENZENE	UG/KG-	ND
05/06/94	MB*NONE*0506	34534*CLP90-G	1,2-DICHLOROETHANE	UG/KG-	ND
05/06/94	MB*NONE*0506	34487*CLP90-G	TRICHLOROETHENE	UG/KG-	ND
05/06/94	MB*NONE*0506	34544*CLP90-G	1,2-DICHLOROPROPANE	UG/KG-	ND
05/06/94	MB*NONE*0506	34330*CLP90-G	BROMODICHLOROMETHANE	UG/KG-	ND
05/06/94	MB*NONE*0506	34702*CLP90-G	CIS-1,3-DICHLOROPROPENE	UG/KG-	ND
05/06/94	MB*NONE*0506	75169*CLP90-G	4-METHYL-2-PENTANONE (MIBK)	UG/KG-	ND
05/06/94	MB*NONE*0506	34483*CLP90-G	TOLUENE	UG/KG-	ND
05/06/94	MB*NONE*0506	34697*CLP90-G	TRANS-1,3-DICHLOROPROPENE	UG/KG-	ND
05/06/94	MB*NONE*0506	34514*CLP90-G	1,1,2-TRICHLOROETHANE	UG/KG-	ND
05/06/94	MB*NONE*0506	34478*CLP90-G	TETRACHLOROETHENE	UG/KG-	ND
05/06/94	MB*NONE*0506	75166*CLP90-G	2-HEXANONE	UG/KG-	ND
05/06/94	MB*NONE*0506	34309*CLP90-G	DIBROMOCHLOROMETHANE	UG/KG-	ND
05/06/94	MB*NONE*0506	34304*CLP90-G	CHLOROBENZENE	UG/KG-	ND
05/06/94	MB*NONE*0506	34374*CLP90-G	ETHYLBENZENE	UG/KG-	ND
05/06/94	MB*NONE*0506	97353*CLP90-G	XYLENES, TOTAL	UG/KG-	ND
05/06/94	MB*NONE*0506	75192*CLP90-G	STYRENE	UG/KG-	ND
05/06/94	MB*NONE*0506	34290*CLP90-G	BROMOFORM	UG/KG-	ND
05/06/94	MB*NONE*0506	34519*CLP90-G	1,1,2,2-TETRACHLORO ETHANE	UG/KG-	ND

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
05/06/94	SPM1*CDMHNSS*29	34504*CLP90-G	1,1-DICHLOROETHYLENE	115	110.5-120	0.0	UG/KG-	53	61
05/06/94	SPM1*CDMHNSS*29	34237*CLP90-G	BENZENE	113	66-142	0.0	UG/KG-	53	60
05/06/94	SPM1*CDMHNSS*29	34487*CLP90-G	TRICHLOROETHENE	111	62-137	0.0	UG/KG-	53	59
05/06/94	SPM1*CDMHNSS*29	34483*CLP90-G	TOLUENE	111	59-139	0.0	UG/KG-	53	59
05/06/94	SPM1*CDMHNSS*29	34304*CLP90-G	CHLOROBENZENE	111	60-133	0.0	UG/KG-	53	59
05/06/94	SPM2*CDMHNSS*29	34504*CLP90-G	1,1-DICHLOROETHYLENE	119	110.5-120	0.0	UG/KG-	53	63
05/06/94	SPM2*CDMHNSS*29	34237*CLP90-G	BENZENE	115	66-142	0.0	UG/KG-	53	61
05/06/94	SPM2*CDMHNSS*29	34487*CLP90-G	TRICHLOROETHENE	111	62-137	0.0	UG/KG-	53	59
05/06/94	SPM2*CDMHNSS*29	34483*CLP90-G	TOLUENE	113	59-139	0.0	UG/KG-	53	60
05/06/94	SPM2*CDMHNSS*29	34304*CLP90-G	CHLOROBENZENE	115	60-133	0.0	UG/KG-	53	61

Surrogate Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/06/94	MB*NONE*0506	95042*SUR	1,2-DICHLOROETHANE-D4 (CLP90)	UG/KG-	50	51	100	70-121
05/06/94	MB*NONE*0506	95040*SUR	TOLUENE-D8 (CLP90)	UG/KG-	50	52	100	84-138
05/06/94	MB*NONE*0506	95041*SUR	BROMOFLUOROBENZENE (CLP90)	UG/KG-	50	51	100	59-113
05/06/94	DA*CDMHNSS*29	95042*SUR	1,2-DICHLOROETHANE-D4 (CLP90)	UG/KG-	50	49	98	70-121
05/06/94	DA*CDMHNSS*29	95040*SUR	TOLUENE-D8 (CLP90)	UG/KG-	50	50	100	84-138
05/06/94	DA*CDMHNSS*29	95041*SUR	BROMOFLUOROBENZENE (CLP90)	UG/KG-	50	48	96	59-113
05/06/94	DA*CDMHNSS*30	95042*SUR	1,2-DICHLOROETHANE-D4 (CLP90)	UG/KG-	50	50	100	70-121
05/06/94	DA*CDMHNSS*30	95040*SUR	TOLUENE-D8 (CLP90)	UG/KG-	50	53	110	84-138
05/06/94	DA*CDMHNSS*30	95041*SUR	BROMOFLUOROBENZENE (CLP90)	UG/KG-	50	50	100	59-113
05/06/94	SPM1*CDMHNSS*29	95042*SUR	1,2-DICHLOROETHANE-D4 (CLP90)	UG/KG-	50	52	100	70-121
05/06/94	SPM1*CDMHNSS*29	95040*SUR	TOLUENE-D8 (CLP90)	UG/KG-	50	52	100	84-138
05/06/94	SPM1*CDMHNSS*29	95041*SUR	BROMOFLUOROBENZENE (CLP90)	UG/KG-	50	52	100	59-113
05/06/94	SPM2*CDMHNSS*29	95042*SUR	1,2-DICHLOROETHANE-D4 (CLP90)	UG/KG-	50	51	100	70-121
05/06/94	SPM2*CDMHNSS*29	95040*SUR	TOLUENE-D8 (CLP90)	UG/KG-	50	51	100	84-138
05/06/94	SPM2*CDMHNSS*29	95041*SUR	BROMOFLUOROBENZENE (CLP90)	UG/KG-	50	51	100	59-113

ESE BATCH : G48933

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G48933 Analysis Date: 05/06/94 Analyst: LARRY SHROADS

	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		
Method blank present?	X		
Method blank 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	12DCE-D4
			95040*SUR
			95041*SUR

Note: Any "NO" answer requires a comment.

OVERRIDE COMMENTS

BATCH OVERRIDE BY:

ESE BATCH : G48933

TABLE OF ABBREVIATIONS

```
%RECV       : % Recovery for spiked sample  (FOUND/TARGET * 100)
ANLY DATE   : Analysis Date
ANLY TIME   : Analysis Time
CURVE       : Curve Regression Number
DILUTION    : Sample Dilution Factor
EXT DATE    : Extract Date
EXT VOL     : Extract Volume
FOUND       : Spiked Sample Conc. - Unspiked Sample Conc
INJ VOL     : Injection Volume
REL%DIFF    : % Difference between current and previous spike.
RESPONSE    : Sample Response
R.T.        : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID   : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
      DA  -- Data Sample
      MB  -- Method Blank
      RF  -- Reference (from commercially known standard)
      RP  -- Replicate Sample
      SP  -- Standard Matrix Spike
      SPM -- Sample Matrix Spike
      STD -- Internal Standard
      SUR -- Surrogate Sample
      UN  -- Unspiked Sample
SAMP VOL    : Sample Volume
SPK CONC    : Spike Concentration
ST          : Sample response explanation or validity. (listed below)
      BK  -- No sample response.
      NA  -- Sample not analyzed.
      NR  -- Not reserved for this batch.  Batch containing the response
             for this sample is listed in the target field.
      OK  -- Sample response shown is correct.
      !   -- Sample response shown is invalid.
      <   -- Sample response < detection limit. Detection limit is shown
             in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET      : Spike Target (SAMPLE LISTING SECTION)
TARGET      : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE        : Response Type ("FINAL" or empty.)
UNSP CONC   : Unspiked Sample Concentration
```

ESE BATCH : G49172
CLASSIFICATION : VOCS - EPA 8260

QC TYPE : FDER/SW
ANALYST : YAEL HOOGLAND
EXTRACTOR :
DATA ENTRY : TODD ROMERO

REPORT DATE/TIME : 05/20/94 06:50:58
ANALYSIS DATE : 05/13/94
EXTRACT DATE :

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

BATCH NOTES
DOWNLOAD FILE CDMHNYH5

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS		1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*34	EA01-2-05	05/13/94	03:07PM
CDMHNSS*35	EA01-3-05	05/13/94	03:39PM

ESE BATCH : G49172

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H.T.	OVER

ALL HOLDING TIMES MET

STORET: 34421 METHOD: 8260-G CHLOROMETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34416 METHOD: 8260-G BROMOMETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34495 METHOD: 8260-G VINYL CHLORIDE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34314 METHOD: 8260-G CHLOROETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34426 METHOD: 8260-G METHYLENE CHLORIDE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 75059 METHOD: 8260-G ACETONE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 78544 METHOD: 8260-G CARBON DISULFIDE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW

STORET: 34504 METHOD: 8260-G 1,1-DICHLOROETHYLENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW

STORET: 34499 METHOD: 8260-G 1,1-DICHLOROETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW

STORET: 96464 METHOD: 8260-G 1,2-DICHLOROETHENE(TOTAL), UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW

STORET: 34318 METHOD: 8260-G CHLOROFORM, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW

STORET: 34534 METHOD: 8260-G 1,2-DICHLOROETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW

STORET: 97031 METHOD: SUR 1,2-DICHLOROETHANE-D(4), UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT= DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 75078 METHOD: 8260-G METHYL ETHYL KETONE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34509 METHOD: 8260-G 1,1,1-TRICHLOROETHANE, UG/KG-DRY GCMS

ESE BATCH : G49172

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34299 METHOD: 8260-G CARBON TETRACHLORIDE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 98583 METHOD: 8260-G VINYL ACETATE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34330 METHOD: 8260-G BROMODICHLOROMETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34544 METHOD: 8260-G 1,2-DICHLOROPROPANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34702 METHOD: 8260-G CIS-1,3-DICHLORO- PROPENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34487 METHOD: 8260-G TRICHLOROETHENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34309 METHOD: 8260-G DIBROMOCHLOROMETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34237 METHOD: 8260-G BENZENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34514 METHOD: 8260-G 1,1,2-TRICHLOROETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34579 METHOD: 8260-G 2-CHLOROETHYLVINYL- ETHER, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34697 METHOD: 8260-G TRANS-1,3-DICHLORO- PROPENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34290 METHOD: 8260-G BROMOFORM, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 75166 METHOD: 8260-G 2-HEXANONE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 75169 METHOD: 8260-G METHYLISOBUTYLKETONE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34478 METHOD: 8260-G TETRACHLOROETHENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1

ESE BATCH : G49172
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34519 METHOD: 8260-G 1,1,2,2 TETRACHLORO- ETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW

STORET: 97026 METHOD: SUR TOLUENE-D(8), UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT= DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34483 METHOD: 8260-G TOLUENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW

STORET: 34304 METHOD: 8260-G CHLOROBENZENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW

STORET: 34374 METHOD: 8260-G ETHYLBENZENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW

STORET: 97027 METHOD: SUR BROMOFLUOROBENZENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT= DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 45510 METHOD: 8260-G XYLENE,TOTAL, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 75192 METHOD: 8260-G STYRENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

ESE BATCH : G49172

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/13/94	MB*NONE*0513	34421*8260-G	CHLOROMETHANE	UG/KG-	ND
05/13/94	MB*NONE*0513	34416*8260-G	BROMOMETHANE	UG/KG-	ND
05/13/94	MB*NONE*0513	34495*8260-G	VINYL CHLORIDE	UG/KG-	ND
05/13/94	MB*NONE*0513	34314*8260-G	CHLOROETHANE	UG/KG-	ND
05/13/94	MB*NONE*0513	34426*8260-G	METHYLENE CHLORIDE	UG/KG-	1.1
05/13/94	MB*NONE*0513	75059*8260-G	ACETONE	UG/KG-	3.4
05/13/94	MB*NONE*0513	78544*8260-G	CARBON DISULFIDE	UG/KG-	ND
05/13/94	MB*NONE*0513	34504*8260-G	1,1-DICHLOROETHYLENE	UG/KG-	ND
05/13/94	MB*NONE*0513	34499*8260-G	1,1-DICHLOROETHANE	UG/KG-	ND
05/13/94	MB*NONE*0513	96464*8260-G	1,2-DICHLOROETHENE(TOTAL)	UG/KG-	ND
05/13/94	MB*NONE*0513	34318*8260-G	CHLOROFORM	UG/KG-	ND
05/13/94	MB*NONE*0513	34534*8260-G	1,2-DICHLOROETHANE	UG/KG-	ND
05/13/94	MB*NONE*0513	75078*8260-G	METHYL ETHYL KETONE	UG/KG-	ND
05/13/94	MB*NONE*0513	34509*8260-G	1,1,1-TRICHLOROETHANE	UG/KG-	ND
05/13/94	MB*NONE*0513	34299*8260-G	CARBON TETRACHLORIDE	UG/KG-	ND
05/13/94	MB*NONE*0513	98583*8260-G	VINYL ACETATE	UG/KG-	ND
05/13/94	MB*NONE*0513	34330*8260-G	BROMODICHLOROMETHANE	UG/KG-	ND
05/13/94	MB*NONE*0513	34544*8260-G	1,2-DICHLOROPROPANE	UG/KG-	ND
05/13/94	MB*NONE*0513	34702*8260-G	CIS-1,3-DICHLORO- PROPENE	UG/KG-	ND
05/13/94	MB*NONE*0513	34487*8260-G	TRICHLOROETHENE	UG/KG-	ND
05/13/94	MB*NONE*0513	34309*8260-G	DIBROMOCHLOROMETHANE	UG/KG-	ND
05/13/94	MB*NONE*0513	34237*8260-G	BENZENE	UG/KG-	ND
05/13/94	MB*NONE*0513	34514*8260-G	1,1,2-TRICHLOROETHANE	UG/KG-	ND
05/13/94	MB*NONE*0513	34579*8260-G	2-CHLOROETHYLVINYL- ETHER	UG/KG-	ND
05/13/94	MB*NONE*0513	34697*8260-G	TRANS-1,3-DICHLORO- PROPENE	UG/KG-	ND
05/13/94	MB*NONE*0513	34290*8260-G	BROMOFORM	UG/KG-	ND
05/13/94	MB*NONE*0513	75166*8260-G	2-HEXANONE	UG/KG-	ND
05/13/94	MB*NONE*0513	75169*8260-G	METHYLISOBUTYLKETONE	UG/KG-	ND
05/13/94	MB*NONE*0513	34478*8260-G	TETRACHLOROETHENE	UG/KG-	ND
05/13/94	MB*NONE*0513	34519*8260-G	1,1,2,2-TETRACHLORO- ETHANE	UG/KG-	ND
05/13/94	MB*NONE*0513	34483*8260-G	TOLUENE	UG/KG-	ND
05/13/94	MB*NONE*0513	34304*8260-G	CHLOROBENZENE	UG/KG-	ND
05/13/94	MB*NONE*0513	34374*8260-G	ETHYLBENZENE	UG/KG-	ND
05/13/94	MB*NONE*0513	45510*8260-G	XYLENE,TOTAL	UG/KG-	ND
05/13/94	MB*NONE*0513	75192*8260-G	STYRENE	UG/KG-	ND

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
05/13/94	SP1*NONE*0513	34504*8260-G	1,1-DICHLOROETHYLENE	102	59-172	UG/KG-	50	51
05/13/94	SP1*NONE*0513	34487*8260-G	TRICHLOROETHENE	102	62-137	UG/KG-	50	51
05/13/94	SP1*NONE*0513	34237*8260-G	BENZENE	106	66-142	UG/KG-	50	53
05/13/94	SP1*NONE*0513	34483*8260-G	TOLUENE	100	59-139	UG/KG-	50	50
05/13/94	SP1*NONE*0513	34304*8260-G	CHLOROBENZENE	108	60-133	UG/KG-	50	54

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
05/13/94	SPM1*CDMHNSS*35	34504*8260-G	1,1-DICHLOROETHYLENE	92	59-172	0.0	UG/KG-	52	48
05/13/94	SPM1*CDMHNSS*35	34487*8260-G	TRICHLOROETHENE	87	62-137	0.0	UG/KG-	52	45
05/13/94	SPM1*CDMHNSS*35	34237*8260-G	BENZENE	100	66-142	0.0	UG/KG-	52	52
05/13/94	SPM1*CDMHNSS*35	34483*8260-G	TOLUENE	98	59-139	2.3	UG/KG-	52	51
05/13/94	SPM1*CDMHNSS*35	34304*8260-G	CHLOROBENZENE	90	60-133	0.0	UG/KG-	52	47
05/13/94	SPM2*CDMHNSS*35	34504*8260-G	1,1-DICHLOROETHYLENE	92	59-172	0.0	UG/KG-	52	48
05/13/94	SPM2*CDMHNSS*35	34487*8260-G	TRICHLOROETHENE	85	62-137	0.0	UG/KG-	52	44
05/13/94	SPM2*CDMHNSS*35	34237*8260-G	BENZENE	102	66-142	0.0	UG/KG-	52	53
05/13/94	SPM2*CDMHNSS*35	34483*8260-G	TOLUENE	102	59-139	2.3	UG/KG-	52	53
05/13/94	SPM2*CDMHNSS*35	34304*8260-G	CHLOROBENZENE	92	60-133	0.0	UG/KG-	52	48

Surrogate Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/13/94	MB*NONE*0513	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	50	100	70-121
05/13/94	MB*NONE*0513	97026*SUR	TOLUENE-D(8)	UG/KG-	50	48	96	81-117
05/13/94	MB*NONE*0513	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	48	96	74-121
05/13/94	DA*CDMHNSS*34	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	48	96	70-121
05/13/94	DA*CDMHNSS*34	97026*SUR	TOLUENE-D(8)	UG/KG-	50	57	110	81-117
05/13/94	DA*CDMHNSS*34	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	37	74	74-121
05/13/94	DA*CDMHNSS*35	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	51	100	70-121
05/13/94	DA*CDMHNSS*35	97026*SUR	TOLUENE-D(8)	UG/KG-	50	53	110	81-117
05/13/94	DA*CDMHNSS*35	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	38	76	74-121
05/13/94	SPM1*CDMHNSS*35	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	50	100	70-121
05/13/94	SPM1*CDMHNSS*35	97026*SUR	TOLUENE-D(8)	UG/KG-	50	54	110	81-117

ESE BATCH : G49172

Surrogate Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/13/94	SPM1*CDMHNSS*35	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	37	74	74-121
05/13/94	SPM2*CDMHNSS*35	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	50	100	70-121
05/13/94	SPM2*CDMHNSS*35	97026*SUR	TOLUENE-D(8)	UG/KG-	50	56	110	81-117
05/13/94	SPM2*CDMHNSS*35	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	38	76	74-121
05/13/94	SP1*NONE*0513	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	49	98	70-121
05/13/94	SP1*NONE*0513	97026*SUR	TOLUENE-D(8)	UG/KG-	50	50	100	81-117
05/13/94	SP1*NONE*0513	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	49	98	74-121

ESE BATCH : G49172

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G49172 Analysis Date: 05/13/94 Analyst: YAEL HOOGLAND

	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		
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	12DCE-D4
			97026*SUR
			97027*SUR

Note: Any "NO" answer requires a comment.

OVERRIDE COMMENTS

BATCH OVERRIDE BY:

ESE BATCH : G49172

TABLE OF ABBREVIATIONS

```
%RECV       : % Recovery for spiked sample.  FOUND/TARGET * 100)
ANLY DATE   : Analysis Date
ANLY TIME   : Analysis Time
CURVE       : Curve Regression Number
DILUTION    : Sample Dilution Factor
EXT DATE    : Extract Date
EXT VOL     : Extract Volume
FOUND       : Spiked Sample Conc. - Unspiked Sample Conc.
INJ VOL     : Injection Volume
REL%DIFF    : % Difference between current and previous spike.
RESPONSE    : Sample Response
R.T.        : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID   : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
      DA  -- Data Sample
      MB  -- Method Blank
      RF  -- Reference (from commercially known standard)
      RP  -- Replicate Sample
      SP  -- Standard Matrix Spike
      SPM -- Sample Matrix Spike
      STD -- Internal Standard
      SUR -- Surrogate Sample
      UN  -- Unspiked Sample
SAMP VOL    : Sample Volume
SPK CONC    : Spike Concentration
ST          : Sample response explanation or validity. (listed below)
      BK  -- No sample response.
      NA  -- Sample not analyzed.
      NR  -- Not reserved for this batch.  Batch containing the response
             for this sample is listed in the target field.
      OK  -- Sample response shown is correct.
      !   -- Sample response shown is invalid.
      <   -- Sample response < detection limit. Detection limit is shown
             in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET      : Spike Target (SAMPLE LISTING SECTION)
TARGET      : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE        : Response Type ("FINAL" or empty.)
UNSP CONC   : Unspiked Sample Concentration
```

ESE BATCH : G49194
CLASSIFICATION : VOAS - CLP SOW OLM01 8

QC TYPE : FDER/SW
ANALYST : LARRY SHROADS
EXTRACTOR :
DATA ENTRY : TODD ROMERO

REPORT DATE/TIME : 05/20/94 07:27:54
ANALYSIS DATE : 05/16/94
EXTRACT DATE :

STATUS :

METHOD BLANK CORRECTION METHOD : NONE

BATCH NOTES
DOWNLOAD FILE ALS0516

FIELD GRP QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS	1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*36	EA01-4-14		

ESE BATCH : G49194

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H.T. OVER

ALL HOLDING TIMES MET

STORET: 34421 METHOD: CLP90-G CHLOROMETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34495 METHOD: CLP90-G VINYL CHLORIDE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34416 METHOD: CLP90-G BROMOMETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34314 METHOD: CLP90-G CHLOROETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34504 METHOD: CLP90-G 1,1-DICHLOROETHYLENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 75059 METHOD: CLP90-G ACETONE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 78544 METHOD: CLP90-G CARBON DISULFIDE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34426 METHOD: CLP90-G METHYLENE CHLORIDE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 96464 METHOD: CLP90-G 1,2-DICHLOROETHENE(TOTAL), UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34499 METHOD: CLP90-G 1,1-DICHLOROETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 75078 METHOD: CLP90-G 2-BUTANONE (MEK), UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34318 METHOD: CLP90-G CHLOROFORM, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34509 METHOD: CLP90-G 1,1,1-TRICHLOROETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34299 METHOD: CLP90-G CARBON TETRACHLORIDE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW

STORET: 95042 METHOD: SUR 1,2-DICHLOROETHANE-D4 (CLP90 , UG/KG-DRY GCMS

ESE BATCH G49194

CALIBRATION CURVE # 1
DETECTION LIMIT= DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34237 METHOD: CLP90-G BENZENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34534 METHOD: CLP90-G 1,2-DICHLOROETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34487 METHOD: CLP90-G TRICHLOROETHENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34544 METHOD: CLP90-G 1,2-DICHLOROPROPANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34330 METHOD: CLP90-G BROMODICHLOROMETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34702 METHOD: CLP90-G CIS-1,3-DICHLOROPROPENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 75169 METHOD: CLP90-G 4-METHYL-2-PENTANONE (MIBK), UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 95040 METHOD: SUR TOLUENE-D8 (CLP90), UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT= DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34483 METHOD: CLP90-G TOLUENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34697 METHOD: CLP90-G TRANS-1,3-DICHLOROPROPENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34514 METHOD: CLP90-G 1,1,2-TRICHL'ETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34478 METHOD: CLP90-G TETRACHLOROETHENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 75166 METHOD: CLP90-G 2-HEXANONE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34309 METHOD: CLP90-G DIBROMOCHLOROMETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34304 METHOD: CLP90-G CHLOROBENZENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1

ESE BATCH : G49194
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34374 METHOD: CLP90-G ETHYLBENZENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 97353 METHOD: CLP90-G XYLENES TOTAL, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 75192 METHOD: CLP90-G STYRENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34290 METHOD: CLP90-G BROMOFORM, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 95041 METHOD: SUR BROMOFLUOROBENZENE (CLP90), UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT= DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34519 METHOD: CLP90-G 1,1,2,2-TETRACHLORO ETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

ESE BATCH : G49194

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/16/94	MB*NONE*0516	34421*CLP90-G	CHLOROMETHANE	UG/KG-	ND
05/16/94	MB*NONE*0516	34495*CLP90-G	VINYL CHLORIDE	UG/KG-	ND
05/16/94	MB*NONE*0516	34416*CLP90-G	BROMOMETHANE	UG/KG-	3.0
05/16/94	MB*NONE*0516	34314*CLP90-G	CHLOROETHANE	UG/KG-	ND
05/16/94	MB*NONE*0516	34504*CLP90-G	1,1-DICHLOROETHYLENE	UG/KG-	ND
05/16/94	MB*NONE*0516	75059*CLP90-G	ACETONE	UG/KG-	ND
05/16/94	MB*NONE*0516	78544*CLP90-G	CARBON DISULFIDE	UG/KG-	ND
05/16/94	MB*NONE*0516	34426*CLP90-G	METHYLENE CHLORIDE	UG/KG-	ND
05/16/94	MB*NONE*0516	96464*CLP90-G	1,2-DICHLOROETHENE(TOTAL)	UG/KG-	ND
05/16/94	MB*NONE*0516	34499*CLP90-G	1,1-DICHLOROETHANE	UG/KG-	ND
05/16/94	MB*NONE*0516	75078*CLP90-G	2-BUTANONE (MEK)	UG/KG-	ND
05/16/94	MB*NONE*0516	34318*CLP90-G	CHLOROFORM	UG/KG-	ND
05/16/94	MB*NONE*0516	34509*CLP90-G	1,1,1-TRICHL'ETHANE	UG/KG-	ND
05/16/94	MB*NONE*0516	34299*CLP90-G	CARBON TETRACHLORIDE	UG/KG-	ND
05/16/94	MB*NONE*0516	34237*CLP90-G	BENZENE	UG/KG-	ND
05/16/94	MB*NONE*0516	34534*CLP90-G	1,2-DICHLOROETHANE	UG/KG-	ND
05/16/94	MB*NONE*0516	34487*CLP90-G	TRICHLOROETHENE	UG/KG-	ND
05/16/94	MB*NONE*0516	34544*CLP90-G	1,2-DICHLOROPROPANE	UG/KG-	ND
05/16/94	MB*NONE*0516	34330*CLP90-G	BROMODICHLOROMETHANE	UG/KG-	ND
05/16/94	MB*NONE*0516	34702*CLP90-G	CIS-1,3-DICHLOROPROPENE	UG/KG-	ND
05/16/94	MB*NONE*0516	75169*CLP90-G	4-METHYL-2-PENTANONE (MIBK)	UG/KG-	ND
05/16/94	MB*NONE*0516	34483*CLP90-G	TOLUENE	UG/KG-	ND
05/16/94	MB*NONE*0516	34697*CLP90-G	TRANS-1,3-DICHLOROPROPENE	UG/KG-	ND
05/16/94	MB*NONE*0516	34514*CLP90-G	1,1,2-TRICHL'ETHANE	UG/KG-	ND
05/16/94	MB*NONE*0516	34478*CLP90-G	TETRACHLOROETHENE	UG/KG-	ND
05/16/94	MB*NONE*0516	75166*CLP90-G	2-HEXANONE	UG/KG-	ND
05/16/94	MB*NONE*0516	34309*CLP90-G	DIBROMOCHLOROMETHANE	UG/KG-	ND
05/16/94	MB*NONE*0516	34304*CLP90-G	CHLOROBENZENE	UG/KG-	ND
05/16/94	MB*NONE*0516	34374*CLP90-G	ETHYLBENZENE	UG/KG-	ND
05/16/94	MB*NONE*0516	97353*CLP90-G	XYLENES, TOTAL	UG/KG-	ND
05/16/94	MB*NONE*0516	75192*CLP90-G	STYRENE	UG/KG-	ND
05/16/94	MB*NONE*0516	34290*CLP90-G	BROMOFORM	UG/KG-	ND
05/16/94	MB*NONE*0516	34519*CLP90-G	1,1,2,2-TETRACHLORO ETHANE	UG/KG-	ND

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
05/16/94	SP1*NONE*0516	34504*CLP90-G	1,1-DICHLOROETHYLENE	106	80-120	UG/KG-	50	53
05/16/94	SP1*NONE*0516	34237*CLP90-G	BENZENE	100	80-120	UG/KG-	50	50
05/16/94	SP1*NONE*0516	34487*CLP90-G	TRICHLOROETHENE	98	80-120	UG/KG-	50	49
05/16/94	SP1*NONE*0516	34483*CLP90-G	TOLUENE	96	80-120	UG/KG-	50	48
05/16/94	SP1*NONE*0516	34304*CLP90-G	CHLOROBENZENE	100	80-120	UG/KG-	50	50

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
05/16/94	SPM1*CDMHNSS*36	34504*CLP90-G	1,1-DICHLOROETHYLENE	126	110.5-120	0.0	UG/KG-	53	67
05/16/94	SPM1*CDMHNSS*36	34237*CLP90-G	BENZENE	104	66-142	0.0	UG/KG-	53	55
05/16/94	SPM1*CDMHNSS*36	34487*CLP90-G	TRICHLOROETHENE	104	62-137	0.0	UG/KG-	53	55
05/16/94	SPM1*CDMHNSS*36	34483*CLP90-G	TOLUENE	102	59-139	0.0	UG/KG-	53	54
05/16/94	SPM1*CDMHNSS*36	34304*CLP90-G	CHLOROBENZENE	104	60-133	0.0	UG/KG-	53	55
05/16/94	SPM2*CDMHNSS*36	34504*CLP90-G	1,1-DICHLOROETHYLENE	106	110.5-120	0.0	UG/KG-	53	56
05/16/94	SPM2*CDMHNSS*36	34237*CLP90-G	BENZENE	96	66-142	0.0	UG/KG-	53	51
05/16/94	SPM2*CDMHNSS*36	34487*CLP90-G	TRICHLOROETHENE	96	62-137	0.0	UG/KG-	53	51
05/16/94	SPM2*CDMHNSS*36	34483*CLP90-G	TOLUENE	94	59-139	0.0	UG/KG-	53	50
05/16/94	SPM2*CDMHNSS*36	34304*CLP90-G	CHLOROBENZENE	96	60-133	0.0	UG/KG-	53	51

Surrogate Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/16/94	MB*NONE*0516	95042*SUR	1,2-DICHLOROETHANE-D4 (CLP90)	UG/KG-	50	47	94	70-121
05/16/94	MB*NONE*0516	95040*SUR	TOLUENE-D8 (CLP90)	UG/KG-	50	48	96	84-138
05/16/94	MB*NONE*0516	95041*SUR	BROMOFLUOROBENZENE (CLP90)	UG/KG-	50	47	94	59-113
05/16/94	SP1*NONE*0516	95042*SUR	1,2-DICHLOROETHANE-D4 (CLP90)	UG/KG-	50	48	96	70-121
05/16/94	SP1*NONE*0516	95040*SUR	TOLUENE-D8 (CLP90)	UG/KG-	50	50	100	84-138
05/16/94	SP1*NONE*0516	95041*SUR	BROMOFLUOROBENZENE (CLP90)	UG/KG-	50	49	98	59-113
05/16/94	DA*CDMHNSS*36	95042*SUR	1,2-DICHLOROETHANE-D4 (CLP90)	UG/KG-	50	48	96	70-121
05/16/94	DA*CDMHNSS*36	95040*SUR	TOLUENE-D8 (CLP90	UG/KG-	50	49	98	84-138
05/16/94	DA*CDMHNSS*36	95041*SUR	BROMOFLUOROBENZENE (CLP90)	UG/KG-	50	48	96	59-113
05/16/94	SPM1*CDMHNSS*36	95042*SUR	1,2-DICHLOROETHANE-D4 (CLP90)	UG/KG-	50	47	94	70-121
05/16/94	SPM1*CDMHNSS*36	95040*SUR	TOLUENE-D8 (CLP90	UG/KG-	50	49	98	84-138
05/16/94	SPM1*CDMHNSS*36	95041*SUR	BROMOFLUOROBENZENE (CLP90)	UG/KG-	50	48	96	59-113
05/16/94	SPM2*CDMHNSS*36	95042*SUR	1,2-DICHLOROETHANE-D4 (CLP90)	UG/KG-	50	47	94	70-121

ESE BATCH : G49194

Surrogate Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/16/94	SPM2*CDMHNSS*36	95040*SUR	TOLUENE-D8 (CLP90)	UG/KG-	50	49	98	84-138
05/16/94	SPM2*CDMHNSS*36	95041*SUR	BROMOFLUOROBENZENE (CLP90)	UG/KG-	50	48	96	59-113

ESE BATCH : G49194

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G49194 Analysis Date: 05/16/94 Analyst: LARRY SHROADS

	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		
Method blank present?	X		
Method blank within acceptance criteria?	X		
Sample matrix spike present?	X		
Sample matrix spike within acceptance criteria?		X	1,1DCETHL
Sample matrix spike duplicate present?	X		
Sample matrix spike duplicate within acceptance criteria?		X	1,1DCETHL
Surrogate present?	X		
Surrogate within acceptance criteria?		X	12DCE-D4
			95040*SUR
			95041*SUR

Note: Any "NO" answer requires a comment.

OVERRIDE COMMENTS

BATCH OVERRIDE BY:

TABLE OF ABBREVIATIONS

```
%RECV       : % Recovery for spiked sample. (FOUND/TARGET * 100)
ANLY DATE   : Analysis Date
ANLY TIME   : Analysis Time
CURVE       : Curve Regression Number
DILUTION    : Sample Dilution Factor
EXT DATE    : Extract Date
EXT VOL     : Extract Volume
FOUND       : Spiked Sample Conc. - Unspiked Sample Conc.
INJ VOL     : Injection Volume
REL%DIFF    : % Difference between current and previous spike.
RESPONSE    : Sample Response
R.T.        : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID   : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
      DA  -- Data Sample
      MB  -- Method Blank
      RF  -- Reference (from commercially known standard)
      RP  -- Replicate Sample
      SP  -- Standard Matrix Spike
      SPM -- Sample Matrix Spike
      STD -- Internal Standard
      SUR -- Surrogate Sample
      UN  -- Unspiked Sample
SAMP VOL    : Sample Volume
SPK CONC    : Spike Concentration
ST          : Sample response explanation or validity. (listed below)
      BK  -- No sample response.
      NA  -- Sample not analyzed.
      NR  -- Not reserved for this batch.  Batch containing the response
             for this sample is listed in the target field.
      OK  -- Sample response shown is correct.
      !   -- Sample response shown is invalid.
      <   -- Sample response < detection limit. Detection limit is shown
             in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET      : Spike Target (SAMPLE LISTING SECTION)
TARGET      : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE        : Response Type ("FINAL" or empty.)
UNSP CONC   : Unspiked Sample Concentration
```

ESE BATCH : G49199
CLASSIFICATION : VOCS - EPA 8260

QC TYPE : FDER/SW
ANALYST : GREGORY LAMB
EXTRACTOR :
DATA ENTRY : TODD ROMERO

REPORT DATE/TIME : 05/20/94 06:52:20
ANALYSIS DATE : 05/16/94
EXTRACT DATE :

STATUS : FINAL

METHOD BLANK CORRECTION METHOD : NONE

BATCH NOTES
DOWNLOAD FILE CDMHNGL1

FIELD GRP	QC TYPE	PROJECT NUMBER	PROJECT NAME	LAB COORDINATOR
CDMHNSS		1944022G 0201	CDM - HANFORD N. SLOPE	EDWARD MANSFIELD

SAMPLE CODE	CLIENT ID	DATE ANALYZED	TIME ANALYZED
CDMHNSS*37	EA01-5-12	05/16/94	12:54PM
CDMHNSS*38	EA01-6-10	05/16/94	01:26PM

ESE BATCH : G49199

HOLDING TIMES CHECK

SAMPLE	ANALYTE	ANL DATE	EXT DATE	SMP DATE	H.T.	OVER

ALL HOLDING TIMES MET

STORET: 34421 METHOD: 8260-G CHLOROMETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34416 METHOD: 8260-G BROMOMETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34495 METHOD: 8260-G VINYL CHLORIDE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34314 METHOD: 8260-G CHLOROETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34426 METHOD: 8260-G METHYLENE CHLORIDE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 75059 METHOD: 8260-G ACETONE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 78544 METHOD: 8260-G CARBON DISULFIDE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34504 METHOD: 8260-G 1,1-DICHLOROETHYLENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34499 METHOD: 8260-G 1,1-DICHLOROETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 96464 METHOD: 8260-G 1,2-DICHLOROETHENE(TOTAL), UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34318 METHOD: 8260-G CHLOROFORM, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34534 METHOD: 8260-G 1,2-DICHLOROETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 97031 METHOD: SUR 1,2-DICHLOROETHANE-D(4), UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT= DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 75078 METHOD: 8260-G METHYL ETHYL KETONE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34509 METHOD: 8260-G 1,1,1-TRICHLOROETHANE, UG/KG-DRY GCMS

ESE BATCH : G49199

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34299 METHOD: 8260-G CARBON TETRACHLORIDE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 98583 METHOD: 8260-G VINYL ACETATE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34330 METHOD: 8260-G BROMODICHLOROMETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34544 METHOD: 8260-G 1,2-DICHLOROPROPANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34702 METHOD: 8260-G CIS-1,3-DICHLORO- PROPENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34487 METHOD: 8260-G TRICHLOROETHENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW

STORET: 34309 METHOD: 8260-G DIBROMOCHLOROMETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34237 METHOD: 8260-G BENZENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW

STORET: 34514 METHOD: 8260-G 1,1,2-TRICHLOROETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW

STORET: 34579 METHOD: 8260-G 2-CHLOROETHYLVINYL- ETHER, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW

STORET: 34697 METHOD: 8260-G TRANS-1,3-DICHLORO- PROPENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW

STORET: 34290 METHOD: 8260-G BROMOFORM, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 75166 METHOD: 8260-G 2-HEXANONE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 75169 METHOD: 8260-G METHYLISOBUTYLKETONE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=10 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34478 METHOD: 8260-G TETRACHLOROETHENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1

ESE BATCH : G49199
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34519 METHOD: 8260-G 1,1,2,2-TETRACHLORO- ETHANE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 97026 METHOD: SUR TOLUENE-D(8), UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT= DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34483 METHOD: 8260-G TOLUENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34304 METHOD: 8260-G CHLOROBENZENE, UG/KG-DRY FINAL

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 34374 METHOD: 8260-G ETHYLBENZENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 97027 METHOD: SUR BROMOFLUOROBENZENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT= DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 45510 METHOD: 8260-G XYLENE,TOTAL, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

STORET: 75192 METHOD: 8260-G STYRENE, UG/KG-DRY GCMS

CALIBRATION CURVE # 1
DETECTION LIMIT=5 DATE: LARGEST RESP= %RSD= RT WINDOW:

ESE BATCH : G49199

Method Blank Sample Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	FOUND
05/16/94	MB*NONE*0516	34421*8260-G	CHLOROMETHANE	UG/KG-	ND
05/16/94	MB*NONE*0516	34416*8260-G	BROMOMETHANE	UG/KG-	ND
05/16/94	MB*NONE*0516	34495*8260-G	VINYL CHLORIDE	UG/KG-	ND
05/16/94	MB*NONE*0516	34314*8260-G	CHLOROETHANE	UG/KG-	ND
05/16/94	MB*NONE*0516	34426*8260-G	METHYLENE CHLORIDE	UG/KG-	2.8
05/16/94	MB*NONE*0516	75059*8260-G	ACETONE	UG/KG-	6.5
05/16/94	MB*NONE*0516	78544*8260-G	CARBON DISULFIDE	UG/KG-	ND
05/16/94	MB*NONE*0516	34504*8260-G	1,1-DICHLOROETHYLENE	UG/KG-	ND
05/16/94	MB*NONE*0516	34499*8260-G	1,1-DICHLOROETHANE	UG/KG-	ND
05/16/94	MB*NONE*0516	96464*8260-G	1,2-DICHLOROETHENE(TOTAL)	UG/KG-	ND
05/16/94	MB*NONE*0516	34318*8260-G	CHLOROFORM	UG/KG-	ND
05/16/94	MB*NONE*0516	34534*8260-G	1,2-DICHLOROETHANE	UG/KG-	ND
05/16/94	MB*NONE*0516	75078*8260-G	METHYL ETHYL KETONE	UG/KG-	ND
05/16/94	MB*NONE*0516	34509*8260-G	1,1,1-TRICHLOROETHANE	UG/KG-	ND
05/16/94	MB*NONE*0516	34299*8260-G	CARBON TETRACHLORIDE	UG/KG-	ND
05/16/94	MB*NONE*0516	98583*8260-G	VINYL ACETATE	UG/KG-	ND
05/16/94	MB*NONE*0516	34330*8260-G	BROMODICHLOROMETHANE	UG/KG-	ND
05/16/94	MB*NONE*0516	34544*8260-G	1,2-DICHLOROPROPANE	UG/KG-	ND
05/16/94	MB*NONE*0516	34702*8260-G	CIS-1,3-DICHLORO- PROPENE	UG/KG-	ND
05/16/94	MB*NONE*0516	34487*8260-G	TRICHLOROETHENE	UG/KG-	ND
05/16/94	MB*NONE*0516	34309*8260-G	DIBROMOCHLOROMETHANE	UG/KG-	ND
05/16/94	MB*NONE*0516	34237*8260-G	BENZENE	UG/KG-	ND
05/16/94	MB*NONE*0516	34514*8260-G	1,1,2-TRICHLOROETHANE	UG/KG-	ND
05/16/94	MB*NONE*0516	34579*8260-G	2-CHLOROETHYLVINYL- ETHER	UG/KG-	ND
05/16/94	MB*NONE*0516	34697*8260-G	TRANS-1,3-DICHLORO- PROPENE	UG/KG-	ND
05/16/94	MB*NONE*0516	34290*8260-G	BROMOFORM	UG/KG-	ND
05/16/94	MB*NONE*0516	75166*8260-G	2-HEXANONE	UG/KG-	ND
05/16/94	MB*NONE*0516	75169*8260-G	METHYLISOBUTYLKETONE	UG/KG-	ND
05/16/94	MB*NONE*0516	34478*8260-G	TETRACHLOROETHENE	UG/KG-	ND
05/16/94	MB*NONE*0516	34519*8260-G	1,1,2,2-TETRACHLORO- ETHANE	UG/KG-	ND
05/16/94	MB*NONE*0516	34483*8260-G	TOLUENE	UG/KG-	ND
05/16/94	MB*NONE*0516	34304*8260-G	CHLOROBENZENE	UG/KG-	ND
05/16/94	MB*NONE*0516	34374*8260-G	ETHYLBENZENE	UG/KG-	ND
05/16/94	MB*NONE*0516	45510*8260-G	XYLENE,TOTAL	UG/KG-	ND
05/16/94	MB*NONE*0516	75192*8260-G	STYRENE	UG/KG-	ND

Standard Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNITS	TARGET	FOUND
05/16/94	SP1*NONE*0516	34504*8260-G	1,1-DICHLOROETHYLENE	110	59-172	UG/KG-	50	55
05/16/94	SP1*NONE*0516	34487*8260-G	TRICHLOROETHENE	102	62-137	UG/KG-	50	51
05/16/94	SP1*NONE*0516	34237*8260-G	BENZENE	96	66-142	UG/KG-	50	48
05/16/94	SP1*NONE*0516	34483*8260-G	TOLUENE	92	59-139	UG/KG-	50	46
05/16/94	SP1*NONE*0516	34304*8260-G	CHLOROBENZENE	100	60-133	UG/KG-	50	50

Sample Matrix Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	%RECV	RECV CRIT	UNSPIKED	UNITS	TARGET	FOUND
05/16/94	SPM1*CDMHNSS*38	34504*8260-G	1,1-DICHLOROETHYLENE	117	59-172	0.0	UG/KG-	52	61
05/16/94	SPM1*CDMHNSS*38	34487*8260-G	TRICHLOROETHENE	108	62-137	0.0	UG/KG-	52	56
05/16/94	SPM1*CDMHNSS*38	34237*8260-G	BENZENE	98	66-142	0.0	UG/KG-	52	51
05/16/94	SPM1*CDMHNSS*38	34483*8260-G	TOLUENE	100	59-139	0.0	UG/KG-	52	52
05/16/94	SPM1*CDMHNSS*38	34304*8260-G	CHLOROBENZENE	104	60-133	0.0	UG/KG-	52	54
05/16/94	SPM2*CDMHNSS*38	34504*8260-G	1,1-DICHLOROETHYLENE	121	59-172	0.0	UG/KG-	52	63
05/16/94	SPM2*CDMHNSS*38	34487*8260-G	TRICHLOROETHENE	104	62-137	0.0	UG/KG-	52	54
05/16/94	SPM2*CDMHNSS*38	34237*8260-G	BENZENE	100	66-142	0.0	UG/KG-	52	52
05/16/94	SPM2*CDMHNSS*38	34483*8260-G	TOLUENE	98	59-139	0.0	UG/KG-	52	51
05/16/94	SPM2*CDMHNSS*38	34304*8260-G	CHLOROBENZENE	106	60-133	0.0	UG/KG-	52	55

Surrogate Spike Recovery Summary

DATE	SAMPLE	STORET	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/16/94	MB*NONE*0516	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	49	98	70-121
05/16/94	MB*NONE*0516	97026*SUR	TOLUENE-D(8)	UG/KG-	50	48	96	81-117
05/16/94	MB*NONE*0516	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	50	100	74-121
05/16/94	DA*CDMHNSS*37	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	51	100	70-121
05/16/94	DA*CDMHNSS*37	97026*SUR	TOLUENE-D(8)	UG/KG-	50	51	100	81-117
05/16/94	DA*CDMHNSS*37	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	51	100	74-121
05/16/94	DA*CDMHNSS*38	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	54	110	70-121
05/16/94	DA*CDMHNSS*38	97026*SUR	TOLUENE-D(8)	UG/KG-	50	51	100	81-117
05/16/94	DA*CDMHNSS*38	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	51	100	74-121
05/16/94	SPM1*CDMHNSS*38	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	53	110	70-121
05/16/94	SPM1*CDMHNSS*38	97026*SUR	TOLUENE-D(8)	UG/KG-	50	49	98	81-117

ESE BATCH : G49199

Surrogate Spike Recovery Summary

DATE	SAMPLE	STORNT	PARAMETER	UNITS	TARGET	FOUND	%RECV	RECV CRIT
05/16/94	SPM1*CDMHNSS*38	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	50	100	74-121
05/16/94	SPM2*CDMHNSS*38	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	51	100	70-121
05/16/94	SPM2*CDMHNSS*38	97026*SUR	TOLUENE-D(8)	UG/KG-	50	49	98	81-117
05/16/94	SPM2*CDMHNSS*38	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	51	100	74-121
05/16/94	SP1*NONE*0516	97031*SUR	1,2-DICHLOROETHANE-D(4)	UG/KG-	50	50	100	70-121
05/16/94	SP1*NONE*0516	97026*SUR	TOLUENE-D(8)	UG/KG-	50	48	96	81-117
05/16/94	SP1*NONE*0516	97027*SUR	BROMOFLUOROBENZENE	UG/KG-	50	49	98	74-121

ESE BATCH : G49199

Environmental Science and Engineering Analytical Services

Computer QC Checks

Batch No.: G49199 Analysis Date: 05/16/94 Analyst: GREGORY LAMB

	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		
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	12DCE-D4
			97026*SUR
			97027*SUR

Note: Any "NO" answer requires a comment.

OVERRIDE COMMENTS

BATCH OVERRIDE BY:

ESE BATCH : G49199

TABLE OF ABBREVIATIONS

%RECV : % Recovery for spiked sample. (FOUND/TARGET * 100)
ANLY DATE : Analysis Date
ANLY TIME : Analysis Time
CURVE : Curve Regression Number
DILUTION : Sample Dilution Factor
EXT DATE : Extract Date
EXT VOL : Extract Volume
FOUND : Spiked Sample Conc. - Unspiked Sample Conc.
INJ VOL : Injection Volume
REL%DIFF : % Difference between current and previous spike.
RESPONSE : Sample Response
R.T. : Retention Time
SAMPLE CODE: Sample Type * Sample ID
SAMPLE ID : Field Group * Sequence Number
SAMPLE TYPE: The kind of sample analyzed. (listed below)
DA -- Data Sample
MB -- Method Blank
RF -- Reference (from commercially known standard)
RP -- Replicate Sample
SP -- Standard Matrix Spike
SPM -- Sample Matrix Spike
STD -- Internal Standard
SUR -- Surrogate Sample
UN -- Unspiked Sample
SAMP VOL : Sample Volume
SPK CONC : Spike Concentration
ST : Sample response explanation or validity. (listed below)
BK -- No sample response.
NA -- Sample not analyzed.
NR -- Not reserved for this batch. Batch containing the response for this sample is listed in the target field.
OK -- Sample response shown is correct.
! -- Sample response shown is invalid.
< -- Sample response < detection limit. Detection limit is shown in the response field.
STORET*MTHD: Storet ID * Method Code
TARGET : Spike Target (SAMPLE LISTING SECTION)
TARGET : Spike Target Concentration (SPIKED SAMPLE SECTION)
TYPE : Response Type ("FINAL" or empty.)
UNSP CONC : Unspiked Sample Concentration