Quarterly Report of RCRA Groundwater Monitoring Data for Period July 1 through September 30, 1995

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United States
Department of Energy

P.O. Box 550
Richland, Washington 99352

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LIST OF TERMS

A-10 Crib	216-A-10 Crib
A-29 Ditch	216-A-29 Ditch
A-36B Crib	216-A-36B Crib
APT	(300) Area Process Trenches
Basins	183-H Solar Evaporation Basins
CBML	Columbia Biomedical Laboratories
CFR	<i>Code of Federal Regulations</i>
CIP	Contamination Indicator Parameter
CRQL	contractually required quantitation limit
DOE	U.S. Department of Energy
DWS	drinking water standard
Ecology	Washington State Department of Ecology
EPA	U.S. Environmental Protection Agency
ICP	inductively coupled plasma
INC	Incident (report)
ITAS	International Technology Analytical Services
LERF	Liquid Effluent Retention Facility
LLBG	Low-Level Burial Grounds
LLWMA	Low-Level Waste Management Area
LWDF	Liquid Waste Disposal Facility
MDC	minimum detectable concentration
MDL	method detection limit
NCR	Nonconformance Report
NRDWL	Nonradioactive Dangerous Waste Landfill
NTU	nephelometric turbidity unit
PNNL	Pacific Northwest National Laboratory
PUREX	Plutonium-Uranium Extraction (Plant)
QA	quality assurance
QC	quality control
RADE	Request for Analytical Data Evaluation
RCRA	<i>Resource Conservation and Recovery Act of 1976</i>
RCW	<i>Revised Code of Washington</i>
REDOX	Reduction-Oxidation (Plant)
RL	Richland Operations Office
RPD	relative percent difference
S-10 Facility	216-S-10 Pond and Ditch
SST	single-shell tank
TOC	total organic carbon
TOX	total organic halogen
Tri-Party Agreement	<i>Hanford Federal Facility Agreement and Consent Order</i>
U-12 Crib	216-U-12 Crib
WAC	<i>Washington Administrative Code</i>
WHC	Westinghouse Hanford Company
WMA	waste management area
WP	Water Pollution (Program)
WS	Water Supply (Program)

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**QUARTERLY REPORT OF RCRA GROUNDWATER MONITORING DATA FOR
PERIOD JULY 1, 1995 THROUGH SEPTEMBER 30, 1995**

1.0 INTRODUCTION

Nineteen *Resource Conservation and Recovery Act of 1976* (RCRA) groundwater monitoring projects are conducted at the Hanford Site. These projects include treatment, storage, and disposal facilities for both solid and liquid waste. The location of each facility is shown in Figure 1-1. The groundwater monitoring programs described in this report comply with the interim- and final-status federal (*Title 40 Code of Federal Regulation* [CFR] Parts 264 and 265) and state (*Washington Administrative Code* [WAC] 173-303-400 and 173-303-645) regulations. The RCRA projects are monitored under one of the following programs: background monitoring, indicator parameter evaluation, or groundwater quality assessment or detection.

Westinghouse Hanford Company (WHC) manages the RCRA groundwater monitoring projects on the Hanford Site. Performing project management, preparing groundwater monitoring plans, well network design and installation, specifying groundwater data needs, performing quality control (QC) oversight, data management, and preparing project sampling schedules are all parts of this responsibility. Pacific Northwest National Laboratory (PNNL) administers the contract for analytical services to WHC for the RCRA groundwater monitoring program.

This quarterly report contains data received between July 1 and September 30, 1995, which are the cutoff dates for this reporting period. This report may contain not only data from the July through September quarter, but also data from earlier sampling events that were not previously reported.

1.1 LABORATORY AND SAMPLING STATUS

DataChem Laboratories of Salt Lake City, Utah, performs most of the hazardous chemicals analyses for the Hanford Site. Quanterra, St. Louis, Lockheed Environmental, and Quanterra, Richland also perform hazardous chemical analyses for the Hanford Site. Analyses for coliform bacteria are performed by Columbia Biomedical Laboratory (CBML) and Quanterra, Richland. Analyses for dioxin are performed by TMS Analytical Services, Inc. Quanterra, Richland performs the radiochemical analyses.

Figure 1-1. Locations of the RCRA Groundwater Monitoring Projects and Landmarks on the Hanford Site.

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1.2 QUALITY CONTROL PROGRAM

H. Hampt
Westinghouse Hanford Company

1.2.1 Introduction

The QC Program is based on guidance from the U.S. Environmental Protection Agency (EPA), the *RCRA Groundwater Monitoring Technical Enforcement Guidance Document* (EPA 1986a), and Chapter 1.0, "Quality Control," from *Test Methods for Evaluating Solid Waste* (EPA 1986b).

1.2.1.1 Data Quality Measures. The QC Program uses these five measures of data quality: precision, accuracy, representativeness, completeness, and comparability, along with applicable program-specific quality parameters to evaluate the quality of the data and the analytical laboratories analyzing the samples. Target values for precision and accuracy are specified in the *Quality Assurance Project Plan for RCRA Groundwater Monitoring Activities* (WHC 1992a).

1. Precision is evaluated using data results from laboratory duplicates, matrix spike duplicates (see Section 1.2.3), field duplicates, and blind samples.
2. Accuracy is evaluated using data results from laboratory matrix spikes; laboratory control samples; EPA Water Pollution (WP), Water Supply (WS), and Interlaboratory Performance Evaluation Programs (see Section 1.2.3); and blind samples.
3. Representativeness expresses the degree to which RCRA facility groundwater monitoring data represent the real composition of the groundwater in the aquifer. Goals for data representativeness for groundwater monitoring programs are addressed qualitatively by the specification of well construction, sampling locations, sampling intervals, and sampling and analysis techniques in the groundwater monitoring plan for each RCRA facility.
4. Completeness is defined as the percentage of measurements that are judged to be valid. Completeness is determined by the number of data unflagged during validation, divided by the total number of data evaluated, and multiplied by 100. The calculated percentages used in reporting completeness are conservative figures and are based on the data flags 'P,' 'F,' 'Y,' 'R,' 'Q,' and 'H.' Table 1-1 illustrates project completeness for the data presented in this report.
5. Comparability is the confidence with which one data set can be compared to another. It is evaluated using replicates to ensure that samples analyzed by different laboratories or by the same laboratory over different time periods are comparable. For this reporting period, samples were analyzed in accordance with *Test Methods for Evaluating Solid Waste* (EPA 1986b) and other applicable approved methods. To attain maximum comparability among field measurements, samplers follow approved sampling

procedures. Rigorous adherence to these procedures can ensure the desired consistency among sampling events.

Table 1-1. Completeness.

Project	Total number of evaluated data	Number of unflagged results	Percent complete (unflagged)
100-D	200	195	98
100-N	950	932	98
183-H	243	222	91
2101-M	--	--	NA
216-A-10	--	--	NA
216-A-29	1,596	1,443	90
216-A-36B	--	--	NA
216-B-3	987	944	96
216-B-63	--	--	NA
216-S-10	--	--	NA
216-U-12	299	284	95
300 APT	--	--	N/A
LERF	172	172	100
LLBG WMA-1	22	19	86
LLBG WMA-2	209	209	100
LLBG WMA-3	1,396	1,350	86
LLBG WMA-4	95	95	100
LLBG WMA-5	929	876	94
NRDWL	663	577	87
SST A/AX	120	119	99
SST B/BX/BY	168	164	98
SST C	120	119	99
SST S/SX	161	160	99
SST T	201	185	92
SST TX/TY	185	179	97
SST U	157	157	100

APT = Area Process Trench.

LERF = Liquid Effluent Retention Facility.

LLBG = Low-Level Burial Grounds.

NRDWL = Nonradioactive Dangerous Waste Landfill.

SST = single-shell tank.

WMA = waste management area.

1.2.1.2 Program-Specific Validation Flags. Program-specific validation flags are assigned during the process of evaluating RCRA groundwater data. These flags include:

1. **H--Data** are flagged with an 'H' flag when method-required hold times have been exceeded. Hold times stated in the laboratory contract are those hold times required by the method in use by the laboratory. The H-flagged data may be used qualitatively, but no regulatory decisions should be made based on a single-flagged data point.
2. **Q--Data** are flagged with a 'Q' flag when results of field blanks indicate contamination and/or results of field duplicate samples have greater than 20% relative percent difference (RPD). This flag means that the field QC data associated with the sample data were outside the limits established in the *Environmental Engineering and Geotechnology Function Procedures* (WHC-CM-7-8).. The Q-flagged data can be used qualitatively, but no regulatory decisions should be made based on a single-flagged data point.
3. **F--Data** are flagged with an 'F' when the data point is submitted for review through the RADE system. The RADE system is a process used to track and evaluate data that appear to be inconsistent with the current pattern or with historical trends.
4. **Y or R--Data** are flagged with a 'Y' or 'R' when Nonconformance Reports (NCR) and Incident Reports (INC) are received from the laboratory and/or RADEs have been resolved. NCRs and INCs document occurrences that may affect data quality.
5. **G--Data** points submitted to the RADE system that have been determined to be acceptable are assigned a 'G' flag.
6. **P--Data** points related to isolated occurrences determined by the specific project scientist are flagged with a 'P,' indicating a potential problem with the data. Explanations for use of the flag will be discussed in the specific project chapter.

1.2.2 External Quality Control Program

The external QC program uses three kinds of QC samples to evaluate the quality of data generated in the field and in the laboratory. These are field duplicates, field blanks, and blind samples. (See Section 1.3 for definitions of the QC samples.)

The analytical results of QC samples are judged to be acceptable if the following evaluation criteria are met.

- **Field duplicates--Results** of field duplicate pairs must have precision as measured by RPD within $\pm 20\%$. Hazardous chemical results below the Practical Quantitation Limit (PQL) and radiological results below the Limit of Quantitation (LOQ) are not evaluated.

- **Blanks**--Two kinds of blanks are used to check for contamination resulting from field activities and/or bottle preparation. These are full trip blanks and field trip blanks.

Except for common laboratory contaminants, results above the threshold of two times the method detection limit (MDL) are identified as suspected contamination. For common laboratory contaminants, such as acetone, methylene chloride, 2-butanone, toluene, and phthalate esters, sample results less than five times the MDL are qualified as nondetects.

Table 1-2 summarizes the analytical results of QC samples available for the July through September 1995 quarter.

Samples associated with duplicate or blank analytes that exceeded the QC limits are discussed in this section and are flagged with a 'Q' in the data tables.

Table 1-2. Field Duplicates and Field Blanks Evaluation Results, Third Quarter 1995.

Quality control sample	Number of analyses	Number of results outside of criteria	Acceptable (%)
Duplicates	900	9	99.0
Blanks	785	26	96.7

Precision based on field duplicate analysis was determined to be 99.0% acceptable. See Table 1-3 for a complete breakdown of field duplicates that did not meet QC acceptance criteria.

Of the 785 blanks analyzed during the July through September 1995 quarter, 26 exceeded the QC limit for 96.7% acceptability. Table 1-4 shows a breakdown of the constituents detected in the blanks.

Field QC samples collected for the July through September 1995 quarter were duplicates, field trip blanks, and full trip blanks. Duplicates were collected at approximately every 20th well. Field trip blanks were collected only on days when samples were collected for VOA. Full trip blanks were collected at approximately every 20th well.

Table 1-3. Breakdown of Field Duplicates. - (2 sheets)

Method analysis code	Method description	Number of flagged results	Total number of results	Percent of total out of limits
17/1199	Pesticides/PCBs	0	56	0
19/1206	Semi-VOA	0	259	0
25	VOA (GC)	0	34	0
30/1197	Phenols	0	32	0
34/1139	Inductively coupled plasma metals	1	201	0.5
40/1170	Lead	0	2	0
41/1174	Mercury	0	2	0
43/1148	Arsenic	0	2	0
48	Selenium	0	2	0
49/1204	Herbicides	0	8	0
65/1039	Total Dissolved Solids	2	7	28.6
67	Total Organic Halides	0	6	0
113	Total Carbon	0	2	0
122/1230	Total Organic Carbon	0	11	0
124/1083	Anions	0	70	0
135/1247	Gross alpha	1	8	12.5
136/1252	Gross Beta	0	8	0
140/1249	Gamma Scan	0	18	0
141	Strontium-90	0	2	0
142/1255	Tritium	0	8	0
143	Technetium-99	1	2	50
145	Uranium	2	4	50
182/1300	VOA GC/MS	0	112	0
356	Chemical oxygen demand	0	1	0
357/1086	Alkalinity	0	6	0
1040	Total suspended solids	0	2	0
1097	Total cyanide	0	2	0
1103	Ammonia	0	2	0
1114	Nitrite nitrate	0	2	0
1188	Tin	0	2	0
1194	Nonhalogenated VOA	0	12	0
1216	Total halogens	0	1	0
1220	Sulfide	0	2	0
1235	Oil & Grease	1	2	50
1270	Plutonium	0	4	0

Table 1-3. Breakdown of Field Duplicates. (2 sheets)

Method analysis code	Method description	Number of flagged results	Total number of results	Percent of total out of limits
1272	Radium-226	0	2	0
1273	Radium-228	0	2	0
1295	Gasoline	1	2	50

Table 1-4. Breakdown of Field Blanks.

Method analysis code	Method description	Number of flagged results	Total number of results	Percent of total out of limits
19	Semi-VOA	0	15	0
25	Volatile Organics (GC 8010/8020)	2	17	11.8
34	Inductively coupled plasma metals	14	196	7.1
40	Lead	0	2	0
41	Mercury	1	2	50
65	Total Dissolved Solids	3	3	100
67	Total Organic Halogen	0	21	0
122	Total Organic Carbon	0	22	0
124	Anions	0	63	0
135	Gross Alpha	0	5	0
136	Gross Beta	0	5	0
138	Iodine-129	0	1	0
142	Tritium	0	5	0
143	Technetium-99	0	3	0
145	Uranium	0	2	0
182	Volatile organics (GC/MS 8260)	6	418	1.4
357	Alkalinity	0	5	0

1.2.3 Internal Quality Control Program

The internal QC program uses five types of QC data to establish and monitor performance in the laboratory. These data are laboratory blanks, matrix spikes, matrix duplicates, matrix spike duplicates, and EPA studies (WP, WS, and radiochemical intercomparisons).

Every quarter each contracted laboratory supplies its own QC report, which includes data quality information on matrix spikes, matrix duplicates, matrix spike duplicates, and blanks in the form of precision and accuracy. Each contracted laboratory also supplies to MHC a report of its results of EPA's WP, WS, and radiochemical intercomparison studies on a quarterly basis. The results of EPA studies independently verify the continuation of laboratory performance and are expressed as the percentage of EPA-accepted results. In addition, once a year each contracted laboratory supplies an MDL/minimum detectable concentration (MDC) report. MHC reviews each of these reports. The MDLs and MDCs are required to be below the contractually required quantitation limit (CRQL). The CRQL is not associated with a quantitation limit as the name suggests; it is intended to be the lowest analyte concentration in a given matrix that a laboratory can be expected to detect consistently. The CRQL is agreed on under the contractual statement of work. A laboratory NCR is issued when the MDL is greater than the CRQL.

The hazardous chemistry laboratory provided precision and accuracy figures in the July through September 1995 quality assurance quarterly report. Last quarter, problems with blank contamination for ICP metals were noted; however, MHC does not believe that additional follow-up is necessary. The percentage of samples affected by 'B' qualifiers was only slightly higher than usual during the April through June quarter. The percentage of 'B' qualifiers for the July through September quarter is similar to what is typically seen. The July through September 1995 quarterly quality control report noted blank contamination for zinc in 5 of 16 sample groups. MHC will request an explanation and follow up if necessary.

Radiochemistry precision and accuracy figures are provided in the radiochemistry laboratory's quarterly report, with percent acceptability calculated from duplicates and spikes, respectively. These results, along with radiochemistry blank data, are summarized in Table 1-5.

Precision and accuracy results from the radiochemistry laboratory, summarized in Table 1-5, indicate the performance of all customers submitting water matrix samples. MHC samples represent only a part of the performance summary. These figures represent samples analyzed during the period of July through September 1995.

Table 1-5. Radiochemistry Quarterly Report Summary.

Third quarter 1995	Duplicates (precision, % acceptable)	Spikes (accuracy, % acceptable)	Blanks (% acceptable)
July through September	99.0	97.4	99.1

EPA intercomparison data were not reported for the July through September quarter.

EPA Water Pollution (WP) samples were analyzed by the hazardous chemistry laboratory during August 1995. The EPA sent blind samples for the

analysis of 143 analytes for performance evaluation WP034. The blind samples were analyzed for metals, minerals, nutrients, TOC, COD, PCBs, pesticides, volatile halocarbons, volatile aromatics, total cyanide, non-filterable residue, oil and grease, total phenolics, and total residual chlorine. Of the 143 results, 137 were acceptable. Results for non-filterable residue, oil and grease, and total residual chlorine were unacceptable. None of the analytes out of limits are of particular concern to the RCRA program.

Environmental Sciences sent performance evaluation (PE) samples to five laboratories during June 1995. PE samples were also sent out in September 1995.

All PE samples were sent out in duplicate and contained known amounts of particular analytes. The laboratories that participated in the analysis of these samples were the primary hazardous chemistry laboratory (Lab 1) and five comparison laboratories (Labs 2, 3, 4, 5, and 6).

Lab 1's results were within the limits of the 95% confidence interval established in accordance with WHC-CM-7-8, Section 2.4 for carbon disulfide, benzene, toluene, zinc, manganese, and TOC (September 1995 only). Lab 1 had unacceptable results twice for TOX. Lab 1 also had unacceptable results for iron and chromium. WHC will send additional performance evaluation samples as appropriate. WHC will also consider selecting a new laboratory for TOX analysis.

1.3 QUALITY CONTROL DEFINITIONS

Accuracy--The closeness of agreement between an observed value and a true value. Accuracy is assessed by means of reference samples and percent recoveries.

Blind sample--A sample that contains a concentration of analyte that is known to the supplier but unknown to the analyzing laboratory. The analyzing laboratory is informed that the sample is a QC sample and not a field sample. The blind, double blind, and matrix-matched double blind samples are used to assess accuracy and monitor the performance of the analytical laboratory(ies) with prepared or purchased materials from EPA QC samples/concentrates or primary materials.

Contractually required quantitation limit--A value intended to be the lowest analyte concentration in a given matrix that the laboratory can be expected to achieve consistently; agreed upon under the contract statement of work.

Double blind sample--A sample that contains a concentration of analyte that is known to the supplier but is unknown to the analyzing laboratory. The analyzing laboratory is not informed that the sample is a QC sample. All attempts are made to make this sample appear like a field sample. For example, the double blind sample should be submitted to the laboratory within the same time period and with a sample identification number similar to that of the field samples. The double blind sample does not include matrix matching.

External quality control sample--Any QC sample prepared without the knowledge of the analytical laboratory.

Field duplicate sample--A sample used to determine repeatability of an analytical measurement on identical samples collected as close as possible to the same time at the same location. These samples are stored in separate containers and are analyzed independently by the same laboratory.

Field trip blank--A sample that contains only Type II reagent water. At the time of sample collection, the field blank is filled at the sampling site by pouring Type II reagent water from a cleaned container into volatile organic analysis (VOA) vials. After collection, the field trip blank is treated in the same manner as the other samples collected during the sampling event. Field trip blanks are collected only on days when samples are collected for VOA.

Full trip blank--A sample that contains only Type II reagent water and preservative, as required. A full trip blank is used to check for contamination in sample bottles and sample preparation. The full trip blank is analyzed for all constituents of interest on all types of sample bottles used during that sampling period. The frequency of collection for a full trip blank is 1 per 20 samples, or 1 per sampling batch. A full trip blank is filled in the analytical laboratory under the sample preparation procedures. The full trip blank is not opened in the field.

Internal quality control sample--Any QC sample prepared by the analytical laboratory and used to establish and monitor the quality of the analytical laboratory.

Limit of detection--The lowest concentration level that is statistically different from a blank. This level is calculated by the average blank signal plus three standard deviations of the blank analyses.

Limit of quantitation--The level above which quantitative results may be obtained with a specific degree of confidence. This level is calculated as the blank mean plus 10 standard deviations of the blank.

Matrix-matched double blind sample--A matrix-matched double blind sample contains a concentration of analyte that is known to the supplier but unknown to the analyzing laboratory. The sample matrix has been altered to closely match that of the field samples.

Method detection limit--The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix type containing the analyte.

Minimum detectable concentration--Required level of analytical detection for radiochemical samples.

Practical Quantitation Limit--The lowest concentration that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions. The PQL is generally 5 to 10 times the MDL.

Precision--The agreement among a set of individual measurements of the same property, usually under prescribed similar conditions. Precision is calculated by using the RPD of the duplicate/replicate analyses. These samples should contain concentrations of analyte above the MDL and may involve the use of matrix spikes.

Reliable detection level--A detection limit set at two times the concentration of the MDL, so the risk of both false positives and false negatives falls below 1%.

Type II reagent water--Distilled or deionized water that is free of contaminants that may interfere with the analytical test in question.

1.4 DATA TABLES

J. A. Serkowski
Westinghouse Hanford Company

Four different formats are used to display water level measurements and groundwater sample analytical results. This section describes the meaning of each table column heading, defines the abbreviations used, explains the data qualifiers and flags, and lists analysis method codes and relevant regulatory standards.

1.4.1 Water Level Measurement Table

The water level measurement table has the following four columns:

- Well--Well in which measurement was made.
- Date--Date of measurement.
- Depth to water--Depth, in feet, from well casing reference point to top of water in well.
- Water level--Elevation, in feet above mean sea level, of water level computed by subtracting depth to water from casing reference elevation.

Wells are grouped according to the zone that they monitor, beginning with the top of the unconfined aquifer and continuing downward to the confined aquifer.

Only measurements made during the reporting quarter are included in the tables. Measurements made during sampling are reported with an asterisk (*). Measurements are also routinely performed at other times to permit collection of data for an entire network within a 1- or 2-day time period.

Data that are judged to be suspect by the project scientist are flagged with a '+' in the table. Before data are designated as suspect, checks are conducted to determine if a transcription error occurred between the field sheet and the electronic database.

1.4.2 Constituent List and Summary of Results Table

The Constituent List and Summary of Results table ("Summary" table) is the first of three tables that present the results of groundwater sample analyses. The "Summary" table displays statistics based on the complete data set for the reporting period. The complete data set consists of all analysis results requested by the project associated with the samples collected before the end of the current reporting quarter that arrived at WRC before the cutoff date for the current quarterly report (November 17, 1995) and have not been reported in a previous quarterly report. Therefore, data collected during previous quarters may appear in this document if the laboratory did not report the data until the current reporting period.

The fields in the "Summary" table are as follows:

- Constituent Name--Name of the analyzed constituent being summarized; the Short name is an abbreviation used in the Constituents with at Least One Detected Value table (Section 1.4.3); the (Method), when present, is a code (Section 1.4.5) used to distinguish between different analytical methods for the same constituent.
- Units--Units in which the MDL and drinking water standards (DWS) are reported in this table.
- Lab MDL--The MDL computed by the laboratory for a constituent. This field is blank for radionuclides where the MDL is defined as the value of the total error reported by the laboratory for each result.
- DWS Limit/Agency--The DWS used for comparison to the reported results; see Section 1.4.5 for Agency definitions and a complete listing of standards used.
- Number of Samples--Total is the number of sample results from all wells in the project contained in the complete data set for that constituent; >MDL is the number of results that exceed the MDL; >DWS is the number of results that exceed the listed DWS.

Summarized constituents are grouped as Contamination Indicator Parameters (CIP), Drinking Water Parameters, Groundwater Quality Parameters, and Site-Specific and Other Constituents. Within groups, rows are ordered alphabetically by the full constituent name.

If a constituent has an MDL that exceeds the DWS, exceedance of the DWS cannot be determined, so an asterisk (*) is placed in the >DWS field. Some radionuclides do not have an explicit MDL; the asterisk is used if the DWS exceeds the total error associated with at least one of the results.

1.4.3 Constituents with at Least One Detected Value Table

The Constituents with at Least One Detected Value table ("Detected" table) is a subset of the complete data set. Only constituents that were detected above the MDL in at least one sample collected for the project during the current reporting period are reported in the "Detected" table.

The first three column headings are as follows:

- Well Name--Well from which sample was collected.
- Collection Date--Date on which the sample was collected.
- Sample Number--Unique number assigned to a well sample.

The remaining columns contain analytical results and qualifiers for the constituent. The structure of the column header is as follows.

constituent short name
method code/reporting units
MDL/DWS (suffix).

The "Summary" table (Section 1.4.2) shows the relationship between the full constituent name and the short name. The analytical method code is defined in Table 1-6. Abbreviations used for reporting units are listed in Section 1.4.5. On the third line, a period appears in place of the MDL or DWS if a value does not exist. The one-letter suffix that may be added to the DWS identifies the regulation associated with the standard and is described in Section 1.4.5.

Analysis results are displayed with two digits to the right of the decimal point. This is a consequence of the generating software and does not reflect the precision of the results. The laboratories normally report the result with three significant digits. Radionuclide values may be negative because the laboratory subtracts a background reading from the measured result. The letter(s) that may follow the result are data qualifiers and flags. A complete explanation of what each flag means is provided in Section 1.4.5.

1.4.4 Contamination Indicator Parameters Table

The "CIP" table has a format similar to the Detected table (see Section 1.4.3) but includes only data for pH, specific conductance, TOC, and TOX. All results for these parameters, whether detected or not, are listed in the "CIP" table. The analysis method code is not part of the column header in this report.

Because more than one laboratory, each with its own MDL may perform some of the TOC and TOX analyses, values in those columns of the "CIP" table may reflect different MDLs. In such cases, an asterisk appears in the MDL portion of the column header.

1.4.5 Codes and Abbreviations

Abbreviations--The abbreviations used in the data tables are as follows:

COL	coliform colonies per 100 milliliters
DWS	drinking water standard
ft	feet
MDL	method detection limit
msl	mean sea level
NTU	nephelometric turbidity unit
pCi/L	picocuries per liter
ppb	parts per billion
ppm	parts per million
µmho/cm	micromhos per centimeter.

Table 1-6. Analysis Method Code Definitions.
(2 sheets)

Method code	Method name
16	SM-846 8240 ^a
17	SM-846 8080 ^a
19	SM-846 8270 ^a
25	SM-846 8010/8020 ^a
29	SM-846 8140 ^a
30	SM-846 8040 ^a
34	SM-846 6010 ^a
36	ASTM D-1385 ^b
40	SM-846 7421 ^a
41	SM-846 7470 ^a
42	SM-846 7841 ^a
43	SM-846 7060 ^a
48	SM-846 7740 ^a
49	SM-846 8150 ^a
51	SM-846 8280 ^a
52	ASTM D-1067-A
54	ASTM D-1426-D
56	SM-846 9010 ^a
62	In-house ion chromatography
63	SM-846 9030 ^a
65	Standard Methods #209B ^c
67	SM-846 9020 ^a
69	SM-846 9131 ^a
73	ASTM D-1125-A
93	Field probe, pH
94	Field probe, conductivity
122	SM-846 9060 ^a
124	ASTM D-4327-88
125	ASTM D-1293
126	Standard Methods #214A ^c
127	ASTM D-2579-A
129	ASTM D-1426-C
130	EPA Method 300.0 ^c
135	SM-846 9310, Alpha ^d
136	SM-846 9310, Beta ^d
137	SM-846 9315, Radium ^d
139	ITAS I-129 Low level
140	ITAS Gamma scan
141	ITAS Sr-90
142	ITAS H-3
143	ITAS Tc-99
144	SM-846 9132 ^a
145	ITAS Gross U
146	ITAS Isotopic Pu
147	ITAS Am-241
148	ITAS Isotopic U
168	USEPA HACH COD ^e
357	EPA 600, 310.2
358	SM-846 9012 ^a
1023	EPA 120.1

Table 1-6. Analysis Method Code Definitions.
(2 sheets)

Method code	Method name
1039	EPA 160.1
1044	EPA 180.1
1083	EPA 300.0
1086	EPA 310.1
1139	SW-846 6010A
1148	SW-846 7060
1197	SW-846 8040
1199	SW-846 8080, Pesticides/PCBs
1206	SW-846 8270A
1216	SW-846 9020
1225	SW-846 9040
1230	SW-846 9060
1247	Gross alpha, direct/proportional counting
1249	Gamma spectroscopy
1252	Gross beta, direct/proportional counting
1255	Tritium, liquid scintillation
1270	Plutonium, electroplate/alpha spectroscopy
1276	Radium, gas proportional counting
1281	Radioactive strontium, proportional counting
1283	Tc-99, chemical separation/liquid scintillation
1288	Uranium, fluorometry
1300	SW-846 8260; VOAs

* (EPA 1986b).

* (ASTM 1991).

* (EPA 1979).

* (APHA 1989).

Agencies and suffixes--Agency codes and DWS suffixes identify the regulatory origin of the standard of the DWS. Agency codes are used in the "Summary" tables, and DWS suffixes are used in the "Detected" and "CIP" tables. The codes are defined as follows:

<u>Agency</u>	<u>Suffix</u>	<u>Regulatory basis</u>
EPA	None	Maximum contaminant levels in 40 CFR 141, "National Primary Drinking Water Regulations."
EPAA	a	40 CFR 141 action level.
EPAS	s	Secondary maximum contaminant levels in 40 CFR 143, "National Secondary Drinking Water Regulations."

Data qualifiers and flags--Data qualifiers and flags used in the "Detected" and "CIP" tables are assigned by the laboratory and MHC personnel, respectively. Qualifiers reflect conditions occurring in the laboratory relating to the analytical procedure. Flags serve a wider function of alerting the data user to the limitations of the reported value. Qualifiers and flags can be appended to each other to form a string of letters when several factors apply to a result. The qualifiers and flags used are as follows:

Laboratory qualifiers:

- B - Blank associated with analyte is contaminated
- D - Analyzed sample is diluted
- E - Concentration is out of instrument calibration range
- J - Concentration is estimated
- L - Concentration is below the contractually required quantitation limit but above the MDL
- U - Undetected; concentration is below the indicated value.

Data flags:

- F - Suspect data currently under review
- H - Laboratory holding time exceeded
- G - Reviewed data that are considered valid
- P - Potential problem; see text associated with table
- Q - Result associated with suspect QC data
- R - Reviewed data that have been rejected
- Y - Reviewed data that continue to be suspect
- +
- Suspect water level data
- * - MDL is greater than DWS, so exceedance of DWS is undetermined.

More complete descriptions of some of these qualifiers and flags are presented in Section 1.2, Quality Control Program.

Analysis method codes--Analysis method codes are used as an abbreviation for the laboratory method used to perform an analysis. A complete listing of the analysis method codes used in the Summary and Detected tables is shown in Table 1-6.

DWSs--DWSs are used in all of the chemistry tables to provide a standard with which to compare sample results. The DWSs are based on standards found in 40 CFR 141 and 40 CFR 143. Where there is overlap in constituents addressed by these regulations, 40 CFR 141 takes precedence over 40 CFR 143. A complete listing of the DWSs used in the Summary, Detected, and CIP tables is shown in Table 1-7.

Table 1-7. Drinking Water Standards. (Sheet 1 of 2)

Constituent Name	Short Name	MWS	Units	Agency
1,1,1-Trichloroethane	111-T	200	ppb	EPA
1,1,2-Trichloroethane	112-T	5	ppb	EPA
1,1-Dichloroethane	DICETHY	7	ppb	EPA
1,2,4-Trichlorobenzene	TRICHLB	70	ppb	EPA
1,2-Dibromo-3-chloropropane	DIBRCHL	.2	ppb	EPA
1,2-Dibromoethane	DIBRETH	.05	ppb	EPA
1,2-Dichlorobenzene	12-DBEN	600	ppb	EPA
1,2-Dichloroethane	12-DIC	5	ppb	EPA
1,2-Dichloropropane	DICPAHE	5	ppb	EPA
1,4-Dichlorobenzene	14-dben	75	ppb	EPA
2,3,7,8-TCDD	2378TCO	.00003	ppb	EPA
2,4,5-TP	245TP	50	ppb	EPA
2,4-D	24-D	70	ppb	EPA
2-sec-Butyl-4,6-dinitrophenol (DBNP)	BUTDIMP	7	ppb	EPA
Aluminum	ALUMINUM	200	ppb	EPAS
Antimony	ANTIMONY	6	ppb	EPA
Aroclor-1016	AR1016	.5	ppb	EPA
Aroclor-1221	AR1221	.5	ppb	EPA
Aroclor-1232	AR1232	.5	ppb	EPA
Aroclor-1242	AR1242	.5	ppb	EPA
Aroclor-1248	AR1248	.5	ppb	EPA
Aroclor-1254	AR1254	.5	ppb	EPA
Aroclor-1260	AR1260	.5	ppb	EPA
Arsenic	ARSENIC	50	ppb	EPA
Barium	BARIUM	2000	ppb	EPA
Benzene	BENZENE	5	ppb	EPA
Benzo(a)pyrene	BENZOPY	.2	ppb	EPA
Beryllium	BERYLLIUM	4	ppb	EPA
Cadmium	CADMIUM	5	ppb	EPA
Carbon tetrachloride	TETRAHE	5	ppb	EPA
Cesium-137	CS-137	200	pCi/L	EPA
Chlordane	CHLORANE	2	ppb	EPA
Chloride	CHLORID	250000	ppb	EPAS
Chlorobenzene	CHLROS	100	ppb	EPA
Chromium	CHROMIUM	100	ppb	EPA
cis-1,2-Dichloroethylene	CIS12DE	70	ppb	EPA
Cobalt-60	CO-60	100	pCi/L	EPA
Copper	COPPER	1000	ppb	EPAS
Cyanide	CYANIDE	200	ppb	EPA
Endrin	ENDRIN	2	ppb	EPA
Ethylbenzene	ETHBENZ	700	ppb	EPA
Fluoride	FLUORID	4000	ppb	EPA
gamma-BHC (Lindane)	G-BHC	.2	ppb	EPA
Gross alpha	ALPHA	15	pCi/L	EPA
Heptachlor	HEPTLOR	.4	ppb	EPA
Heptachlor epoxide	HEPTIDE	.2	ppb	EPA
Hexachlorobenzene	HEXC BEN	1	ppb	EPA
Hexachlorocyclopentadiene	HEXC CYC	50	ppb	EPA
Iodine-129	I-129	1	pCi/L	EPA
Iron	IRON	300	ppb	EPAS
Lead	LEAD	15	ppb	EPAA
Manganese	MANGESE	50	ppb	EPAS
Mercury	MERCURY	2	ppb	EPA
Methoxychlor	METHLOR	40	ppb	EPA
Methylene chloride	METHYCH	5	ppb	EPA
Nickel	NICKEL	100	ppb	EPA
Nitrate	NITRATE	45000	ppb	EPA
Nitrite	NITRITE	4000	ppb	EPA
Nitrogen in nitrate	NO3-N	10000	ppb	EPA
Nitrogen in nitrite	NO2-N	1000	ppb	EPA
Pentachlorophenol	PENTCHP	1	ppb	EPA
pH	PH	6.5 - 8.5	pH	EPAS
Radium-226	RA-226	5	pCi/L	EPA
Radium-228	RA-228	5	pCi/L	EPA
Ruthenium-106	RU-106	30	pCi/L	EPA

Table 1-7. Drinking Water Standards. (Sheet 2 of 2)

Constituent Name	Short Name	DWS	Units	Agency
Selenium	SELENIUM	50	ppb	EPA
Silver	SILVER	100	ppb	EPAS
Strontium-90	SR-90	8	pCi/L	EPA
Styrene	STYRENE	100	ppb	EPA
Sulfate	SULFATE	250000	ppb	EPAS
Technetium-99	TC-99	900	pCi/L	EPA
Tetrachloroethene	PERCENE	5	ppb	EPA
Thallium	THALLIUM	2	ppb	EPA
Toluene	TOLUENE	1000	ppb	EPA
Total dissolved solids	TDS	500000	ppb	EPAS
Toxaphene	TOXAENE	3	ppb	EPA
trans-1,2-Dichloroethylene	TRANSCE	100	ppb	EPA
Trichloroethene	TRICENE	5	ppb	EPA
Tritium	TRITIUM	20000	pCi/L	EPA
Vinyl chloride	VINYIOE	2	ppb	EPA
Xylenes (total)	XYLENE	10000	ppb	EPA
Zinc	ZINC	5000	ppb	EPAS

1.5 DATA EVALUATION

R. V. Gray
Westinghouse Hanford Company

Data evaluation is a process through which suspect data are identified and/or investigated. At present, the data evaluation process consists of the evaluating data called out in RADEs, which are submitted by data users and/or identified when performing the required statistical evaluation of CIP data. The statistical evaluations of CIP data are presented within the chapters for individual sites.

Thirty-six RADEs were submitted during the July through September quarter of 1995. Of the submitted RADEs, 21 are for ICP metals, 7 are for radionuclides, 6 are for anions, 4 are for field parameters (pH and conductivity), 2 are for TOX, 2 are for turbidity, 1 is for organics, 1 is for mercury and 1 is for lab pH.

An F flag is used to indicate that a RADE has been submitted. Suspect analytical data shall be evaluated for the following, as applicable: historical trends, site geohydrology, contaminant distribution (e.g., plumes), and internal consistency to determine if the data are acceptable. After evaluation, the F flag will be changed to 'G,' indicating acceptable data; 'Y,' indicating suspect data; or 'R,' indicating unusable data. A summary of the results will be presented in the annual report.

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2.0 100-D PONDS

N. J. Hartman
Westinghouse Hanford Company

2.1 INTRODUCTION

The 100-D Ponds system is an interim-status RCRA disposal unit located in the 100-D Area of the Hanford Site (Figure 2-1). Four wells make up the 100-D Ponds sampling network (Table 2-1). The 100-D Ponds are monitored under an indicator evaluation program (40 CFR 265).

The 100-D Ponds unit was constructed in 1977 for disposal of nonradioactive effluents derived from 100-D Area operating facilities. The 100-D Ponds are located in the former 188-D ash disposal basin and consist of a settling pond and a percolation pond, separated by a dike.

Effluent to the 100-D Ponds originated from two sources: a filter plant and engineering testing laboratories. Some past discharges may have included corrosive waste or mercury (Hartman 1991). All discharges to the 100-D Ponds ceased in May 1994.

2.2 WATER LEVEL MEASUREMENTS

Water levels are measured monthly in wells in and near the 100-D Area to track changes caused by river-stage fluctuations and the cessation of effluent discharge. Water level data are listed in Table 2-2.

2.3 WATER CHEMISTRY DATA

All four wells were sampled as scheduled last quarter. Data are reported in Tables 2-3 through 2-5. Data flags are explained in Sections 1.2 and 1.4. Wells D8-4 and D8-6 exceeded the upper DWS for pH. Requests for analytical data evaluation were made for well D5-13 (tritium) and well D8-6 (field pH) because the results did not follow historical trends.

Downgradient wells did not exceed critical mean values for conductivity, TOC, or TOX. Downgradient well D8-6 exceeded the critical range for field pH, but the value was suspect. Laboratory pH was 0.5 pH unit lower, which is within the critical range and more in trend with historical data. The well was resampled for field pH using two meters, but one meter gave an average value above the critical range and the other gave an average value within the critical range. The well will be sampled again for pH until conclusive results are obtained.

Figure 2-1. Monitoring Well Location Map for the 100-D Ponds.

RCRA-WF030903-0

**Table 2-1. Monitoring Well Purpose and Sampling Schedule
in the 100-D Ponds Network.**

Well no. (199-)	Relative position	Sample frequency	Sample date, 3rd Qtr 1995
D5-13	Upgradient	Quarterly	8/16/95
D8-4	Downgradient	Semiannually	8/16/95
D8-5	Downgradient	Semiannually	8/16/95
D8-6	Downgradient	Semiannually	8/16/95

Note: The hydrogeologic unit monitored is the uppermost portion of the unconfined aquifer, which comprises unconsolidated sand and gravels of the Ringold Formation.

Table 2-2. RCRA Water Level Measurement Report
 100-D Ponds, Third Quarter 1995.
 (sheet 1 of 3)

Well	Date	Depth to water (ft)	Water level elevation above msl (ft)	(m)
Wells Monitoring the Top of the Unconfined Aquifer				
199-D2-5	7/19/95	75.21	385.09	117.38
	8/15/95	75.10	385.20	117.41
	9/28/95	75.11	385.19	117.41
199-D2-6	7/19/95	83.90	385.38	117.46
	8/15/95	84.07	385.21	117.41
	9/28/95	85.06	384.22	117.11
199-D5-12	7/19/95	85.83	383.78	116.98
	8/15/95	85.31	384.30	117.13
	9/28/95	85.54	384.07	117.06
199-D5-13	7/19/95	87.40	384.09	117.07
	8/15/95	87.69	383.80	116.98
	8/16/95	87.75*	383.74	116.96
199-D5-17	7/19/95	84.70	384.79	117.28
	8/15/95	84.51	384.98	117.34
	9/27/95	84.67	384.82	117.29
199-D5-20	7/19/95	83.67	384.43	117.17
	8/15/95	84.58	383.52	116.90
	9/28/95	85.95	382.15	116.48
199-D8-3	7/19/95	65.83	383.13	116.78
	8/15/95	67.02	381.94	116.42
	9/28/95	68.69	380.27	115.91
199-D8-4	7/19/95	84.61	384.12	117.08
	8/15/95	85.24	383.49	116.89
	8/16/95	85.28*	383.45	116.88
	9/28/95	86.37	382.36	116.54
199-D8-5	7/19/95	68.73	383.76	116.97
	8/15/95	69.71	382.78	116.67
	8/16/95	69.78*	382.71	116.65
	9/28/95	71.30	381.19	116.19
199-D8-53	7/19/95	52.97	383.06	116.76
	8/15/95	54.16	381.87	116.39

Table 2-2. RCRA Water Level Measurement Report
 100-D Ponds, Third Quarter 1995.
 (sheet 2 of 3)

Well	Date	Depth to water (ft)	Water level elevation above msl (ft)	(m)
Wells Monitoring the Top of the Unconfined Aquifer				
199-D8-54A	7/19/95	59.63	383.15	116.78
	8/15/95	60.89	381.89	116.40
199-D8-55	7/19/95	55.87	383.48	116.88
	8/15/95	56.26	383.09	116.77
	9/28/95	59.03	380.32	115.92
199-D8-6	7/19/95	92.45	384.05	117.06
	8/15/95	93.09	383.41	116.86
	8/16/95	93.16*	383.34	116.84
	9/28/95	94.37	382.13	116.47
699-87-55	7/19/95	72.26	387.35	118.06
	8/15/95	72.37	387.24	118.03
	9/28/95	72.97	386.64	117.85
699-90-45	7/19/95	38.09	383.43	116.87
	8/15/95	38.10	383.42	116.87
	9/28/95	38.07	383.45	116.88
699-92-49	7/19/95	50.45	381.41	116.25
	8/15/95	52.27	379.59	115.70
	9/28/95	52.74	379.12	115.56
699-96-49	7/19/95	37.06	382.15	116.48
	8/15/95	37.21	382.00	116.43
	9/28/95	38.79	380.42	115.95
699-97-51A	7/19/95	20.05	382.20	116.49
	8/15/95	20.46	381.79	116.37
	9/28/95	21.42	380.83	116.08

Table 2-2. RCRA Water Level Measurement Report
 100-D Ponds, Third Quarter 1995.
 (sheet 3 of 3)

Well	Date	Depth to water (ft)	Water level elevation above msl (ft)	(m)
Wells Monitoring the Confined Aquifer				
199-D8-54B	7/19/95	59.14	383.37	116.85
	8/15/95	60.12	382.39	116.55
	9/28/95	61.41	381.10	116.16

- NOTES:
1. Water level elevations are calculated by subtracting the measured depth-to-water from the surveyed elevation for the well.
 2. Depth-to-water values are transcribed from field records.
 3. Measurements marked with an '*' were taken at the time of sampling.
 4. Measurements marked with a '+' are outside of the expected range, and are suspected of error.

Table 2-3. Constituent List and Summary of Results for the
100-D Pond Data for Reporting Period
July 1 through September 30, 1995.
(sheet 1 of 2)

CONTAMINATION INDICATOR PARAMETERS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS Limit	Agency	Number of Samples		
		Full						Total	>CRQL	>DWS
CONDUCT		Conductivity, field	umhos					16	16	
TOC		Total organic carbon	ppb		140			16	16	
TOX		Total organic halogen	ppb		6.9			16	1	
PH	93	pH, field	pH			6.5-8.5	EPAS	16	16	8
PH	125	pH, lab	pH			6.5-8.5	EPAS	4	4	2

DRINKING WATER PARAMETERS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS Limit	Agency	Number of Samples		
		Full						Total	>CRQL	>DWS
PBARIUM		Barium, filtered	ppb		1.4	2000	EPA	4	4	0
PCADMIU		Cadmium, filtered	ppb		.98	5	EPA	4	1	0
PCROMI		Chromium, filtered	ppb		3.7	100	EPA	4	3	0
PLUORID		Fluoride	ppb		52	4000	EPA	4	4	0
ALPHA		Gross alpha	pCi/L			15	EPA	4	3	0
PMERCUR		Mercury, filtered	ppb		.019	2	EPA	4	0	0
NITRATE		Nitrate	ppb		120	45000	EPA	4	4	0

GROUNDWATER QUALITY PARAMETERS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS Limit	Agency	Number of Samples		
		Full						Total	>CRQL	>DWS
CHLORID		Chloride	ppb		110	250000	EPAS	4	4	0
FIROH		Iron, filtered	ppb		8.9	300	EPAS	4	4	0
FMANGAN		Manganese, filtered	ppb		.55	50	EPAS	4	1	0
FSODIUM		Sodium, filtered	ppb		44			4	4	
SULFATE		Sulfate	ppb		130	250000	EPAS	4	4	0

SITE SPECIFIC AND OTHER CONSTITUENTS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS Limit	Agency	Number of Samples		
		Full						Total	>CRQL	>DWS
ALKALIN		Alkalinity	ppb		3500			4	4	
ALUMINI		Aluminum, filtered	ppb		31	200	EPAS	4	2	0
ANTIMO		Antimony, filtered	ppb		24	6	EPA	4	0	4*
BERYLL		Beryllium, filtered	ppb		.63	4	EPA	4	0	0
BROMIDE		Bromide	ppb		72			4	1	

Table 2-3. Constituent List and Summary of Results for the
100-D Pond Data for Reporting Period
July 1 through September 30, 1995.
(sheet 2 of 2)

Short	(Method)	Constituent Name Full	Units	Lab CRGL	DWS Limit	Agency	Number of Samples		
							Total	>CRGL	>DWS
FCALCIU		Calcium, filtered	ppb	41			4	4	
FCOBALT		Cobalt, filtered	ppb	5.3			4	0	
FCOPPER		Copper, filtered	ppb	2.1	1000	EPAS	4	0	0
BETA		Gross beta	pCi/L				4	3	
FMAGNES		Magnesium, filtered	ppb	26			4	4	
FNICKEL		Nickel, filtered	ppb	11	100	EPA	4	0	0
NITRITE		Nitrite	ppb	140	4000	EPA	4	0	0
PHOSPHA		Phosphate	ppb	340			4	0	
FPOTASS		Potassium, filtered	ppb	390			4	4	
FSILVER		Silver, filtered	ppb	5.5	100	EPAS	4	0	0
FSTRONTIUM		Strontium, filtered	ppb	.31			4	4	
FTIN		Tin, filtered	ppb	30			4	0	
TRITIUM		Tritium	pCi/L		20000	EPA	4	2	0
TURBID		Turbidity	NTU				4	4	
FVANADI		Vanadium, filtered	ppb	1.9			4	4	
FZINC		Zinc, filtered	ppb	3.7	5000	EPAS	4	0	0

For explanation of this table, see Section 1.4 of report.

Table 2-4. Constituents with at Least One Detected Value
for the 100-D Pond Data for Reporting Period
July 1 through September 30, 1995.
(sheet 1 of 2)

Well Name	Collection Date	Sample Number	ALKALIN 357/ppb 3500/.	ALUMIN 34/ppb 31/2000	PERMANG 34/ppb 1.4/2000	BROMIDE 124/ppb 72/.
199-05-13	8/16/95	80GC52	90000.00			200.00
199-05-13	8/16/95	80GC56		31.00 U	120.00	
199-08-4	8/16/95	80GC57	30000.00			72.00 U
199-08-4	8/16/95	80GC61		48.00 L	18.00	
199-08-5	8/16/95	80GC63	80000.00			72.00 U
199-08-5	8/16/95	80GC67		31.00 U	40.00	
199-08-6	8/16/95	80GC70	30000.00			72.00 U
199-08-6	8/16/95	80GC74		43.00 L	16.00	

Well Name	Collection Date	Sample Number	FCADMIU 34/ppb .98/5	FCALCIU 34/ppb 41/.	CHLORID 124/ppb 110/250000s	FCCHROMI 34/ppb 3.7/100
199-05-13	8/16/95	80GC52			23000.00 D	
199-05-13	8/16/95	80GC56	.98 U	61000.00		100.00
199-08-4	8/16/95	80GC57			2600.00	
199-08-4	8/16/95	80GC61	1.50 L	17000.00		3.70 U
199-08-5	8/16/95	80GC63			3500.00	
199-08-5	8/16/95	80GC67	.98 U	28000.00		21.00
199-08-6	8/16/95	80GC70			3100.00	
199-08-6	8/16/95	80GC74	.98 U	21000.00		4.80 L

Well Name	Collection Date	Sample Number	FLUORID 124/ppb 52/4000	ALPHA 135/pCi/L .7/15	BETA 136/pCi/L ./.	FIRCON 34/ppb 8.9/300s
199-05-13	8/16/95	80GC52	400.00	3.56	7.14	
199-05-13	8/16/95	80GC56				12.00 L
199-08-4	8/16/95	80GC57	200.00	.94	2.95	
199-08-4	8/16/95	80GC61				9.30 L
199-08-5	8/16/95	80GC63	300.00	.86	2.48	
199-08-5	8/16/95	80GC67				14.00 L
199-08-6	8/16/95	80GC70	200.00	.02 U	2.06 U	
199-08-6	8/16/95	80GC74				14.00 L

Table 2-4. Constituents with at Least One Detected Value
for the 100-D Pond Data for Reporting Period
July 1 through September 30, 1995.
(sheet 2 of 2)

Well Name	Collection Date	Sample Number	FMAGNES 34/ppb 26/.	FMANGAN 34/ppb .55/50u	NITRATE 124/ppb 120/45000	FPOTASS 34/ppb 590/.
199-D5-13	8/16/95	B06C52			38000.00 D	
199-D5-13	8/16/95	B06C56	17000.00	.55 U		4400.00
199-D8-4	8/16/95	B06C57			2200.00	
199-D8-4	8/16/95	B06C61	750.00	.55 U		3100.00
199-D8-5	8/16/95	B06C63			2500.00	
199-D8-5	8/16/95	B06C67	7000.00	.55 U		3300.00
199-D8-6	8/16/95	B06C70			4600.00	
199-D8-6	8/16/95	B06C74	930.00	.91 L		2200.00

Well Name	Collection Date	Sample Number	FSCOLIUM 34/ppb 44/.	FSTROMUM 34/ppb .31/.	SULFATE 124/ppb 130/250000s	TRITIUM 142/pCi/L ./20000
199-D5-13	8/16/95	B06C52			73000.00 D	1100.00 F
199-D5-13	8/16/95	B06C56	7600.00 q	410.00		
199-D8-4	8/16/95	B06C57			17000.00 D	173.00 U
199-D8-4	8/16/95	B06C61	3700.00 q	140.00		
199-D8-5	8/16/95	B06C63			17000.00 D	390.00
199-D8-5	8/16/95	B06C67	5300.00 q	190.00		
199-D8-6	8/16/95	B06C70			26000.00 D	196.00 U
199-D8-6	8/16/95	B06C74	4400.00 q	290.00		

Well Name	Collection Date	Sample Number	TURBID 111/NTU ./.	FVANADI 34/ppb 1.9/.
199-D5-13	8/16/95	B06C52	1.16	
199-D5-13	8/16/95	B06C56		6.60 L
199-D8-4	8/16/95	B06C57	2.62	
199-D8-4	8/16/95	B06C61		4.70 L
199-D8-5	8/16/95	B06C63	4.65	
199-D8-5	8/16/95	B06C67		9.30 L
199-D8-6	8/16/95	B06C70	1.38	
199-D8-6	8/16/95	B06C74		4.10 L

For explanation of this table, see Section 1.4 of report.

Table 2-5. Contamination Indicator Parameters for the
100-D Pond Data for Reporting Period
July 1 through September 30, 1995.

Well Name	Collection Date	Sample Number	COND FIELD uMho 1/.	COND LAB uMho 1/.	pH FIELD .01/6.5-8.5s	pH LAB .01/6.5-8.5s	TOC ppb */.	TOX ppb */.
199-05-13	8/16/95	B0GC52	504		8.16	8.10	1000	6.9 U
		B0GC53	500		8.16		800	6.9 U
		B0GC54	508		8.21		800	6.9 U
		B0GC55	506		8.24		800	6.9 U
199-08-4	8/16/95	B0GC57	128		8.91	8.80	400 L	6.9 U
		B0GC58	128		8.92		400 L	6.9 U
		B0GC59	127		8.92		400 L	6.9 U
		B0GC60	127		8.93		400 L	6.9 U
199-08-5	8/16/95	B0GC63	227		8.31	8.20	400 L	6.9 U
		B0GC64	226		8.30		300 L	7.0 L
		B0GC65	226		8.29		300 L	6.9 U
		B0GC66	226		8.29		400 L	6.9 U
199-08-6	8/16/95	B0GC70	145		9.30 F	8.80	400 L	6.9 U
		B0GC71	147		9.31 F		500	6.9 U
		B0GC72	147		9.31 F		400 L	6.9 U
		B0GC73	148		9.31 F		300 L	6.9 U

* Detection limits for TOC and TOX vary depending on the performing laboratory.
For explanation of this table, see Section 1.4 of report.

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3.0 183-H SOLAR EVAPORATION BASINS

M. J. Hartman
Westinghouse Hanford Company

3.1 INTRODUCTION

The 183-H Solar Evaporation Basins (Basins) are a RCRA-regulated facility located near the Columbia River in the 100-H Area of the Hanford Site. Originally the Basins were part of the water treatment facility that prepared coolant for the 105-H Reactor. Subsequent to that mission, between 1973 and 1985, the Basins were used for storage and volume reduction (by solar evaporation) of liquid waste from nuclear fuel processing activities conducted in the 300 Area. The predominant waste consisted of nitric acid solutions that had been neutralized with sodium hydroxide before discharge into the Basins. The solutions contained various metals and radioactive constituents (e.g., chromium, uranium, and technetium). Hazardous waste has been removed from the Basins and most of the walls have been decontaminated and demolished. Additional decontamination and demolition is in progress.

Groundwater quality has been affected by leakage from the Basins. Until now, groundwater monitoring has been conducted as an assessment-level program under 40 CFR 265 interim-status standards, as mandated by a consent agreement and compliance order (Ecology and EPA 1986). A final-status compliance monitoring program was initiated in September 1995 (Hartman and Chou 1995) under WAC 173-303-645.

The purpose of each RCRA well in the 183-H network, its sampling frequency, and the dates sampled during the quarter are summarized in Table 3-1. Well locations are shown in Figure 3-1.

3.2 WATER LEVEL MEASUREMENTS

Water levels were recorded before the 183-H network wells were sampled. Routine measurements also are made in a larger network of wells on a single day once each quarter. Water levels are presented in Table 3-2.

3.3 WATER CHEMISTRY DATA

Under the final-status compliance monitoring program at 183-H, each semiannual sampling event comprises four independent samples from each well, collected at monthly intervals. The first of the four sample sets for the fall sampling event was collected in September. Results are presented in Tables 3-3 through 3-5. Table 3-6 lists concentration limits that were exceeded. Table 3-7 lists RADEs issued on suspect data.

Figure 3-1. Well Location Map for the 183-H Solar Evaporation Basins Network.

RCRA-AR/122983J

Table 3-1. Monitoring Well Position and Sampling Schedule
for the 1B3-H Solar Evaporation Basins Network.

Well no. (199-)	Relative position	Sample frequency ^a	Sample date, 3rd Qtr 1995
H3-2A	Upgradient	Semiannually	9/19/95
H4-12A	Downgradient	Semiannually	9/20/95
H4-12C	Downgradient	Semiannually	9/20/95
H4-18	Downgradient	Semiannually	9/20/95
H4-3	Downgradient	Semiannually	9/19/95
H4-4	Downgradient	Semiannually	9/20/95
H4-6	Upgradient	Semiannually	9/19/95
H4-9	Downgradient	Semiannually	9/20/95

Note: Hydrogeologic units include the sandy gravels of the Hanford formation (seven wells) and silty sands of the Ringold Formation (well H4-12C).

^aThe semiannual sampling event comprises four independent sample sets from each well collected at monthly intervals. The fall samples are collected in September, October, November, and December. The spring samples are collected in March, April, May, and June.

Table 3-2. RCRA Water Level Measurement Report 183-H Solar
Evaporation Basins, Third Quarter 1995.
(sheet 1 of 2)

Well	Date	Depth to water (ft)	Water level elevation above msl (ft)	(m)
Wells Monitoring the Top of the Unconfined Aquifer (Hanford Formation)				
199-H3-1	9/14/95	45.75	375.73	114.52
199-H3-2A	9/14/95	42.42	375.90	114.57
	9/19/95	42.54*	375.78	114.54
199-H3-2B	9/14/95	43.02	375.89	114.57
199-H4-10	9/14/95	31.57	372.87	113.65
199-H4-11	9/14/95	44.83	372.01	113.39
199-H4-12A	9/14/95	40.82	372.68	113.59
	9/20/95	40.92*	372.58	113.56
199-H4-12B	9/14/95	40.84	372.68	113.59
199-H4-13	9/14/95	46.02	372.18	113.44
199-H4-14	9/14/95	45.51	375.57	114.47
199-H4-15A	9/14/95	34.37	373.34	113.79
199-H4-15B	9/14/95	34.09	372.83	113.64
199-H4-16	9/14/95	49.68	374.55	114.16
199-H4-17	9/14/95	45.46	374.13	114.03
199-H4-18	9/14/95	48.11	374.21	114.06
	9/20/95	48.18*	374.14	114.04
199-H4-3	9/14/95	46.85	373.44	113.82
	9/19/95	46.90*	373.39	113.81
199-H4-4	9/14/95	41.29	372.95	113.68
	9/20/95	41.39*	372.85	113.64
199-H4-5	9/14/95	43.42	372.79	113.63

Table 3-2. RCRA Water Level Measurement Report 183-H Solar
Evaporation Basins, Third Quarter 1995.
(sheet 2 of 2)

Well	Date	Depth to water (ft)	Water level elevation above msl (ft)	(m)
Wells Monitoring the Top of the Unconfined Aquifer (Hanford Formation)				
199-H4-6	9/14/95	44.19	375.39	114.42
	9/19/95	44.29*	375.29	114.39
199-H4-7	9/14/95	46.15	374.44	114.13
199-H4-8	9/14/95	46.10	373.90	113.96
199-H4-9	9/14/95	44.74	373.84	113.95
	9/20/95	44.86*	373.72	113.91
Wells Monitoring Upper Levels in the Ringold Formation				
199-H3-2C	9/14/95	43.01	375.73	114.52
199-H4-12C	9/14/95	41.15	372.37	113.50
	9/20/95	41.14*	372.38	113.50
199-H4-15CS	9/14/95	34.75	372.69	113.60
Well Monitoring Mid-Level in the Ringold Formation				
199-H4-15CR	9/14/95	32.91	374.46	114.14

- NOTES: 1. Water level elevations are calculated by subtracting the measured depth-to-water from the surveyed elevation for the well.
2. Depth-to-water values are transcribed from field records.
3. Measurements marked with an '*' were taken at the time of sampling.
4. Measurements marked with a '+' are outside of the expected range, and are suspected of error.

Table 3-3. Constituent List and Summary of Results for
183-H Solar Evaporation Basins Data for Reporting
Period July 1 through September 30, 1995.

CONTAMINATION INDICATOR PARAMETERS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS Limit	Agency	Number of Samples		
		Full						Total	>CRQL	>DWS
CONDUCT		Conductivity, field		umhos				9	9	
TOX		Total organic halogen		ppb	6.9			1	1	
PH		pH, field		pH		6.5-8.5	EPAS	9	9	0

DRINKING WATER PARAMETERS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS Limit	Agency	Number of Samples		
		Full						Total	>CRQL	>DWS
FBARIUM		Barium, filtered		ppb	1.4	2000	EPA	8	8	0
FCADMIU		Cadmium, filtered		ppb	.98	.5	EPA	8	2	0
FCROMI		Chromium, filtered		ppb	3.7	100	EPA	8	8	2
FLUORIO		Fluoride		ppb	52	4000	EPA	5	5	0
NITRATE		Nitrate		ppb	120	45000	EPA	5	5	3

GROUNDWATER QUALITY PARAMETERS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS Limit	Agency	Number of Samples		
		Full						Total	>CRQL	>DWS
CHLORID		Chloride		ppb	110	250000	EPAS	5	5	0
FIROH		Iron, filtered		ppb	8.9	300	EPAS	8	8	0
FMANGAN		Manganese, filtered		ppb	.55	50	EPAS	8	6	0
FSODIUM		Sodium, filtered		ppb	44			8	8	
SULFATE		Sulfate		ppb	130	250000	EPAS	5	5	0

SITE SPECIFIC AND OTHER CONSTITUENTS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS Limit	Agency	Number of Samples		
		Full						Total	>CRQL	>DWS
ALKALIN		Alkalinity		ppb	3500			8	8	
FALUMIN		Aluminum, filtered		ppb	31	200	EPAS	8	0	0
FANTIMO		Antimony, filtered		ppb	24	6	EPA	8	0	8*
FBERYLL		Beryllium, filtered		ppb	.63	4	EPA	8	0	0
BROMIDE		Bromide		ppb	72			5	0	
FCALCIU		Calcium, filtered		ppb	41			8	8	
FCOBALT		Cobalt, filtered		ppb	5.3			8	0	
FCOPPER		Copper, filtered		ppb	2.1	1000	EPAS	8	1	0
FMAGNES		Magnesium, filtered		ppb	26			8	8	
FNICKEL		Nickel, filtered		ppb	11	100	EPA	8	1	0
NITRITE		Nitrite		ppb	140	4000	EPA	5	0	0
PHOSPHA		Phosphate		ppb	340			5	0	
FPOTASS		Potassium, filtered		ppb	390			8	8	
FSILVER		Silver, filtered		ppb	5.5	100	EPAS	8	0	0
FSRONTIUM		Strontium, Filtered		ppb	.31			8	8	
TC-99		Technetium-99		pCi/L		900	EPA	8	5	1
FTIN		Tin, filtered		ppb	30			8	4	
TURBID		Turbidity		NTU				8	8	
URANIUM		Uranium		ppb				8	8	
FVANADI		Vanadium, filtered		ppb	1.9			8	6	
FZINC		Zinc, filtered		ppb	3.7	5000	EPAS	8	5	0

For explanation of this table, see Section 1.4 of report.

Table 3-4. Constituents with at Least One Detected Value for the
183-H Solar Evaporation Basins Data for Reporting Period
July 1 through September 30, 1995.
(sheet 1 of 3)

Well Name	Collection Date	Sample Number	ALKALIN 357/ppb 3500/.	FEARION 34/ppb 1.4/2000	FCADMTU 34/ppb .98/5	FCALCEU 34/ppb 41/.
199-H3-2A	9/19/95	BOGHS9	130000.00			
199-H3-2A	9/19/95	BOGHT0		190.00 F	1.20 L	170000.00 F
199-H4-12A	9/20/95	BOGHT6	140000.00			
199-H4-12A	9/20/95	BOGHT7		58.00	.98 U	60000.00
199-H4-12C	9/20/95	BOGHT8	100000.00			
199-H4-12C	9/20/95	BOGHT9		9.80 L	.98 U	29000.00
199-H4-18	9/20/95	BOGHV0	130000.00			
199-H4-18	9/20/95	BOGHV1		36.00	.98 U	58000.00
199-H4-3	9/19/95	BOGHV2	180000.00			
199-H4-3	9/19/95	BOGHV3		30.00	1.40 L	51000.00
199-H4-4	9/20/95	BOGHV4	130000.00			
199-H4-4	9/20/95	BOGHV5		56.00	.98 U	50000.00
199-H4-6	9/19/95	BOGHV6	160000.00			
199-H4-6	9/19/95	BOGHV7		40.00	.98 U	56000.00
199-H4-9	9/20/95	BOGHV8	170000.00			
199-H4-9	9/20/95	BOGHV9		59.00	.98 U	73000.00

Well Name	Collection Date	Sample Number	CHLORID 124/ppb 110/250000a	FCIRONI 34/ppb 3.7/100	FCOPPER 34/ppb 2.1/1000a	FLMORID 124/ppb 52/4000
199-H3-2A	9/19/95	BOGHT0		190.00 F	16.00 LF	
199-H4-12A	9/20/95	BOGHT6	8700.00			500.00
199-H4-12A	9/20/95	BOGHT7		74.00	2.10 U	
199-H4-12C	9/20/95	BOGHT8	2300.00			400.00
199-H4-12C	9/20/95	BOGHT9		280.00	2.10 U	
199-H4-18	9/20/95	BOGHV0	6200.00			500.00
199-H4-18	9/20/95	BOGHV1		47.00	2.10 U	
199-H4-3	9/19/95	BOGHV3		100.00	2.10 U	
199-H4-4	9/20/95	BOGHV4	7700.00			700.00
199-H4-4	9/20/95	BOGHV5		80.00	2.10 U	
199-H4-6	9/19/95	BOGHV7		75.00	2.10 U	
199-H4-9	9/20/95	BOGHV8	11000.00 D			600.00
199-H4-9	9/20/95	BOGHV9		70.00	2.10 U	

Well Name	Collection Date	Sample Number	FIRON 34/ppb 8.9/3000a	FMAGNES 34/ppb 26/.	FMANGAN 34/ppb .55/50a	FMICKEL 34/ppb 11/100
199-H3-2A	9/19/95	BOGHT0	28.00 L	30000.00 F	4.70 BLF	43.00 F
199-H4-12A	9/20/95	BOGHT7	18.00 L	9900.00	.62 L	11.00 U
199-H4-12C	9/20/95	BOGHT9	14.00 L	10000.00	.55 U	11.00 U
199-H4-18	9/20/95	BOGHV1	11.00 L	10000.00	.55 U	11.00 U
199-H4-3	9/19/95	BOGHV3	28.00 L	12000.00	.69 BL	11.00 U
199-H4-4	9/20/95	BOGHV5	9.80 L	8500.00	.65 L	11.00 U
199-H4-6	9/19/95	BOGHV7	13.00 L	14000.00	16.00 B	11.00 U
199-H4-9	9/20/95	BOGHV9	40.00	13000.00	2.60 L	11.00 U

Table 3-4. Constituents with at Least One Detected Value for the
183-H Solar Evaporation Basins Data for Reporting Period
July 1 through September 30, 1995.
(sheet 2 of 3)

Well Name	Collection Date	Sample Number	NITRATE 124/ppb 120/45000	POTASS 34/ppb 390/.	SODIUM 34/ppb 44/.	STRONTIUM 34/ppb .31/.
199-H3-2A	9/19/95	B0GHT0		12000.00 F	300000.00 F	900.00 H
199-H4-12A	9/20/95	B0GHT6	39000.00 D			
199-H4-12A	9/20/95	B0GHT7		4400.00	17000.00 Q	290.00 H
199-H4-12C	9/20/95	B0GHT8	6100.00			
199-H4-12C	9/20/95	B0GHT9		3700.00	4300.00 Q	210.00 H
199-H4-18	9/20/95	B0GHV0	49000.00 D			
199-H4-18	9/20/95	B0GHV1		4400.00	16000.00 Q	280.00 H
199-H4-3	9/19/95	B0GHV3		5000.00	19000.00	270.00 H
199-H4-4	9/20/95	B0GHV4	230000.00 D			
199-H4-4	9/20/95	B0GHV5		5100.00	89000.00 Q	260.00 H
199-H4-6	9/19/95	B0GHV7		6600.00	25000.00	330.00 H
199-H4-9	9/20/95	B0GHV8	51000.00 D			
199-H4-9	9/20/95	B0GHV9		5500.00	20000.00 Q	350.00 H

Well Name	Collection Date	Sample Number	SULFATE 124/ppb 130/250000s	TC-99 143/pCi/L ./900	FTIN 34/ppb 30/.	TURBID 111/NTU ./.
199-H3-2A	9/19/95	B0GHS9		1.70 U		.76
199-H3-2A	9/19/95	B0GHT0			30.00 U	
199-H4-12A	9/20/95	B0GHT6	52000.00 D	56.50		4.81
199-H4-12A	9/20/95	B0GHT7			36.00 L	
199-H4-12C	9/20/95	B0GHT8	23000.00 D	-.24 U		2.52
199-H4-12C	9/20/95	B0GHT9			44.00 L	
199-H4-18	9/20/95	B0GHV0	51000.00 D	98.80		.43
199-H4-18	9/20/95	B0GHV1			30.00 U	
199-H4-3	9/19/95	B0GHV2		4980.00 F		1.55
199-H4-3	9/19/95	B0GHV3			30.00 U	

Well Name	Collection Date	Sample Number	SULFATE 124/ppb 130/250000s	TC-99 143/pCi/L ./900	FTIN 34/ppb 30/.	TURBID 111/NTU ./.
199-H4-4	9/20/95	B0GHV4	53000.00 D	815.00		4.71
199-H4-4	9/20/95	B0GHV5			30.00 U	
199-H4-6	9/19/95	B0GHV6		-.53 U		.96
199-H4-6	9/19/95	B0GHV7			48.00 L	
199-H4-9	9/20/95	B0GHV8	60000.00 D	36.40		4.59
199-H4-9	9/20/95	B0GHV9			52.00 L	

Table 3-4. Constituents with at Least One Detected Value for the
183-H Solar Evaporation Basins Data for Reporting Period
July 1 through September 30, 1995.
(sheet 3 of 3)

Well Name	Collection Date	Sample Number	URANIUM 145/ppb ./.	PFANADI 34/ppb 1.9/.	PZINC 34/ppb 3.7/5000s
199-H3-2A	9/19/95	BOGHS9	3.37		
199-H3-2A	9/19/95	BOGHT0		1.90 U	6.90 L
199-H4-12A	9/20/95	BOGHT6	7.48		
199-H4-12A	9/20/95	BOGHT7		1.90 U	5.80 L
199-H4-12C	9/20/95	BOGHT8	1.75		
199-H4-12C	9/20/95	BOGHT9		24.00	3.70 U
199-H4-18	9/20/95	BOGHV0	9.94		
199-H4-18	9/20/95	BOGHV1		5.30 L	4.00 L
199-H4-3	9/19/95	BOGHV2	273.00		
199-H4-3	9/19/95	BOGHV3		6.70 L	3.70 U
199-H4-4	9/20/95	BOGHV4	88.10		
199-H4-4	9/20/95	BOGHV5		3.40 L	3.70 U
199-H4-6	9/19/95	BOGHV6	5.17		
199-H4-6	9/19/95	BOGHV7		5.40 L	4.80 L
199-H4-9	9/20/95	BOGHV8	8.07		
199-H4-9	9/20/95	BOGHV9		6.20 L	6.60 L

For explanation of this table, see Section 1.4 of report.

Table 3-5. Contamination Indicator Parameters for the 183-H Solar
Evaporation Basins Data for Reporting Period
July 1 through September 30, 1995.

Well Name	Collection Date	Sample Number	COND FIELD uMho 1/.	COND LAB uMho 1/.	pH FIELD .01/6.5-8.5s	pH LAB .01/6.5-8.5s	TOC ppb */.	TOX ppb */.
199-H3-2A	9/19/95	BOGHS9	441		7.92			
199-H3-28	6/15/95	BOFNO6	471		7.88			10.0
199-H4-12A	9/20/95	BOGHT6	472		7.87			
199-H4-12C	9/20/95	BOGHT8	263		8.05			
199-H4-18	9/20/95	BOGHV0	470		7.77			
199-H4-3	9/19/95	BOGHV2	2590 F		7.58			
199-H4-4	9/20/95	BOGHV4	785		7.94			
199-H4-6	9/19/95	BOGHV6	519		8.23			
199-H4-9	9/20/95	BOGHV8	576		7.80			

* Detection limits for TOC and TOX vary depending on the performing laboratory.
For explanation of this table, see Section 1.4 of report.

**Table 3-6. Drinking Water Standards Exceeded for the 183-H Basins,
Third Quarter, 1995.**

Constituent (concentration limit ^a)	Wells exceeding concentration limit
Chromium, filtered samples (122 ppb)	H3-2A, H4-12C.
Nitrate ^b (45,000 ppb)	H4-4, H4-18, H4-9.
Technetium-99 (900 pCi/L)	H4-3 ^c

^aConcentration limit is DWS or background (Hartman and Chou 1995).

^bAnion data not yet received for wells H4-2A, H4-3, and H4-6.

^cData are in question. Requests for Analytical Data Evaluation were submitted.

**Table 3-7. Requests for Analytical Data Evaluation for the 183-H Solar
Evaporation Basins, 3rd Quarter, 1995.**

Well No.	Sample Date	Constituent	Reasons
H3-2A	9/19/95	Filtered metals (barium, calcium, chromium, copper, magnesium, manganese, nickel, potassium, sodium, strontium)	Higher than historical trend; does not match conductivity.
H4-3	9/19/95	Technetium-99	Higher than historical trend.
H4-3	9/19/95	Field conductivity	Higher than historical trend; does not match cations.

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4.0 100-N RCRA SITES

M. J. Hartman
Westinghouse Hanford Company

4.1 INTRODUCTION

Four interim-status RCRA disposal units are located in the 100-N Area of the Hanford Site: the 1301-N Liquid Waste Disposal Facility (LWDF), the 1324-N Surface Impoundment, the 1324-NA Percolation Pond, and the 1325-N LWDF. These units and their associated well locations are shown in Figure 4-1. Sampling networks are listed in Table 4-1. The 1324-N and 1324-NA units are monitored as a single site. RCRA monitoring began in late 1987. The 1324-N/NA site is monitored under a groundwater quality assessment program because of elevated levels of TOX (40 CFR 265.93). The 1301-N and 1325-N LWDF are monitored under indicator parameter evaluation programs (40 CFR 265.92).

The 1301-N and 1325-N LWDFs were used for disposal of liquid effluent from the N Reactor and associated facilities. Primary waste constituents were radionuclides, including strontium-90, tritium, and cobalt-60. Minor amounts of hazardous waste also were present in the waste streams (e.g., hydrazine). The 1324-N/NA units received corrosive waste. The 100-N RCRA units are currently not in use.

4.2 WATER LEVEL MEASUREMENTS

Water levels were measured before sample collection. Data are listed in Table 4-2.

4.3 WATER CHEMISTRY DATA

All of the 100-N RCRA wells were sampled as scheduled last quarter. Downgradient wells for 1301-N and 1325-N did not exceed critical mean values for pH, conductivity, TOC, or TOX.

Two of four TOX sample bottles for well N-3 were broken. Because of sampler errors, quadruplicate pH and conductivity readings were not made at well N-32 and no field readings were made at well N-75, which is a pumping well for a ⁹⁰Sr pump-and-treat system.

Groundwater chemistry data received before the cut-off date are listed in Tables 4-3 through 4-5. Data qualifiers and data flags are discussed in Sections 1.2 and 1.4, respectively. DWSs were exceeded for the constituents listed in Table 4-6. RADEs submitted last quarter are listed in Table 4-7.

Sampling and analysis were conducted in coordination with the 100-NR-2 and Sitewide surveillance programs to avoid duplication. For this reason, Tables 4-3 through 4-5 include data not requested specifically for the RCRA program (e.g., unfiltered metals, filtered anions, radionuclides, etc.). Note that one of the methods of pH testing listed in Table 4-3 is "filtered pH."

These results are actually field readings from unfiltered groundwater that were input to the database under sample numbers associated with filtered samples (e.g. metals).

Figure 4-1. Well Location Map for the 1301-N, 1324-N/NA, and 1325-N Facilities.

Table 4-1. Monitoring Well Purpose and Sampling Schedule for the 100-N Area.

Well no. (199-)	RCRA site	Relative position	Sample frequency	Sample date, 3rd Qtr 1995
N-2	1301-N	Downgradient	Semiannually	9/8/95
N-3	1301-N	Downgradient	Semiannually	9/15/95
N-14	1301-N	Downgradient	Semiannually	8/30/95
N-27	1325-N	Downgradient	Semiannually	8/23/95
N-32	1325-N	Downgradient	Semiannually	9/7/95
N-34	1301-N	Upgradient	Semiannually	8/23/95
N-41	1325-N	Downgradient	Semiannually	8/23/95
N-43	1325-N	Downgradient	Semiannually	8/28/95
N-57	1301-N	Upgradient	Semiannually	8/25/95
N-59	1324-N/NA	Downgradient	Quarterly	8/25/95
N-67	1301-N	Downgradient	Semiannually	9/7/95
N-69	1301-N	Downgradient; bottom of aquifer	Semiannually	9/8/95
N-70	1325-N	Downgradient; bottom of aquifer	Semiannually	9/18/95
N-71	1324-N/NA	Upgradient	Quarterly	8/28/95
N-72	1324-N/NA	Downgradient	Quarterly	8/28/95
N-73	1324-N/NA	Downgradient	Quarterly	8/28/95
N-74	1325-N	Upgradient	Semiannually	8/28/95
N-75 ^a	1301-N	Downgradient	Semiannually	9/12/95
N-76	1301-N	Downgradient	Semiannually	9/5/95
N-77	1324-N/NA	Downgradient; bottom of aquifer	Quarterly	9/15/95
N-81	1325-N	Downgradient	Semiannually	8/30/95

Note: The hydrogeologic unit monitored is the unconfined aquifer, which comprises sands and gravels of the Ringold Formation.

RCRA = Resource Conservation and Recovery Act of 1976.

^aExtraction well for ⁹⁰Sr pump-and-treat system, began operating in August 1995.

Table 4-2. RCRA Water Level Measurement Report
 100-N Area, Third Quarter 1995.
 (sheet 1 of 2)

Well	Date	Depth to water (ft)	Water level elevation above msl (ft)	(m)
Wells Monitoring the Top of the Unconfined Aquifer				
199-N-14	8/30/95	68.63*	384.52	117.20
199-N-2	9/08/95	74.68*	385.15	117.39
199-N-27	8/23/95	61.81*	387.27	118.04
199-N-3	9/15/95	75.30*	384.15	117.09
199-N-32	9/07/95	75.29*	386.79	117.89
199-N-34	8/23/95	72.88*	386.75	117.88
199-N-41	8/23/95	72.37*	385.22	117.42
199-N-43	8/28/95	64.25*	384.76	117.27
199-N-57	8/25/95	70.70*	387.06	117.98
199-N-59	8/25/95	72.43*	387.10	117.99
199-N-67	9/07/95	73.48*	384.98	117.34
199-N-71	8/28/95	74.08*	388.96	118.56
199-N-72	8/28/95	71.55*	387.44	118.09
199-N-73	8/28/95	75.52*	387.76	118.19
199-N-74	8/28/95	68.70*	388.96	118.56
199-N-81	8/30/95	75.97*	386.74	117.88

Table 4-2. RCRA Water Level Measurement Report
 100-N Area, Third Quarter 1995.
 (sheet 2 of 2)

Well	Date	Depth to water (ft)	Water level elevation above msl (ft)	(m)
Wells Monitoring the Bottom of the Unconfined Aquifer				
199-N-69	9/08/95	73.82*	385.02	117.35
199-N-70	9/18/95	68.47*	385.74	117.57

- NOTES:
1. Water level elevations are calculated by subtracting the measured depth-to-water from the surveyed elevation for the well.
 2. Depth-to-water values are transcribed from field records.
 3. Measurements marked with an '*' were taken at the time of sampling.
 4. Measurements marked with a '+' are outside of the expected range, and are suspected of error.

Table 4-3. Constituent List and Summary of Results
for 100-N RCRA Sites Data for Reporting Period
July 1 through September 30, 1995.
(sheet 1 of 3)

CONTAMINATION INDICATOR PARAMETERS

Short	(Method)	Constituent Name Full	Units	Lab CRQL	DWS Limit Agency	Number of Samples		
						Total	>CRQL	>DWS
CONDUCT	94	Conductivity, field	umho/cm			59	59	
CONDUCT	1023	Specific conductance	umho/cm			12	11	
CONDUCT	87	Specific conductance	umho/cm			11	11	
FCONDUCT	87	Specific conductance, filtered	umho/cm			5	5	
TOC		Total organic carbon	ppb	140		70	59	
TOX		Total organic halogen	ppb	6.9		68	15	
PH	86	pH	pH		6.5-8.5 EPAS	11	11	2
PH	93	pH, field	pH		6.5-8.5 EPAS	59	59	8
FPH	86	pH, filtered	pH		6.5-8.5 EPAS	5	5	0
PH	1225	pH, lab	pH		6.5-8.5 EPAS	7	7	0
PH	125	pH, lab	pH		6.5-8.5 EPAS	17	17	1

DRINKING WATER PARAMETERS

Short	(Method)	Constituent Name Full	Units	Lab CRQL	DWS Limit Agency	Number of Samples		
						Total	>CRQL	>DWS
BARIUM	1139	Barium	ppb		2000 EPA	12	12	0
FBARIUM	1139	Barium, filtered	ppb		2000 EPA	7	7	0
FBARIUM	34	Barium, filtered	ppb	1.4	2000 EPA	21	21	0
CADMIUM	1139	Cadmium	ppb		5 EPA	12	0	0
FCADMIUM	1139	Cadmium, filtered	ppb		5 EPA	7	0	0
FCADMIUM	34	Cadmium, filtered	ppb	.98	5 EPA	21	4	0
CHROMIUM	1139	Chromium	ppb		100 EPA	12	9	0
FCHROMIUM	1139	Chromium, filtered	ppb		100 EPA	7	3	0
FCHROMIUM	34	Chromium, filtered	ppb	3.7	100 EPA	21	12	0
FLUORIDE	1083	Fluoride	ppb		4000 EPA	12	9	0
FLUORIDE	124	Fluoride	ppb	52	4000 EPA	17	17	0
FFLUORIDE	1083	Fluoride, filtered	ppb		4000 EPA	7	7	0
ALPHA	1247	Gross alpha	pCi/L		15 EPA	4	1	0
ALPHA	135	Gross alpha	pCi/L		15 EPA	17	9	0
NITRATE		Nitrate	ppb	120	45000 EPA	17	17	3
FN03-N		Nitrogen in Nitrate, filtered	ppb		10000 EPA	7	7	1
NO3-N		Nitrogen in nitrate	ppb		10000 EPA	12	12	3

GROUNDWATER QUALITY PARAMETERS

Short	(Method)	Constituent Name Full	Units	Lab CRQL	DWS Limit Agency	Number of Samples		
						Total	>CRQL	>DWS
CHLORIDE	1083	Chloride	ppb		250000 EPAS	12	12	0
CHLORIDE	124	Chloride	ppb	110	250000 EPAS	17	17	0
FCHLORIDE	1083	Chloride, filtered	ppb		250000 EPAS	7	7	0
IRON	1139	Iron	ppb		300 EPAS	12	12	2
FIRON	1139	Iron, filtered	ppb		300 EPAS	7	7	0
FIRON	34	Iron, filtered	ppb	8.9	300 EPAS	21	14	0
MANGANESE	1139	Manganese	ppb		50 EPAS	12	12	0
FMANGANESE	1139	Manganese, filtered	ppb		50 EPAS	7	7	0
FMANGANESE	34	Manganese, filtered	ppb	.55	50 EPAS	21	19	0
SODIUM	1139	Sodium	ppb			12	12	
FSODIUM	1139	Sodium, filtered	ppb			7	7	
FSODIUM	34	Sodium, filtered	ppb	44		21	21	
SULFATE	1083	Sulfate	ppb		250000 EPAS	24	24	2
SULFATE	124	Sulfate	ppb	130	250000 EPAS	17	17	2
FSULFATE	1083	Sulfate, filtered	ppb		250000 EPAS	7	7	1

Table 4-3. Constituent List and Summary of Results
for 100-N RCRA Sites Data for Reporting Period
July 1 through September 30, 1995.
(sheet 2 of 3)

SITE SPECIFIC AND OTHER CONSTITUENTS

Short	(Method)	Constituent Name	Full	Units	Lab CRGL	DMS Limit	Agency	Number of Samples		
								Total	>CRGL	>DMS
111-T		1,1,1-Trichloroethane		ppb	.28	200	EPA	2	0	0
112-T		1,1,2-Trichloroethane		ppb	.19	5	EPA	2	0	0
11-DIC		1,1-Dichloroethane		ppb	.22			2	0	
12-DIC		1,2-Dichloroethane		ppb	.24	5	EPA	2	0	0
12-DCE		1,2-Dichloroethene		ppb	.26			2	0	
14-dben		1,4-Dichlorobenzene		ppb	.2	75	EPA	2	1	0
1BUTYN		1-Butanol		ppb	.84			2	0	
MIBK		4-Methyl-2-pentanone		ppb	.65			2	0	
ACETONE		Acetone		ppb	4.7			2	0	
ALKALIN		Alkalinity		ppb	3500			22	22	
ALUMINUM	1139	Aluminum		ppb		200	EPAS	12	5	1
FALUMIN	1139	Aluminum, filtered		ppb		200	EPAS	7	0	0
FALLUMIN	34	Aluminum, filtered		ppb	31	200	EPAS	21	3	0
ANTIMONY	1139	Antimony		ppb		6	EPA	12	0	12*
FANTIMO	1139	Antimony, filtered		ppb		6	EPA	7	0	7*
FANTIMO	34	Antimony, filtered		ppb	24	6	EPA	21	0	21*
BENZENE		Benzene		ppb	.14	5	EPA	2	0	0
BERYLLIUM	1139	Beryllium		ppb		4	EPA	12	6	0
FBERYLL	1139	Beryllium, filtered		ppb		4	EPA	7	4	0
FBERYLL	34	Beryllium, filtered		ppb	.63	4	EPA	21	0	0
BRONIDE		Bronide		ppb	.72			17	3	
CALCIUM	1139	Calcium		ppb				25	25	
FCALCIU	1139	Calcium, filtered		ppb				7	7	
FCALCIU	34	Calcium, filtered		ppb	41			21	21	
CARBIDE		Carbon disulfide		ppb	.65			2	0	
TETRANE		Carbon tetrachloride		ppb	.22	5	EPA	2	0	0
CS-137		Cesium-137		pCi/L		200	EPA	8	0	0
CHLFORM		Chloroform		ppb	.21			2	2	
COBALT	1139	Cobalt		ppb				12	0	
FCOBALT	1139	Cobalt, filtered		ppb				7	0	
FCOBALT	34	Cobalt, filtered		ppb	5.3			21	0	
CO-58		Cobalt-58		pCi/L				8	0	
CO-60		Cobalt-60		pCi/L		100	EPA	8	0	0
COPPER	1139	Copper		ppb		1000	EPAS	12	8	0
FCOPPER	1139	Copper, filtered		ppb		1000	EPAS	7	4	0
FCOPPER	34	Copper, filtered		ppb	2.1	1000	EPAS	21	5	0
DIESEL_O		Diesel oil		ppb				3	0	
DO		Dissolved oxygen		ppb				10	10	
ETHCYAN		Ethyl cyanide		ppb	2.7			2	0	
EU-152		Europium-152		pCi/L				8	0	
EU-154		Europium-154		pCi/L				8	0	
EU-155		Europium-155		pCi/L				8	0	
BETA	1252	Gross beta		pCi/L				4	4	
BETA	136	Gross beta		pCi/L				17	16	
FE-59		Iron-59		pCi/L				8	0	
LEAD		Lead, filtered		ppb	.88	15	EPAA	16	1	0
MAGNES	1139	Magnesium		ppb				25	25	
FMAGNES	1139	Magnesium, filtered		ppb				7	7	
FMAGNES	34	Magnesium, filtered		ppb	26			21	21	
METHONE		Methyl ethyl ketone		ppb	3.9			2	0	
METHYCH		Methylene chloride		ppb	.62	5	EPA	2	0	0
NICKEL	1139	Nickel		ppb		100	EPA	12	2	0
FNICKEL	1139	Nickel, filtered		ppb		100	EPA	7	0	0
FNICKEL	34	Nickel, filtered		ppb	11	100	EPA	21	1	0
NITRITE	1083	Nitrite		ppb		4000	EPA	12	0	0
NITRITE	124	Nitrite		ppb	140	4000	EPA	17	0	0
OILORSE		Oil and grease		mg/L				1	0	

Table 4-3. Constituent List and Summary of Results
for 100-N RCRA Sites Data for Reporting Period
July 1 through September 30, 1995.
(sheet 3 of 3)

Short	(Method)	Constituent Name Full	Units	Lab CRQL	DWS		Number of Samples		
					Limit	Agency	Total	>CRQL	>DWS
PHOSPHA	1083	Phosphate	ppb	340			12	0	
PHOSPHA	124	Phosphate	ppb				17	0	
FPHOSPHA	1083	Phosphate, filtered	ppb				7	0	
POTASUM	1139	Potassium	ppb				12	12	
FPOTASS	1139	Potassium, filtered	ppb				7	7	
FPOTASS	34	Potassium, filtered	ppb	390			21	21	
SILVER	1139	Silver	ppb		100	EPAS	12	2	0
FSILVER	1139	Silver, filtered	ppb		100	EPAS	7	0	0
FSILVER	34	Silver, filtered	ppb	5.5	100	EPAS	21	0	0
STROMUM	1281	Strontium	pCi/L				21	17	
FSTROMUM	34	Strontium, filtered	ppb	.31			17	17	
PERCENE		Tetrachloroethene	ppb	.24	5	EPA	2	0	0
TAF		Tetrahydrofuran	ppb	.45			2	0	
FTIN		Tin, filtered	ppb	30			21	1	
TOLUENE		Toluene	ppb	.13	1000	EPA	2	0	0
TDS		Total dissolved solids	ppb		500000	EPAS	6	6	4
TPH		Total petroleum hydrocarbons	mg/L				2	0	
TRICENE		Trichloroethene	ppb	.24	5	EPA	2	0	0
TRITIUM		Tritium	pCi/L		20000	EPA	8	7	5
TURBID	1064	Turbidity	NTU				12	12	
TURBID	111	Turbidity	NTU				20	20	
TURBID	126	Turbidity	NTU				13	13	
VANADIUM	1139	Vanadium	ppb				12	12	
FVANADI	1139	Vanadium, filtered	ppb				7	7	
FVANADI	34	Vanadium, filtered	ppb	1.9			21	21	
VINYLIDE		Vinyl chloride	ppb	.33	2	EPA	2	0	0
XYLENE		Xylenes (total)	ppb	.57	10000	EPA	2	0	0
ZINC	1139	Zinc	ppb		5000	EPAS	12	12	0
FZINC	1139	Zinc, filtered	ppb		5000	EPAS	7	7	0
FZINC	34	Zinc, filtered	ppb	3.7	5000	EPAS	21	2	0

For explanation of this table, see Section 1.4 of report.

Table 4-4. Constituents with at Least One Detected Value for the
100-N RCRA Sites Data for Reporting Period
July 1 through September 30, 1995.
(sheet 1 of 17)

Well Name	Collection Date	Sample Number	14-cben 182/ppb .2/75	ALKALIN 357/ppb 3500/.	ALUMINUM 1139/ppb ./200s	FALUNIN 1139/ppb ./200s
199-N-14	8/30/95	B0GBV6		60000.00		
199-N-2	9/08/95	B0GBZ8		70000.00		
199-N-27	8/23/95	B0GBV6		80000.00		
199-N-3	9/15/95	B0GC09		320000.00 D		
199-N-3	9/15/95	B0GKX7			44.20 B	
199-N-32	9/07/95	B0GBV1		70000.00		
199-N-32	9/07/95	B0GJT4			30.80 B	
199-N-32	9/07/95	B0GJT3				24.60 U
199-N-34	8/23/95	B0GC16		80000.00		
199-N-41	8/23/95	B0GBM8		60000.00		
199-N-43	8/28/95	B0GBY1		80000.00		
199-N-57	8/25/95	B0GC24		120000.00		
199-N-59	8/25/95	B0GC14		200000.00		
199-N-67	9/07/95	B0GC32		80000.00		
199-N-67	9/07/95	B0GKX6			1010.00	
199-N-69	9/08/95	B0GC42		60000.00		
199-N-70	9/18/95	B0GBM0		70000.00		
199-N-70	9/18/95	B0GJV6			24.60 U	
199-N-70	9/18/95	B0GJV7				24.60 U
199-N-70	9/18/95	B0GJY0			24.60 U	
199-N-70	9/18/95	B0GJY1				24.60 U
199-N-71	8/28/95	B0GBT9		110000.00		
199-N-71	8/28/95	B0GC22		110000.00		
199-N-71	8/28/95	B0GKX3			25.80 B	
199-N-72	8/28/95	B0GBZ6	1.30 L	100000.00		
199-N-73	8/28/95	B0GC30		130000.00		
199-N-73	8/28/95	B0GKX9			31.20 B	
199-N-74	8/28/95	B0GBZ1		90000.00		
199-N-74	8/28/95	B0GKX0			24.60 U	
199-N-75	9/12/95	B0GBX1		70000.00		
199-N-75	9/12/95	B0GJV8			24.60 U	
199-N-75	9/12/95	B0GJV9				24.60 U
199-N-75	9/12/95	B0GJY2			24.60 U	
199-N-75	9/12/95	B0GJY3				24.60 U
199-N-76	9/05/95	B0GBX6		70000.00		
199-N-76	9/05/95	B0GJM0			24.60 U	
199-N-76	9/05/95	B0GJM1				24.60 U
199-N-77	9/15/95	B0GC08	.20 U	120000.00		
199-N-77	9/15/95	B0GJM2			24.60 U	
199-N-77	9/15/95	B0GJM3				24.60 U
199-N-81	8/30/95	B0GC03		70000.00		

Table 4-4. Constituents with at Least One Detected Value for the 100-N RCRA Sites
Data for Reporting Period July 1 through September 30, 1995.
(sheet 2 of 17)

Well Name	Collection Date	Sample Number	FALUNIN 34/ppb 31/2000	BARIUM 1139/ppb ./2000	FBARIUM 1139/ppb ./2000	FBARIUM 34/ppb 1.4/2000
199-N-14	8/30/95	80GB20	38.00 L			28.00
199-N-2	9/08/95	80GC02	31.00 U			28.00
199-N-27	8/23/95	80GBM1	31.00 U			34.00
199-N-3	9/15/95	80GC13	39.00 BL			160.00
199-N-3	9/15/95	80GRX7		158.00 B		
199-N-32	9/07/95	80GJT4		27.40 B		
199-N-32	9/07/95	80GJT5			28.30 B	
199-N-34	8/23/95	80GC20	31.00 U			39.00
199-N-41	8/23/95	80GBX0	31.00 U			22.00
199-N-43	8/28/95	80GBY5	31.00 U			28.00
199-N-57	8/25/95	80GC28	36.00 L			64.00
199-N-59	8/25/95	80GC15	31.00 U			23.00
199-N-67	9/07/95	80GC36	31.00 U			64.00
199-N-67	9/07/95	80GRX6		80.80 B		
199-N-69	9/08/95	80GC46	31.00 U			22.00
199-N-70	9/18/95	80GJV6		35.40 B		
199-N-70	9/18/95	80GJV7			34.80 B	
199-N-70	9/18/95	80GJY0		35.10 B		
199-N-70	9/18/95	80GJY1			35.80 B	
199-N-71	5/02/95	80FCB5	31.00 U			18.00 L
199-N-71	8/28/95	80GBV0	31.00 U			18.00
199-N-71	8/28/95	80GC23	31.00 U			18.00
199-N-71	8/28/95	80GRX8		19.00 B		
199-N-72	5/02/95	80FCB7	31.00 U			68.00
199-N-72	8/28/95	80GBZ7	31.00 U			70.00
199-N-73	5/03/95	80FCB9	31.00 U			46.00
199-N-73	8/28/95	80GC31	31.00 U			42.00
199-N-73	8/28/95	80GRX9		42.90 B		
199-N-74	8/28/95	80GBZ5	31.00 U			30.00
199-N-74	8/28/95	80GRY0		30.40 B		
199-N-75	9/12/95	80GJV8		26.80 B		
199-N-75	9/12/95	80GJV9			28.00 B	
199-N-75	9/12/95	80GJY2		26.30 B		
199-N-75	9/12/95	80GJY3			26.40 B	
199-N-76	9/05/95	80GJU0		17.90 B		
199-N-76	9/05/95	80GJN1			18.60 B	
199-N-77	5/03/95	80FCC1	31.00 U			37.00
199-N-77	9/15/95	80GJN2		37.90 B		
199-N-77	9/15/95	80GJU3			37.90 B	
199-N-81	8/30/95	80GC07	31.00 U			33.00

Table 4-4. Constituents with at Least One Detected Value for the 100-N RCRA Sites
Data for Reporting Period July 1 through September 30, 1995.
(sheet 3 of 17)

Well Name	Collection Date	Sample Number	BERYLIUM 1139/ppb .74	FBERYLL 1139/ppb .74	BROMIDE 124/ppb 72/.	FCADMIU 34/ppb .98/5
199-N-14	8/30/95	B0GBV6			72.00 U	
199-N-14	8/30/95	B0GBZ0				1.50 L
199-N-2	9/08/95	B0GBZ8			72.00 U	
199-N-2	9/08/95	B0GC02				.98 U
199-N-27	8/23/95	B0GBV6			72.00 U	
199-N-27	8/23/95	B0GBM1				1.00 L
199-N-3	9/15/95	B0GC09			150.00	
199-N-3	9/15/95	B0GC13				.98 U
199-N-3	9/15/95	B0GK7	.84 B			
199-N-32	9/07/95	B0GJT4	.50 U			
199-N-32	9/07/95	B0GJT5		.50 U		
199-N-34	8/23/95	B0GC16			72.00 U	
199-N-34	8/23/95	B0GC20				.98 U
199-N-41	8/23/95	B0GBM6			72.00 U	
199-N-41	8/23/95	B0GBX0				.98 U
199-N-43	8/28/95	B0GBY1			72.00 U	
199-N-43	8/28/95	B0GBY5				.98 U
199-N-57	8/25/95	B0GC24			100.00 L	
199-N-57	8/25/95	B0GC28				1.50 L
199-N-59	8/25/95	B0GC14			200.00	
199-N-59	8/25/95	B0GC15				.98 U
199-N-67	9/07/95	B0GC32			72.00 U	
199-N-67	9/07/95	B0GC36				.98 U
199-N-67	9/07/95	B0GKX6	.50 U			
199-N-69	9/08/95	B0GC42			72.00 U	
199-N-69	9/08/95	B0GC46				.98 U
199-N-70	9/18/95	B0BJV6	.51 B			
199-N-70	9/18/95	B0BJV7		.50 U		
199-N-70	9/18/95	B0BJV0	.51 B			
199-N-70	9/18/95	B0BJY1		.59 B		
199-N-71	5/02/95	B0FCB5				.98 U
199-N-71	8/28/95	B0GBT9			72.00 U	
199-N-71	8/28/95	B0GBV0				.98 U
199-N-71	8/28/95	B0GC22			72.00 U	
199-N-71	8/28/95	B0GC23				1.10 L
199-N-71	8/28/95	B0GKX8	.50 U			
199-N-72	5/02/95	B0FCB7				.98 U
199-N-72	8/28/95	B0GBZ6			72.00 U	
199-N-72	8/28/95	B0GBZ7				.98 U
199-N-73	5/03/95	B0FCB9				.98 U
199-N-73	8/28/95	B0GC30			72.00 U	
199-N-73	8/28/95	B0GC31				.98 U
199-N-73	8/28/95	B0GK9	.50 U			
199-N-74	8/28/95	B0GBZ1			72.00 U	
199-N-74	8/28/95	B0GBZ5				.98 U
199-N-74	8/28/95	B0GKX0	.50 U			
199-N-75	9/12/95	B0BJV8	.69 B			
199-N-75	9/12/95	B0BJV9		.92 B		
199-N-75	9/12/95	B0BJY2	.68 B			
199-N-75	9/12/95	B0BJY3		.92 B		
199-N-76	9/05/95	B0GKX0	.50 U			
199-N-76	9/05/95	B0GKX1		.69 B		
199-N-77	5/03/95	B0FCB1				.98 U
199-N-77	9/15/95	B0BJW2	.66 B			
199-N-77	9/15/95	B0BJW3		.50 U		
199-N-81	8/30/95	B0GC03			72.00 U	
199-N-81	8/30/95	B0GC07				.98 U

Table 4-4. Constituents with at Least One Detected Value for the 100-N RCRA Sites
Data for Reporting Period July 1 through September 30, 1995.
(sheet 4 of 17)

Well Name	Collection Date	Sample Number	CALCIUM 1139/ppb ./.	FCALCIU 1139/ppb ./.	FCALCIU 34/ppb 41/.	CHLORID 1083/ppb ./250000s
199-N-14	8/04/95	B0GB55	27500.00			
199-N-14	8/30/95	B0GB20			27000.00	
199-N-14	9/06/95	B0GF89	29500.00			
199-N-2	8/08/95	B0GB53	35900.00			
199-N-2	9/08/95	B0GC02			38000.00	
199-N-2	9/08/95	B0GF87	38500.00			
199-N-27	8/23/95	B0GBW1			52000.00	
199-N-3	8/08/95	B0GB54	141000.00			
199-N-3	8/08/95	B0GB70	139000.00			
199-N-3	8/08/95	B0GB71	150000.00			
199-N-3	9/15/95	B0GC13			170000.00	
199-N-3	9/15/95	B0GF88	165000.00			
199-N-3	9/15/95	B0GBX7	172000.00			30600.00
199-N-32	9/07/95	B0GJT4	35900.00			1920.00
199-N-32	9/07/95	B0GJT5		37900.00		
199-N-34	8/23/95	B0GC20			62000.00	
199-N-41	8/23/95	B0GBX0			32000.00	
199-N-43	8/28/95	B0GBY5			35000.00	
199-N-57	8/25/95	B0GC28			65000.00	
199-N-59	8/25/95	B0GC15			28000.00	
199-N-67	9/07/95	B0GC36			65000.00	
199-N-67	9/07/95	B0GBX6	70200.00			3230.00
199-N-67	9/15/95	B0GFT2	59400.00			
199-N-69	9/08/95	B0GC46			30000.00	
199-N-70	9/18/95	B0GJV6	36400.00			4860.00
199-N-70	9/18/95	B0GJV7		36400.00		
199-N-70	9/18/95	B0GJY0	36400.00			4580.00
199-N-70	9/18/95	B0GJY1		37100.00		
199-N-71	5/02/95	B0FCB5			17000.00	
199-N-71	8/28/95	B0GBV0			17000.00	
199-N-71	8/28/95	B0GC23			17000.00	
199-N-71	8/28/95	B0GBX8	17800.00			3560.00
199-N-72	5/02/95	B0FCB7			93000.00	
199-N-72	8/28/95	B0GB27			90000.00	
199-N-73	5/03/95	B0FCB9			28000.00	
199-N-73	8/28/95	B0GC31			28000.00	
199-N-73	8/28/95	B0GBX9	28500.00			5670.00
199-N-74	8/28/95	B0GBZ5			41000.00	
199-N-74	8/28/95	B0GBY0	41200.00			6150.00
199-N-75	7/20/95	B0GB60	30200.00			
199-N-75	9/12/95	B0GFT3	29200.00			
199-N-75	9/12/95	B0GJV8	30200.00			1320.00
199-N-75	9/12/95	B0GJV9		30000.00		
199-N-75	9/12/95	B0GJY2	29400.00			1270.00
199-N-75	9/12/95	B0GJY3		29200.00		
199-N-76	8/02/95	B0GB61	26100.00			
199-N-76	9/05/95	B0GBW0	28300.00			1230.00
199-N-76	9/05/95	B0GBW1		28500.00		
199-N-76	9/06/95	B0GFT4	27800.00			
199-N-77	5/03/95	B0FC01			33000.00	
199-N-77	9/15/95	B0GJU2	30500.00			5850.00
199-N-77	9/15/95	B0GJU3		31200.00		
199-N-81	8/30/95	B0GC07			43000.00	

Table 4-4. Constituents with at Least One Detected Value for the 100-N RCRA Sites
Data for Reporting Period July 1 through September 30, 1995.
(sheet 5 of 17)

Well Name	Collection Date	Sample Number	CHLORID 124/ppb 110/250000s	FCHELRID 1083/ppb ./250000s	CHLFORM 182/ppb ./21/.	CHROMUM 1139/ppb ./100
199-N-14	8/30/95	B0GBV6	2100.00			
199-N-2	9/08/95	B0GBZ8	1800.00			
199-N-27	8/23/95	B0GBV6	7000.00			
199-N-3	9/15/95	B0BC09	33000.00 D			
199-N-3	9/15/95	B0GKX7				9.80 B
199-N-32	9/07/95	B0GJT4				2.80 U
199-N-32	9/07/95	B0GJT5		1930.00		
199-N-34	8/23/95	B0GC16	6800.00			
199-N-41	8/23/95	B0GBW6	5900.00			
199-N-43	8/28/95	B0GBY1	7100.00			
199-N-57	8/25/95	B0GC24	36000.00 D			
199-N-59	8/25/95	B0GC14	14000.00 D			
199-N-67	9/07/95	B0GC32	3000.00			
199-N-67	9/07/95	B0GKX6				7.40 B
199-N-69	9/08/95	B0GC42	2300.00			
199-N-70	9/18/95	B0GJV6				11.50 B
199-N-70	9/18/95	B0GJV7		4680.00		
199-N-70	9/18/95	B0GJY0				14.70 B
199-N-70	9/18/95	B0GJY1		4800.00		
199-N-71	8/28/95	B0GB19	3300.00			
199-N-71	8/28/95	B0GC22	3300.00			
199-N-71	8/28/95	B0GKX8				41.20
199-N-72	8/28/95	B0GBZ6	7400.00		6.00	
199-N-73	8/28/95	B0GC30	5600.00			
199-N-73	8/28/95	B0GKX9				16.90 B
199-N-74	8/28/95	B0GBZ1	5800.00			
199-N-74	8/28/95	B0GKX0				41.80
199-N-75	9/12/95	B0GJV8				2.80 U
199-N-75	9/12/95	B0GJV9		1350.00		
199-N-75	9/12/95	B0GJV2				2.80 U
199-N-75	9/12/95	B0GJV3		1330.00		
199-N-76	9/05/95	B0GJW0				3.10 B
199-N-76	9/05/95	B0GJW1		1200.00		
199-N-77	9/15/95	B0GCC8			8.30 Q	
199-N-77	9/15/95	B0GJW2				11.20 B
199-N-77	9/15/95	B0GJW3		6140.00		
199-N-81	8/30/95	B0GC03	5200.00			

Well Name	Collection Date	Sample Number	FCHEMUM 1139/ppb ./100	FCHEMUM 34/ppb 3.7/100	COPPER 1139/ppb ./1000s	FCOPPER 1139/ppb ./1000s
199-N-14	8/30/95	B0GBZ0		3.70 U		
199-N-2	9/08/95	B0GC02		3.70 U		
199-N-27	8/23/95	B0GBW1		13.00		
199-N-3	9/15/95	B0GC13		5.20 L		
199-N-3	9/15/95	B0GKX7			21.80 B	
199-N-32	9/07/95	B0GJT4			6.10 B	
199-N-32	9/07/95	B0GJT5	2.80 U			10.80 B
199-N-34	8/23/95	B0GC20		5.20 L		
199-N-41	8/23/95	B0GBX0		4.50 L		
199-N-43	8/28/95	B0GBY5		23.00		
199-N-57	8/25/95	B0GC28		3.90 L		
199-N-59	8/25/95	B0GC15		3.70 U		
199-N-67	9/07/95	B0GC36		3.70 U		
199-N-67	9/07/95	B0GKX6			11.40 B	
199-N-69	9/08/95	B0GC46		4.50 L		

Table 4-4. Constituents with at Least One Detected Value for the 100-N RCRA Sites
Data for Reporting Period July 1 through September 30, 1995.
(sheet 6 of 17)

Well Name	Collection Date	Sample Number	FCROMI 1139/ppb ./100	FCROMI 34/ppb 3.7/100	COPPER 1139/ppb ./1000s	FCOPPER 1139/ppb ./1000s
199-N-70	9/18/95	B0GJV6			4.70 U	
199-N-70	9/18/95	B0GJV7	10.80 B			4.70 U
199-N-70	9/18/95	B0GJV0			4.70 U	
199-N-70	9/18/95	B0GJV1	11.10 B			4.70 U
199-N-71	5/02/95	B0FCB5		4.90 L		
199-N-71	8/28/95	B0GBV0		4.80 L		
199-N-71	8/28/95	B0GC23		3.80 L		
199-N-71	8/28/95	B0GHX8			4.70 U	
199-N-72	5/02/95	B0FCB7		3.70 U		
199-N-72	8/28/95	B0GBZ7		3.70 U		
199-N-73	5/03/95	B0FCB9		3.70 U		
199-N-73	8/28/95	B0GC31		3.70 U		
199-N-73	8/28/95	B0GHX9			4.70 U	
199-N-74	8/28/95	B0GBZ5		14.00		
199-N-74	8/28/95	B0GNY0			7.20 B	
199-N-75	9/12/95	B0GJV8			9.00 B	
199-N-75	9/12/95	B0GJV9	2.80 U			23.00 B
199-N-75	9/12/95	B0GJV2			11.60 B	
199-N-75	9/12/95	B0GJV3	2.80 U			19.60 B
199-N-76	9/05/95	B0GJW0			13.60 B	
199-N-76	9/05/95	B0GJM1	2.80 U			5.20 B
199-N-77	5/03/95	B0FCC1		3.70 U		
199-N-77	9/15/95	B0GJM2			4.70 B	
199-N-77	9/15/95	B0GJM3	3.20 B			4.70 U
199-N-81	8/30/95	B0GC07		9.10 L		

Well Name	Collection Date	Sample Number	FCOPPER 34/ppb 2.1/1000s	DO 121/ppb ./	FLUORID 1083/ppb ./4000	FLUORID 124/ppb 52/4000
199-N-14	8/04/95	B0GB55		2400.00		
199-N-14	8/30/95	B0GBY6				300.00
199-N-14	8/30/95	B0GBZ0	2.90 L			
199-N-14	9/06/95	B0GFS9		2730.00		
199-N-2	9/08/95	B0GBZ8				300.00
199-N-2	9/08/95	B0GC02	2.10 U			
199-N-27	8/23/95	B0GBV6				200.00
199-N-27	8/23/95	B0GBW1	2.10 U			
199-N-3	9/15/95	B0GC09				1000.00
199-N-3	9/15/95	B0GC13	2.40 BL			
199-N-3	9/15/95	B0GHX7			200.00 U	
199-N-32	9/07/95	B0GJT4		5100.00	120.00	
199-N-34	8/23/95	B0GC16				400.00
199-N-34	8/23/95	B0GC20	2.10 U			
199-N-41	8/23/95	B0GBW6				100.00
199-N-41	8/23/95	B0GBX0	2.10 U			
199-N-43	8/28/95	B0GBY1				500.00
199-N-43	8/28/95	B0GBY5	2.10 U			
199-N-57	8/25/95	B0GC24				700.00
199-N-57	8/25/95	B0GC28	4.90 L			
199-N-59	8/25/95	B0GC14				1300.00
199-N-59	8/25/95	B0GC15	3.40 L			
199-N-67	9/07/95	B0GC32				350.00
199-N-67	9/07/95	B0GC36	2.10 U			
199-N-67	9/07/95	B0GHX6			100.00 U	
199-N-67	9/15/95	B0GFT2		5600.00		

Table 4-4. Constituents with at Least One Detected Value for the 100-N RCRA Sites
Data for Reporting Period July 1 through September 30, 1995.
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Well Name	Collection Date	Sample Number	FCOPPER 34/ppb 2.1/1000s	CO 121/ppb ./.	FLUORID 1083/ppb ./4000	FLUORID 124/ppb 52/4000
199-N-69	9/08/95	B0GC42				250.00
199-N-69	9/08/95	B0GC46	2.10 U			
199-N-70	9/18/95	B0GJV6		6300.00	170.00	
199-N-70	9/18/95	B0GJV0		6300.00	180.00	
199-N-71	5/02/95	B0FCB5	2.10 U			
199-N-71	8/28/95	B0GBT9				600.00
199-N-71	8/28/95	B0GBV0	2.10 U			
199-N-71	8/28/95	B0GC22				600.00
199-N-71	8/28/95	B0GC23	2.10 U			
199-N-71	8/28/95	B0GHH8			350.00	
199-N-72	5/02/95	B0FCB7	3.20 L			
199-N-72	8/28/95	B0GBZ6				1100.00
199-N-72	8/28/95	B0GBZ7	2.10 U			
199-N-73	5/03/95	B0FCB9	2.10 U			
199-N-73	8/28/95	B0GC30				1400.00
199-N-73	8/28/95	B0GC31	2.10 U			
199-N-73	8/28/95	B0GHH9			570.00	
199-N-74	8/28/95	B0GBZ1				500.00
199-N-74	8/28/95	B0GBZ5	2.10 U			
199-N-74	8/28/95	B0GNY0			280.00	
199-N-75	9/12/95	B0GJV8			140.00	
199-N-75	9/12/95	B0GJV2			150.00	
199-N-76	8/02/95	B0GB61		5010.00		
199-N-76	9/05/95	B0GJV0		3500.00	100.00 U	
199-N-76	9/06/95	B0GFT4		5100.00		
199-N-77	5/03/95	B0FCC1	2.10 U			
199-N-77	9/15/95	B0GJV2		8650.00	670.00	
199-N-81	8/30/95	B0GC03				300.00
199-N-81	8/30/95	B0GC07	2.10 U			

Well Name	Collection Date	Sample Number	FFLUORID 1083/ppb ./4000	ALPHA 1247/pCi/L ./15	ALPHA 135/pCi/L ./15	BETA 1252/pCi/L ./.
199-N-14	8/30/95	B0GBV6			.01 U	
199-N-2	9/08/95	B0GBZ8			.19 U	
199-N-27	8/23/95	B0GBV6			1.45	
199-N-3	9/15/95	B0GC09			9.13	
199-N-32	9/07/95	B0GJV4		1.59 J		13.70
199-N-32	9/07/95	B0GJV5	130.00			
199-N-34	8/23/95	B0GC16			2.66	
199-N-41	8/23/95	B0GBW6			.41 U	
199-N-43	8/28/95	B0GBY1			1.59	
199-N-57	8/25/95	B0GC24			1.72 U	
199-N-59	8/25/95	B0GC14			2.78	
199-N-67	9/07/95	B0GC32			1.09	
199-N-69	9/08/95	B0GC42			.54 U	
199-N-70	9/18/95	B0GJV7	180.00			
199-N-70	9/18/95	B0GJV1	190.00			
199-N-71	8/28/95	B0GBT9			1.28	
199-N-71	8/28/95	B0GC22			.40 U	
199-N-72	8/28/95	B0GBZ6			.93 U	
199-N-73	8/28/95	B0GC30			2.38 UY	
199-N-74	8/28/95	B0GBZ1			2.11	
199-N-75	9/12/95	B0GJV8		.30 U		1390.00
199-N-75	9/12/95	B0GJV9	160.00			

Table 4-4. Constituents with at Least One Detected Value for the 100-N RCRA Sites
Data for Reporting Period July 1 through September 30, 1995.
(sheet 8 of 17)

Well Name	Collection Date	Sample Number	FLLUORID 1083/ppb ./4000	ALPHA 1247/pCi/L ./15	ALPHA 135/pCi/L ./15	BETA 1252/pCi/L ./.
199-N-75	9/12/95	B0GJY2		.65 U		1380.00
199-N-75	9/12/95	B0GJY3	160.00			
199-N-76	9/05/95	B0GJW0		0.00 U		185.00
199-N-76	9/05/95	B0GJW1	110.00			
199-N-77	9/15/95	B0GJW3	660.00			
199-N-81	8/30/95	B0GC03			1.45	

Well Name	Collection Date	Sample Number	BETA 136/pCi/L ./.	IRON 1139/ppb ./300s	FIBON 1139/ppb ./300s	FIBON 34/ppb 8.9/300s
199-N-14	8/30/95	B0GBY6	1400.00			
199-N-14	8/30/95	B0GBZ0				13.00 BL
199-N-2	9/08/95	B0GBZ8	232.00			
199-N-2	9/08/95	B0GC02				8.90 U
199-N-27	8/23/95	B0GBV6	323.00			
199-N-27	8/23/95	B0GBW1				8.90 U
199-N-3	9/15/95	B0GC09	1880.00			
199-N-3	9/15/95	B0GC13				19.00 L
199-N-3	9/15/95	B0GIX7		267.00		
199-N-32	9/07/95	B0GJY4		585.00		
199-N-32	9/07/95	B0GJY5			58.50 B	
199-N-34	8/23/95	B0GC16	141.00			
199-N-34	8/23/95	B0GC20				12.00 BL
199-N-41	8/23/95	B0GBW6	6.25			
199-N-41	8/23/95	B0GBX0				26.00 BL
199-N-43	8/28/95	B0GBY1	5.21			
199-N-43	8/28/95	B0GBY5				34.00
199-N-57	8/25/95	B0GC24	43.30			
199-N-57	8/25/95	B0GC28				15.00 BL
199-N-59	8/25/95	B0GC14	3.87			
199-N-59	8/25/95	B0GC15				8.90 U
199-N-67	9/07/95	B0GC32	14200.00			
199-N-67	9/07/95	B0GC36				8.90 U
199-N-67	9/07/95	B0GIX6		1490.00		
199-N-69	9/08/95	B0GC42	2.04 U			
199-N-69	9/08/95	B0GC46				8.90 U
199-N-70	9/18/95	B0GJY6		56.40 B		
199-N-70	9/18/95	B0GJY7			34.60 B	
199-N-70	9/18/95	B0GJY0		58.50 B		
199-N-70	9/18/95	B0GJY1			37.80 B	
199-N-71	5/02/95	B0FC85				32.00 B
199-N-71	8/28/95	B0GBY9	3.17			
199-N-71	8/28/95	B0GBV0				22.00 L
199-N-71	8/28/95	B0GC22	3.69			
199-N-71	8/28/95	B0GC23				22.00 L
199-N-71	8/28/95	B0GIX8		207.00		
199-N-72	5/02/95	B0FC87				26.00 B
199-N-72	8/28/95	B0GBZ6	6.84			
199-N-72	8/28/95	B0GBZ7				8.90 U
199-N-73	5/03/95	B0FC89				17.00 BL
199-N-73	8/28/95	B0GC30	2.73			
199-N-73	8/28/95	B0GC31				9.10 L
199-N-73	8/28/95	B0GIX9		101.00		
199-N-74	8/28/95	B0GBZ1	6.36			
199-N-74	8/28/95	B0GBZ5				8.90 U
199-N-74	8/28/95	B0GIX0		152.00		

Table 4-4. Constituents with at Least One Detected Value for the 100-N RCRA Sites
Data for Reporting Period July 1 through September 30, 1995.
(sheet 9 of 17)

Well Name	Collection Date	Sample Number	BETA 136/pCl/L ./.	IRON 1139/ppb ./300s	FIRON 1139/ppb ./300s	FIRON 34/ppb 8.9/300s
199-N-75	9/12/95	80GJV8		36.70 B		
199-N-75	9/12/95	80GJV9			40.60 B	
199-N-75	9/12/95	80GJY2		30.90 B		
199-N-75	9/12/95	80GJY3			39.10 B	
199-N-76	9/05/95	80GJW0		41.00 B		
199-N-76	9/05/95	80GJW1			56.20 B	
199-N-77	5/03/95	80GCC1				16.00 BL
199-N-77	9/15/95	80GJU2		63.90 B		
199-N-77	9/15/95	80GJW3			32.20 B	
199-N-81	8/30/95	80GC03	1660.00			
199-N-81	8/30/95	80GC07				9.30 BL

Well Name	Collection Date	Sample Number	FLEAD 40/ppb .88/15s	MAGNES 1139/ppb ./.	FMAGNES 1139/ppb ./.	FMAGNES 34/ppb 26/.
199-N-14	8/04/95	80GB55		4710.00 B		
199-N-14	8/30/95	80GB20	.88 UDN			4400.00
199-N-14	9/06/95	80GFS9		5160.00		
199-N-2	8/08/95	80GB53		7170.00		
199-N-2	9/08/95	80GC02	1.50 LD			7100.00
199-N-2	9/08/95	80GFS7		8000.00		
199-N-27	8/23/95	80GBW1	.88 U			10000.00
199-N-3	8/08/95	80GB54		25000.00		
199-N-3	8/08/95	80GB70		24400.00		
199-N-3	8/08/95	80GB71		25600.00		
199-N-3	9/15/95	80GC13	.88 U			29000.00
199-N-3	9/15/95	80GFS8		29200.00		
199-N-3	9/15/95	80GHS7		30500.00		
199-N-32	9/07/95	80GBV5	.88 UD			
199-N-32	9/07/95	80GJT4		10400.00		
199-N-32	9/07/95	80GJT5			10800.00	
199-N-34	8/23/95	80GC20	.88 U			11000.00
199-N-41	8/23/95	80GBX0	.88 U			7500.00
199-N-43	8/28/95	80GBY5	.88 U			12000.00
199-N-57	8/25/95	80GC28	.88 U			13000.00
199-N-59	8/25/95	80GC15				5200.00
199-N-67	9/07/95	80GC36	.88 UD			10000.00
199-N-67	9/07/95	80GHS6		11800.00		
199-N-67	9/15/95	80GFT2		10500.00		
199-N-69	9/08/95	80GC46	.88 UD			5800.00
199-N-70	9/18/95	80GBW5	.88 UX			
199-N-70	9/18/95	80GJV6		10300.00		
199-N-70	9/18/95	80GJV7			10400.00	
199-N-70	9/18/95	80GJY0		10400.00		
199-N-70	9/18/95	80GJY1			10600.00	
199-N-71	5/02/95	80FC85				4900.00
199-N-71	8/28/95	80GBV0				4800.00
199-N-71	8/28/95	80GC23				4800.00
199-N-71	8/28/95	80GBX8		4850.00 B		
199-N-72	5/02/95	80FC87				20000.00
199-N-72	8/28/95	80GB27				19000.00
199-N-73	5/03/95	80FC89				5700.00
199-N-73	8/28/95	80GC31				5600.00
199-N-73	8/28/95	80GHS9		5780.00		
199-N-74	8/28/95	80GB25	.88 U			13000.00
199-N-74	8/28/95	80GNY0		12700.00		

Table 4-4. Constituents with at Least One Detected Value for the 100-N RCRA Sites
Data for Reporting Period July 1 through September 30, 1995.
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Well Name	Collection Date	Sample Number	FLEAD 40/ppb .88/15s	MAGNES 1139/ppb ./.	FMAGNES 1139/ppb ./.	FMAGNES 34/ppb 26/.
199-N-75	7/20/95	80GB60		5130.00		
199-N-75	9/12/95	80GBX5	.88 UH			
199-N-75	9/12/95	80BFT3		5000.00		
199-N-75	9/12/95	80GJV8		5280.00		
199-N-75	9/12/95	80GJV9			5300.00	
199-N-75	9/12/95	80GJY2		5140.00		
199-N-75	9/12/95	80GJY3			5140.00	
199-N-76	8/02/95	80GB61		4500.00		
199-N-76	9/05/95	80GBY0	.88 UD			
199-N-76	9/05/95	80GJW0		4890.00 B		
199-N-76	9/05/95	80GJW1			5000.00 B	
199-N-76	9/06/95	80GFT4		5030.00		
199-N-77	5/03/95	80FDC1				8300.00
199-N-77	9/15/95	80GJW2		7900.00		
199-N-77	9/15/95	80GJW3			8040.00	
199-N-81	8/30/95	80GC07	.88 UDH			8200.00

Well Name	Collection Date	Sample Number	FMANGEE 1139/ppb ./50s	FMANGAN 1139/ppb ./50s	FMANGAN 34/ppb .55/50s	NICKEL 1139/ppb ./100
199-N-14	8/30/95	80GB20			3.20 BL	
199-N-2	9/08/95	80GC02			1.30 BL	
199-N-27	8/23/95	80GBW1			4.00 BL	
199-N-3	9/15/95	80GC13			.55 U	
199-N-3	9/15/95	80GHX7	14.80 B			14.20 U
199-N-32	9/07/95	80GJT4	12.50 B			14.20 U
199-N-32	9/07/95	80GJT5		11.20 B		
199-N-34	8/23/95	80GC20			.65 BL	
199-N-41	8/23/95	80GBX0			.63 BL	
199-N-43	8/28/95	80GBY5			2.90 L	
199-N-57	8/25/95	80GC28			1.30 BL	
199-N-59	8/25/95	80GC15			11.00 B	
199-N-67	9/07/95	80GC36			1.70 BL	
199-N-67	9/07/95	80GHX6	29.40			14.20 U
199-N-69	9/08/95	80GC46			.98 BL	
199-N-70	9/18/95	80GJV6	4.10 B			14.20 U
199-N-70	9/18/95	80GJV7		3.60 B		
199-N-70	9/18/95	80GJY0	3.90 B			14.20 U
199-N-70	9/18/95	80GJT1		4.10 B		
199-N-71	5/02/95	80FC85			1.80 L	
199-N-71	8/28/95	80GBY0			1.40 L	
199-N-71	8/28/95	80GC23			1.10 L	
199-N-71	8/28/95	80GHX8	5.70 B			26.30 B
199-N-72	5/02/95	80FC87			.55 U	
199-N-72	8/28/95	80GBZ7			.85 L	
199-N-73	5/03/95	80FC89			1.90 BL	
199-N-73	8/28/95	80GC31			1.60 L	
199-N-73	8/28/95	80GHX9	4.20 B			15.60 B
199-N-74	8/28/95	80GBZ5			1.10 L	
199-N-74	8/28/95	80GHY0	5.80 B			14.20 U
199-N-75	9/12/95	80GJV8	4.60 B			14.20 U
199-N-75	9/12/95	80GJV9		5.30 B		
199-N-75	9/12/95	80GJY2	3.70 B			14.20 U
199-N-75	9/12/95	80GJY3		5.10 B		
199-N-76	9/05/95	80GJW0	3.30 B			14.20 U
199-N-76	9/05/95	80GJW1		4.50 B		

Table 4-4. Constituents with at Least One Detected Value for the 100-N RCRA Sites
Data for Reporting Period July 1 through September 30, 1995.
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Well Name	Collection Date	Sample Number	MANGANESE 1139/ppb ./50s	MANGANESE 1139/ppb ./50s	MANGANESE 34/ppb ./50s	NICKEL 1139/ppb ./100
199-N-77	5/03/95	80FCC1			.84 BL	
199-N-77	9/15/95	80GJ42	4.10 B			14.20 U
199-N-77	9/15/95	80GJ43		3.30 B		
199-N-81	8/30/95	80GC07			1.80 BL	

Well Name	Collection Date	Sample Number	NICKEL 1139/ppb ./100	NICKEL 34/ppb 11/100	NITRATE 124/ppb 120/45000	FM03-M 1083/ppb ./10000
199-N-14	8/30/95	80GBY6			13000.00 D	
199-N-14	8/30/95	80GB20		11.00 U		
199-N-2	9/08/95	80GB28			51000.00 D	
199-N-2	9/08/95	80GC02		11.00 U		
199-N-27	8/23/95	80GBV6			17000.00 D	
199-N-27	8/23/95	80GBW1		11.00 U		
199-N-3	9/15/95	80GC09			73000.00 D	
199-N-3	9/15/95	80GC13		11.00 U		
199-N-32	9/07/95	80GJT5	14.20 U			10600.00
199-N-34	8/23/95	80GC16			14000.00 D	
199-N-34	8/23/95	80GC20		11.00 U		
199-N-41	8/23/95	80GBW6			13000.00 D	
199-N-41	8/23/95	80GBW0		11.00 U		
199-N-43	8/28/95	80GBY1			19000.00 D	
199-N-43	8/28/95	80GBY5		11.00 U		
199-N-57	8/25/95	80GC24			22000.00 D	
199-N-57	8/25/95	80GC28		21.00 L		
199-N-59	8/25/95	80GC14			33000.00 D	
199-N-59	8/25/95	80GC15		11.00 U		
199-N-67	9/07/95	80GC32			130000.00 DF	
199-N-67	9/07/95	80GC36		11.00 U		
199-N-69	9/08/95	80GC42			11000.00 D	
199-N-69	9/08/95	80GC46		11.00 U		
199-N-70	9/18/95	80GJV7	14.20 U			4300.00
199-N-70	9/18/95	80GJT1	14.20 U			4230.00
199-N-71	5/02/95	80FC85		11.00 U		
199-N-71	8/28/95	80GBT9			1900.00	
199-N-71	8/28/95	80GBV0		11.00 U		
199-N-71	8/28/95	80GC22			1900.00	
199-N-71	8/28/95	80GC23		11.00 U		
199-N-72	5/02/95	80FC87		11.00 U		
199-N-72	8/28/95	80GB26			6900.00	
199-N-72	8/28/95	80GB27		11.00 U		
199-N-73	5/03/95	80FC89		11.00 U		
199-N-73	8/28/95	80GC30			4200.00	
199-N-73	8/28/95	80GC31		11.00 U		
199-N-74	8/28/95	80GB21			7300.00	
199-N-74	8/28/95	80GB25		11.00 U		
199-N-75	9/12/95	80GJV9	14.20 U			1600.00
199-N-75	9/12/95	80GJY3	14.20 U			1560.00
199-N-76	9/03/95	80GJV1	14.20 U			1930.00
199-N-77	5/03/95	80FCC1		11.00 U		
199-N-77	9/15/95	80GJ43	14.20 U			810.00
199-N-81	8/30/95	80GC03			24000.00 D	
199-N-81	8/30/95	80GC07		11.00 U		

Table 4-4. Constituents with at Least One Detected Value for the 100-N RCRA Sites
Data for Reporting Period July 1 through September 30, 1995.
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Well Name	Collection Date	Sample Number	NO3-N 1083/ppb ./10000	POTASSIUM 1139/ppb ./.	FPOTASS 1139/ppb ./.	FPOTASS 34/ppb 390/.
199-N-14	8/30/95	BOGB20				2000.00
199-N-2	9/08/95	BOGC02				2200.00
199-N-27	8/23/95	BOGBW1				3900.00
199-N-3	9/15/95	BOGC13				4600.00
199-N-3	9/15/95	BOGHX7	16400.00	4330.00 B		
199-N-32	9/07/95	BOGJT4	10900.00	4030.00 B		
199-N-32	9/07/95	BOGJT5			3080.00 B	
199-N-34	8/23/95	BOGC20				3600.00
199-N-41	8/23/95	BOGBX0				3300.00
199-N-43	8/28/95	BOGBY5				4300.00
199-N-57	8/25/95	BOGC28				6200.00
199-N-59	8/25/95	BOGC15				4100.00
199-N-67	9/07/95	BOGC36				3000.00
199-N-67	9/07/95	BOGBX6	32900.00	2730.00 B		
199-N-69	9/08/95	BOGC46				2400.00
199-N-70	9/18/95	BOGJV6	4300.00	3070.00 B		
199-N-70	9/18/95	BOGJV7			3200.00 B	
199-N-70	9/18/95	BOGJY0	4260.00	3240.00 B		
199-N-70	9/18/95	BOGJY1			4330.00 B	
199-N-71	5/02/95	BOFCB5				3900.00
199-N-71	8/28/95	BOGBV0				4300.00
199-N-71	8/28/95	BOGC23				3800.00
199-N-71	8/28/95	BOGHX8	430.00	4140.00 B		
199-N-72	5/02/95	BOFCB7				5900.00
199-N-72	8/28/95	BOGB27				6200.00
199-N-73	5/03/95	BOFCB9				2800.00
199-N-73	8/28/95	BOGC31				3400.00
199-N-73	8/28/95	BOGHX9	960.00	3400.00 B		
199-N-74	8/28/95	BOGB25				4600.00
199-N-74	8/28/95	BOGHY0	1760.00	4900.00 B		
199-N-75	9/12/95	BOGJV8	1600.00	2310.00 B		
199-N-75	9/12/95	BOGJV9			2300.00 B	
199-N-75	9/12/95	BOGJY2	1590.00	2420.00 B		
199-N-75	9/12/95	BOGJY3			2510.00 B	
199-N-76	9/05/95	BOGJW0	1950.00	2290.00 B		
199-N-76	9/05/95	BOGJW1			2540.00 B	
199-N-77	5/03/95	BOFCC1				4600.00
199-N-77	9/15/95	BOGJW2	790.00	3890.00 B		
199-N-77	9/15/95	BOGJW3			3820.00 B	
199-N-81	8/30/95	BOGC07				4100.00

Well Name	Collection Date	Sample Number	SILVER 1139/ppb ./1000	FSILVER 1139/ppb ./1000	SODIUM 1139/ppb ./.	FSODIUM 1139/ppb ./.
199-N-3	9/15/95	BOGRX7	4.60 U		17600.00	
199-N-32	9/07/95	BOGJT4	2.40 B		3560.00	
199-N-32	9/07/95	BOGJT5		2.20 U		3710.00
199-N-67	9/07/95	BOGHX6	2.20 U		4810.00	
199-N-70	9/18/95	BOGJV6	2.20 U		6640.00	
199-N-70	9/18/95	BOGJV7		2.20 U		6990.00
199-N-70	9/18/95	BOGJY0	2.20 U		6780.00	
199-N-70	9/18/95	BOGJY1		2.20 U		7140.00
199-N-71	8/28/95	BOGHX8	2.20 U		32800.00	
199-N-73	8/28/95	BOGHX9	2.50 B		224000.00	
199-N-74	8/28/95	BOGHY0	2.20 U		13900.00	

Table 4-4. Constituents with at Least One Detected Value for the 100-N RCRA Sites
Data for Reporting Period July 1 through September 30, 1995.
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Well Name	Collection Date	Sample Number	SILVER 1139/ppb ./100s	PSILVER 1139/ppb ./100s	SODIUM 1139/ppb ./.	FSCODIUM 1139/ppb ./.
199-N-75	9/12/95	B0GJV8	2.20 U		3070.00	
199-N-75	9/12/95	B0GJV9		2.20 U		3020.00
199-N-75	9/12/95	B0GJY2	2.20 U		2980.00	
199-N-75	9/12/95	B0GJY3		2.20 U		2960.00
199-N-76	9/05/95	B0GJW0	2.20 U		2990.00	
199-N-76	9/05/95	B0GJW1		2.20 U		3080.00
199-N-77	9/15/95	B0GJW2	2.20 U		171000.00	
199-N-77	9/15/95	B0GJW3		2.20 U		172000.00

Well Name	Collection Date	Sample Number	FSCODIUM 34/ppb 44/.	STRONIUM 1281/ppb/L ./.	FSTRONIUM 34/ppb 31/.	SULFATE 1083/ppb ./250000s
199-N-14	8/04/95	B0GB55		502.00		18300.00
199-N-14	8/30/95	B0GB20	4100.00 a		130.00	
199-N-14	9/06/95	B0GF59		791.00		19300.00
199-N-2	8/08/95	B0GB53		152.00		20800.00
199-N-2	9/08/95	B0GC02	3200.00		170.00	
199-N-2	9/08/95	B0GF67		126.00		22500.00
199-N-27	8/23/95	B0GBW1	9200.00 a		280.00	
199-N-29	7/21/95	B0GB56		231.00		
199-N-3	8/08/95	B0GB54		1020.00		198000.00
199-N-3	8/08/95	B0GB70		1040.00		206000.00
199-N-3	9/15/95	B0GC13	18000.00 a		670.00	
199-N-3	9/15/95	B0GF58		914.00		144000.00
199-N-3	9/15/95	B0GHK7				143000.00
199-N-32	9/07/95	B0GJT4		.23 U		26800.00
199-N-34	8/23/95	B0GC20	5100.00 a		300.00	
199-N-41	8/23/95	B0GBX0	5200.00 a		180.00	
199-N-43	8/28/95	B0GBY5	13000.00		270.00	
199-N-57	8/25/95	B0GC28	70000.00 a		330.00	
199-N-59	8/25/95	B0GC15	200000.00 a		130.00	
199-N-67	9/07/95	B0GC36	4400.00		250.00	
199-N-67	9/07/95	B0GHX6		6390.00		24100.00
199-N-67	9/15/95	B0GFT2		9180.00		20000.00
199-N-69	9/08/95	B0GC46	3200.00		160.00	
199-N-70	9/18/95	B0BJV6				59400.00
199-N-70	9/18/95	B0GJV0				57600.00
199-N-71	5/02/95	B0FCB5	36000.00			
199-N-71	8/28/95	B0GBV0	36000.00		120.00	
199-N-71	8/28/95	B0GC23	35000.00		120.00	
199-N-71	8/28/95	B0GHX8		.06 U		28400.00
199-N-72	5/02/95	B0FCB7	69000.00			
199-N-72	8/28/95	B0GBZ7	80000.00		370.00	
199-N-73	5/03/95	B0FCB9	230000.00 B			
199-N-73	8/28/95	B0GC31	230000.00		130.00	
199-N-73	8/28/95	B0GHX9		.22 U		436000.00
199-N-74	8/28/95	B0GBZ5	15000.00		290.00	
199-N-74	8/28/95	B0GHY0		.19 U		80700.00
199-N-75	7/20/95	B0GB60		1350.00		25900.00
199-N-75	9/12/95	B0GFT3		621.00		10100.00
199-N-75	9/12/95	B0GJV8		678.00		16400.00
199-N-75	9/12/95	B0GJY2		682.00		16400.00
199-N-76	8/02/95	B0GB61		154.00		12700.00
199-N-76	9/05/95	B0GJW0		85.30		12200.00
199-N-76	9/06/95	B0GFT4		81.90		13000.00

Table 4-4. Constituents with at Least One Detected Value for the 100-N RCRA Sites
Data for Reporting Period July 1 through September 30, 1995.
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Well Name	Collection Date	Sample Number	FSCDIUM 34/ppb 44/.	STRONIUM 1281/pCi/L ./.	FSTRONIUM 34/ppb .31/.	SULFATE 1083/ppb ./250000s
199-N-77	5/03/95	80FC01	180000.00 B			
199-N-77	9/15/95	80GJW2				340000.00
199-N-81	8/30/95	80GC07	6000.00 d		230.00	

Well Name	Collection Date	Sample Number	SULFATE 124/ppb 130/250000s	FSULFATE 1083/ppb ./250000s	FTIN 34/ppb 30/.	TDS 65/ppb ./500000s
199-N-14	8/30/95	80GBY6	17000.00 d			
199-N-14	8/30/95	80GBZ0			30.00 U	
199-N-2	9/08/95	80GBZ8	21000.00 d			
199-N-2	9/08/95	80GC02			30.00 U	
199-N-27	8/23/95	80GBV6	86000.00 d			
199-N-27	8/23/95	80GBW1			30.00 U	
199-N-3	9/15/95	80GC09	140000.00 d			
199-N-3	9/15/95	80GC13			30.00 U	
199-N-32	9/07/95	80GJT5		27300.00		
199-N-34	8/23/95	80GC16	110000.00 d			
199-N-34	8/23/95	80GC20			30.00 U	
199-N-41	8/23/95	80GBW6	38000.00 d			
199-N-41	8/23/95	80GBX0			30.00 U	
199-N-43	8/28/95	80GBY1	54000.00 d			
199-N-43	8/28/95	80GBY5			30.00 U	
199-N-57	8/25/95	80GC24	170000.00 d			
199-N-57	8/25/95	80GC28			30.00 U	
199-N-59	8/25/95	80GC14	250000.00 d			740000.00
199-N-59	8/25/95	80GC15			30.00 U	
199-N-67	9/07/95	80GC32	20000.00 d			
199-N-67	9/07/95	80GC36			30.00 U	
199-N-69	9/08/95	80GC42	37000.00 d			
199-N-69	9/08/95	80GC46			30.00 U	
199-N-70	9/18/95	80GJV7		57800.00		
199-N-70	9/18/95	80GJY1		58700.00		
199-N-71	5/02/95	80FC85			30.00 U	
199-N-71	8/28/95	80GBT9	27000.00 d			190000.00
199-N-71	8/28/95	80GBV0			30.00 U	
199-N-71	8/28/95	80GC22	25000.00 d			180000.00
199-N-71	8/28/95	80GC23			30.00 U	
199-N-72	5/02/95	80FC87			30.00 U	
199-N-72	8/28/95	80GBZ6	340000.00 d			690000.00
199-N-72	8/28/95	80GBZ7			39.00 L	
199-N-73	5/03/95	80FC89			30.00 U	
199-N-73	8/28/95	80GC30	430000.00 d			850000.00
199-N-73	8/28/95	80GC31			30.00 U	
199-N-74	8/28/95	80GBZ1	79000.00 d			
199-N-74	8/28/95	80GBZ5			30.00 U	
199-N-75	9/12/95	80GJV9		16200.00		
199-N-75	9/12/95	80GJY3		16200.00		
199-N-76	9/05/95	80GJV1		12500.00		
199-N-77	5/03/95	80FC01			30.00 U	
199-N-77	9/15/95	80GC08				710000.00
199-N-77	9/15/95	80GJW3		350000.00		
199-N-81	8/30/95	80GC03	57000.00 d			
199-N-81	8/30/95	80GC07			30.00 U	

Table 4-4. Constituents with at Least One Detected Value for the 100-N RCRA Sites
Data for Reporting Period July 1 through September 30, 1995.
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Well Name	Collection Date	Sample Number	TRITIUM 1253/pCi/L ./20000	TURBID 1044/NTU ./.	TURBID 111/NTU ./.	TURBID 126/NTU ./.
199-N-14	8/04/95	BOGB55				.69
199-N-14	8/30/95	BOGBY6			.95	
199-N-14	9/06/95	BOGFS9				.77
199-N-2	9/08/95	BOGB28			.67	
199-N-27	8/23/95	BOGBV6			1.38	
199-N-3	9/15/95	BOGC09			2.74	
199-N-3	9/15/95	BOGFS8				4.67
199-N-3	9/15/95	BOGHX7		1.75		
199-N-32	9/07/95	BOGBV1			5.00	
199-N-32	9/07/95	BOGJT4	60800.00	1.20		5.00
199-N-34	8/23/95	BOGC16			1.73	
199-N-41	8/23/95	BOGBW6			11.20	
199-N-43	8/28/95	BOGBY1			1.67	
199-N-57	8/25/95	BOGC24			1.80	
199-N-59	8/25/95	BOGC14			7.31	
199-N-67	9/07/95	BOGC32			1.53	
199-N-67	9/07/95	BOGHX6	28800.00	26.30		
199-N-67	9/15/95	BOGFT2				1.54
199-N-69	9/08/95	BOGC42			1.01	
199-N-70	9/18/95	BOGBW0			.53	
199-N-70	9/18/95	BOGJV6		.59		.53
199-N-70	9/18/95	BOGJY0		.29		.53
199-N-71	8/28/95	BOGC22			1.31	
199-N-71	8/28/95	BOGHX8	110.00 U	.60		
199-N-72	8/28/95	BOGBZ6			1.67	
199-N-73	8/28/95	BOGC30			1.73	
199-N-73	8/28/95	BOGHX9	563.00	.10		
199-N-74	8/28/95	BOGBZ1			.94	
199-N-74	8/28/95	BOGHY0	16900.00	.54		
199-N-75	9/12/95	BOGJV8	61900.00	.16		2.65
199-N-75	9/12/95	BOGJY2	61800.00	.10		2.65
199-N-76	8/02/95	BOGB61				.89
199-N-76	9/05/95	BOGBX6			5.00	
199-N-76	9/05/95	BOGJW0	67800.00	.82		5.00
199-N-76	9/06/95	BOGFT4				.62
199-N-77	9/15/95	BOGCC8			1.43	
199-N-77	9/15/95	BOGJW2		.93		1.43
199-N-81	8/30/95	BOGCC3			5.10	

Well Name	Collection Date	Sample Number	VANADIUM 1139/ppb ./.	FVANADI 1139/ppb ./.	FVANADI 34/ppb 1.9/.	ZINC 1139/ppb ./5000s
199-N-14	8/30/95	BOGBZ0			5.80 L	
199-N-2	9/08/95	BOBC02			2.00 L	
199-N-27	8/23/95	BOGBW1			7.60 L	
199-N-3	9/15/95	BOGC13			4.50 L	
199-N-3	9/15/95	BOGBX7	23.10 B			40.70
199-N-32	9/07/95	BOGJT4	12.40 B			36.90
199-N-32	9/07/95	BOGJT5		15.80 B		
199-N-34	8/23/95	BOGCC20			5.60 L	
199-N-41	8/23/95	BOGBX0			16.00	
199-N-43	8/28/95	BOGBY5			26.00	
199-N-57	8/25/95	BOGCC28			9.60 L	
199-N-59	8/25/95	BOGC15			7.60 L	
199-N-67	9/07/95	BOGCC36			3.70 L	
199-N-67	9/07/95	BOGHX6	13.40 B			26.00

Table 4-4. Constituents with at Least One Detected Value for the 100-N RCRA Sites
Data for Reporting Period July 1 through September 30, 1995.
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Well Name	Collection Date	Sample Number	VANADUM 1139/ppb ./.	FVANADI 1139/ppb ./.	FVANADI 34/ppb 1.9/.	ZINC 1139/ppb ./5000s
199-N-69	9/08/95	80GC46			4.90 L	
199-N-70	9/18/95	80GJV6	22.30 B			46.80
199-N-70	9/18/95	80GJV7		21.80 B		
199-N-70	9/18/95	80GJY0	24.60 B			28.50
199-N-70	9/18/95	80GJY1		23.00 B		
199-N-71	5/02/95	80FC85			28.00 L	
199-N-71	8/28/95	80GBV0			27.00	
199-N-71	8/28/95	80GC23			26.00	
199-N-71	8/28/95	80GBX8	19.40 B			20.30
199-N-72	5/02/95	80FC87			3.60 L	
199-N-72	8/28/95	80GBZ7			5.20 L	
199-N-73	5/03/95	80FC89			9.00 L	
199-N-73	8/28/95	80GC31			9.30 L	
199-N-73	8/28/95	80GBX9	7.30 B			31.60
199-N-74	8/28/95	80GBZ5			20.00	
199-N-74	8/28/95	80GBY0	23.30 B			18.20 B
199-N-75	9/12/95	80GJV8	14.90 B			36.60
199-N-75	9/12/95	80GJV9		27.20 B		
199-N-75	9/12/95	80GJY2	17.30 B			28.20
199-N-75	9/12/95	80GJY3		25.40 B		
199-N-76	9/05/95	80BJW0	7.20 B			10.40 B
199-N-76	9/05/95	80BJW1		16.30 B		
199-N-77	5/03/95	80FC01			14.00 L	
199-N-77	9/15/95	80GJW2	26.80 B			27.90
199-N-77	9/15/95	80GJW3		23.20 B		
199-N-81	8/30/95	80GC07			9.10 L	

Well Name	Collection Date	Sample Number	FZINC 1139/ppb ./5000s	FZINC 34/ppb 3.7/5000s
199-N-14	8/30/95	80GBZ0		3.70 U
199-N-2	9/08/95	80GC02		3.70 U
199-N-27	8/23/95	80GBU1		3.70 U
199-N-3	9/15/95	80GC13		3.70 U
199-N-32	9/07/95	80GJT5	38.80	
199-N-34	8/23/95	80GC20		3.70 U
199-N-41	8/23/95	80GBX0		3.70 U
199-N-43	8/28/95	80GBY5		11.00
199-N-57	8/25/95	80GC28		3.70 U
199-N-59	8/25/95	80GC15		3.70 U
199-N-67	9/07/95	80GC36		3.70 U
199-N-69	9/08/95	80GC46		3.70 U
199-N-70	9/18/95	80GJV7	19.40 B	
199-N-70	9/18/95	80GJY1	28.30	
199-N-71	5/02/95	80FC85		3.70 U
199-N-71	8/28/95	80GBV0		3.70 U
199-N-71	8/28/95	80GC23		3.70 U
199-N-72	5/02/95	80FC87		3.70 U
199-N-72	8/28/95	80GBZ7		3.70 U
199-N-73	5/03/95	80FC89		16.00 F
199-N-73	8/28/95	80GC31		3.70 U
199-N-74	8/28/95	80GBZ5		3.70 U
199-N-75	9/12/95	80GJV9	12.20 B	
199-N-75	9/12/95	80GJY3	12.30 B	
199-N-76	9/05/95	80BJW1	14.10 B	

Table 4-4. Constituents with at Least One Detected Value for the 100-N RCRA Sites
 Data for Reporting Period July 1 through September 30, 1995.
 (sheet 17 of 17)

Well Name	Collection Date	Sample Number	FZINC 1139/ppb ./5000s	FZINC 34/ppb 3.7/5000s
199-N-77	5/03/95	B0FCC1		3.70 U
199-N-77	9/15/95	B0GJM3	44.40	
199-N-81	8/30/95	B0GC07		3.70 U

For explanation of this table, see Section 1.4 of report.

Table 4-5. Contamination Indicator Parameters for the
100-N RCRA Sites Data for Reporting Period
July 1 through September 30, 1995.
(sheet 1 of 2)

Well Name	Collection Date	Sample Number	COND FIELD uMho 1/.	COND LAB uMho 1/.	pH FIELD .01/6.5-8.5s	pH LAB .01/6.5-8.5s	TOC ppb */.	TOX ppb */.
199-N-14	8/04/95	B0GB55	173		8.77			
		B0GBY6	194		8.82	8.60	200 L	6.9 U
	8/30/95	B0GBY7	194		8.69		300 L	6.9 U
		B0GBY8	194		8.70		300 L	6.9 U
		B0GBY9	193		8.76		300 L	6.9 U
199-N-2	9/06/95	B0GFS9	198		8.77			
		B0GBZ8	275		8.26	8.20	140 U	6.9 U
	9/08/95	B0GBZ9	276		8.26		140 U	6.9 U
		B0GCC0	274		8.26		140 U	7.0 L
		B0GC01	275		8.26		140 U	6.9 U
199-N-27	8/23/95	B0GBV6	403		8.05	8.00	300 L	6.9 U
		B0GBV7	402		8.05		300 L	8.0 L
		B0GBV8	402		8.04		300 L	6.9 U
		B0GBV9	403		8.05		300 L	6.9 U
		B0GC09	1108		7.39	7.40	600	
199-N-3	9/15/95	B0GC10	1104		7.39		600	
		B0GC11	1108		7.39		700	6.9 U
		B0GC12	1107		7.39		600	6.9 U
		B0GFS8	108		7.40			
		B0GHX7		1090				
199-N-32	9/07/95	B0GBV1	300		8.42		300 L	6.9 U
		B0GBV2					400 L	6.9 U
		B0GBV3					300 L	6.9 U
		B0GBV4					300 L	6.9 U
		B0GJT4	300	291	8.42	8.15		
199-N-34	8/23/95	B0GJT5	300		8.42			
		B0GC16	438		7.89	7.90	300 L	8.0 L
		B0GC17	437		7.88		200 L	6.9 U
		B0GC18	437		7.90		300 L	6.9 U
		B0GC19	436		7.90		300 L	6.9 U
199-N-41	8/23/95	B0GBW6	265		8.40	8.30	200 L	6.9 U
		B0GBW7	263		8.35		200 L	6.9 U
		B0GBW8	265		8.31		200 L	6.9 U
		B0GBW9	264		8.31		200 L	6.9 U
		B0GBY1	346		8.06	8.10	300 L	6.9 U
199-N-43	8/28/95	B0GBY2	347		8.06		200 L	6.9 U
		B0GBY3	347		8.06		300 L	6.9 U
		B0GBY4	346		8.03		200 L	6.9 U
		B0GC24	737		8.14	7.90	600	6.9 U
		B0GC25	739		8.13		600	6.9 U
199-N-57	8/25/95	B0GC26	737		8.13		400	6.9 U
		B0GC27	732		8.13		500	8.0 L
		B0GC14	1000		8.10	8.10	1200	6.9 U
		B0GC32	460		8.22	8.10	200 L	6.9 U
		B0GC33	459		8.21		300 L	6.9 U
199-N-59	9/07/95	B0GC34	456		8.19		200 L	6.9 U
		B0GC35	454		8.17		400 L	6.9 U
		B0GHX6		466				
		B0GPT2	475		8.31			
		B0GC42	222		8.80 F	8.30	140 U	6.9 U
199-N-69	9/08/95	B0GC43	222		8.79 F		140 U	6.9 U
		B0GC44	222		8.83 F		140 U	6.9 U
		B0GC45	223		8.84 F		200 L	6.9 U

Table 4-5. Contamination Indicator Parameters for the
100-N RCRA Sites Data for Reporting Period
July 1 through September 30, 1995.
(sheet 2 of 2)

Well Name	Collection Date	Sample Number	COND FIELD uMho 1/.	COND LAB uMho 1/.	pH FIELD .01/6.5-8.5a	pH LAB .01/6.5-8.5a	TOC ppb */.	TOX ppb */.
199-N-70	9/16/95	B0GBW0	320		8.19		400 L	9.0 L
		B0GBW2					400 L	6.9 U
		B0GBW3					200 L	6.9 U
		B0GBW4					400 L	6.9 U
		B0GJV6	320	314	8.19	8.08		
		B0GJV7	320		8.19			
		B0GJY0	320	100 U	8.19	8.10		
		B0GJY1	320		8.19			
199-N-71	8/28/95	B0GBT9				8.30	300 L	9.0 L
		B0GC22	286		8.24	8.30	300 L	8.0 L
		B0GKX8		316				
199-N-72	8/28/95	B0GBZ6	941		7.95	8.00	400 L	10.0 L
199-N-73	8/28/95	B0GC30	1236		8.16	8.20	400 L	9.0 L
		B0GKX9		1233				
199-N-74	8/28/95	B0GBZ1	349		8.03	8.10	200 L	8.0 L
		B0GBZ2	348		8.02		200 L	9.0 L
		B0GBZ3	346		8.02		200 L	10.0
		B0GBZ4	345		8.02		200 L	10.0
		B0GHY0		407				
199-N-75	9/12/95	B0GBK1					200 L	6.9 U
		B0GBK2					150 L	6.9 U
		B0GBK3					200 L	9.0 L
		B0GBK4					140 U	6.9 U
		B0GJV8		187		8.15		
		B0GJY2		186		8.15		
199-N-76	8/02/95	B0GB61	185		8.11			
	9/05/95	B0GBX6	180		8.01		140 U	6.9 U
		B0GBX7	182		7.99		140 U	6.9 U
		B0GBX8	181		8.00		200 L	6.9 U
		B0GBX9	181		8.01		140 U	6.9 U
		B0GJW0	181	177	8.01	8.23		
		B0GJW1	181		8.01			
	9/06/95	B0GFT4	185		8.10			
199-N-77	9/15/95	B0GC08	107 F		8.14		300 L	7.0 L
		B0GJW2	107	1040	8.14	8.13		
		B0GJW3	107		8.14			
199-N-81	8/30/95	B0GC03	320		8.15	8.20	200 L	6.9 U
		B0GC04	320		8.15		200 L	6.9 U
		B0GC05	320		8.15		200 L	6.9 U
		B0GC06	320		8.14		200 L	6.9 U

* Detection limits for TOC and TOX vary depending on the performing laboratory.
For explanation of this table, see Section 1.4 of report.

Table 4-6. Drinking Water Standards Exceeded for 100-N Area RCRA Sites.

Constituent (DWS)	Wells exceeding DWS (number of samples)
Field pH (6.5 - 8.5)	1301-N: N-14 (4), N-69 (4) ^a .
Laboratory pH (6.5 - 8.5)	1301-N: N-14.
Nitrate (45,000 ppb)	1301-N: N-2, N-3, N-67 ^a
Sulfate (250,000 ppb)	1324-N/NA: N-72, N-73.
Total dissolved solids (500 ppb)	1324-N/NA: N-59, N-72, N-73, N-77.

^aData are in question. Request for Analytical Data Evaluation was submitted.

DWS = drinking water standard.

Table 4-7. Requests for Analytical Data Evaluation for 100-N RCRA Sites, Third Quarter, 1995.

Well No.	Sample Date	Constituent	Reasons
N-67	9/7/95	Nitrate	Higher than historical trend.
N-77	9/15/95	Field conductivity	Lower than historical trend.
N-69	9/8/95	Field pH	Higher than historical trend; higher than lab pH.

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5.0 216-B-3 POND SYSTEM

D. B. Barnett
Westinghouse Hanford Company

5.1 INTRODUCTION

The 216-B-3 Pond System is located east of the 200 East Area and originally consisted of a main pond and three expansion ponds for waste water disposal. Several ditches leading to the ponds and the main pond itself are no longer in use and are backfilled (Figures 1-1 and 5-1). These surface impoundments cover approximately 41.3 hectares (102 acres). Only the 3C expansion pond now receives waste water. Table 5-1 lists the groundwater wells and their monitoring status.

The 216-B-3 Pond System groundwater monitoring well locations are shown in Figure 5-1. Detection monitoring began at the 216-B-3 Pond System in November 1988 and continued through June 1990, when assessment monitoring was scheduled to begin because of elevated levels of TOX in two downgradient monitoring wells. Assessment monitoring actually began in June 1991 when groundwater sampling on the Hanford Site resumed following a hiatus, as described in the *Groundwater Quality Assessment Plan for the 216-B-3 Pond System* (Harris 1990). Thus far, no specific constituents have been demonstrably linked to the elevated TOX results.

5.2 WATER LEVEL DATA

Water levels in B Pond wells were measured quarterly, and once during sample events during the July through September 1995 period. Table 5-2 lists the results of the water level measurements. The results for wells 299-E18-1 and 699-43-42J are outside of the expected range of water levels for these wells, and may be in error.

5.3 WATER CHEMISTRY DATA

All wells scheduled for the July through September 1995 sampling were sampled during July, except upgradient well 299-E18-1, which was sampled in September. Any results for the period that are unavailable as of the writing of this report will be reported in future quarterly reports.

The list of constituents for which data were received and the summary of results available are given in Table 5-3. The results of the available analyses, for constituents with at least one value above the MDL, are reported in Table 5-4. Results of analyses for CIPs are reported in Table 5-5. Explanations of data flags and qualifiers are given in Section 1.4.

The constituent list for this quarter includes those constituents required by regulations and compounds under investigation for potential links

to elevated TOX results. Groundwater monitoring requirements and strategy for the 216-B-3 Pond System are described in Sweeney (1995).

Beginning with the July-through-September sampling event, the monitoring well network was reduced by 11 downgradient wells. This action was taken to reduce redundancy in the B Pond network, and to reassign administration of the three wells near the TEDF to that facility. Table 5-1 reflects these changes. Water levels from all wells of the original network, including TEDF wells, will still be reported in this document.

Well 699-40-40A produced a result for manganese in filtered samples (64 ppb) slightly exceeding the drinking water standard (50 ppb). Well 699-43-41E produced an average pH of 8.52, slightly over the upper limit for drinking water standards (8.50). Most results for filtered samples of calcium, sodium, and zinc are associated with suspect QC data. Vanadium results from filtered samples were associated with a contaminated blank sample.

Figure 5-1. 216-B-3 Pond Groundwater Monitoring Network.

HP21201.1

**Table 5-1. Monitoring Well Purpose and Sampling Schedule
for the 216-B-3 Pond System Network.**

Well no.	Relative position	Hydrogeologic unit	Sample frequency	Sample date, 4th Qtr 1994
299-E18-1	Upgradient	Hanford: Water Table	Quarterly	9/5/95
299-E32-4 ^a	Upgradient	Hanford: Water Table	Quarterly	7/18/95
699-40-40A	Downgradient	Ringold: Lower Confined	Quarterly	7/21/95
699-41-40	Downgradient	Ringold: Upper Confined	Quarterly	7/24/95
699-41-42	Downgradient	Ringold: Top of Confined	Quarterly	7/24/95
699-42-39B	Downgradient	Ringold: Lower Confined	Quarterly	7/21/95
699-42-41	Downgradient	Ringold: Water Table	Quarterly	7/21/95
699-42-42B	Downgradient	Ringold: Lower Unconfined	Quarterly	7/20/95
699-43-40	Downgradient	Ringold: Water Table	Quarterly	7/19/95
699-43-41E	Downgradient	Ringold: Upper Confined	Quarterly	7/20/95
699-43-41G	Downgradient	Ringold: Bottom of Confined	Quarterly	7/20/95
699-43-45 ^b	Downgradient	Hanford/Ringold: Water Table	Quarterly	7/06/95
699-44-39B	Downgradient	Ringold: Water Table	Quarterly	7/20/95
699-44-43B	Downgradient	Ringold: Water Table	Quarterly	7/20/95

^aWell shared with the Low-Level Waste Burial Grounds network.

^bWell shared with the 216-A-29 Ditch network.

Table 5-2. RCRA Water Level Measurement Report
 216-B-3 Pond System, Third Quarter 1995.
 (sheet 1 of 2)

Well	Date	Depth to water (ft)	Water level elevation above msl (ft)	(m)
299-E18-1	9/05/95	319.36*+	400.88	122.19
	9/14/95	318.71	401.53	122.39
299-E32-4	7/18/95	284.92*	401.19	122.28
	9/20/95	285.04	401.07	122.25
699-40-36	7/10/95	118.69*	410.23	125.04
	7/31/95	118.16	410.76	125.20
	8/18/95	118.16	410.76	125.20
	9/26/95	118.17	410.75	125.20
699-40-39	7/21/95	129.10*	412.74	125.80
	7/31/95	129.29	412.55	125.75
	8/18/95	129.51	412.33	125.68
	9/26/95	129.58	412.26	125.66
699-40-40A	7/21/95	129.68*	411.53	125.43
	9/26/95	130.27	410.94	125.25
699-40-40B	9/26/95	130.90	411.28	125.36
699-41-35	7/10/95	108.50*	411.88	125.54
	7/31/95	108.59	411.79	125.51
	8/18/95	108.57	411.81	125.52
	9/26/95	108.45	411.93	125.56
699-41-40	7/24/95	130.26*	415.68	126.70
	9/26/95	130.90	415.04	126.50
699-41-42	7/24/95	232.40*	411.51	125.43
	9/26/95	233.25	410.66	125.17
699-42-37	7/10/95	105.00*	414.40	126.31
	7/31/95	104.46	414.94	126.47
	8/18/95	104.58	414.82	126.44
	9/26/95	104.36	415.04	126.50
699-42-39A	9/26/95	139.20	418.94	127.69
699-42-39B	7/21/95	138.85*	419.47	127.85
	9/26/95	139.62	418.70	127.62
699-42-40A	9/26/95	124.33	421.20	128.38

Table 5-2. RCRA Water Level Measurement Report
 216-B-3 Pond System, Third Quarter 1995.
 (sheet 2 of 2)

Well	Date	Depth to water (ft)	Water level elevation above msl	
			(ft)	(m)
699-42-41	7/21/95	146.56*	420.74	128.24
	9/26/95	147.36	419.94	128.00
699-42-42B	7/20/95	166.68*	416.55	126.96
	9/26/95	167.74	415.49	126.64
699-43-40	7/19/95	121.15*	421.05	128.34
	9/26/95	122.29	419.91	127.99
699-43-41E	7/20/95	129.87*	420.99	128.32
	9/26/95	130.68	420.18	128.07
699-43-41F	9/26/95	130.77	420.24	128.09
699-43-41G	7/20/95	134.20*	417.14	127.14
	9/26/95	135.13	416.21	126.86
699-43-42J	9/26/95	124.73+	456.95	139.28
699-43-43	7/06/95	165.75*	413.62	126.07
	9/26/95	166.41	412.96	125.87
699-43-45	7/06/95	195.96*	401.72	122.44
	9/26/95	195.62	402.06	122.55
699-44-39B	7/20/95	92.26*	421.14	128.36
	9/26/95	93.41	419.99	128.01
699-44-42	9/26/95	160.42	418.80	127.65
699-44-43B	7/20/95	166.20*	413.92	126.16
	9/26/95	167.23	412.89	125.85

- NOTES: 1. Water level elevations are calculated by subtracting the measured depth-to-water from the surveyed elevation for the well.
2. Depth-to-water values are transcribed from field records.
3. Measurements marked with an '*' were taken at the time of sampling.
4. Measurements marked with a '+' are outside of the expected range, and are suspected of error.

Table 5-3. Constituent List and Summary of Results
for the 216-B-3 Pond Data for Reporting Period
July 1 through September 30, 1995.
(sheet 1 of 3)

CONTAMINATION INDICATOR PARAMETERS

Short	(Method)	Constituent Name		Units	Lab			DWS			Number of Samples		
		Full			CRCL	Limit	Agency	Total	>CRCL	>DWS	Total	>CRCL	>DWS
CONDUCT		Conductivity, field	umhos								60	60	
TOC		Total organic carbon	ppb		140						68	53	
TOX		Total organic halogen	ppb		6.9						68	2	
PH	93	pH, field	pH			6.5-8.5	EPAS				60	60	3
PH	125	pH, lab	pH			6.5-8.5	EPAS				17	17	0

DRINKING WATER PARAMETERS

Short	(Method)	Constituent Name		Units	Lab			DWS			Number of Samples		
		Full			CRCL	Limit	Agency	Total	>CRCL	>DWS	Total	>CRCL	>DWS
ARSENIC		Arsenic, filtered	ppb		2	50	EPA				1	1	0
BARIUM		Barium	ppb		1.4	2000	EPA				1	1	0
FBARIUM		Barium, filtered	ppb		1.4	2000	EPA				17	17	0
CADMIUM		Cadmium	ppb		.98	5	EPA				1	0	0
FCADMIU		Cadmium, filtered	ppb		.98	5	EPA				17	0	0
CHROMIUM		Chromium	ppb		3.7	100	EPA				1	1	0
FCHROMI		Chromium, filtered	ppb		3.7	100	EPA				17	7	0
FLUORID		Fluoride	ppb		52	4000	EPA				17	17	0
ALPHA		Gross alpha	pCi/L			15	EPA				17	14	0
NITRATE		Nitrate	ppb		120	45000	EPA				17	17	0

GROUNDWATER QUALITY PARAMETERS

Short	(Method)	Constituent Name		Units	Lab			DWS			Number of Samples		
		Full			CRCL	Limit	Agency	Total	>CRCL	>DWS	Total	>CRCL	>DWS
CHLORID		Chloride	ppb		110	250000	EPAS				17	17	0
IRON		Iron	ppb		8.9	300	EPAS				1	1	0
FIRON		Iron, filtered	ppb		8.9	300	EPAS				17	17	0
MANGESE		Manganese	ppb		.95	50	EPAS				1	1	0
FMANGAN		Manganese, filtered	ppb		.55	50	EPAS				17	17	1
LPHENOL	19	Phenol	ppb		.21						17	0	
LPHENOL	30	Phenol	ppb		.58						1	0	
SODIUM		Sodium	ppb		44						1	1	
FSODIUM		Sodium, filtered	ppb		44						17	17	
SULFATE		Sulfate	ppb		130	250000	EPAS				17	17	0

Table S-3. Constituent List and Summary of Results
for the 216-B-3 Pond Data for Reporting Period
July 1 through September 30, 1995.
(sheet 2 of 3)

SITE SPECIFIC AND OTHER CONSTITUENTS

Short	(Method)	Constituent Name Full	Units	Lab CRQL	DWS		Number of Samples		
					Limit	Agency	Total	>CRQL	>DWS
246-TBP		2,4,6-Trichlorophenol	ppb	.8			1	0	
24-dchp	19	2,4-Dichlorophenol	ppb	2.8			17	0	
24-dchp	30	2,4-Dichlorophenol	ppb	.43			1	0	
DIMPHEN		2,4-Dimethylphenol	ppb	.62			1	0	
DINPHEN		2,4-Dinitrophenol	ppb	6.8			1	0	
26-DCHP		2,6-Dichlorophenol	ppb	.52			1	0	
CHLPHEN		2-Chlorophenol	ppb	.6			1	0	
2METHPH		2-Methylphenol	ppb	.29			15	0	
2NITPH	19	2-Nitrophenol	ppb	4.2			17	0	
2NITPH	30	2-Nitrophenol	ppb	.6			1	0	
BUTOINP		2-sec-Butyl-4,6-dinitrophenol (DN)	ppb	.41	7	EPA	1	0	0
46DNZHP		4,6-Dinitro-2-methylphenol	ppb	.84			1	0	
CHLCRES		4-Chloro-3-methylphenol	ppb	.52			1	0	
4METHPH		4-Methylphenol	ppb	.52			15	0	
NITPHEN		4-Nitrophenol	ppb	.49			1	0	
ALKALIN		Alkalinity	ppb	3500			17	17	
ALUMINUM		Aluminum	ppb	31	200	EPAS	1	0	0
FALUMIN		Aluminum, filtered	ppb	31	200	EPAS	17	0	0
ANTIMONY		Antimony	ppb	24	6	EPA	1	0	1*
FANTIMO		Antimony, filtered	ppb	24	6	EPA	17	0	17*
BENZOTH		Benzothiazole	ppb	2.1			17	0	
BERYLLIUM		Beryllium	ppb	.63	4	EPA	1	0	0
FBERYLL		Beryllium, filtered	ppb	.63	4	EPA	17	0	0
BIS2EPH		Bis(2-ethylhexyl) phthalate	ppb	.37			17	3	
BROMIDE		Bromide	ppb	72			17	1	
CALCIUM		Calcium	ppb	41			1	1	
FCALCIU		Calcium, filtered	ppb	41			17	17	
COBALT		Cobalt	ppb	5.3			1	0	
FCOBALT		Cobalt, filtered	ppb	5.3			17	0	
COPPER		Copper	ppb	2.1	1000	EPAS	1	0	0
FCOPPER		Copper, filtered	ppb	2.1	1000	EPAS	17	4	0
CRESOLS		Cresols (methylphenols)	ppb	1.7			1	0	
DECANE		Decane	ppb	.38			17	0	
DODECAN		Dodecane	ppb	.26			17	0	
BETA		Gross beta	pCi/L				17	16	
MAGNES		Magnesium	ppb	26			1	1	
FMAGNES		Magnesium, filtered	ppb	26			17	17	
NAPHTHA		Naphthalene	ppb	.16			17	0	
NICKEL		Nickel	ppb	11	100	EPA	1	0	0
FNICKEL		Nickel, filtered	ppb	11	100	EPA	17	2	0
NITRITE		Nitrite	ppb	140	4000	EPA	17	0	0
PENTCHP	19	Pentachlorophenol	ppb	.87	1	EPA	17	0	0
PENTCHP	30	Pentachlorophenol	ppb	.48	1	EPA	1	0	0

Table 5-3. Constituent List and Summary of Results
for the 216-B-3 Pond Data for Reporting Period
July 1 through September 30, 1995.
(sheet 3 of 3)

Short	(Method)	Constituent Name		Units	Lab CRGL	DWS		Number of Samples		
		Full				Limit	Agency	Total	>CRGL	>DWS
PHOSPPA		Phosphate	ppb	340				17	0	
POTASUM		Potassium	ppb	390				1	1	
FPOTASS		Potassium, filtered	ppb	390				17	17	
SILVER		Silver	ppb	5.5	100	EPAS		1	0	0
FSILVER		Silver, filtered	ppb	5.5	100	EPAS		17	1	0
FSTRONIUM		Strontium, filtered	ppb	.31				2	2	
TETPHNL		Tetrachlorophenols	ppb	.52				1	0	
TETRADE		Tetradecane	ppb	.28				17	0	
TIN		Tin	ppb	30				1	0	
FTIN		Tin, filtered	ppb	30				17	2	
TDS		Total dissolved solids	ppb	500000	EPAS			1	1	0
TRIBUTPH		Tributyl Phosphate	ppb	.14				17	0	
TRIPHNL		Trichlorophenols	ppb	.56				1	0	
TDICPH		Tris-2-chloroethyl phosphate	ppb	6.4				17	1	
TRITIUM		Tritium	pCi/L	20000	EPA			1	1	0
TURBID		Turbidity	NTU					15	15	
VANADIUM		Vanadium	ppb	1.9				1	1	
FVANADI		Vanadium, filtered	ppb	1.9				17	17	
ZINC		Zinc	ppb	3.7	5000	EPAS		1	0	0
FZINC		Zinc, filtered	ppb	3.7	5000	EPAS		17	15	0
MCRESOL		m-Cresol	ppb	.77				15	0	
MPCRESD		m-Cresol and p-Cresol, total	ppb					2	0	

For explanation of this table, see Section 1.4 of report.

Table 5-4. Constituents with at Least One Detected Value for the
216-B-3 Pond Data for Reporting Period
July 1 through September 30, 1995.
(sheet 1 of 7)

Well Name	Collection Date	Sample Number	ALKALIN 357/ppb 3500/.	ARSENIC 43/ppb 2/50	SARIUM 34/ppb 1.4/2000	FBARIUM 34/ppb 1.4/2000
299-E18-1	9/03/95	B0G6H4	100000.00			
299-E18-1	9/05/95	B0G6H8				30.00
299-E18-1	9/05/95	B0G6J5	100000.00			
299-E18-1	9/05/95	B0G6J9				30.00
299-E32-4	7/18/95	B0G7B6	120000.00			
299-E32-4	7/18/95	B0G7R0				69.00
699-40-39	7/21/95	B0G7R3	150000.00			
699-40-39	7/21/95	B0G7R7				91.00
699-40-40A	7/21/95	B0G7R9	150000.00			
699-40-40A	7/21/95	B0G7S3				110.00
699-41-40	7/24/95	B0G7S6	130000.00			
699-41-40	7/24/95	B0G7T0				37.00
699-41-42	7/24/95	B0G7T2	100000.00			
699-41-42	7/24/95	B0G7T6				26.00
699-42-39B	7/21/95	B0G7Y7	120000.00			
699-42-39B	7/21/95	B0G7V1				58.00
699-42-41	7/21/95	B0G7V2	70000.00			
699-42-41	7/21/95	B0G7V6				5.70 L
699-42-41	7/21/95	B0G7Z3	70000.00			
699-42-41	7/21/95	B0G7Z7				4.80 L
699-42-42B	7/20/95	B0G7Y7	100000.00			
699-42-42B	7/20/95	B0G7W1				21.00
699-43-40	7/19/95	B0G7W2	110000.00			
699-43-40	7/19/95	B0G7W6				41.00
699-43-41E	7/20/95	B0G7W7	110000.00			
699-43-41E	7/20/95	B0G7X1				34.00
699-43-41G	7/20/95	B0G7X2	100000.00			
699-43-41G	7/20/95	B0G7X6				49.00
699-43-45	7/06/95	B0G6M2	90000.00		28.00	
699-43-45	7/06/95	B0G6M6		9.40		29.00
699-44-39B	7/20/95	B0G7X7	80000.00			
699-44-39B	7/20/95	B0G7Y1				7.60 L
699-44-43B	7/20/95	B0G7Y2	120000.00			
699-44-43B	7/20/95	B0G7Y6				41.00

Well Name	Collection Date	Sample Number	BISZEPH 19/ppb .37/.	BROMIDE 124/ppb 72/.	CALCIUM 34/ppb 41/.	FCALCIU 34/ppb 41/.
299-E18-1	9/03/95	B0G6H4	.37 U	72.00 U		
299-E18-1	9/05/95	B0G6H8				51000.00
299-E18-1	9/05/95	B0G6J5	.37 U	72.00 U		
299-E18-1	9/05/95	B0G6J9				52000.00
299-E32-4	7/18/95	B0G7B6	.37 U	90.00 L		
299-E32-4	7/18/95	B0G7R0				39000.00 a
699-40-39	7/21/95	B0G7R3	20.00	72.00 U		
699-40-39	7/21/95	B0G7R7				20000.00 a
699-40-40A	7/21/95	B0G7R9	.37 U	72.00 U		
699-40-40A	7/21/95	B0G7S3				19000.00 a
699-41-40	7/24/95	B0G7S6	13.00	72.00 U		
699-41-40	7/24/95	B0G7T0				27000.00 a
699-41-42	7/24/95	B0G7T2	.37 U	72.00 U		
699-41-42	7/24/95	B0G7T6				17000.00 a

Table 5-4. Constituents with at Least One Detected Value for the
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Well Name	Collection Date	Sample Number	8152EPK 19/ppb .37/.	BROMIDE 124/ppb 72/.	CALCIUM 34/ppb 41/.	FCALCIU 34/ppb 41/.
699-42-39B	7/21/95	B067T7	.37 U	72.00 U		
699-42-39B	7/21/95	B067V1				27000.00 q
699-42-41	7/21/95	B067V2	.37 U	72.00 U		
699-42-41	7/21/95	B067V6				20000.00 q
699-42-41	7/21/95	B067Z3	.37 U	72.00 U		
699-42-41	7/21/95	B067Z7				20000.00 q
699-42-42B	7/20/95	B067V7	.37 U	72.00 U		
699-42-42B	7/20/95	B067W1				20000.00 q
699-43-40	7/19/95	B067W2	.37 U	72.00 U		
699-43-40	7/19/95	B067W6				26000.00 q
699-43-41E	7/20/95	B067W7	.37 U	72.00 U		
699-43-41E	7/20/95	B067X1				24000.00 q
699-43-41G	7/20/95	B067X2	.37 U	72.00 U		
699-43-41G	7/20/95	B067X6				24000.00 q
699-43-45	7/06/95	B068M2		72.00 U	24000.00 q	
699-43-45	7/06/95	B068N6				24000.00 q
699-43-45	7/06/95	B06789	.37 U			
699-44-39B	7/20/95	B067X7	.37 U	72.00 U		
699-44-39B	7/20/95	B067Y1				20000.00 q
699-44-43B	7/20/95	B067Y2	5.30 L	72.00 U		
699-44-43B	7/20/95	B067Y6				25000.00 q

Well Name	Collection Date	Sample Number	CHLORID 124/ppb 110/250000s	CHROMIUM 34/ppb 3.7/100	FCROMI 34/ppb 3.7/100	COPPER 34/ppb 2.1/1000s
299-E18-1	9/05/95	B068H4	7800.00			
299-E18-1	9/05/95	B068N8			3.70 U	
299-E18-1	9/05/95	B068J5	7800.00			
299-E18-1	9/05/95	B068J9			5.10 L	
299-E32-4	7/18/95	B06786	9200.00			
299-E32-4	7/18/95	B067R0			3.70 U	
699-40-39	7/21/95	B067R3	3100.00			
699-40-39	7/21/95	B067R7			3.70 U	
699-40-40A	7/21/95	B067R9	5300.00			
699-40-40A	7/21/95	B067S3			3.70 L	
699-41-40	7/24/95	B06786	6400.00			
699-41-40	7/24/95	B067T0			5.20 L	
699-41-42	7/24/95	B067T2	3100.00			
699-41-42	7/24/95	B067T6			3.70 U	
699-42-39B	7/21/95	B067T7	7400.00			
699-42-39B	7/21/95	B067V1			3.70 U	
699-42-41	7/21/95	B067V2	1400.00			
699-42-41	7/21/95	B067V6			3.70 U	
699-42-41	7/21/95	B067Z3	1400.00			
699-42-41	7/21/95	B067Z7			3.70 U	
699-42-42B	7/20/95	B067V7	3000.00			
699-42-42B	7/20/95	B067W1			4.40 L	
699-43-40	7/19/95	B067W2	7300.00			
699-43-40	7/19/95	B067W6			3.70 U	
699-43-41E	7/20/95	B067W7	6200.00			
699-43-41E	7/20/95	B067X1			5.30 L	
699-43-41G	7/20/95	B067X2	5400.00			
699-43-41G	7/20/95	B067X6			4.00 L	

Table 5-4. Constituents with at Least One Detected Value for the
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Well Name	Collection Date	Sample Number	CHLORID 124/ppb 110/250000s	CHROMIUM 34/ppb 3.7/100	PCROMIT 34/ppb 3.7/100	COPPER 34/ppb 2.1/1000s
699-43-45	7/06/95	B0G6M2	1700.00	13.00 L		2.10 U
699-43-45	7/06/95	B0G6M6			5.00 L	
699-44-398	7/20/95	B0G7X7	1500.00			
699-44-398	7/20/95	B0G7Y1			3.70 U	
699-44-438	7/20/95	B0G7Y2	3300.00			
699-44-438	7/20/95	B0G7Y6			3.70 U	

Well Name	Collection Date	Sample Number	FCOPPER 34/ppb 2.1/1000s	FLUORID 124/ppb 52/4000	ALPNA 135/pCl/L ./15	BETA 136/pCl/L ./.
299-E18-1	9/05/95	B0G6M4		800.00	6.31	7.29
299-E18-1	9/05/95	B0G6M8	2.10 U			
299-E18-1	9/05/95	B0G6J5		700.00	5.03	8.11
299-E18-1	9/05/95	B0G6J9	2.10 U			
299-E32-4	7/18/95	B0G706		800.00	3.74	10.60
299-E32-4	7/18/95	B0G7R0	2.10 U			
699-40-39	7/21/95	B0G7R3		1000.00	6.69	8.15
699-40-39	7/21/95	B0G7R7	2.10 U			
699-40-40A	7/21/95	B0G7R9		1000.00	3.99	7.43
699-40-40A	7/21/95	B0G7S3	2.40 L			
699-41-40	7/24/95	B0G7S6		1000.00	3.80	7.95
699-41-40	7/24/95	B0G7T0	9.60 L			
699-41-42	7/24/95	B0G7T2		800.00	.84 U	2.64
699-41-42	7/24/95	B0G7T6	2.10 U			
699-42-398	7/21/95	B0G7Y7		900.00	3.43	6.42
699-42-398	7/21/95	B0G7V1	2.10 U			
699-42-41	7/21/95	B0G7V2		200.00	.36 U	4.62
699-42-41	7/21/95	B0G7V6	2.40 L			
699-42-41	7/21/95	B0G7Z3		200.00	.08 U	3.65
699-42-41	7/21/95	B0G7Z7	2.10 U			
699-42-42B	7/20/95	B0G7V7		700.00	2.25	2.21 U
699-42-42B	7/20/95	B0G7W1	2.10 U			
699-43-40	7/19/95	B0G7W2		500.00	3.75	6.15
699-43-40	7/19/95	B0G7W6	2.10 U			
699-43-41E	7/20/95	B0G7W7		700.00	1.82	4.76
699-43-41B	7/20/95	B0G7X1	2.10 U			
699-43-41G	7/20/95	B0G7X2		800.00	1.57	5.61
699-43-41G	7/20/95	B0G7X6	2.40 L			
699-43-45	7/06/95	B0G6M2		300.00	1.09	5.27
699-43-45	7/06/95	B0G6M6	2.10 U			
699-44-398	7/20/95	B0G7X7		200.00	1.23	2.96
699-44-398	7/20/95	B0G7Y1	2.10 U			
699-44-438	7/20/95	B0G7Y2		700.00	2.49	3.74
699-44-438	7/20/95	B0G7Y6	2.10 U			

Table 5-4. Constituents with at Least One Detected Value for the
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Well Name	Collection Date	Sample Number	IRON 34/ppb 8.9/300s	FIROM 34/ppb 8.9/300s	MAGNES 34/ppb 26/.	FMAGNES 34/ppb 26/.
299-E18-1	9/05/95	B06G88		11.00 L		13000.00
299-E18-1	9/05/95	B06GJ9		19.00 L		13000.00
299-E32-4	7/18/95	B067R0		42.00		12000.00
699-40-39	7/21/95	B067R7		74.00		7800.00
699-40-40A	7/21/95	B067S3		71.00		7500.00
699-41-40	7/24/95	B067T0		34.00 S		11000.00
699-41-42	7/24/95	B067T6		19.00 BL		6300.00
699-42-39B	7/21/95	B067V1		23.00		10000.00
699-42-41	7/21/95	B067V6		16.00 L		4700.00
699-42-41	7/21/95	B067Z7		16.00 L		4600.00
699-42-42B	7/20/95	B067W1		24.00		7200.00
699-43-40	7/19/95	B067W6		17.00 BL		10000.00
699-43-41E	7/20/95	B067X1		24.00		9000.00
699-43-41G	7/20/95	B067X6		22.00		9700.00
699-43-45	7/06/95	B066H2	64.00		5800.00	
699-43-45	7/06/95	B066H6		31.00		5800.00
699-44-39B	7/20/95	B067Y1		24.00		7400.00
699-44-43B	7/20/95	B067Y6		19.00 L		9300.00

Well Name	Collection Date	Sample Number	MANGESE 34/ppb .55/50s	FMANGAN 34/ppb .55/50s	NICKEL 34/ppb 11/100	FNICKEL 34/ppb 11/100
299-E18-1	9/05/95	B06G88		1.00 L		11.00 U
299-E18-1	9/05/95	B06GJ9		2.00 L		11.00 U
299-E32-4	7/18/95	B067R0		1.50 L		11.00 U
699-40-39	7/21/95	B067R7		40.00		12.00 L
699-40-40A	7/21/95	B067S3		64.00		11.00 U
699-41-40	7/24/95	B067T0		3.10 L		13.00 L
699-41-42	7/24/95	B067T6		.89 L		11.00 U
699-42-39B	7/21/95	B067V1		38.00		11.00 U
699-42-41	7/21/95	B067V6		1.30 L		11.00 U
699-42-41	7/21/95	B067Z7		.93 L		11.00 U
699-42-42B	7/20/95	B067W1		.87 L		11.00 U
699-43-40	7/19/95	B067W6		1.50 L		11.00 U
699-43-41E	7/20/95	B067X1		1.20 L		11.00 U
699-43-41G	7/20/95	B067X6		16.00		11.00 U
699-43-45	7/06/95	B066H2	1.90 L		11.00 U	
699-43-45	7/06/95	B066H6		1.50 L		11.00 U
699-44-39B	7/20/95	B067Y1		.94 L		11.00 U
699-44-43B	7/20/95	B067Y6		.57 L		11.00 U

Table 5-4. Constituents with at Least One Detected Value for the
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(sheet 5 of 7)

Well Name	Collection Date	Sample Number	NITRATE 124/ppb 120/45000	POTASUM 34/ppb 390/.	POTASS 34/ppb 390/.	SILVER 34/ppb 5.5/100s
299-E18-1	9/05/95	B066H4	14000.00 D			
299-E18-1	9/05/95	B066H8			5800.00	
299-E18-1	9/05/95	B066J5	14000.00 D			
299-E18-1	9/05/95	B066J9			5700.00	
299-E32-4	7/18/95	B067Q6	28000.00 D			
299-E32-4	7/18/95	B067R0			6000.00 B	
699-40-39	7/21/95	B067R3	500.00			
699-40-39	7/21/95	B067R7			4700.00 B	
699-40-40A	7/21/95	B067R9	3000.00			
699-40-40A	7/21/95	B067S3			7100.00 B	
699-41-40	7/24/95	B067S6	16000.00 D			
699-41-40	7/24/95	B067T0			4000.00	
699-41-42	7/24/95	B067T2	3000.00			
699-41-42	7/24/95	B067T6			6000.00	
699-42-39B	7/21/95	B067T7	11000.00 D			
699-42-39B	7/21/95	B067V1			4800.00 B	
699-42-41	7/21/95	B067V2	500.00			
699-42-41	7/21/95	B067V6			2800.00 B	
699-42-41	7/21/95	B067Z3	500.00			
699-42-41	7/21/95	B067Z7			2800.00 B	
699-42-42B	7/20/95	B067V7	3800.00			
699-42-42B	7/20/95	B067W1			3900.00 B	
699-43-40	7/19/95	B067W2	6900.00			
699-43-40	7/19/95	B067W6			5000.00	
699-43-41E	7/20/95	B067W7	7600.00			
699-43-41E	7/20/95	B067X1			4200.00 B	
699-43-41G	7/20/95	B067X2	6400.00			
699-43-41G	7/20/95	B067X6			5100.00 B	
699-43-45	7/06/95	B066M2	1100.00	4100.00		5.50 U
699-43-45	7/06/95	B066M6			4100.00	
699-44-39B	7/20/95	B067X7	1300.00			
699-44-39B	7/20/95	B067Y1			3600.00 B	
699-44-43B	7/20/95	B067Y2	4000.00			
699-44-43B	7/20/95	B067Y6			6700.00 B	

Well Name	Collection Date	Sample Number	SILVER 34/ppb 5.5/100s	SODIUM 34/ppb 44/.	PSCODIUM 34/ppb 44/.	STRONCIUM 34/ppb .31/.
299-E18-1	9/05/95	B066H8	5.50 U		26000.00	220.00
299-E18-1	9/05/95	B066J9	5.50 U		26000.00	220.00
299-E32-4	7/18/95	B067R0	5.50 U		26000.00 Q	
699-40-39	7/21/95	B067R7	5.50 U		32000.00 Q	
699-40-40A	7/21/95	B067S3	5.60 L		38000.00 Q	
699-41-40	7/24/95	B067T0	5.50 U		29000.00 Q	
699-41-42	7/24/95	B067T6	5.50 U		21000.00 Q	
699-42-39B	7/21/95	B067V1	5.50 U		28000.00 Q	
699-42-41	7/21/95	B067V6	5.50 U		3500.00 Q	
699-42-41	7/21/95	B067Z7	5.50 U		3600.00 Q	
699-42-42B	7/20/95	B067W1	5.50 U		19000.00 Q	
699-43-40	7/19/95	B067W6	5.50 U		20000.00 Q	
699-43-41E	7/20/95	B067X1	5.50 U		23000.00 Q	
699-43-41G	7/20/95	B067X6	5.50 U		19000.00 Q	

Table 5-4. Constituents with at Least One Detected Value for the
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Well Name	Collection Date	Sample Number	FSILVER 34/ppb 5.5/100s	SODIUM 34/ppb 44/.	FSCDIUM 34/ppb 44/.	FSTRONIUM 34/ppb .31/.
699-43-45	7/06/95	8066H2		7900.00 d		
699-43-45	7/06/95	8066H6	5.50 U		7900.00 d	
699-44-39B	7/20/95	8067Y1	5.50 U		5300.00 d	
699-44-43B	7/20/95	8067Y6	5.50 U		20000.00 d	
Well Name	Collection Date	Sample Number	SULFATE 124/ppb 130/250000s	TIN 34/ppb 30/.	FTIN 34/ppb 30/.	TDS 65/ppb ./500000s
299-E18-1	9/05/95	806GH4	110000.00 D			
299-E18-1	9/05/95	806GH8			30.00 U	
299-E18-1	9/05/95	806GJ5	110000.00 D			
299-E18-1	9/05/95	806GJ9			30.00 U	
299-E32-4	7/18/95	8067R6	47000.00 D			
299-E32-4	7/18/95	8067R0			30.00 U	
699-40-39	7/21/95	8067R3	4100.00			
699-40-39	7/21/95	8067R7			30.00 U	
699-40-40A	7/21/95	8067R9	16000.00 D			
699-40-40A	7/21/95	8067S3			30.00 U	
699-41-40	7/24/95	8067S6	30000.00 D			
699-41-40	7/24/95	8067T0			30.00 U	
699-41-42	7/24/95	8067T2	15000.00 D			
699-41-42	7/24/95	8067T6			30.00 U	
699-42-39B	7/21/95	8067T7	36000.00 D			
699-42-39B	7/21/95	8067V1			30.00 L	
699-42-41	7/21/95	8067V2	7200.00			
699-42-41	7/21/95	8067V6			30.00 U	
699-42-41	7/21/95	8067Z3	7300.00			
699-42-41	7/21/95	8067Z7			30.00 U	
699-42-42B	7/20/95	8067V7	15000.00 D			
699-42-42B	7/20/95	8067W1			30.00 U	
699-43-40	7/19/95	8067W2	33000.00 D			
699-43-40	7/19/95	8067W6			30.00 U	
699-43-41E	7/20/95	8067W7	27000.00 D			
699-43-41E	7/20/95	8067X1			40.00 L	
699-43-41B	7/20/95	8067X2	25000.00 D			
699-43-41B	7/20/95	8067X6			30.00 U	
699-43-45	7/06/95	8066H2	11000.00 D	30.00 U		130000.00
699-43-45	7/06/95	8066H6			30.00 U	
699-44-39B	7/20/95	8067X7	9500.00			
699-44-39B	7/20/95	8067Y1			30.00 U	
699-44-43B	7/20/95	8067Y2	19000.00 D			
699-44-43B	7/20/95	8067Y6			30.00 U	

Table 5-4. Constituents with at Least One Detected Value for the
216-B-3 Pond Data for Reporting Period
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Well Name	Collection Date	Sample Number	TDICMPH 19/ppb 6.4/.	TRITIUM 142/pCi/L ./20000	TURBID 111/NTU ./.	Vanadium 34/ppb 1.9/.
299-E18-1	9/05/95	B06G04	6.40 U		9.80	
299-E18-1	9/05/95	B06GJ5	6.40 U			
299-E32-4	7/18/95	B06706	6.40 U		13.50	
699-40-39	7/21/95	B067R3	6.40 U		1.29	
699-40-40A	7/21/95	B067R9	6.40 U		.50	
699-41-40	7/24/95	B067S6	6.40 U		1.90	
699-41-42	7/24/95	B067T2	6.40 U		1.20	
699-42-39B	7/21/95	B067T7	6.40 U		.60	
699-42-41	7/21/95	B067V2	6.40 U		.31	
699-42-41	7/21/95	B067Z3	6.40 U			
699-42-42B	7/20/95	B067V7	6.40 U		.88	
699-43-40	7/19/95	B067M2	6.40 U		2.00	
699-43-41E	7/20/95	B067M7	9.00 L		1.10	
699-43-41B	7/20/95	B067X2	6.40 U		.50	
699-43-45	7/06/95	B066M2		758.00	.64	32.00
699-43-45	7/06/95	B067B9	6.40 U			
699-44-39B	7/20/95	B067X7	6.40 U		.70	
699-44-43B	7/20/95	B067Y2	6.40 U		1.54	

Well Name	Collection Date	Sample Number	FVANADI 34/ppb 1.9/.	ZINC 34/ppb 3.7/5000s	FZINC 34/ppb 3.7/5000s
299-E18-1	9/05/95	B06G08	12.00		3.70 U
299-E18-1	9/05/95	B06GJ9	9.60 L		3.70 U
299-E32-4	7/18/95	B067R0	20.00 BL		3.90 LQ
699-40-39	7/21/95	B067R7	7.60 BL		11.00 Q
699-40-40A	7/21/95	B067S3	2.70 BL		6.30 LQ
699-41-40	7/24/95	B067T0	21.00 BL		6.10 LQ
699-41-42	7/24/95	B067T6	24.00 BL		4.00 LQ
699-42-39B	7/21/95	B067Y1	11.00 BL		16.00 Q
699-42-41	7/21/95	B067V6	5.70 BL		5.70 LQ
699-42-41	7/21/95	B067Z7	6.10 BL		15.00 Q
699-42-42B	7/20/95	B067M1	36.00 B		5.50 LQ
699-43-40	7/19/95	B067M6	16.00 BL		6.20 LQ
699-43-41E	7/20/95	B067X1	9.20 BL		7.90 LQ
699-43-41B	7/20/95	B067X6	24.00 BL		8.10 LQ
699-43-45	7/06/95	B066M2		3.70 UQ	
699-43-45	7/06/95	B066M6	31.00		11.00 BQ
699-44-39B	7/20/95	B067Y1	12.00 BL		23.00 Q
699-44-43B	7/20/95	B067Y6	34.00 B		6.30 LQ

For explanation of this table, see Section 1.4 of report.

Table 5-5. Contamination Indicator Parameters for the
216-B-3 Pond Data for Reporting Period
July 1 through September 30, 1995.
(sheet 1 of 2)

Well Name	Collection Date	Sample Number	COND FIELD µmho 1/.	COND LAB µmho 1/.	pH FIELD .01/6.5-8.5e	pH LAB .01/6.5-8.5e	TOC ppb %/.	TOX ppb %/.
299-E18-1	9/05/95	806GH4	489		8.20	8.20	200 L	6.9 U
		806GH5	489		8.20		300 L	6.9 U
		806GH6	488		8.19		150 L	6.9 U
		806GH7	489		8.19		140 U	6.9 U
		806GJ5				8.20	140 U	6.9 U
		806GJ6					140 U	6.9 U
		806GJ7					200 L	6.9 U
		806GJ8					140 U	6.9 U
299-E32-4	7/18/95	8067Q6	424		7.92	8.00	200 L	6.9 U
		8067Q7	423		7.92		140 U	6.9 U
		8067Q8	424		7.92		140 L	6.9 U
		8067Q9	423		7.92		140 U	6.9 U
699-40-39	7/21/95	8067R3	312		8.22	8.20	140 U	6.9 U
		8067R4	312		8.21		140 U	6.9 U
		8067R5	311		8.22		200 L	6.9 U
		8067R6	313		8.24		140 U	6.9 U
699-40-40A	7/21/95	8067R9	354		8.24	8.10	140 U	6.9 UX
		8067S0	354		8.24		140 U	6.9 UX
		8067S1	350		8.24		140 U	6.9 UX
		8067S2	349		8.24		140 U	6.9 UX
699-41-40	7/24/95	8067S6	363		8.24	8.20	300 L	6.9 U
		8067S7	363		8.25		140 U	6.9 U
		8067S8	375		8.20		140 U	6.9 U
		8067S9	366		8.23		150 L	6.9 U
699-41-42	7/24/95	8067T2	220		8.37	8.30	400 L	6.9 U
		8067T3	214		8.37		200 L	6.9 U
		8067T4	215		8.37		200 L	6.9 U
		8067T5	230		8.37		500 L	6.9 U
699-42-39B	7/21/95	8067T7	369		8.03	7.90	300 L	6.9 UX
		8067T8	371		8.02		200 L	6.9 UX
		8067T9	370		8.02		300 L	6.9 UX
		8067V0	371		8.03		200 L	6.9 UX
699-42-41	7/21/95	8067V2	165		8.16	8.10	1000	6.9 UX
		8067V3	165		8.16		1000	6.9 U
		8067V4	165		8.16		1000	6.9 U
		8067V5	165		8.16		1000	6.9 UX
		8067Z3				8.10	1000	6.9 U
		8067Z4					1000	6.9 UXHY
		8067Z5					1000	6.9 U
		8067Z6					1000	6.9 U
699-42-42B	7/20/95	8067V7	258		8.09	8.10	200 L	6.9 U
		8067V8	262		8.09		200 L	6.9 U
		8067V9	261		8.09		300 L	7.0 L

Table 5-5. Contamination Indicator Parameters for the
216-B-3 Pond Data for Reporting Period
July 1 through September 30, 1995.
(sheet 2 of 2)

Well Name	Collection Date	Sample Number	COND FIELD uMho 1/.	COND LAB uMho 1/.	pH FIELD .01/6.5-8.5e	pH LAB .01/6.5-8.5s	TOC ppb */.	TOX ppb */.
699-42-42B	7/20/95	8067M0	260		8.10		300 L	6.9 U
699-43-40	7/19/95	8067M2	325		8.19	8.20	500 L	6.9 U
		8067M3	322		8.18		300 L	6.9 U
		8067M4	321		8.18		300 L	6.9 U
		8067M5	321		8.18		300 L	6.9 U
699-43-41E	7/20/95	8067M7	329		8.52	8.40	200 L	6.9 U
		8067M8	328		8.53		200 L	6.9 U
		8067M9	329		8.52		200 L	6.9 U
		8067M0	327		8.50		300 L	8.0 L
699-43-41C	7/20/95	8067M2	309		8.23	8.20	200 L	6.9 U
		8067M3	304		8.22		200 L	6.9 U
		8067M4	304		8.22		200 L	6.9 U
		8067M5	304		8.21		300 L	6.9 U
699-43-45	7/06/95	8066M2	209		8.15	8.20	400 L	6.9 U
		8066M3	208		8.14		300 L	6.9 U
		8066M4	208		8.14		400 L	6.9 U
		8066M5	208		8.14		400 L	6.9 U
699-44-39B	7/20/95	8067M7	200		8.33	8.20	700 L	6.9 U
		8067M8	199		8.33		700 L	6.9 U
		8067M9	198		8.34		700 L	6.9 U
		8067M0	197		8.35		900 L	6.9 U
699-44-43B	7/20/95	8067M2	299		8.26	8.20	200 L	6.9 U
		8067M3	301		8.25		400 L	6.9 U
		8067M4	300		8.24		200 L	6.9 U
		8067M5	298		8.24		200 L	6.9 U

* Detection limits for TOC and TOX vary depending on the performing laboratory.
For explanation of this table, see Section 1.4 of report.

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6.0 216-A-29 DITCH

J. M. Votava
Westinghouse Hanford Company

6.1 INTRODUCTION

The 216-A-29 Ditch (A-29 Ditch) is located east of the 200 East Area in the central portion of the Hanford Site (Figure 6-1). From 1955 to July 1991, the unlined ditch received effluent from the Plutonium-Uranium Extraction (PUREX) Plant chemical sewer line and conducted it to the 216-B-3-3 Ditch and the B Pond System. After July 15, 1991, the effluent to the A-29 Ditch was rerouted to the PUREX cooling water line. The ditch was backfilled and the site was graded and stabilized to meet Milestone M-17-10 of the *Hanford Federal Facility Agreement and Consent Order* (Tri-Party Agreement) (Ecology et al. 1994).

Groundwater beneath the A-29 Ditch has been monitored by a RCRA groundwater monitoring network since 1988 because of earlier discharges of caustic and potentially hazardous chemicals to the ditch. The A-29 Ditch is currently in an interim-status groundwater quality assessment monitoring program because of elevated specific conductance levels in one monitoring well (299-E25-35) (Chou et al. 1990).

The RCRA groundwater monitoring network consists of three upgradient and 10 downgradient wells. Eleven additional wells in the surrounding area are used to provide supplementary data for the groundwater quality assessment investigation. Figure 6-1 shows the locations of the wells used to monitor groundwater quality for the A-29 Ditch. Table 6-1 presents pertinent data about these wells.

6.2 WATER LEVEL MEASUREMENTS

Water levels are measured monthly in the 13 wells that make up the A-29 Ditch monitoring network and are measured quarterly in additional wells that provide supplemental data for the groundwater quality assessment investigation. Water level measurements are also recorded when the wells are sampled. Water level measurements obtained during this quarter are presented in Table 6-2.

6.3 WATER CHEMISTRY DATA

Groundwater beneath the A-29 Ditch is sampled quarterly in accordance with the groundwater quality assessment plan (Chou et al. 1990). The constituent list and summary of results are provided in Table 6-3. Reported analytical data are included in Tables 6-4 and 6-5. Table 6-4 lists the wells and analytical results for chemical constituents with at least one detected value above the MDL. Results of analyses for CIP are reported in Table 6-5. Some of the data from the second quarter sampling were missing from the April through June quarterly report because of laboratory reporting delays. These data have not been reported yet.

Eight wells in the A-29 Ditch detection network had individual constituent results that are higher than the historical trends for filtered chromium, filtered iron, filtered nickel, unfiltered nickel, and tritium. Data are flagged in Tables 6-4 and 6-5 according to the explanation found in Sections 1.2 and 1.4.

Constituents reported in concentrations that exceed the DWS for the A-29 Ditch network and supplemental wells include unfiltered chromium, nitrate, filtered iron, filtered nickel, unfiltered nickel, and tritium (Table 6-6).

A groundwater assessment report for the 216-A-29 Ditch was released in October 1995 (Votava 1995). The report presents findings of the groundwater quality assessment program for the 216-A-29 Ditch. These findings are the result of a study to determine if effluent discharged to the 216-A-29 Ditch is the source of elevated specific conductance in well 299-E25-35. The study determined that the ditch is contributing to elevated specific conductance and the source is nonhazardous. The report describes the current monitoring status of the 216-A-29 Ditch and groundwater chemical data interpretation, and recommends reinstating an indicator-evaluation monitoring program in accordance with 40 CFR 265.93(d)(6) starting in October 1995.

Figure 6-1. Well Location Map for the 216-A-29 Ditch.

H9411010.14a

Table 6-1. Monitoring Well Purpose and Sampling Schedule
for the 216-A-29 Ditch. (2 sheets)

Well no.	Relative position	Hydrogeologic unit ^a	Sample frequency	Sample date, 3rd Qtr 1995
699-43-43 ^b	Upgradient	Hanford: Water Table	Quarterly	07/06/95
699-43-45 ^b	Upgradient	Hanford: Water Table	Quarterly	07/06/95
299-E25-32P	Downgradient	Hanford: Water Table	Quarterly	07/06/95
299-E25-26	Downgradient	Hanford: Mid-Depth	Quarterly	07/17/95
299-E25-28	Downgradient	Ringold: Deep	Quarterly	07/17/95
299-E25-34	Downgradient	Hanford: Water Table	Quarterly	07/17/95
299-E25-35	Downgradient	Hanford: Water Table	Quarterly	07/14/95
299-E25-42	Downgradient	Hanford: Water Table	Quarterly	07/14/95
299-E25-43	Downgradient	Hanford: Water Table	Quarterly	07/18/95
299-E25-47	Downgradient	Hanford: Water Table	Quarterly	07/14/95
299-E25-48	Downgradient	Hanford: Water Table	Quarterly	07/14/95
299-E26-12	Downgradient	Hanford: Water Table	Quarterly	07/17/95
299-E26-13	Downgradient	Hanford: Water Table	Quarterly	07/17/95
299-E17-20 ^{d,e}	Downgradient	Ringold: Water Table	Quarterly	07/14/95
299-E25-11 ^e	Downgradient	Undetermined: Mid-Depth	Quarterly	07/18/95
299-E25-18 ^e	Downgradient	Undetermined: Mid-Depth	Quarterly	07/11/95
299-E25-19 ^e	Downgradient	Undetermined: Mid-Depth	Quarterly	07/11/95
299-E25-20 ^e	Downgradient	Undetermined: Mid-Depth	Quarterly	07/11/95

Table 6-1. Monitoring Well Purpose and Sampling Schedule
for the 216-A-29 Ditch. (2 sheets)

Well no.	Relative position	Hydrogeologic unit ^a	Sample frequency	Sample date, 3rd Qtr 1995
299-E25-21 ^a	Downgradient	Hanford: Water Table	Quarterly	07/11/95
299-E25-31 ^a	Downgradient	Hanford: Water Table	Quarterly	07/11/95
299-E25-36 ^{c,d,e}	Downgradient	Ringold: Water Table	Quarterly	07/17/95

^aHydrogeologic units include the sandy gravels of the Hanford formation and the silty sands of the Ringold Formation.

^bWells shared with the 216-B-3 Pond monitoring network.

^cWells shared with the 216-A-36B monitoring network.

^dWells shared with the 216-A-10 monitoring network.

^eWells used for supplemental groundwater quality.

Table 6-2. RCRA Water Level Measurement Report
 216-A-29 Ditch, Third Quarter 1995.
 (sheet 1 of 3)

Well	Date	Depth to water (ft)	Water level elevation above ms1 (ft)	(m)
Wells in the Monitoring System				
299-E25-26	7/17/95	266.60*	401.92	122.51
	7/20/95	266.94	401.58	122.40
	8/18/95	266.97	401.55	122.39
	9/07/95	267.06	401.46	122.37
299-E25-28	7/17/95	260.84*	401.60	122.41
	7/20/95	260.51	401.93	122.51
	8/18/95	260.57	401.87	122.49
	9/07/95	260.68	401.76	122.46
299-E25-32P	7/06/95	268.01*	401.18	122.28
	7/20/95	268.19	401.00	122.22
	8/18/95	268.34	400.85	122.18
	9/07/95	268.44	400.75	122.15
299-E25-34	7/17/95	261.08*	401.79	122.47
	7/20/95	261.41	401.46	122.37
	8/18/95	261.73	401.14	122.27
	9/07/95	261.32	401.55	122.39
299-E25-35	7/14/95	273.12*	401.27	122.31
	7/20/95	272.85	401.54	122.39
	8/18/95	272.87	401.52	122.38
	9/07/95	272.89	401.50	122.38
299-E25-42	7/14/95	292.70*+	390.59	119.05
	7/20/95	281.67	401.62	122.41
	8/18/95	281.68	401.61	122.41
	9/07/95	281.70	401.59	122.40
299-E25-43	7/18/95	247.93*	401.96	122.52
	7/20/95	247.89	402.00	122.53
	9/07/95	248.07	401.82	122.47
299-E25-47	7/14/95	271.80*	401.97	122.52
	7/20/95	271.94	401.83	122.48
	8/18/95	271.94	401.83	122.48
	9/07/95	272.00	401.77	122.46

Table 6-2. RCRA Water Level Measurement Report
 216-A-29 Ditch - 3rd Quarter 1995.
 (sheet 2 of 3)

Well	Date	Depth to water (ft)	Water level elevation above msl	
			(ft)	(m)
Wells in the Monitoring System				
299-E25-48	7/14/95	280.48*	401.83	122.48
	7/20/95	280.56	401.75	122.45
	8/18/95	280.53	401.78	122.46
	9/07/95	280.58	401.73	122.45
299-E26-12	7/17/95	228.44*	402.30	122.62
	7/20/95	228.63	402.11	122.56
	8/18/95	228.70	402.04	122.54
	9/07/95	228.78	401.96	122.52
299-E26-13	7/17/95	202.88*	402.14	122.57
	7/20/95	202.99	402.03	122.54
	8/18/95	203.06	401.96	122.52
	9/07/95	203.10	401.92	122.51
699-43-43	7/06/95	165.75*	413.62	126.07
	9/26/95	166.41	412.96	125.87
699-43-45	7/06/95	195.96*	401.72	122.44
	9/26/95	195.62	402.06	122.55
Supplemental Wells for Monitoring				
299-E17-20	7/14/95	317.79*	401.44	122.36
	9/21/95	318.18	401.05	122.24
299-E25-11	7/18/95	279.90*	401.38	122.34
	9/07/95	279.85	401.43	122.36
299-E25-18	7/11/95	278.56*	400.49	122.07
	9/07/95	277.56	401.49	122.37
299-E25-19	7/11/95	276.83*	400.37	122.03
	9/07/95	275.88	401.32	122.32
299-E25-20	7/11/95	275.97*	400.33	122.02
	9/07/95	275.08	401.22	122.29

Table 6-2. RCRA Water Level Measurement Report
 216-A-29 Ditch - 3rd Quarter 1995.
 (sheet 3 of 3)

Well	Date	Depth to water (ft)	Water level elevation above msl (ft)	(m)
Supplemental Wells for Monitoring				
299-E25-21	9/07/95	275.63	401.64	122.42
299-E25-31	7/17/95	274.81	401.94	122.51
	9/07/95	274.95	401.80	122.47
299-E25-36	7/17/95	306.30*	401.09	122.25
	9/21/95	306.29	401.10	122.26
299-E25-6	9/07/95	259.51	398.80	121.55
299-E25-9	9/07/95	255.60	399.26	121.69
299-E26-2	9/07/95	233.73	401.57	122.40

- NOTES: 1. Water level elevations are calculated by subtracting the measured depth-to-water from the surveyed elevation for the well.
2. Depth-to-water values are transcribed from field records.
3. Measurements marked with an '*' were taken at the time of sampling.
4. Measurements marked with a '+' are outside of the expected range, and are suspected of error.

Table 6-3. Constituent List and Summary of Results
for the 216-A-29 Ditch Data for Reporting Period
July 1 through September 30, 1995.
(sheet 1 of 2)

CONTAMINATION INDICATOR PARAMETERS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS Limit	Agency	Number of Samples		
		Full						Total	>CRQL	>DWS
CONDUCT		Conductivity, field	umhos					63	63	
TOC		Total organic carbon	ppb	140				56	56	
TOX		Total organic halogen	ppb	6.9				56	0	
PH	93	pH, field	pH		6.5-8.5	EPAS		63	63	0
PH	125	pH, lab	pH		6.5-8.5	EPAS		14	14	0

DRINKING WATER PARAMETERS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS Limit	Agency	Number of Samples		
		Full						Total	>CRQL	>DWS
ARSENIC		Arsenic, filtered	ppb	2	50	EPA		14	14	0
BARIUM		Barium	ppb	1.4	2000	EPA		22	22	0
FBARIUM		Barium, filtered	ppb	1.4	2000	EPA		22	22	0
CADMIUM		Cadmium	ppb	.98	5	EPA		22	0	0
FCADMIUM		Cadmium, filtered	ppb	.98	5	EPA		22	0	0
CHROMIUM		Chromium	ppb	3.7	100	EPA		22	16	1
FCHROMIUM		Chromium, filtered	ppb	3.7	100	EPA		22	12	0
FLUORIDE		Fluoride	ppb	52	4000	EPA		22	22	0
ALPHA		Gross alpha	pCi/L		15	EPA		14	7	0
NITRATE		Nitrate	ppb	120	45000	EPA		22	22	1

GROUNDWATER QUALITY PARAMETERS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS Limit	Agency	Number of Samples		
		Full						Total	>CRQL	>DWS
CHLORIDE		Chloride	ppb	110	250000	EPAS		22	22	0
IRON		Iron	ppb	8.9	300	EPAS		22	22	4
FIRON		Iron, filtered	ppb	8.9	300	EPAS		22	22	0
MANGANESE		Manganese	ppb	.55	50	EPAS		22	22	0
FMANGANESE		Manganese, filtered	ppb	.55	50	EPAS		22	22	0
LPHENOL	19	Phenol	ppb	.21				1	0	
LPHENOL	30	Phenol	ppb	.58				14	0	
SODIUM		Sodium	ppb	44				22	22	
FSODIUM		Sodium, filtered	ppb	44				22	22	
SULFATE		Sulfate	ppb	130	250000	EPAS		22	22	0

SITE SPECIFIC AND OTHER CONSTITUENTS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS Limit	Agency	Number of Samples		
		Full						Total	>CRQL	>DWS
246-TRP		2,4,6-Trichlorophenol	ppb	.8				14	0	
24-dchp	19	2,4-Dichlorophenol	ppb	2.8				1	0	
24-dchp	30	2,4-Dichlorophenol	ppb	.43				14	0	
DINPHEN		2,4-Dimethylphenol	ppb	.62				14	0	
DINPHEN		2,4-Dinitrophenol	ppb	6.8				14	0	
26-DCHP		2,6-Dichlorophenol	ppb	.52				14	0	
CHLPHEN		2-Chlorophenol	ppb	.6				14	0	
2METRPH		2-Methylphenol	ppb	.29				1	0	
2NITPH	19	2-Nitrophenol	ppb	4.2				1	0	
2NITPH	30	2-Nitrophenol	ppb	.6				14	0	

Table 6-3. Constituent List and Summary of Results
for the 216-A-29 Ditch Data for Reporting Period
July 1 through September 30, 1995.
(sheet 2 of 2)

SITE SPECIFIC AND OTHER CONSTITUENTS

Short	(Method)	Constituent Name	Full	Units	Lab CRQL	DWS Limit	Agency	Number of Samples Total	>CRQL	>DWS
BUTDHP		2-sec-Butyl-4,6-dinitrophenol	DM	ppb	.41	7	EPA	14	0	0
46DN2HP		4,6-Dinitro-2-methylphenol		ppb	.84			14	0	
CMLCRES		4-Chloro-3-methylphenol		ppb	.52			14	0	
4METHPH		4-Methylphenol		ppb	.52			1	0	
NITPHEN		4-Nitrophenol		ppb	.49			14	1	
ALKALIN		Alkalinity		ppb	3500			22	22	
ALUMINUM		Aluminum		ppb	31	200	EPAS	22	5	0
FALLUMIN		Aluminum, filtered		ppb	31	200	EPAS	22	1	0
ANTIMONY		Antimony		ppb	24	6	EPA	22	0	22*
FANTIMO		Antimony, filtered		ppb	24	6	EPA	22	0	22*
BENZOTH		Benzothiazole		ppb	2.1			1	0	
BERYLLIUM		Beryllium		ppb	.63	4	EPA	22	0	0
FBERYLL		Beryllium, filtered		ppb	.63	4	EPA	22	0	0
BISZEPH		Bis(2-ethylhexyl) phthalate		ppb	.37			1	0	
BROMIDE		Bromide		ppb	72			22	0	
CALCIUM		Calcium		ppb	41			22	22	
FCALCIU		Calcium, filtered		ppb	41			22	22	
COBALT		Cobalt		ppb	5.3			22	2	
FCOBALT		Cobalt, filtered		ppb	5.3			22	0	
COPPER		Copper		ppb	2.1	1000	EPAS	22	12	0
FCOPPER		Copper, filtered		ppb	2.1	1000	EPAS	22	5	0
CRESOLS		Cresols (methylphenols)		ppb	1.7			14	0	
DECANE		Decane		ppb	.38			1	0	
DDOECAN		Dodecane		ppb	.26			1	0	
BETA		Gross beta		pCi/L				14	13	
MAGNES		Magnesium		ppb	26			22	22	
FMAGNES		Magnesium, filtered		ppb	26			22	22	
NAPHTHA		Naphthalene		ppb	.16			1	0	
NICKEL		Nickel		ppb	11	100	EPA	22	8	2
FNICKEL		Nickel, filtered		ppb	11	100	EPA	22	3	1
NITRITE		Nitrite		ppb	140	4000	EPA	22	0	0
PENTCHP 19		Pentachlorophenol		ppb	.87	1	EPA	1	0	0
PENTCHP 30		Pentachlorophenol		ppb	.48	1	EPA	14	0	0
PHOSPHA		Phosphate		ppb	340			22	0	
POTASSIUM		Potassium		ppb	390			22	22	
FPOTASS		Potassium, filtered		ppb	390			22	22	
SILVER		Silver		ppb	5.5	100	EPAS	22	1	0
FSILVER		Silver, filtered		ppb	5.5	100	EPAS	22	1	0
TETPHNL		Tetrachlorophenols		ppb	.52			14	0	
TETRADE		Tetradecane		ppb	.28			1	0	
TIN		Tin		ppb	30			22	3	
FTIN		Tin, filtered		ppb	30			22	6	
TDS		Total dissolved solids		ppb		500000	EPAS	22	22	0
TRIBUTPH		Tributyl Phosphate		ppb	.14			1	0	
TRIPHNL		Trichlorophenols		ppb	.56			14	0	
TOICNPH		Tris-2-chloroethyl phosphate		ppb	6.4			1	0	
TRITIUM		Tritium		pCi/L		20000	EPA	14	14	2
TURBID		Turbidity	NTU					30	30	
VANADIUM		Vanadium		ppb	1.9			22	22	
FVANADI		Vanadium, filtered		ppb	1.9			22	22	
ZINC		Zinc		ppb	3.7	5000	EPAS	22	17	0
FZINC		Zinc, filtered		ppb	3.7	5000	EPAS	22	18	0
MCRESOL		m-Cresol		ppb	.77			1	0	

For explanation of this table, see Section 1.4 of report.

Table 6-4. Constituents with at Least One Detected Value for the
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Well Name	Collection Date	Sample Number	NITROGEN 30/ppb .49/.	ALKALIN 357/ppb 3500/.	ALUMINUM 34/ppb 31/200s	FALUMIN 34/ppb 31/200s
299-E17-20	7/14/95	80G683		90000.00	31.00 U	
299-E17-20	7/14/95	80G684				31.00 U
299-E25-11	7/18/95	80G685		80000.00	31.00 U	
299-E25-11	7/18/95	80G686				31.00 U
299-E25-18	7/11/95	80G6C3		80000.00	31.00 U	
299-E25-18	7/11/95	80G6C4				31.00 U
299-E25-19	7/11/95	80G6C5		90000.00	31.00 U	
299-E25-19	7/11/95	80G6C6				31.00 U
299-E25-20	7/11/95	80G6D3		90000.00	31.00 U	
299-E25-20	7/11/95	80G6D4				31.00 U
299-E25-21	7/11/95	80G6D9		80000.00	31.00 U	
299-E25-21	7/11/95	80G6F1				31.00 U
299-E25-26	7/17/95	80G688	.49 U	80000.00	31.00 U	
299-E25-26	7/17/95	80G692				31.00 U
299-E25-28	7/17/95	80G698	.49 U	80000.00	31.00 U	
299-E25-28	7/17/95	80G682				31.00 U
299-E25-31	7/17/95	80G6F4		90000.00	49.00 L	
299-E25-31	7/17/95	80G6F5				31.00 U
299-E25-32P	7/06/95	80G688	.49 U	80000.00	69.00 L	
299-E25-32P	7/06/95	80G6C2				31.00 U
299-E25-34	7/17/95	80G693	.49 U	80000.00	31.00 U	
299-E25-34	7/17/95	80G697				31.00 U
299-E25-34	7/17/95	80G6C7	.49 U	80000.00	33.00 L	
299-E25-34	7/17/95	80G6D1				31.00 U
299-E25-35	7/14/95	80G6D7	.49 U	100000.00	31.00 U	
299-E25-35	7/14/95	80G6F3				31.00 U
299-E25-36	7/17/95	80G6F7		90000.00	31.00 U	
299-E25-36	7/17/95	80G6F8				31.00 U
299-E25-42	7/14/95	80G6F9	.49 U	110000.00	37.00 L	
299-E25-42	7/14/95	80G6G3				31.00 U
299-E25-43	7/18/95	80G6G5	.49 U	80000.00	31.00 U	
299-E25-43	7/18/95	80G6G9				31.00 U
299-E25-47	7/14/95	80G6H5	.49 U	100000.00	31.00 U	
299-E25-47	7/14/95	80G6H9				31.00 U
299-E25-48	7/14/95	80G6J8	.52 L	80000.00	66.00 L	
299-E25-48	7/14/95	80G6K2				31.00 U
299-E26-12	7/17/95	80G6K7	.49 U	80000.00	31.00 U	
299-E26-12	7/17/95	80G6L1				31.00 U
299-E26-13	7/17/95	80G6L2	.49 U	80000.00	31.00 U	
299-E26-13	7/17/95	80G6L6				37.00 L
699-43-43	7/06/95	80G6L7	.49 U	80000.00	31.00 U	
699-43-43	7/06/95	80G6N1				31.00 U
699-43-45	7/06/95	80G6N2	.49 U	90000.00	31.00 U	
699-43-45	7/06/95	80G6N6				31.00 U

Table 6-4. Constituents with at Least One Detected Value for the
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Well Name	Collection Date	Sample Number	ARSENIC 43/ppb 2/50	BARIUM 34/ppb 1.4/2000	FEARUM 34/ppb 1.4/2000	CALCIUM 34/ppb 41/.
299-E17-20	7/14/95	806683		50.00		40000.00 q
299-E17-20	7/14/95	806684			50.00	
299-E25-11	7/18/95	806685		17.00 L		20000.00 q
299-E25-11	7/18/95	806686			16.00 L	
299-E25-18	7/11/95	8066C3		12.00 L		23000.00 q
299-E25-18	7/11/95	8066C4			12.00 L	
299-E25-19	7/11/95	8066C5		26.00		23000.00 q
299-E25-19	7/11/95	8066C6			26.00	
299-E25-20	7/11/95	806603		18.00 L		22000.00 q
299-E25-20	7/11/95	806604			18.00 L	
299-E25-21	7/11/95	806609		12.00 L		19000.00 q
299-E25-21	7/11/95	8066F1			12.00 L	
299-E25-26	7/17/95	806688		12.00 L		20000.00 q
299-E25-26	7/17/95	806692	4.70 L		12.00 L	
299-E25-28	7/17/95	806698		14.00 L		19000.00 q
299-E25-28	7/17/95	806682	8.70		14.00 L	
299-E25-31	7/17/95	8066F4		26.00		21000.00 q
299-E25-31	7/17/95	8066F5			22.00	
299-E25-32P	7/06/95	806688		14.00 L		20000.00 q
299-E25-32P	7/06/95	8066C2	2.80 L		13.00 L	
299-E25-34	7/17/95	806693		16.00 L		20000.00 q
299-E25-34	7/17/95	806697	6.70		16.00 L	
299-E25-34	7/17/95	8066C7		15.00 L		20000.00 q
299-E25-34	7/17/95	806601	7.50		15.00 L	
299-E25-35	7/14/95	806607		26.00		28000.00 q
299-E25-35	7/14/95	8066F3	11.00		27.00	
299-E25-36	7/17/95	8066F7		22.00		29000.00 q
299-E25-36	7/17/95	8066F8			22.00	
299-E25-42	7/14/95	8066F9		23.00		31000.00 q
299-E25-42	7/14/95	806663	8.20		23.00	
299-E25-43	7/18/95	806605		16.00 L		20000.00 q
299-E25-43	7/18/95	806609	8.00		16.00 L	
299-E25-47	7/14/95	8066R5		23.00		23000.00 q
299-E25-47	7/14/95	8066R9	11.00		23.00	
299-E25-48	7/14/95	8066J8		26.00		21000.00 q
299-E25-48	7/14/95	8066K2	6.90		26.00	
299-E26-12	7/17/95	8066K7		13.00 L		21000.00 q
299-E26-12	7/17/95	8066L1	7.20		13.00 L	
299-E26-13	7/17/95	8066L2		13.00 L		23000.00 q
299-E26-13	7/17/95	8066L6	8.00		13.00 L	
699-43-43	7/06/95	8066L7		9.20 L		21000.00 q
699-43-43	7/06/95	8066M1	4.10 L		9.30 L	
699-43-45	7/06/95	8066M2		28.00		24000.00 q
699-43-45	7/06/95	8066M6	9.40		29.00	

Table 6-4. Constituents with at Least One Detected Value for the
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Well Name	Collection Date	Sample Number	CALCIU 34/ppb 41/.	CHLORID 124/ppb 110/250000s	CHROMIUM 34/ppb 3.7/100	CHROMI 34/ppb 3.7/100
299-E17-20	7/14/95	80G683		4400.00	27.00	
299-E17-20	7/14/95	80G684	40000.00 Q			3.70 U
299-E25-11	7/18/95	80G685		1800.00	14.00 L	
299-E25-11	7/18/95	80G686	20000.00 Q			3.80 L
299-E25-18	7/11/95	80G6C3		2200.00	3.70 U	
299-E25-18	7/11/95	80G6C4	22000.00 Q			4.20 L
299-E25-19	7/11/95	80G6C5		2500.00	3.70 U	
299-E25-19	7/11/95	80G6C6	23000.00 Q			3.70 U
299-E25-20	7/11/95	80G6D3		2700.00	3.70 U	
299-E25-20	7/11/95	80G6D4	22000.00 Q			3.70 U
299-E25-21	7/11/95	80G6D9		2000.00	3.70 U	
299-E25-21	7/11/95	80G6F1	19000.00 Q			3.70 U
299-E25-26	7/17/95	80G688		1600.00	3.70 U	
299-E25-26	7/17/95	80G692	20000.00 Q			3.70 U
299-E25-28	7/17/95	80G698		1600.00	3.70 U	
299-E25-28	7/17/95	80G682	19000.00 Q			3.70 U
299-E25-31	7/17/95	80G6F4		1500.00	250.00	
299-E25-31	7/17/95	80G6F5	21000.00 Q			26.00
299-E25-32P	7/06/95	80G688		1500.00	31.00	
299-E25-32P	7/06/95	80G6C2	20000.00 Q			3.70 U
299-E25-34	7/17/95	80G693		1700.00	25.00	
299-E25-34	7/17/95	80G697	20000.00 Q			45.00 F
299-E25-34	7/17/95	80G6C7		1800.00	13.00 L	
299-E25-34	7/17/95	80G6D1	20000.00 Q			15.00 L
299-E25-35	7/14/95	80G6D7		3300.00	24.00	
299-E25-35	7/14/95	80G6F3	28000.00 Q			6.80 L
299-E25-36	7/17/95	80G6F7		4100.00	21.00	
299-E25-36	7/17/95	80G6F8	28000.00 Q			6.20 L
299-E25-42	7/14/95	80G6F9		4300.00	66.00	
299-E25-42	7/14/95	80G6E3	31000.00 Q			7.20 L
299-E25-43	7/18/95	80G6E5		1700.00	45.00	
299-E25-43	7/18/95	80G6E9	20000.00 Q			3.70 U
299-E25-47	7/14/95	80G6H5		2500.00	11.00 L	
299-E25-47	7/14/95	80G6H9	23000.00 Q			3.70 U
299-E25-48	7/14/95	80G6J8		2700.00	48.00	
299-E25-48	7/14/95	80G6K2	21000.00 Q			26.00
299-E26-12	7/17/95	80G6K7		1500.00	35.00	
299-E26-12	7/17/95	80G6L1	21000.00 Q			3.70 U
299-E26-13	7/17/95	80G6L2		1700.00	31.00	
299-E26-13	7/17/95	80G6L6	22000.00 Q			5.70 L
699-43-43	7/06/95	80G6L7		1200.00	12.00 L	
699-43-43	7/06/95	80G6H1	22000.00 Q			4.40 L
699-43-43	7/06/95	80G6H2		1700.00	13.00 L	
699-43-45	7/06/95	80G6H6	24000.00 Q			5.00 L

Table 6-4. Constituents with at Least One Detected Value for the
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Well Name	Collection Date	Sample Number	COBALT 34/ppb 5.3/.	FCOBALT 34/ppb 5.3/.	COPPER 34/ppb 2.1/1000s	FCOPPER 34/ppb 2.1/1000s
299-E17-20	7/14/95	B06683	5.30 U		2.10 U	
299-E17-20	7/14/95	B06684		5.30 U		2.10 U
299-E25-11	7/18/95	B06685	5.30 U		2.10 U	
299-E25-11	7/18/95	B06686		5.30 U		2.10 U
299-E25-18	7/11/95	B066C3	5.30 U		6.40 L	
299-E25-18	7/11/95	B066C4		5.30 U		2.10 U
299-E25-19	7/11/95	B066C5	5.30 U		2.10 U	
299-E25-19	7/11/95	B066C6		5.30 U		2.10 U
299-E25-20	7/11/95	B06603	5.30 U		2.10 U	
299-E25-20	7/11/95	B06604		5.30 U		2.10 U
299-E25-21	7/11/95	B06609	5.30 U		2.10 U	
299-E25-21	7/11/95	B066F1		5.30 U		2.40 L
299-E25-26	7/17/95	B06688	5.30 U		2.40 L	
299-E25-26	7/17/95	B06692		5.30 U		2.10 U
299-E25-28	7/17/95	B06698	5.30 U		2.10 U	
299-E25-28	7/17/95	B06682		5.30 U		2.10 U
299-E25-31	7/17/95	B066F4	6.00 L		34.00 F	
299-E25-31	7/17/95	B066F5		5.30 U		2.10 U
299-E25-32P	7/06/95	B06688	5.30 U		2.40 L	
299-E25-32P	7/06/95	B066C2		5.30 U		2.10 U
299-E25-34	7/17/95	B06693	5.30 U		3.60 L	
299-E25-34	7/17/95	B06697		5.30 U		7.60 L
299-E25-34	7/17/95	B066C7	5.30 U		2.40 L	
299-E25-34	7/17/95	B06601		5.30 U		2.80 L
299-E25-35	7/14/95	B06607	5.30 U		2.10 U	
299-E25-35	7/14/95	B066F3		5.30 U		2.10 U
299-E25-36	7/17/95	B066F7	5.30 U		2.40 L	
299-E25-36	7/17/95	B066F8		5.30 U		4.00 L
299-E25-42	7/14/95	B066F9	5.30 U		4.40 L	
299-E25-42	7/14/95	B066E3		5.30 U		2.10 U
299-E25-43	7/18/95	B06605	5.30 U		5.20 L	
299-E25-43	7/18/95	B066G9		5.30 U		2.10 U
299-E25-47	7/14/95	B066H5	5.30 U		3.20 L	
299-E25-47	7/14/95	B066H9		5.30 U		2.10 U
299-E25-48	7/14/95	B066J8	6.40 BL		2.80 L	
299-E25-48	7/14/95	B066K2		5.30 U		2.10 U
299-E26-12	7/17/95	B066K7	5.30 U		2.10 U	
299-E26-12	7/17/95	B066L1		5.30 U		2.10 U
299-E26-13	7/17/95	B066L2	5.30 U		2.80 L	
299-E26-13	7/17/95	B066L6		5.30 U		2.40 L
699-43-43	7/06/95	B066L7	5.30 U		2.10 U	
699-43-43	7/06/95	B066M1		5.30 U		2.10 U
699-43-45	7/06/95	B066H2	5.30 U		2.10 U	
699-43-45	7/06/95	B066H6		5.30 U		2.10 U

Table 6-4. Constituents with at Least One Detected Value for the
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Well Name	Collection Date	Sample Number	FLUORID 124/ppb 52/4000	ALPHA 135/pCi/L ./15	BETA 136/pCi/L ./.	IRON 34/ppb 8.9/300s
299-E17-20	7/14/95	806683	700.00			130.00 B
299-E25-11	7/18/95	806685	500.00			140.00
299-E25-18	7/11/95	8066C3	500.00			760.00 B
299-E25-19	7/11/95	8066C5	800.00			140.00 B
299-E25-20	7/11/95	8066D3	900.00			210.00 B
299-E25-21	7/11/95	8066D9	600.00			160.00 B
299-E25-26	7/17/95	806688	200.00	1.05	2.71	42.00 B
299-E25-28	7/17/95	806698	200.00	.46 U	3.53	110.00 B
299-E25-31	7/17/95	8066F4	300.00			1100.00 B
299-E25-32P	7/06/95	806688	400.00	.64 U	2.03 U	410.00
299-E25-34	7/17/95	806693	200.00	.49 U	5.50	120.00 B
299-E25-34	7/17/95	8066C7	200.00	1.67	5.59	80.00 B
299-E25-35	7/14/95	806697	900.00	.69 U	4.52	110.00 B
299-E25-36	7/17/95	8066F7	300.00			110.00 B
299-E25-42	7/14/95	8066F9	900.00	3.62	3.97	300.00 B
299-E25-43	7/18/95	8066G5	300.00	1.00	5.96	520.00
299-E25-47	7/14/95	8066H5	700.00	3.31	3.90	85.00 B
299-E25-48	7/14/95	8066J8	500.00	1.15	4.17	300.00 B
299-E26-12	7/17/95	8066K7	200.00	.53 U	2.88	180.00 B
299-E26-13	7/17/95	8066L2	200.00	.43 U	3.81	140.00 B
699-43-43	7/06/95	8066L7	300.00	.02 U	4.52	60.00
699-43-45	7/06/95	8066H2	300.00	1.09	5.27	64.00

Well Name	Collection Date	Sample Number	IRON 34/ppb 8.9/300s	MAGNES 34/ppb 26/.	FMAGNES 34/ppb 26/.	MANGESE 34/ppb .55/50s
299-E17-20	7/14/95	806683		13000.00		3.00 L
299-E17-20	7/14/95	806684	25.00 B		13000.00	
299-E25-11	7/18/95	806685		5500.00		5.40 L
299-E25-11	7/18/95	806686	20.00		5400.00	
299-E25-18	7/11/95	8066C3		6300.00		12.00
299-E25-18	7/11/95	8066C4	33.00 B		6200.00	
299-E25-19	7/11/95	8066C5		6000.00		11.00
299-E25-19	7/11/95	8066C6	43.00 B		5900.00	
299-E25-20	7/11/95	8066D3		5800.00		5.20 L
299-E25-20	7/11/95	8066D4	25.00 B		5800.00	
299-E25-21	7/11/95	8066D9		5300.00		4.00 L
299-E25-21	7/11/95	8066F1	32.00 B		5300.00	
299-E25-26	7/17/95	806688		5500.00		1.10 L
299-E25-26	7/17/95	806692	16.00 BL		5400.00	
299-E25-28	7/17/95	806698		5700.00		.59 L
299-E25-28	7/17/95	806682	15.00 BL		5600.00	
299-E25-31	7/17/95	8066F4		6000.00		15.00
299-E25-31	7/17/95	8066F5	35.00 B		5900.00	
299-E25-32P	7/06/95	806688		5600.00		8.90 L
299-E25-32P	7/06/95	8066C2	25.00		5600.00	
299-E25-34	7/17/95	806693		5600.00		2.90 L
299-E25-34	7/17/95	806697	210.00 BF		5600.00	
299-E25-34	7/17/95	8066C7		5600.00		2.00 L
299-E25-34	7/17/95	8066D1	72.00 B		5500.00	
299-E25-35	7/14/95	8066D7		8100.00		2.50 L
299-E25-35	7/14/95	8066F3	24.00 B		8200.00	
299-E25-36	7/17/95	8066F7		7900.00		2.90 L
299-E25-36	7/17/95	8066F8	41.00 B		7700.00	

Table 6-4. Constituents with at Least One Detected Value for the
216-A-29 Ditch Data for Reporting Period
July 1 through September 30, 1995.
(sheet 6 of 10)

Well Name	Collection Date	Sample Number	IRON 34/ppb 8.9/300s	MAGNES 34/ppb 26/.	FMAGNES 34/ppb 26/.	MARGESE 34/ppb .55/50s
299-E25-42	7/14/95	B0G6F9		7300.00		6.90 L
299-E25-42	7/14/95	B0G6G3	22.00 B		7300.00	
299-E25-43	7/18/95	B0G6G5		5300.00		5.60 L
299-E25-43	7/18/95	B0G6G9	24.00		5200.00	
299-E25-47	7/14/95	B0G6H5		6700.00		2.40 L
299-E25-47	7/14/95	B0G6H9	19.00 BL		6700.00	
299-E25-48	7/14/95	B0G6J8		6100.00		40.00
299-E25-48	7/14/95	B0G6K2	66.00 B		6200.00	
299-E26-12	7/17/95	B0G6K7		5200.00		3.70 L
299-E26-12	7/17/95	B0G6L1	22.00 B		5200.00	
299-E26-13	7/17/95	B0G6L2		5700.00		3.10 L
299-E26-13	7/17/95	B0G6L6	25.00 B		5600.00	
699-43-43	7/06/95	B0G6L7		4900.00		1.60 L
699-43-43	7/06/95	B0G6H1	38.00		5100.00	
699-43-45	7/06/95	B0G6H2		5800.00		1.90 L
699-43-45	7/06/95	B0G6H6	31.00		5800.00	

Well Name	Collection Date	Sample Number	FMANGAM 34/ppb .55/50s	NICKEL 34/ppb 11/100	FNICKEL 34/ppb 11/100	NITRATE 124/ppb 120/45000
299-E17-20	7/14/95	B0G6B3		11.00 U		86000.00 D
299-E17-20	7/14/95	B0G6B4	1.40 L		11.00 U	
299-E25-11	7/18/95	B0G6B5		11.00 U		4600.00
299-E25-11	7/18/95	B0G6B6	1.50 L		11.00 U	
299-E25-18	7/11/95	B0G6C3		11.00 U		10000.00 D
299-E25-18	7/11/95	B0G6C4	5.00 L		11.00 U	
299-E25-19	7/11/95	B0G6C5		11.00 U		25000.00 D
299-E25-19	7/11/95	B0G6C6	9.60 L		11.00 U	
299-E25-20	7/11/95	B0G6D3		11.00 U		17000.00 D
299-E25-20	7/11/95	B0G6D4	2.80 L		11.00 U	
299-E25-21	7/11/95	B0G6D9		11.00 U		2000.00
299-E25-21	7/11/95	B0G6F1	2.90 L		11.00 U	
299-E25-26	7/17/95	B0G6B8		11.00 U		1100.00
299-E25-26	7/17/95	B0G692	.83 L		11.00 U	
299-E25-28	7/17/95	B0G698		11.00 U		1000.00
299-E25-28	7/17/95	B0G6B2	.75 L		11.00 U	
299-E25-31	7/17/95	B0G6F4		140.00		1500.00
299-E25-31	7/17/95	B0G6F5	2.60 L		11.00 U	
299-E25-32P	7/06/95	B0G6B8		13.00 L		1400.00
299-E25-32P	7/06/95	B0G6C2	1.30 L		11.00 U	
299-E25-34	7/17/95	B0G693		16.00 L		1700.00
299-E25-34	7/17/95	B0G697	3.30 L		31.00	
299-E25-34	7/17/95	B0G6C7		11.00 U		1700.00
299-E25-34	7/17/95	B0G6D1	1.90 L		11.00 U	
299-E25-35	7/14/95	B0G6D7		11.00 U		3400.00
299-E25-35	7/14/95	B0G6F3	1.60 L		11.00 U	
299-E25-36	7/17/95	B0G6F7		11.00 U		13000.00 D
299-E25-36	7/17/95	B0G6F8	1.70 L		11.00 U	
299-E25-42	7/14/95	B0G6F9		29.00 L		5700.00
299-E25-42	7/14/95	B0G6G3	2.00 L		12.00 L	
299-E25-43	7/18/95	B0G6G5		22.00 L		1500.00
299-E25-43	7/18/95	B0G6G9	1.90 L		11.00 U	
299-E25-47	7/14/95	B0G6H5		11.00 U		5000.00
299-E25-47	7/14/95	B0G6H9	1.70 L		11.00 U	
299-E25-48	7/14/95	B0G6J8		110.00		2200.00

Table 6-4. Constituents with at Least One Detected Value for the
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(sheet 7 of 10)

Well Name	Collection Date	Sample Number	PHOSPHORUS 34/ppb .55/50s	NICKEL 34/ppb 11/100	FMICKEL 34/ppb 11/100	NITRATE 124/ppb 120/45000
299-E25-48	7/14/95	B066K2	40.00		110.00 F	
299-E26-12	7/17/95	B066K7		18.00 L		1200.00
299-E26-12	7/17/95	B066L1	1.10 L		11.00 U	
299-E26-13	7/17/95	B066L2		12.00 L		1500.00 F
299-E26-13	7/17/95	B066L6	1.80 L		11.00 U	
699-43-43	7/06/95	B066L7		11.00 U		700.00
699-43-43	7/06/95	B066M1	1.20 L		11.00 U	
699-43-45	7/06/95	B066M2		11.00 U		1100.00
699-43-45	7/06/95	B066M6	1.50 L		11.00 U	

Well Name	Collection Date	Sample Number	POTASSIUM 34/ppb 390/.	FPOTASS 34/ppb 390/.	SILVER 34/ppb 5.5/100s	FSILVER 34/ppb 5.5/100s
299-E17-20	7/14/95	B06683	6200.00		5.50 U	
299-E17-20	7/14/95	B06684		6100.00		5.50 U
299-E25-11	7/18/95	B06685	4700.00 B		5.50 U	
299-E25-11	7/18/95	B06686		4900.00 B		5.50 U
299-E25-18	7/11/95	B066C3	4700.00		5.50 U	
299-E25-18	7/11/95	B066C4		4700.00		5.50 U
299-E25-19	7/11/95	B066C5	6000.00		5.50 U	
299-E25-19	7/11/95	B066C6		6300.00		5.50 U
299-E25-20	7/11/95	B06603	5900.00		5.50 U	
299-E25-20	7/11/95	B06604		6000.00		5.50 U
299-E25-21	7/11/95	B06609	4600.00		5.50 U	
299-E25-21	7/11/95	B066F1		4600.00		5.50 U
299-E25-26	7/17/95	B06688	4100.00		5.50 U	
299-E25-26	7/17/95	B06692		3800.00		5.50 U
299-E25-28	7/17/95	B06698	3600.00		5.50 U	
299-E25-28	7/17/95	B06682		4100.00		5.50 U
299-E25-31	7/17/95	B066F4	4300.00		5.80 L	
299-E25-31	7/17/95	B066F5		4400.00		5.50 U
299-E25-32P	7/06/95	B06688	3500.00		5.50 U	
299-E25-32P	7/06/95	B066C2		3500.00		5.50 U
299-E25-34	7/17/95	B06693	4000.00		5.50 U	
299-E25-34	7/17/95	B06697		3900.00		5.50 U
299-E25-34	7/17/95	B066C7	4200.00		5.50 U	
299-E25-34	7/17/95	B06601		4000.00		5.50 U
299-E25-35	7/14/95	B06607	5500.00		5.50 U	
299-E25-35	7/14/95	B066F3		5600.00		5.50 U
299-E25-36	7/17/95	B066F7	4900.00		5.50 U	
299-E25-36	7/17/95	B066F8		5500.00		5.50 U
299-E25-42	7/14/95	B066F9	5700.00		5.50 U	
299-E25-42	7/14/95	B066G3		5400.00		5.50 U
299-E25-43	7/18/95	B06665	4000.00 B		5.50 U	
299-E25-43	7/18/95	B06609		4200.00 B		6.30 L
299-E25-47	7/14/95	B066H5	5000.00		5.50 U	
299-E25-47	7/14/95	B066H9		4900.00		5.50 U
299-E25-48	7/14/95	B066J8	4700.00		5.50 U	
299-E25-48	7/14/95	B066K2		4500.00		5.50 U
299-E26-12	7/17/95	B066K7	4100.00		5.50 U	
299-E26-12	7/17/95	B066L1		4300.00		5.50 U
299-E26-13	7/17/95	B066L2	3800.00		5.50 U	
299-E26-13	7/17/95	B066L6		4400.00		5.50 U
699-43-43	7/06/95	B066L7	4400.00		5.50 U	
699-43-43	7/06/95	B066M1		4700.00		5.50 U

Table 6-4. Constituents with at Least One Detected Value for the
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(sheet 8 of 10)

Well Name	Collection Date	Sample Number	POTASSIUM 34/ppb 390/.	POTASSIUM 34/ppb 390/.	SILVER 34/ppb 5.5/100s	SILVER 34/ppb 5.5/100s
699-43-45	7/06/95	B066M2	4100.00		5.50 U	
699-43-45	7/06/95	B066M6		4100.00		5.50 U

Well Name	Collection Date	Sample Number	SODIUM 34/ppb 44/.	SODIUM 34/ppb 44/.	SULFATE 124/ppb 130/250000s	TIN 34/ppb 30/.
299-E17-20	7/14/95	B066B3	19000.00 Q		33000.00 D	30.00 U
299-E17-20	7/14/95	B066B4		19000.00 Q		
299-E25-11	7/18/95	B066B5	12000.00 Q		13000.00 D	30.00 U
299-E25-11	7/18/95	B066B6		12000.00 Q		
299-E25-18	7/11/95	B066C3	13000.00 Q		21000.00 D	30.00 U
299-E25-18	7/11/95	B066C4		13000.00 Q		
299-E25-19	7/11/95	B066C5	21000.00 Q		22000.00 D	30.00 U
299-E25-19	7/11/95	B066C6		20000.00 Q		
299-E25-20	7/11/95	B066D3	21000.00 Q		20000.00 D	30.00 U
299-E25-20	7/11/95	B066D4		21000.00 Q		
299-E25-21	7/11/95	B066D9	13000.00 Q		15000.00 D	30.00 U
299-E25-21	7/11/95	B066F1		13000.00 Q		
299-E25-26	7/17/95	B066B8	6500.00 Q		11000.00 D	30.00 U
299-E25-26	7/17/95	B066D2		6600.00 Q		
299-E25-28	7/17/95	B066D8	8300.00 Q		11000.00 D	30.00 U
299-E25-28	7/17/95	B066E2		8200.00 Q		
299-E25-31	7/17/95	B066F4	12000.00 Q		17000.00 D	30.00 U
299-E25-31	7/17/95	B066F5		12000.00 Q		
299-E25-32P	7/06/95	B066B8	5600.00 Q		9800.00 D	37.00 L
299-E25-32P	7/06/95	B066C2		5700.00 Q		
299-E25-34	7/17/95	B066D3	7600.00 Q		13000.00 D	30.00 U
299-E25-34	7/17/95	B066D7		7500.00 Q		
299-E25-34	7/17/95	B066C7	7400.00 Q		13000.00 D	30.00 U
299-E25-34	7/17/95	B066D1		7300.00 Q		
299-E25-35	7/14/95	B066D7	24000.00 Q		48000.00 D	31.00 BL
299-E25-35	7/14/95	B066F3		24000.00 Q		
299-E25-36	7/17/95	B066F7	14000.00 Q		33000.00 D	41.00 L
299-E25-36	7/17/95	B066F8		14000.00 Q		
299-E25-42	7/14/95	B066F9	24000.00 Q		43000.00 D	30.00 U
299-E25-42	7/14/95	B066G3		24000.00 Q		
299-E25-43	7/18/95	B066D5	7800.00 Q		11000.00 D	30.00 U
299-E25-43	7/18/95	B066D9		7700.00 Q		
299-E25-47	7/14/95	B066H5	21000.00 Q		29000.00 D	30.00 U
299-E25-47	7/14/95	B066H9		21000.00 Q		
299-E25-48	7/14/95	B066J8	12000.00 Q		23000.00 D	30.00 U
299-E25-48	7/14/95	B066K2		12000.00 Q		
299-E26-12	7/17/95	B066K7	7400.00 Q		10000.00 D	30.00 U
299-E26-12	7/17/95	B066L1		7600.00 Q		
299-E26-13	7/17/95	B066L2	7800.00 Q		11000.00 D	30.00 U
299-E26-13	7/17/95	B066L6		7600.00 Q		
699-43-43	7/06/95	B066L7	4800.00 Q		8200.00	30.00 U
699-43-43	7/06/95	B066M1		4900.00 Q		
699-43-45	7/06/95	B066M2	7900.00 Q		11000.00 D	30.00 U
699-43-45	7/06/95	B066M6		7900.00 Q		

Table 6-4. Constituents with at Least One Detected Value for the
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(sheet 9 of 10)

Well Name	Collection Date	Sample Number	FTIR 34/ppb 30/.	TDS 65/ppb ./500000s	TRITIUM 142/pCi/L ./20000	TURBID 111/NTU ./.
299-E17-20	7/14/95	B0G6B3		280000.00 q		.90
299-E17-20	7/14/95	B0G6B4	30.00 U			
299-E25-11	7/18/95	B0G6B5		180000.00 q		.90
299-E25-11	7/18/95	B0G6B6	30.00 U			
299-E25-18	7/11/95	B0G6C3		200000.00		3.15
299-E25-18	7/11/95	B0G6C4	30.00 U			
299-E25-19	7/11/95	B0G6C5		230000.00		.62
299-E25-19	7/11/95	B0G6C6	37.00 BL			
299-E25-20	7/11/95	B0G6C3		220000.00		1.14
299-E25-20	7/11/95	B0G6C4	38.00 BL			
299-E25-21	7/11/95	B0G6D9		170000.00		.99
299-E25-21	7/11/95	B0G6F1	30.00 U			
299-E25-26	7/17/95	B0G6B8		110000.00 q	1150.00	.30
299-E25-26	7/17/95	B0G692	30.00 U			
299-E25-28	7/17/95	B0G698		120000.00 q	1190.00	.60
299-E25-28	7/17/95	B0G6B2	31.00 L			
299-E25-31	7/17/95	B0G6F4		110000.00 q		2.61
299-E25-31	7/17/95	B0G6F5	30.00 U			
299-E25-32P	7/06/95	B0G6B8		130000.00	804.00	1.04
299-E25-32P	7/06/95	B0G6C2	30.00 U			
299-E25-34	7/17/95	B0G693		120000.00 q	1040.00	
299-E25-34	7/17/95	B0G697	30.00 U			
299-E25-34	7/17/95	B0G6C7		180000.00 q	986.00	.80
299-E25-34	7/17/95	B0G6D1	37.00 L			
299-E25-35	7/14/95	B0G6D7		220000.00 q	22300.00	1.28
299-E25-35	7/14/95	B0G6B8				1.70
299-E25-35	7/14/95	B0G6F0				1.04
299-E25-35	7/14/95	B0G6F2				1.23
299-E25-35	7/14/95	B0G6F3	30.00 U			
299-E25-36	7/17/95	B0G6F7		240000.00 q		.62
299-E25-36	7/17/95	B0G6F8	30.00 U			
299-E25-42	7/14/95	B0G6F9		230000.00 q	24300.00	2.35
299-E25-42	7/14/95	B0G6G0				1.84
299-E25-42	7/14/95	B0G6G1				2.74
299-E25-42	7/14/95	B0G6G2				2.01
299-E25-42	7/14/95	B0G6G3	34.00 BL			
299-E25-43	7/18/95	B0G6G5		160000.00 q	553.00	4.40
299-E25-43	7/18/95	B0G6G9	30.00 U			
299-E25-47	7/14/95	B0G6H5		190000.00 q	19000.00	1.10
299-E25-47	7/14/95	B0G6H6				2.07
299-E25-47	7/14/95	B0G6H7				2.12
299-E25-47	7/14/95	B0G6H8				2.04
299-E25-47	7/14/95	B0G6H9	32.00 BL			
299-E25-48	7/14/95	B0G6J8		150000.00 q	6200.00	4.00
299-E25-48	7/14/95	B0G6K2	30.00 U			
299-E26-12	7/17/95	B0G6K7		180000.00 q	851.00	.52
299-E26-12	7/17/95	B0G6L1	30.00 U			
299-E26-13	7/17/95	B0G6L2		180000.00 q	822.00	.52
299-E26-13	7/17/95	B0G6L6	30.00 U			
699-43-43	7/06/95	B0G6L7		120000.00	417.00	.65
699-43-43	7/06/95	B0G6M1	30.00 U			
699-43-45	7/06/95	B0G6H2		130000.00	758.00	.64
699-43-45	7/06/95	B0G6H6	30.00 U			

Table 6-4. Constituents with at Least One Detected Value for the
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Well Name	Collection Date	Sample Number	VANADUM 34/ppb 1.9/.	PVANADI 34/ppb 1.9/.	ZINC 34/ppb 3.7/5000s	FZINC 34/ppb 3.7/5000s
299-E17-20	7/14/95	B066B3	26.00 BL		6.60 BLQ	
299-E17-20	7/14/95	B066B4		26.00 BL		3.70 UQ
299-E25-11	7/18/95	B066B5	35.00 B		16.00 Q	
299-E25-11	7/18/95	B066B6		35.00 B		3.70 UQ
299-E25-18	7/11/95	B066C3	28.00 BL		20.00 BQ	
299-E25-18	7/11/95	B066C4		29.00 BL		8.10 BLQ
299-E25-19	7/11/95	B066C5	42.00 B		14.00 BQ	
299-E25-19	7/11/95	B066C6		44.00 B		7.70 BLQ
299-E25-20	7/11/95	B066D3	50.00 B		10.00 BQ	
299-E25-20	7/11/95	B066D4		49.00 B		4.40 BLQ
299-E25-21	7/11/95	B066D9	37.00 B		17.00 BQ	
299-E25-21	7/11/95	B066F1		36.00 B		9.70 BLQ
299-E25-26	7/17/95	B066B8	20.00 BL		8.10 LQ	
299-E25-26	7/17/95	B06692		19.00 BL		5.50 LQ
299-E25-28	7/17/95	B06698	33.00 B		5.70 LQ	
299-E25-28	7/17/95	B066B2		34.00 B		27.00 QF
299-E25-31	7/17/95	B066F4	29.00 BL		9.70 LQ	
299-E25-31	7/17/95	B066F5		26.00 BL		21.00 Q
299-E25-32P	7/06/95	B066B8	12.00 L		8.20 BLQ	
299-E25-32P	7/06/95	B066C2		10.00 L		3.70 UQ
299-E25-34	7/17/95	B06693	32.00 B		4.80 LQ	
299-E25-34	7/17/95	B06697		32.00 B		6.90 LQ
299-E25-34	7/17/95	B066C7	34.00 B		11.00 Q	
299-E25-34	7/17/95	B066D1		32.00 B		18.00 Q
299-E25-35	7/14/95	B066D7	36.00 B		3.70 UQ	
299-E25-35	7/14/95	B066F3		35.00 B		19.00 BQ
299-E25-36	7/17/95	B066F7	27.00 BL		3.80 LQ	
299-E25-36	7/17/95	B066FB		26.00 BL		4.50 LQ
299-E25-42	7/14/95	B066F9	31.00 B		12.00 BQ	
299-E25-42	7/14/95	B066G3		28.00 BL		9.10 BLQ
299-E25-43	7/18/95	B066G5	36.00 B		3.70 UQ	
299-E25-43	7/18/95	B066G9		36.00 B		4.60 LQ
299-E25-47	7/14/95	B066H5	32.00 B		3.70 UQ	
299-E25-47	7/14/95	B066H9		31.00 B		3.70 UQ
299-E25-48	7/14/95	B066J8	24.00 BL		7.50 BLQ	
299-E25-48	7/14/95	B066K2		23.00 BL		4.10 BLQ
299-E26-12	7/17/95	B066K7	35.00 B		3.70 UQ	
299-E26-12	7/17/95	B066L1		34.00 B		32.00 QF
299-E26-13	7/17/95	B066L2	34.00 B		5.70 LQ	
299-E26-13	7/17/95	B066L6		37.00 B		4.40 LQ
699-43-43	7/06/95	B066L7	19.00 L		6.80 BLQ	
699-43-43	7/06/95	B066M1		19.00 L		5.90 BLQ
699-43-45	7/06/95	B066M2	32.00		3.70 UQ	
699-43-45	7/06/95	B066M6		31.00		11.00 BQ

For explanation of this table, see Section 1.4 of report.

Table 6-5. Contamination Indicator Parameters for the
216-A-29 Ditch Data for Reporting Period
July 1 through September 30, 1995.
(sheet 1 of 2)

Well Name	Collection Date	Sample Number	COND FIELD	COND LAB	pH FIELD	pH LAB	TOC	TOX
			uMho 1/.	uMho 1/.	.01/6.5-8.5s	.01/6.5-8.5s	ppb */.	ppb */.
299-E17-20	7/14/95	B06683	408		8.40			
299-E25-11	7/18/95	B06685	215		8.38			
299-E25-18	7/11/95	B066C3	237		8.08			
299-E25-19	7/11/95	B066C5	288		7.93			
299-E25-20	7/11/95	B066D3	276		8.07			
299-E25-21	7/11/95	B066D9	213		8.29			
299-E25-26	7/17/95	B06688	191		8.40	8.30	400 L	6.9 U
		B06689	190		8.38		400 L	6.9 U
		B06690	189		8.39		400 L	6.9 U
		B06691	189		8.40		500 L	6.9 U
299-E25-28	7/17/95	B06698	192		8.44	8.30	400 L	6.9 U
		B06699	191		8.44		500 L	6.9 U
		B06680	201		8.45		400 LY	6.9 U
		B06681	192		8.45		400 L	6.9 U
299-E25-31	7/17/95	B066F4	220		8.05			
299-E25-32P	7/06/95	B06688	189		8.32	8.30	600 L	6.9 U
		B06689	187		8.33		600 L	6.9 U
		B066C0	186		8.33		800 L	6.9 U
		B066C1	186		8.32		700 L	6.9 U
299-E25-34	7/17/95	B06693				8.30	500 L	6.9 U
		B06694					500 L	6.9 U
		B06695					500 L	6.9 U
		B06696					500 L	6.9 U
		B066C7	192		8.38	8.30	500 L	6.9 U
		B066C8	192		8.39		500 L	6.9 U
		B066C9	192		8.40		500 L	6.9 U
		B066D0	192		8.40		500 L	6.9 U
299-E25-35	7/14/95	B066D7	353		8.26	8.10	300 L	6.9 U
		B066D8	345		8.26		300 L	6.9 U
		B066F0	340		8.26		400 L	6.9 U
		B066F2	338		8.26		300 L	6.9 U
299-E25-36	7/17/95	B066F7	289		8.07			
		B06FL9	288		8.07			
		B06FM0	288		8.07			
		B06FM1	289		8.07			
299-E25-42	7/14/95	B066F9	343		7.56	7.70	400 L	6.9 U
		B066G0	340		7.57		300 L	6.9 U
		B066G1	337		7.60		300 L	6.9 U
		B066G2	339		7.61		400 L	6.9 U
299-E25-43	7/18/95	B066G3	193		8.36	8.20	600 L	6.9 U
		B066G6	193		8.36		500 L	6.9 U
		B066G7	193		8.36		500 L	6.9 U
		B066G8	193		8.37		500 L	6.9 U

Table 6-5. Contamination Indicator Parameters for the
216-A-29 Ditch Data for Reporting Period
July 1 through September 30, 1995.
(sheet 2 of 2)

Well Name	Collection Date	Sample Number	COND FIELD uMho 1/.	COND LAB uMho 1/.	pH FIELD .01/6.5-8.5e	pH LAB .01/6.5-8.5e	TOC ppb %/.	TOX ppb %/.
299-E25-47	7/14/95	80G6H5	284		8.21	8.10	400 L	6.9 U
		80G6H6	284		8.21		400 L	6.9 U
		80G6H7	284		8.21		500 L	6.9 U
		80G6H8	283		8.21		400 L	6.9 U
299-E25-48	7/14/95	80G6J8	230		7.80	7.90	1000	6.9 U
		80G6J9	230		7.80		1000	6.9 U
		80G6K0	229		7.81		1000	6.9 U
		80G6K1	229		7.81		900 L	6.9 U
299-E26-12	7/17/95	80G6K7	184		8.19	8.20	600 L	6.9 U
		80G6K8	185		8.19		700 L	6.9 U
		80G6K9	182		8.19		600 L	6.9 U
		80G6L0	190		8.18		600 L	6.9 U
299-E26-13	7/17/95	80G6L2	201		8.18	8.20	500 L	6.9 U
		80G6L3	200		8.20		600 L	6.9 U
		80G6L4	200		8.20		500 L	6.9 U
		80G6L5	199		8.20		600 L	6.9 U
699-43-43	7/06/95	80G6L7	182		8.24	8.20	900 L	6.9 U
		80G6L8	181		8.25		900 L	6.9 U
		80G6L9	181		8.24		900 L	6.9 U
		80G6M0	181		8.24		900 L	6.9 U
699-43-45	7/06/95	80G6M2	209		8.15	8.20	400 L	6.9 U
		80G6M3	208		8.14		300 L	6.9 U
		80G6M4	208		8.14		400 L	6.9 U
		80G6M5	208		8.14		400 L	6.9 U

* Detection limits for TOC and TOX vary depending on the performing laboratory.
For explanation of this table, see Section 1.4 of report.

Table 6-6. Drinking Water Standards Exceeded in the 216-A-29 Ditch
Groundwater Monitoring Network.

Constituent (DWS)	Wells exceeding DWS
Chromium, unfiltered (100 ppb)	299-E25-31 ^a
Nitrate (45000 ppb)	299-E17-20 ^a
Iron, unfiltered (300 ppb)	299-E25-18 ^a , 299-E25-31 ^a , 299-E25-32P 299-E25-43
Nickel, unfiltered (100 ppb)	299-E25-31 ^a , 299-E25-48
Nickel, filtered (100 ppb)	299-E25-48
Tritium (20000 ppb)	299-E25-35, 299-E25-42

^aWell in supplemental network.
DWS - Drinking Water Standard.

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7.0 216-A-36B CRIB

J. M. Votava
Westinghouse Hanford Company

7.1 INTRODUCTION

The 216-A-36B Crib (A-36B Crib) is a retired liquid waste disposal facility for the PUREX Plant. The crib is located in the 200 East Area approximately 365 m (1,200 ft) south of the PUREX Plant (Figures 1-1 and 7-1). The A-36B Crib is the southernmost 152 m (500 ft) of a crib originally known as the 216-A-36 Crib. The ammonia scrubber distillate waste stream that resulted from PUREX operations was discharged to the crib to percolate through the soil column. The original crib received liquid effluent from September 1965 to March 1966. Because a substantial inventory of radionuclides was disposed of in the crib and was assumed to have infiltrated the sediments near the inlet of the crib, a grout curtain was constructed to partition the crib into two sections, known as A and B. Discharge to the A-36B Crib section resumed in March 1966 and continued until 1972 when the crib was temporarily removed from service. The crib was placed back in service in November 1982 and operated until it was retired in October 1987.

Ammonia scrubber distillate effluent disposed of in the A-36B Crib was the condensate from the fuel-rod decladding operation. In this process, the zircalloy cladding was removed from the irradiated fuel by dissolving the cladding in a boiling solution of ammonium fluoride and ammonium nitrate. Waste stream constituents are known to have included radionuclides (tritium, strontium-90, cesium-137, ruthenium-106, cobalt-60, and uranium) and hazardous substances (ammonium, fluoride, and nitrate).

In accordance with the Tri-Party Agreement (Ecology et al. 1994), Milestone M-20-33, a RCRA closure/post-closure plan for the A-36B Crib is to be submitted to Ecology and the EPA in June 1998. An interim-status detection-level RCRA groundwater monitoring network has been established at the A-36B Crib since May 1988.

The RCRA groundwater monitoring system consists of four RCRA-compliant downgradient wells and three upgradient wells, as listed in Table 7-1. The two upgradient wells from the 216-A-10 Crib monitoring network, 299-E24-18 and 299-E25-36, have been added as upgradient wells for the A-36B Crib. Well 299-E17-5 is no longer sampled and is used for water level information only.

Well locations for the A-36B Crib monitoring network are shown in Figure 7-1. CIP critical means were reestablished using four quarters of data from upgradient wells (see Table 7-1) during September 1988 to October 1989. As shown in Table 7-1, data from well 299-E25-36 are also used by the 216-A-29 Ditch groundwater quality assessment.

7.2 WATER LEVEL MEASUREMENTS

Water level measurements are made quarterly and during semiannual RCRA sample collection. Water level data collected during the July 1 through September 30, 1995 period are reported in Table 7-2.

7.3 WATER CHEMISTRY DATA

Wells in the A-36B Crib groundwater monitoring network are sampled semiannually. The network was not scheduled for sampling during the July through September 1995 period. Some of the data from the previous quarter were missing because of laboratory reporting delays. These data will be reported when they are available. Well 299-E25-36 was sampled during the report period for the 216-A-29 Ditch groundwater quality assessment. The analytical results are presented in Chapter 6.

Figure 7-1. Well Location Map
for the 216-A-36B Crib.

H8411010.12a

Table 7-1. Well Identification and Sampling Schedule for the 216-A-36B Crib Groundwater Monitoring Network.

Well no. (299-)	Relative position	Hydrogeologic unit	Sample frequency	Sample date, 3rd Qtr 1995
E17-17	Upgradient	Ringold: Water Table	Semiannually	Not Scheduled
E24-18 ^a	Upgradient	Ringold: Water Table	Semiannually	Not Scheduled
E25-36 ^b	Upgradient	Ringold: Water Table	Semiannually	7/17/95
E17-5 ^c	Downgradient	Ringold: Water Table	Water Level Only	—
E17-9 ^c	Downgradient	Ringold: Water Table	Semiannually	Not Scheduled
E17-14	Downgradient	Ringold: Water Table	Semiannually	Not Scheduled
E17-15	Downgradient	Ringold: Water Table	Semiannually	Not Scheduled
E17-16	Downgradient	Ringold: Water Table	Semiannually	Not Scheduled
E17-18	Downgradient	Ringold: Water Table	Semiannually	Not Scheduled

^aWell shared with the 216-A-10 Crib network.

^bWell shared with the 216-A-29 Ditch network.

^cWell is not used for statistical evaluation.

Table 7-2. RCRA Water Level Measurement Report
216-A-36B Crib, Third Quarter 1995.

Well	Date	Depth to water (ft)	Water level elevation above msl	
			(ft)	(m)
299-E17-14	9/21/95	321.15	401.03	122.23
299-E17-15	9/21/95	321.61	400.17	121.97
299-E17-16	9/21/95	319.76	400.82	122.17
299-E17-17	9/21/95	319.11	400.81	122.17
299-E17-18	9/21/95	319.73	400.92	122.20
299-E17-5	9/21/95	318.13	400.56	122.09
299-E17-9	9/21/95	316.84	400.80	122.16
299-E24-18	9/21/95	318.25	401.03	122.23
299-E25-36	7/17/95	306.30*	401.09	122.25
	9/21/95	306.29	401.10	122.26

- NOTES: 1. Water level elevations are calculated by subtracting the measured depth-to-water from the surveyed elevation for the well.
2. Depth-to-water values are transcribed from field records.
3. Measurements marked with an '*' were taken at the time of sampling.
4. Measurements marked with a '+' are outside of the expected range, and are suspected of error.

Table 7-3. Constituent List and Summary of Results
for the 216-A-36B Crib Data for Reporting Period
July 1 through September 30, 1995.
(sheet 1 of 2)

CONTAMINATION INDICATOR PARAMETERS

Short	(Method)	Constituent Name		Lab	DWS	Agency	Number of Samples		
		Full	Units				Total	>CRQL	>DWS
CONDUCT		Conductivity, field	umhos				4	4	
PH		pH, field	pH		6.5-8.5	EPAS	4	4	0

DRINKING WATER PARAMETERS

Short	(Method)	Constituent Name		Lab	DWS	Agency	Number of Samples		
		Full	Units				Total	>CRQL	>DWS
BARUM		Barium	ppb	1.4	2000	EPA	1	1	0
FBARUM		Barium, filtered	ppb	1.4	2000	EPA	1	1	0
CADMIUM		Cadmium	ppb	.98	5	EPA	1	0	0
FCADMIUM		Cadmium, filtered	ppb	.98	5	EPA	1	0	0
CHROMIUM		Chromium	ppb	3.7	100	EPA	1	1	0
FCHROMIUM		Chromium, filtered	ppb	3.7	100	EPA	1	1	0
FLUORIDE		Fluoride	ppb	52	4000	EPA	1	1	0
NITRATE		Nitrate	ppb	120	45000	EPA	1	1	0

GROUNDWATER QUALITY PARAMETERS

Short	(Method)	Constituent Name		Lab	DWS	Agency	Number of Samples		
		Full	Units				Total	>CRQL	>DWS
CHLORIDE		Chloride	ppb	110	250000	EPAS	1	1	0
IRON		Iron	ppb	8.9	300	EPAS	1	1	0
FIRON		Iron, filtered	ppb	8.9	300	EPAS	1	1	0
MANGANESE		Manganese	ppb	.55	50	EPAS	1	1	0
FMANGANESE		Manganese, filtered	ppb	.55	50	EPAS	1	1	0
SODIUM		Sodium	ppb	44			1	1	
FSODIUM		Sodium, filtered	ppb	44			1	1	
SULFATE		Sulfate	ppb	130	250000	EPAS	1	1	0

SITE SPECIFIC AND OTHER CONSTITUENTS

Short	(Method)	Constituent Name		Lab	DWS	Agency	Number of Samples		
		Full	Units				Total	>CRQL	>DWS
ALKALIN		Alkalinity	ppb	3500			1	1	
ALUMINUM		Aluminum	ppb	31	200	EPAS	1	0	0
FALUMINUM		Aluminum, filtered	ppb	31	200	EPAS	1	0	0
ANTIMONY		Antimony	ppb	24	6	EPA	1	0	1*
FANTIMONY		Antimony, filtered	ppb	24	6	EPA	1	0	1*
BERYLLIUM		Beryllium	ppb	.63	4	EPA	1	0	0
FBERYLLIUM		Beryllium, filtered	ppb	.63	4	EPA	1	0	0
BROMIDE		Bromide	ppb	72			1	0	
CALCIUM		Calcium	ppb	41			1	1	
FCALCIUM		Calcium, filtered	ppb	41			1	1	
COBALT		Cobalt	ppb	5.3			1	0	
FCOBALT		Cobalt, filtered	ppb	5.3			1	0	
COPPER		Copper	ppb	2.1	1000	EPAS	1	1	0
FCOPPER		Copper, filtered	ppb	2.1	1000	EPAS	1	1	0

Table 7-3. Constituent List and Summary of Results
for the 216-A-36B Crib Data for Reporting Period
July 1 through September 30, 1995.
(sheet 2 of 2)

Short	(Method)	Constituent Name		Units	Lab CROL	DWS Limit	Agency	Number of Samples		
		Full						Total	>CROL	>DWS
MAGNES		Magnesium	ppb	26				1	1	
PMAGNES		Magnesium, filtered	ppb	26				1	1	
NICKEL		Nickel	ppb	11	100	EPA		1	0	0
PNICKEL		Nickel, filtered	ppb	11	100	EPA		1	0	0
NITRITE		Nitrite	ppb	140	4000	EPA		1	0	0
PHOSPHA		Phosphate	ppb	340				1	0	
POTASUM		Potassium	ppb	390				1	1	
PPOTASS		Potassium, filtered	ppb	390				1	1	
SILVER		Silver	ppb	5.5	100	EPAS		1	0	0
PSILVER		Silver, filtered	ppb	5.5	100	EPAS		1	0	0
TIN		Tin	ppb	30				1	1	
FTIN		Tin, filtered	ppb	30				1	0	
TDS		Total dissolved solids	ppb		500000	EPAS		1	1	0
TURBID		Turbidity	NTU					1	1	
VANADIUM		Vanadium	ppb	1.9				1	1	
PVANADI		Vanadium, filtered	ppb	1.9				1	1	
ZINC		Zinc	ppb	3.7	5000	EPAS		1	1	0
PZINC		Zinc, filtered	ppb	3.7	5000	EPAS		1	1	0

For explanation of this table, see Section 1.4 of report.

Table 7-4. Constituents with at Least One Detected Value for the
216-A-368 Crib Data for Reporting Period
July 1 through September 30, 1995.
(sheet 1 of 2)

Well Name	Collection Date	Sample Number	ALKALIN 357/ppb 3500/.	BARIUM 34/ppb 1.4/2000	PGARIUM 34/ppb 1.4/2000	CALCIUM 34/ppb 41/.
299-E25-36	7/17/95	8066F7	90000.00	22.00		29000.00 g
299-E25-36	7/17/95	8066F8			22.00	

Well Name	Collection Date	Sample Number	FCALCIU 34/ppb 41/.	CHLORID 124/ppb 110/250000s	CHROMIUM 34/ppb 3.7/100	PCROMIT 34/ppb 3.7/100
299-E25-36	7/17/95	8066F7		4100.00	21.00	
299-E25-36	7/17/95	8066F8	28000.00 g			6.20 L

Well Name	Collection Date	Sample Number	COPPER 34/ppb 2.1/1000s	FCOPPER 34/ppb 2.1/1000s	FLUORID 124/ppb 52/4000	IRON 34/ppb 8.9/300s
299-E25-36	7/17/95	8066F7	2.40 L		300.00	110.00 B
299-E25-36	7/17/95	8066F8		4.00 L		

Well Name	Collection Date	Sample Number	FIROH 34/ppb 8.9/300s	MAGNES 34/ppb 26/.	FMAGNES 34/ppb 26/.	MANGESE 34/ppb .55/50s
299-E25-36	7/17/95	8066F7		7900.00		2.90 L
299-E25-36	7/17/95	8066F8	41.00 B		7700.00	

Well Name	Collection Date	Sample Number	FMANGAN 34/ppb .55/50s	NITRATE 124/ppb 120/45000	POTASUM 34/ppb 390/.	FPOTASS 34/ppb 390/.
299-E25-36	7/17/95	8066F7		13000.00 D	4900.00	
299-E25-36	7/17/95	8066F8	1.70 L			5500.00

Well Name	Collection Date	Sample Number	SODIUM 34/ppb 44/.	FSODIUM 34/ppb 44/.	SULFATE 124/ppb 130/250000s	TIN 34/ppb 30/.
299-E25-36	7/17/95	8066F7	14000.00 g		33000.00 D	41.00 L
299-E25-36	7/17/95	8066F8		14000.00 g		

Well Name	Collection Date	Sample Number	FTIN 34/ppb 30/.	TDS 65/ppb .500000s	TURBID 111/NTU ./.	VANADIUM 34/ppb 1.9/.
299-E25-36	7/17/95	8066F7		240000.00 g	.62	27.00 BL
299-E25-36	7/17/95	8066F8	30.00 U			

Table 7-4. Constituents with at Least One Detected Value for the
216-A-36B Crib Data for Reporting Period
July 1 through September 30, 1995.
(sheet 2 of 2)

Well Name	Collection Date	Sample Number	RYANADI 34/ppb 1.9/.	ZINC 34/ppb 3.7/5000s	FZINC 34/ppb 3.7/5000s
299-E25-36	7/17/95	B0G6F7		3.80 LG	
299-E25-36	7/17/95	B0G6F8	26.00 BL		4.50 LG

For explanation of this table, see Section 1.4 of report.

Table 7-5. Contamination Indicator Parameters for the
216-A-36B Crib Data for Reporting Period
July 1 through September 30, 1995.

Well Name	Collection Date	Sample Number	COND FIELD uMho 1/.	COND LAB uMho 1/.	pH FIELD .01/6.5-8.5c	pH LAB .01/6.5-8.5s	TOC ppb */.	TOX ppb */.
299-E25-36	7/17/95	B0G6F7	289		8.07			
		B0GFL9	288		8.07			
		B0GFM0	288		8.07			
		B0GFM1	289		8.07			

* Detection limits for TOC and TOX vary depending on the performing laboratory.
For explanation of this table, see Section 1.4 of report.

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8.0 216-A-10 CRIB

J. M. Votava
Westinghouse Hanford Company

8.1 INTRODUCTION

The 216-A-10 Crib (A-10 Crib) is a retired liquid waste disposal facility that was used during the operation of the Plutonium-Uranium Extraction (PUREX) Plant. The crib is located in the 200 East Area approximately 120 m (400 ft) south of the PUREX Plant (Figures 1-1 and 8-1).

Several waste streams, collectively referred to as the process distillate discharge, were disposed of in the A-10 Crib for soil-column disposal during PUREX Plant operations. Process distillate discharge waste was first disposed of in the crib for 4 months during the 1956 PUREX startup. In 1961, the A-10 Crib replaced the 216-A-5 Crib and received PUREX effluent continuously until 1973. Periodic discharges were received in 1977, 1978, and 1981. From 1982 to 1987, continuous effluent discharges to the A-10 Crib were resumed. Effluent volumes from 1981 to 1986 averaged 1×10^8 L (2.6×10^6 gal) per year. In 1987, the A-10 Crib was removed from service and replaced by the 216-A-45 Crib.

The process distillate discharge waste stream sent to the A-10 Crib was characteristically acidic and contained concentrated salts. Waste stream constituents included aliphatic hydrocarbon compounds, organic complexants, and radionuclides (plutonium, uranium, strontium-90, cobalt-60, cesium-134 and -137, ruthenium-103 and -106, and tritium).

In accordance with the Tri-Party Agreement (Ecology et al. 1994), Milestone M-20-33, a RCRA closure/post-closure plan for the A-10 Crib is to be submitted to Ecology and EPA in June 1998. An interim-status detection-level RCRA groundwater monitoring network has been operational since November 1988.

The RCRA groundwater monitoring system consists of six downgradient wells and two upgradient wells, as listed in Table 8-1. Two wells in the 216-A-10 network, 216-E15-20 and 216-E25-36, are shared with the groundwater monitoring network for the A-29 Ditch facility. Wells 216-E24-18 and 216-E25-36 are shared with the 216-A-36B Crib. Well locations are shown in Figure 8-1. Background monitoring was completed in the fourth quarter of 1989, following the first four quarters of groundwater sampling.

8.2 WATER LEVEL MEASUREMENTS

Water level measurements are made quarterly and during semiannual RCRA sample collection. Water level data collected from July through September 1995 are reported in Table 8-2.

8.3 WATER CHEMISTRY DATA

Wells in the A-10 Crib groundwater monitoring network are sampled semiannually. The network was not scheduled for sampling during the July through September 1995 period. Some of the data from the previous quarter sampling were missing because of laboratory reporting delays. These data will be reported when they are available. Chemistry data that were available are reported in Tables 8-3 through 8-5. Wells 299-E17-20 and 299-E25-36 were sampled during the report period for the 215-A-29 Ditch groundwater quality assessment. The analytical results are presented in Chapter 6.

Figure 8-1. Well Location Map for the 216-A-10 Crib.

H9411010.13a

Table 8-1. Well Identification and Sampling Schedule for the 216-A-10 Crib Groundwater Monitoring Network.

Well no. (299-)	Relative position	Hydrogeologic unit	Sample frequency	Sample date, 3rd Qtr 1995
E24-18 ^a	Upgradient	Ringold: Water Table	Semiannually	Not scheduled
E25-36 ^b	Upgradient	Ringold: Water Table	Semiannually	7/17/95
E17-1 ^c	Downgradient	Ringold: Water Table	Semiannually	Not scheduled
E17-19	Downgradient	Ringold: Water Table	Semiannually	Not scheduled
E17-20 ^b	Downgradient	Ringold: Water Table	Semiannually	7/14/95
E24-2	Downgradient	Ringold: Water Table	Water Level Only	—
E24-16	Downgradient	Ringold: Water Table	Semiannually	Not scheduled
E24-17	Downgradient	Ringold: Water Table	Semiannually	Not scheduled

^aWell sampled during period for 216-A-36B Crib network.

^bWell sampled during period for 216-A-29 Ditch network.

^cWell is not used for statistical evaluation.

Table 8-2. RCRA Water Level Measurement Report
216-A-10 Crib, Third Quarter 1995.

Well	Date	Depth to water (ft)	Water level elevation above msl	
			(ft)	(m)
299-E17-1	9/21/95	318.38	400.79	122.16
299-E17-19	9/21/95	318.85	400.48	122.07
299-E17-20	7/14/95	317.79*	401.44	122.36
	9/21/95	318.18	401.05	122.24
299-E24-16	9/21/95	317.14	401.13	122.26
299-E24-17	9/21/95	318.57	400.12	121.96
299-E24-18	9/21/95	318.25	401.03	122.23
299-E24-2	9/21/95	316.35	401.12	122.26
299-E25-36	7/17/95	306.30*	401.09	122.25
	9/21/95	306.29	401.10	122.26

- NOTES: 1. Water level elevations are calculated by subtracting the measured depth-to-water from the surveyed elevation for the well.
2. Depth-to-water values are transcribed from field records.
3. Measurements marked with an '*' were taken at the time of sampling.
4. Measurements marked with a '+' are outside of the expected range, and are suspected of error.

Table 8-3. Constituent List and Summary of Results
for the 216-A-10 Crib Data for Reporting Period
July 1 through September 30, 1995.
(sheet 1 of 2)

CONTAMINATION INDICATOR PARAMETERS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS Limit	Agency	Number of Samples		
		Full						Total	>CRQL	>DWS
CONDUCT		Conductivity, field		umhos				5	5	
PH		pH, field		pH		6.5-8.5	EPAS	5	5	0

DRINKING WATER PARAMETERS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS Limit	Agency	Number of Samples		
		Full						Total	>CRQL	>DWS
BARUM		Barium		ppb	1.4	2000	EPA	2	2	0
FBARUM		Barium, filtered		ppb	1.4	2000	EPA	2	2	0
CADMIUM		Cadmium		ppb	.98	5	EPA	2	0	0
FCADMIU		Cadmium, filtered		ppb	.98	5	EPA	2	0	0
CHROMIUM		Chromium		ppb	3.7	100	EPA	2	2	0
FCHROMI		Chromium, filtered		ppb	3.7	100	EPA	2	1	0
FLUORID		Fluoride		ppb	52	4000	EPA	2	2	0
NITRATE		Nitrate		ppb	120	45000	EPA	2	2	1

GROUNDWATER QUALITY PARAMETERS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS Limit	Agency	Number of Samples		
		Full						Total	>CRQL	>DWS
CHLORID		Chloride		ppb	110	250000	EPAS	2	2	0
IRON		Iron		ppb	8.9	300	EPAS	2	2	0
FIRON		Iron, filtered		ppb	8.9	300	EPAS	2	2	0
MANGESE		Manganese		ppb	.55	50	EPAS	2	2	0
FMANGES		Manganese, filtered		ppb	.55	50	EPAS	2	2	0
SODIUM		Sodium		ppb	44			2	2	
FSODIUM		Sodium, filtered		ppb	44			2	2	
SULFATE		Sulfate		ppb	130	250000	EPAS	2	2	0

SITE SPECIFIC AND OTHER CONSTITUENTS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS Limit	Agency	Number of Samples		
		Full						Total	>CRQL	>DWS
ALKALIN		Alkalinity		ppb	3500			2	2	
ALUMINUM		Aluminum		ppb	31	200	EPAS	2	0	0
FALUMIN		Aluminum, filtered		ppb	31	200	EPAS	2	0	0
ANTIMONY		Antimony		ppb	24	6	EPA	2	0	2*
FANTIMO		Antimony, filtered		ppb	24	6	EPA	2	0	2*
BERYLLIUM		Beryllium		ppb	.63	4	EPA	2	0	0
FBERYLL		Beryllium, filtered		ppb	.63	4	EPA	2	0	0
BROMIDE		Bromide		ppb	72			2	0	
CALCIUM		Calcium		ppb	41			2	2	
FCALCIU		Calcium, filtered		ppb	41			2	2	
COBALT		Cobalt		ppb	5.3			2	0	
FCOBALT		Cobalt, filtered		ppb	5.3			2	0	
COPPER		Copper		ppb	2.1	1000	EPAS	2	1	0
FCOPPER		Copper, filtered		ppb	2.1	1000	EPAS	2	1	0

Table 8-3. Constituent List and Summary of Results
for the 216-A-10 Crib Data for Reporting Period
July 1 through September 30, 1995.
(sheet 2 of 2)

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS Limit	Agency	Number of Samples		
		Full						Total	>CRQL	>DWS
MAGNES		Magnesium	ppb	26				2	2	
FMAGNES		Magnesium, filtered	ppb	26				2	2	
NICKEL		Nickel	ppb	11	100	EPA		2	0	0
FNICKEL		Nickel, filtered	ppb	11	100	EPA		2	0	0
NITRITE		Nitrite	ppb	140	4000	EPA		2	0	0
PHOSPHA		Phosphate	ppb	340				2	0	
POTASUM		Potassium	ppb	390				2	2	
FPOTASS		Potassium, filtered	ppb	390				2	2	
SILVER		Silver	ppb	5.5	100	EPAS		2	0	0
FSILVER		Silver, filtered	ppb	5.5	100	EPAS		2	0	0
TIN		Tin	ppb	30				2	1	
FTIN		Tin, filtered	ppb	30				2	0	
TDS		Total dissolved solids	ppb		500000	EPAS		2	2	0
TURBID		Turbidity	NTU					2	2	
VANADUM		Vanadium	ppb	1.9				2	2	
RVANADI		Vanadium, filtered	ppb	1.9				2	2	
ZINC		Zinc	ppb	3.7	5000	EPAS		2	2	0
FZINC		Zinc, filtered	ppb	3.7	5000	EPAS		2	1	0

For explanation of this table, see Section 1.4 of report.

**Table 8-4. Constituents with at Least One Detected Value for the
216-A-10 Crib Data for Reporting Period
July 1 through September 30, 1995.
(sheet 1 of 2)**

Well Name	Collection Date	Sample Number	ALKALIN 357/ppb 3500/.	BARIUM 34/ppb 1.4/2000	FBARIUM 34/ppb 1.4/2000	CALCIUM 34/ppb 41/.
299-E17-20	7/14/95	B06683	90000.00	50.00		40000.00 g
299-E17-20	7/14/95	B06684			50.00	
299-E25-36	7/17/95	B066F7	90000.00	22.00		29000.00 g
299-E25-36	7/17/95	B066F8			22.00	

Well Name	Collection Date	Sample Number	FCALCIU 34/ppb 41/.	CHLORID 124/ppb 110/250000s	CHROMIUM 34/ppb 3.7/100	FCROMI 34/ppb 3.7/100
299-E17-20	7/14/95	B06683		4400.00	27.00	
299-E17-20	7/14/95	B06684	40000.00 g			3.70 U
299-E25-36	7/17/95	B066F7		4100.00	21.00	
299-E25-36	7/17/95	B066F8	28000.00 g			6.20 L

Well Name	Collection Date	Sample Number	COPPER 34/ppb 2.1/1000s	FCOPPER 34/ppb 2.1/1000s	FLUORID 124/ppb 52/4000	IRON 34/ppb 8.9/300s
299-E17-20	7/14/95	B06683	2.10 U		700.00	130.00 B
299-E17-20	7/14/95	B06684		2.10 U		
299-E25-36	7/17/95	B066F7	2.40 L		300.00	110.00 B
299-E25-36	7/17/95	B066F8		4.00 L		

Well Name	Collection Date	Sample Number	FIROM 34/ppb 8.9/300s	MAGNES 34/ppb 26/.	FMAGNES 34/ppb 26/.	MANGESE 34/ppb .55/50s
299-E17-20	7/14/95	B06683		13000.00		3.00 L
299-E17-20	7/14/95	B06684	25.00 B		13000.00	
299-E25-36	7/17/95	B066F7		7900.00		2.90 L
299-E25-36	7/17/95	B066F8	41.00 B		7700.00	

Well Name	Collection Date	Sample Number	FMANGAN 34/ppb .55/50s	NITRATE 124/ppb 120/45000	POTASUM 34/ppb 390/.	FPOTASS 34/ppb 390/.
299-E17-20	7/14/95	B06683		86000.00 D	6200.00	
299-E17-20	7/14/95	B06684	1.40 L			6100.00
299-E25-36	7/17/95	B066F7		13000.00 D	4900.00	
299-E25-36	7/17/95	B066F8	1.70 L			5500.00

**Table 8-4. Constituents with at Least One Detected Value for the
216-A-10 Crib Data for Reporting Period
July 1 through September 30, 1995.
(sheet 2 of 2)**

Well Name	Collection Date	Sample Number	SODIUM 34/ppb 44/.	FSODIUM 34/ppb 44/.	SULFATE 124/ppb 130/250000s	TIN 34/ppb 30/.
299-E17-20	7/14/95	B066B3	19000.00 Q		33000.00 D	30.00 U
299-E17-20	7/14/95	B066B4		19000.00 Q		
299-E25-36	7/17/95	B066F7	14000.00 Q		33000.00 D	41.00 L
299-E25-36	7/17/95	B066F8		14000.00 Q		

Well Name	Collection Date	Sample Number	PTIN 34/ppb 30/.	TDS 65/ppb .7500000s	TURBID 111/NTU ./.	VANADIUM 34/ppb 1.9/.
299-E17-20	7/14/95	B066B3		280000.00 Q	.90	26.00 BL
299-E17-20	7/14/95	B066B4	30.00 U			
299-E25-36	7/17/95	B066F7		240000.00 Q	.62	27.00 BL
299-E25-36	7/17/95	B066F8	30.00 U			

Well Name	Collection Date	Sample Number	FVANADI 34/ppb 1.9/.	ZINC 34/ppb 3.7/5000s	FZINC 34/ppb 3.7/5000s	
299-E17-20	7/14/95	B066B3		6.60 BLQ		
299-E17-20	7/14/95	B066B4	26.00 BL		3.70 LQ	
299-E25-36	7/17/95	B066F7		3.80 LQ		
299-E25-36	7/17/95	B066F8	26.00 BL		4.50 LQ	

For explanation of this table, see Section 1.4 of report.

Table 8-5. Contamination Indicator Parameters for the
216-A-10 Crib Data for Reporting Period
July 1 through September 30, 1995.

Well Name	Collection Date	Sample Number	COND FIELD uMho 1/.	COND LAB uMho 1/.	pH FIELD .01/6.5-8.5s	pH LAB .01/6.5-8.5s	TOC ppb %/.	TOX ppb %/.
299-E17-20	7/14/95	B0B683	408		8.40			
299-E25-36	7/17/95	B0G6F7	289		8.07			
		B0GFL9	288		8.07			
		B0BFM0	288		8.07			
		B0BFM1	289		8.07			

* Detection limits for TOC and TOX vary depending on the performing laboratory.
For explanation of this table, see Section 1.4 of report.

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9.0 216-B-63 TRENCH

M. D. Sweeney
Westinghouse Hanford Company

9.1 INTRODUCTION

A RCRA interim-status detection-level groundwater monitoring network has been established for the 216-B-63 Trench. The 216-B-63 Trench received wastewater containing hazardous waste and radioactive materials from the B Plant located in the 200 East Area (Figures 1-1 and 9-1). Liquid effluent discharge to the 216-B-63 Trench ceased in February 1992.

The 216-B-63 Trench was an open, unlined earthen trench that was in service from March 1970 until February 1992. The trench received 4.0×10^5 to 1.5×10^6 L/day (100,000 to 400,000 gal/day) of liquid effluent from the B Plant chemical sewer, none of which is now designated as dangerous waste. The effluent was a mixture of steam condensate and raw water. Documented hazardous discharges occurred from 1970 to October 1985 and consisted of aqueous sulfuric acid and sodium hydroxide solutions exceeding the pH limits of 2.0 and 12.5, respectively. Radioactive soils were dredged from the trench in August 1970. In 1985, physical controls, radiation monitors, and operating procedures were modified to avoid inadvertent discharge of chemicals or radioactive substances to the wastewater stream. The trench has since been backfilled and stabilized and the diversion box leading to it has been filled with concrete.

Four quarters of groundwater background sampling were completed for all the wells in the network in April 1993. Background sampling is done to establish background water quality, in accordance with the requirements outlined in 40 CFR 265 *Interim-Status Indicator-Evaluation Groundwater Monitoring Plan for the 216-B-63 Trench* (PNL 1989). The 12 wells in the network are now sampled semiannually. Based on the present groundwater flow direction, seven of the wells are downgradient and five are upgradient of the trench (see Figure 9-1). The purpose of the wells, their sampling schedule, and the dates sampled are summarized in Table 9-1. As indicated in Table 9-1, some wells in the 216-B-63 Trench network are shared with the low-level burial grounds (LLBG) and single-shell tanks (SST) groundwater monitoring networks.

9.2 WATER LEVEL MEASUREMENTS

Water level measurements obtained during the July 1 through September 30, 1995, period are presented in Table 9-2. These measurements are obtained during sampling and as part of a semiannual water table evaluation. Water measurements in well 299-E33-36 indicate water levels lower than in nearby wells in the network. Reasons for the apparent discrepancy are still under investigation.

9.3 WATER CHEMISTRY DATA

Chemistry data received before the cutoff date for this report are reported in Tables 9-3 through 9-5. The 216-B-63 Trench is sampled semi-annually and was not scheduled for sampling this quarter. Sample results in the tables include both data from previous sampling periods and data from wells sampled for SST B-BX-BY. An explanation of data flags can be found in Section 1.4.

Figure 9-1. Well Location Map for the 216-B-63 Trench.

**Table 9-1. Monitoring Well Purpose and Sampling Schedule
for the 216-B-63 Trench Network.**

Well no. (299-)	Relative position	Hydrogeologic unit	Sample frequency	Sample date, 3rd Qtr 1995
E27-8 ^a	Upgradient	Hanford: Water Table	Semiannually	Not Sampled
E27-9 ^a	Upgradient	Hanford: Water Table	Semiannually	Not Sampled
E27-11 ^a	Upgradient	Hanford: Water Table	Semiannually	Not Sampled
E27-16	Downgradient	Hanford: Water Table	Semiannually	Not Sampled
E27-17 ^a	Upgradient	Hanford: Water Table	Semiannually	Not Sampled
E27-18	Downgradient	Hanford: Water Table	Semiannually	Not Sampled
E27-19	Downgradient	Hanford: Water Table	Semiannually	Not Sampled
E33-33 ^b	Downgradient	Hanford: Water Table	Semiannually	08/01/95
E33-36 ^b	Downgradient	Hanford: Water Table	Semiannually	08/01/95
E33-37	Downgradient	Hanford: Water Table	Semiannually	Not Sampled
E34-8	Downgradient	Hanford: Water Table	Semiannually	Not Sampled
E34-10 ^a	Upgradient	Hanford: Water Table	Semiannually	Not Sampled

^aWell shared with the Low-Level Burial Grounds facility network.

^bWell shared with the single-shell tanks facility network.

Table 9-2. RCRA Water Level Measurement Report
216-B-63 Trench, Third Quarter 1995.

Well	Date	Depth to water (ft)	Water level elevation above msl (ft)	(m)
Wells Monitoring the Top of the Unconfined Aquifer				
299-E27-11	9/20/95	242.22	401.07	122.25
299-E27-16	9/08/95	251.88	400.25	122.00
299-E27-17	9/20/95	233.36	401.36	122.33
299-E27-18	9/08/95	248.79	401.36	122.33
299-E27-19	9/08/95	249.58	401.30	122.32
299-E27-8	9/20/95	236.64	401.19	122.28
299-E27-9	9/20/95	227.95	401.26	122.30
299-E33-33	7/25/95	238.92	401.47	122.37
	8/01/95	238.69*	401.70	122.44
	8/16/95	238.94	401.45	122.36
	9/13/95	238.94	401.45	122.36
299-E33-36	8/01/95	246.96*	399.71	121.83
	9/08/95	247.72	398.95	121.60
299-E33-37	9/08/95	251.77	401.24	122.30
299-E34-10	9/20/95	238.37	401.40	122.35
299-E34-8	9/08/95	241.37	399.15	121.66

- NOTES: 1. Water level elevations are calculated by subtracting the measured depth-to-water from the surveyed elevation for the well.
2. Depth-to-water values are transcribed from field records.
3. Measurements marked with an '*' were taken at the time of sampling.
4. Measurements marked with a '+' are outside of the expected range, and are suspected of error.

Table 9-3. Constituent List and Summary of Results
for the 216-B-63 Trench Data for Reporting Period
July 1 through September 30, 1995.

CONTAMINATION INDICATOR PARAMETERS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS Limit	Agency	Number of Samples		
		Full						Total	>CRQL	>DWS
CONDUCT		Conductivity, field		umhos				8	8	
TOC		Total organic carbon		ppb	140			8	8	
TOX		Total organic halogen		ppb	6.9			8	0	
PH	93	pH, field		pH		6.5-8.5	EPAS	8	8	0
PH	125	pH, lab		pH		6.5-8.5	EPAS	2	2	0

DRINKING WATER PARAMETERS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS Limit	Agency	Number of Samples		
		Full						Total	>CRQL	>DWS
FBARIUM		Barium, filtered		ppb	1.4	2000	EPA	5	5	0
FCADMIU		Cadmium, filtered		ppb	.98	5	EPA	5	0	0
FCROMI		Chromium, filtered		ppb	3.7	100	EPA	5	0	0
ALPHA		Gross alpha		pCi/L		15	EPA	2	1	0

GROUNDWATER QUALITY PARAMETERS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS Limit	Agency	Number of Samples		
		Full						Total	>CRQL	>DWS
FIROH		Iron, filtered		ppb	8.9	300	EPAS	5	5	0
FMANGAN		Manganese, filtered		ppb	.55	50	EPAS	5	5	0
FSDIUM		Sodium, filtered		ppb	44			5	5	

SITE SPECIFIC AND OTHER CONSTITUENTS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS Limit	Agency	Number of Samples		
		Full						Total	>CRQL	>DWS
FALUMIN		Aluminum, filtered		ppb	31	200	EPAS	5	0	0
FAKTIMO		Antimony, filtered		ppb	24	6	EPA	5	0	5*
FBERYLL		Beryllium, filtered		ppb	.63	4	EPA	5	0	0
FCALCIU		Calcium, filtered		ppb	41			5	5	
FCOBALT		Cobalt, filtered		ppb	5.3			5	0	
FCOPPER		Copper, filtered		ppb	2.1	1000	EPAS	5	1	0
BETA		Gross beta		pCi/L				2	2	
I-129		Iodine-129		pCi/L		1	EPA	2	2	2
FMAGNES		Magnesium, filtered		ppb	26			5	5	
FNICKEL		Nickel, filtered		ppb	11	100	EPA	5	0	0
FPOTIASS		Potassium, filtered		ppb	390			5	5	
FSILVER		Silver, filtered		ppb	5.5	100	EPAS	5	0	0
TC-99		Technetium-99		pCi/L		900	EPA	2	2	0
FTIN		Tin, filtered		ppb	30			5	0	
TDS		Total dissolved solids		ppb		500000	EPAS	2	2	0
TRITIUM		Tritium		pCi/L		20000	EPA	2	2	0
TURBID		Turbidity		NTU				2	2	
FVANADI		Vanadium, filtered		ppb	1.9			5	5	
FZINC		Zinc, filtered		ppb	3.7	5000	EPAS	5	3	0

For explanation of this table, see Section 1.4 of report.

**Table 9-4. Constituents with at Least One Detected Value for the
216-B-63 Trench Data for Reporting Period
July 1 through September 30, 1995.
(sheet 1 of 2)**

Well Name	Collection Date	Sample Number	FBARIUM 34/ppb 1.4/2000	FCALCIU 34/ppb 41/.	FCOPPER 34/ppb 2.1/1000s	ALPHA 135/pCi/L ./15
299-E27-11	5/03/95	B0FCC6	36.00	35000.00	2.10 U	
299-E27-17	5/03/95	B0FCD1	32.00	39000.00	3.10 L	
299-E27-8	5/04/95	B0FCD6	23.00	34000.00	2.10 U	
299-E27-9	5/03/95	B0FCF1	22.00	35000.00	2.10 U	
299-E33-33	8/01/95	B0GB27				1.77
299-E33-36	8/01/95	B0GB36				.88 U
299-E34-10	5/03/95	B0FCF6	35.00	35000.00	2.10 U	

Well Name	Collection Date	Sample Number	BETA 136/pCi/L ./.	I-129 138/pCi/L ./1	FIROM 34/ppb 8.9/300s	FMAGNES 34/ppb 26/.
299-E27-11	5/03/95	B0FCC6			110.00 B	9400.00
299-E27-17	5/03/95	B0FCD1			14.00 BL	11000.00
299-E27-8	5/04/95	B0FCD6			25.00 B	9300.00
299-E27-9	5/03/95	B0FCF1			30.00 B	10000.00
299-E33-33	8/01/95	B0GB27	7.14	5.85		
299-E33-36	8/01/95	B0GB36	5.81	5.65		
299-E34-10	5/03/95	B0FCF6			16.00 BL	9200.00

Well Name	Collection Date	Sample Number	FMANGAN 34/ppb .55/50s	FPOTASS 34/ppb 390/.	FSODIUM 34/ppb 44/.	TC-99 143/pCi/L ./900
299-E27-11	5/03/95	B0FCC6	2.30 BL	6000.00	13000.00 B	
299-E27-17	5/03/95	B0FCD1	1.70 BL	6700.00	16000.00 B	
299-E27-8	5/04/95	B0FCD6	1.80 BL	6400.00	13000.00 B	
299-E27-9	5/03/95	B0FCF1	1.80 BL	5900.00	12000.00 B	
299-E33-33	8/01/95	B0GB27				3.01
299-E33-36	8/01/95	B0GB36				4.32
299-E34-10	5/03/95	B0FCF6	3.20 BL	6200.00	14000.00 B	

Well Name	Collection Date	Sample Number	TDS 65/ppb ./500000s	TRITIUM 142/pCi/L ./20000	TURBID 111/NTU ./.	FVANADI 34/ppb 1.9/.
299-E27-11	5/03/95	B0FCC6				22.00 L
299-E27-17	5/03/95	B0FCD1				21.00 L
299-E27-8	5/04/95	B0FCD6				24.00 L
299-E27-9	5/03/95	B0FCF1				27.00 L
299-E33-33	8/01/95	B0GB27	190000.00	3370.00	.62	
299-E33-36	8/01/95	B0GB36	170000.00	2050.00	1.32	
299-E34-10	5/03/95	B0FCF6				23.00 L

Table 9-4. Constituents with at Least One Detected Value for the
216-B-63 Trench Data for Reporting Period
July 1 through September 30, 1995.
(sheet 2 of 2)

Well Name	Collection Date	Sample Number	FZINC 34/ppb 3.7/5000s
299-E27-11	5/03/95	80FC06	6.80 L
299-E27-17	5/03/95	80FC01	6.00 L
299-E27-8	5/04/95	80FC06	9.70 L
299-E27-9	5/03/95	80FCF1	3.70 U
299-E34-10	5/03/95	80FCF6	3.70 U

For explanation of this table, see Section 1.4 of report.

Table 9-5. Contamination Indicator Parameters for the
216-B-63 Trench Data for Reporting Period
July 1 through September 30, 1995.

Well Name	Collection Date	Sample Number	COND FIELD uMho 1/.	COND LAB uMho 1/.	pH FIELD .01/6.5-8.5s	pH LAB .01/6.5-8.5s	TOC ppb */.	TOX ppb */.
299-E33-33	8/01/95	806827	295		8.21	8.10	300 L	6.9 U
		806828	296		8.21		200 L	6.9 U
		806829	296		8.21		200 L	6.9 U
		806830	295		8.20		300 L	6.9 U
299-E33-36	8/01/95	806836	266		8.39	8.20	300 L	6.9 U
		806837	266		8.38		300 L	6.9 U
		806838	266		8.37		400 L	6.9 U
		806839	266		8.37		300 L	6.9 U

* Detection limits for TOC and TOX vary depending on the performing laboratory.
For explanation of this table, see Section 1.4 of report.

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10.0 216-S-10 POND AND DITCH

J. W. Lindberg
Westinghouse Hanford Company

10.1 INTRODUCTION

The 216-S-10 Pond and Ditch (S-10 Facility) is located south-southwest of the 200 West Area, directly outside the perimeter fence. The S-10 Facility received wastewater from the Reduction-Oxidation (REDOX) Plant (202-S Building) located in the 200 West Area. In the past, wastewater disposed of at the S-10 Facility has contained hazardous waste and radioactive materials. Since 1985, physical controls and operating procedures have been modified to avoid inadvertent discharge of hazardous and radioactive substances to the wastewater stream. The facility has been monitored under interim status since August 1991. In October 1991, the effluent waste stream, including the water source, to the 216-S-10 Ditch was deactivated. Because the S-10 Facility is not expected to receive additional hazardous and radioactive substances, the facility will be closed in accordance with WAC 173-303-610 (final status). The closure/post-closure plan is due in 2003.

The S-10 Facility initially comprised an open, unlined ditch 1.8 m (6 ft) deep, 1.2 m (4 ft) wide at the bottom, and 686 m (2,250 ft) long. In addition, an open, unlined percolation pond, approximately 2 hectares (5 acres) in area, was constructed at the southwest end of the ditch, and was active during part of the time the ditch was receiving waste.

The 216-S-10 Ditch began receiving wastewater from the REDOX Plant in August 1951, and the 216-S-10 Pond was dug and placed in service in February 1954. In October 1985, the 216-S-10 Pond and portions of the 216-S-10 Ditch were decommissioned, backfilled, and stabilized. The remaining portion of the 216-S-10 Ditch (approximately 594 m [1,950 ft]) received nonhazardous, nonregulated waste from the 202-S Building chemical sewer until deactivation in October 1991. This waste stream comprised cooling water, steam condensate, water tower overflow, and drain effluent. These source streams had been routed so that they would not come into contact with hazardous materials.

Releases of hazardous materials and constituents to the S-10 Facility are poorly documented. Radioactive waste was reportedly disposed of to the S-10 Facility as a result of contaminated floor and sewer drains at the REDOX Plant. Chemical releases were documented in 1954 and 1983, and known constituents are $\text{Al}(\text{NO}_3)_3$, NaNO_3 , NaOH , Na_3PO_4 , NaF , NaCl , and $\text{K}_2\text{Cr}_2\text{O}_7$.

During 1991 the annual volume of effluent discharged to the 216-S-10 Ditch was between 1.9×10^8 and 5.7×10^8 L (5.0×10^7 and 1.5×10^8 gal). Annual discharges of these volumes created a localized recharge mound and an associated perched water table directly below the receiving (north) end of the ditch. This recharge mound has since dissipated, and the perched water zone has been dry since shortly after the ditch was deactivated.

Groundwater beneath the S-10 Facility is sampled semiannually in accordance with the *Interim-Status Groundwater Monitoring Plan for the 216-S-10 Pond and Ditch* (MHC 1990a). The site is currently in a detection-level indicator parameters evaluation program.

The monitoring network currently consists of two upgradient wells, three downgradient wells, and one downgradient well that monitors the base of the unconfined aquifer (Figure 10-1). Table 10-1 lists the wells and their sampling status. The first four quarters of groundwater sampling and analysis in the detection-level program were completed in 1992. The results of the background statistical calculations for the upgradient monitoring wells (based on the first four quarters of analytical data) were presented in the *Annual Report for RCRA Groundwater Monitoring Projects at Hanford Site Facilities for 1993* (DOE-RL 1994).

10.2 WATER LEVEL MEASUREMENTS

Water levels were measured at five S-10 Facility wells during the third quarter. They included wells 299-W26-7, 299-W26-8, 299-W26-9, 299-W26-10, and 299-W26-12 (Table 10-2). The sixth well (299-W27-2) was not measured during the third quarter because it is measure only at the time of sampling. Like the other wells in the well network, it is on a semiannual sampling schedule and was not sampled during the third quarter (see Section 10.3).

10.3 WATER CHEMISTRY DATA

Because the sampling schedule for all six S-10 Facility wells is semiannual, groundwater samples were not collected during the third quarter of 1995. These wells will be sampled again in the fourth quarter. Tables 10-3 and 10-4 are previously unreported data.

Figure 10-1. Well Location Map for the 216-S-10 Facility.

Table 10-1. Monitoring Well Purpose and Sampling Schedule for the 216-S-10 Facility.

Well no. (299-)	Relative position	Hydrogeologic unit	Sampling frequency	Last sampling date
W26-7	Upgradient	Ringold: Water Table	Semiannually	06/13/95
W26-8	Upgradient	Ringold: Water Table	Semiannually	06/14/95
W26-9	Downgradient	Ringold: Water Table	Semiannually	06/13/95
W26-10	Downgradient	Ringold: Water Table	Semiannually	06/10/95
W26-12	Downgradient	Ringold: Water Table	Semiannually	06/14/95
W27-2	Downgradient	Ringold: Base of Unconfined Aquifer	Semiannually	06/15/95

Table 10-2. RCRA Water Level Measurement Report
216-S-10 Facility, Third Quarter 1995.

Well	Date	Depth to water (ft)	Water level elevation above msl (ft)	(m)
Wells Monitoring the Top of the Unconfined Aquifer				
299-W26-10	9/08/95	216.85	454.02	138.39
299-W26-12	9/08/95	221.39	454.30	138.47
299-W26-7	9/08/95	195.98	456.01	138.99
299-W26-8	9/08/95	211.63	454.94	138.67
299-W26-9	9/08/95	199.70	454.72	138.60

- NOTES: 1. Water level elevations are calculated by subtracting the measured depth-to-water from the surveyed elevation for the well.
2. Depth-to-water values are transcribed from field records.
3. Measurements marked with an '*' were taken at the time of sampling.
4. Measurements marked with a '+' are outside of the expected range, and are suspected of error.

Table 10-3. Constituent List and Summary of Results for the
216-S-10 Facility Data for Reporting Period
July 1 through September 30, 1995.

CONTAMINATION INDICATOR PARAMETERS

Short	(Method)	Constituent Name		Units	Lab CRCL	DWS Limit	Agency	Number of Samples		
		Full						Total	>CRCL	>DWS
CONDUCT		Conductivity, field	umhos					1	1	
TOC		Total organic carbon	ppb		140			1	1	
TOX		Total organic halogen	ppb		6.9			1	1	
PH	93	pH, field	pH		6.5-8.5	EPAS		1	1	0
PH	125	pH, lab	pH		6.5-8.5	EPAS		1	1	0

For explanation of this table, see Section 1.4 of report.

**Table 10-4. Contamination Indicator Parameters for the
216-S-10 Facility Data for Reporting Period
July 1 through September 30, 1995.**

Well Name	Collection Date	Sample Number	COND FIELD uMho 1/.	COND LAB uMho 1/.	pH FIELD .01/6.5-8.5s	pH LAB .01/6.5-8.5s	TOC ppb */.	TOX ppb */.
299-127-2	6/15/95	B0FLF7	354		7.62	7.80	200 L	7.0 L

* Detection limits for TOC and TOX vary depending on the performing laboratory.
for explanation of this table, see Section 1.4 of report.

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11.0 216-U-12 CRIB

B. A. Williams
Westinghouse Hanford Company

11.1 INTRODUCTION

The 216-U-12 Crib (U-12 Crib) is located approximately 609 m (1,998 ft) south of the U Plant in the 200 West Area (see Figures 1-1 and 11-1). The crib is an unlined, gravel-bottom, percolation crib that is 3 m by 30.5 m (10 ft by 100 ft) and 4 m (13 ft) deep. The crib has a plastic barrier cover and is backfilled with the original excavated soil. A vitrified clay distribution pipe buried in the gravel was used to disperse the effluent across the bottom of the crib.

The U-12 Crib received wastewater from the U Plant in the 200 West Area from April 1960 until February 1988, when it was replaced by the 216-U-17 Crib. The closure of the U-12 Crib will be coordinated with the CERCLA Past-Practice activity (200-UP-2 Operable Unit cleanup). The 216-U-12 Crib is scheduled to be included in the Hanford RCRA Permit (Ecology 1994) as a TSD unit undergoing closure through the permit modification process in 1997.

The wastewater disposed of in the U-12 Crib consisted of effluent from the U Plant and included 291-U-1 Stack drainage and process condensate from the 224-U Building. The U-12 Crib received this waste stream from April 1960 until 1972, when it was deactivated. The U-12 Crib was reactivated in November 1981 and received U Plant waste until it was permanently retired in February 1988. An average of over 1,000,000 L (264,200 gal) of effluent was disposed of in the crib during each year of its active life. This waste contained hazardous waste and radioactive materials. The U-12 Crib received low-level radioactive waste that is known to have included chemicals such as nitric acid in addition to plutonium, strontium, ruthenium, and uranium. In 1985, physical controls and operating procedures were modified to avoid inadvertent discharge of hazardous chemicals to the wastewater stream. In 1983, hydrogeologic evaluation of the crib revealed radioactive contamination to a depth of at least 43 m (140 ft). The depth to water below the crib is approximately 72.5 m (237 ft).

The RCRA *Interim-Status Groundwater Monitoring Plan for the 216-U-12 Crib* (WHC 1990b) presents the program used to establish the background levels for the CIPs. The document summarizes the available data for the disposal facility. In accordance with the plan, four RCRA groundwater monitoring wells were installed in 1990. The monitoring network consisted of one upgradient well and three downgradient wells (Figure 11-1). A RCRA interim-status assessment-level groundwater monitoring network was established for the U-12 Crib in 1993 (WHC 1993a) because of elevated levels of specific conductivity in two downgradient wells.

The sample results for the third quarter of 1995 represent the 17th quarter of RCRA data collected at the U-12 Crib. Data collected during the third quarter of 1992 from downgradient wells 299-W22-41 and 299-W22-42 showed elevated specific conductivity. Verification sampling results and data

obtained in subsequent quarters corroborated these findings. Currently, the U-12 Crib groundwater monitoring well network is sampled quarterly.

The current network consists of five wells—one upgradient well (299-W22-43) and four downgradient wells (299-W22-40, -41, -42, and 699-36-70A). Two old wells (299-W22-22 and 299-W22-23) initially sampled during assessment monitoring are no longer sampled because of less-than-optimal well conditions, high turbidity, and casing corrosion products. Table 11-1 lists the network wells and their sampling status during the reporting period.

11.2 WATER LEVEL MEASUREMENTS

Water levels in each network well are measured at least quarterly and when water samples are collected. Water level measurements obtained during the third quarter are presented in Table 11-2.

11.3 WATER CHEMISTRY DATA

Groundwater samples were collected September 21-25, 1995 from all network wells. All data currently available from this and previous unreported sampling periods are shown in Tables 11-3 through 11-5. Table 11-3 includes the constituent list and a summary of results. Tables 11-4 and 11-5 show results for specific constituents. Analytical data unavailable at the time this report was prepared will be included in future quarterly reports.

Specific conductivity results in wells 699-36-70A, 299-W22-41 and 299-W22-42 continue to exceed the critical mean of 437 $\mu\text{mho/cm}$. Results for nitrate (DWS = 45,000 ppb), one of the principal constituents suspected of causing elevated conductivity at the crib are 150,000, 150,000, and 550,000 ppb, respectively, for the wells with elevated specific conductance. Technetium-99 (beta indicators are elevated also) is also elevated above the Hanford Sitewide background values in these same wells (consistent with previous downgradient well data). Iodine-129 continues to be elevated above Hanford Sitewide background values in wells 699-36-70A and 299-W22-42 and tritium in well 699-36-70A is 324,000 pCi/L, above the 20,000 pCi/L DWS. An explanation of any data flags can be found in Sections 1.2 and 1.4.

Analytical results flagged with an 'F' indicate that a RADE has been issued because the results did not follow past trends.

Figure 11-1. Well Location Map for 216-U-12 Crib.

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Table 11-1. Monitoring Well Purpose and Sampling Schedule for the 216-U-12 Crib.

Well no. (229-)	Relative position	Hydrogeologic unit	Sample frequency	Sample date, 3rd Qtr 1995
W22-43	Upgradient	Ringold: Water Table	Quarterly	09/21/95
W22-40	Downgradient	Ringold: Water Table	Quarterly	09/21/95
W22-41	Downgradient	Ringold: Water Table	Quarterly	09/22/95
W22-42	Downgradient	Ringold: Water Table	Quarterly	09/22/95
699-36-70A	Downgradient	Ringold: Water Table	Quarterly	09/25/95

Note: Hydrogeologic units include the sandy gravel of the Hanford formation and the Ringold Formation.

Table 11-2. RCRA Water Level Measurement Report
216-U-12 Crib, Third Quarter 1995.

Well	Date	Depth to water (ft)	Water level elevation above msl	
			(ft)	(m)
Wells Monitoring the Top of the Unconfined Aquifer				
299-W22-40	9/21/95	239.88*	452.35	137.88
299-W22-41	9/08/95	238.93	453.07	138.10
	9/22/95	239.10*	452.90	138.04
299-W22-42	9/08/95	238.41	453.01	138.08
	9/22/95	238.70*	452.72	137.99
299-W22-43	9/08/95	237.74	453.87	138.34
	9/21/95	238.80*	452.81	138.02
699-36-70A	9/08/95	258.40	447.03	136.25
	9/25/95	258.33*	447.10	136.28

- NOTES: 1. Water level elevations are calculated by subtracting the measured depth-to-water from the surveyed elevation for the well.
2. Depth-to-water values are transcribed from field records.
3. Measurements marked with an '*' were taken at the time of sampling.
4. Measurements marked with a '+' are outside of the expected range, and are suspected of error.

Table 11-3. Constituent List and Summary of Results for the
216-U-12 Crib Data for Reporting Period
July 1 through September 30, 1995.
(sheet 1 of 3)

CONTAMINATION INDICATOR PARAMETERS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS Limit	Agency	Number of Samples		
		Full						Total	>CRQL	>DWS
CONDUCT		Conductivity, field	umhos					12	12	
TOC		Total organic carbon	ppb	140				13	13	
TOX		Total organic halogen	ppb	6.9				13	8	
PH	93	pH, field	pH		6.5-8.5	EPAS		12	12	0
PH	125	pH, lab	pH		6.5-8.5	EPAS		3	3	0

DRINKING WATER PARAMETERS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS Limit	Agency	Number of Samples		
		Full						Total	>CRQL	>DWS
2,4,5-TP		2,4,5-TP	ppb	.048	50	EPA		1	0	0
2,4-D		2,4-D	ppb	.12	70	EPA		1	0	0
ARSENIC		Arsenic, filtered	ppb	2	50	EPA		2	2	0
BARIUM		Barium, filtered	ppb	1.4	2000	EPA		6	6	0
CADMIUM		Cadmium, filtered	ppb	.98	5	EPA		6	0	0
CHROMIUM		Chromium, filtered	ppb	3.7	100	EPA		6	1	0
ENDRIN		Endrin	ppb	.0035	2	EPA		1	0	0
FLUORIDE		Fluoride	ppb	52	4000	EPA		6	6	0
ALPHA		Gross alpha	pCi/L		15	EPA		6	4	0
MERCURY		Mercury, filtered	ppb	.019	2	EPA		1	0	0
METHYLOR		Methoxychlor	ppb	.0046	40	EPA		1	0	0
NITRATE		Nitrate	ppb	120	45000	EPA		6	6	4
RADIUM		Radium	pCi/L					1	0	
SELENIUM		Selenium, filtered	ppb	1.2	50	EPA		2	2	0
TOXAENE		Toxaphene	ppb	.18	3	EPA		1	0	0
gamma-BHC		gamma-BHC (Lindane)	ppb	.0013	.2	EPA		1	0	0

GROUNDWATER QUALITY PARAMETERS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS Limit	Agency	Number of Samples		
		Full						Total	>CRQL	>DWS
CHLORIDE		Chloride	ppb	110	250000	EPAS		6	6	0
IRON		Iron, filtered	ppb	8.9	300	EPAS		6	4	0
MANGANESE		Manganese, filtered	ppb	.55	50	EPAS		6	3	0
PHENOL		Phenol	ppb	.58				1	0	
SODIUM		Sodium, filtered	ppb	44				6	6	
SULFATE		Sulfate	ppb	130	250000	EPAS		6	6	0

Table 11-3. Constituent List and Summary of Results for the
216-U-12 Crib Data for Reporting Period
July 1 through September 30, 1995.
(sheet 2 of 3)

SITE SPECIFIC AND OTHER CONSTITUENTS

Short	(Method)	Constituent Name	Full	Units	Lab CRQL	DWS Limit	Agency	Number of Samples		
								Total	>CRQL	>DWS
245-T		2,4,5-T		ppb	.029			1	0	
246-TRP		2,4,6-Trichlorophenol		ppb	.8			1	0	
24-dchp		2,4-Dichlorophenol		ppb	.43			1	0	
DIMPHEN		2,4-Dimethylphenol		ppb	.62			1	0	
DINPHEN		2,4-Dinitrophenol		ppb	6.8			1	0	
26-DCHP		2,6-Dichlorophenol		ppb	.52			1	0	
CHLPHEN		2-Chlorophenol		ppb	.6			1	0	
2NITPH		2-Nitrophenol		ppb	.6			1	0	
BUTDNP	30	2-sec-Butyl-4,6-dinitrophenol(DN		ppb	.41	7	EPA	1	0	0
BUTDNP	49	2-sec-Butyl-4,6-dinitrophenol(DN		ppb	0	7	EPA	1	0	0
DDD		4,4'-DDD		ppb	.0043			1	0	
DDE		4,4'-DDE		ppb	.0012			1	0	
DDT		4,4'-DDT		ppb	.00038			1	0	
46DN2MP		4,6-Dinitro-2-methylphenol		ppb	.84			1	0	
CHLCRES		4-Chloro-3-methylphenol		ppb	.52			1	0	
NITPHEN		4-Nitrophenol		ppb	.49			1	0	
ALDRIN		Aldrin		ppb	.00062			1	0	
ALKALIN		Alkalinity		ppb	3500			3	3	
A-BHC		Alpha-BHC		ppb	.0018			1	0	
FALUNTH		Aluminum, filtered		ppb	31	200	EPAS	6	0	0
FANTIMO		Antimony, filtered		ppb	24	6	EPA	6	0	6*
FBERYLL		Beryllium, filtered		ppb	.63	4	EPA	6	0	0
B-BHC		Beta-BHC		ppb	.00086			1	0	
BROMIDE		Bromide		ppb	72			6	0	
FCALCIU		Calcium, filtered		ppb	41			6	4	
CYLOANE		Chlordane		ppb	.017	2	EPA	1	0	0
FCOBALT		Cobalt, filtered		ppb	5.3			6	0	
FCOPPER		Copper, filtered		ppb	2.1	1000	EPAS	6	0	0
CRESOLS		Cresols (methylphenols)		ppb	1.7			1	0	
0-BHC		Delta-BHC		ppb	.0012			1	0	
DIELRIN		Dieldrin		ppb	.00053			1	0	
ENDO1		Endosulfan I		ppb	.00028			1	0	
ENDO2		Endosulfan II		ppb	.0031			1	0	
ENDSFAN		Endosulfan sulfate		ppb	.0037			1	0	
ENDRALD		Endrin Aldehyde		ppb	.00085			1	0	
BETA		Gross beta		pCi/L				6	5	
HEPTLOR		Heptachlor		ppb	.0012	.4	EPA	1	0	0
HEPTIDE		Heptachlor epoxide		ppb	.0012	.2	EPA	1	0	0
1-129		Iodine-129		pCi/L		1	EPA	6	2	2
PLEAD		Lead, filtered		ppb	.88	15	EPAA	2	1	0
MAGNES		Magnesium, filtered		ppb	26			6	6	
NICKEL		Nickel, filtered		ppb	11	100	EPA	6	0	0
NITRITE		Nitrite		ppb	140	4000	EPA	6	0	0

Table 11-3. Constituent List and Summary of Results for the
216-U-12 Crib Data for Reporting Period
July 1 through September 30, 1995.
(sheet 3 of 3)

Short	(Method)	Constituent Name Full	Units	Lab CRGL	DWS Limit	Agency	Number of Samples		
							Total	>CRGL	>DWS
PENTCHP		Pentachlorophenol	ppb	.48	1	EPA	1	0	0
PHOSPHA		Phosphate	ppb	340			6	0	
PPOTASS		Potassium, filtered	ppb	390			6	6	
FSILVER		Silver, filtered	ppb	5.5	100	EPAS	6	0	0
FSTRONUM		Strontium, Filtered	ppb	.31			6	6	
TC-99		Technetium-99	pCi/L		900	EPA	6	6	0
TETPHNL		Tetrachlorophenols	ppb	.52			1	0	
FTIN		Tin, filtered	ppb	30			6	0	
TDS		Total dissolved solids	ppb		500000	EPAS	3	3	1
TRIPHNL		Trichlorophenols	ppb	.56			1	0	
TRITIUM		Tritium	pCi/L		20000	EPA	6	6	1
TURBID		Turbidity	NTU				5	5	
FVANADI		Vanadium, filtered	ppb	1.9			6	6	
FZINC		Zinc, filtered	ppb	3.7	5000	EPAS	6	4	0

For explanation of this table, see Section 1.4 of report.

Table 11-4. Constituents with at Least One Detected Value for the 216-U-12 Crib
Data for Reporting Period July 1 through September 30, 1995.
(sheet 1 of 3)

Well Name	Collection Date	Sample Number	ALKALIN 357/ppb 3500/.	ARSENIC 43/ppb 2/50	BARIUM 34/ppb 1.4/2000	CALCIU 34/ppb 41/.
299-U22-40	9/21/95	BOGHR9			30.00	33000.00
299-U22-41	9/22/95	BOGHR7			45.00	56000.00
299-U22-41	9/22/95	BOGHS6			46.00	56000.00
299-U22-42	9/22/95	BOGHS7	100000.00			
299-U22-42	9/22/95	BOGHS8			120.00	130000.00
299-U22-43	9/21/95	BOGHT1	110000.00			
299-U22-43	9/21/95	BOGHT5			27.00	30000.00
699-36-70A	6/15/95	BOFMY9		2.80 L		
699-36-70A	9/25/95	BOGHS0	120000.00			
699-36-70A	9/25/95	BOGHS4		2.90 L	89.00	61000.00

Well Name	Collection Date	Sample Number	CHLORID 124/ppb 110/250000s	CHROMI 34/ppb 3.7/100	FLUORID 124/ppb 52/4000	ALPHA 135/pCi/L ./15
299-U22-40	9/21/95	BOGHR8	16000.00 D		800.00	2.04
299-U22-40	9/21/95	BOGHR9		4.20 L		
299-U22-41	9/22/95	BOGHR6	14000.00 D		900.00	2.01
299-U22-41	9/22/95	BOGHR7		3.70 U		
299-U22-41	9/22/95	BOGHS5	14000.00 D		900.00	.65 U
299-U22-41	9/22/95	BOGHS6		3.70 U		
299-U22-42	9/22/95	BOGHS7	15000.00 D		1100.00	4.47
299-U22-42	9/22/95	BOGHS8		3.70 U		
299-U22-43	9/21/95	BOGHT1	13000.00 D		800.00	.86 U
299-U22-43	9/21/95	BOGHT5		3.70 U		
699-36-70A	9/25/95	BOGHS0	22000.00 D		800.00	2.06
699-36-70A	9/25/95	BOGHS4		3.70 U		

Well Name	Collection Date	Sample Number	BETA 136/pCi/L ./.	I-129 138/pCi/L ./1	IRON 34/ppb 8.9/300s	FLEAD 40/ppb .88/15u
299-U22-40	9/21/95	BOGHR8	11.20	-.83 U		
299-U22-40	9/21/95	BOGHR9			18.00 L	
299-U22-41	9/22/95	BOGHR6	29.30	-1.52 U		
299-U22-41	9/22/95	BOGHR7			9.80 L	
299-U22-41	9/22/95	BOGHS5	24.10	-.59 U		
299-U22-41	9/22/95	BOGHS6			8.90 U	
299-U22-42	9/22/95	BOGHS7	-1.45 UF	11.57		
299-U22-42	9/22/95	BOGHS8			16.00 L	
299-U22-43	9/21/95	BOGHT1	10.40	.89 U		
299-U22-43	9/21/95	BOGHT5			8.90 U	
699-36-70A	6/15/95	BOFMY9				2.40 L
699-36-70A	9/25/95	BOGHS0	20.60	19.92		
699-36-70A	9/25/95	BOGHS4			19.00 L	.88 UM

Table 11-4. Constituents with at Least One Detected Value for the
216-U-12 Crib Data for Reporting Period
July 1 through September 30, 1995.
(sheet 2 of 3)

Well Name	Collection Date	Sample Number	FMAGNES 34/ppb 26/.	FMANGAN 34/ppb .55/50%	NITRATE 124/ppb 120/45000	FPOTASS 34/ppb 390/.
299-U22-40	9/21/95	BOGHR8			25000.00 D	
299-U22-40	9/21/95	BOGHR9	12000.00	.79 L		3800.00
299-U22-41	9/22/95	BOGHR6			150000.00 D	
299-U22-41	9/22/95	BOGHR7	18000.00	.55 U		3900.00
299-U22-41	9/22/95	BOGHS5			140000.00 D	
299-U22-41	9/22/95	BOGHS6	19000.00	.55 U		3900.00
299-U22-42	9/22/95	BOGHS7			550000.00 D	
299-U22-42	9/22/95	BOGHS8	44000.00	.55 U		6500.00
299-U22-43	9/21/95	BOGHT1			17000.00 D	
299-U22-43	9/21/95	BOGHT5	11000.00	.69 L		3500.00
699-36-70A	9/25/95	BOGHS0			150000.00 D	
699-36-70A	9/25/95	BOGHS4	22000.00	1.20 L		5700.00

Well Name	Collection Date	Sample Number	FSELENI 48/ppb 1.2/50	FBOOION 34/ppb 44/.	FSTRONIUM 34/ppb .31/.	SULFATE 124/ppb 130/250000s
299-U22-40	9/21/95	BOGHR8				31000.00 D
299-U22-40	9/21/95	BOGHR9		20000.00 Q	180.00 H	
299-U22-41	9/22/95	BOGHR6				29000.00 D
299-U22-41	9/22/95	BOGHR7		22000.00 Q	330.00 H	
299-U22-41	9/22/95	BOGHS5				29000.00 D
299-U22-41	9/22/95	BOGHS6		23000.00 Q	340.00 H	
299-U22-42	9/22/95	BOGHS7				31000.00 D
299-U22-42	9/22/95	BOGHS8		31000.00 Q	790.00 H	
299-U22-43	9/21/95	BOGHT1				28000.00 D
299-U22-43	9/21/95	BOGHT5		21000.00 Q	170.00 H	
699-36-70A	6/15/95	BOFHV9	1.30 L			
699-36-70A	9/25/95	BOGHS0				33000.00 D
699-36-70A	9/25/95	BOGHS4	4.80 LH	22000.00 Q	320.00 H	

Well Name	Collection Date	Sample Number	TC-99 143/pCi/L .1/900	TDS 65/ppb .1/500000%	TRITIUM 142/pCi/L .1/20000	TURBID 111/NTU ./.
299-U22-40	9/21/95	BOGHR8	18.30		1360.00	1.55
299-U22-41	9/22/95	BOGHR6	103.00		1480.00	
299-U22-41	9/22/95	BOGHS5	100.00		1560.00	1.30
299-U22-42	9/22/95	BOGHS7	222.00	830000.00	13200.00	1.86
299-U22-43	9/21/95	BOGHT1	27.00	240000.00	1250.00	.82
699-36-70A	9/25/95	BOGHS0	56.50	420000.00	324000.00	2.90

Table 11-4. Constituents with at Least One Detected Value for the
216-U-12 Crib Data for Reporting Period
July 1 through September 30, 1995.
(sheet 3 of 3)

Well Name	Collection Date	Sample Number	FVAH01 34/ppb 1.9/-	FZINC 34/ppb 3.7/5000s
299-U22-40	9/21/95	80GHR9	28.00	4.00 L
299-U22-41	9/22/95	80GHR7	26.00	4.30 L
299-U22-41	9/22/95	80GHS6	25.00	28.00
299-U22-42	9/22/95	80GHS8	17.00	3.70 U
299-U22-43	9/21/95	80GHT5	27.00	3.70 U
699-36-70A	9/25/95	80GHS4	23.00	11.00

For explanation of this table, see Section 1.4 of report.

Table 11-5. Contamination Indicator Parameters for the
216-U-12 Crib Data for Reporting Period
July 1 through September 30, 1995.

Well Name	Collection Date	Sample Number	COND FIELD uMho 1/.	COND LAB uMho 1/.	pH FIELD .01/6.5-8.5s	pH LAB .01/6.5-8.5s	TOC ppb */.	TOX ppb */.
299-W22-40	9/21/95	BOGHRB	371		7.86		200 L	10.0
299-W22-41	9/22/95	BOGHR6					200 L	8.0 L
		BOGHS5	588		8.19		300 L	6.9 U
299-W22-42	9/22/95	BOGHS7	1241		7.72	7.80	200 L	6.9 U
299-W22-43	9/21/95	BOGHT1	358		7.95	8.00	200 L	8.0 L
		BOGHT2	358		7.95		200 L	10.0
		BOGHT3	355		7.95		400 L	10.0 L
		BOGHT4	355		7.95		200 L	10.0
699-36-70A	6/15/93	BOGMY6	673		7.67		200 L	9.0 L
	9/25/95	BOGHS0	665		7.76	7.90	200 L	6.9 U
		BOGHS1	664		7.77		200 L	6.9 U
		BOGHS2	663		7.76		200 L	8.0 L
		BOGHS3	663		7.76		200 L	6.9 U

* Detection limits for TOC and TOX vary depending on the performing laboratory.
For explanation of this table, see Section 1.4 of report.

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12.0 LIQUID EFFLUENT RETENTION FACILITY

M. D. Sweeney
Westinghouse Hanford Company

12.1 INTRODUCTION

The Liquid Effluent Retention Facility (LERF) was constructed to provide interim storage of 242-A Evaporator process condensate effluent suspected of containing listed and dangerous (ammonia) waste constituents. Construction of the LERF began in May 1990. The LERF, classified as a surface impoundment for mixed waste storage, will be permitted as a RCRA TSD facility. The evaporator was shut down in 1989 and restarted on April 14, 1994. The LERF basins currently serve as temporary storage for evaporator process condensate until the Effluent Treatment Facility is operational.

The facility is classified as a surface impoundment and was originally planned to have four basins arranged side by side. Four excavations were made; only three of the four basins are lined and are currently scheduled for use. The basins are located immediately east of the northeast corner of the 200 East Area. The liquid effluent may contain nonhalogenated solvents (F003 and F005, WAC 173-303-9004, "Dangerous Waste Source List"), namely acetone, methyl ethyl ketone, and methyl isobutyl ketone. The ammonia content in the liquid effluent may also justify handling the effluent as a dangerous waste.

An interim-status, detection-level groundwater monitoring network was installed around the LERF in 1990 in accordance with the *Interim Status Groundwater Monitoring Plan for the 200 East Area Liquid Effluent Retention Facility* (WHC 1991). Four quarters of background groundwater sampling and analysis were completed in April 1992. Three downgradient wells and one upgradient well constitute the monitoring network. Figure 12-1 shows the well locations. Table 12-1 provides the last sampling date and frequency and identifies the upgradient and downgradient groundwater monitoring wells. Table 12-2 shows current water table elevations for three of the four monitoring wells.

12.2 WATER LEVEL MEASUREMENTS

Water level measurements obtained during the July 1 through September 30, 1995, period are presented in Table 12-2. These measurements are obtained during sampling and as part of a semiannual water table evaluation.

12.3 WATER CHEMISTRY DATA

Chemistry data received before the cutoff date for this report are reported in Tables 12-3 through 12-5. No exceedances were noted for this quarter. An explanation of data flags can be found in Section 1.4.

Figure 12-1. Well Location Map for the Liquid Effluent Retention Facility.

**Table 12-1. Monitoring Well Purpose and Sampling Schedule
for the Liquid Effluent Retention Facility Network.**

Well no. (299-)	Relative position	Hydrogeologic unit	Sample frequency	Sample date, 3rd Qtr 1995
E26-9	Downgradient	Hanford: Water Table	Semiannually	07/18/95
E26-10	Downgradient	Hanford: Water Table	Semiannually	07/18/95
E26-11	Upgradient	Hanford: Water Table	Semiannually	07/18/95
E35-2	Downgradient	Hanford: Water Table	Semiannually	07/18/95

Table 12-2. RCRA Water Level Measurement Report
LERF, Third Quarter 1995.

Well	Date	Depth to water (ft)	Water level elevation above msl	
			(ft)	(m)
299-E26-10	7/18/95	199.62*	401.85	122.48
	9/08/95	199.78	401.69	122.44
299-E26-11	7/18/95	194.18*	405.50	123.60
	9/08/95	194.37	405.31	123.54
299-E26-9	7/19/95	200.98*	401.91	122.50
	9/08/95	201.18	401.71	122.44
299-E35-2	7/18/95	200.28*	402.08	122.55
	9/08/95	200.39	401.97	122.52

- NOTES:
1. Water level elevations are calculated by subtracting the measured depth-to-water from the surveyed elevation for the well.
 2. Depth-to-water values are transcribed from field records.
 3. Measurements marked with an '*' were taken at the time of sampling.
 4. Measurements marked with a '+' are outside of the expected range, and are suspected of error.

Table 12-3. Constituent List and Summary of Results
for the Liquid Effluent Retention Facility
Data for Reporting Period July 1
through September 30, 1995.

CONTAMINATION INDICATOR PARAMETERS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS Limit	Agency	Number of Samples		
		Full						Total	>CRQL	>DWS
CONDUCT		Conductivity, field		umhos				16	16	
TOC		Total organic carbon		ppb	140			16	13	
TOX		Total organic halogen		ppb	6.9			16	2	
PH	93	pH, field		pH		6.5-8.5	EPAS	16	16	0
PH	125	pH, lab		pH		6.5-8.5	EPAS	4	4	0

DRINKING WATER PARAMETERS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS Limit	Agency	Number of Samples		
		Full						Total	>CRQL	>DWS
ALPHA		Gross alpha		pCi/L		15	EPA	4	4	0

SITE SPECIFIC AND OTHER CONSTITUENTS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS Limit	Agency	Number of Samples		
		Full						Total	>CRQL	>DWS
111-T		1,1,1-Trichloroethane		ppb	.28	200	EPA	4	0	0
112-T		1,1,2-Trichloroethane		ppb	.19	5	EPA	4	0	0
11-DIC		1,1-Dichloroethane		ppb	.22			4	0	
12-DIC		1,2-Dichloroethane		ppb	.24	5	EPA	4	0	0
12-DCE		1,2-Dichloroethene		ppb	.26			4	0	
14-dben		1,4-Dichlorobenzene		ppb	.2	75	EPA	4	0	0
1BUTYL		1-Butanol		ppb	.84			4	0	
MIBK		4-Methyl-2-pentanone		ppb	.65			4	0	
ACETONE		Acetone		ppb	4.7			4	0	
AMMONIU		Ammonium ion		ppb	.27			4	4	
BENZENE		Benzene		ppb	.14	5	EPA	4	0	0
CARBIDE		Carbon disulfide		ppb	.65			4	0	
TETRAHE		Carbon tetrachloride		ppb	.22	5	EPA	4	0	0
CHLFORM		Chloroform		ppb	.21			4	0	
ETHCYAN		Ethyl cyanide		ppb	2.7			4	0	
BETA		Gross beta		pCi/L				4	4	
METHONE		Methyl ethyl ketone		ppb	3.9			4	0	
METHYCH		Methylene chloride		ppb	.62	5	EPA	4	0	0
PERCENE		Tetrachloroethene		ppb	.24	5	EPA	4	0	0
TAF		Tetrahydrofuran		ppb	.45			4	0	
TOLUENE		Toluene		ppb	.13	1000	EPA	4	1	0
TRICENE		Trichloroethene		ppb	.24	5	EPA	4	0	0
TURBID		Turbidity		NTU				4	4	
VINYIDE		Vinyl chloride		ppb	.33	2	EPA	4	0	0
XYLENE		Xylenes (total)		ppb	.57	10000	EPA	4	0	0

For explanation of this table, see Section 1.4 of report.

Table 12-4. Constituents with at Least One Detected Value for the
Liquid Effluent Retention Facility Data for Reporting Period
July 1 through September 30, 1995.

Well Name	Collection Date	Sample Number	AMMONIU 129/ppb 27/.	ALPHA 135/pCi/L ./15	BETA 136/pCi/L ./.	TOLUENE 182/ppb .13/1000
299-E26-10	7/18/95	B066H1	50.00 L	1.98	5.61	.13 U
299-E26-11	7/18/95	B066J0	40.00 L	3.67	5.57	.13 U
299-E26-9	7/19/95	B066J4	40.00 L	2.49	9.16	.68 L
299-E35-2	7/18/95	B066K3	40.00 L	3.77	8.48	.13 U

Well Name	Collection Date	Sample Number	TURBID 111/NTU ./.
299-E26-10	7/18/95	B066H1	2.20
299-E26-11	7/18/95	B066J0	2.25
299-E26-9	7/19/95	B066J4	1.17
299-E35-2	7/18/95	B066K3	.84

For explanation of this table, see Section 1.4 of report.

Table 12-5. Contamination Indicator Parameters for the
Liquid Effluent Retention Facility Data for
Reporting Period July 1 through
September 30, 1995.

Well Name	Collection Date	Sample Number	COND FIELD uMho 1/.	COND LAB uMho 1/.	pH FIELD .01/6.5-8.5s	pH LAB .01/6.5-8.5s	TOC ppb */.	TOX ppb */.
299-E26-10	7/18/95	B0G6H1	420		8.13	8.20	140 U	6.9 U
		B0G6H2	420		8.13		140 U	6.9 U
		B0G6H3	420		8.13		200 L	6.9 U
		B0G6H4	420		8.13		200 L	6.9 U
299-E26-11	7/18/95	B0G6J0	376		8.14	8.10	200 L	6.9 U
		B0G6J1	372		8.14		200 L	6.9 U
		B0G6J2	374		8.14		140 U	6.9 U
		B0G6J3	373		8.13		200 L	6.9 U
299-E26-9	7/19/95	B0G6J4	430		8.16	8.10	200 L	6.9 U
		B0G6J5	431		8.16		300 L	6.9 U
		B0G6J6	431		8.16		200 L	6.9 U
		B0G6J7	430		8.16		200 L	8.0 L
299-E35-2	7/18/95	B0G6K3	431		8.14	8.10	200 L	6.9 U
		B0G6K4	431		8.14		200 L	6.9 U
		B0G6K5	432		8.14		200 L	7.0 L
		B0G6K6	433		8.14		200 L	6.9 U

* Detection limits for TOC and TOX vary depending on the performing laboratory.
For explanation of this table, see Section 1.4 of report.

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13.0 2101-M POND

E. C. Thornton
Westinghouse Hanford Company

Washington State Department of Ecology indicated acceptance of a clean closure certification for the 2101-M Pond on October 26, 1995. The last groundwater sampling activities for this facility occurred in June 1995 and all associated data were reported in the RCRA quarterly report for the period April 1 through June 30, 1995. A section will not be included for the 2101-M Pond in future quarterly reports.

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14.0 LOW-LEVEL BURIAL GROUNDS

R. B. Mercer
Westinghouse Hanford Company

14.1 INTRODUCTION

The 200 Areas LLBG consist of five Low-Level Waste Management Areas (LLWMA). LLWMA 1 and LLWMA 2 are located in the 200 East Area and LLWMA 3, LLWMA 4, and LLWMA 5 are located in the 200 West Area (Figures 14-1 through 14-5). Table 14-1 describes the waste contained in each burial ground.

The groundwater monitoring program for the LLBG began with the installation of 35 monitoring wells in 1987. Additional wells have been installed in subsequent years. The present monitoring networks are listed in Tables 14-2 through 14-6. Semiannual detection level sampling is being conducted at all five burial grounds. Additional samples are being collected at the upgradient LLWMA-5 water table wells to establish a critical mean for TOX.

The carbon tetrachloride pump-and-treat demonstration project is continuing near LLWMA 4. Groundwater is being extracted from well 299-W18-1 and injected into well 299-W18-4 after treatment. Groundwater levels are being monitored with transducers in the extraction and injection wells and in 299-W18-2, 299-W18-5, and 299-W18-24. Well 299-W18-24 is an upgradient monitoring well for LLWMA 4. No impacts on the LLWMA 4 monitoring network have been noted to date. Significant impacts are expected when the full pump-and-treat program is started in early 1996.

14.2 WATER LEVEL MEASUREMENTS

In addition to measurements taken at the time of sampling, water levels were measured quarterly at the LLBG. Water level measurements are presented in Tables 14-7 through 14-11. Additional water level measurements are reported for some wells if they are monitored for other projects. Suspected errors in the water level measurements occurred at several wells this quarter, as indicated in the tables. Water level measurements were not taken at well 299-W6-5 because of an obstructed casing; the casing in well 299-W6-5 was crimped during installation. Although remedial action enlarged the casing to permit the installation of a pump, the well does not have sufficient space to measure water levels, and additional well remediation may not be possible without damaging the casing. Well 299-E34-4 has been dry since it was constructed. Water levels are no longer measured in LLWMA 2 wells 299-E34-6 and 299-E35-1 because they have fallen below the bottom of the screens. All three of these wells were completed to the top of basalt. The LLWMA 2 monitoring network continues to meet the requirement of at least one upgradient and three downgradient monitoring wells.

14.3 WATER CHEMISTRY DATA

Groundwater samples were collected from all scheduled wells. Additional samples were collected at well 299-E32-4 (LLWMA 1) for 216-B-3 Pond. Samples were analyzed for CIPs, interim primary drinking water parameters, water quality parameters, and site-specific parameters. Results of analyses are listed in Tables 14-12 through 14-26. These tables also contain any previously unreported data and data that are being rereported because of changes in the data qualifier flags.

Samples were collected at some LLWMA 3 and LLWMA 5 groundwater monitoring wells for iodine-129, strontium-90, technetium-99, and total dissolved solids. These samples were collected in support of groundwater quality assessment at the T and TX-TY SST farms. Analytical results from these samples are reported in the data tables in this section.

Field pH measurements from upgradient well 299-W6-4 and downgradient well 299-W6-5 exceeded the critical range established for LLWMA 5. Laboratory measurements for these wells were within acceptable limits. RADEs have been filed of the field pH data. Resampling for field pH has been requested for well 299-W6-5. Other indicator parameter averages did not exceed the critical means at LLWMA 3 or LLWMA 5 this quarter.

Analytical results flagged with a 'Q' are associated with suspect QC data. Data qualifiers and data flags are discussed in more detail in Sections 1.2 and 1.4, respectively. Results are flagged with an 'F' if a RADE has been issued because the results did not follow the past trends. Tables 14-27 and 14-28 list the water quality standards that were exceeded for the data reported this quarter.

Figure 14-1. Well Location Map for Low-Level
Waste Management Area 1.

Figure 14-2. Well Location Map for Low-Level Waste Management Area 2.

Figure 14-3. Well Location Map for Low-Level Waste Management Area 3.

Figure 14-4. Well Location Map for Low-Level Waste Management Area 4.

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Figure 14-5. Well Location Map for Low-Level Waste Management Area 5.

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Table 14-1. Low-Level Burial Grounds.

LLWMA	Burial ground	First use	Contents
1	218-E-10	1960	Dragoff material Failed equipment Mixed waste
2	218-E-12B	1968	Miscellaneous dry waste Transuranic waste Submarine reactor compartments
3	218-W-3A	1970	Ion exchange resins Failed equipment
	218-W-3AE	1981	Low-level waste Low-level mixed waste
	218-W-5	1986	Low-level waste Low-level mixed waste
4	218-W-4B	1968	Mixed waste Retrievable transuranic waste
	218-W-4C	1978	Transuranic waste Mixed waste Low-level waste
5	218-W-6	N/A	None to date

N/A = not applicable.

Table 14-2. Monitoring Well Purpose and Sampling Schedule
for Low-Level Waste Management Area 1.

Well no. (299-)	Relative position	Hydrologic unit	Sample interval	Sample date: 3rd Qtr 1995
E28-26 ⁸⁷	Upgradient	Hanford: Water Table	Semiannually	NS
E28-27 ⁸⁷	Upgradient	Hanford: Water Table	Semiannually	NS
E28-28 ⁹⁰	Upgradient	Hanford: Water Table	Semiannually	NS
E32-2 ⁸⁷	Downgradient	Hanford: Water Table	Semiannually	NS
E32-3 ⁸⁷	Downgradient	Hanford: Water Table	Semiannually	NS
E32-4 ⁸⁷	Upgradient	Hanford: Water Table	Semiannually	07/18/95 *
E32-5 ⁸⁹	Downgradient	Hanford: Water Table	Semiannually	NS
E32-6 ⁹¹	Downgradient	Hanford: Water Table	Semiannually	NS
E32-7 ⁹¹	Downgradient	Hanford: Water Table	Semiannually	NS
E32-8 ⁹¹	Downgradient	Hanford: Water Table	Semiannually	NS
E32-9 ⁹¹	Downgradient	Hanford: Water Table	Semiannually	NS
E32-10 ⁹²	Downgradient	Hanford: Water Table	Semiannually	NS
E33-28 ⁸⁷	Upgradient	Hanford: Water Table	Semiannually	NS
E33-29 ⁸⁷	Upgradient	Hanford: Water Table	Semiannually	NS
E33-30 ⁸⁷	Downgradient	Hanford: Water Table	Semiannually	NS
E33-34 ⁹⁰	Downgradient	Hanford: Water Table	Semiannually	NS
E33-35 ⁹⁰	Upgradient	Hanford: Water Table	Semiannually	NS

Notes: Notes: * - Sampled for B-Pond

NS - Not Scheduled

Superscript following well number indicates year of installation.

Table 14-3. Monitoring Well Purpose and Sampling Schedule
for Low-Level Waste Management Area 2.

Well no. (299-)	Relative position	Hydrologic unit	Sample interval	Sample date: 3rd Qtr 1995
E27-8 ⁸⁷	Downgradient	Hanford: Water Table	Semiannually	NS
E27-9 ⁸⁷	Downgradient	Hanford: Water Table	Semiannually	NS
E27-10 ⁸⁷	Upgradient	Hanford: Water Table	Semiannually	NS
E27-11 ⁸⁹	Downgradient	Hanford: Water Table	Semiannually	NS
E27-17 ⁹¹	Downgradient	Hanford: Water Table	Semiannually	NS
E34-2 ⁸⁷	Downgradient	Hanford: Water Table	Semiannually	NS
E34-3 ⁸⁷	Upgradient	Hanford: Water Table	Semiannually	NS
E34-4 ⁸⁷	Upgradient	Hanford: Water Table	NA	Dry
E34-5 ⁸⁷	Upgradient	Hanford: Water Table	Semiannually	NS
E34-6 ⁸⁷	Upgradient	Hanford: Water Table	NA	Dry
E34-7 ⁸⁹	Upgradient	Hanford: Water Table	Semiannually	NS
E34-9 ⁹¹	Downgradient	Hanford: Water Table	Semiannually	NS
E34-10 ⁹¹	Downgradient	Hanford: Water Table	Semiannually	NS
E34-11 ⁹²	Downgradient	Hanford: Water Table	Semiannually	NS
E34-12 ⁹²	Downgradient	Hanford: Water Table	Semiannually	NS
E35-1 ⁸⁹	Upgradient	Hanford: Water Table	NA	Dry

Notes: NS - Not Scheduled

Superscript following well number indicates year of installation.

Table 14-4. Monitoring Well Purpose and Sampling Schedule
for Low-Level Waste Management Area 3.

Well no. (299-)	Relative position	Hydrologic unit	Sample interval	Sample date: 3rd Qtr 1995
W6-2 ^{87m}	Downgradient	Ringold: Water Table	Semiannually	09/11/95
W7-1 ⁸⁷	Downgradient	Ringold: Water Table	Semiannually	09/11/95
W7-2 ⁸⁷	Downgradient	Ringold: Water Table	Semiannually	09/11/95
W7-3 ⁸⁷	Downgradient	Ringold: Deep	Semiannually	09/12/95
W7-4 ⁸⁷	Downgradient	Ringold: Water Table	Semiannually	09/12/95
W7-5 ⁸⁷	Downgradient	Ringold: Water Table	Semiannually	09/12/95
W7-6 ⁸⁷	Downgradient	Ringold: Water Table	Semiannually	09/12/95
W7-7 ⁸⁹	Downgradient	Ringold: Water Table	Semiannually	09/12/95
W7-8 ⁸⁹	Downgradient	Ringold: Water Table	Semiannually	09/14/95
W7-9 ⁹⁰	Downgradient	Ringold: Water Table	Semiannually	09/13/95
W7-10 ^{90m}	Downgradient	Ringold: Water Table	Semiannually	09/11/95
W7-11 ⁹¹	Downgradient	Ringold: Water Table	Semiannually	09/11/95
W7-12 ⁹¹	Downgradient	Ringold: Water Table	Semiannually	09/12/95
W8-1 ⁸⁷	Downgradient	Ringold: Water Table	Semiannually	09/13/95
W9-1 ⁸⁷	Upgradient	Ringold: Water Table	Semiannually	09/12/95
W10-13 ⁸⁷	Upgradient	Ringold: Water Table	Semiannually	09/05/95
W10-14 ⁸⁷	Upgradient	Ringold: Deep	Semiannually	09/05/95
W10-19 ⁹²	Upgradient	Ringold: Water Table	Semiannually	09/06/95
W10-20 ⁹³	Upgradient	Ringold: Water Table	Semiannually	09/06/95
W10-21 ⁹³	Upgradient	Ringold: Water Table	Semiannually	09/11/95

Superscript following well number indicates year of installation.

^m Well monitors multiple LLWMAs.

Deep indicates well monitors bottom of the unconfined aquifer.

Table 14-5. Monitoring Well Purpose and Sampling Schedule
for Low-Level Waste Management Area 4.

Well no. (299-)	Relative position	Hydrologic unit	Sample interval	Sample date: 3rd Qtr 1995
W15-15 ⁸⁷	Downgradient	Ringold: Water Table	Semiannually	NS
W15-16 ⁸⁷	Upgradient	Ringold: Water Table	Semiannually	NS
W15-17 ⁸⁷	Upgradient	Ringold: Deep	Semiannually	NS
W15-18 ⁸⁷	Upgradient	Ringold: Water Table	Semiannually	NS
W15-19 ⁸⁹	Downgradient	Ringold: Water Table	Semiannually	NS
W15-20 ⁸⁹	Downgradient	Ringold: Water Table	Semiannually	NS
W15-23 ⁹⁰	Downgradient	Ringold: Water Table	Semiannually	NS
W15-24 ⁸⁹	Downgradient	Ringold: Water Table	Semiannually	NS
W18-21 ⁸⁷	Downgradient	Ringold: Water Table	Semiannually	NS
W18-22 ⁸⁷	Downgradient	Ringold: Deep	Semiannually	NS
W18-23 ⁸⁷	Downgradient	Ringold: Water Table	Semiannually	NS
W18-24 ⁸⁷	Upgradient	Ringold: Water Table	Semiannually	NS
W18-26 ⁸⁹	Downgradient	Ringold: Water Table	Semiannually	NS
W18-27 ⁹¹	Downgradient	Ringold: Water Table	Semiannually	NS
W18-28 ⁹¹	Downgradient	Ringold: Water Table	Semiannually	NS
W18-29 ⁹¹	Upgradient	Hanford: Perched	Semiannually	NS
W18-32 ⁹²	Upgradient	Ringold: Water Table	Semiannually	NS

Notes: NS - Not Scheduled.

Superscript following well number indicates year of installation.

Deep indicates well monitors bottom of the unconfined aquifer.

**Table 14-6. Monitoring Well Purpose and Sampling Schedule
for Low-Level Waste Management Area 5.**

Well no. (299-)	Relative position	Hydrologic unit	Sample interval	Sample date: 3rd Qtr 1995
W6-2 ^{87m}	Upgradient	Ringold: Water Table	Semiannually	09/11/95
W6-3 ⁹¹	Upgradient	Ringold: Deep	Semiannually	09/14/95
W6-4 ⁹¹	Upgradient	Ringold: Water Table	Semiannually	09/14/95
W6-5 ⁹¹	Downgradient	Ringold: Water Table	Semiannually	09/15/95
W6-6 ⁹¹	Downgradient	Ringold: Deep	Semiannually	09/18/95
W6-7 ⁹¹	Downgradient	Ringold: Water Table	Semiannually	09/18/95
W6-8 ⁹¹	Downgradient	Ringold: Water Table	Semiannually	09/21/95
W6-9 ⁹²	Upgradient	Ringold: Water Table	Semiannually	09/14/95
W6-10 ⁹²	Upgradient	Ringold: Water Table	Semiannually	09/13/95
W6-11 ⁹²	Downgradient	Ringold: Water Table	Semiannually	09/15/95
W6-12 ⁹²	Downgradient	Ringold: Water Table	Semiannually	09/15/95
W7-10 ^{90m}	Upgradient	Ringold: Water Table	Semiannually	09/11/95
W11-31 ⁹²	Upgradient	Ringold: Water Table	Semiannually	09/13/95

Superscript following well number indicates year of installation.

^m Well monitors multiple LLWMAs.

Deep indicates well monitors bottom of the unconfined aquifer.

Table 14-7. RCRA Water Level Measurement Report
 LLWMA 1, Third Quarter 1995.
 (sheet 1 of 2)

Well	Date	Depth to water (ft)	Water level elevation above msl (ft)	(m)
LLWMA-1 Wells Monitoring the Top of the Unconfined Aquifer				
299-E28-26	9/20/95	286.14	401.12	122.26
299-E28-27	9/20/95	279.29	401.29	122.31
299-E28-28	9/20/95	285.58	401.17	122.28
299-E32-10	9/20/95	236.68	401.20	122.29
299-E32-2	9/20/95	269.08	401.17	122.28
299-E32-3	9/20/95	277.02	399.70	121.83
299-E32-4	7/18/95	284.92*	401.19	122.28
	9/20/95	285.04	401.07	122.25
299-E32-5	9/20/95	281.14	401.21	122.29
299-E32-6	9/20/95	266.16	401.29	122.31
299-E32-7	9/20/95	257.17	401.20	122.29
299-E32-8	9/20/95	244.45	401.14	122.27
299-E32-9	9/20/95	242.10	401.23	122.29
299-E33-28	9/20/95	263.09	401.36	122.33
299-E33-29	9/20/95	272.67	401.31	122.32
299-E33-30	9/20/95	262.58	401.12	122.26

**Table 14-7. RCRA Water Level Measurement Report
LLWA 1, Third Quarter 1995.
(sheet 2 of 2)**

Well	Date	Depth to water (ft)	Water level elevation above msl (ft)	(m)
LLWA-1 Wells Monitoring the Top of the Unconfined Aquifer				
299-E33-34	9/20/95	232.34	401.23	122.29
299-E33-35	9/20/95	242.04	401.18	122.28

- NOTES:**
1. Water level elevations are calculated by subtracting the measured depth-to-water from the surveyed elevation for the well.
 2. Depth-to-water values are transcribed from field records.
 3. Measurements marked with an '*' were taken at the time of sampling.
 4. Measurements marked with a '+' are outside of the expected range, and are suspected of error.

Table 14-8. RCRA Water Level Measurement Report
LLWMA 2, Third Quarter 1995.

Well	Date	Depth to water (ft)	Water level elevation above msl (ft)	(m)
LLWMA-2 Wells Monitoring the Top of the Unconfined Aquifer				
299-E27-10	9/20/95	223.06	401.41	122.35
299-E27-11	9/20/95	242.22	401.07	122.25
299-E27-17	9/20/95	233.36	401.36	122.33
299-E27-8	9/20/95	236.64	401.19	122.28
299-E27-9	9/20/95	227.95	401.26	122.30
299-E34-10	9/20/95	238.37	401.40	122.35
299-E34-11	9/20/95	216.63	401.32	122.32
299-E34-12	9/20/95	237.62	401.21	122.29
299-E34-2	9/20/95	229.56	401.24	122.30
299-E34-3	9/20/95	210.06	401.46	122.37
299-E34-5	9/20/95	188.41	402.38	122.65
299-E34-7	9/20/95	203.70	400.55	122.09
299-E34-9	9/20/95	227.36	401.33	122.33

- NOTES: 1. Water level elevations are calculated by subtracting the measured depth-to-water from the surveyed elevation for the well.
2. Depth-to-water values are transcribed from field records.
3. Measurements marked with an '*' were taken at the time of sampling.
4. Measurements marked with a '+' are outside of the expected range, and are suspected of error.

Table 14-9. RCRA Water Level Measurement Report
 LLWMA 3, Third Quarter 1995.
 (sheet 1 of 2)

Well	Date	Depth to water (ft)	Water level elevation above ms1 (ft)	(m)
LLWMA-3 Wells Monitoring the Top of the Unconfined Aquifer				
299-W10-13	9/05/95	239.82*	459.22	139.97
	9/19/95	239.49	459.55	140.07
299-W10-19	9/06/95	224.98*	458.01	139.60
	9/19/95	224.74	458.25	139.67
299-W10-20	9/06/95	227.91*	459.63	140.10
	9/19/95	228.71	458.83	139.85
299-W10-21	9/11/95	217.16*	456.90	139.26
	9/19/95	216.95	457.11	139.33
299-W6-2	9/11/95	237.52*	454.93	138.66
	9/18/95	237.19	455.26	138.76
299-W7-1	9/11/95	234.25*	456.46	139.13
	9/19/95	234.35	456.36	139.10
299-W7-10	9/11/95	235.22*	454.44	138.51
	9/18/95	234.94	454.72	138.60
299-W7-11	9/11/95	225.62*	455.83	138.94
	9/18/95	225.34	456.11	139.02
299-W7-12	9/12/95	231.83*	456.10	139.02
	9/18/95	231.52	456.41	139.11
299-W7-2	9/11/95	220.28*	455.31	138.78
	9/18/95	220.30	455.29	138.77
299-W7-4	9/12/95	215.10*	456.82	139.24
	9/19/95	214.85	457.07	139.31
299-W7-5	9/12/95	218.40*	454.65	138.58
	9/18/95	218.25	454.80	138.62
299-W7-6	9/13/95	224.18*	454.46	138.52
	9/18/95	224.02	454.62	138.57

Table 14-9. RCRA Water Level Measurement Report
 LLWMA 3, Third Quarter 1995.
 (sheet 2 of 2)

Well	Date	Depth to water (ft)	Water level elevation above ms) (ft)	(m)
LLWMA-3 Wells Monitoring the Top of the Unconfined Aquifer				
299-W7-7	9/12/95	220.41*	454.53	138.54
	9/18/95	220.15	454.79	138.62
299-W7-8	9/14/95	233.88*	453.47	138.22
	9/18/95	235.28	452.07	137.79
299-W7-9	9/13/95	236.50*+	455.59	138.86
	9/19/95	235.30	456.79	139.23
299-W8-1	9/13/95	244.80*	456.53	139.15
	9/19/95	244.53	456.80	139.23
299-W9-1	9/12/95	278.99*	458.74	139.82
	9/19/95	278.83	458.90	139.87
LLWMA-3 Wells Monitoring the Bottom of the Unconfined Aquifer				
299-W10-14	9/05/95	240.66*	458.77	139.83
	9/19/95	240.31	459.12	139.94
299-W7-3	9/12/95	222.05*	454.09	138.41
	9/18/95	221.91	454.23	138.45

- NOTES: 1. Water level elevations are calculated by subtracting the measured depth-to-water from the surveyed elevation for the well.
2. Depth-to-water values are transcribed from field records.
3. Measurements marked with an '*' were taken at the time of sampling.
4. Measurements marked with a '+' are outside of the expected range, and are suspected of error.

Table 14-10. RCRA Water Level Measurement Report
 LLWMA 4, Third Quarter 1995.
 (sheet 1 of 2)

Well	Date	Depth to water (ft)	Water level elevation above msl (ft)	(m)
LLWMA-4 Wells Monitoring the Top of the Unconfined Aquifer				
299-W15-15	9/19/95	237.88	460.08	140.23
299-W15-16	9/19/95	224.45	460.44	140.34
299-W15-18	9/19/95	225.74	459.97	140.20
299-W15-19	9/19/95	231.40	460.20	140.27
299-W15-20	9/19/95	238.14	460.22	140.28
299-W15-23	9/19/95	239.26	460.23	140.28
299-W15-24	9/19/95	239.16	460.21	140.27
299-W18-21	9/19/95	208.35	460.27	140.29
299-W18-23	9/19/95	236.61	460.20	140.27
299-W18-24	9/19/95	224.03	460.32	140.31
299-W18-26	9/19/95	238.69	460.36	140.32
299-W18-27	9/19/95	229.98	460.27	140.29
299-W18-28	9/19/95	219.54	460.45	140.35
299-W18-32	7/31/95	214.61*+	462.04	140.83
	9/19/95	216.58	460.07	140.23

Table 14-10. RCRA Water Level Measurement Report
LLWMA 4, Third Quarter 1995.
(sheet 2 of 2)

Well	Date	Depth to water (ft)	Water level elevation above msl (ft)	(m)
LLWMA-4 Wells Monitoring the Bottom of the Unconfined Aquifer				
299-W15-17	9/19/95	224.42	460.22	140.28
299-W18-22	9/19/95	208.69	459.80	140.15

- NOTES:**
1. Water level elevations are calculated by subtracting the measured depth-to-water from the surveyed elevation for the well.
 2. Depth-to-water values are transcribed from field records.
 3. Measurements marked with an '*' were taken at the time of sampling.
 4. Measurements marked with a '+' are outside of the expected range, and are suspected of error.

Table 14-11. RCRA Water Level Measurement Report
 LLWMA 5, Third Quarter 1995.
 (sheet 1 of 2)

Well	Date	Depth to water (ft)	Water level elevation above msl (ft)	(m)
LLWMA-5 Wells Monitoring the Top of the Unconfined Aquifer				
299-W11-31	9/13/95	252.06*	454.80	138.62
	9/18/95	251.76	455.10	138.71
299-W6-10	9/13/95	260.11*	452.37	137.88
	9/18/95	259.98	452.50	137.92
299-W6-11	9/15/95	250.11*	452.75	138.00
	9/18/95	250.15	452.71	137.99
299-W6-12	9/15/95	238.08*+	454.43	138.51
	9/18/95	238.71	453.80	138.32
299-W6-2	9/11/95	237.52*	454.93	138.66
	9/18/95	237.19	455.26	138.76
299-W6-4	9/14/95	246.13*	455.12	138.72
	9/18/95	246.11	455.14	138.73
299-W6-7	9/18/95	258.48*	451.80	137.71
	9/18/95	258.36	451.92	137.75
299-W6-8	9/18/95	241.44	453.29	138.16
	9/21/95	241.68*	453.05	138.09
299-W6-9	9/14/95	240.95*	455.15	138.73
	9/18/95	240.95	455.15	138.73
299-W7-10	9/11/95	235.22*	454.44	138.51
	9/18/95	234.94	454.72	138.60

Table 14-11. RCRA Water Level Measurement Report
 LLWMA 5, Third Quarter 1995.
 (sheet 2 of 2)

Well	Date	Depth to water (ft)	Water level elevation above msl (ft)	(m)
LLWMA-5 Wells Monitoring the Bottom of the Unconfined Aquifer				
299-N6-3	9/14/95	245.45*	454.38	138.50
	9/18/95	245.32	454.51	138.53
299-N6-6	9/18/95	258.35*	451.64	137.66
	9/18/95	258.07	451.92	137.75

- NOTES:
1. Water level elevations are calculated by subtracting the measured depth-to-water from the surveyed elevation for the well.
 2. Depth-to-water values are transcribed from field records.
 3. Measurements marked with an '*' were taken at the time of sampling.
 4. Measurements marked with a '+' are outside of the expected range, and are suspected of error.

Table 14-12. Constituent List and Summary of Results for the
Low-Level Waste Management Area 1 Data
for Reporting Period July 1
through September 30, 1995.
(sheet 1 of 2)

CONTAMINATION INDICATOR PARAMETERS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS		Number of Samples		
		Full				Limit	Agency	Total	>CRQL	>DWS
CONDUCT		Conductivity, field	umhos					7	7	
TOC		Total organic carbon	ppb		140			7	5	
TOX		Total organic halogen	ppb		6.9			7	2	
PH	93	pH, field	pH			6.5-8.5	EPAS	7	7	0
PH	125	pH, lab	pH			6.5-8.5	EPAS	2	2	0

DRINKING WATER PARAMETERS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS		Number of Samples		
		Full				Limit	Agency	Total	>CRQL	>DWS
BARIUM		Barium, filtered	ppb		1.4	2000	EPA	2	2	0
CADMIUM		Cadmium, filtered	ppb		.98	5	EPA	2	0	0
CHROMIUM		Chromium, filtered	ppb		3.7	100	EPA	2	0	0
FLUORIDE		Fluoride	ppb		52	4000	EPA	1	1	0
ALPHA		Gross alpha	pCi/L			15	EPA	1	1	0
NITRATE		Nitrate	ppb		120	45000	EPA	1	1	0

GROUNDWATER QUALITY PARAMETERS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS		Number of Samples		
		Full				Limit	Agency	Total	>CRQL	>DWS
CHLORIDE		Chloride	ppb		110	250000	EPAS	1	1	0
IRON		Iron, filtered	ppb		8.9	300	EPAS	2	2	0
MANGANESE		Manganese, filtered	ppb		.55	50	EPAS	2	2	0
PHENOL		Phenol	ppb		.21			1	0	
SODIUM		Sodium, filtered	ppb		44			2	2	
SULFATE		Sulfate	ppb		130	250000	EPAS	1	1	0

SITE SPECIFIC AND OTHER CONSTITUENTS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS		Number of Samples		
		Full				Limit	Agency	Total	>CRQL	>DWS
2,4-dcnp		2,4-Dichlorophenol	ppb		2.8			1	0	
2-METHYPH		2-Methylphenol	ppb		.29			1	0	
2-NITRPH		2-Nitrophenol	ppb		4.2			1	0	
4-METHYPH		4-Methylphenol	ppb		.52			1	0	
ALKALIN		Alkalinity	ppb		3500			1	1	

Table 14-12. Constituent List and Summary of Results for the
 Low-Level Waste Management Area 1 Data
 for Reporting Period July 1
 through September 30, 1995.
 (sheet 2 of 2)

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS		Number of Samples		
		Full				Limit	Agency	Total	>CRQL	>DWS
FALUMIN		Aluminum, filtered	ppb	31	200		EPAS	2	0	0
FANTIMO		Antimony, filtered	ppb	24	6		EPA	2	0	2*
BENZOTH		Benzothiazole	ppb	2.1				1	0	
FBERYLL		Beryllium, filtered	ppb	.63	4		EPA	2	0	0
BISZEPH		Bis(2-ethylhexyl) phthalate	ppb	.37				1	0	
BROMIDE		Bromide	ppb	72				1	1	
FCALCIU		Calcium, filtered	ppb	41				2	2	
FCOBALT		Cobalt, filtered	ppb	5.3				2	0	
FCOPPER		Copper, filtered	ppb	2.1	1000		EPAS	2	0	0
DECANE		Decane	ppb	.38				1	0	
DODECAN		Dodecane	ppb	.26				1	0	
BETA		Gross beta	pCi/L					1	1	
FLEAD		Lead, filtered	ppb	.88	15		EPAA	3	2	0
FMAGNES		Magnesium, filtered	ppb	26				2	2	
NAPHTHA		Naphthalene	ppb	.16				1	0	
FNICKEL		Nickel, filtered	ppb	11	100		EPA	2	1	0
NITRITE		Nitrite	ppb	140	4000		EPA	1	0	0
PENTCHP		Pentachlorophenol	ppb	.87	1		EPA	1	0	0
PHOSPHA		Phosphate	ppb	340				1	0	
FPOTASS		Potassium, filtered	ppb	390				2	2	
FSILVER		Silver, filtered	ppb	5.5	100		EPAS	2	0	0
TETRADE		Tetradecane	ppb	.28				1	0	
FTIN		Tin, filtered	ppb	30				2	0	
TRIBUTPH		Tributyl Phosphate	ppb	.14				1	0	
IDICHPH		Tris-2-chloroethyl phosphate	ppb	6.4				1	0	
TURBID		Turbidity	NTU					1	1	
FVANADI		Vanadium, filtered	ppb	1.9				2	2	
FZINC		Zinc, filtered	ppb	3.7	5000		EPAS	2	1	0
MCRESOL		m-Cresol	ppb	.77				1	0	

For explanation of this table, see Section 1.4 of report.

Table 14-13. Constituents with at Least One Detected Value for the Low-Level Waste Management Area 1 Data for Reporting Period July 1 through September 30, 1995.

Well Name	Collection Date	Sample Number	ALKALIN 357/ppb 3500/.	FBARIUM 34/ppb 1.4/2000	BROMIDE 124/ppb 72/.	FCALCIU 34/ppb 41/.
299-E32-4	7/18/95	B0G706	120000.00		90.00 L	
299-E32-4	7/18/95	B0G7R0		69.00		39000.00 q
299-E33-35	6/29/95	B0FLW0		34.00		30000.00 q

Well Name	Collection Date	Sample Number	CHLORID 124/ppb 110/230000s	FLUORID 124/ppb 52/4000	ALPHA 135/ppb/L ./15	BETA 136/ppb/L ./.
299-E32-4	7/18/95	B0G706	9200.00	800.00	3.74	10.60

Well Name	Collection Date	Sample Number	FIROM 34/ppb 8.9/300s	FLEAO 40/ppb .88/15s	FMAGNES 34/ppb 26/.	FMANGAN 34/ppb .55/50s
299-E32-4	7/18/95	B0G7R0	42.00		12000.00	1.50 L
299-E32-9	6/12/95	B0FLR9		.92 L		
299-E33-30	6/22/95	B0FLT8		1.40 L		
299-E33-35	6/29/95	B0FLW0	26.00	.68 U	9000.00	2.20 L

Well Name	Collection Date	Sample Number	FMICKEL 34/ppb 11/100	FNITRATE 124/ppb 120/45000	FPOTASS 34/ppb 390/.	FSODIUM 34/ppb 44/.
299-E32-4	7/18/95	B0G706		28000.00 D		
299-E32-4	7/18/95	B0G7R0	11.00 U		6000.00 B	24000.00 q
299-E33-35	6/29/95	B0FLW0	14.00 L		5200.00	14000.00 q

Well Name	Collection Date	Sample Number	SULFATE 124/ppb 130/250000s	TURBID 111/NTU ./.	FMANADI 34/ppb 1.9/.	FZINC 34/ppb 3.7/5000s
299-E32-4	7/18/95	B0G706	47000.00 D	13.50		
299-E32-4	7/18/95	B0G7R0			20.00 BL	3.90 LQ
299-E33-35	6/29/95	B0FLW0			23.00 L	3.70 UQ

For explanation of this table, see Section 1.4 of report.

**Table 14-14. Contamination Indicator Parameters for the Low-Level
Waste Management Area 1 Data for Reporting Period
July 1 through September 30, 1995.**

Well Name	Collection Date	Sample Number	COND FIELD uMho 1/.	COND LAB uMho 1/.	pH FIELD .01/6.5-8.5	pH LAB .01/6.5-8.5	TOC ppb */.	TOX ppb */.
299-E28-28	6/06/95	B0FLH4	413		7.75	7.90	300 L	6.9 U
299-E32-4	7/18/95	B0G7Q6	424		7.92	8.00	200 L	6.9 U
		B0G7Q7	423		7.92		140 U	6.9 U
		B0G7Q8	424		7.92		140 L	6.9 U
		B0G7Q9	423		7.92		140 U	6.9 U
299-E32-8	6/08/95	B0FLR1	331		8.07		400 L	7.0 L
299-E32-9	6/12/95	B0FLR7	327		8.09		300 L	8.0 L

* Detection limits for TOC and TOX vary depending on the performing laboratory.
For explanation of this table, see Section 1.4 of report.

Table 14-15. Constituent List and Summary of Results for the Low-Level Waste Management Area 2 Data for Reporting Period July 1 through September 30, 1995.

CONTAMINATION INDICATOR PARAMETERS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS		Number of Samples		
		Full				Limit	Agency	Total	>CRQL	>DWS
CONDUCT	94	Conductivity, field	umhos					1	1	
CONDUCT	73	Conductivity, lab	umhos					1	1	
TOC		Total organic carbon	ppb	140				1	1	
TOX		Total organic halogen	ppb	6.9				1	0	
PH	93	pH, field	pH		6.5-8.5	EPAS		1	1	0
PH	125	pH, lab	pH		6.5-8.5	EPAS		1	1	0

DRINKING WATER PARAMETERS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS		Number of Samples		
		Full				Limit	Agency	Total	>CRQL	>DWS
FBARIUM		Barium, filtered	ppb	1.4	2000	EPA		11	11	0
FCADMIU		Cadmium, filtered	ppb	.98	5	EPA		11	0	0
FCROMNI		Chromium, filtered	ppb	3.7	100	EPA		11	3	0

GROUNDWATER QUALITY PARAMETERS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS		Number of Samples		
		Full				Limit	Agency	Total	>CRQL	>DWS
FIROH		Iron, filtered	ppb	8.9	300	EPAS		11	11	0
FMANGAN		Manganese, filtered	ppb	.55	50	EPAS		11	11	0
FSODIUM		Sodium, filtered	ppb	44				11	11	

SITE SPECIFIC AND OTHER CONSTITUENTS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS		Number of Samples		
		Full				Limit	Agency	Total	>CRQL	>DWS
FAUMIN		Aluminum, filtered	ppb	31	200	EPAS		11	0	0
FAHTINO		Antimony, filtered	ppb	24	6	EPA		11	0	11*
FBERYLL		Beryllium, filtered	ppb	.65	4	EPA		11	0	0
FCALCIU		Calcium, filtered	ppb	41				11	11	
FCOBALT		Cobalt, filtered	ppb	5.3				11	0	
FCOPPER		Copper, filtered	ppb	2.1	1000	EPAS		11	1	0
FMAGNES		Magnesium, filtered	ppb	24				11	11	
FNICKEL		Nickel, filtered	ppb	11	100	EPA		11	1	0
FPOTASS		Potassium, filtered	ppb	390				11	11	
FSILVER		Silver, filtered	ppb	5.5	100	EPAS		11	0	0
FTIN		Tin, filtered	ppb	30				11	0	
FWANADI		Vanadium, filtered	ppb	1.9				11	11	
FZINC		Zinc, filtered	ppb	3.7	5000	EPAS		11	5	0

For explanation of this table, see Section 1.4 of report.

Table 14-16. Constituents with at Least One Detected Value for the Low-Level Waste Management Area 2 Data for Reporting Period July 1 through September 30, 1995.

Well Name	Collection Date	Sample Number	FBARIUM 34/ppb 1.4/2000	FCALCIU 34/ppb 41/.	FCHROMI 34/ppb 3.7/100	FCOPPER 34/ppb 2.1/1000s
299-E27-10	5/04/95	B0FCG7	30.00	36000.00	3.70 U	2.10 U
299-E27-11	5/03/95	B0FCC6	36.00	39000.00	3.70 U	2.10 U
299-E27-17	5/03/95	B0FC01	32.00	39000.00	3.70 U	3.10 L
299-E27-8	5/04/95	B0FC06	23.00	34000.00	3.70 U	2.10 U
299-E27-9	5/03/95	B0FCF1	22.00	35000.00	3.70 U	2.10 U
299-E34-10	5/03/95	B0FCF6	35.00	35000.00	3.70 U	2.10 U
299-E34-12	5/08/95	B0FCH7	51.00	51000.00	3.70 U	2.10 U
299-E34-3	5/04/95	B0FCJ7	50.00	41000.00	3.90 L	2.10 U
299-E34-5	5/04/95	B0FCX2	38.00	34000.00	5.50 L	2.10 U
299-E34-7	5/04/95	B0FCL2	23.00	48000.00	3.70 U	2.10 U
299-E34-9	5/08/95	B0FCM2	43.00	37000.00	4.20 L	2.10 U

Well Name	Collection Date	Sample Number	FIRON 34/ppb 8.9/300s	FMAGNES 34/ppb 26/.	FMANGAN 34/ppb .55/50s	FNICKEL 34/ppb 11/100
299-E27-10	5/04/95	B0FCG7	31.00 B	9400.00	2.20 BL	11.00 U
299-E27-11	5/03/95	B0FCC6	110.00 B	9400.00	2.30 BL	11.00 U
299-E27-17	5/03/95	B0FC01	14.00 BL	11000.00	1.70 BL	11.00 U
299-E27-8	5/04/95	B0FC06	25.00 B	9300.00	1.80 BL	11.00 U
299-E27-9	5/03/95	B0FCF1	30.00 B	10000.00	1.80 BL	11.00 U
299-E34-10	5/03/95	B0FCF6	16.00 BL	9200.00	3.20 BL	11.00 U
299-E34-12	5/08/95	B0FCH7	23.00 B	14000.00	1.50 BL	11.00 U
299-E34-3	5/04/95	B0FCJ7	34.00 B	11000.00	1.30 BL	11.00 U
299-E34-5	5/04/95	B0FCX2	54.00 B	11000.00	2.00 BL	11.00 U
299-E34-7	5/04/95	B0FCL2	67.00 B	14000.00	6.30 BL	34.00
299-E34-9	5/08/95	B0FCM2	21.00 B	10000.00	1.30 BL	11.00 U

Well Name	Collection Date	Sample Number	FPOTASS 34/ppb 390/.	FSODIUM 34/ppb 44/.	FVANADI 34/ppb 1.9/.	FZINC 34/ppb 3.7/5000s
299-E27-10	5/04/95	B0FCG7	5800.00	14000.00 B	21.00 L	8.30 L
299-E27-11	5/03/95	B0FCC6	6000.00	13000.00 B	22.00 L	6.80 L
299-E27-17	5/03/95	B0FC01	6700.00	16000.00 B	21.00 L	6.00 L
299-E27-8	5/04/95	B0FC06	6400.00	13000.00 B	24.00 L	9.70 L
299-E27-9	5/03/95	B0FCF1	5900.00	12000.00 B	27.00 L	3.70 U
299-E34-10	5/03/95	B0FCF6	6200.00	14000.00 B	23.00 L	3.70 U
299-E34-12	5/08/95	B0FCH7	7600.00	26000.00 B	20.00 L	3.70 U
299-E34-3	5/04/95	B0FCJ7	6800.00	20000.00 B	19.00 L	3.70 U
299-E34-5	5/04/95	B0FCX2	7800.00	20000.00 B	19.00 L	3.70 U
299-E34-7	5/04/95	B0FCL2	7200.00	28000.00 B	17.00 L	3.70 U
299-E34-9	5/08/95	B0FCM2	6300.00	20000.00 B	19.00 L	4.50 L

For explanation of this table, see Section 1.4 of report.

Table 14-17. Contamination Indicator Parameters for the Low-Level
Waste Management Area 2 Data for Reporting Period
July 1 through September 30, 1995.

Well Name	Collection Date	Sample Number	COND FIELD u/mo 1/.	COND LAB u/mo 1/.	pH FIELD .01/6.5-8.5e	pH LAB .01/6.5-8.5e	TOC ppb */.	TOX ppb */.
299-E34-11	5/09/95	80FC68	443	440	7.96	8.00	200 L	6.9 U

* Detection limits for TOC and TOX vary depending on the performing laboratory.
For explanation of this table, see Section 1.4 of report.

Table 14-18. Constituent List and Summary of Results for the
Low-Level Waste Management Area 3 Data for Reporting
Period July 1 through September 30, 1995.
(sheet 1 of 2)

CONTAMINATION INDICATOR PARAMETERS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS Limit	Agency	Number of Samples		
		Full						Total	>CRQL	>DWS
CONDUCT		Conductivity, field	umhos					81	81	
TOC		Total organic carbon	ppb	140				81	63	
TOX		Total organic halogen	ppb	6.9				81	38	
PH	93	pH, field	pH		6.5-8.5	EPAS		81	81	4
PH	125	pH, lab	pH		6.5-8.5	EPAS		20	20	0

DRINKING WATER PARAMETERS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS Limit	Agency	Number of Samples		
		Full						Total	>CRQL	>DWS
BARIUM		Barium, filtered	ppb	1.4	2000	EPA		20	20	0
CADMIUM		Cadmium, filtered	ppb	.08	5	EPA		20	4	0
CHROMIUM		Chromium, filtered	ppb	3.7	100	EPA		20	19	0
FLUORIDE		Fluoride	ppb	52	4000	EPA		20	19	0
ALPHA		Gross alpha	pCi/L		15	EPA		20	6	0
MERCURY		Mercury, filtered	ppb	.019	2	EPA		20	9	0
NITRATE		Nitrate	ppb	120	45000	EPA		20	20	5

GROUNDWATER QUALITY PARAMETERS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS Limit	Agency	Number of Samples		
		Full						Total	>CRQL	>DWS
CHLORIDE		Chloride	ppb	110	250000	EPAS		20	19	0
IRON		Iron, filtered	ppb	8.9	300	EPAS		20	18	0
MANGANESE		Manganese, filtered	ppb	.55	50	EPAS		20	20	0
SODIUM		Sodium, filtered	ppb	44				20	20	
SULFATE		Sulfate	ppb	130	250000	EPAS		20	20	0

SITE SPECIFIC AND OTHER CONSTITUENTS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS Limit	Agency	Number of Samples		
		Full						Total	>CRQL	>DWS
111-T		1,1,1-Trichloroethane	ppb	.061	200	EPA		20	2	0
112-T		1,1,2-Trichloroethane	ppb	.068	5	EPA		20	0	0
11-DIC		1,1-Dichloroethane	ppb	.047				20	0	
12-DIC		1,2-Dichloroethane	ppb	.049	5	EPA		20	0	0
14-dben		1,4-Dichlorobenzene	ppb	.056	75	EPA		20	0	0
ALKALIN		Alkalinity	ppb	3500				20	20	
ALUMINUM		Aluminum, filtered	ppb	31	200	EPAS		20	1	0
ANTIMONY		Antimony, filtered	ppb	24	5	EPA		20	0	20*
BENZENE		Benzene	ppb	.059	5	EPA		20	0	0
BERYLLIUM		Beryllium, filtered	ppb	.63	4	EPA		20	0	0
BE-7		Beryllium-7	pCi/L					8	1	
BROMIDE		Bromide	ppb	72				20	9	
CALCIUM		Calcium, filtered	ppb	41				20	20	
TETRANE		Carbon tetrachloride	ppb	.042	5	EPA		20	20	8
CS-134		Cesium-134	pCi/L					8	0	
CS-137		Cesium-137	pCi/L		200	EPA		8	0	0
CHLFORM		Chloroform	ppb	.029				20	20	
COBALT		Cobalt, filtered	ppb	5.3				20	0	

Table 14-18. Constituent List and Summary of Results for the
Low-Level Waste Management Area 3 Data for Reporting
Period July 1 through September 30, 1995.
(sheet 2 of 2)

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS Limit	Agency	Number of Samples		
		Full						Total	>CRQL	>DWS
CD-60		Cobalt-60	pCi/L			100	EPA	8	0	0
#COPPER		Copper, filtered	ppb		2.1	1000	EPAS	20	0	0
ETHBENZ		Ethylbenzene	ppb		.034	700	EPA	20	0	0
EU-154		Europium-154	pCi/L					8	0	
EU-155		Europium-155	pCi/L					8	0	
BETA		Gross beta	pCi/L					20	19	
FLBAD		Lead, filtered	ppb		.88	15	EPAA	20	2	0
FMAGNES		Magnesium, filtered	ppb		26			20	20	
METHYCH		Methylene chloride	ppb		.084	5	EPA	20	3	0
FNICKEL		Nickel, filtered	ppb		11	100	EPA	20	4	0
NITRITE		Nitrite	ppb		140	4000	EPA	20	0	0
PHOSPHA		Phosphate	ppb		340			20	0	
FPOTASS		Potassium, filtered	ppb		390			20	20	
K-40		Potassium-40	pCi/L					8	6	
FSILVER		Silver, filtered	ppb		5.5	100	EPAS	20	0	0
FSTRONTIUM		Strontium, filtered	ppb		.31			20	20	
TC-99		Technetium-99	pCi/L			900	EPA	4	4	0
PERCENE		Tetrachloroethene	ppb		.035	5	EPA	20	4	0
FTIN		Tin, filtered	ppb		30			20	1	
TOLUENE		Toluene	ppb		.048	1000	EPA	20	0	0
TDS		Total dissolved solids	ppb			500000	EPAS	4	4	0
TRICENE		Trichloroethene	ppb		.075	5	EPA	20	7	3
TRITIUM		Tritium	pCi/L			20000	EPA	20	11	0
TURBID		Turbidity	NTU					20	20	
FVANADI		Vanadium, filtered	ppb		1.9			20	20	
VINYLIDE		Vinyl chloride	ppb		.25	2	EPA	20	0	0
XYLENE		Xylenes (total)	ppb		.085	10000	EPA	20	0	0
FZINC		Zinc, filtered	ppb		3.7	5000	EPAS	20	9	0
CIS12DE		cis-1,2-Dichloroethylene	ppb		.049	70	EPA	20	0	0
TRANSCE		trans-1,2-Dichloroethylene	ppb		.045	100	EPA	20	0	0

For explanation of this table, see Section 1.4 of report.

Table 14-19. Constituents with at Least One Detected Value for the
Low-Level Waste Management Area 3 Data for Reporting
Period July 1 through September 30, 1995.
(sheet 1 of 10)

Well Name	Collection Date	Sample Number	111-T 25/ppb .061/200	ALKALIN 357/ppb 3500/.	FALLUMIN 34/ppb 31/200s	FRANCIUM 34/ppb 1.4/2000
299-W10-13	9/05/95	B06M32	.06 U			
299-W10-13	9/05/95	B06M40		90000.00		
299-W10-13	9/05/95	B06M44			31.00 U	45.00
299-W10-14	9/05/95	B06M34	.06 U			
299-W10-14	9/05/95	B06M54		120000.00		
299-W10-14	9/05/95	B06M58			31.00 U	67.00
299-W10-19	9/06/95	B06M19		100000.00		
299-W10-19	9/06/95	B06M23			31.00 U	58.00
299-W10-19	9/06/95	B06M24	.06 U			
299-W10-20	9/06/95	B06M25	.06 U			
299-W10-20	9/06/95	B06M26		110000.00		
299-W10-20	9/06/95	B06M30			31.00 U	53.00
299-W10-21	9/11/95	B06M31	.06 U			
299-W10-21	9/11/95	B06M35		90000.00		
299-W10-21	9/11/95	B06M39			31.00 U	49.00
299-W6-2	9/11/95	B06M47	.06 U			
299-W6-2	9/11/95	B06M75		120000.00		
299-W6-2	9/11/95	B06M79			31.00 U	36.00
299-W7-1	9/11/95	B06M86	.06 U			
299-W7-1	9/11/95	B06M83		100000.00		
299-W7-1	9/11/95	B06M87			31.00 U	28.00
299-W7-10	9/11/95	B06M87	.06 U			
299-W7-10	9/11/95	B06M90		110000.00		
299-W7-10	9/11/95	B06M94			31.00 U	32.00
299-W7-11	9/11/95	B06M98	.08 L			
299-W7-11	9/11/95	B06M65		90000.00		
299-W7-11	9/11/95	B06M69			31.00 U	27.00
299-W7-12	9/12/95	B06M99	.06 U			
299-W7-12	9/12/95	B06M90		100000.00		
299-W7-12	9/12/95	B06M94			31.00 U	36.00
299-W7-2	9/11/95	B06M90	.08 L			
299-W7-2	9/11/95	B06M95		90000.00		
299-W7-2	9/11/95	B06M99			31.00 U	20.00
299-W7-3	9/12/95	B06M91	.06 U			
299-W7-3	9/12/95	B06M90		120000.00		
299-W7-3	9/12/95	B06M94			31.00 U	32.00
299-W7-4	9/12/95	B06M97	.06 U			
299-W7-4	9/12/95	B06M95		100000.00		
299-W7-4	9/12/95	B06M99			31.00 U	38.00
299-W7-5	9/12/95	B06M98	.06 U			
299-W7-5	9/12/95	B06M90		100000.00		
299-W7-5	9/12/95	B06M94			31.00 U	32.00
299-W7-6	9/12/95	B06M94	.06 U			
299-W7-6	9/12/95	B06M95		100000.00		
299-W7-6	9/12/95	B06M99			44.00 L	33.00
299-W7-7	9/12/95	B06M95	.06 U			
299-W7-7	9/12/95	B06M90		100000.00		
299-W7-7	9/12/95	B06M94			31.00 U	26.00
299-W7-8	9/14/95	B06M91	.06 U			
299-W7-8	9/14/95	B06M95		100000.00		
299-W7-8	9/14/95	B06M99			31.00 U	33.00
299-W7-9	9/13/95	B06M92	.06 U			
299-W7-9	9/13/95	B06M90		100000.00		
299-W7-9	9/13/95	B06M94			31.00 U	48.00

Table 14-19. Constituents with at Least One Detected Value for the
Low-Level Waste Management Area 3 Data for Reporting
Period July 1 through September 30, 1995.
(sheet 2 of 10)

Well Name	Collection Date	Sample Number	111-T 25/ppb .061/200	ALKALIN 357/ppb 3500/.	FALUNIN 34/ppb 31/200s	FBARIUM 34/ppb 1.4/2000
299-W8-1	9/13/95	BOGHF8	.06 U			
299-W8-1	9/13/95	BOGHM5		100000.00		
299-W8-1	9/13/95	BOGHM9			31.00 U	29.00
299-W9-1	9/12/95	BOGHM9	.06 U			
299-W9-1	9/12/95	BOGHM0		90000.00		
299-W9-1	9/12/95	BOGHM4			31.00 U	32.00
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Well Name	Collection Date	Sample Number	BE-7 140/pCi/L ./.	BROMIDE 124/ppb 72/.	FCADMIU 34/ppb .98/5	FCALCIU 34/ppb 41/.
299-W10-13	9/05/95	BOGH40		200.00		
299-W10-13	9/05/95	BOGH44			.98 U	47000.00
299-W10-14	9/05/95	BOGH54		100.00 L		
299-W10-14	9/05/95	BOGH58			.98 U	34000.00
299-W10-19	6/12/95	BOFLM5	15.90			
299-W10-19	9/06/95	BOGH19	-.68 U	72.00 UB		
299-W10-19	9/06/95	BOGH23			.98 U	63000.00
299-W10-20	6/12/95	BOFLM9	.77 U			
299-W10-20	9/06/95	BOGH26	6.54 U	72.00 UB		
299-W10-20	9/06/95	BOGH30			1.10 L	70000.00
299-W10-21	6/12/95	BOFLX3	-1.02 U			
299-W10-21	9/11/95	BOGH35	3.52 U	72.00 BU		
299-W10-21	9/11/95	BOGH39			.98 U	67000.00
299-W6-2	6/14/95	BOFLX9	-1.24 U			
299-W6-2	9/11/95	BOGH75	-4.79 U	72.00 U		
299-W6-2	9/11/95	BOGH79			.98 U	39000.00
299-W7-1	9/11/95	BOGHF3		100.00 L		
299-W7-1	9/11/95	BOGHF7			.98 U	44000.00
299-W7-10	9/11/95	BOGHG0		72.00 U		
299-W7-10	9/11/95	BOGHG4			.98 U	32000.00
299-W7-11	9/11/95	BOGH85		200.00		
299-W7-11	9/11/95	BOGH89			.98 U	38000.00
299-W7-12	9/12/95	BOGHM0		100.00 L		
299-W7-12	9/12/95	BOGHM4			.98 U	41000.00
299-W7-2	9/11/95	BOGHM5		100.00 L		
299-W7-2	9/11/95	BOGHM9			.98 U	28000.00
299-W7-3	9/12/95	BOGRJ0		72.00 U		
299-W7-3	9/12/95	BOGHJ4			.98 U	29000.00
299-W7-4	9/12/95	BOGHJ5		72.00 UB		
299-W7-4	9/12/95	BOGHJ9			2.00 L	58000.00
299-W7-5	9/12/95	BOGRK0		72.00 U		
299-W7-5	9/12/95	BOGRK4			.98 U	44000.00
299-W7-6	9/12/95	BOGRK5		72.00 U		
299-W7-6	9/12/95	BOGRK9			2.20 L	26000.00
299-W7-7	9/12/95	BOGHL0		72.00 U		
299-W7-7	9/12/95	BOGML4			.98 U	31000.00
299-W7-8	9/14/95	BOGHL5		72.00 U		
299-W7-8	9/14/95	BOGHL9			.98 U	35000.00
299-W7-9	9/13/95	BOGHM0		90.00 L		
299-W7-9	9/13/95	BOGHM4			2.10 L	43000.00

Table 14-19. Constituents with at Least One Detected Value for the
Low-Level Waste Management Area 3 Data for Reporting
Period July 1 through September 30, 1995.
(sheet 3 of 10)

Well Name	Collection Date	Sample Number	BE-7 140/ppb/L ./.	BROMIDE 124/ppb 72/.	PCADMIU 34/ppb .98/5	PCALCIU 34/ppb 41/.
299-W8-1	9/13/95	B06H45		90.00 L		
299-W8-1	9/13/95	B06H49			.98 U	46000.00
299-W9-1	9/12/95	B06H40		100.00 L		
299-W9-1	9/12/95	B06H44			.98 U	47000.00

Well Name	Collection Date	Sample Number	TETRAHE 25/ppb .042/5	CHLORID 124/ppb 110/250000s	CHLFORM 25/ppb .029/.	PCARONI 34/ppb 3.7/100
299-W10-13	9/05/95	B06H32	10.00		.35	
299-W10-13	9/05/95	B06H40		33000.00 D		
299-W10-13	9/05/95	B06H44				3.70 U
299-W10-14	9/05/95	B06H34	.10 L		.04 L	
299-W10-14	9/05/95	B06H54		9700.00		
299-W10-14	9/05/95	B06H58				3.20 L
299-W10-19	9/06/95	B06H19		16000.00 D		
299-W10-19	9/06/95	B06H23				16.00
299-W10-19	9/06/95	B06H24	870.00 D		12.00	
299-W10-20	9/06/95	B06H25	1500.00 D		38.00 D	
299-W10-20	9/06/95	B06H26		17000.00 D		
299-W10-20	9/06/95	B06H30				13.00
299-W10-21	9/11/95	B06H31	600.00 D		6.60	
299-W10-21	9/11/95	B06H35		14000.00 D		
299-W10-21	9/11/95	B06H39				31.00
299-W6-2	9/11/95	B06H47	110.00 D		1.00	
299-W6-2	9/11/95	B06H75		110.00 U		
299-W6-2	9/11/95	B06H79				23.00
299-W7-1	9/11/95	B06H86	1.80		.17 L	
299-W7-1	9/11/95	B06H83		13000.00 D		
299-W7-1	9/11/95	B06H87				7.40 L
299-W7-10	9/11/95	B06H87	17.00		.49	
299-W7-10	9/11/95	B06H90		5000.00		
299-W7-10	9/11/95	B06H84				8.70 L
299-W7-11	9/11/95	B06H98	.40 L		.18 L	
299-W7-11	9/11/95	B06H85		7700.00		
299-W7-11	9/11/95	B06H69				10.00
299-W7-12	9/12/95	B06H99	1.10		.24	
299-W7-12	9/12/95	B06H40		9900.00 D		
299-W7-12	9/12/95	B06H44				7.30 L
299-W7-2	9/11/95	B06H80	.22 L		.09 L	
299-W7-2	9/11/95	B06H85		3800.00		
299-W7-2	9/11/95	B06H89				13.00
299-W7-3	9/12/95	B06H81	.08 L		.12 L	
299-W7-3	9/12/95	B06H40		4700.00		
299-W7-3	9/12/95	B06H44				5.70 L
299-W7-4	9/12/95	B06H87	610.00 D		6.70	
299-W7-4	9/12/95	B06H45		17000.00 D		
299-W7-4	9/12/95	B06H49				11.00
299-W7-5	9/12/95	B06H88	100.00 D		2.90	
299-W7-5	9/12/95	B06H40		15000.00 D		
299-W7-5	9/12/95	B06H44				6.70 L
299-W7-6	9/12/95	B06H84	.14 L		.16 L	
299-W7-6	9/12/95	B06H85		3700.00		
299-W7-6	9/12/95	B06H89				5.20 L

Table 14-19. Constituents with at Least One Detected Value for the
Low-Level Waste Management Area 3 Data for Reporting
Period July 1 through September 30, 1995.
(sheet 4 of 10)

Well Name	Collection Date	Sample Number	TETRAHE 25/ppb .042/5	CHLORID 124/ppb 110/250000s	CHLFORM 25/ppb .029/.	FCHEM1 34/ppb 3.7/100
299-W7-7	9/12/95	BOGH05	2.20		.22	
299-W7-7	9/12/95	BOGH10		4300.00		
299-W7-7	9/12/95	BOGH14				6.00 L
299-W7-8	9/14/95	BOGHF1	3.40		.26	
299-W7-8	9/14/95	BOGH15		6300.00		
299-W7-8	9/14/95	BOGH19				11.00
299-W7-9	9/13/95	BOGHF2	.84 g		.21	
299-W7-9	9/13/95	BOGHM0		15000.00 D		
299-W7-9	9/13/95	BOGHM4				4.90 L
299-W8-1	9/13/95	BOGHF8	4.40 g		.25	
299-W8-1	9/13/95	BOGHM5		15000.00 D		
299-W8-1	9/13/95	BOGHM9				5.70 L
299-W9-1	9/12/95	BOGHF9	.36 L		.04 L	
299-W9-1	9/12/95	BOGHM0		16000.00 D		
299-W9-1	9/12/95	BOGHM4				5.70 L

Well Name	Collection Date	Sample Number	FLUORID 124/ppb 52/4000	ALPHA 135/pCi/L ./15	BETA 136/pCi/L ./.	FIROM 34/ppb 8.9/300s
299-W10-13	9/05/95	BOGH40	600.00	.39 U	6.86	
299-W10-13	9/05/95	BOGH44				9.10 L
299-W10-14	9/05/95	BOGH54	600.00	.54 U	6.27	
299-W10-14	9/05/95	BOGH58				13.00 L
299-W10-19	9/06/95	BOGH19	700.00	2.08	19.70	
299-W10-19	9/06/95	BOGH23				8.90 U
299-W10-20	9/06/95	BOGH26	600.00	.62 U	18.50	
299-W10-20	9/06/95	BOGH30				12.00 BL
299-W10-21	9/11/95	BOGH35	600.00	2.15	18.10	
299-W10-21	9/11/95	BOGH39				8.90 U
299-W6-2	9/11/95	BOGH75	52.00 U	.89 U	10.60	
299-W6-2	9/11/95	BOGH79				13.00 BL
299-W7-1	9/11/95	BOGHF3	500.00	.98 U	1.46 U	
299-W7-1	9/11/95	BOGHF7				94.00 B
299-W7-10	9/11/95	BOGHG0	600.00	.84 U	3.39	
299-W7-10	9/11/95	BOGHG4				32.00 B
299-W7-11	9/11/95	BOGHG5	500.00	1.99	5.50	
299-W7-11	9/11/95	BOGHG9				23.00 BL
299-W7-12	9/12/95	BOGHM0	500.00	.54 U	6.47	
299-W7-12	9/12/95	BOGHM4				26.00 L
299-W7-2	9/11/95	BOGHM5	600.00	1.65	2.22	
299-W7-2	9/11/95	BOGHM9				25.00 BL
299-W7-3	9/12/95	BOGHJ0	500.00	.75 U	3.90	
299-W7-3	9/12/95	BOGHJ4				280.00
299-W7-4	9/12/95	BOGHJ5	500.00	.83 U	14.50	
299-W7-4	9/12/95	BOGHJ9				36.00
299-W7-5	9/12/95	BOGHK0	600.00	.50 U	9.01	
299-W7-5	9/12/95	BOGHK4				22.00 L
299-W7-6	9/12/95	BOGHK5	400.00	1.07	2.27	
299-W7-6	9/12/95	BOGHK9				38.00
299-W7-7	9/12/95	BOGH10	500.00	.57 U	2.65	
299-W7-7	9/12/95	BOGH14				17.00 L
299-W7-8	9/14/95	BOGH15	600.00	.91 U	3.66	
299-W7-8	9/14/95	BOGH19				40.00
299-W7-9	9/13/95	BOGHM0	700.00	2.10	4.83	
299-W7-9	9/13/95	BOGHM4				16.00 L

Table 14-19. Constituents with at Least One Detected Value for the
Low-Level Waste Management Area 3 Data for Reporting
Period July 1 through September 30, 1995.
(sheet 5 of 10)

Well Name	Collection Date	Sample Number	FLUORID 124/ppb 52/4000	ALPHA 135/pCi/L ./15	BETA 136/pCi/L ./.	FIROM 34/ppb 8.9/300a
299-W8-1	9/13/95	B06M45	500.00	.03 U	4.75	
299-W8-1	9/13/95	B06M45				21.00 L
299-W9-1	9/12/95	B06M40	500.00	.58 U	7.11	
299-W9-1	9/12/95	B06M44				28.00 L

Well Name	Collection Date	Sample Number	FLEAD 40/ppb .88/15a	FMAGNES 34/ppb 26/.	FMANGAN 34/ppb .55/50a	FMERCUR 41/ppb .019/2
299-W10-13	9/05/95	B06M44	.88 U	16000.00	1.60 L	.02 U
299-W10-14	9/05/95	B06M58	.88 U	12000.00	3.40 L	.02 U
299-W10-19	9/06/95	B06M23	.88 U	21000.00	1.00 BL	.02 U
299-W10-20	9/06/95	B06M30	.88 U	22000.00	3.80 BL	.02 U
299-W10-21	9/11/95	B06M39	.88 U	23000.00	1.40 BL	.02 U
299-W6-2	9/11/95	B06M79	.88 U	16000.00	.93 BL	.03 BLQ
299-W7-1	9/11/95	B06M77	.88 U	14000.00	7.00 B	.02 U
299-W7-10	9/11/95	B06M64	.88 U	13000.00	2.30 BL	.02 U
299-W7-11	9/11/95	B06M09	.88 U	12000.00	1.30 BL	.02 BLQ
299-W7-12	9/12/95	B06M44	.88 U	13000.00	2.20 BL	.03 BLQ
299-W7-2	9/11/95	B06M39	.88 U	14000.00	1.70 BL	.02 U
299-W7-3	9/12/95	B06M44	.88 U	11000.00	28.00 B	.03 BLQ
299-W7-4	9/12/95	B06M39	.88 U	19000.00	3.70 BL	.02 U
299-W7-5	9/12/95	B06M44	1.00 LH	15000.00	4.40 BL	.02 U
299-W7-6	9/12/95	B06M44	.88 U	9000.00	6.70 B	.07 BLQ
299-W7-7	9/12/95	B06M44	.88 U	11000.00	2.90 BL	.04 BLQ
299-W7-8	9/14/95	B06M44	1.70 LH	12000.00	2.40 BL	.04 BLQ
299-W7-9	9/13/95	B06M44	.88 U	13000.00	6.00 B	.05 BLQ
299-W8-1	9/13/95	B06M40	.88 U	14000.00	.84 BL	.02 U
299-W9-1	9/12/95	B06M44	.88 U	17000.00	3.70 BL	.02 BLQ

Well Name	Collection Date	Sample Number	METNYCH 25/ppb .084/5	NICKEL 34/ppb 11/100	NITRATE 124/ppb 120/45000	POTASS 34/ppb 390/.
299-W10-13	9/05/95	B06M32	.08 U			
299-W10-13	9/05/95	B06M40			42000.00 D	
299-W10-13	9/05/95	B06M44		20.00 L		3800.00
299-W10-14	9/05/95	B06M34	.08 U			
299-W10-14	9/05/95	B06M54			21000.00 D	
299-W10-14	9/05/95	B06M58		11.00 U		4800.00
299-W10-19	9/06/95	B06M19			130000.00 D	
299-W10-19	9/06/95	B06M23		11.00 U		4600.00
299-W10-19	9/06/95	B06M24	.08 U			
299-W10-20	9/06/95	B06M25	.15 L			
299-W10-20	9/06/95	B06M26			150000.00 D	
299-W10-20	9/06/95	B06M30		11.00 U		5100.00
299-W10-21	9/11/95	B06M31	.08 U			
299-W10-21	9/11/95	B06M35			180000.00 D	
299-W10-21	9/11/95	B06M39		11.00 U		4100.00
299-W6-2	9/11/95	B06M47	.08 U			
299-W6-2	9/11/95	B06M75			700.00 F	
299-W6-2	9/11/95	B06M79		11.00 U		3700.00

Table 14-19. Constituents with at Least One Detected Value for the
Low-Level Waste Management Area 3 Data for Reporting
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Well Name	Collection Date	Sample Number	METHYCH 25/ppb .024/5	FWICKEL 34/ppb 11/100	NITRATE 124/ppb 120/45000	FPOTASS 34/ppb 390/.
299-W7-1	9/11/95	B06H86	.08 U			
299-W7-1	9/11/95	B06H83			38000.00 D	
299-W7-1	9/11/95	B06H87		38.00		4000.00
299-W7-10	9/11/95	B06H87	.08 U			
299-W7-10	9/11/95	B06H80			29000.00 D	
299-W7-10	9/11/95	B06H84		11.00 U		3100.00
299-W7-11	9/11/95	B06H98	.08 U			
299-W7-11	9/11/95	B06H85			45000.00 D	
299-W7-11	9/11/95	B06H89		11.00 U		3600.00
299-W7-12	9/12/95	B06H99	.08 U			
299-W7-12	9/12/95	B06H80			32000.00 D	
299-W7-12	9/12/95	B06H84		11.00 U		4400.00
299-W7-2	9/11/95	B06H80	.08 U			
299-W7-2	9/11/95	B06H85			26000.00 D	
299-W7-2	9/11/95	B06H89		11.00 U		2700.00
299-W7-3	9/12/95	B06H81	.08 U			
299-W7-3	9/12/95	B06H80			10000.00 D	
299-W7-3	9/12/95	B06H84		16.00 U		4500.00
299-W7-4	9/12/95	B06H87	.08 U			
299-W7-4	9/12/95	B06H85			100000.00 D	
299-W7-4	9/12/95	B06H89		11.00 U		3600.00
299-W7-5	9/12/95	B06H88	.08 U			
299-W7-5	9/12/95	B06H80			60000.00 D	
299-W7-5	9/12/95	B06H84		11.00 U		3500.00
299-W7-6	9/12/95	B06H84	.12 L4			
299-W7-6	9/12/95	B06H85			4900.00 H	
299-W7-6	9/12/95	B06H89		11.00 U		3500.00
299-W7-7	9/12/95	B06H85	.08 U			
299-W7-7	9/12/95	B06H80			17000.00 D	
299-W7-7	9/12/95	B06H84		11.00 U		3000.00
299-W7-8	9/14/95	B06H81	.12 L			
299-W7-8	9/14/95	B06H85			36000.00 D	
299-W7-8	9/14/95	B06H89		11.00 U		3500.00
299-W7-9	9/13/95	B06H82	.08 U4			
299-W7-9	9/13/95	B06H80			29000.00 D	
299-W7-9	9/13/95	B06H84		11.00 U		4700.00
299-W8-1	9/13/95	B06H88	.08 U4			
299-W8-1	9/13/95	B06H85			30000.00 D	
299-W8-1	9/13/95	B06H89		11.00 U		4200.00
299-W9-1	9/12/95	B06H89	.08 U			
299-W9-1	9/12/95	B06H80			39000.00 D	
299-W9-1	9/12/95	B06H84		44.00		4800.00

Table 14-19. Constituents with at Least One Detected Value for the
Low-Level Waste Management Area 3 Data for Reporting
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Well Name	Collection Date	Sample Number	K-40 140/pCi/L u/l	FRONIUM 34/ppb u/l	FRONIUM 34/ppb u/l	SULFATE 124/ppb 130/250000s
299-U10-13	9/05/95	BOGH40				41000.00 D
299-U10-13	9/05/95	BOGH44		12000.00	230.00	
299-U10-14	9/05/95	BOGH54				24000.00 D
299-U10-14	9/05/95	BOGH58		15000.00	180.00	
299-U10-19	6/12/95	BOFLW5	68.70			
299-U10-19	9/06/95	BOGH19	45.50			40000.00 D
299-U10-19	9/06/95	BOGH23		13000.00	330.00	
299-U10-20	6/12/95	BOFLW9	57.60			
299-U10-20	9/06/95	BOGH26	45.60			41000.00 D
299-U10-20	9/06/95	BOGH30		13000.00	290.00	
299-U10-21	6/12/95	BOFLX3	62.50			
299-U10-21	9/11/95	BOGH35	5.84 U			37000.00 D
299-U10-21	9/11/95	BOGH39		8800.00	330.00	
299-U6-2	6/14/95	BOFLX9	19.90 U			
299-U6-2	9/11/95	BOGH75	60.30			300.00
299-U6-2	9/11/95	BOGH79		9500.00	230.00	
299-U7-1	9/11/95	BOGHF3				49000.00 D
299-U7-1	9/11/95	BOGHF7		8800.00	170.00	
299-U7-10	9/11/95	BOGHG0				21000.00 D
299-U7-10	9/11/95	BOGHG4		7900.00	150.00	
299-U7-11	9/11/95	BOGHG5				30000.00 D
299-U7-11	9/11/95	BOGHG9		9700.00	150.00	
299-U7-12	9/12/95	BOGHH0				35000.00 D
299-U7-12	9/12/95	BOGHH4		9900.00	170.00 H	
299-U7-2	9/11/95	BOGHM5				29000.00 D
299-U7-2	9/11/95	BOGHM9		8000.00	150.00	
299-U7-3	9/12/95	BOGHJ0				23000.00 D
299-U7-3	9/12/95	BOGHJ4		16000.00	140.00 H	
299-U7-4	9/12/95	BOGHJ5				33000.00 D
299-U7-4	9/12/95	BOGHJ9		11000.00	250.00 H	
299-U7-5	9/12/95	BOGHK0				29000.00 D
299-U7-5	9/12/95	BOGHK4		10000.00	190.00 H	
299-U7-6	9/12/95	BOGHK5				22000.00 D
299-U7-6	9/12/95	BOGHK9		15000.00	130.00 H	
299-U7-7	9/12/95	BOGHL0				19000.00 D
299-U7-7	9/12/95	BOGHL4		9000.00	120.00 H	
299-U7-8	9/14/95	BOGHL5				23000.00 D
299-U7-8	9/14/95	BOGHL9		9000.00	140.00 H	
299-U7-9	9/13/95	BOGHM0				48000.00 D
299-U7-9	9/13/95	BOGHM4		15000.00	220.00 H	
299-U8-1	9/13/95	BOGHM5				46000.00 D
299-U8-1	9/13/95	BOGHM9		10000.00	190.00 H	
299-U9-1	9/12/95	BOGRN0				63000.00 D
299-U9-1	9/12/95	BOGRN4		11000.00	200.00 H	

Table 14-19. Constituents with at Least One Detected Value for the
Low-Level Waste Management Area 3 Data for Reporting
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Well Name	Collection Date	Sample Number	TC-99 143/pCi/L ./900	PERCENE 25/ppb .035/5	FTM 34/ppb 30/.	TDS 65/ppb ./500000s
299-W10-13	9/05/95	B0GH32		.04 U		
299-W10-13	9/05/95	B0GH44			30.00 U	
299-W10-14	9/05/95	B0GH34		.04 U		
299-W10-14	9/05/95	B0GH58			30.00 U	
299-W10-19	9/06/95	B0GH19	70.10			390000.00
299-W10-19	9/06/95	B0GH23			30.00 U	
299-W10-19	9/06/95	B0GH24		.40		
299-W10-20	9/06/95	B0GH25		.53		
299-W10-20	9/06/95	B0GH26	64.30			430000.00
299-W10-20	9/06/95	B0GH30			30.00 U	
299-W10-21	9/11/95	B0GH31		.23		
299-W10-21	9/11/95	B0GH35	91.10			430000.00
299-W10-21	9/11/95	B0GH39			30.00 U	
299-W6-2	9/11/95	B0GH47		.04 U		
299-W6-2	9/11/95	B0GH75	27.20			250000.00
299-W6-2	9/11/95	B0GH79			30.00 U	
299-W7-1	9/11/95	B0GH86		.04 U		
299-W7-1	9/11/95	B0GH87			30.00 U	
299-W7-10	9/11/95	B0GH87		.04 U		
299-W7-10	9/11/95	B0GH84			30.00 U	
299-W7-11	9/11/95	B0GH98		.04 U		
299-W7-11	9/11/95	B0GH99			30.00 U	
299-W7-12	9/12/95	B0GH99		.04 U		
299-W7-12	9/12/95	B0GH94			30.00 U	
299-W7-2	9/11/95	B0GH90		.04 U		
299-W7-2	9/11/95	B0GH99			30.00 U	
299-W7-3	9/12/95	B0GH91		.04 U		
299-W7-3	9/12/95	B0GH94			30.00 U	
299-W7-4	9/12/95	B0GH97		.26		
299-W7-4	9/12/95	B0GH99			51.00 L	
299-W7-5	9/12/95	B0GH98		.04 U		
299-W7-5	9/12/95	B0GH94			30.00 U	
299-W7-6	9/12/95	B0GH94		.04 U		
299-W7-6	9/12/95	B0GH99			30.00 U	
299-W7-7	9/12/95	B0GH95		.04 U		
299-W7-7	9/12/95	B0GH94			30.00 U	
299-W7-8	9/14/95	B0GH91		.04 U		
299-W7-8	9/14/95	B0GH99			30.00 U	
299-W7-9	9/13/95	B0GH92		.04 U		
299-W7-9	9/13/95	B0GH94			30.00 U	
299-W8-1	9/13/95	B0GH98		.04 U		
299-W8-1	9/13/95	B0GH99			30.00 U	
299-W9-1	9/12/95	B0GH99		.04 U		
299-W9-1	9/12/95	B0GH94			30.00 U	

Well Name	Collection Date	Sample Number	TRICENE 25/ppb .075/5	TRITIUM 142/pCi/L ./20000	TURBID 111/NTU ./.	FVANAD1 34/ppb 1.9/.
299-W10-13	9/05/95	B0GH32	.08 U			
299-W10-13	9/05/95	B0GH40		321.00	1.48	
299-W10-13	9/05/95	B0GH44				22.00
299-W10-14	9/05/95	B0GH34	.08 U			
299-W10-14	9/05/95	B0GH54		41.00 U	.90	
299-W10-14	9/05/95	B0GH58				32.00

Table 14-19. Constituents with at Least One Detected Value for the
Low-Level Waste Management Area 3 Data for Reporting
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Well Name	Collection Date	Sample Number	TRICENE 25/ppb .075/5	TRITIUM 142/pCi/L ./20000	TURBID 111/NTU ./.	FMANADI 34/ppb 1.9/.
299-W10-19	9/06/95	BOGH19		1420.00	1.09	
299-W10-19	9/06/95	BOGH23				16.00
299-W10-19	9/06/95	BOGH24	6.40			
299-W10-20	9/06/95	BOGH25	5.60			
299-W10-20	9/06/95	BOGH26		2160.00	9.50	
299-W10-20	9/06/95	BOGH30				17.00
299-W10-21	9/11/95	BOGH31	7.20			
299-W10-21	9/11/95	BOGH35		1590.00	3.38	
299-W10-21	9/11/95	BOGH39				25.00
299-W6-2	9/11/95	BOGH47	1.90			
299-W6-2	9/11/95	BOGH75		7480.00	3.69	
299-W6-2	9/11/95	BOGH79				29.00
299-W7-1	9/11/95	BOGH86	.08 U			
299-W7-1	9/11/95	BOGHF3		-160.00 U	1.16	
299-W7-1	9/11/95	BOGHF7				29.00
299-W7-10	9/11/95	BOGH87	.37			
299-W7-10	9/11/95	BOGHG0		690.00	12.30	
299-W7-10	9/11/95	BOGH04				25.00
299-W7-11	9/11/95	BOGH98	.08 U			
299-W7-11	9/11/95	BOGH05		-144.00 U	1.59	
299-W7-11	9/11/95	BOGH09				27.00
299-W7-12	9/12/95	BOGH99	.08 U			
299-W7-12	9/12/95	BOGH10		-21.00 U	5.15	
299-W7-12	9/12/95	BOGH16				20.00
299-W7-2	9/11/95	BOGH00	.08 U			
299-W7-2	9/11/95	BOGH15		-163.00 U	1.02	
299-W7-2	9/11/95	BOGH19				29.00
299-W7-3	9/12/95	BOGH01	.08 U			
299-W7-3	9/12/95	BOGH10		-35.80 U	1.45	
299-W7-3	9/12/95	BOGH14				19.00
299-W7-4	9/12/95	BOGH07	3.50			
299-W7-4	9/12/95	BOGH15		421.00	.85	
299-W7-4	9/12/95	BOGH19				21.00
299-W7-5	9/12/95	BOGH08	.93			
299-W7-5	9/12/95	BOGH10		331.00	.63	
299-W7-5	9/12/95	BOGH14				20.00
299-W7-6	9/12/95	BOGH04	.08 U			
299-W7-6	9/12/95	BOGH03		376.00	6.07	
299-W7-6	9/12/95	BOGH09				20.00
299-W7-7	9/12/95	BOGH05	.08 U			
299-W7-7	9/12/95	BOGH10		216.00	2.31	
299-W7-7	9/12/95	BOGH14				27.00
299-W7-8	9/14/95	BOGHF1	.08 U			
299-W7-8	9/14/95	BOGH15		354.00	2.34	
299-W7-8	9/14/95	BOGH19				27.00
299-W7-9	9/13/95	BOGHF2	.08 U			
299-W7-9	9/13/95	BOGH10		90.00 U	5.79	
299-W7-9	9/13/95	BOGH14				9.00 L
299-W8-1	9/13/95	BOGHF5	.08 U			
299-W8-1	9/13/95	BOGH05		3.07 U	2.14	
299-W8-1	9/13/95	BOGH09				29.00
299-W9-1	9/12/95	BOGHF9	.08 U			
299-W9-1	9/12/95	BOGH10		167.00 U	3.06	
299-W9-1	9/12/95	BOGH14				24.00

Table 14-19. Constituents with at Least One Detected Value for the
Low-Level Waste Management Area 3 Data for Reporting
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Well Name	Collection Date	Sample Number	TRICENE 25/ppb .075/5	TRITIUM 142/pCi/L ./20000	TURBID 111/NTU ./.	FLUORIDE 34/ppb 1.9/.
Well Name	Collection Date	Sample Number	FZINC 34/ppb 3.7/5000s			
299-W10-13	9/05/95	B0GH44	3.70 U			
299-W10-14	9/05/95	B0GH50	3.70 U			
299-W10-19	9/06/95	B0GH23	3.70 U			
299-W10-20	9/06/95	B0GH30	20.00			
299-W10-21	9/11/95	B0GH39	3.70 U			
299-W6-2	9/11/95	B0GH79	3.70 U			
299-W7-1	9/11/95	B0GHF7	3.70 U			
299-W7-10	9/11/95	B0GH64	3.70 U			
299-W7-11	9/11/95	B0GH09	3.70 U			
299-W7-12	9/12/95	B0GH14	4.50 L			
299-W7-2	9/11/95	B0GH19	3.70 U			
299-W7-3	9/12/95	B0GH14	15.00			
299-W7-4	9/12/95	B0GH19	3.70 U			
299-W7-5	9/12/95	B0GHK4	4.70 L			
299-W7-6	9/12/95	B0GHK9	5.40 L			
299-W7-7	9/12/95	B0GHL4	4.60 L			
299-W7-8	9/14/95	B0GHL9	3.80 L			
299-W7-9	9/13/95	B0GHM4	8.60 L			
299-W8-1	9/13/95	B0GHM9	3.70 U			
299-W9-1	9/12/95	B0GHM4	5.20 L			

For explanation of this table, see Section 1.4 of report.

Table 14-20. Contamination Indicator Parameters for the Low-Level
Waste Management Area 3 Data for Reporting Period
July 1 through September 30, 1995.
(sheet 1 of 2)

Well Name	Collection Date	Sample Number	COND FIELD uMho 1/.	COND LAB uMho 1/.	pH FIELD .01/6.5-8.5s	pH LAB .01/6.5-8.5s	TOC ppb %/.	TOX ppb %/.
299-W10-13	9/05/95	BOGH40	490		8.24	8.20	200 L	10.0 L
		BOGH41	486		8.23		200 L	20.0
		BOGH42	488		8.16		200 L	10.0
		BOGH43	487		8.19		300 L	10.0
299-W10-14	9/05/95	BOGH54	347		8.02	8.00	140 U	6.9 U
		BOGH55	345		8.00		200 L	6.9 U
		BOGH56	346		8.00		200 L	6.9 U
		BOGH57	348		8.00		300 L	6.9 U
299-W10-19	9/06/95	BOGH19	593		8.17	8.00	200 L	430.0 D
		BOGH20	593		8.18		200 L	450.0 D
		BOGH21	595		8.16		300 L	450.0 D
		BOGH22	595		8.18		200 L	570.0 D
299-W10-20	6/12/95 9/06/95	BOFLX0	634		7.81		400 L	890.0 D
		BOGH26	634		7.90	7.90	200 L	730.0 D
		BOGH27	634		7.89		200 L	870.0 D
		BOGH28	633		7.92		200 L	970.0 D
299-W10-21	9/11/95	BOGH29	632		7.89		300 L	810.0 D
		BOGH35	604		7.83	7.90	300 L	220.0 D
		BOGH36	604		7.83		200 L	290.0 D
		BOGH37	607		7.83		300 L	280.0 D
299-W6-2	9/11/95	BOGH38	606		7.83		200 L	290.0 D
		BOGH75	332		8.09	8.10	300 L	50.0 D
		BOGH76	339		8.08		200 L	60.0 D
		BOGH77	349		8.06		200 L	70.0 D
299-W7-1	9/11/95	BOGH78	354		8.05		140 U	70.0 D
		BOGHF3	390		7.98	7.90	140 U	9.0 L
		BOGHF4	390		7.98		140 U	6.9 U
		BOGHF5	389		7.98		140 U	6.9 U
299-W7-10	9/11/95	BOGHF6	389		7.98		140 U	6.9 U
		BOGHG0	298		8.29	8.00	200 L	10.0
		BOGHG1	299		8.16		200 L	10.0
		BOGHG2	299		8.17		200 L	20.0
299-W7-11	9/11/95	BOGHG3	300		8.15		300 L	10.0
		BOGHG5	352		7.94	8.00	200 L	9.0 L
		BOGHG6	352		7.94		140 U	6.9 U
		BOGHG7	352		7.94		140 U	6.9 U
299-W7-12	9/12/95	BOGHG8	352		7.94		140 U	6.9 U
		BOGHH0	368		8.10	8.10	200 L	6.9 U
		BOGHH1	367		8.05		150 L	6.9 U
		BOGHH2	368		8.05		140 U	6.9 U
299-W7-2	9/11/95	BOGHH3	369		8.05		200 L	6.9 U
		BOGHH5	281		8.52	8.10	200 L	6.9 U
		BOGHH6	281		8.50		140 L	6.9 U
		BOGHK7	282		8.37		200 L	6.9 U
299-W7-2	9/11/95	BOGHK8	283		8.35		140 U	6.9 U
		BOGHJ0	313		8.02	8.10	140 U	6.9 U
		BOGHJ1	313		8.01		140 U	6.9 U
		BOGHJ2	312		8.00		140 U	6.9 U
299-W7-3	9/12/95	BOGHJ3	311		8.00		140 U	6.9 U
		BOGHJ5	521		7.99	8.00	200 L	340.0
		BOGHJ6	521		7.99		200 L	280.0
		BOGHJ7	521		7.99		200 L	380.0
299-W7-4	9/12/95	BOGHJ8	520		8.00		200 L	330.0
		BOGHK0	420		7.95	8.00	200 L	80.0
		BOGHK1	420		7.95		200 L	60.0
		BOGHK2	420		7.94		200 L	80.0
299-W7-5	9/12/95	BOGHK3	421		7.94		200 L	80.0

Table 14-20. Contamination Indicator Parameters for the Low-Level
Waste Management Area 3 Data for Reporting Period
July 1 through September 30, 1995.
(sheet 2 of 2)

Well Name	Collection Date	Sample Number	COND FIELD uMho 1/.	COND LAB uMho 1/.	pH FIELD .01/6.5-8.5s	pH LAB .01/6.5-8.5s	TDC ppb */.	TOX ppb */.
299-W7-6	9/12/95	B06MK5	268		8.31	8.20	200 L	6.9 U
		B06MK6	268		8.31		200 L	6.9 U
		B06MK7	267		8.30		200 L	6.9 U
		B06MK8	267		8.29		300 L	6.9 U
299-W7-7	9/12/95	B06HL0	283		8.26	8.10	200 L	6.9 U
		B06HL1	283		8.24		200 L	6.9 U
		B06HL2	283		8.23		200 L	6.9 U
		B06HL3	282		8.23		200 L	6.9 U
299-W7-8	9/14/95	B06HL5	307		8.26	8.10	300 L	6.9 U
		B06HL6	312		8.26		200 L	10.0
		B06HL7	315		8.26		200 L	6.9 U
		B06HL8	315		8.26		300 L	6.9 U
299-W7-9	9/13/95	B06HM0	409		8.49	8.30	150 L	6.9 U
		B06HM1	407		8.44		140 U	9.0 L
		B06HM2	405		8.40		300 L	6.9 U
		B06HM3	405		8.39		200 L	6.9 U
299-W8-1	9/13/95	B06HM5	401		8.29	8.20	200 L	6.9 U
		B06HM6	402		8.28		200 L	6.9 U
		B06HM7	402		8.27		140 L	6.9 U
		B06HM8	402		8.28		140 L	8.0 L
299-W9-1	9/12/95	B06HM0	443		8.13	8.10	140 U	6.9 U
		B06HM1	444		8.13		200 L	6.9 U
		B06HM2	444		8.13		140 L	6.9 U
		B06HM3	442		8.12		140 U	6.9 U

* Detection limits for TDC and TOX vary depending on the performing laboratory.
For explanation of this table, see Section 1.4 of report.

Table 14-21. Constituent List and Summary of Results for the
Low-Level Waste Management Area 4 Data for Reporting
Period July 1 through September 30, 1995.

CONTAMINATION INDICATOR PARAMETERS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS Limit	Agency	Number of Samples		
		Full						Total	>CRQL	>DWS
CONDUCT	94	Conductivity, field	umhos					2	2	
CONDUCT	73	Conductivity, lab	umhos					1	1	
TOC		Total organic carbon	ppb	140				2	0	
TOX		Total organic halogen	ppb	6.9				2	2	
PH	93	pH, field	pH		6.5-8.5	EPAS		2	2	0
PH	125	pH, lab	pH		6.5-8.5	EPAS		1	1	0

DRINKING WATER PARAMETERS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS Limit	Agency	Number of Samples		
		Full						Total	>CRQL	>DWS
FBARIUM		Barium, filtered	ppb	1.4	2000	EPA		5	5	0
FCADMIU		Cadmium, filtered	ppb	.98	5	EPA		5	0	0
FCROMI		Chromium, filtered	ppb	3.7	100	EPA		5	4	0

GROUNDWATER QUALITY PARAMETERS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS Limit	Agency	Number of Samples		
		Full						Total	>CRQL	>DWS
FIRO		Iron, filtered	ppb	8.9	300	EPAS		5	5	0
FMANGAN		Manganese, filtered	ppb	.55	50	EPAS		5	5	0
FSODIUM		Sodium, filtered	ppb	44				5	5	

SITE SPECIFIC AND OTHER CONSTITUENTS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS Limit	Agency	Number of Samples		
		Full						Total	>CRQL	>DWS
FALUMIN		Aluminum, filtered	ppb	31	200	EPAS		5	0	0
FANTIMO		Antimony, filtered	ppb	24	6	EPA		5	0	5*
FBERYLL		Beryllium, filtered	ppb	.63	4	EPA		5	0	0
FCALCIU		Calcium, filtered	ppb	41				5	5	
FCOBALT		Cobalt, filtered	ppb	5.3				5	0	
FCOPPER		Copper, filtered	ppb	2.1	1000	EPAS		5	0	0
FMAGNES		Magnesium, filtered	ppb	26				5	5	
FNICKEL		Nickel, filtered	ppb	11	100	EPA		5	5	0
FPTASS		Potassium, filtered	ppb	390				5	5	
FSILVER		Silver, filtered	ppb	5.5	100	EPAS		5	0	0
FTIN		Tin, filtered	ppb	30				5	0	
FVANADI		Vanadium, filtered	ppb	1.9				5	5	
FZINC		Zinc, filtered	ppb	3.7	5000	EPAS		5	3	0

For explanation of this table, see Section 1.4 of report.

Table 14-22. Constituents with at Least One Detected Value for the Low-Level Waste Management Area 4 Data for Reporting Period July 1 through September 30, 1995.

Well Name	Collection Date	Sample Number	FBARIUM 34/ppb 1.4/2000	FCALCIU 34/ppb 41/.	FCROMI 34/ppb 3.7/100	FIROM 34/ppb 8.9/300s
299-W15-16	5/08/95	BOFCL7	73.00	69000.00	13.00 L	34.00 B
299-W15-18	5/08/95	BOFCN2	42.00	57000.00	6.80 L	32.00 B
299-W18-23	5/15/95	BOFCR7	25.00	26000.00	5.30 L	26.00 B
299-W18-24	5/08/95	BOFCS2	36.00	32000.00	6.40 L	44.00 B
299-W18-26	5/15/95	BOFCS7	55.00	36000.00	3.70 U	21.00 B

Well Name	Collection Date	Sample Number	FMAGNES 34/ppb 26/.	FMANGAN 34/ppb .55/50s	FNICKEL 34/ppb 11/100	FPOTASS 34/ppb 390/.
299-W15-16	5/08/95	BOFCL7	19000.00	2.00 BL	16.00 L	5400.00
299-W15-18	5/08/95	BOFCN2	17000.00	1.30 BL	51.00	4900.00
299-W18-23	5/15/95	BOFCR7	7200.00	3.50 BL	13.00 L	3300.00
299-W18-24	5/08/95	BOFCS2	9800.00	1.40 BL	15.00 L	3600.00
299-W18-26	5/15/95	BOFCS7	9400.00	19.00 B	15.00 L	4500.00

Well Name	Collection Date	Sample Number	FSDIUM 34/ppb 44/.	FVANADI 34/ppb 1.9/.	FZINC 34/ppb 3.7/5000s
299-W15-16	5/08/95	BOFCL7	40000.00 B	22.00 L	22.00
299-W15-18	5/08/95	BOFCN2	27000.00 B	24.00 L	3.70 U
299-W18-23	5/15/95	BOFCR7	13000.00 B	24.00 L	3.70 U
299-W18-24	5/08/95	BOFCS2	18000.00 B	28.00 L	24.00
299-W18-26	5/15/95	BOFCS7	17000.00 B	5.20 L	6.90 L

For explanation of this table, see Section 1.4 of report.

Table 14-23. Contamination Indicator Parameters for the Low-Level Waste Management Area 4 Data for Reporting Period July 1 through September 30, 1995.

Well Name	Collection Date	Sample Number	COND FIELD umho 1/.	COND LAB umho 1/.	pH FIELD .01/6.5-8.5s	pH LAB .01/6.5-8.5s	TOC ppb */.	TOX ppb */.
299-W15-17	5/09/95	BOFCM3	387	380	7.96	8.10	140 U	8.0 L
		BOFCM6	375		7.99		140 U	10.0

* Detection limits for TOC and TOX vary depending on the performing laboratory.
For explanation of this table, see Section 1.4 of report.

Table 14-24. Constituent List and Summary of Results for the
Low-Level Waste Management Area 5 Data for Reporting
Period July 1 through September 30, 1995.
(sheet 1 of 2)

CONTAMINATION INDICATOR PARAMETERS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS		Number of Samples		
		Full				Limit	Agency	Total	>CRQL	>DWS
CONDUCT		Conductivity, field	umhos					52	52	
TOC		Total organic carbon	ppb		140			52	44	
TOX		Total organic halogen	ppb		6.9			52	38	
PH	93	pH, field	pH			6.5-8.5	EPAS	52	52	8
PH	125	pH, lab	pH			6.5-8.5	EPAS	13	13	0

DRINKING WATER PARAMETERS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS		Number of Samples		
		Full				Limit	Agency	Total	>CRQL	>DWS
BARIUM		Barium, filtered	ppb		1.4	2000	EPA	13	13	0
CADMIUM		Cadmium, filtered	ppb		.08	5	EPA	13	5	0
CHROMIUM		Chromium, filtered	ppb		3.7	100	EPA	13	12	1
FLUORIDE		Fluoride	ppb		52	4000	EPA	13	12	0
ALPHA		Gross alpha	pCi/L			15	EPA	13	8	0
MERCURY		Mercury, filtered	ppb		.019	2	EPA	13	8	0
NITRATE		Nitrate	ppb		120	45000	EPA	13	13	8

GROUNDWATER QUALITY PARAMETERS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS		Number of Samples		
		Full				Limit	Agency	Total	>CRQL	>DWS
CHLORIDE		Chloride	ppb		110	250000	EPAS	13	12	0
IRON		Iron, filtered	ppb		8.9	300	EPAS	13	13	0
MANGANESE		Manganese, filtered	ppb		.55	50	EPAS	13	12	1
SODIUM		Sodium, filtered	ppb		44			13	13	
SULFATE		Sulfate	ppb		130	250000	EPAS	13	13	0

SITE SPECIFIC AND OTHER CONSTITUENTS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS		Number of Samples		
		Full				Limit	Agency	Total	>CRQL	>DWS
111-T		1,1,1-Trichloroethane	ppb		.061	200	EPA	13	2	0
112-T		1,1,2-Trichloroethane	ppb		.068	5	EPA	13	0	0
11-DIC		1,1-Dichloroethane	ppb		.047			13	0	
12-DIC		1,2-Dichloroethane	ppb		.049	5	EPA	13	0	0
14-dben		1,4-Dichlorobenzene	ppb		.056	75	EPA	13	0	0
ALKALIN		Alkalinity	ppb		3500			13	13	
ALUMINUM		Aluminum, filtered	ppb		31	200	EPAS	13	0	0
ANTIMONY		Antimony, filtered	ppb		24	6	EPA	13	0	13*
BENZENE		Benzene	ppb		.059	5	EPA	13	1	0
BERYLLIUM		Beryllium, filtered	ppb		.63	4	EPA	13	0	0
BE-7		Beryllium-7	pCi/L					9	0	
BROMIDE		Bromide	ppb		72			13	0	

Table 14-24. Constituent List and Summary of Results for the
Low-Level Waste Management Area 5 Data for Reporting
Period July 1 through September 30, 1995.
(sheet 2 of 2)

Short	(Method)	Constituent Name Full	Units	Lab CRQL	DMS		Number of Samples		
					Limit	Agency	Total	>CRQL	>DMS
FCALCIU		Calcium, filtered	ppb	.41			13	13	
TETRAHE		Carbon tetrachloride	ppb	.042	5	EPA	13	13	0
CS-134		Cesium-134	pCi/L				9	0	
CS-137		Cesium-137	pCi/L		200	EPA	9	1	0
CHLFORM		Chloroform	ppb	.029			13	12	
FCOBALT		Cobalt, filtered	ppb	5.3			13	0	
CO-60		Cobalt-60	pCi/L		100	EPA	9	3	0
FCOPPER		Copper, filtered	ppb	2.1	1000	EPAS	13	1	0
ETHBENZ		Ethylbenzene	ppb	.034	700	EPA	13	1	0
EU-154		Europium-154	pCi/L				9	0	
EU-155		Europium-155	pCi/L				9	1	
BETA		Gross beta	pCi/L				13	13	
FLEAD		Lead, filtered	ppb	.88	15	EPAA	13	3	0
FMAGNES		Magnesium, filtered	ppb	.26			13	13	
METHYLCH		Methylene chloride	ppb	.084	5	EPA	13	4	0
FNICKEL		Nickel, filtered	ppb	.11	100	EPA	13	1	0
NITRITE		Nitrite	ppb	140	4000	EPA	13	0	0
PHOSPHA		Phosphate	ppb	340			13	0	
FPOTASS		Potassium, filtered	ppb	390			13	13	
K-40		Potassium-40	pCi/L				9	6	
FSILVER		Silver, filtered	ppb	5.5	100	EPAS	13	0	0
FSTRONTIUM		Strontium, filtered	ppb	.31			13	13	
TC-99		Technetium-99	pCi/L		900	EPA	5	5	0
PERCENE		Tetrachloroethene	ppb	.035	5	EPA	13	3	0
FTIN		Tin, filtered	ppb	.30			13	2	
TOLUENE		Toluene	ppb	.048	1000	EPA	13	0	0
TDS		Total dissolved solids	ppb		500000	EPAS	5	5	0
TRICENE		Trichloroethene	ppb	.075	5	EPA	13	11	3
TRITIUM		Tritium	pCi/L		20000	EPA	13	11	5
TURBID		Turbidity	NTU				13	13	
FVANADIUM		Vanadium, filtered	ppb	1.9			13	13	
VINYLCHL		Vinyl chloride	ppb	.25	2	EPA	13	0	0
XYLENE		Xylenes (total)	ppb	.085	10000	EPA	13	0	0
FZINC		Zinc, filtered	ppb	3.7	5000	EPAS	13	5	0
CIS12DE		cis-1,2-Dichloroethylene	ppb	.049	70	EPA	13	0	0
TRANS12DE		trans-1,2-Dichloroethylene	ppb	.045	100	EPA	13	0	0

For explanation of this table, see Section 1.4 of report.

Table 14-25. Constituents with at Least One Detected Value for the Low-Level Waste Management Area 5 Data for Reporting Period July 1 through September 30, 1995.
(sheet 1 of 8)

Well Name	Collection Date	Sample Number	111-T 25/ppb .061/200	ALKALIN 357/ppb 3500/.	FBARIUM 34/ppb 1.4/2000	BENZENE 25/ppb .059/5
299-W11-31	9/13/95	B06H33	.46			.11 L
299-W11-31	9/13/95	B06H49		130000.00		
299-W11-31	9/13/95	B06H53			51.00	
299-W6-10	9/13/95	B06H45	.06 U			.06 U
299-W6-10	9/13/95	B06H63		130000.00		
299-W6-10	9/13/95	B06H67			55.00	
299-W6-11	9/15/95	B06H46	.06 U			.06 U
299-W6-11	9/15/95	B06H68		110000.00		
299-W6-11	9/15/95	B06H72			32.00	
299-W6-12	9/15/95	B06H48	.26			.06 U
299-W6-12	9/15/95	B06H81		110000.00		
299-W6-12	9/15/95	B06H85			30.00	
299-W6-2	9/11/95	B06H47	.06 U			.06 U
299-W6-2	9/11/95	B06H75		120000.00		
299-W6-2	9/11/95	B06H79			36.00	
299-W6-3	9/14/95	B06H60	.06 U			.06 U
299-W6-3	9/14/95	B06H93		100000.00		
299-W6-3	9/14/95	B06H97			68.00	
299-W6-4	9/14/95	B06H59	.06 U			.06 U
299-W6-4	9/14/95	B06H88		90000.00		
299-W6-4	9/14/95	B06H92			58.00	
299-W6-5	9/15/95	B06H62	.06 U			.06 U
299-W6-5	9/15/95	B06H85		70000.00		
299-W6-5	9/15/95	B06H89			72.00	
299-W6-6	9/18/95	B06H73	.06 U			.06 U
299-W6-6	9/18/95	B06HC2		130000.00		
299-W6-6	9/18/95	B06HC6			45.00	
299-W6-7	9/18/95	B06H74	.06 U			.06 U
299-W6-7	9/18/95	B06HC9		110000.00		
299-W6-7	9/18/95	B06HD3			60.00	
299-W6-8	9/21/95	B06H80	.06 U			.06 U
299-W6-8	9/21/95	B06HD6		110000.00		
299-W6-8	9/21/95	B06HFO			42.00	
299-W6-9	9/14/95	B06H61	.06 U			.06 U
299-W6-9	9/14/95	B06H80		120000.00		
299-W6-9	9/14/95	B06H84			33.00	
299-W7-10	9/11/95	B06H87	.06 U			.06 U
299-W7-10	9/11/95	B06HGO		110000.00		
299-W7-10	9/11/95	B06H84			32.00	

Table 14-25. Constituents with at Least One Detected Value for the Low-Level Waste Management Area 5 Data for Reporting Period July 1 through September 30, 1995.
(sheet 2 of 8)

Well Name	Collection Date	Sample Number	FCADHIU 34/ppb .98/5	FCALCIU 34/ppb 41/.	TETRAHE 25/ppb .042/5	CS-137 140/pCi/L ./200
299-W11-31	6/12/95	BOFLX7				-.06 U
299-W11-31	9/13/95	BOGH33			380.00 DQ	
299-W11-31	9/13/95	BOGH49				.75 U
299-W11-31	9/13/95	BOGH53	1.80 L	61000.00		
299-W6-10	9/13/95	BOGH45			670.00 DQ	
299-W6-10	9/13/95	BOGH63				-.21 U
299-W6-10	9/13/95	BOGH67	.98 U	71000.00		
299-W6-11	9/15/95	BOGH46			62.00 DQ	
299-W6-11	9/15/95	BOGH72	1.10 BL	43000.00		
299-W6-12	9/15/95	BOGH48			3.60 Q	
299-W6-12	9/15/95	BOGH85	.98 U	31000.00		
299-W6-2	6/14/95	BOFLX9				.30 U
299-W6-2	9/11/95	BOGH47			110.00 D	
299-W6-2	9/11/95	BOGH75				.34 U
299-W6-2	9/11/95	BOGH79	.98 U	39000.00		
299-W6-3	9/14/95	BOGH60			.70	
299-W6-3	9/14/95	BOGH97	1.10 L	75000.00		
299-W6-4	6/12/95	BOFLY0				-.10 U
299-W6-4	9/14/95	BOGH59			290.00 D	
299-W6-4	9/14/95	BOGH68				.46 U
299-W6-4	9/14/95	BOGH92	.98 U	42000.00		
299-W6-5	9/15/95	BOGH62			300.00 DQ	
299-W6-5	9/15/95	BOGH89	1.00 BL	69000.00		
299-W6-6	9/18/95	BOGH73			.06 LQ	
299-W6-6	9/18/95	BOGH66	.98 U	30000.00		
299-W6-7	9/18/95	BOGH74			81.00 DQ	
299-W6-7	9/18/95	BOGH83	.98 U	69000.00		
299-W6-8	9/21/95	BOGH80			.94 Q	
299-W6-8	9/21/95	BOGH80	.98 U	30000.00		
299-W6-9	6/13/95	BOFLY1				1.13 U
299-W6-9	9/14/95	BOGH61			240.00 D	
299-W6-9	9/14/95	BOGH80				1.12
299-W6-9	9/14/95	BOGH84	1.00 L	49000.00		
299-W7-10	9/11/95	BOGH87			17.00	
299-W7-10	9/11/95	BOGH64	.98 U	32000.00		

Well Name	Collection Date	Sample Number	CHLORID 124/ppb 110/250000s	CHLFORM 25/ppb .029/.	ECCHROMI 34/ppb 3.7/100	CO-60 140/pCi/L ./100
299-W11-31	6/12/95	BOFLX7				.52 U
299-W11-31	9/13/95	BOGH33		5.50		
299-W11-31	9/13/95	BOGH49	35000.00 D			1.54
299-W11-31	9/13/95	BOGH53			42.00	
299-W6-10	9/13/95	BOGH45		7.40		
299-W6-10	9/13/95	BOGH63	21000.00 D			.32 U
299-W6-10	9/13/95	BOGH67			50.00	
299-W6-11	9/15/95	BOGH46		1.70		
299-W6-11	9/15/95	BOGH68	6800.00			
299-W6-11	9/15/95	BOGH72			51.00	
299-W6-12	9/15/95	BOGH48		.25		
299-W6-12	9/15/95	BOGH81	4600.00			
299-W6-12	9/15/95	BOGH85			9.10 L	

Table 14-25. Constituents with at Least One Detected Value for the
Low-Level Waste Management Area 5 Data for Reporting
Period July 1 through September 30, 1995.
(sheet 3 of 8)

Well Name	Collection Date	Sample Number	CHLORID 124/ppb 110/250000s	CHLFORM 25/ppb .029/.	PCRRONI 34/ppb 3.7/100	CO-60 140/pCi/L ./100
299-W6-2	6/14/95	BOFLX9				-.32 U
299-W6-2	9/11/95	BOGH47		1.00		
299-W6-2	9/11/95	BOGH75	110.00 U			1.24 U
299-W6-2	9/11/95	BOGH79			23.00	
299-W6-3	9/14/95	BOGH60		.74		
299-W6-3	9/14/95	BOGH93	7800.00			
299-W6-3	9/14/95	BOGH97			37.00	
299-W6-4	6/12/95	BOFLY0				1.40
299-W6-4	9/14/95	BOGH59		3.30		
299-W6-4	9/14/95	BOGH88	9700.00 D			-1.15 U
299-W6-4	9/14/95	BOGH92			38.00	
299-W6-5	9/15/95	BOGH62		6.80		
299-W6-5	9/15/95	BOGH85	11000.00 D			
299-W6-5	9/15/95	BOGH89			110.00	
299-W6-6	9/18/95	BOGH73		.03 U		
299-W6-6	9/18/95	BOGH62	5000.00			
299-W6-6	9/18/95	BOGH66			3.70 U	
299-W6-7	9/18/95	BOGH74		3.00		
299-W6-7	9/18/95	BOGH69	11000.00 D			
299-W6-7	9/18/95	BOGH83			78.00	
299-W6-8	9/21/95	BOGH80		.25		
299-W6-8	9/21/95	BOGH86	3000.00			
299-W6-8	9/21/95	BOGH90			4.70 L	
299-W6-9	6/13/95	BOFLY1				2.45
299-W6-9	9/14/95	BOGH61		2.00		
299-W6-9	9/14/95	BOGH80	6700.00			.44 U
299-W6-9	9/14/95	BOGH84			31.00	
299-W7-10	9/11/95	BOGH87		.49		
299-W7-10	9/11/95	BOGH60	5000.00			
299-W7-10	9/11/95	BOGH64			8.70 L	

Table 14-25. Constituents with at Least One Detected Value for the
Low-Level Waste Management Area 5 Data for Reporting
Period July 1 through September 30, 1995.
(sheet 4 of 8)

Well Name	Collection Date	Sample Number	FCOPPER 34/ppb 2.1/1000s	ETHBENZ 25/ppb .034/700	EU-155 140/pCi/L ./.	FLUORID 124/ppb 52/4000
299-W11-31	6/12/95	BOFLX7			4.32	
299-W11-31	9/13/95	BOGH33		.08 L		
299-W11-31	9/13/95	BOGH49			-.78 U	1200.00
299-W11-31	9/13/95	BOGH53	2.10 U			
299-W6-10	9/13/95	BOGH45		.03 U		
299-W6-10	9/13/95	BOGH63			-.18 U	800.00
299-W6-10	9/13/95	BOGH67	2.10 U			
299-W6-11	9/15/95	BOGH46		.03 U		
299-W6-11	9/15/95	BOGH68				650.00
299-W6-11	9/15/95	BOGH72	2.10 U			
299-W6-12	9/15/95	BOGH48		.03 U		
299-W6-12	9/15/95	BOGH81				670.00
299-W6-12	9/15/95	BOGH85	2.10 U			
299-W6-2	6/14/95	BOFLX9			.32 U	
299-W6-2	9/11/95	BOGH47		.03 U		
299-W6-2	9/11/95	BOGH75			2.61 U	52.00 U
299-W6-2	9/11/95	BOGH79	2.10 U			
299-W6-3	9/14/95	BOGH60		.03 U		
299-W6-3	9/14/95	BOGH93				800.00
299-W6-3	9/14/95	BOGH97	2.10 U			
299-W6-4	6/12/95	BOFLY0			.51 U	
299-W6-4	9/14/95	BOGH59		.03 U		
299-W6-4	9/14/95	BOGH88			-.08 U	700.00
299-W6-4	9/14/95	BOGH92	2.10 U			
299-W6-5	9/15/95	BOGH62		.03 U		
299-W6-5	9/15/95	BOGH85				740.00
299-W6-5	9/15/95	BOGH89	2.40 BL			
299-W6-6	9/18/95	BOGH73		.03 U		
299-W6-6	9/18/95	BOGH82				600.00
299-W6-6	9/18/95	BOGH86	2.10 U			
299-W6-7	9/18/95	BOGH74		.03 U		
299-W6-7	9/18/95	BOGH89				700.00
299-W6-7	9/18/95	BOGH83	2.10 U			
299-W6-8	9/21/95	BOGH80		.03 U		
299-W6-8	9/21/95	BOGH84				700.00
299-W6-8	9/21/95	BOGH90	2.10 U			
299-W6-9	6/13/95	BOFLY1			.82 U	
299-W6-9	9/14/95	BOGH61		.03 U		
299-W6-9	9/14/95	BOGH80			-2.12 U	700.00
299-W6-9	9/14/95	BOGH84	2.10 U			
299-W7-10	9/11/95	BOGH87		.03 U		
299-W7-10	9/11/95	BOGH80				600.00
299-W7-10	9/11/95	BOGH84	2.10 U			

Table 14-25. Constituents with at Least One Detected Value for the Low-Level Waste Management Area 5 Data for Reporting Period July 1 through September 30, 1995.
(sheet 5 of 8)

Well Name	Collection Date	Sample Number	ALPHA 133/pCi/L ./15	BETA 136/pCi/L ./.	IRON 34/ppb 8.9/300s	LEAD 40/ppb .88/15s
299-W11-31	9/13/95	B0GH49	1.33 U	93.70		
299-W11-31	9/13/95	B0GH53			36.00	1.20 LH
299-W6-10	9/13/95	B0GH63	3.11	63.60		
299-W6-10	9/13/95	B0GH67			23.00 L	.88 UH
299-W6-11	9/15/95	B0GH68	.77 U	14.90		
299-W6-11	9/15/95	B0GH72			13.00 L	.88 U
299-W6-12	9/15/95	B0GH81	1.36	4.09		
299-W6-12	9/15/95	B0GH85			18.00 L	.93 L
299-W6-2	9/11/95	B0GH75	.89 U	10.60		
299-W6-2	9/11/95	B0GH79			13.00 BL	.88 UD
299-W6-3	9/14/95	B0GH93	1.70	18.30		
299-W6-3	9/14/95	B0GH97			49.00	.88 UH
299-W6-4	9/14/95	B0GH88	1.67	24.40		
299-W6-4	9/14/95	B0GH92			72.00	.88 UH
299-W6-5	9/15/95	B0GH85	1.17 U	70.10		
299-W6-5	9/15/95	B0GH89			11.00 L	.88 U
299-W6-6	9/18/95	B0GH82	1.29	5.11		
299-W6-6	9/18/95	B0GH86			26.00 L	1.10 LH
299-W6-7	9/18/95	B0GH89	2.98	40.00		
299-W6-7	9/18/95	B0GH93			33.00	.88 UH
299-W6-8	9/21/95	B0GH86	1.33	5.62		
299-W6-8	9/21/95	B0GH90			20.00 L	.88 UH
299-W6-9	9/14/95	B0GH80	2.43	16.50		
299-W6-9	9/14/95	B0GH84			24.00 L	.88 UH
299-W7-10	9/11/95	B0GH80	.84 U	5.39		
299-W7-10	9/11/95	B0GH84			32.00 R	.88 UD

Well Name	Collection Date	Sample Number	FMAGNES 34/ppb 26/.	FMANGAN 34/ppb .35/50s	FMERCUR 41/ppb .019/2	METHYCH 25/ppb .084/5
299-W11-31	9/13/95	B0GH33				.13 LQ
299-W11-31	9/13/95	B0GH53	21000.00	15.00 B	.02 UQ	
299-W6-10	9/13/95	B0GH43				.08 UQ
299-W6-10	9/13/95	B0GH67	25000.00	.55 U	.05 BLQ	
299-W6-11	9/15/95	B0GH46				.08 UQ
299-W6-11	9/15/95	B0GH72	19000.00	.66 L	.02 UQ	
299-W6-12	9/15/95	B0GH48				.15 LQ
299-W6-12	9/15/95	B0GH85	12000.00	2.00 L	.08 BLQ	
299-W6-2	9/11/95	B0GH47				.08 U
299-W6-2	9/11/95	B0GH79	16000.00	.93 BL	.03 BLQ	
299-W6-3	9/14/95	B0GH60				.08 U
299-W6-3	9/14/95	B0GH97	28000.00	1.00 BL	.07 BLQ	
299-W6-4	9/14/95	B0GH59				.08 U
299-W6-4	9/14/95	B0GH92	25000.00	1.30 BL	.13 BLQ	
299-W6-5	9/15/95	B0GH62				.18 LQ
299-W6-5	9/15/95	B0GH89	35000.00	6.30	.16 BLQ	
299-W6-6	9/18/95	B0GH73				.08 UQ
299-W6-6	9/18/95	B0GH86	12000.00	62.00	.03 BLQ	
299-W6-7	9/18/95	B0GH74				.11 LQ
299-W6-7	9/18/95	B0GH83	30000.00	1.60 L	.02 UQ	
299-W6-8	9/21/95	B0GH80				.08 UQ
299-W6-8	9/21/95	B0GH90	11000.00	2.40 L	.02 UQ	
299-W6-9	9/14/95	B0GH61				.08 U
299-W6-9	9/14/95	B0GH84	18000.00	2.20 BL	.05 BLQ	

Table 14-25. Constituents with at Least One Detected Value for the
Low-Level Waste Management Area 5 Data for Reporting
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Well Name	Collection Date	Sample Number	FMAGNES 34/ppb 26/.	FMANGAN 34/ppb .55/50s	FMERCUR 41/ppb .019/2	METHYCH 25/ppb .084/5
299-W7-10	9/11/95	80GH87				.08 U
299-W7-10	9/11/95	80GH84	13000.00	2.30 RL	.02 UR	

Well Name	Collection Date	Sample Number	FNICKEL 34/ppb 11/100	NITRATE 124/ppb 120/45000	FPOTASS 34/ppb 390/.	K-40 140/pCi/L ./.
299-W11-31	6/12/95	80FLX7				33.50
299-W11-31	9/13/95	80GH49		140000.00 D		52.30
299-W11-31	9/13/95	80GH53	11.00 U		5200.00	
299-W6-10	9/13/95	80GH63		150000.00 D		27.60
299-W6-10	9/13/95	80GH67	11.00 U		4800.00	
299-W6-11	9/15/95	80GH68		77000.00 D		
299-W6-11	9/15/95	80GH72	11.00 U		3200.00	
299-W6-12	9/15/95	80GH81		19000.00 D		
299-W6-12	9/15/95	80GH85	14.00 L		3300.00	
299-W6-2	6/14/95	80FLX9				19.90 U
299-W6-2	9/11/95	80GH75		700.00 F		60.30
299-W6-2	9/11/95	80GH79	11.00 U		3700.00	
299-W6-3	9/14/95	80GH93		270000.00 D		
299-W6-3	9/14/95	80GH97	11.00 U		6200.00	
299-W6-4	6/12/95	80FLY0				64.80
299-W6-4	9/14/95	80GH88		100000.00 D		5.81 U
299-W6-4	9/14/95	80GH92	11.00 U		4800.00	
299-W6-5	9/15/95	80GH85		280000.00 D		
299-W6-5	9/15/95	80GH89	11.00 U		5500.00	
299-W6-6	9/18/95	80GH82		680.00		
299-W6-6	9/18/95	80GH86	11.00 U		4800.00	
299-W6-7	9/18/95	80GH89		200000.00 D		
299-W6-7	9/18/95	80GH83	11.00 U		4200.00	
299-W6-8	9/21/95	80GH86		11000.00 D		
299-W6-8	9/21/95	80GH90	11.00 U		3400.00	
299-W6-9	6/13/95	80FLY1				66.10
299-W6-9	9/14/95	80GH80		78000.00 D		9.26 U
299-W6-9	9/14/95	80GH84	11.00 U		3600.00	
299-W7-10	9/11/95	80GH80		29000.00 D		
299-W7-10	9/11/95	80GH84	11.00 U		3100.00	

Well Name	Collection Date	Sample Number	FBODIUM 34/ppb 44/.	FSTRONUM 34/ppb .31/.	SULFATE 124/ppb 130/250000s	TC-99 143/pCi/L ./900
299-W11-31	9/13/95	80GH49			62000.00 D	290.00
299-W11-31	9/13/95	80GH53	53000.00	330.00 H		
299-W6-10	9/13/95	80GH63			55000.00 D	266.00
299-W6-10	9/13/95	80GH67	25000.00	350.00 H		
299-W6-11	9/15/95	80GH68			26000.00 D	
299-W6-11	9/15/95	80GH72	10000.00 H	230.00		
299-W6-12	9/15/95	80GH81			21000.00 D	
299-W6-12	9/15/95	80GH85	8800.00 H	120.00		
299-W6-2	9/11/95	80GH75			300.00	27.20
299-W6-2	9/11/95	80GH79	9500.00	230.00		
299-W6-3	9/14/95	80GH93			20000.00 D	
299-W6-3	9/14/95	80GH97	20000.00	330.00 H		

Table 14-25. Constituents with at Least One Detected Value for the Low-Level Waste Management Area 5 Data for Reporting Period July 1 through September 30, 1995.
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Well Name	Collection Date	Sample Number	SODIUM 34/ppb 44/.	STRONTIUM 34/ppb .31/.	SULFATE 124/ppb 130/250000s	TC-99 143/pCi/L ./900
299-W6-4	9/14/95	B06H88			40000.00 D	81.50
299-W6-4	9/14/95	B06H92	12000.00	270.00 H		
299-W6-5	9/15/95	B06H85			46000.00 D	
299-W6-5	9/15/95	B06H89	16000.00 q	630.00		
299-W6-6	9/18/95	B06H82			26000.00 D	
299-W6-6	9/18/95	B06H86	14000.00 q	140.00 H		
299-W6-7	9/18/95	B06H89			40000.00 D	
299-W6-7	9/18/95	B06H83	13000.00 q	410.00 H		
299-W6-8	9/21/95	B06H86			18000.00 D	
299-W6-8	9/21/95	B06H90	8500.00 q	160.00 H		
299-W6-9	9/14/95	B06H80			25000.00 D	55.50
299-W6-9	9/14/95	B06H84	12000.00	220.00 H		
299-W7-10	9/11/95	B06H80			21000.00 D	
299-W7-10	9/11/95	B06H84	7900.00	150.00		

Well Name	Collection Date	Sample Number	PERCENE 25/ppb .035/5	FTIR 34/ppb 30/.	TDS 65/ppb ./500000s	TRICENE 25/ppb .075/5
299-W11-31	9/13/95	B06H33	.61			14.00
299-W11-31	9/13/95	B06H49			480000.00	
299-W11-31	9/13/95	B06H53		30.00 U		
299-W6-10	9/13/95	B06H45	.29			16.00
299-W6-10	9/13/95	B06H63			470000.00	
299-W6-10	9/13/95	B06H67		30.00 U		
299-W6-11	9/15/95	B06H46	.04 U			1.40
299-W6-11	9/15/95	B06H72		30.00 U		
299-W6-12	9/15/95	B06H48	.04 U			.86
299-W6-12	9/15/95	B06H85		30.00 U		
299-W6-2	9/11/95	B06H47	.04 U			1.90
299-W6-2	9/11/95	B06H75			250000.00	
299-W6-2	9/11/95	B06H79		30.00 U		
299-W6-3	9/14/95	B06H60	.04 U			.08 U
299-W6-3	9/14/95	B06H97		30.00 U		
299-W6-4	9/14/95	B06H59	.08 L			4.50
299-W6-4	9/14/95	B06H88			320000.00	
299-W6-4	9/14/95	B06H92		41.00 L		
299-W6-5	9/15/95	B06H62	.08 L			6.20
299-W6-5	9/15/95	B06H89		30.00 U		
299-W6-6	9/18/95	B06H73	.04 U			.08 U
299-W6-6	9/18/95	B06H86		30.00 U		
299-W6-7	9/18/95	B06H74	.04 U			4.60
299-W6-7	9/18/95	B06H83		30.00 U		
299-W6-8	9/21/95	B06H80	.04 U			.08 L
299-W6-8	9/21/95	B06H90		30.00 U		
299-W6-9	9/14/95	B06H61	.07 L			3.20
299-W6-9	9/14/95	B06H80			290000.00	
299-W6-9	9/14/95	B06H84		36.00 L		
299-W7-10	9/11/95	B06H87	.04 U			.37
299-W7-10	9/11/95	B06H84		30.00 U		

Table 14-25. Constituents with at Least One Detected Value for the
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(sheet 8 of 8)

Well Name	Collection Date	Sample Number	TRITIUM 142/pCi/L ./20000	TURBID 111/NTU ./.	EVAPOR 34/ppb 1.9/.	ZINC 34/ppb 3.7/5000s
299-W11-31	9/13/95	B06H49	76000.00	15.70		
299-W11-31	9/13/95	B06H53			26.00	23.00 F
299-W6-10	9/13/95	B06H63	79800.00	3.83		
299-W6-10	9/13/95	B06H67			20.00	4.60 L
299-W6-11	9/13/95	B06H68	8390.00	3.65		
299-W6-11	9/15/95	B06H72			28.00	3.70 U
299-W6-12	9/15/95	B06H81	394.00	7.39		
299-W6-12	9/15/95	B06H85			30.00	3.70 U
299-W6-2	9/11/95	B06H75	7480.00	3.69		
299-W6-2	9/11/95	B06H79			29.00	3.70 U
299-W6-3	9/14/95	B06H93	94.60 U	1.90		
299-W6-3	9/14/95	B06H97			18.00	4.40 L
299-W6-4	9/14/95	B06H88	31300.00	16.10		
299-W6-4	9/14/95	B06H92			14.00	3.70 U
299-W6-5	9/15/95	B06H95	39200.00	1.88		
299-W6-5	9/15/95	B06H99			15.00	3.70 U
299-W6-6	9/18/95	B06HC2	17.90 U	.74		
299-W6-6	9/18/95	B06HC6			2.70 L	3.70 U
299-W6-7	9/18/95	B06HC9	45000.00	17.70		
299-W6-7	9/18/95	B06HD3			18.00	3.70 U
299-W6-8	9/21/95	B06H06	723.00	11.30		
299-W6-8	9/21/95	B06HFO			20.00	7.80 L
299-W6-9	9/14/95	B06H80	10100.00	1.64		
299-W6-9	9/14/95	B06H94			27.00	5.30 L
299-W7-10	9/11/95	B06H00	490.00	12.30		
299-W7-10	9/11/95	B06H94			25.00	3.70 U

For explanation of this table, see Section 1.4 of report.

Table 14-26. Contamination Indicator Parameters for the Low-Level
Waste Management Area 5 Data for Reporting Period
July 1 through September 30, 1995.
(sheet 1 of 2)

Well Name	Collection Date	Sample Number	COND FIELD uMho 1/.	COND LAB uMho 1/.	pH FIELD .01/6.5-8.5s	pH LAB .01/6.5-8.5s	TOC ppb */.	TOX ppb */.
299-W11-31	9/13/95	BOGH49	742		7.89	8.00	300 L	370.0
		BOGH50	742		7.84		300 L	360.0
		BOGH51	742		7.80		300 L	410.0
		BOGH52	742		7.88		300 L	560.0
299-W6-10	9/13/95	BOGH63	718		7.77	8.00	300 L	290.0
		BOGH64	718		7.77		300 L	250.0
		BOGH65	718		7.76		500	230.0
		BOGH66	717		7.77		300 L	270.0
299-W6-11	9/15/95	BOGH68	428		7.99	7.90	200 L	40.0
		BOGH69	428		7.87		200 L	60.0
		BOGH70	428		7.86		300 L	50.0
		BOGH71	428		7.86		200 L	50.0
299-W6-12	9/15/95	BOGH81	298		8.38	8.00	300 L	6.9 U
		BOGH82	298		8.19		400 L	6.9 U
		BOGH83	298		8.17		300 L	6.9 U
		BOGH84	299		8.15		300 L	6.9 U
299-W6-2	9/11/95	BOGH75	332		8.09	8.10	300 L	50.0 D
		BOGH76	339		8.08		200 L	60.0 D
		BOGH77	349		8.06		200 L	70.0 D
		BOGH78	354		8.05		140 U	70.0 D
299-W6-3	9/14/95	BOGH93	738		7.92	8.00	140 U	6.9 U
		BOGH94	740		7.92		140 U	6.9 U
		BOGH95	740		7.92		140 U	6.9 U
		BOGH96	740		7.94		140 U	8.0 L
299-W6-4	9/14/95	BOGH88	399		9.18 F	8.40	300 L	190.0
		BOGH89	403		9.15 F		400 L	180.0
		BOGH90	408		9.11 F		300 L	170.0
		BOGH91	416		9.05 F		200 L	150.0
299-W6-5	9/15/95	BOGH85	736		9.10 F	8.20	200 L	250.0
		BOGH86	744		9.09 F		300 L	230.0
		BOGH87	740		9.02 F		200 L	300.0
		BOGH88	749		8.97 F		200 L	200.0
299-W6-6	9/18/95	BOGHC2	326		7.94	7.90	140 U	6.9 U
		BOGHC3	326		7.94		200 L	6.9 U
		BOGHC4	326		7.94		140 U	6.9 U
		BOGHC5	326		7.93		140 U	6.9 U
299-W6-7	9/18/95	BOGHC9	712		7.79	8.00	200 L	140.0
		BOGHD0	715		7.78		200 L	160.0
		BOGHD1	715		7.78		200 L	170.0
		BOGHD2	715		7.78		200 L	170.0
299-W6-8	9/21/95	BOGHD6	275		8.26	8.10	400 L	20.0
		BOGHD7	275		8.26		300 L	6.9 U
		BOGHD8	275		8.26		200 L	6.9 U
		BOGHD9	275		8.27		300 L	6.9 U
299-W6-8	9/21/95	BOGHD9	275		8.27		300 L	6.9 U
299-W6-9	9/14/95	BOGH80	435		8.09	8.00	300 L	140.0
		BOGH81	435		8.09		300 L	130.0
		BOGH82	435		8.05		200 L	150.0
		BOGH83	434		8.09		300 L	130.0
299-W7-10	9/11/95	BOGH60	298		8.20	8.00	200 L	10.0
		BOGH61	299		8.16		200 L	10.0
		BOGH62	299		8.17		200 L	20.0
		BOGH63	300		8.15		300 L	10.0

* Detection limits for TOC and TOX vary depending on the performing laboratory.
For explanation of this table, see Section 1.4 of report.

Table 14-27. Water Quality Standards Exceeded at Low-Level Waste Management Area 3.

Nitrate (45,000 ppb)	299-W7-1 299-W10-21	299-W7-4	299-W10-19	299-W10-20
Carbon Tetrachloride (5 ppb)	299-W6-2 299-W10-19	299-W7-4 299-W10-20	299-W7-5	299-W7-10 299-W10-13 299-W10-21
Trichloroethene (5 ppb)	299-W10-19	299-W10-20	299-W10-21	

Table 14-28. Water Quality Standards Exceeded at Low-Level Waste Management Area 5.

pH - Field (>8.5)	299-W6-4†	299-W6-5†			
Chromium, filtered (100 ppb)	299-W6-5				
Nitrate (45,000 ppb)	299-W6-3 299-W6-10	299-W6-4 299-W6-11	299-W6-5 299-W11-31	299-W6-7	299-W6-9
Manganese, filtered (50 ppb)	299-W6-6				
Carbon Tetrachloride (5 ppb)	299-W6-2 299-W6-10	299-W6-4 299-W6-11	299-W6-5 299-W7-10	299-W6-7 299-W11-31	299-W6-9
Trichloroethene (5 ppb)	299-W6-5	299-W6-10	299-W11-31		
Tritium (20,000 pCi/l)	299-W6-4	299-W6-5	299-W6-7	299-W6-10	299-W11-31

† Suspect data, RADE has been filed.

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15.0 SINGLE-SHELL TANKS

J. A. Caggiano
Westinghouse Hanford Company

15.1 INTRODUCTION

Although decommissioned in 1980, the SSTs are actively storing hazardous and radioactive waste and have been designated as RCRA facilities. The SSTs received metal and first-cycle waste from the chemical processing of uranium-bearing spent fuel rods. Spent fuel rods from reactors in the 100 Areas were processed using the bisawth phosphate, REDOX, or PUREX process. Metal waste is that which was produced in the first step of the process of dissolving spent fuels, and contains about 90% of fission product radionuclides as well as uranium and some plutonium. Other waste streams (e.g., coating, noncomplexed, and deionizing waste) also were sent to SSTs at some time in their history. Anderson (1990), discusses types of waste sent to various SSTs from startup until the tank was no longer used. Chemical and radiological contents of the various SSTs were summarized in WHC (1993c).

The 149 SSTs are located in 7 waste management areas (WMA) containing one or more tank farms (Figures 15-1 and 15-2). Three WMAs are in the 200 East Area (A-AX, B-BX-BY, and C) and four are in the 200 West Area (S-SX, T, TX-TV, and U). Each tank farm contains from 4 (AX Tank Farm) to 18 (TX Tank Farm) tanks, each of which is an underground, reinforced-concrete tank with a single liner of carbon steel. The larger tanks have a diameter of 23 m (75 ft), vary in height, and are buried at least 2 m (6 ft) below the ground surface. The capacity of these tanks varies from 2,006,000 to 3,785,000 L (530,000 to 1,000,000 gal). There are sixteen 200-series tanks, each of which holds 208,175 L (55,000 gal). Four 200-series tanks are located in each of the original four tank farms: 241-B, 241-C, 241-T, and 241-U. The original four tank farms were built in 1944; SSTs were built from 1944 to 1964.

Interim-status, detection-level groundwater monitoring was initiated at the SSTs in 1989 with the construction of 12 RCRA standard wells. Sampling was initiated in February 1990 at WMAs A-AX, B-BX-BY, C, and T, but was suspended until July 1991 because of the absence of analytical laboratory support. Sampling resumed in 1991 and continued quarterly through early 1993. Most wells have been sampled for more than four quarters. All WMAs, except T and TX-TV, are now in detection-level indicator-parameter-evaluation status and are sampled semiannually. WMAs T and TX-TV continue to be sampled quarterly, as these sites are now in assessment-level monitoring status because of elevated specific conductance. A groundwater quality assessment monitoring plan (Caggiano and Chou 1993) for WMAs T and TX-TV was submitted to Ecology in July 1993. The SST WMA well locations are shown in Figures 15-3 and 15-4. Wells in the SST monitoring networks are listed in Table 15-1. Groundwater monitoring at the SSTs follows the groundwater monitoring plan (Jensen et al. 1989) as revised (Caggiano and Goodwin 1991).

Numerous older wells in the vicinity of the tank farms are constructed of carbon steel casing that is perforated and open to different levels in the unconfined aquifer. These wells were part of an operational groundwater

monitoring system at some point in their history and currently are used only for water level measurements or to collect samples for operational monitoring. Some are used for environmental surveillance monitoring to check for conformance to DOE orders (e.g., Schmidt et al. 1992). These older wells do not comply with the construction specifications of WAC 173-160 and are not used for collecting RCRA samples. One exception is well 2-E27-7, a well that was constructed in 1982 and has a carbon steel casing, an annular seal, and a stainless steel screen below the carbon steel casing. There is no carbon steel in contact with groundwater in well 2-E27-7. Samples are collected from this well, which is upgradient of WMA C.

15.2 WATER LEVEL MEASUREMENTS

Water levels measured in 62 wells for this quarter are given in Table 15-2. These data include routine water level measurements taken when sampling, as well as nonroutine monthly measurements made by Well Services personnel. Suspected errors in water level measurements this quarter are flagged in Table 15-2.

The water table in the 200 East Area is nearly flat because of declining water levels and high transmissivity of the Hanford formation. The water table map for June 1995 (DOE-RL 1996, Fig 4.11-7) illustrates the very low slope to the water table.

A barrier may be constructed over the 216-BY cribs in operable unit 200-BP-1 located north of WMA B-BX-BY. A modified RCRA cover was the preferred alternative in the Record of Decision that is going out for public comment. After comments are addressed, the definitive design of the cover will commence. However, it is anticipated that all wells in the area of the 216-BY cribs will be decommissioned to ease construction and to eliminate potential pathways through the cover. New groundwater monitoring wells beyond the new cover will be constructed. Well 2-E33-38, along with nine older carbon steel wells formerly used by the Operational Monitoring program to monitor the 216-BY cribs, will be decommissioned. Wells 2-E33-1 and 2-E33-5, along with well 2-E33-38, have been used to monitor water levels for the SSTs in this area of very low water table gradient in the 200 East Area. Contingency planning for the location and design of replacement wells has been initiated, but the project is on hold pending review of the Record of Decision by the Yakama Nation.

Water levels have been declining steadily over the past several years at all SST sites (see hydrographs of all WMAs in DOE-RL [1995]). The rate of decline appears to be accelerating after a slowing in 1994.

Water level data for this quarter at WMA U indicate that groundwater is flowing to the south-southwest, but the difference in head among all wells is generally less than 0.5 ft. The borehole velocity flowmeter was run at three different levels within the screens of wells 2-W18-25, 2-W19-31 and 2-W19-32 in May. The direction of flow in 2-W19-31 and 2-W19-32 is north-northwest; the direction of flow measured in 2-W18-25 is east-northeast. The conflicting data on the direction of groundwater in an area of very low gradient indicate further work is needed to confirm the direction of groundwater flow to determine whether an additional well may be needed. At this time, WMA U

appears to be situated above the apex of a local water table mound creating a situation of confounding head data that make the determination of true direction of groundwater flow enigmatic.

15.3 WATER CHEMISTRY DATA

Data received from analyses of samples collected during the third quarter of 1995 are provided in Tables 15-3 through 15-23. Most SST wells were sampled this quarter. Quarterly sampling is presently conducted in WMAs T and TX-TY because these sites are in groundwater assessment monitoring under interim status (40 CFR 265). All other WMAs are sampled semiannually except for WMA U. Statistical methods are provided in Appendix C of the 1995 RCRA Annual Report (DOE 1996).

Regulatory limits for constituents in groundwater have been revised in Tables 15-3 through 15-32 to reflect current limits in 40 CFR 141 and 40 CFR 143.

Four quarters of background data have been obtained from wells in all WMAs and the data have been statistically evaluated for indications of contamination through analyses of TOC, pH, specific conductance and TOX for each site. Replicate average values from downgradient wells are compared to the critical means for indicator parameters to determine whether the facilities in any SST WMAs may be affecting groundwater quality. The change in groundwater flow direction beneath WMA U will necessitate a new calculation of background for this site.

Several LLBG RCRA standard wells have been added to the expanded network for groundwater quality assessment monitoring at WMAs T and TX-TY. Wells 299-W6-2, 299-W6-4, 299-W6-6, 299-W6-9, 299-W10-19, 299-W10-20, 299-W10-21 and 299-W11-31 may be found on Figures 14-3 (for LLBG WMA 3) or Figure 14-5 (for LLBG WMA 5). Ten radionuclides from the list of site-specific constituents for the SSTs have been added to the sampling list for these wells, all of which are located north of WMA T. Some data on radionuclides from these wells were received this quarter and may be found in Tables 15-19 and 15-25. These two WMAs are in groundwater quality assessment status because of elevated specific conductance.

15.3.1 Waste Management Area A-AX

All wells were sampled this quarter. Data are included in Tables 15-3, 15-4, and 15-5. There were no exceedances of the critical mean for field specific conductance or pH. The four values for pH for well 2-E24-19 are well below the historical trend and have been flagged as suspect. The four values for field pH also differ significantly from the pH of 7.50 determined in the laboratory for this sampling event. Data for TOC and TOX do not exceed the critical mean for these parameters. ¹²⁹I ranges between 3.26 and 7.65 pCi/L for the five wells, all of which exceed the regulatory limit. Turbidity exceeded 1 NTU in all wells, with a high of 17.6 NTU in well 299-E24-19.

15.3.2 Waste Management Area B-BX-BY

All five wells were sampled this quarter. Data are reported in Tables 15-6 through 15-8. Turbidity exceeded 1 NTU in four samples this quarter, with a high of 3.51 NTU in well 299-E33-41. ⁹⁹Tc exceeded the regulatory limit of 900 pCi/L in well 2-E33-41, but the data are suspect and are being investigated. Gross beta of 356 pCi/L reflects this value for ⁹⁹Tc. ¹²⁹I exceeded the regulatory limit in all wells this quarter and ranged between 3.61 and 7.59 pCi/L.

There were no exceedances of the critical mean (or critical range) for the reported indicator parameters for this quarter.

15.3.3 Waste Management Area C

All five wells in WMA C were sampled this quarter. Data are reported in Tables 15-9 through 15-11. ¹²⁹I exceeded the regulatory limit (1 pCi/L) in all wells this quarter and ranged between 3.80 and 4.37 pCi/L. Turbidity ranged from 0.49 to 3.16 NTU for all samples. There were no exceedances of the critical mean for field specific conductance, pH, or TOC. All TOX data are non-detects and do not exceed the upgradient/downgradient comparison value.

15.3.4 Waste Management Area S-SX

Data are reported for all wells in WMA S-SX in Tables 15-12 through 15-14. Turbidity ranged from 1.59 NTU to 7.45 NTU, with four wells having turbidity below 5 NTU. Tritium exceeded the 20,000 pCi/L DWS in wells 2-W23-14 and 2-W23-15. ⁹⁹Tc (and gross beta) was elevated in well 2-W22-39, but did not exceed the 900 pCi/L DWS. There were no exceedances of the critical mean for field specific conductance, pH, or TOC. TOX data did not exceed the upgradient/downgradient comparison value.

15.3.5 Waste Management Area T

All wells were sampled this quarter and the data are included in Tables 15-15 through 15-17. Filtered chromium, iron, and nickel exceeded the DWS in well 2-W10-15, but the data are suspect and are being investigated. Fluoride also exceeded the 4,000 ppb DWS in well 2-W10-15. Filtered manganese exceeded the 50 ppb DWS in well 2-W6-6, a supplemental assessment well. Nitrate exceeded the 45,000 ppb DWS in all wells but 2-W11-27, 2-W6-2, and 2-W6-6. Tritium exceeded the 20,000 pCi/L DWS in wells 2-W10-15, 2-W10-16, 2-W6-4, 2-W11-28, and 2-W11-31. TDS exceeded the 500-ppm DWS in all these wells except 2-W11-31. Turbidity ranged between 0.74 and 16.1 NTU this quarter, with five wells exceeding 6 NTU.

Field specific conductance continues to be elevated in downgradient well 299-W10-15 and is the parameter that triggered this site into groundwater quality assessment monitoring under interim-status regulations. Four values for field pH exceeded the 8.5 DWS in well 2-W6-4, but these values depart significantly from the historical trend and an investigation has been initiated. The laboratory pH for this sample was 8.4.

15.3.6 Waste Management Area TX-TY

All wells in WMA TX-TY were sampled this quarter. Data are in Tables 15-18 through 15-20. Nitrate exceeded the DWS in all wells this quarter, with a maximum of 350,000 ppb in well 299-W14-12. ⁹⁹Tc continues to exceed the 900 pCi/L. DWS in well 2-W14-12. ¹²⁹I, TDS and filtered chromium are also elevated above the DWS in this well. Tritium exceeds the limit of 20,000 pCi/L in all wells but 2-W10-18. Turbidity ranges from 2.5 to 30.7 NTU.

Field specific conductance continues to be elevated in downgradient wells 2-W14-12 and 2-W10-17 and is the reason WMA TX-TY has been triggered into groundwater quality assessment monitoring under interim-status regulations.

15.3.7 Waste Management Area U

Samples were collected in all wells this quarter at WMA U. The data are reported in Tables 15-21 through 15-23. There were no exceedances of any DWS for any constituents monitored this quarter. Turbidity ranged between 1.46 and 5.64 NTU this quarter, with all but one value below 5 NTU.

There were no exceedances of the critical mean or critical range for data reported this quarter. The background levels for indicator parameters have been recalculated because of a change in groundwater flow direction beneath WMA U. Quarterly sampling for TOX will be initiated in 1996 to establish a background level for that parameter.

Figure 15-1. Single-Shell Tank Waste Management Areas in the 200 East Area.

PS-80-71

Figure 15-2. Single-Shell Tank Waste Management Areas in the 200 West Area.

PS-90-69

Figure 15-3. Well Location Map for the Single-Shell Tank Waste Management Areas in the 200 East Area.

H9411010.11

Figure 15-4. Well Location Map for the Single-Shell Tank Waste Management Areas in the 200 West Area.

H9411010.10

Table 15-1. Groundwater Monitoring Wells for the Single-Shell Tanks. (sheet 1 of 2)

Well no. (299-)	Aquifer ^a	Sample frequency	Sample date, 3rd Qtr 1995
Single-Shell Tanks Waste Management Area A-AX			
E24-19 ⁸⁹	Ringold: Water Table	Semiannually	8/3/95
E24-20 ⁹¹	Ringold: Water Table	Semiannually	8/2/95
E25-40 ⁸⁹	Ringold: Water Table	Semiannually	8/1/95
E25-41 ⁸⁹	Ringold: Water Table	Semiannually	8/2/95
E25-46 ⁹²	Ringold: Water Table	Semiannually	8/1/95
Single-Shell Tanks Waste Management Area B-BX-BY			
E33-31 ⁸⁹	Hanford: Water Table	Semiannually	8/4/95
E33-32 ⁸⁹	Hanford: Water Table	Semiannually	8/2/95
E33-33 ⁸⁹	Hanford: Water Table	Semiannually	8/1/95
E33-36 ⁹⁰	Hanford: Water Table	Semiannually	8/1/95
E33-41 ^{91b}	Hanford: Water Table	Semiannually	8/4/95
E33-38 ^{91c}	Hanford: Water Table	Semiannually	NS
E33-39 ^{91c}	Hanford: Water Table	Semiannually	NS
E33-42 ⁹¹	Hanford: Water Table	Semiannually	8/3/95
E33-43 ⁹¹	Hanford: Water Table	Semiannually	8/3/95
Single-Shell Tank Waste Management Area C			
E27-12 ⁸⁹	Ringold: Water Table	Semiannually	8/2/95
E27-13 ⁸⁹	Ringold: Water Table	Semiannually	8/3/95
E27-14 ⁸⁹	Ringold: Water Table	Semiannually	8/2/95
E27-15 ⁸⁹	Ringold: Water Table	Semiannually	8/2/95
E27-7 ⁸²	Ringold: Water Table	Semiannually	8/2/95
Single-Shell Tanks Waste Management Area S-SX			
W22-39 ⁹¹	Ringold: Water Table	Semiannually	8/9/95
W22-44 ⁹¹	Ringold: Water Table	Semiannually	8/9/95
W22-45 ⁹²	Ringold: Water Table	Semiannually	8/9/95
W22-46 ⁹¹	Ringold: Water Table	Semiannually	8/9/95
W23-13 ⁹⁰	Ringold: Water Table	Semiannually	8/4/95

Table 15-1. Groundwater Monitoring Wells for the Single-Shell Tanks. (sheet 2 of 2)

Well no. (299-)	Aquifer ^a	Sample frequency	Sample date, 3rd Qtr 1995
W23-14 ⁹⁰	Ringold: Water Table	Semiannually	8/9/95
W23-15 ⁹¹	Ringold: Water Table	Semiannually	8/9/95
Single-Shell Tanks Waste Management Area T			
W10-15 ⁸⁹	Ringold: Water Table	Quarterly	8/8/95
W10-16 ⁸⁹	Ringold: Water Table	Quarterly	8/7/95
W10-19 ⁹²	Ringold: Water Table	Quarterly	9/6/95
W10-20 ⁹³	Ringold: Water Table	Quarterly	9/6/95
W10-21 ⁹³	Ringold: Water Table	Quarterly	9/11/95
W11-27 ⁹¹	Ringold: Water Table	Quarterly	8/8/95
W11-28 ⁹¹	Ringold: Water Table	Quarterly	8/10/95
W11-31 ⁹²	Ringold: Water Table	Quarterly	9/13/95
Single-Shell Tanks Waste Management Area TX-TY			
W10-17 ⁹¹	Ringold: Water Table	Quarterly	8/7/95
W10-18 ⁹⁰	Ringold: Water Table	Quarterly	8/7/95
W14-12 ⁹¹	Ringold: Water Table	Quarterly	8/8/95
W15-22 ⁹¹	Ringold: Water Table	Quarterly	8/24/95
Single-Shell Tanks Waste Management Area U			
W18-25 ⁹⁰	Ringold: Water Table	Semiannually	7/31/95
W18-30 ⁹¹	Ringold: Water Table	Semiannually	8/1/95
W18-31 ⁹¹	Ringold: Water Table	Semiannually	8/1/95
W19-31 ⁹⁰	Ringold: Water Table	Semiannually	7/31/95
W19-32 ⁹¹	Ringold: Water Table	Semiannually	7/31/95
W19-12 ⁸³	Ringold: Water Table	Semiannually	NS

Notes: Shading denotes upgradient wells. Superscript following well number denotes the year of completion of the well.

^aWells are screened either in sand and gravel of the Hanford formation or in matrix-supported silty sandy gravel of the Ringold Formation.

^bWell in middle of WMA B-BX-BY and not clearly upgradient or downgradient. Therefore, data from sampling/analyses in this well are not used in statistical evaluations.

^cPart of 200-BP-1 operable unit network. Not sampled regularly as RCRA wells.

NS = not sampled.

Table 15-2. RCRA Water Level Measurement Report
Single-Shell Tanks, Third Quarter 1995.
(sheet 1 of 8)

Well	Date	Depth to water (ft)	Water level elevation above msl (ft)	(m)
241-A/AX Tank Farm Wells				
299-E24-19	7/25/95	292.25	401.40	122.35
	8/03/95	292.43*	401.22	122.29
	8/16/95	292.30	401.35	122.33
	9/13/95	292.35	401.30	122.32
299-E24-20	7/25/95	287.57	401.71	122.44
	8/02/95	287.92*	401.36	122.33
	8/16/95	287.62	401.66	122.43
	9/13/95	287.68	401.60	122.41
299-E25-2	7/25/95	273.82	401.83	122.48
	8/16/95	273.94	401.71	122.44
	9/13/95	273.94	401.71	122.44
299-E25-40	7/25/95	264.19	401.72	122.44
	8/01/95	264.16*	401.75	122.45
	8/16/95	264.33	401.58	122.40
	9/13/95	264.30	401.61	122.41
299-E25-41	7/25/95	269.67	401.79	122.47
	8/02/95	269.88*	401.58	122.40
	8/16/95	269.78	401.68	122.43
	9/13/95	269.79	401.67	122.43
299-E25-46	7/25/95	293.09	401.72	122.44
	8/01/95	293.03*	401.78	122.46
	8/16/95	293.17	401.64	122.42
	9/13/95	293.18	401.63	122.42
241-B/BX/BY Tank Farm Wells				
299-E33-1	7/25/95	230.65	401.46	122.37
	8/16/95	230.69	401.42	122.35
	9/13/95	230.63	401.48	122.37
299-E33-18	7/25/95	250.28	401.58	122.40
	8/16/95	250.35	401.51	122.38
	9/13/95	250.34	401.52	122.38

Table 15-2. RCRA Water Level Measurement Report
Single-Shell Tanks, Third Quarter 1995.
(sheet 2 of 8)

Well	Date	Depth to water (ft)	Water level elevation above msl (ft)	(m)
241-B/BX/BY Tank Farm Wells				
299-E33-21	7/25/95	266.79	401.60	122.41
	8/16/95	266.86	401.53	122.39
	9/13/95	266.88	401.51	122.38
299-E33-31	7/25/95	246.03	401.45	122.36
	8/04/95	245.93*	401.55	122.39
	8/16/95	246.09	401.39	122.34
	9/13/95	246.09	401.39	122.34
299-E33-32	7/25/95	258.70	401.32	122.32
	8/02/95	258.79*	401.23	122.29
	8/16/95	258.72	401.30	122.32
	9/13/95	258.75	401.27	122.31
299-E33-33	7/25/95	238.92	401.47	122.37
	8/01/95	238.69*	401.70	122.44
	8/16/95	238.94	401.45	122.36
	9/13/95	238.94	401.45	122.36
299-E33-36	8/01/95	246.96*	399.71+	121.83
	9/08/95	247.72	398.95+	121.60
299-E33-38	7/25/95	230.73	401.22	122.29
	8/16/95	230.74	401.21	122.29
	9/13/95	230.71	401.24	122.30
299-E33-39	7/25/95	222.26	401.03	122.23
	9/13/95	222.24	401.05	122.24
299-E33-41	7/25/95	253.72	401.23	122.29
	8/04/95	253.60*	401.35	122.33
	8/16/95	253.63	401.32	122.32
	9/13/95	253.57	401.38	122.34
299-E33-42	7/25/95	252.87	401.43	122.36
	8/03/95	252.93*	401.37	122.34
	8/16/95	252.88	401.42	122.35
	9/13/95	252.83	401.47	122.37

Table 15-2. RCRA Water Level Measurement Report
Single-Shell Tanks, Third Quarter 1995.
(sheet 3 of 8)

Well	Date	Depth to water (ft)	Water level elevation above msl (ft)	(m)
241-B/BX/BY Tank Farm Wells				
299-E33-43	7/25/95	261.39	401.29	122.31
	8/03/95	261.47*	401.21	122.29
	8/16/95	261.36	401.32	122.32
	9/13/95	261.38	401.30	122.32
299-E33-5	7/25/95	233.19	401.53	122.39
	8/16/95	233.23	401.49	122.37
	9/13/95	233.20	401.52	122.38
299-E33-8	7/25/95	249.42	401.57	122.40
	8/16/95	249.46	401.53	122.39
	9/13/95	249.47	401.52	122.38
241-C Tank Farm Wells				
299-E27-12	7/25/95	259.58	401.57	122.40
	8/02/95	259.88*	401.27+	122.31
	8/16/95	259.68	401.47	122.37
	9/13/95	259.66	401.49	122.37
299-E27-13	7/25/95	267.58	401.61	122.41
	8/03/95	267.56*	401.63	122.42
	8/16/95	267.56	401.63	122.42
	9/13/95	267.63	401.56	122.40
299-E27-14	7/25/95	257.00	401.54	122.39
	8/02/95	257.09*	401.45	122.36
	8/16/95	257.08	401.46	122.37
	9/13/95	257.09	401.45	122.36
299-E27-15	7/25/95	251.69	401.18	122.28
	8/02/95	251.89*	400.98	122.22
	8/16/95	252.09	400.78	122.16
	9/13/95	251.72	401.15+	122.27
299-E27-7	7/25/95	233.09	401.78	122.46
	8/02/95	233.72*	401.15	122.27
	8/16/95	233.23	401.64	122.42
	9/13/95	233.21	401.66	122.43

Table 15-2. RCRA Water Level Measurement Report
Single-Shell Tanks, Third Quarter 1995.
(sheet 4 of 8)

Well	Date	Depth to water (ft)	Water level elevation above ms] (ft)	(m)
241-S/SX Tank Farm Wells				
299-W22-39	7/27/95	212.77	455.49	138.83
	8/09/95	212.96*	455.30	138.78
	8/29/95	212.87	455.39	138.80
	9/12/95	212.91	455.35	138.79
299-W22-44	7/25/95	221.08	457.05	139.31
	8/09/95	221.13*	457.00	139.29
	8/16/95	221.31	456.82	139.24
	9/13/95	221.53	456.60	139.17
299-W22-45	7/25/95	210.17	456.04	139.00
	8/09/95	210.18*	456.03	139.00
	8/16/95	210.34	455.87	138.95
	9/13/95	210.49	455.72	138.90
299-W22-46	7/27/95	215.84	455.34	138.79
	8/09/95	215.71*	455.47	138.83
	8/29/95	215.91	455.27	138.77
	9/12/95	215.99	455.19	138.74
299-W23-13	7/27/95	208.73	457.60	139.48
	8/04/95	208.58*	457.75	139.52
	8/29/95	208.84	457.49	139.44
	9/12/95	208.90	457.43	139.42
299-W23-14	7/27/95	206.82	457.18	139.35
	8/09/95	206.97*	457.03	139.30
	8/29/95	206.89	457.11	139.33
	9/12/95	206.96	457.04	139.31
299-W23-15	7/27/95	199.35	456.09	139.02
	8/09/95	199.16*	456.28	139.07
	8/29/95	199.42	456.02	138.99
	9/12/95	199.48	455.96	138.98
299-W23-6	7/27/95	211.36	455.62	138.87
	8/29/95	211.43	455.55	138.85
	9/12/95	211.50	455.48	138.83
299-W23-8	7/27/95	206.59	457.36	139.40
	8/29/95	206.68	457.27	139.38
	9/12/95	206.75	457.20	139.35

Table 15-2. RCRA Water Level Measurement Report
Single-Shell Tanks, Third Quarter 1995.
(sheet 5 of 8)

Well	Date	Depth to water (ft)	Water level elevation above msl (ft)	(m)
241-T Tank Farm Wells				
299-W10-10	7/26/95	216.15	459.20	139.96
	8/28/95	216.24	459.11	139.94
	9/11/95	216.57	458.78	139.84
299-W10-11	7/26/95	216.02	459.50	140.06
	8/28/95	216.12	459.40	140.03
	9/11/95	216.46	459.06	139.92
299-W10-12	7/26/95	215.73	459.28	139.99
	8/28/95	215.85	459.16	139.95
	9/11/95	216.18	458.83	139.85
299-W10-15	7/26/95	216.71	459.19	139.96
	8/08/95	216.87*	459.03	139.91
	8/28/95	216.81	459.09	139.93
	9/11/95	217.15	458.75	139.83
241-T Tank Farm Wells				
299-W10-16	7/26/95	213.36	459.40	140.03
	8/07/95	213.70*	459.06	139.92
	8/28/95	213.44	459.32	140.00
	9/11/95	213.83	458.93	139.88
299-W10-8	7/26/95	221.42	458.89	139.87
	8/28/95	221.56	458.75	139.83
	9/11/95	221.88	458.43	139.73
299-W10-9	7/26/95	215.76	459.17	139.96
	8/28/95	216.99+	457.94+	139.58
	9/11/95	216.09	458.84	139.85
299-W11-23	7/26/95	229.57	458.58	139.78
	8/28/95	229.73	458.42	139.73
	9/11/95	230.03	458.12	139.63
299-W11-24	7/26/95	228.40	459.03	139.91
	8/28/95	228.55	458.88	139.87
	9/11/95	228.89	458.54	139.76

Table 15-2. RCRA Water Level Measurement Report
Single-Shell Tanks, Third Quarter 1995.
(sheet 6 of 8)

Well	Date	Depth to water (ft)	Water level elevation above msl (ft)	(m)
241-T Tank Farm Wells				
299-W11-27	7/26/95	226.47	458.80	139.84
	8/08/95	226.65*	458.62	139.79
	8/28/95	226.61	458.66	139.80
	9/11/95	226.91	458.36	139.71
299-W11-28	7/26/95	234.34	459.14	139.95
	8/10/95	234.30*	459.18	139.96
	8/28/95	235.69+	457.79	139.53
	9/11/95	234.99	458.49	139.75
241-TX/TY Tank Farm Wells				
299-W10-17	7/26/95	211.12	459.72	140.12
	8/07/95	211.50*	459.34	140.01
	8/28/95	211.20	459.64	140.10
	9/11/95	211.60	459.24	139.98
299-W10-18	7/26/95	210.50	460.43	140.34
	8/07/95	210.90*	460.03	140.22
	8/28/95	210.66	460.27	140.29
	9/11/95	211.15	459.78	140.14
299-W14-12	7/26/95	209.44	461.08	140.54
	8/08/95	209.78*	460.74	140.43
	8/28/95	209.77	460.75	140.44
	9/11/95	210.16	460.36	140.32
299-W15-12	7/26/95	209.54	460.53	140.37
	8/28/95	209.67	460.40	140.33
	9/11/95	210.08	459.99	140.20
299-W15-13	7/26/95	209.59	460.53	140.37
	8/28/95	209.81	460.31	140.30
	9/11/95	210.25	459.87	140.17
299-W15-22	7/26/95	208.94	461.83	140.77
	8/24/95	209.64*	461.13	140.55
	8/28/95	209.19	461.58	140.69
	9/11/95	209.65	461.12	140.55

Table 15-2. RCRA Water Level Measurement Report
Single-Shell Tanks, Third Quarter 1995.
(sheet 7 of 8)

Well	Date	Depth to water (ft)	Water level elevation above ms1	
			(ft)	(m)
241-U Tank Farm Wells				
299-W18-25	7/27/95	205.91	460.13	140.25
	7/31/95	205.86*	460.18	140.26
	8/29/95	206.09	459.95	140.19
	9/12/95	206.23	459.81	140.15
299-W18-30	7/27/95	212.34	460.50	140.36
	8/01/95	212.26*	460.58	140.38
	8/29/95	212.61	460.23	140.28
	9/12/95	212.81	460.03	140.22
299-W18-31	7/27/95	203.90	460.26	140.29
	8/01/95	202.84*+	461.32	140.61
	8/29/95	204.11	460.05	140.22
	9/12/95	204.28	459.88	140.17
299-W18-33	7/27/95	209.33	459.58	140.08
	8/15/95	209.44*	459.47	140.05
	8/29/95	209.52	459.39	140.02
	9/12/95	209.65	459.26	139.98
299-W19-1	7/27/95	216.50	457.27	139.38
299-W19-12	7/27/95	212.82	460.43	140.34
	8/29/95	213.12	460.13	140.25
	9/12/95	213.65	459.60	140.09
	9/18/95	214.68*+	458.57	139.77
299-W19-21	7/27/95	219.66	459.13	139.94
	8/15/95	219.88*	458.91	139.88
	8/29/95	219.95	458.84	139.85
	9/12/95	220.38	458.41	139.72
299-W19-27	7/27/95	224.40	459.51	140.06
	8/15/95	222.40*+	461.51	140.67
	8/29/95	224.69	459.22	139.97
	9/12/95	224.90	459.01	139.91
299-W19-31	7/27/95	213.66	460.53	140.37
	7/31/95	213.68*	460.51	140.36
	8/29/95	213.96	460.23	140.28
	9/12/95	214.17	460.02	140.21

Table 15-2. RCRA Water Level Measurement Report
Single-Shell Tanks, Third Quarter 1995.
(sheet 8 of 8)

Well	Date	Depth to water (ft)	Water level elevation above msl (ft)	(m)
241-U Tank Farm Wells				
299-W19-32	7/27/95	214.67	460.23	140.28
	8/29/95	214.93	459.97	140.20
	9/12/95	215.10	459.80	140.15
299-W19-6	7/27/95	229.85	456.75	139.22
	8/29/95	230.03	456.57	139.16
	9/12/95	230.12	456.48	139.14

- NOTES: 1. Water level elevations are calculated by subtracting the measured depth-to-water from the surveyed elevation for the well.
2. Depth-to-water values are transcribed from field records.
3. Measurements marked with an '*' were taken at the time of sampling.
4. Measurements marked with a '+' are outside of the expected range, and are suspected of error.

Table 15-3. Constituent List and Summary of Results for the Single-Shell Tank Waste Management Area A-AX Data for Reporting Period July 1 through September 30, 1995.

CONTAMINATION INDICATOR PARAMETERS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS Limit	Agency	Number of Samples		
		Full						Total	>CRQL	>DWS
CONDUCT		Conductivity, field		umhos				20	20	
TOC		Total organic carbon		ppb	140			20	20	
TOX		Total organic halogen		ppb	6.9			20	1	
PH	93	pH, field		pH		6.5-8.5	EPAS	20	20	0
PH	125	pH, lab		pH		6.5-8.5	EPAS	5	5	0

DRINKING WATER PARAMETERS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS Limit	Agency	Number of Samples		
		Full						Total	>CRQL	>DWS
ALPHA		Gross alpha		pCi/L		15	EPA	5	2	0

SITE SPECIFIC AND OTHER CONSTITUENTS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS Limit	Agency	Number of Samples		
		Full						Total	>CRQL	>DWS
BETA		Gross beta		pCi/L				5	5	
I-129		Iodine-129		pCi/L		1	EPA	5	5	5
TC-99		Technetium-99		pCi/L		900	EPA	5	5	0
TDS		Total dissolved solids		ppb		50000	EPAS	5	5	0
TRITIUM		Tritium		pCi/L		20000	EPA	5	5	0
TURBID		Turbidity		NTU				5	5	

For explanation of this table, see Section 9.4 of report.

Table 15-4. Constituents with at Least One Detected Value for the Single-Shell Tank Waste Management Area A-AX Data for Reporting Period July 1 through September 30, 1995.

Well Name	Collection Date	Sample Number	ALPHA 135/pCi/L ./15	BETA 136/pCi/L ./.	I-129 138/pCi/L ./1	TC-99 143/pCi/L ./900
299-E24-19	8/03/95	B069M7	3.79	35.30	5.56	110.00
299-E24-20	8/02/95	B069M8	.94 U	7.59	6.73	12.30
299-E25-40	8/01/95	B069P4	.46 U	13.90	7.65	14.60
299-E25-41	8/02/95	B069Q7	1.04 U	5.40	4.97	11.30
299-E25-46	8/01/95	B069R9	2.36	16.90	3.26	34.20

Well Name	Collection Date	Sample Number	TDS 65/ppb ./500000a	TRITIUM 142/pCi/L ./20000	TURBID 111/NTU ./.
299-E24-19	8/03/95	B069M7	190000.00 g	4020.00	17.60
299-E24-20	8/02/95	B069M8	170000.00	4500.00	2.18
299-E25-40	8/01/95	B069P4	200000.00	6420.00	2.27
299-E25-41	8/02/95	B069Q7	180000.00	3440.00	2.68
299-E25-46	8/01/95	B069R9	160000.00	2320.00	1.17

For explanation of this table, see Section 1.4 of report.

Table 15-5. Contamination Indicator Parameters for
the Single-Shell Tank Waste Management Area A-AX
Data for Reporting Period July 1
through September 30, 1995.

Well Name	Collection Date	Sample Number	COND FIELD uMho 1/.	COND LAB uMho 1/.	pH FIELD .01/6.5-8.5s	pH LAB .01/6.5-8.5s	TOC ppb */.	TOX ppb */.
299-E24-19	8/03/95	B0G9M7	277		6.87 F	7.50	400 L	6.9 U
		B0G9M8	200		6.84 F		400 L	6.9 U
		B0G9M9	200		6.85 F		400 L	6.9 U
		B0G9M0	278		6.86 F		300 L	20.0
299-E24-20	8/02/95	B0G9M8	269		7.94	8.20	400 L	6.9 U
		B0G9M9	270		7.94		400 L	6.9 U
		B0G9P0	270		7.94		300 L	6.9 U
		B0G9P1	271		7.92		400 L	6.9 U
299-E25-40	8/01/95	B0G9P4	349		8.10	8.10	300 L	6.9 U
		B0G9P5	338		8.11		400 L	6.9 U
		B0G9P6	333		8.12		500 L	6.9 U
		B0G9P7	332		8.11		400 L	6.9 U
299-E25-41	8/02/95	B0G9P7	300		7.99	8.20	300 L	6.9 U
		B0G9P8	298		7.99		300 L	6.9 U
		B0G9P9	297		7.99		300 L	6.9 U
		B0G9R0	298		7.99		400 L	6.9 U
299-E25-46	8/01/95	B0G9R9	271		7.28	7.40	300 L	6.9 U
		B0G9S0	273		7.30		400 L	6.9 U
		B0G9S1	273		7.30		400 L	6.9 U
		B0G9S2	273		7.30		400 L	6.9 U

* Detection limits for TOC and TOX vary depending on the performing laboratory.
for explanation of this table, see Section 1.4 of report.

Table 15-6. Constituent List and Summary of Results for the Single-Shell Tank Waste Management Area B-BY-BX Data for Reporting Period July 1 through September 30, 1995.

CONTAMINATION INDICATOR PARAMETERS

Short	(Method)	Constituent Name		Units	Lab	DWS		Number of Samples		
		Full				CRQL	Limit Agency	Total	>CRQL	>DWS
CONDUCT		Conductivity, field	umhos					28	28	
TOC		Total organic carbon	ppb		140			28	28	
TOX		Total organic halogen	ppb		6.9			28	2	
PH	93	pH, field	pH			6.5-8.5	EPAS	28	28	0
PH	125	pH, lab	pH			6.5-8.5	EPAS	7	7	0

DRINKING WATER PARAMETERS

Short	(Method)	Constituent Name		Units	Lab	DWS		Number of Samples		
		Full				CRQL	Limit Agency	Total	>CRQL	>DWS
ALPHA		Gross alpha	pCi/L				15 EPA	7	5	0

SITE SPECIFIC AND OTHER CONSTITUENTS

Short	(Method)	Constituent Name		Units	Lab	DWS		Number of Samples		
		Full				CRQL	Limit Agency	Total	>CRQL	>DWS
BETA		Gross beta	pCi/L					7	7	
I-129		Iodine-129	pCi/L				1 EPA	7	7	7
Tc-99		Technetium-99	pCi/L				900 EPA	7	7	1
TDS		Total dissolved solids	ppb			500000	EPAS	7	7	0
TRITIUM		Tritium	pCi/L			20000	EPA	7	7	0
TURBID		Turbidity	NTU					7	7	

For explanation of this table, see Section 1.4 of report.

Table 15-7. Constituents with at Least One Detected Value for the Single-Shell Tank Waste Management Area B-BY-BX Data for Reporting Period July 1 through September 30, 1995.

Well Name	Collection Date	Sample Number	ALPHA 135/pCi/L ./15	BETA 136/pCi/L ./.	I-129 138/pCi/L ./1	TC-99 143/pCi/L ./900
299-E33-31	8/04/95	B06809	2.32	76.60	7.59	233.00
299-E33-32	8/02/95	B06823	1.76	46.10	3.86	171.00
299-E33-33	8/01/95	B06827	1.77	7.14	5.85	3.01
299-E33-36	8/01/95	B06836	.88 U	5.81	5.65	4.32
299-E33-41	8/04/95	B06840	3.82	356.00	5.95	1630.00
299-E33-42	8/03/95	B06849	2.75	50.00	8.68	231.00
299-E33-43	8/03/95	B06872	1.11 U	16.00	3.61	55.50

Well Name	Collection Date	Sample Number	TDS 65/ppb ./500000u	TRETIUM 142/pCi/L ./20000	TURBID 111/NTU ./.
299-E33-31	8/04/95	B06809	460000.00 qf	1800.00	3.22
299-E33-32	8/02/95	B06823	220000.00	1600.00	.64
299-E33-33	8/01/95	B06827	190000.00	3370.00	.62
299-E33-36	8/01/95	B06836	170000.00	2050.00	1.32
299-E33-41	8/04/95	B06840	240000.00 q	2070.00	3.51
299-E33-42	8/03/95	B06849	200000.00 q	1870.00	.88
299-E33-43	8/03/95	B06872	210000.00 q	1340.00	1.38

For explanation of this table, see Section 1.4 of report.

Table 15-8. Contamination Indicator Parameters for the
Single-Shell Tank Waste Management Area B-BY-BX
Data for Reporting Period July 1
through September 30, 1995.

Well Name	Collection Date	Sample Number	COND FIELD	COND LAB	pH FIELD	pH LAB	TOC	TOX
			uMho 1/.	uMho 1/.	.01/6.5-8.5a	.01/6.5-8.5a	ppb */.	ppb */.
299-E33-31	8/04/95	B0G809	316		7.93	8.10	800 L	6.9 U
		B0G810	315		7.93		900 L	6.9 U
		B0G811	316		7.93		900 L	6.9 U
		B0G812	316		7.94		800 L	6.9 U
299-E33-32	8/02/95	B0G823	364		7.86	8.10	300 L	6.9 U
		B0G824	362		7.89		300 L	6.9 U
		B0G825	362		7.89		300 L	6.9 U
		B0G826	356		7.90		200 L	6.9 U
299-E33-33	8/01/95	B0G827	295		8.21	8.10	300 L	6.9 U
		B0G828	296		8.21		200 L	6.9 U
		B0G829	296		8.21		200 L	6.9 U
		B0G830	295		8.20		300 L	6.9 U
299-E33-36	8/01/95	B0G836	266		8.39	8.20	300 L	6.9 U
		B0G837	266		8.38		300 L	6.9 U
		B0G838	266		8.37		400 L	6.9 U
		B0G839	266		8.37		300 L	6.9 U
299-E33-41	8/04/95	B0G840	283		7.93	8.10	300 L	6.9 U
		B0G841	284		7.94		300 L	6.9 U
		B0G842	291		7.94		300 L	6.9 U
		B0G843	297		7.94		300 L	6.9 U
299-E33-42	8/03/95	B0G849	309		7.99	8.10	200 L	6.9 U
		B0G850	309		8.00		200 L	6.9 U
		B0G851	310		8.00		400 L	6.9 U
		B0G852	309		7.98		400 L	6.9 U
299-E33-43	8/03/95	B0G872	326		7.90	8.10	400 L	7.0 L
		B0G873	326		7.90		400 L	6.9 U
		B0G874	326		7.90		300 L	8.0 L
		B0G875	327		7.89		300 L	6.9 U

* Detection limits for TOC and TOX vary depending on the performing laboratory.
For explanation of this table, see Section 1.4 of report.

Table 15-9. Constituent List and Summary of Results for the Single-Shell Tank Waste Management Area C Data for Reporting Period July 1 through September 30, 1995.

CONTAMINATION INDICATOR PARAMETERS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS Limit	Agency	Number of Samples		
		Full						Total	>CRQL	>DWS
CONDUCT		Conductivity, field		umhos				20	20	
TOC		Total organic carbon		ppb	140			20	20	
TOX		Total organic halogen		ppb	6.9			20	0	
PH	93	pH, field		pH		6.5-8.5	EPAS	20	20	0
PH	125	pH, lab		pH		6.5-8.5	EPAS	5	5	0

DRINKING WATER PARAMETERS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS Limit	Agency	Number of Samples		
		Full						Total	>CRQL	>DWS
ALPHA		Gross alpha		pCi/L		15	EPA	5	2	0

SITE SPECIFIC AND OTHER CONSTITUENTS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS Limit	Agency	Number of Samples		
		Full						Total	>CRQL	>DWS
BETA		Gross beta		pCi/L				5	5	
I-129		Iodine-129		pCi/L		1	EPA	5	5	5
TC-99		Technetium-99		pCi/L		900	EPA	5	5	0
TDS		Total dissolved solids		ppb		500000	EPAS	5	5	0
TRITIUM		Tritium		pCi/L		20000	EPA	5	5	0
TURBID		Turbidity		NTU				5	5	

For explanation of this table, see Section 1.4 of report.

Table 15-10. Constituents with at Least One Detected Value for the Single-Shell Tank Waste Management Area C Data for Reporting Period July 1 through September 30, 1995.

Well Name	Collection Date	Sample Number	ALPHA 135/pCi/L ./15	BETA 136/pCi/L ./.	1-129 138/pCi/L ./1	TC-99 143/pCi/L ./900
299-E27-12	8/02/95	8069T6	.99 U	7.18	3.92	4.18
299-E27-13	8/03/95	8069V5	.94 U	49.50	4.37	182.00
299-E27-14	8/02/95	8069X0	1.14 U	28.50	4.07	75.40
299-E27-15	8/02/95	8069Y3	1.46	5.87	7.09	1.36 U
299-E27-7	8/02/95	806801	1.50	8.39	3.80	.40 U

Well Name	Collection Date	Sample Number	TDS 65/ppb ./500000s	TRITIUM 142/pCi/L ./20000	TURBID 111/NTU ./.
299-E27-12	8/02/95	8069T6	170000.00	860.00	.49
299-E27-13	8/03/95	8069V5	170000.00 a	1830.00	3.16
299-E27-14	8/02/95	8069X0	230000.00	762.00	1.36
299-E27-15	8/02/95	8069Y3	220000.00	624.00	2.16
299-E27-7	8/02/95	806801	170000.00	655.00	2.13

For explanation of this table, see Section 1.4 of report.

Table 15-11: Contamination Indicator Parameters for the
Single-Shell Tank Waste Management Area C
Data for Reporting Period July 1
through September 30, 1995.

Well Name	Collection Date	Sample Number	COND FIELD	COND LAB	pH FIELD	pH LAB	TOC	TOX
			uMho 1/.	uMho 1/.	.01/6.5-8.5s	.01/6.5-8.5s	ppb %/.	ppb %/.
299-E27-12	8/02/95	80G9T6	268		8.11	8.20	300 L	6.9 U
		80G9T7	267		8.14		300 L	6.9 U
		80G9T8	267		8.12		300 L	6.9 U
		80G9T9	267		8.10		300 L	6.9 U
299-E27-13	8/03/95	80G9V5	249		8.14	8.20	300 L	6.9 U
		80G9V6	249		8.14		400 L	6.9 U
		80G9V7	250		8.14		300 L	6.9 U
		80G9V8	247		8.12		300 L	6.9 U
299-E27-14	8/02/95	80G9X0	360		8.00	8.20	300 L	6.9 U
		80G9X1	360		8.00		400 L	6.9 U
		80G9X2	360		8.00		400 L	6.9 U
		80G9X3	360		7.99		500 L	6.9 U
299-E27-15	8/02/95	80G9Y3	284		8.22	8.30	400 L	6.9 U
		80G9Y4	282		8.22		400 L	6.9 U
		80G9Y5	280		8.20		300 L	6.9 U
		80G9Y6	280		8.19		300 L	6.9 U
299-E27-7	8/02/95	80G801	272		8.16	8.10	400 L	6.9 U
		80G802	271		8.19		300 L	6.9 U
		80G803	270		8.19		400 L	6.9 U
		80G804	270		8.19		300 L	6.9 U

* Detection limits for TOC and TOX vary depending on the performing laboratory.
For explanation of this table, see Section 1.4 of report.

Table 15-12. Constituent List and Summary of Results for the
Single-Shell Tank Waste Management Area S-SX Data for
Reporting Period July 1 through September 30, 1995.

CONTAMINATION INDICATOR PARAMETERS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS		Number of Samples		
		Full				Limit	Agency	Total	>CRQL	>DWS
CONDUCT		Conductivity, field	umhos					28	28	
TOC		Total organic carbon	ppb		140			28	28	
TOX		Total organic halogen	ppb		6.9			28	4	
PH	93	pH, field	pH		6.5-8.5		EPAS	28	28	0
PH	125	pH, lab	pH		6.5-8.5		EPAS	7	7	0

DRINKING WATER PARAMETERS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS		Number of Samples		
		Full				Limit	Agency	Total	>CRQL	>DWS
ALPHA		Gross alpha	pCi/L			15	EPA	7	7	0

SITE SPECIFIC AND OTHER CONSTITUENTS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS		Number of Samples		
		Full				Limit	Agency	Total	>CRQL	>DWS
BETA		Gross beta	pCi/L					7	7	
TC-99		Technetium-99	pCi/L			900	EPA	7	7	0
TDS		Total dissolved solids	ppb			500000	EPAS	7	7	0
TRITIUM		Tritium	pCi/L			20000	EPA	7	5	2
TURBID		Turbidity	NTU					7	7	

For explanation of this table, see Section 1.4 of report.

Table 15-13. Constituents with at Least One Detected Value for the Single-Shell Tank Waste Management Area S-SX Data for Reporting Period July 1 through September 30, 1995.

Well Name	Collection Date	Sample Number	ALPHA 135/pCi/L ./15	BETA 136/pCi/L ./.	TC-99 143/pCi/L ./900	TDS 65/ppb ./500000s
299-W22-39	8/09/95	B069R1	3.47	191.00	796.00	180000.00
299-W22-44	8/09/95	B069S3	2.77	2.95	2.80	130000.00
299-W22-45	8/09/95	B069V0	4.13	4.60	8.76	240000.00
299-W22-46	8/09/95	B069W6	3.25	118.00	393.00	230000.00
299-W23-13	8/04/95	B069X9	9.14	5.80	8.61	170000.00 a
299-W23-14	8/09/95	B069Z2	9.80	14.90	29.60	210000.00
299-W23-15	8/09/95	B06805	7.15	51.90	193.00	220000.00

Well Name	Collection Date	Sample Number	TRITIUM 142/pCi/L ./20000	TURBID 111/NTU ./.
299-W22-39	8/09/95	B069R1	1630.00	7.45
299-W22-44	8/09/95	B069S3	50.70 U	6.38
299-W22-45	8/09/95	B069V0	364.00	3.37
299-W22-46	8/09/95	B069W6	4460.00	1.59
299-W23-13	8/04/95	B069X9	84.50 U	3.77
299-W23-14	8/09/95	B069Z2	137000.00	4.17
299-W23-15	8/09/95	B06805	27700.00	2.11

For explanation of this table, see Section 1.4 of report.

Table 15-14. Contamination Indicator Parameters for the
Single-Shell Tank Waste Management Area S-SX
Data for Reporting Period July 1
through September 30, 1995.

Well Name	Collection Date	Sample Number	COND FIELD uMho 1/.	COND LAB uMho 1/.	pH FIELD .01/6.5-8.5s	pH LAB .01/6.5-8.5s	TOC ppb */.	TOX ppb */.
299-W22-39	8/09/95	B069R1	258		7.99	8.00	200 L	6.9 U
		B069R2	258		7.98		300 L	6.9 U
		B069R3	258		7.98		200 L	6.9 U
		B069R4	258		7.98		200 L	6.9 U
299-W22-44	8/09/95	B069S3	198		8.02	8.10	200 L	6.9 U
		B069S4	198		8.02		200 L	6.9 U
		B069S5	198		8.03		300 L	6.9 U
		B069S6	198		8.03		200 L	6.9 U
299-W22-45	8/09/95	B069V0	259		8.11	8.10	200 L	6.9 U
		B069V1	259		8.10		300 L	6.9 U
		B069V2	258		8.09		200 L	6.9 U
		B069V3	256		8.07		300 L	6.9 U
299-W22-46	8/09/95	B069W6	246		7.96	8.00	200 L	6.9 U
		B069W7	247		7.96		200 L	6.9 U
		B069W8	247		7.96		200 L	6.9 U
		B069W9	246		7.97		200 L	6.9 U
299-W23-13	8/04/95	B069Y9	233		8.11	8.10	200 L	8.0 L
		B069Y0	231		8.10		200 L	7.0 L
		B069Y1	233		8.10		200 L	6.9 U
		B069Y2	226		8.11		200 L	6.9 U
299-W23-14	8/09/95	B069Z2	225		8.16	8.10	300 L	6.9 U
		B069Z3	225		8.16		200 L	6.9 U
		B069Z4	225		8.15		200 L	7.0 L
		B069Z5	225		8.15		200 L	10.0 L
299-W23-15	8/09/95	B06905	244		8.09	8.10	200 L	6.9 U
		B06906	245		8.09		300 L	6.9 U
		B06907	244		8.10		200 L	6.9 U
		B06908	244		8.09		200 L	6.9 U

* Detection limits for TOC and TOX vary depending on the performing laboratory.
For explanation of this table, see Section 1.4 of report.

Table 15-15. Constituent List and Summary of Results for the
Single-Shell Tank Waste Management Area T Data for
Reporting Period July 1 through September 30, 1995.
(sheet 1 of 2)

CONTAMINATION INDICATOR PARAMETERS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS		Number of Samples		
		Full				Limit	Agency	Total	>CRQL	>DWS
CONDUCT		Conductivity, field	umhos					41	41	
TOC		Total organic carbon	ppb		140			41	37	
TOX		Total organic halogen	ppb		6.9			41	34	
PH	93	pH, field	pH			6.5-8.5	EPAS	41	41	4
PH	125	pH, lab	pH			6.5-8.5	EPAS	13	13	0

DRINKING WATER PARAMETERS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS		Number of Samples		
		Full				Limit	Agency	Total	>CRQL	>DWS
FBARIUM		Barium, filtered	ppb		1.4	2000	EPA	13	13	0
FCADMIU		Cadmium, filtered	ppb		.98	5	EPA	13	3	0
FCHROMI		Chromium, filtered	ppb		3.7	100	EPA	13	12	1
FLUORID		Fluoride	ppb		52	4000	EPA	13	12	1
ALPHA		Gross alpha	pCi/L			15	EPA	13	9	0
FMERCUR		Mercury, filtered	ppb		.019	2	EPA	9	4	0
NITRATE		Nitrate	ppb		120	45000	EPA	13	13	9

GROUNDWATER QUALITY PARAMETERS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS		Number of Samples		
		Full				Limit	Agency	Total	>CRQL	>DWS
CHLORID		Chloride	ppb		110	250000	EPAS	13	12	0
FIRON		Iron, filtered	ppb		8.9	300	EPAS	13	11	1
FMANGAN		Manganese, filtered	ppb		.55	50	EPAS	13	13	1
FSODIUM		Sodium, filtered	ppb		44			13	13	
SULFATE		Sulfate	ppb		130	250000	EPAS	13	13	0

SITE SPECIFIC AND OTHER CONSTITUENTS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS		Number of Samples		
		Full				Limit	Agency	Total	>CRQL	>DWS
111-T		1,1,1-Trichloroethane	ppb		.061	200	EPA	9	1	0
112-T		1,1,2-Trichloroethane	ppb		.068	5	EPA	9	0	0
11-DIC		1,1-Dichloroethane	ppb		.047			9	0	
12-DIC		1,2-Dichloroethane	ppb		.049	.5	EPA	9	0	0
14-dben		1,4-Dichlorobenzene	ppb		.056	75	EPA	9	0	0
ALKALIN		Alkalinity	ppb		3500			13	13	
FALUMIN		Aluminum, filtered	ppb		31	200	EPAS	13	0	0
FANTIMO		Antimony, filtered	ppb		24	6	EPA	13	0	13*
BENZENE		Benzene	ppb		.059	5	EPA	9	1	0
FBERYLL		Beryllium, filtered	ppb		.63	4	EPA	13	0	0
BE-7		Beryllium-7	pCi/L					14	1	
BROMIDE		Bromide	ppb		72			13	0	
FCALCIU		Calcium, filtered	ppb		41			13	13	
TETRANE		Carbon tetrachloride	ppb		.042	5	EPA	9	9	7
CS-134		Cesium-134	pCi/L					14	0	
CS-137		Cesium-137	pCi/L			200	EPA	14	1	0
CHLFORM		Chloroform	ppb		.029			9	8	

Table 15-15. Constituent List and Summary of Results for the
Single-Shell Tank Waste Management Area T Data for
Reporting Period July 1 through September 30, 1995.
(sheet 2 of 2)

Short	(Method)	Constituent Name	Full	Units	Lab	DWS		Number of Samples		
					CRCL	Limit	Agency	Total	>CRCL	>DWS
FCOBALT		Cobalt, filtered		ppb	5.3			13	1	
CO-60		Cobalt-60		pCi/L		100	EPA	14	3	0
FCOPPER		Copper, filtered		ppb	2.1	1000	EPAS	13	1	0
ETHBENZ		Ethylbenzene		ppb	.034	700	EPA	9	1	0
EU-154		Europium-154		pCi/L				14	0	
EU-155		Europium-155		pCi/L				14	1	
BETA		Gross beta		pCi/L				13	13	
FLEAD		Lead, filtered		ppb	.88	15	EPAA	9	2	0
FMAGNES		Magnesium, filtered		ppb	26			13	13	
METHYCH		Methylene chloride		ppb	.084	5	EPA	9	2	0
FNICKEL		Nickel, filtered		ppb	11	100	EPA	13	1	1
NITRITE		Nitrite		ppb	140	4000	EPA	13	0	0
PHOSPHA		Phosphate		ppb	340			13	0	
FPOTASS		Potassium, filtered		ppb	390			13	13	
K-40		Potassium-40		pCi/L				14	10	
FSILVER		Silver, filtered		ppb	5.5	100	EPAS	13	0	0
STRONTIUM		Strontium, Filtered		ppb	.31			9	9	
TC-99		Technetium-99		pCi/L		900	EPA	11	11	0
PERCENE		Tetrachloroethene		ppb	.035	5	EPA	9	6	0
FTIN		Tin, filtered		ppb	30			13	2	
TOLUENE		Toluene		ppb	.048	1000	EPA	9	0	0
TDS		Total dissolved solids		ppb		500000	EPAS	11	11	3
TRICENE		Trichloroethene		ppb	.075	5	EPA	9	8	4
TRITIUM		tritium		pCi/L		20000	EPA	13	11	5
TURBID		Turbidity		NTU				13	13	
FVANADI		Vanadium, filtered		ppb	1.9			13	13	
VINYLIDE		Vinyl chloride		ppb	.25	2	EPA	9	0	0
XYLENE		Xylenes (total)		ppb	.083	10000	EPA	9	0	0
FZINC		Zinc, filtered		ppb	3.7	5000	EPAS	13	4	0
CIS120E		cis-1,2-Dichloroethylene		ppb	.049	70	EPA	9	0	0
TRANSCE		trans-1,2-Dichloroethylene		ppb	.045	100	EPA	9	0	0

For explanation of this table, see Section 1.4 of report.

Table 15-16. Constituents with at Least One Detected Value for the Single-Shell Tank Waste Management Area T Data for Reporting Period July 1 through September 30, 1995.
(sheet 1 of 7)

Well Name	Collection Date	Sample Number	111-T 25/ppb .061/200	ALKALIN 357/ppb 3500/.	FBARIUM 34/ppb 1.4/2000	BENZENE 25/ppb .059/5
299-W10-15	8/08/95	B089P2		160000.00		
299-W10-15	8/08/95	B089P3			63.00	
299-W10-16	8/07/95	B089P8		150000.00		
299-W10-16	8/07/95	B089P9			29.00	
299-W10-19	9/06/95	B08H19		100000.00		
299-W10-19	9/06/95	B08H23			58.00	
299-W10-19	9/06/95	B08H24	.06 U			.06 U
299-W10-20	9/06/95	B08H25	.06 U			.06 U
299-W10-20	9/06/95	B08H26		110000.00		
299-W10-20	9/06/95	B08H30			35.00	
299-W10-21	9/11/95	B08H31	.06 U			.06 U
299-W10-21	9/11/95	B08H35		90000.00		
299-W10-21	9/11/95	B08H39			49.00	
299-W11-27	8/08/95	B089R5		150000.00		
299-W11-27	8/08/95	B089R6			48.00	
299-W11-28	8/10/95	B089S7		160000.00		
299-W11-28	8/10/95	B089S8			36.00	
299-W11-31	9/13/95	B08H33	.46			.11 L
299-W11-31	9/13/95	B08H49		130000.00		
299-W11-31	9/13/95	B08H53			31.00	
299-W6-2	9/11/95	B08H47	.06 U			.06 U
299-W6-2	9/11/95	B08H73		120000.00		
299-W6-2	9/11/95	B08H79			36.00	
299-W6-4	9/14/95	B08H59	.06 U			.06 U
299-W6-4	9/14/95	B08H88		90000.00		
299-W6-4	9/14/95	B08H92			58.00	
299-W6-6	9/18/95	B08H73	.06 U			.06 U
299-W6-6	9/18/95	B08HC2		130000.00		
299-W6-6	9/18/95	B08HC6			45.00	
299-W6-8	9/21/95	B08H80	.06 U			.06 U
299-W6-8	9/21/95	B08H86		110000.00		
299-W6-8	9/21/95	B08H90			42.00	
299-W6-9	9/14/95	B08H61	.06 U			.06 U
299-W6-9	9/14/95	B08H80		120000.00		
299-W6-9	9/14/95	B08H84			33.00	

Well Name	Collection Date	Sample Number	BE-7 140/pCi/L ./.	PCADNIU 34/ppb .98/5	PCALCIU 34/ppb 41/.	TETRAHE 25/ppb .062/5
299-W10-15	8/08/95	B089P3		.98 U	35000.00	
299-W10-16	8/07/95	B089P9		.98 U	26000.00	
299-W10-19	6/12/95	B0FLM5	15.90			
299-W10-19	9/06/95	B08H19	-.68 U			
299-W10-19	9/06/95	B08H23		.98 U	63000.00	
299-W10-19	9/06/95	B08H24				870.00 D
299-W10-20	6/12/95	B0FLM9	.77 U			
299-W10-20	9/06/95	B08H25				1500.00 D
299-W10-20	9/06/95	B08H26	6.54 U			
299-W10-20	9/06/95	B08H30		1.10 L	70000.00	
299-W10-21	6/12/95	B0FLC3	-1.02 U			
299-W10-21	9/11/95	B08H31				600.00 D
299-W10-21	9/11/95	B08H35	3.52 U			
299-W10-21	9/11/95	B08H39		.98 U	67000.00	
299-W11-27	8/08/95	B089R6		.98 U	43000.00	
299-W11-28	8/10/95	B089S8		.98 U	32000.00	

Table 15-16. Constituents with at Least One Detected Value for the Single-Shell Tank Waste Management Area T Data for Reporting Period July 1 through September 30, 1995.
(sheet 2 of 7)

Well Name	Collection Date	Sample Number	BE-7 140/ppb/L ./.	FCADMIU 34/ppb .98/5	FCALCIU 34/ppb 41/.	TETRAHE 25/ppb .042/5
299-W11-31	6/12/95	BOFLX7	6.62 U			
299-W11-31	9/13/95	BOGH33				380.00 DQ
299-W11-31	9/13/95	BOGH49	3.42 U			
299-W11-31	9/13/95	BOGH53		1.80 L	61000.00	
299-W6-2	6/14/95	BOFLX9	-1.24 U			
299-W6-2	9/11/95	BOGH47				110.00 D
299-W6-2	9/11/95	BOGH75	-4.79 U			
299-W6-2	9/11/95	BOGH79		.98 U	39000.00	
299-W6-4	6/12/95	BOFLY0	-6.59 U			
299-W6-4	9/14/95	BOGH59				290.00 D
299-W6-4	9/14/95	BOGH88	3.17 U			
299-W6-4	9/14/95	BOGH92		.98 U	42000.00	
299-W6-6	9/18/95	BOGH73				.06 LQ
299-W6-6	9/18/95	BOGH66		.98 U	30000.00	
299-W6-8	9/21/95	BOGH80				.94 Q
299-W6-8	9/21/95	BOGHF0		.98 U	30000.00	
299-W6-9	6/13/95	BOFLY1	10.00 U			
299-W6-9	9/14/95	BOGH61				240.00 D
299-W6-9	9/14/95	BOGH8D	4.86 U			
299-W6-9	9/14/95	BOGH84		1.00 L	49000.00	

Well Name	Collection Date	Sample Number	CS-137 140/ppb/L ./200	CHLORID 124/ppb 110/250000s	CHLFORM 25/ppb .029/.	FCCHROMI 34/ppb 3.7/100
299-W10-15	8/08/95	BOG9P2		26000.00 D		
299-W10-15	8/08/95	BOG9P3				930.00 F
299-W10-16	8/07/95	BOG9P8		28000.00 D		
299-W10-16	8/07/95	BOG9P9				42.00 B
299-W10-19	6/12/95	BOFLW5	.21 U			
299-W10-19	9/06/95	BOGH19	.74 U	16000.00 D		
299-W10-19	9/06/95	BOGH23				16.00
299-W10-19	9/06/95	BOGH24			12.00	
299-W10-20	6/12/95	BOFLW9	-.09 U			
299-W10-20	9/06/95	BOGH25			38.00 D	
299-W10-20	9/06/95	BOGH26	.86 U	17000.00 D		
299-W10-20	9/06/95	BOGH30				13.00
299-W10-21	6/12/95	BOFLX3	-.11 U			
299-W10-21	9/11/95	BOGH31			6.60	
299-W10-21	9/11/95	BOGH35	.05 U	14000.00 D		
299-W10-21	9/11/95	BOGH39				31.00
299-W11-27	8/08/95	BOG9P5		2400.00		
299-W11-27	8/08/95	BOG9P6				11.00 L
299-W11-28	8/10/95	BOG9P7		28000.00 D		
299-W11-28	8/10/95	BOG9P8				56.00
299-W11-31	6/12/95	BOFLX7	-.06 U			
299-W11-31	9/13/95	BOGH33			5.50	
299-W11-31	9/13/95	BOGH49	.75 U	35000.00 D		
299-W11-31	9/13/95	BOGH53				42.00
299-W6-2	6/14/95	BOFLX9	.30 U			
299-W6-2	9/11/95	BOGH47			1.00	
299-W6-2	9/11/95	BOGH75	.34 U	110.00 U		
299-W6-2	9/11/95	BOGH79				23.00
299-W6-4	6/12/95	BOFLY0	-.10 U			
299-W6-4	9/14/95	BOGH59			3.30	

Table 15-16. Constituents with at Least One Detected Value for the Single-Shell Tank Waste Management Area T Data for Reporting Period July 1 through September 30, 1995.
(sheet 3 of 7)

Well Name	Collection Date	Sample Number	CS-137 140/pCi/L ./200	CMORID 124/ppb 110/250000s	CHLFORM 25/ppb .029/.	FCHROMI 34/ppb 3.7/100
299-W6-4	9/14/95	B0GH88	.46 U	9700.00 D		
299-W6-4	9/14/95	B0GH92				38.00
299-W6-6	9/18/95	B0GH73			.03 U	
299-W6-6	9/18/95	B0GHC2		5000.00		
299-W6-6	9/18/95	B0GHC6				3.70 U
299-W6-8	9/21/95	B0GH80			.25	
299-W6-8	9/21/95	B0GH06		3000.00		
299-W6-8	9/21/95	B0GHF0				4.70 L
299-W6-9	6/13/95	B0FLY1	1.13 U			
299-W6-9	9/14/95	B0GH61			2.00	
299-W6-9	9/14/95	B0GH80	1.12	6700.00		
299-W6-9	9/14/95	B0GH84				31.00

Well Name	Collection Date	Sample Number	FCOBALT 34/ppb 5.3/.	CO-60 140/pCi/L ./100	FCOPPER 34/ppb 2.1/1000s	ETHBENZ 25/ppb .034/700
299-W10-15	8/08/95	B0G9P3	9.50 L		130.00 F	
299-W10-16	8/07/95	B0G9P9	5.30 U		2.10 U	
299-W10-19	6/12/95	B0FLW5		1.16 U		
299-W10-19	9/06/95	B0GH19		.79 U		
299-W10-19	9/06/95	B0GH23	5.30 U		2.10 U	
299-W10-19	9/06/95	B0GH24				.03 U
299-W10-20	6/12/95	B0FLW9		.21 U		
299-W10-20	9/06/95	B0GH25				.03 U
299-W10-20	9/06/95	B0GH26		.96 U		
299-W10-20	9/06/95	B0GH30	5.30 U		2.10 U	
299-W10-21	6/12/95	B0FLX3		.47 U		
299-W10-21	9/11/95	B0GH31				.03 U
299-W10-21	9/11/95	B0GH35		.74 U		
299-W10-21	9/11/95	B0GH39	5.30 U		2.10 U	
299-W11-27	8/08/95	B0G9R6	5.30 U		2.10 U	
299-W11-28	8/10/95	B0G9S8	5.30 U		2.10 U	
299-W11-31	6/12/95	B0FLX7		.52 U		
299-W11-31	9/13/95	B0GH33				.08 L
299-W11-31	9/13/95	B0GH49		1.54		
299-W11-31	9/13/95	B0GH53	5.30 U		2.10 U	
299-W6-2	6/14/95	B0FLX9		.32 U		
299-W6-2	9/11/95	B0GH47				.03 U
299-W6-2	9/11/95	B0GH75		1.24 U		
299-W6-2	9/11/95	B0GH79	5.30 U		2.10 U	
299-W6-4	6/12/95	B0FLY0		1.40		
299-W6-4	9/14/95	B0GH59				.03 U
299-W6-4	9/14/95	B0GH88		1.15 U		
299-W6-4	9/14/95	B0GH92	5.30 U		2.10 U	
299-W6-6	9/18/95	B0GH73				.03 U
299-W6-6	9/18/95	B0GHC6	5.30 U		2.10 U	
299-W6-8	9/21/95	B0GH80				.03 U
299-W6-8	9/21/95	B0GHF0	5.30 U		2.10 U	
299-W6-9	6/13/95	B0FLY1		2.45		
299-W6-9	9/14/95	B0BR61				.03 U
299-W6-9	9/14/95	B0BR80		.44 U		
299-W6-9	9/14/95	B0GH84	5.30 U		2.10 U	

Table 15-16. Constituents with at Least One Detected Value for the Single-Shell Tank Waste Management Area T Data for Reporting Period July 1 through September 30, 1995.
(sheet 4 of 7)

Well Name	Collection Date	Sample Number	EU-155 140/pCi/L ./.	FLUORID 124/ppb 52/4000	ALPHA 135/pCi/L ./15	BETA 136/pCi/L ./.
299-W10-15	8/08/95	B0G9P2		4800.00	4.42	88.70
299-W10-16	8/07/95	B0G9P8		2500.00	2.30	33.80
299-W10-19	6/12/95	B0FLW5	-.19 U			
299-W10-19	9/06/95	B0GN19	-1.18 U	700.00	2.08	19.70
299-W10-20	6/12/95	B0FLW9	-1.25 U			
299-W10-20	9/06/95	B0GN26	.27 U	600.00	.62 U	18.50
299-W10-21	6/12/95	B0FLX3	2.55 U			
299-W10-21	9/11/95	B0GN35	.68 U	600.00	2.15	18.10
299-W11-27	8/08/95	B0G9R5		1100.00	2.00	32.20
299-W11-28	8/10/95	B0G9S7		3400.00	2.91 U	57.80
299-W11-31	6/12/95	B0FLX7	4.32			
299-W11-31	9/13/95	B0GN49	-.78 U	1200.00	1.33 U	93.70
299-W6-2	6/14/95	B0PLX9	.32 U			
299-W6-2	9/11/95	B0GN75	2.61 U	52.00 U	.89 U	10.60
299-W6-4	6/12/95	B0FLY0	.51 U			
299-W6-4	9/14/95	B0GN88	-.08 U	700.00	1.67	26.40
299-W6-6	9/18/95	B0GNC2		600.00	1.29	5.11
299-W6-8	9/21/95	B0GN06		700.00	1.33	5.62
299-W6-9	6/13/95	B0FLY1	.82 U			
299-W6-9	9/14/95	B0GN80	-2.12 U	700.00	2.43	16.50

Well Name	Collection Date	Sample Number	FIROM 34/ppb 8.9/300s	FLEAD 40/ppb .88/15s	FMAGNES 34/ppb 26/.	FMANGAN 34/ppb .55/50s
299-W10-15	8/08/95	B0G9P3	3100.00 Bq		13000.00	35.00
299-W10-16	8/07/95	B0G9P9	39.00 B		7800.00	1.70 L
299-W10-19	9/06/95	B0GN23	8.90 U	.88 UD	21000.00	1.00 BL
299-W10-20	9/06/95	B0GN30	12.00 BL	.88 UD	22000.00	3.80 BL
299-W10-21	9/11/95	B0GN39	8.90 U	.88 UD	23000.00	1.40 BL
299-W11-27	8/08/95	B0G9R6	38.00 Bq		15000.00	1.00 L
299-W11-28	8/10/95	B0G9S8	93.00 Bq		11000.00	8.90 L
299-W11-31	9/13/95	B0GN53	36.00	1.20 LH	21000.00	15.00 B
299-W6-2	9/11/95	B0GN79	13.00 BL	.88 UD	16000.00	.93 BL
299-W6-4	9/14/95	B0GN92	72.00	.88 LH	25000.00	1.30 BL
299-W6-6	9/18/95	B0GNC6	26.00 L	1.10 LH	12000.00	62.00
299-W6-8	9/21/95	B0GNF0	20.00 L	.88 LH	11000.00	2.40 L
299-W6-9	9/14/95	B0GN84	24.00 L	.88 LH	18000.00	2.20 BL

Table 15-16. Constituents with at Least One Detected Value for the Single-Shell Tank Waste Management Area T Data for Reporting Period July 1 through September 30, 1995. (sheet 5 of 7)

Well Name	Collection Date	Sample Number	FMERCU 41/ppb .019/2	METHYCK 25/ppb .084/5	FMICKEL 34/ppb 11/100	NITRATE 124/ppb 120/45000
299-U10-15	8/08/95	B0G9P2				280000.00 D
299-U10-15	8/08/95	B0G9P3			500.00 F	
299-U10-16	8/07/95	B0G9P8				130000.00 D
299-U10-16	8/07/95	B0G9P9			11.00 U	
299-U10-19	9/06/95	B0GH19				130000.00 D
299-U10-19	9/06/95	B0GH23	.02 U		11.00 U	
299-U10-19	9/06/95	B0GH24		.08 U		
299-U10-20	9/06/95	B0GH25		.15 L		
299-U10-20	9/06/95	B0GH26				150000.00 D
299-U10-20	9/06/95	B0GH30	.02 U		11.00 U	
299-U10-21	9/11/95	B0GH31		.08 U		
299-U10-21	9/11/95	B0GH35				180000.00 D
299-U10-21	9/11/95	B0GH39	.02 UQ		11.00 U	
299-U11-27	8/08/95	B0G9R5				5900.00
299-U11-27	8/08/95	B0G9R6			11.00 U	
299-U11-28	8/10/95	B0G9R7				140000.00 D
299-U11-28	8/10/95	B0G9R8			11.00 U	
299-U11-31	9/13/95	B0GH33		.13 LQ		
299-U11-31	9/13/95	B0GH49				140000.00 D
299-U11-31	9/13/95	B0GH53	.02 UQ		11.00 U	
299-U6-2	9/11/95	B0GH47		.08 U		
299-U6-2	9/11/95	B0GH75				700.00 F
299-U6-2	9/11/95	B0GH79	.03 BLQ		11.00 U	
299-U6-4	9/14/95	B0GH59		.08 U		
299-U6-4	9/14/95	B0GH88				100000.00 D
299-U6-4	9/14/95	B0GH92	.13 BLQ		11.00 U	
299-U6-6	9/18/95	B0GH73		.08 UQ		
299-U6-6	9/18/95	B0GH82				680.00
299-U6-6	9/18/95	B0GH86	.03 BLQ		11.00 U	
299-U6-8	9/21/95	B0GH80		.08 UQ		
299-U6-8	9/21/95	B0GH86				11000.00 D
299-U6-8	9/21/95	B0GHF0	.02 UQ		11.00 U	
299-U6-9	9/14/95	B0GH61		.08 U		
299-U6-9	9/14/95	B0GH80				78000.00 D
299-U6-9	9/14/95	B0GH84	.05 BLQ		11.00 U	

Well Name	Collection Date	Sample Number	FPOTASS 34/ppb 390/.	K-40 140/pCi/L ./.	FSODIUM 34/ppb 44/.	FSTRONIUM 34/ppb 31/.
299-U10-15	8/08/95	B0G9P3	4800.00		160000.00 Q	
299-U10-16	8/07/95	B0G9P9	3700.00		120000.00	
299-U10-19	6/12/95	B0FLM5		68.70		
299-U10-19	9/06/95	B0GH19		45.50		
299-U10-19	9/06/95	B0GH23	4600.00		13000.00	330.00
299-U10-20	6/12/95	B0FLM9		57.60		
299-U10-20	9/06/95	B0GH26		45.60		
299-U10-20	9/06/95	B0GH30	5100.00		13000.00	290.00
299-U10-21	6/12/95	B0FLX3		62.50		
299-U10-21	9/11/95	B0GH35		5.84 U		
299-U10-21	9/11/95	B0GH39	4100.00		8800.00	330.00
299-U11-27	8/08/95	B0G9R6	4500.00		20000.00 Q	
299-U11-28	8/10/95	B0G9R8	4500.00		130000.00 Q	
299-U11-31	6/12/95	B0FLX7		33.50		
299-U11-31	9/13/95	B0GH49		52.30		
299-U11-31	9/13/95	B0GH53	5200.00		53000.00	330.00 H

Table 15-16. Constituents with at Least One Detected Value for the Single-Shell Tank Waste Management Area T Data for Reporting Period July 1 through September 30, 1995.
(sheet 6 of 7)

Well Name	Collection Date	Sample Number	FPOTASS 34/ppb 390/.	K-40 140/pCi/L ./.	FSODIUM 34/ppb 44/.	FSTRONIUM 34/ppb .31/.
299-W6-2	6/14/95	B0FLX9		19.90 U		
299-W6-2	9/11/95	B0GH75		60.30		
299-W6-2	9/11/95	B0GH79	3700.00		9500.00	230.00
299-W6-4	6/12/95	B0FLY0		64.80		
299-W6-4	9/14/95	B0GH88		5.81 U		
299-W6-4	9/14/95	B0GH92	4800.00		12000.00	270.00 M
299-W6-6	9/18/95	B0GHC6	4800.00		14000.00 M	140.00 M
299-W6-8	9/21/95	B0GHF0	3400.00		8500.00 M	160.00 M
299-W6-9	6/13/95	B0FLY1		66.10		
299-W6-9	9/14/95	B0GH80		9.26 U		
299-W6-9	9/14/95	B0GH84	3600.00		12000.00	220.00 M

Well Name	Collection Date	Sample Number	SULFATE 124/ppb 130/250000s	TC-99 143/pCi/L ./900	PERCENE 25/ppb .035/5	FTIN 34/ppb 30/.
299-W10-15	8/08/95	B0G9P2	62000.00 D	441.00		
299-W10-15	8/08/95	B0G9P3				30.00 U
299-W10-16	8/07/95	B0G9P8	56000.00 D	104.00		
299-W10-16	8/07/95	B0G9P9				30.00 U
299-W10-19	9/06/95	B0GH19	40000.00 D	70.10		
299-W10-19	9/06/95	B0GH23				30.00 U
299-W10-19	9/06/95	B0GH24			.40	
299-W10-20	9/06/95	B0GH25			.53	
299-W10-20	9/06/95	B0GH26	41000.00 D	64.30		
299-W10-20	9/06/95	B0GH30				30.00 U
299-W10-21	9/11/95	B0GH31			.23	
299-W10-21	9/11/95	B0GH35	37000.00 D	91.10		
299-W10-21	9/11/95	B0GH39				30.00 U
299-W11-27	8/08/95	B0G9S5	61000.00 D	117.00		
299-W11-27	8/08/95	B0G9R6				30.00 U
299-W11-28	8/10/95	B0G9S7	93000.00 D	305.00		
299-W11-28	8/10/95	B0G9S8				30.00 U
299-W11-31	9/13/95	B0GH33			.61	
299-W11-31	9/13/95	B0GH49	62000.00 D	290.00		
299-W11-31	9/13/95	B0GH53				30.00 U
299-W6-2	9/11/95	B0GH47			.04 U	
299-W6-2	9/11/95	B0GH75	300.00	27.20		
299-W6-2	9/11/95	B0GH79				30.00 U
299-W6-4	9/14/95	B0GH59			.08 L	
299-W6-4	9/14/95	B0GH88	40000.00 D	81.50		
299-W6-4	9/14/95	B0GH92				41.00 L
299-W6-6	9/18/95	B0GH73			.04 U	
299-W6-6	9/18/95	B0GHC2	26000.00 D			
299-W6-6	9/18/95	B0GHC6				30.00 U
299-W6-8	9/21/95	B0GH80			.04 U	
299-W6-8	9/21/95	B0GH86	18000.00 D			
299-W6-8	9/21/95	B0GHF0				30.00 U
299-W6-9	9/14/95	B0GH61			.07 L	
299-W6-9	9/14/95	B0GH80	25000.00 D	55.50		
299-W6-9	9/14/95	B0GH84				36.00 L

Table 15-16. Constituents with at Least One Detected Value for the Single-Shell Tank Waste Management Area T Data for Reporting Period July 1 through September 30, 1995.
(sheet 7 of 7)

Well Name	Collection Date	Sample Number	TDS 65/ppb ./500000s	TRICENE 25/ppb ./075/5	TRITIUM 142/pCi/L ./20000	TURBID 111/NTU ./.
299-W10-15	8/08/95	B0G9P2	760000.00 Q		33100.00	5.01
299-W10-16	8/07/95	B0G9P6	510000.00 Q		45600.00	3.18
299-W10-19	9/06/95	B0GH19	390000.00		1420.00	1.09
299-W10-19	9/06/95	B0GH24		6.40		
299-W10-20	9/06/95	B0GH25		5.60		
299-W10-20	9/06/95	B0GH26	430000.00		2160.00	9.50
299-W10-21	9/11/95	B0GH31		7.20		
299-W10-21	9/11/95	B0GH35	430000.00		1590.00	3.38
299-W11-27	8/08/95	B0G9R5	290000.00 Q		213.00 U	8.18
299-W11-28	8/10/95	B0G9R7	650000.00		57900.00	5.02
299-W11-31	9/13/95	B0GH33		14.00		
299-W11-31	9/13/95	B0GH49	480000.00		76000.00	15.70
299-W6-2	9/11/95	B0GH47		1.90		
299-W6-2	9/11/95	B0GH75	250000.00		7480.00	3.69
299-W6-4	9/14/95	B0GH59		4.50		
299-W6-4	9/14/95	B0GH88	320000.00		31300.00	16.10
299-W6-6	9/18/95	B0GH73		.08 U		
299-W6-6	9/18/95	B0GHC2			17.90 U	.74
299-W6-8	9/21/95	B0GH80		.08 L		
299-W6-8	9/21/95	B0GH06			723.00	11.30
299-W6-9	9/14/95	B0GH61		3.20		
299-W6-9	9/14/95	B0GH80	290000.00		10100.00	1.64

Well Name	Collection Date	Sample Number	FVANADI 34/ppb 1.9/.	FZINC 34/ppb 3.7/5000s
299-W10-15	8/08/95	B0G9P3	46.00	3.70 U
299-W10-16	8/07/95	B0G9P9	32.00	3.70 U
299-W10-19	9/06/95	B0GH23	16.00	3.70 U
299-W10-20	9/06/95	B0GH30	17.00	20.00
299-W10-21	9/11/95	B0GH39	25.00	3.70 U
299-W11-27	8/08/95	B0G9R6	22.00 L	3.70 U
299-W11-28	8/10/95	B0G9S8	25.00 L	3.70 U
299-W11-31	9/13/95	B0GH53	26.00	23.00 F
299-W6-2	9/11/95	B0GH79	29.00	3.70 U
299-W6-4	9/14/95	B0GH92	14.00	3.70 U
299-W6-6	9/18/95	B0GHC6	2.70 L	3.70 U
299-W6-8	9/21/95	B0GHF0	20.00	7.80 L
299-W6-9	9/14/95	B0GH84	27.00	5.30 L

For explanation of this table, see Section 1.4 of report.

Table 15-17. Contamination Indicator Parameters for the
Single-Shell Tank Waste Management Area T
Data for Reporting Period July 1
through September 30, 1995.

Well Name	Collection Date	Sample Number	COND FIELD uMho 1/.	COND LAB uMho 1/.	pH FIELD .01/6.5-8.5	pH LAB .01/6.5-8.5	TOC ppb %/.	TOX ppb %/.
299-W10-15	8/08/95	BOG992	1099		8.14	8.20	400 L	330.0 D
299-W10-16	8/07/95	BOG998	778		7.93	8.10	400 L	350.0 D
299-W10-19	9/06/95	BOGH19	593		8.17	8.00	200 L	430.0 D
		BOGH20	593		8.18		200 L	450.0 D
		BOGH21	595		8.16		300 L	450.0 D
		BOGH22	595		8.18		200 L	570.0 D
299-W10-20	6/12/95	BOFLX0	634		7.81		600 L	890.0 D
	9/06/95	BOGH26	634		7.90	7.90	200 L	750.0 D
		BOGH27	634		7.89		200 L	870.0 D
		BOGH28	633		7.92		200 L	970.0 D
		BOGH29	632		7.89		300 L	810.0 D
299-W10-21	9/11/95	BOGH33	604		7.83	7.90	300 L	220.0 D
		BOGH36	604		7.83		200 L	290.0 D
		BOGH37	607		7.83		300 L	280.0 D
		BOGH38	606		7.83		200 L	290.0 D
299-W11-27	8/08/95	BOG995	425		8.10	8.10	300 L	20.0
299-W11-28	8/10/95	BOG997	897		7.89	8.00	400 L	300.0 DP
299-W11-31	9/13/95	BOGH49	742		7.89	8.00	300 L	370.0
		BOGH50	742		7.84		300 L	360.0
		BOGH51	742		7.89		300 L	410.0
		BOGH52	742		7.88		300 L	560.0
299-W6-2	9/11/95	BOGH75	332		8.09	8.10	300 L	50.0 D
		BOGH76	339		8.08		200 L	60.0 D
		BOGH77	349		8.06		200 L	70.0 D
		BOGH78	354		8.05		140 U	70.0 D
299-W6-4	9/14/95	BOGH88	399		9.18 F	8.40	300 L	190.0
		BOGH89	403		9.15 F		400 L	180.0
		BOGH90	408		9.11 F		300 L	170.0
		BOGH91	416		9.05 F		200 L	150.0
299-W6-6	9/18/95	BOGHC2	326		7.94	7.90	140 U	6.9 U
		BOGHC3	326		7.94		200 L	6.9 U
		BOGHC4	326		7.94		140 U	6.9 U
		BOGHC5	326		7.93		140 U	6.9 U
299-W6-8	9/21/95	BOGHD6	275		8.26	8.10	400 L	20.0
		BOGHD7	275		8.26		300 L	6.9 U
		BOGHD8	275		8.26		200 L	6.9 U
		BOGHD9	275		8.27		300 L	6.9 U
299-W6-9	9/14/95	BOGHB0	435		8.09	8.00	300 L	140.0
		BOGHB1	435		8.09		300 L	130.0
		BOGHB2	435		8.05		200 L	150.0
		BOGHB3	434		8.09		300 L	130.0

* Detection Limits for TOC and TOX vary depending on the performing laboratory.
For explanation of this table, see Section 1.4 of report.

Table 15-18. Constituent List and Summary of Results for the
Single-Shell Tank Waste Management Area TX-TY Data for
Reporting Period July 1 through September 30, 1995.
(sheet 1 of 2)

CONTAMINATION INDICATOR PARAMETERS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS		Number of Samples		
		Full				Limit	Agency	Total	>CRQL	>DWS
CONDUCT		Conductivity, field	umhos					4	4	
TOC		Total organic carbon	ppb		140			4	4	
TOX		Total organic halogen	ppb		6.9			4	4	
PH	93	pH, field	pH			6.5-8.5	EPAS	4	4	0
PH	125	pH, lab	pH			6.5-8.5	EPAS	4	4	0

DRINKING WATER PARAMETERS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS		Number of Samples		
		Full				Limit	Agency	Total	>CRQL	>DWS
BARIUM		Barium, filtered	ppb		1.4	2000	EPA	4	4	0
CADMIUM		Cadmium, filtered	ppb		.98	5	EPA	4	1	0
CHROMIUM		Chromium, filtered	ppb		3.7	100	EPA	4	4	1
FLUORIDE		Fluoride	ppb		52	4000	EPA	4	4	0
ALPHA		Gross alpha	pCi/L			15	EPA	4	1	0
NITRATE		Nitrate	ppb		120	45000	EPA	4	4	4

GROUNDWATER QUALITY PARAMETERS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS		Number of Samples		
		Full				Limit	Agency	Total	>CRQL	>DWS
CHLORIDE		Chloride	ppb		110	250000	EPAS	4	4	0
FIRON		Iron, filtered	ppb		8.9	300	EPAS	4	4	0
MANGANESE		Manganese, filtered	ppb		.95	50	EPAS	4	4	0
SODIUM		Sodium, filtered	ppb		44			4	4	
SULFATE		Sulfate	ppb		130	250000	EPAS	4	4	0

SITE SPECIFIC AND OTHER CONSTITUENTS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS		Number of Samples		
		Full				Limit	Agency	Total	>CRQL	>DWS
ALKALIN		Alkalinity	ppb		3500			4	4	
ALUMINUM		Aluminum, filtered	ppb		31	200	EPAS	4	0	0
ANTIMONY		Antimony, filtered	ppb		24	6	EPA	4	0	4*
BERYLLIUM		Beryllium, filtered	ppb		.63	4	EPA	4	0	0
BE-7		Beryllium-7	pCi/L					4	1	
BROMIDE		Bromide	ppb		72			4	3	
CALCIUM		Calcium, filtered	ppb		41			4	4	
CS-134		Cesium-134	pCi/L					4	0	
CS-137		Cesium-137	pCi/L			200	EPA	4	0	0
COBALT		Cobalt, filtered	ppb		5.3			4	0	
CO-60		Cobalt-60	pCi/L			100	EPAS	4	2	0
COPPER		Copper, filtered	ppb		2.1	1000	EPAS	4	1	0
EU-154		Europium-154	pCi/L					4	0	
EU-155		Europium-155	pCi/L					4	0	
BETA		Gross beta	pCi/L					4	4	
I-129		Iodine-129	pCi/L			1	EPA	4	1	1
MAGNESIUM		Magnesium, filtered	ppb		26			4	4	
NICKEL		Nickel, filtered	ppb		11	100	EPA	4	2	0

Table 15-18. Constituent List and Summary of Results for the
Single-Shell Tank Waste Management Area TX-TY Data for
Reporting Period July 1 through September 30, 1995.
(sheet 2 of 2)

Short	(Method)	Constituent Name	Full	Units	Lab CRCL	DWS Limit	Agency	Number of Samples		
								Total	>CRCL	>DWS
NITRITE		Nitrite	ppb		140	4000	EPA	4	0	0
PHOSPHA		Phosphate	ppb		340			4	0	
FPOTASS		Potassium, filtered	ppb		390			4	4	
K-40		Potassium-40	pCi/L					4	4	
FSILVER		Silver, filtered	ppb		5.5	100	EPAS	4	0	0
FSRONTIUM		Strontium, filtered	ppb		.31			1	1	
TC-99		Technetium-99	pCi/L			900	EPA	4	4	1
FTIN		Tin, filtered	ppb		30			4	0	
TDS		Total dissolved solids	ppb			500000	EPAS	4	4	1
TRITIUM		Tritium	pCi/L			20000	EPA	4	4	3
TURBID		Turbidity	NTU					4	4	
FVANADI		Vanadium, filtered	ppb		1.9			4	4	
FZINC		Zinc, filtered	ppb		3.7	5000	EPAS	4	0	0

For explanation of this table, see Section 1.4 of report.

Table 15-19. Constituents with at Least One Detected Value for the Single-Shell Tank Waste Management Area TX-TY Data for Reporting Period July 1 through September 30, 1995.
(sheet 1 of 2)

Well Name	Collection Date	Sample Number	ALKALIN 357/ppb 3500/.	FBARILIN 34/ppb 1.4/2000	BE-7 140/ppb/L ./.	BROMIDE 124/ppb 72/.
299-W10-17	8/07/95	B06905	140000.00		11.80	300.00 L
299-W10-17	8/07/95	B06906		27.00		
299-W10-18	8/07/95	B06907	120000.00		-.76 U	100.00 L
299-W10-18	8/07/95	B06908		62.00		
299-W14-12	8/08/95	B06914	90000.00		2.36 U	72.00 DU
299-W14-12	8/08/95	B06915		93.00		
299-W15-22	8/24/95	B069V9	100000.00		10.10 U	300.00
299-W15-22	8/24/95	B069W0		64.00		

Well Name	Collection Date	Sample Number	FCADMIU 34/ppb .98/5	FCALCIU 34/ppb 41/.	CHLORID 124/ppb 110/250000s	FCIRONI 34/ppb 3.7/100
299-W10-17	8/07/95	B06905			37000.00 D	
299-W10-17	8/07/95	B06906	.98 U	23000.00		43.00 S
299-W10-18	8/07/95	B06907			36000.00 D	
299-W10-18	8/07/95	B06908	.98 U	31000.00		5.70 BL
299-W14-12	8/08/95	B06914			64000.00 D	
299-W14-12	8/08/95	B06915	.98 U	120000.00		250.00
299-W15-22	8/24/95	B069V9			35000.00 D	
299-W15-22	8/24/95	B069W0	1.30 L	64000.00		6.90 L

Well Name	Collection Date	Sample Number	CD-60 140/ppb/L ./100	FCOPPER 34/ppb 2.1/1000s	FLUORID 124/ppb 52/4000	ALPHA 135/ppb/L ./15
299-W10-17	8/07/95	B06905	-2.22 U		2000.00	1.18 U
299-W10-17	8/07/95	B06906		4.80 L		
299-W10-18	8/07/95	B06907	1.49		1500.00	1.41 U
299-W10-18	8/07/95	B06908		2.10 U		
299-W14-12	8/08/95	B06914	6.62		1000.00	2.03
299-W14-12	8/08/95	B06915		2.10 U		
299-W15-22	8/24/95	B069V9	2.46 U		700.00	.86 U
299-W15-22	8/24/95	B069W0		2.10 U		

Well Name	Collection Date	Sample Number	BETA 136/ppb/L ./.	I-129 138/ppb/L ./1	FIROM 34/ppb 8.9/300s	FMAGNES 34/ppb 26/.
299-W10-17	8/07/95	B06905	32.90	-.79 U		
299-W10-17	8/07/95	B06906			230.00 S	7600.00
299-W10-18	8/07/95	B06907	66.70	-.28 U		
299-W10-18	8/07/95	B06908			37.00 S	18000.00
299-W14-12	8/08/95	B06914	1190.00	30.40		
299-W14-12	8/08/95	B06915			40.00 SA	43000.00
299-W15-22	8/24/95	B069V9	80.00	-1.20 U		
299-W15-22	8/24/95	B069W0			22.00 BL	19000.00

Table 15-19. Constituents with at Least One Detected Value for the Single-Shell Tank Waste Management Area TX-TY Data for Reporting Period July 1 through September 30, 1995.
(sheet 2 of 2)

Well Name	Collection Date	Sample Number	FMANGAM 34/ppb .55/50s	PNICKEL 34/ppb 11/100	NITRATE 124/ppb 120/45000	FPOTASS 34/ppb 390/.
299-W10-17	8/07/95	80G905			97000.00 D	
299-W10-17	8/07/95	80G906	8.00 L	47.00		3400.00
299-W10-18	8/07/95	80G907			95000.00 D	
299-W10-18	8/07/95	80G908	1.40 L	49.00		4900.00
299-W14-12	8/08/95	80G914			350000.00 D	
299-W14-12	8/08/95	80G915	6.10 L	11.00 U		6600.00
299-W15-22	8/24/95	80G9V9			100000.00 D	
299-W15-22	8/24/95	80G9W0	.74 BL	11.00 U		5100.00

Well Name	Collection Date	Sample Number	K-40 140/pCi/L ./.	FSODIUM 34/ppb 44/.	FSRCHUM 34/ppb .31/.	SULFATE 124/ppb 130/250000s
299-W10-17	8/07/95	80G905	44.50			56000.00 D
299-W10-17	8/07/95	80G906		110000.00		
299-W10-18	8/07/95	80G907	54.30			40000.00 D
299-W10-18	8/07/95	80G908		36000.00		
299-W14-12	8/08/95	80G914	39.50			56000.00 D
299-W14-12	8/08/95	80G915		30000.00 a		
299-W15-22	8/24/95	80G9V9	49.20			44000.00 D
299-W15-22	8/24/95	80G9W0		23000.00 a	280.00	

Well Name	Collection Date	Sample Number	TC-99 143/pCi/L ./900	TDS 65/ppb ./500000s	TRITIUM 142/pCi/L ./20000	TURBID 111/NTU ./.
299-W10-17	8/07/95	80G905	122.00	470000.00 a	29900.00	2.78
299-W10-18	8/07/95	80G907	277.00	410000.00 a	10200.00	2.50
299-W14-12	8/08/95	80G914	6060.00	810000.00 a	184000.00	30.70
299-W15-22	8/24/95	80G9V9	286.00	440000.00	43200.00	19.80

Well Name	Collection Date	Sample Number	FMANADI 34/ppb 1.9/.
299-W10-17	8/07/95	80G906	54.00
299-W10-18	8/07/95	80G908	27.00 L
299-W14-12	8/08/95	80G915	14.00 L
299-W15-22	8/24/95	80G9W0	19.00

For explanation of this table, see Section 1.4 of report.

Table 15-20. Contamination Indicator Parameters for the
Single-Shell Tank Waste Management Area TX-TY
Data for Reporting Period July 1
through September 30, 1995.

Well Name	Collection Date	Sample Number	COND FIELD uMho 1/.	COND LAB uMho 1/.	pH FIELD .01/6.5-8.5e	pH LAB .01/6.5-8.5e	TOC ppb */.	TOX ppb */.
299-W10-17	8/07/95	80G905	726		8.06	8.10	300 L	330.0 D
299-W10-18	8/07/95	80G9R7	620		7.99	8.10	300 L	100.0 D
299-W14-12	8/08/95	80G9T4	1213		7.68	7.80	400 L	170.0
299-W15-22	8/24/95	80G9V9	622		8.02	7.90	300 L	550.0 D

* Detection limits for TOC and TOX vary depending on the performing laboratory.
For explanation of this table, see Section 1.4 of report.

Table 15-21. Constituent List and Summary of Results for the
Single-Shell Tank Waste Management Area U Data for
Reporting Period July 1 through September 30, 1995.
(sheet 1 of 2)

CONTAMINATION INDICATOR PARAMETERS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS Limit	Agency	Number of Samples		
		Full						Total	>CRQL	>DWS
CONDUCT		Conductivity, field	umhos					20	20	
TOC		Total organic carbon	ppb	140				24	24	
TOX		Total organic halogen	ppb	6.9				24	24	
PH	93	pH, field	pH		6.5-8.5	EPAS		20	20	0
PH	125	pH, lab	pH		6.5-8.5	EPAS		6	6	0

DRINKING WATER PARAMETERS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS Limit	Agency	Number of Samples		
		Full						Total	>CRQL	>DWS
ARSENIC		Arsenic, filtered	ppb	2	50	EPAS		1	0	0
BARIUM		Barium, filtered	ppb	1.4	2000	EPAS		1	1	0
CADMIUM		Cadmium, filtered	ppb	.98	5	EPAS		1	0	0
CHROMIUM		Chromium, filtered	ppb	3.7	100	EPAS		1	1	0
FLUORIDE		Fluoride	ppb	52	4000	EPAS		1	1	0
ALPHA		Gross alpha	pCi/L		15	EPAS		6	6	0
NITRATE		Nitrate	ppb	120	45000	EPAS		1	1	0

GROUNDWATER QUALITY PARAMETERS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS Limit	Agency	Number of Samples		
		Full						Total	>CRQL	>DWS
CHLORIDE		Chloride	ppb	110	250000	EPAS		1	1	0
IRON		Iron, filtered	ppb	8.9	300	EPAS		1	1	0
MANGANESE		Manganese, filtered	ppb	.55	50	EPAS		1	1	0
SODIUM		Sodium, filtered	ppb	44				1	1	
SULFATE		Sulfate	ppb	130	250000	EPAS		1	1	0

SITE SPECIFIC AND OTHER CONSTITUENTS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS Limit	Agency	Number of Samples		
		Full						Total	>CRQL	>DWS
ALUMINUM		Aluminum, filtered	ppb	31	200	EPAS		1	0	0
ANTIMONY		Antimony, filtered	ppb	24	6	EPAS		1	0	1*
BERYLLIUM		Beryllium, filtered	ppb	.63	4	EPAS		1	0	0
BROMIDE		Bromide	ppb	72				1	0	
CALCIUM		Calcium, filtered	ppb	41				1	1	
COBALT		Cobalt, filtered	ppb	5.3				1	0	
COPPER		Copper, filtered	ppb	2.1	1000	EPAS		1	0	0
BETA		Gross beta	pCi/L					6	5	
MAGNESIUM		Magnesium, filtered	ppb	26				1	1	
NICKEL		Nickel, filtered	ppb	11	100	EPAS		1	1	0
NITRITE		Nitrite	ppb	140	4000	EPAS		1	0	0
PHOSPHATE		Phosphate	ppb	340				1	0	
POTASSIUM		Potassium, filtered	ppb	390				1	1	
SILVER		Silver, filtered	ppb	5.5	100	EPAS		1	0	0
TC-99		Technetium-99	pCi/L		900	EPAS		6	5	0
TIN		Tin, filtered	ppb	30				1	0	
TDS		Total dissolved solids	ppb		500000	EPAS		6	6	0
TRITIUM		Tritium	pCi/L		20000	EPAS		6	2	0
TURBIDITY		Turbidity	NTU					5	5	

Table 15-21. Constituent List and Summary of Results for the
Single-Shell Tank Waste Management Area U Data for
Reporting Period July 1 through September 30, 1995.
(sheet 2 of 2)

Short	(Method)	Constituent Name		Units	Lab CRQL	DMS Limit	Agency	Number of Samples		
		Full						Total	>CRQL	>DMS
URANIUM			Uranium	ppb				1	1	
VRANADI			Vanadium, filtered	ppb	1.9			1	1	
FZINC			Zinc, filtered	ppb	3.7	5000	EPAS	1	1	0

For explanation of this table, see Section 1.4 of report.

Table 15-22. Constituents with at Least One Detected Value for the Single-Shell Tank Waste Management Area U Data for Reporting Period July 1 through September 30, 1995.
(sheet 1 of 2)

Well Name	Collection Date	Sample Number	FBARIUM 34/ppb 1.4/2000	FCALCIU 34/ppb 41/.	CHLORID 124/ppb 110/250000s	FCIRONI 34/ppb 3.7/100
299-W19-32	7/31/95	B069J4			24000.00 D	
299-W19-32	7/31/95	B069J8	62.00	40000.00		5.70 8L

Well Name	Collection Date	Sample Number	FLUORID 124/ppb 52/4000	ALPHA 135/pCi/L ./15	BETA 136/pCi/L ./.	FIROM 34/ppb 8.9/3006
299-W18-25	7/31/95	B069G8		1.13	3.24	
299-W18-25	7/31/95	B069H6		2.29	4.28	
299-W18-30	8/01/95	B069H2		1.57	1.51 U	
299-W18-31	8/01/95	B069J0		5.96	5.89	
299-W19-31	7/31/95	B069K4		2.12	13.00	
299-W19-32	7/31/95	B069J4	800.00	6.53	20.50	
299-W19-32	7/31/95	B069J8				160.00 B

Well Name	Collection Date	Sample Number	FMAGNES 34/ppb 26/.	FMANGAN 34/ppb .55/50s	FNICKEL 34/ppb 11/100	NITRATE 124/ppb 120/45000
299-W19-32	7/31/95	B069J4				1700.00
299-W19-32	7/31/95	B069J8	12000.00	47.00	83.00	

Well Name	Collection Date	Sample Number	FPOTASS 34/ppb 390/.	FSODIUM 34/ppb 44/.	SULFATE 124/ppb 130/250000s	TC-99 143/pCi/L ./900
299-W18-25	7/31/95	B069G8				3.09
299-W18-25	7/31/95	B069H6				2.94
299-W18-30	8/01/95	B069H2				3.63
299-W18-31	8/01/95	B069J0				-.44 U
299-W19-31	7/31/95	B069K4				45.50
299-W19-32	7/31/95	B069J4			25000.00 D	50.90
299-W19-32	7/31/95	B069J8	4900.00	20000.00		

Well Name	Collection Date	Sample Number	TGS 65/ppb ./500000s	TRITIUM 142/pCi/L ./20000	TURBID 111/NTU ./.	URANIUM 145/ppb ./.
299-W18-25	7/31/95	B069G8	200000.00	-57.40 U	2.12	
299-W18-25	7/31/95	B069H6	200000.00	415.00		
299-W18-30	8/01/95	B069H2	170000.00	345.00	3.80	
299-W18-31	8/01/95	B069J0	220000.00	-29.20 U	1.44	
299-W19-31	7/31/95	B069K4	190000.00	114.00 U	5.64	
299-W19-32	7/31/95	B069J4	240000.00	15.90 U	15.60	7.49

Table 15-22. Constituents with at Least One Detected Value for the
Single-Shell Tank Waste Management Area U Data for
Reporting Period July 1 through September 30, 1995.
(sheet 2 of 2)

Well Name	Collection Date	Sample Number	FVANAD1 34/ppb 1.9/.	FZINC 34/ppb 3.7/5000s
299-W19-32	7/31/95	806918	11.00 L	100.00 B

For explanation of this table, see Section 1.4 of report.

Table 15-23. Contamination Indicator Parameters for the
Single-Shell Tank Waste Management Area U
Data for Reporting Period July 1
through September 30, 1995.

Well Name	Collection Date	Sample Number	COND FIELD uMho 1/.	COND LAB uMho 1/.	pH FIELD .01/6.5-8.5a	pH LAB .01/6.5-8.5a	TOC ppb */.	TOX ppb */.
299-W18-25	7/31/95	B06908	302		7.97	8.00	300 L	60.0
		B06909	303		7.97		200 L	80.0
		B06910	303		7.97		300 L	80.0
		B06911	303		7.96		200 L	80.0
		B06916				8.00	200 L	70.0
		B06917					300 L	80.0
		B06918					200 L	80.0
		B06919					200 L	90.0
		B06912	246		8.08	8.10	300 L	200.0
299-W18-30	8/01/95	B06913	246		8.08		300 L	190.0
		B06914	246		8.08		300 L	200.0
		B06915	247		8.06		300 L	180.0
299-W18-31	8/01/95	B06910	377		7.97	8.00	400 L	90.0
		B06911	371		8.00		300 L	100.0
		B06912	370		8.00		300 L	100.0
		B06913	369		8.00		500 L	80.0
299-W19-31	7/31/95	B06914	310		8.39	8.20	400 L	180.0
		B06915	310		8.41		300 L	170.0
		B06916	310		8.38		300 L	200.0
		B06917	310		8.35		400 L	180.0
		B06914	395		8.12	7.90	300 L	30.0
299-W19-32	7/31/95	B06915	395		8.10		300 L	30.0
		B06916	395		8.10		400 L	30.0
		B06917	394		8.10		300 L	30.0

* Detection limits for TOC and TOX vary depending on the performing laboratory.
For explanation of this table, see Section 1.4 of report.

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16.0 300 AREA PROCESS TRENCHES

J. W. Lindberg
Westinghouse Hanford Company

16.1 INTRODUCTION

The groundwater near the 300 Area Process Trenches (APTs) (316-5) has been monitored by a RCRA well network since June 1985. The groundwater monitoring is being conducted under interim-status regulations (40 CFR 265) and is an assessment-level program (Schalla 1988). A revised groundwater monitoring plan has been prepared (Lindberg 1995). The revised plan will take effect later this year when the facility goes into a compliance monitoring program under final status.

The 300 APTs are located in the northern portion of the 300 Area and were used for the disposal of wastewater from various 300 Area operations. Administrative isolation of the trenches has been completed and all discharges to the trenches have been terminated. Complete physical isolation of the trenches occurred in January 1995. Just before the trenches were taken out of use, the wastewater primarily consisted of cooling water, with small quantities of nonhazardous maintenance and process waste.

Monitoring wells were constructed in response to a *Consent Agreement and Compliance Order* (Ecology and EPA 1986). Locations of groundwater wells currently used to monitor the facility are shown in Figure 16-1. Table 16-1 lists the wells of the monitoring network and provides information about their relative location, the portion of the aquifer sampled, sampling frequency, and last sampling date. Nine of the 11 wells in the monitoring network are RCRA-standard wells; the other two are older, noncompliant wells.

16.2 WATER LEVEL MEASUREMENTS

Water levels are measured quarterly and at the time of sampling in selected 300 Area wells. Water level measurements obtained during the third quarter of 1995 are presented in Table 16-2.

16.3 WATER CHEMISTRY DATA

Water chemistry samples are collected semiannually from all but one of the 300 APT monitoring wells. The last sampling took place during the second quarter, so no data were obtained from these wells for the third quarter. (See Table 16-1 for the sampling schedule.) Samples are collected four times per year from well 399-1-17A to provide near-trench monitoring of contaminants. However, this well was sampled on October 5, 1995, which was beyond the cut-off of the third quarter reporting period, so no data are reported for this well.

Figure 16-1. Monitoring Well Location Map for the 300 Area Process Trenches.

- 1-12 Well Location and Number (Wells Prefixed by 399-, Except Those Beginning with S are Prefixed with 699-)
- 4-7 Monitoring Network Well
- △ SWS-1 Surface-Water Monitoring Station
- Roads

**Table 16-1. Monitoring Well Purpose and Sampling Schedule
for the 300 Area Process Trenches Network.**

Well no. (399-)	Relative position	Hydrogeologic unit	Sample frequency	Last sampling date(s)
1-10A	Downgradient	Hanford/Ringold: Water Table	Semiannually	06/01/95
1-11	Adjacent	Hanford/Ringold: Water Table	Semiannually	06/05/95
1-12	Downgradient	Hanford/Ringold: Water Table	Semiannually	06/01/95
1-14A	Adjacent	Hanford: Water Table	Semiannually	06/01/95
1-16A	Downgradient	Ringold: Water Table	Semiannually	06/01/95
1-16B	Downgradient	Ringold: Bottom of Unconfined Aquifer	Semiannually	06/02/95
1-17A	Downgradient	Ringold: Water Table	Four Times Per Year	04/05/95 06/01/95 10/05/95
1-17B	Downgradient	Ringold: Bottom of Unconfined Aquifer	Semiannually	06/02/95
1-18A	Upgradient	Ringold: Water Table	Semiannually	06/01/95
2-1 ^a	Downgradient	Hanford/Ringold: Water Table	Semiannually	06/01/95
3-10 ^a	Downgradient	Hanford: Water Table	Semiannually	06/05/95

Note: Hydrogeologic units include the sandy gravels of the Hanford formation and silty sands of the Ringold Formation. Water levels are measured in all wells monthly.

^aWells 399-2-1 and 399-3-10 are not RCRA standard wells. The results are used as a supplemental source of data only.

Table 16-2. RCRA Water Level Measurement Report
 300 Area Process Trenches, Third Quarter 1995.
 (sheet 1 of 3)

Well	Date	Depth to water (ft)	Water level elevation above msl (ft)	(m)
Wells Monitoring the Top of the Unconfined Aquifer				
399-1-1	9/05/95	35.95	340.71	103.85
399-1-10A	9/05/95	32.86	340.79	103.87
399-1-11	9/05/95	36.34	341.38	104.05
399-1-12	9/05/95	43.44	340.97	103.93
399-1-14A	9/05/95	41.40	341.83	104.19
399-1-15	9/05/95	37.69	341.84	104.19
399-1-16A	9/05/95	40.91	340.56	103.80
399-1-17A	9/05/95	36.62	340.82	103.88
399-1-18A	9/05/95	48.30	342.53	104.40
399-1-19	9/05/95	33.71	340.93	103.92
399-1-3	9/05/95	44.04	340.67	103.84
399-1-4	9/05/95	38.97	341.61	104.12
399-1-5	9/05/95	38.84	340.93	103.92
399-1-7	9/05/95	44.95	340.65	103.83
399-1-8	9/05/95	44.18	340.70	103.85
399-2-1	9/06/95	34.83	340.40	103.75
399-2-2	9/05/95	37.01	340.51	103.79
399-2-3	9/05/95	34.92	340.50	103.78
399-3-1	9/05/95	44.13	340.26	103.71
399-3-10	9/05/95	45.13	340.22	103.70

Table 16-2. RCRA Water Level Measurement Report
 300 Area Process Trenches, Third Quarter 1995.
 (sheet 2 of 3)

Well	Date	Depth to water (ft)	Water level elevation above msl (ft)	(m)
Wells Monitoring the Top of the Unconfined Aquifer				
399-3-12	9/05/95	47.25	340.79	103.87
399-3-6	9/05/95	51.96	340.84	103.89
399-3-9	9/05/95	47.81	340.27	103.71
399-4-1	9/05/95	55.32	340.28	103.72
399-4-10	9/05/95	38.50	340.04	103.64
399-4-11	9/05/95	63.93	340.52	103.79
399-4-7	9/05/95	38.55	340.01	103.64
399-5-1	9/05/95	54.37	341.16	103.99
399-6-1	9/05/95	47.13	341.66	104.14
399-8-1	9/05/95	54.63	341.50	104.09
399-8-2	9/05/95	55.33	342.69	104.45
399-8-3	9/05/95	52.82	341.93	104.22
699-S27-E14	9/05/95	61.81	337.87	102.98
Wells Monitoring the Bottom of the Unconfined Aquifer				
399-1-16B	9/05/95	40.39	340.75	103.86
399-1-17B	9/05/95	36.72	341.08	103.96
399-1-18B	9/05/95	47.19	342.70	104.45

Table 16-2. RCRA Water Level Measurement Report
 300 Area Process Trenches, Third Quarter 1995.
 (sheet 3 of 3)

Well	Date	Depth to water (ft)	Water level, elevation above msl (ft)	(m)
Wells Monitoring the Confined Aquifer				
399-1-17C	9/05/95	4.76	373.30	113.78
399-1-18C	9/05/95	44.65	343.36	104.66
399-1-9	9/05/95	27.58	357.18	108.87

- NOTES:
1. Water level elevations are calculated by subtracting the measured depth-to-water from the surveyed elevation for the well.
 2. Depth-to-water values are transcribed from field records.
 3. Measurements marked with an '*' were taken at the time of sampling.
 4. Measurements marked with a '+' are outside of the expected range, and are suspected of error.

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17.0 NONRADIOACTIVE DANGEROUS WASTE LANDFILL

F. N. Hodges
Westinghouse Hanford Company

17.1 INTRODUCTION

The Nonradioactive Dangerous Waste Landfill (NRDWL) is part of the Hanford Central Landfill. The NRDWL is located approximately 5.6 km (3.5 mi) southeast of the 200 East Area. The NRDWL, covered under the *Consent Agreement and Compliance Order* (Ecology and EPA 1986), is currently under an interim-status, detection-level groundwater monitoring program (MHC 1993c). The groundwater monitoring network consists of three upgradient wells and six downgradient wells (Table 17-1). Two upgradient and five downgradient wells are screened at the top of the water table. One upgradient and one downgradient well are screened at the top of a low-permeability unit, approximately 21.3 m (70 ft) below the top of the water table. Figure 17-1 shows well locations. It should be noted that well 699-26-34A on Figure 17-1 was previously named 699-26-34.

17.2 WATER LEVEL DATA

Water level measurements were carried out on a monthly schedule for nine NRDWL monitoring wells, the nine monitoring wells of the adjacent Solid Waste Landfill, and in several nearby non-RCRA wells. Results of the water level measurements are reported in Table 17-2.

17.3 WATER CHEMISTRY DATA

The monitoring network for the NRDWL is on a semiannual sampling schedule. The network was sampled during August 1995 and results from that sampling are included in this report. The next scheduled sampling for the NRDWL network is in February 1996. This report contains water level and groundwater chemistry data for the third quarter of CY 1995. The results are reported in Tables 17-3 and 17-4.

Values for specific conductance, field pH, TOC, and TOX reported for this quarter do not exceed the critical means for this site.

Figure 17-1. Well Location Map for the Nonradioactive Dangerous Waste Landfill and Solid Waste Landfill.

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Table 17-1. Monitoring Well Purpose and Sampling Schedule for the Nonradioactive Dangerous Waste Landfill Network.

Well no. (699-)	Relative position	Hydrogeologic unit	Sample frequency	Sample date, 3rd Qtr 1995
26-34A	Upgradient	Hanford: Water Table	Semiannually	8/10/95
26-35A	Upgradient	Hanford: Water Table	Semiannually ¹	8/11/95
26-35C	Upgradient	Top of Ringold	Semiannually	8/11/95
25-33A	Downgradient	Top of Ringold	Semiannually	8/14/95
25-34A	Downgradient	Hanford: Water Table	Semiannually	8/11/95
25-34B	Downgradient	Hanford: Water Table	Semiannually	8/11/95
25-34D	Downgradient	Hanford: Water Table	Semiannually	8/15/95
26-33	Downgradient	Hanford: Water Table	Semiannually	8/10/95
26-34B	Downgradient	Hanford: Water Table	Semiannually	8/10/95

Note: Hydrogeologic units include the sandy gravels of the Hanford formation and silty sands of the Ringold Formation. Water levels are measured monthly in all wells.

1. Also sampled as part of the network for the Solid Waste Landfill.

Table 17-2. RCRA Water Level Measurement Report
NRDWL, Third Quarter 1995.
(sheet 1 of 3)

Well	Date	Depth to water (ft)	Water level elevation above msl (ft)	(m)
NRDWL Wells Monitoring the Top of the Unconfined Aquifer at the Water Table				
699-25-34A	7/21/95	129.74	400.57	122.09
	8/11/95	129.22*	401.09	122.25
	8/30/95	130.11	400.20	121.98
	9/22/95	130.20	400.11	121.95
699-25-34B	7/21/95	128.59	400.81	122.17
	8/11/95	129.33*	400.07	121.94
	8/30/95	128.50	400.90	122.19
	9/22/95	128.54	400.86	122.18
699-25-34D	7/21/95	136.99	400.92	122.20
	8/15/95	137.05*	400.86	122.18
	8/30/95	136.91	401.00	122.22
	9/22/95	136.99	400.92	122.20
699-26-33	7/21/95	134.94	400.72	122.14
	8/10/95	134.63*	401.03	122.23
	8/30/95	134.92	400.74	122.15
	9/22/95	135.04	400.62	122.11
699-26-34A	7/21/95	127.59	400.81	122.17
	8/10/95	121.26*	407.14	124.10
	8/30/95	127.90	400.50	122.07
	9/22/95	127.67	400.73	122.14
699-26-34B	7/21/95	129.34	400.93	122.20
	8/10/95	129.40*	400.87	122.19
	8/30/95	129.25	401.02	122.23
	9/22/95	129.42	400.85	122.18
699-26-35A	7/21/95	131.80	400.86	122.18
	8/11/95	131.30*	401.36	122.33
	8/30/95	131.81	400.85	122.18
	9/22/95	131.98	400.68	122.13
NRDWL Wells Monitoring the Upper Ringold				
699-25-33A	7/21/95	128.13	400.84	122.18
	8/14/95	128.28*	400.69	122.13
	8/30/95	128.05	400.92	122.20
	9/22/95	128.09	400.88	122.19

Table 17-2. RCRA Water Level Measurement Report
NRDWL, Third Quarter 1995.
(sheet 2 of 3)

Well	Date	Depth to water (ft)	Water level elevation above msl (ft)	(m)
NRDWL Wells Monitoring the Upper Ringold				
699-26-35C	7/21/95	131.77	400.91	122.20
	8/11/95	131.10*	401.58	122.40
	8/30/95	131.69	400.99	122.22
	9/22/95	131.83	400.85	122.18
Other Wells Associated with NRDWL				
699-20-20	7/21/95	106.35	399.23	121.69
	8/30/95	106.27	399.31	121.71
	9/22/95	106.31	399.27	121.70
699-20-39	7/21/95	138.81	401.17	122.28
	8/30/95	138.77	401.21	122.29
	9/22/95	138.69	401.29	122.31
699-22-35	7/21/95	133.15	400.82	122.17
	8/14/95	133.20*	400.77	122.15
	8/30/95	133.06	400.91	122.20
	9/22/95	133.15	400.82	122.17
699-23-34A	7/21/95	131.99	400.87	122.19
	8/14/95	132.04*	400.82	122.17
	8/30/95	131.90	400.96	122.21
	9/22/95	131.95	400.91	122.20
699-23-34B	7/21/95	132.66	400.84	122.18
	8/14/95	132.53*	400.97	122.22
	8/30/95	132.57	400.93	122.20
699-24-33	7/21/95	123.39	400.88	122.19
	8/14/95	123.33*	400.94	122.21
	8/30/95	123.30	400.97	122.22
	9/22/95	123.37	400.90	122.19
699-24-34A	7/21/95	133.02	400.86	122.18
	8/14/95	132.89*	400.99	122.22
	8/30/95	132.93	400.95	122.21
	9/22/95	132.99	400.89	122.19

Table 17-2. RCRA Water Level Measurement Report
NRDWL, Third Quarter 1995.
(sheet 3 of 3)

Well	Date	Depth to water (ft)	Water level elevation above msl	
			(ft)	(m)
Other Wells Associated with NRDWL				
699-24-34B	7/21/95	132.61	400.89	122.19
	8/15/95	132.66*	400.84	122.18
	8/30/95	132.52	400.98	122.22
	9/22/95	132.57	400.93	122.20
699-24-34C	7/21/95	131.71	400.88	122.19
	8/14/95	131.59*	401.00	122.22
	8/30/95	131.63	400.96	122.21
	9/22/95	131.69	400.90	122.19
699-24-35	7/21/95	137.92	400.89	122.19
	8/11/95	137.99*	400.82	122.17
	8/30/95	137.82	400.99	122.22
	9/22/95	137.99	400.82	122.17
699-25-34C	7/21/95	134.58	400.88	122.19
	8/14/95	134.65*	400.81	122.17
	8/30/95	134.50	400.96	122.21
	9/22/95	134.58	400.88	122.19
699-28-40	7/21/95	158.19	401.25	122.30
	8/30/95	158.18	401.26	122.30
	9/22/95	158.20	401.24	122.30
699-31-31	7/21/95	128.52	400.80	122.16
	8/30/95	128.43	400.89	122.19
	9/22/95	128.51	400.81	122.17
699-34-39A	7/21/95	135.69	401.38	122.34
	8/30/95	135.71	401.36	122.33
	9/22/95	135.75	401.32	122.32

- NOTES: 1. Water level elevations are calculated by subtracting the measured depth-to-water from the surveyed elevation for the well.
2. Depth-to-water values are transcribed from field records.
3. Measurements marked with an '*' were taken at the time of sampling.
4. Measurements marked with a '+' are outside of the expected range, and are suspected of error.

Table 17-3. Constituent List and Summary of Results for the
NRDW Landfill Data for Reporting Period
July 1 through September 30, 1995.
(sheet 1 of 2)

CONTAMINATION INDICATOR PARAMETERS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS		Number of Samples		
		Full				Limit	Agency	Total	>CRQL	>DWS
CONDUCT		Conductivity, field		umhos				36	36	
TOC		Total organic carbon		ppb	140			40	25	
TOX		Total organic halogen		ppb	6.9			40	2	
PH	93	pH, field		pH		6.5-8.5	EPAS	36	36	0
PH	125	pH, lab		pH		6.5-8.5	EPAS	10	10	0

DRINKING WATER PARAMETERS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS		Number of Samples		
		Full				Limit	Agency	Total	>CRQL	>DWS
FBARIUM		Barium, filtered		ppb	1.4	2000	EPA	10	10	0
FCADMIU		Cadmium, filtered		ppb	.98	5	EPA	10	1	0
FCHROMI		Chromium, filtered		ppb	3.7	100	EPA	10	9	0
FLUORID		Fluoride		ppb	52	4000	EPA	10	10	0
ALPHA		Gross alpha		pCi/L		15	EPA	10	9	0
NITRATE		Nitrate		ppb	120	45000	EPA	10	10	0

GROUNDWATER QUALITY PARAMETERS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS		Number of Samples		
		Full				Limit	Agency	Total	>CRQL	>DWS
CHLORID		Chloride		ppb	110	250000	EPAS	10	10	0
IRON		Iron, filtered		ppb	8.9	300	EPAS	10	9	0
FMANGAN		Manganese, filtered		ppb	.55	50	EPAS	10	4	0
FSODIUM		Sodium, filtered		ppb	44			10	10	0
SULFATE		Sulfate		ppb	130	250000	EPAS	10	10	0

SITE SPECIFIC AND OTHER CONSTITUENTS

Short	(Method)	Constituent Name		Units	Lab CRQL	DWS		Number of Samples		
		Full				Limit	Agency	Total	>CRQL	>DWS
111-T		1,1,1-Trichloroethane		ppb	.061	200	EPA	10	8	0
112-T		1,1,2-Trichloroethane		ppb	.068	5	EPA	10	0	0
11-DIC		1,1-Dichloroethane		ppb	.047			10	0	
12-DIC		1,2-Dichloroethane		ppb	.049	5	EPA	10	0	0
14-dben		1,4-Dichlorobenzene		ppb	.056	75	EPA	10	0	0
ALKALIN		Alkalinity		ppb	3500			10	10	
ALUMIN		Aluminum, filtered		ppb	31	200	EPAS	10	0	0
ANTIMO		Antimony, filtered		ppb	24	6	EPA	10	0	10*
BENZENE		Benzene		ppb	.059	5	EPA	10	0	0
BERYLL		Beryllium, filtered		ppb	.63	4	EPA	10	0	0
BROMIDE		Bromide		ppb	72			10	0	
FCALCIU		Calcium, filtered		ppb	41			10	10	
TETRANE		Carbon tetrachloride		ppb	.042	5	EPA	10	4	0
CHLFORM		Chloroform		ppb	.029			10	0	
FCOBALT		Cobalt, filtered		ppb	5.3			10	0	
FCOPPER		Copper, filtered		ppb	2.1	1000	EPAS	10	3	0
ETHBENZ		Ethylbenzene		ppb	.034	700	EPA	10	0	0
BETA		Gross beta		pCi/L				10	10	

Table 17-3. Constituent List and Summary of Results for the
 NRDW Landfill Data for Reporting Period
 July 1 through September 30, 1995.
 (sheet 2 of 2)

Short	(Method)	Constituent Name Full	Units	Lab CRQL	DWS Limit	Agency	Number of Samples		
							Total	>CRQL	>DWS
FMAGNES		Magnesium, filtered	ppb	26			10	10	
METHYCH		Methylene chloride	ppb	.084	5	EPA	10	0	0
FNICKEL		Nickel, filtered	ppb	11	100	EPA	10	0	0
NITRITE		Nitrite	ppb	140	4000	EPA	10	0	0
PHOSPHA		Phosphate	ppb	340			10	0	
FPOTASS		Potassium, filtered	ppb	390			10	10	
FSILVER		Silver, filtered	ppb	5.5	100	EPAS	10	0	0
FSTRONUM		Strontium, filtered	ppb	.31			2	2	
PERCENE		Tetrachloroethene	ppb	.035	5	EPA	10	8	0
FTIN		Tin, filtered	ppb	30			10	0	
TOUENE		Toluene	ppb	.048	1000	EPA	10	0	0
TC		Total Carbon	ppb	170			10	10	
TDS		Total dissolved solids	ppb		500000	EPAS	10	10	0
TRICENE		Trichloroethene	ppb	.075	5	EPA	10	4	0
TRITIUM		Tritium	pCi/L		20000	EPA	10	10	9
TURBID		Turbidity	NTU				9	9	
FVANADI		Vanadium, filtered	ppb	1.0			10	10	
VINYIDE		Vinyl chloride	ppb	.25	2	EPA	10	0	0
XYLENE		Xylenes (total)	ppb	.085	10000	EPA	10	0	0
FZINC		Zinc, filtered	ppb	3.7	5000	EPAS	10	3	0
CIS12OE		cis-1,2-Dichloroethylene	ppb	.049	70	EPA	10	0	0
TRANSCE		trans-1,2-Dichloroethylene	ppb	.045	100	EPA	10	0	0

For explanation of this table, see Section 1.4 of report.

Table 17-4. Constituents with at Least One Detected Value for the
NRDW Landfill Data for Reporting Period
July 1 through September 30, 1995.
(sheet 1 of 4)

Well Name	Collection Date	Sample Number	111-T 25/ppb .061/200	ALKALIN 357/ppb 3500/.	FBARIUM 34/ppb 1.4/2000	FCADMIU 34/ppb .98/5
699-25-33A	8/14/95	8069J9	.06 U	130000.00		
699-25-33A	8/14/95	8069K3			29.00	.98 U
699-25-34A	8/11/95	8069L3	1.90	190000.00		
699-25-34A	8/11/95	8069L7			48.00	1.40 L
699-25-34B	8/11/95	8069L8	1.90	200000.00		
699-25-34B	8/11/95	8069M2			48.00	.98 U
699-25-34D	8/15/95	8069M3	1.20	190000.00		
699-25-34D	8/15/95	8069M7			54.00	.98 U
699-26-33	8/10/95	8069K8	.76 R	160000.00		
699-26-33	8/10/95	8069L2			40.00	.98 U
699-26-33	8/10/95	8069Q0	.79 R	160000.00		
699-26-33	8/10/95	8069Q4			40.00	.98 U
699-26-34A	8/10/95	8069S9	.70 R	160000.00		
699-26-34A	8/10/95	8069T3			35.00	.98 U
699-26-34B	8/10/95	8069W1	.24 LR	150000.00		
699-26-34B	8/10/95	8069W5			42.00	.98 U
699-26-35A	8/11/95	8069Y7	.99	160000.00		
699-26-35A	8/11/95	8069Z1			39.00	.98 U
699-26-35C	8/11/95	8068T3	.06 U	120000.00		
699-26-35C	8/11/95	8068T7			39.00	.98 U

Well Name	Collection Date	Sample Number	FCALCIU 34/ppb 41/.	TETRANE 25/ppb .042/5	CHLORID 124/ppb 110/250000s	FCROMI 34/ppb 3.7/100
699-25-33A	8/14/95	8069J9		.04 U	5800.00	
699-25-33A	8/14/95	8069K3	35000.00			3.70 U
699-25-34A	8/11/95	8069L3		.53	7700.00	
699-25-34A	8/11/95	8069L7	58000.00			19.00 L
699-25-34B	8/11/95	8069L8		.44 L	8700.00	
699-25-34B	8/11/95	8069M2	63000.00			24.00
699-25-34D	8/15/95	8069M3		.24 L	7000.00	
699-25-34D	8/15/95	8069M7	56000.00			15.00
699-26-33	8/10/95	8069K8		.04 UXR	6800.00	
699-26-33	8/10/95	8069L2	46000.00			8.50 L
699-26-33	8/10/95	8069Q0		.04 UXR	6800.00	
699-26-33	8/10/95	8069Q4	46000.00			8.50 L
699-26-34A	8/10/95	8069S9		.04 UXR	6900.00	
699-26-34A	8/10/95	8069T3	46000.00			23.00
699-26-34B	8/10/95	8069W1		.04 UXR	7200.00	
699-26-34B	8/10/95	8069W5	45000.00			14.00 L
699-26-35A	8/11/95	8069Y7		2.00	6900.00	
699-26-35A	8/11/95	8069Z1	48000.00			19.00 L
699-26-35C	8/11/95	8068T3		.04 U	8500.00	
699-26-35C	8/11/95	8068T7	42000.00			15.00 L

Table 17-4. Constituents with at Least One Detected Value for the
NRDW Landfill Data for Reporting Period
July 1 through September 30, 1995.
(sheet 2 of 4)

Well Name	Collection Date	Sample Number	COPPER 34/ppb 2.1/1000a	FLUORIDE 124/ppb 52/4000	ALPHA 135/pCi/L ./15	BETA 136/pCi/L ./.
699-25-33A	8/14/95	B069J9		700.00	2.12	5.37
699-25-33A	8/14/95	B069K3	2.10 U			
699-25-34A	8/11/95	B069L3		800.00	6.66	12.30
699-25-34A	8/11/95	B069L7	2.10 U			
699-25-34B	8/11/95	B069L8		800.00	3.04	15.20
699-25-34B	8/11/95	B069M2	2.10 U			
699-25-34D	8/15/95	B069M3		800.00	2.15	14.80
699-25-34D	8/15/95	B069M7	2.10 U			
699-26-33	8/10/95	B069K8		700.00	4.05	10.20
699-26-33	8/10/95	B069L2	2.10 U			
699-26-33	8/10/95	B069Q0		800.00	3.33	12.50
699-26-33	8/10/95	B069Q4	2.40 L			
699-26-34A	8/10/95	B069S9		800.00	2.06	12.20
699-26-34A	8/10/95	B069T3	2.40 L			
699-26-34B	8/10/95	B069M1		700.00	2.43	15.40
699-26-34B	8/10/95	B069M5	2.10 U			
699-26-35A	8/11/95	B069Y7		700.00	4.58	15.10
699-26-35A	8/11/95	B069Z1	2.40 L			
699-26-35C	8/11/95	B06B13		600.00	.84 U	20.00
699-26-35C	8/11/95	B06B17	2.10 U			

Well Name	Collection Date	Sample Number	FIRDN 34/ppb 8.9/300a	PHAGRES 34/ppb 26/.	PHANGAN 34/ppb .55/50s	NITRATE 124/ppb 120/45000
699-25-33A	8/14/95	B069J9				3700.00
699-25-33A	8/14/95	B069K3	18.00 L	9400.00	.55 U	
699-25-34A	8/11/95	B069L3				26000.00 D
699-25-34A	8/11/95	B069L7	26.00 BQ	16000.00	.55 U	
699-25-34B	8/11/95	B069L8				30000.00 D
699-25-34B	8/11/95	B069M2	43.00 BQ	17000.00	.55 U	
699-25-34D	8/15/95	B069M3				24000.00 D
699-25-34D	8/15/95	B069M7	8.90 U	15000.00	.55 U	
699-26-33	8/10/95	B069K8				24000.00 D
699-26-33	8/10/95	B069L2	210.00 BQ	13000.00	9.30 L	
699-26-33	8/10/95	B069Q0				23000.00 D
699-26-33	8/10/95	B069Q4	170.00 BQ	13000.00	8.40 L	
699-26-34A	8/10/95	B069S9				23000.00 D
699-26-34A	8/10/95	B069T3	120.00 BQ	13000.00	1.20 L	
699-26-34B	8/10/95	B069M1				22000.00 D
699-26-34B	8/10/95	B069M5	24.00 BQ	13000.00	.55 U	
699-26-35A	8/11/95	B069Y7				23000.00 D
699-26-35A	8/11/95	B069Z1	15.00 BLQ	13000.00	.55 U	
699-26-35C	8/11/95	B06B13				19000.00 D
699-26-35C	8/11/95	B06B17	72.00 BQ	12000.00	3.60 L	

Table 17-4. Constituents with at Least One Detected Value for the
NRDW Landfill Data for Reporting Period
July 1 through September 30, 1995.
(sheet 3 of 4)

Well Name	Collection Date	Sample Number	FPOTASS 34/ppb 390/.	FSODIUM 34/ppb 44/.	FSTRONUM 34/ppb .31/.	SULFATE 124/ppb 130/250000s
699-25-33A	8/14/95	B069J9				21000.00 D
699-25-33A	8/14/95	B069K3	5300.00	19000.00 Q	200.00	
699-25-34A	8/11/95	B069L3				54000.00 D
699-25-34A	8/11/95	B069L7	7100.00	32000.00 Q		
699-25-34B	8/11/95	B069L8				52000.00 D
699-25-34B	8/11/95	B069M2	7300.00	26000.00 Q		
699-25-34D	8/15/95	B069M3				38000.00 D
699-25-34D	8/15/95	B069M7	7400.00	25000.00 Q	270.00	
699-26-33	8/10/95	B069K8				38000.00 D
699-26-33	8/10/95	B069L2	6400.00	23000.00 Q		
699-26-33	8/10/95	B069Q0				37000.00 D
699-26-33	8/10/95	B069Q4	6600.00	24000.00 Q		
699-26-34A	8/10/95	B069S9				37000.00 D
699-26-34A	8/10/95	B069T3	6400.00	23000.00 Q		
699-26-34B	8/10/95	B069W1				40000.00 D
699-26-34B	8/10/95	B069W5	6100.00	22000.00 Q		
699-26-35A	8/11/95	B069Y7				37000.00 D
699-26-35A	8/11/95	B069Z1	6800.00	23000.00 Q		
699-26-35C	8/11/95	B068T3				46000.00 D
699-26-35C	8/11/95	B068T7	5700.00	18000.00 Q		

Well Name	Collection Date	Sample Number	PERCENE 25/ppb .035/5	TC 113/ppb 170/.	TDS 65/ppb ./500000s	TRICENE 25/ppb .075/5
699-25-33A	8/14/95	B069J9	.04 U	33000.00	200000.00	.08 U
699-25-34A	8/11/95	B069L3	.89	51000.00 D	390000.00	.34
699-25-34B	8/11/95	B069L8	1.00	52000.00 D	390000.00	.40
699-25-34D	8/15/95	B069M3	.58	47000.00 D	350000.00	.31
699-26-33	8/10/95	B069K8	.18 LR	40000.00 D	340000.00	.08 UR
699-26-33	8/10/95	B069Q0	.20 LR	40000.00 D	330000.00	.08 UR
699-26-34A	8/10/95	B069S9	.22 LR	41000.00 D	330000.00	.08 UR
699-26-34B	8/10/95	B069W1	.04 LR	38000.00 D	310000.00	.08 UR
699-26-35A	8/11/95	B069Y7	.38	41000.00 D	310000.00	.13 L
699-26-35C	8/11/95	B068T3	.04 U	28000.00	270000.00	.08 U

Table 17-4. Constituents with at Least One Detected Value for the
NRDM Landfill Data for Reporting Period
July 1 through September 30, 1995.
(sheet 4 of 4)

Well Name	Collection Date	Sample Number	TRITIUM 142/pCi/L ./20000	TURBID 111/NTU ./.	FLUORIDE 34/ppb 1.9/.	ZINC 34/ppb 3.7/5000s
699-25-33A	8/14/95	8069J9	362.00	4.81		
699-25-33A	8/14/95	8069K5			8.10 L	5.80 L
699-25-34A	8/11/95	8069L3	158000.00	4.22		
699-25-34A	8/11/95	8069L7			16.00 L	3.70 U
699-25-34B	8/11/95	8069L8	155000.00	.32		
699-25-34B	8/11/95	8069M2			15.00 L	3.70 U
699-25-34B	8/15/95	8069N3	148000.00	.64		
699-25-34B	8/15/95	8069N7			17.00	3.70 U
699-26-33	8/10/95	8069K8	157000.00			
699-26-33	8/10/95	8069L2			14.00 L	6.10 L
699-26-33	8/10/95	8069Q0	154000.00	1.84		
699-26-33	8/10/95	8069Q4			14.00 L	3.70 U
699-26-34A	8/10/95	8069S9	141000.00	.90		
699-26-34A	8/10/95	8069T3			17.00 L	11.00
699-26-34B	8/10/95	8069U1	118000.00	.70		
699-26-34B	8/10/95	8069M5			16.00 L	3.70 U
699-26-35A	8/11/95	8069Y7	143000.00	.76		
699-26-35A	8/11/95	8069Z1			18.00 L	3.70 U
699-26-35C	8/11/95	806813	39200.00	4.43		
699-26-35C	8/11/95	806817			7.80 L	3.70 U

For explanation of this table, see Section 1.4 of report.

Table 17-5. Contamination Indicator Parameters
for the NRDW Landfill Data for Reporting Period
July 1 through September 30, 1995.

Well Name	Collection Date	Sample Number	COND FIELD uMho 1/.	COND LAB uMho 1/.	pH FIELD .01/6.5-8.5a	pH LAB .01/6.5-8.5a	TOC ppb */.	TOX ppb */.
699-25-33A	8/14/95	80G9J9	330		8.19	8.00	200 L	6.9 U
		80G9K0	332		8.13		200 L	6.9 U
		80G9K1	333		8.11		140 U	6.9 U
		80G9K2	334		8.05		140 U	6.9 U
699-25-34A	8/11/95	80G9L3	516		7.55	7.50	200 L	7.0 L
		80G9L4	515		7.57		200 L	6.9 U
		80G9L5	515		7.57		200 L	6.9 U
		80G9L6	515		7.57		400 L	6.9 U
699-25-34B	8/11/95	80G9L8	523		7.46	7.40	200 L	6.9 U
		80G9L9	536		7.45		200 L	6.9 U
		80G9M0	546		7.49		200 L	6.9 U
		80G9M1	548		7.48		200 L	6.9 U
699-25-34D	8/15/95	80G9M3	504		7.56	7.70	200 L	6.9 U
		80G9M4	504		7.56		200 L	6.9 U
		80G9M5	505		7.55		140 U	6.9 U
		80G9M6	504		7.56		300 L	6.9 U
699-26-33	8/10/95	80G9K8					200 L	6.9 U
		80G9K9				7.80	140 U	6.9 U
		80G9L0					140 U	6.9 U
		80G9L1					140 U	6.9 U
699-26-34A	8/10/95	80G9Q0	453		7.80	7.80	200 L	6.9 U
		80G9Q1	452		7.79		140 U	6.9 U
		80G9Q2	452		7.79		140 U	6.9 U
		80G9Q3	452		7.78		140 U	6.9 U
699-26-34B	8/10/95	80G9S9	453		7.57	7.60	200 L	9.0 L
		80G9T0	453		7.56		140 U	6.9 U
		80G9T1	453		7.55		300 L	6.9 U
		80G9T2	452		7.54		200 L	6.9 U
699-26-34C	8/10/95	80G9M1	438		8.05	7.80	140 U	6.9 U
		80G9M2	438		8.02		140 U	6.9 U
		80G9M3	438		8.00		200 L	6.9 U
		80G9M4	439		7.98		200 L	6.9 U
699-26-35A	8/11/95	80G9Y7	450		7.42	7.90	140 U	6.9 U
		80G9Y8	450		7.42		200 L	6.9 U
		80G9Y9	450		7.41		300 L	6.9 U
		80G9Z0	451		7.42		150 L	6.9 U
699-26-35C	8/11/95	80G813	364		8.20	7.50	140 U	6.9 U
		80G814	369		8.16		140 U	6.9 U
		80G815	371		8.15		200 L	6.9 U
		80G816	376		8.14		300 L	6.9 U

* Detection limits for TOC and TOX vary depending on the performing laboratory.
for explanation of this table, see Section 1.4 of report.

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