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Quarterly Report of RCRA Groundwater Monitoring Data for Period January 1 through March 31, 1995

United States
Department of Energy
Richland, Washington

Approved for Public Release

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Quarterly Report of RCRA Groundwater Monitoring Data for Period January 1 through March 31, 1995

Earth and Environmental
Technical Services
Westinghouse Hanford Company

Date Published
July 1995

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	*Code of Federal Regulations*
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
PNL	Pacific Northwest Laboratory
PUREX	Plutonium-Uranium Extraction (Plant)
QA	quality assurance
QC	quality control
RADE	Request for Analytical Data Evaluation
RCRA	*Resource Conservation and Recovery Act of 1976*
RCW	*Revised Code of Washington*
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	*Hanford Federal Facility Agreement and Consent Order*
U-12 Crib	216-U-12 Crib
WAC	*Washington Administrative Code*
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 JANUARY 1, 1995 THROUGH MARCH 31, 1995

1.0 INTRODUCTION

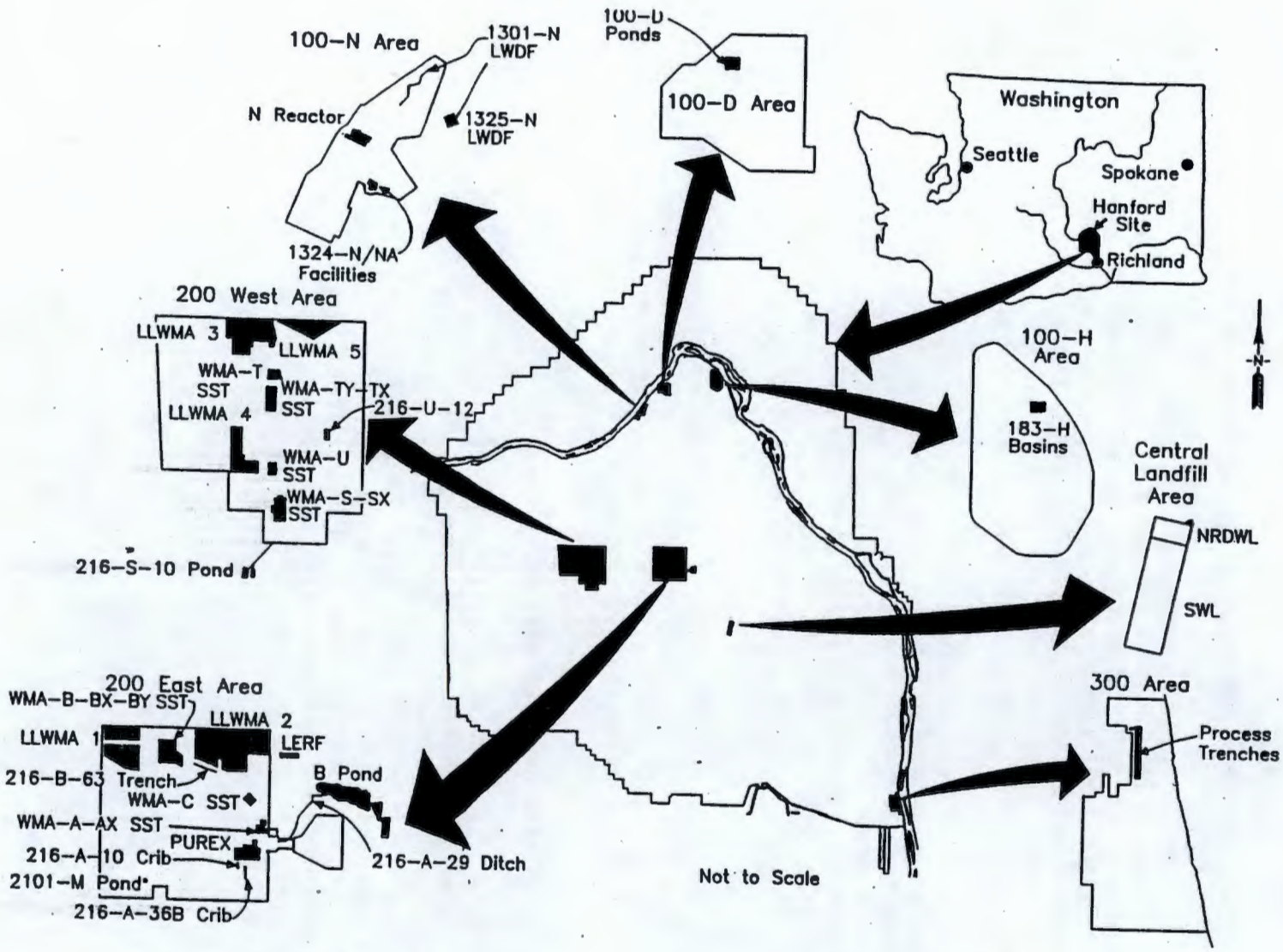
Nineteen *Resource Conservation and Recovery Act of 1976* (RCRA) groundwater monitoring projects are conducted at the Hanford Site. These projects include treatment, storage, and disposal facilities for both solid and liquid waste. The location of each facility is shown in Figure 1-1. The groundwater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

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 Laboratory (PNL) administers the contract for analytical services to WHC for the RCRA groundwater monitoring program.

This quarterly report contains data received between January and March 1995, which are the cutoff dates for this reporting period. This report may contain not only data from the January through March 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 some 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.



LERF	Liquid Effluent Retention Facility	PUREX	Plutonium-Uranium Extraction (Plant)
LLWMA	Low-Level Waste Management Area	SST	Single-Shell Tank
LWDF	Liquid Waste Disposal Facility	SWL	Solid Waste Landfill
NRDWL	Nonradioactive Dangerous Waste Landfill	WMA	Waste Management Area

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

1.2 QUALITY CONTROL PROGRAM

M. H. Edrington/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 the 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 (see Section 1.2.2).

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 with blind samples (see Section 1.2.2).

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 analyses 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,' 'Q,' and 'H.' Table 1-1 illustrates project completeness for the data presented in this report. The percent complete for the January to March 1995 quarter for LLBG WMA-4 and 216-A-36B is misleading. The data reported for 216-A-36B are from a set of samples that were collected during the October to December 1994 quarter. The samples from well 299-E17-9 were misplaced by samplers for 55 days before they were shipped to the laboratory. The high number of flags are primarily because hold times were missed. The data reported for LLBG WMA-4 are rereported data from the October to

December 1994 quarter and are not representative of the complete set of data for that WMA.

5. Comparability is used to ensure that samples analyzed by different laboratories or by the same laboratory over different time periods are comparable. For the January through March 1995 quarter, only the primary hazardous chemistry and radiochemistry laboratories were requested to analyze samples and submit data. Samples are analyzed in accordance with *Test Methods for Evaluating Solid Waste* (EPA 1986b) and other applicable approved methods. Comparability of field measurements is determined by following approved sampling procedures that ensure consistency among sampling events.

Table 1-1. Completeness. (2 sheets)

Project	Total number of evaluated data	Number of unflagged results	Percent complete (unflagged)
100-D	322	280	87
100-N	1,140	1,019	89
183-H	902	878	97
2101-M	66	65	98
216-A-10	158	141	89
216-A-29	1,828	1,667	91
216-A-36B	61	35	57
216-B-3	1,874	1,740	93
216-B-63	221	204	92
216-S-10	164	161	98
216-U-12	206	194	94
300 APT	0	0	N/A
LERF	343	319	93
LLBG WMA-1	63	58	92
LLBG WMA-2	56	50	89
LLBG WMA-3	1,727	1,562	90
LLBG WMA-4	21	12	57
LLBG WMA-5	1,167	1,054	90
NRDWL	776	696	90
SST A/AX	350	337	96

Table 1-1. Completeness. (2 sheets)

Project	Total number of evaluated data	Number of unflagged results	Percent complete (unflagged)
SST B/BX/BY	520	492	95
SST C	344	328	95
SST S/SX	540	505	94
SST T	1,077	882	82
SST TX/TY	233	203	87
SST U	344	330	96

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**--Holding time exceedances have been flagged in the quarterly reports with an H flag. This flag means that the samples were analyzed after the method-required holding times stated in the contract. 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 associated with field blanks that indicate contamination and data associated with field duplicate samples that show greater than 25% relative percent difference (RPD) are identified in the quarterly project data tables with a Q flag. This flag means that the field QC data associated with the sample data were outside 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**--The RADE system is used to track and evaluate data that appear to be inconsistent with the current pattern or with historical trends. An 'F' flag indicates that the data point is submitted for data review through the RADE system.

4. **Y or R**--Nonconformance Reports (NCR) and Incident (INC) Reports are received from the laboratory and are used to document

occurrences that may affect data quality. Data points affected by these reports are flagged with 'Y,' or 'R'.

5. **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 ±25%.

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

- **Blind samples**--Results must fall within 2.0 standard deviations from the mean recovery of the known concentration of samples submitted to the laboratory.

Table 1-2 summarizes the analytical results of QC samples available for the January through March 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, First Quarter 1995.

Quality control sample	Number of analyses	Number of results outside of criteria	Acceptable (%)
Duplicates	588	40	93.2
Blanks	1,510	68	95.5

Precision based on field duplicate analysis was determined to be 93.2% acceptable. See Table 1-3 for a complete breakdown of field duplicates that did not meet QC acceptance criteria. The criteria for determining the acceptability of duplicate data are currently being reevaluated. Precision values for some field duplicate constituents (including both radiochemistry and hazardous chemistry constituents) have been consistently outside the acceptable limit of 25% RPD for several quarters. WHC is currently reevaluating the 25% blanket RPD limit.

Of the 1,510 blanks analyzed during the January through March quarter, 68 exceeded the QC limit for 95.5% acceptability. Table 1-4 shows a breakdown of the constituents detected in the blanks.

Field QC samples collected for the January through March 1995 quarter were duplicates, daily trip blanks (DLY), full trip blanks (FTB), and field transfer blanks (TXR). Duplicates were collected at every 20th well. DLYs were collected every day that sampling took place. FTBs were collected every 20th well. TXRs were collected with 2.3% of the wells sampled.

Table 1-3. Breakdown of Field Duplicates Exceeding Quality Control Limits.

Method analysis code	Method description	Number of flagged results	Total number of results	Percent of total out of limits
25	Volatile organics (gas chromatography)	3	68	4.4
34	Inductively coupled plasma metals	19	266	7.1
67	Total organic halogen	5	15	33.3
122	Total organic carbon	2	7	28.6
124	Anions	2	84	2.4
129	Ammonium ion	1	1	100
135	Gross alpha	4	10	40
136	Gross beta	2	10	20
145	Uranium	2	7	28.6

Table 1-4. Breakdown of Field Blanks Exceeding Quality Control Limits.

Method analysis code	Method description	Number of flagged results	Total number of results	Percent of total out of limits
25	Volatile organics (GC)	4	68	5.9
34	Inductively coupled plasma metals	25	266	9.4
67	Total organic halogen	9	34	26.5
122	Total organic carbon	4	18	22.2
124	Anions	11	70	1.6
126	Turbidity	6	6	100
127	Total carbon	1	1	100
182	Volatile organics (GC/MS 8260)	14	946	1.5
30	Phenols	1	64	1.6

1.2.3 Internal Quality Control Program

The internal QC program uses four types of QC data to establish and monitor performance in the laboratory. These data are laboratory blanks, matrix spikes, matrix 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, and blanks in the form of precision and accuracy. Each contracted laboratory also supplies to WHC 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, every 6 months each contracted laboratory supplies an MDL/minimum detectable concentration (MDC) report. 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. WHC reviews each of these reports.

Radiochemistry precision and accuracy figures are gleaned from 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. WHC samples represent only a part of the performance summary. These figures represent samples analyzed during the period of January through March 1995.

For the January through March 1995 quarter, the radiochemistry laboratory analyzed 132 duplicates, of which 129 were within control limits ($\pm 3\sigma$), for an acceptability of 97.7%. The radiochemistry laboratory analyzed 206 spikes, of which 203 fell within control limits, for an acceptability of 98.5%. The radiochemistry laboratory analyzed 203 blanks, of which 199 fell within control limits, for an acceptability of 98.0%.

Table 1-5. Radiochemistry Quarterly Report Summary.

First quarter 1995	Duplicates (precision, % acceptable)	Spikes (accuracy, % acceptable)	Blanks (% acceptable)
January through March	97.7	98.5	98.0

EPA intercomparison samples were analyzed by the radiochemistry laboratory during January 1995. Four samples were analyzed for gross alpha, gross beta, strontium-89, and strontium-90. All sample results were within the $\pm 25\%$ bias acceptability criterion. This translates to four out of four acceptable results, or 100% acceptability.

EPA WP samples were analyzed by the hazardous chemistry laboratory during February 1995. There were 146 blind samples sent for ICP metals, pH, specific conductance, total dissolved solids, alkalinity, anions, polychlorinated biphenyls, total organic carbon, pesticides, volatile aromatics, chemical oxygen demand, volatile halocarbons, cyanide, oil and grease, and total phenolics. Of the 146 results, 144 results were acceptable for 98.6% acceptability (Table 1-6). All results except those for nitrate-nitrogen were in the acceptable range. Nitrate results were unacceptable because a dilution error was made at the laboratory. The laboratory contractor was notified of the nitrate-nitrogen deficiency.

Table 1-6. Summary of EPA Water Pollution, Water Supply, and Interlaboratory Comparison Studies (in percent acceptable).

First Quarter 1995	EPA water pollution[a]	EPA water supply[a]	EPA interlab comparison[b]
January through March	98.6%	Samples not sent for this quarter	100%

EPA = U.S. Environmental Protection Agency.
[a]Hazardous chemistry contracted laboratory.
[b]Radiochemistry contracted laboratory.

Environmental Sciences sent out performance evaluation (PE) samples to four laboratories during March 1995. The PE samples were sent out in duplicate to each laboratory and contained known amounts of TOX. The laboratories that participated in the analysis of these samples are three comparison laboratories (Labs 1, 2, and 3) and the primary laboratory for TOX analysis (Lab 4). A 95% confidence interval is used to establish acceptance limits for the PE samples. This is in accordance with WHC-CM-7-8, Section 2.4.

The results for these analyses are shown in Table 1-7. The results for Labs 1 and 2 were within the limits of the 95% confidence interval for TOX. The detection limit for TOX for Lab 3 is above the "true value" of the sample, so a qualifier was issued with the results. The results from Lab 3 were not included in the evaluation of the PE results. The raw data from the PE samples and an explanation of how the reporting unit was obtained have been requested from Lab 3. Lab 3 will not be used in the future for TOX analysis.

Lab 4's results were outside the acceptance limits for the TOX samples. Lab 4 has been analyzing RCRA groundwater samples for Environmental Sciences since November 1994. Lab 4 received TOX PE samples in November 1994 and had results outside the acceptable limits at that time. The PE procedure, WHC-CM-7-8, Section 2.4, requires that a laboratory that does not get results in acceptable limits a second time in a row shall be informed and an inspection of the laboratory may be initiated. Lab 4 will no longer be receiving RCRA TOX samples so a laboratory inspection is unnecessary.

Table 1-7. Summary of Performance Evaluation Samples.

Analyte	"True value" (ppb)	Lab 1 (comparison lab) mean result (ppb)	Lab 2 (comparison lab) mean result (ppb)	Lab 3 (comparison lab) mean result (ppb)	Lab 4 (primary TOX lab) mean result (ppb)	95% confidence interval (ppb)
TOX	18	17.76	15.25	40 U[a]	21.20	15.16-20.98

[a]The detection limit for Lab 3 was 40, so the result was qualified with a U flag.

1.2.4 Nonconformance/Incident Reports

T. X. Washington
Westinghouse Hanford Company

NCR and INC Reports are methods of documentation by which field samplers and contract laboratories inform their customers of any problems encountered with the sample, analysis, data, and/or data deliverable. This method of documentation identifies occurrences, deficiencies, and/or issues that potentially affect the data integrity. These may include, but are not limited to, the following:

- Lost sample
- Broken bottle
- Instrument malfunction
- Calibration standard out of acceptable range
- Laboratory control standard out of acceptable range
- Matrix spike recovery out of acceptable range
- Procedural noncompliance
- Chain-of-custody discrepancies
- Shipping temperature out of acceptable range
- Misreported data.

During the January through March quarter, 20 NCR/INC Reports were transmitted, affecting 84 data points. Eighteen NCR/INC Reports affecting 80 data points were transmitted by the hazardous chemistry laboratory and two reports affecting four data points were transmitted by the radiochemistry laboratory. These reports describe incidents that potentially affect the integrity of either groundwater samples or external QC samples (e.g., trip blanks, bottle blanks).

The incident reports transmitted by the hazardous chemistry laboratory affect 80 data points, 36 of which were rejected. The rejected data were attributed to seven samples sample bottles that were broken, one sample that was contaminated during the extraction process, one chain of custody issue and 28 perchlorate analyses not required by the RCRA program being canceled. In addition, 44 analytical results were determined to be suspect. These data should be used for trending purposes only.

Eighty percent of the suspect data are attributed to TOX samples arriving at the laboratory with headspace. SW-846 requires no headspace in the TOX samples. Field samplers inspect the TOX samples at the time of sampling and packaging to ensure that no headspace is present. This suggests that the headspace developed in the TOX samples during shipment. Two possible causes of the entrapped air are the lowering of water tables and the rate of purging at the time of sampling. Several tests will be conducted during the next quarter to help determine possible causes and solutions to headspace in TOX samples.

The incident reports transmitted by the radiochemistry laboratory affect four data points of which three were rejected because of broken sample containers and the fourth was laboratory contamination.

Table 1-8 presents the sample numbers adversely affected by the NCR and incident reports, along with the associated well numbers, analytical methods,

and flags assigned to these samples as a result of the WHC NCR and incident report evaluations (see Section 1.4.5 for definitions of flags found in Table 1-8).

1.2.5 Quality Assurance Occurrences

Quality assurance (QA) occurrences are situations that potentially affect the quality of the data. These situations are discussed through summaries of inspections of laboratory services and/or system and performance audits/surveillances.

Inspection of laboratory services and/or system and performance audits/surveillances for the RCRA groundwater monitoring program are performed throughout the year by the laboratory contractor, WHC, and/or the U.S. Department of Energy (DOE) on various aspects of this program. QA requirements and data quality objectives are defined in the *Quality Assurance Project Plan for RCRA Groundwater Monitoring Activities* (WHC 1992a). Results of these oversight activities are documented with the audit/surveillance and/or inspecting organization(s). No audits or surveillances were conducted during the past quarter. In February 1995 the contract administrator evaluated the hazardous chemistry laboratories responses with respect to each finding and observation. These findings and observations were open issues from the inspection of services conducted at the hazardous chemistry laboratory on May 2-6, 1994. The details of the report are provided below.

FINDING # F1May94.121 **The Contractor failed to track and verify implementation of corrective actions, as required by the contract**

This Finding is withdrawn and changed to an Observation.

Please refer to "Observation 3" for discussion.

FINDING # F2May94.121 **Noncompliances were found with the hazardous chemistry laboratories procedures governing document control. Multiple instances were found of effective dates for procedures preceding approval dates**

This Finding is withdrawn and changed to an Observation.

Please refer to "Observation 4" for discussion.

FINDING # F3May94.121 **Noncompliances were found with the implementation of the contractual requirement for annual review of procedures**

This Finding is withdrawn.

Corrective actions were in process for 1994 procedure reviews; it appears that the hazardous chemistry laboratory is adequately addressing this issue and understands the need to continue its annual review of procedures.

FINDING # F4May94.121 Deficiencies exist in the traceability to specific procedures and standards used for the analysis of samples

This Finding is withdrawn.

The contract administrator will require that all data be traceable to specific analytical procedures (including revision dates) in the forthcoming Operations Year Statement of Work.

FINDING # F5May94.121 Noncompliances were found to procedural and contractual requirements of training

The corrective action provided for this finding is acceptable. Future inspections will evaluate implementation of the laboratory's corrective action in this area.

FINDING # F6May94.121 Deficiencies and inconsistencies exist in the control charting and tracking for both analysis and reporting purposes

This Finding is withdrawn and changed to an Observation.

Please refer to "Observation 5" below for discussion.

OBSERVATIONS

The Laboratory is reminded that, in inspection, Observation is a conclusion that presents the results of a generally subjective evaluation of implementation practices or management systems related to the area under review. An Observation may or may not relate to specific noncompliance(s) with contractual requirements but is based on the inspector's evaluation of factual evidence.

OBSERVATION NO. 1

This Observation is withdrawn.

The contract administrator will reevaluate this issue during the next Inspection of Services. The evaluation will be based on the laboratory's internal procedures and Appendix B, Section I of the contract that required the organizational structure, functional responsibilities, level of authority, and lines of communication for the activities affecting quality that are to be documented. Such documentation must be consistent with the current practices within the laboratory.

OBSERVATION NO. 2

This Observation is withdrawn.

The contract administrator will make a contract change in forthcoming documentation that is expected to resolve the issues involved. The "Contractual Required Quantitation Limit" (CRQL) will be changed to a

"Contractual Required Detection Limit" (CRDL) and blank acceptance criteria will be tied to the CRDL.

NOTE: The following observations did not appear in the original report and are the result of reclassifying three of the original findings as observations.

OBSERVATION NO. 3

The laboratory acknowledges that the specific corrective action to the August 1993 Finding and Observations taken was different from that committed to in its correspondence to the contract administrator dated March 24, 1994. The contract administrator recognized that corrective actions cannot always be implemented as committed. However, the laboratory's changes to corrective action commitments could result in additional conditions that could adversely affect quality.

The contract administrator expects the hazardous chemistry laboratory to: work toward improving its system for follow-up of corrective action commitments and notify the contract administrator in a more timely manner when changes to commitments are made (e.g., when it is determined the original/committed corrective action is not appropriate). The laboratory must recognize that such changes are made at its own risk and the possibility exists that, on occasion, a change may be questioned and justification of the validity of the data may be requested.

A good example of how this could work is provided in laboratory's May 12, 1994, correspondence to the contract administrator. If the changes addressed in this letter had been communicated to the contract administrator before the May 2-6 Inspection of Services, the inspection team would have had confidence in the laboratory's corrective action/follow-up system. Most of these changes were know by the laboratory before the inspection.

OBSERVATION NO. 4

In several instances, approval signatures' dates were later than the effective date of the procedure. These instances included administrative procedures, analytical procedures, and the laboratory's *Environmental Chemistry Quality Assurance Program Plan*, QA-2/83 revised 6/92. The discrepancy did not appear to affect the quality of the deliverable and implementation of the subject procedures was within a short time after the effective date. However, the laboratory should ensure in the future that indicated effective dates do not precede approval dates.

OBSERVATION NO. 5

Inconsistencies were noted in the control charting and tracking for both analysis and reporting purposes of the laboratory's QC Program. Significant Background information has already been addressed in the contract administrator's September 6, 1994, Inspection of Services Report and in the laboratory's October 17, 1994, Response (Ref. 94P900) that addresses the complex and varied issues involved in this observation. The laboratory acknowledged that opportunity for improvements existed in their QC Program. Therefore, it is recommended that the technical parties involved communicate directly on these issues to finalize the laboratory's control charting and

tracking QC program. Any changes must be authorized through a formal contract modification.

The laboratory's committed corrective action to this issue is deemed acceptable as a response to this observation and is repeated below for follow up and verification.

> "The laboratory will continue to develop and refine the existing computerized QC System (with accompanying guidelines and documentation) such that specifications of the contract administrator are satisfied. Significant improvements have been effected at the lab in the last few weeks. As the program is finalized, the lab will provide the contract administrator with documentation and details in an effort to provide a product that is considered acceptable."

During this reporting period WHC transitioned all analytical services to new laboratories and analytical contracts. The Radiochemistry analyses were performed by the same laboratory through a different contract. The hazardous chemistry work was analyzed by two new laboratories. The analytical requirements were the same, in accordance with the Environmental Sciences statement of work, however some differences may be inherent because of a change in analytical facilities and contracts.

Table 1-8. RCRA Samples Flagged for Nonconformance Report. (sheet 1 of 2)

Sample Number	Flag Name	Flag	Group	Method Code	Well Name	
	Rejected	R	ALPHA	135	299-W19-19	B0DQ27
			BETA	136	299-W19-19	B0DQ27
			PERCHLORATE	62	199-K-109A	B0F632
					199-K-110A	B0F633
					199-K-110A	B0F634
					199-K-111A	B0F635
					199-K-27	B0F636
					199-K-28	B0F637
					199-K-29	B0F8X3
					199-K-30	B0F638
					199-K-32A	B0F639
					299-E17-12	B0F620
					299-E17-13	B0F622
					299-E25-22	B0F624
					299-E25-24	B0F625
					299-E25-6	B0F626
					299-W10-1	B0F627
					299-W10-4	B0F628
					299-W10-5	B0F631
					299-W22-40	B0F646
					299-W22-41	B0F653
					299-W22-42	B0F644
					299-W22-43	B0F648
					699-1-18	B0F619
					699-2-3	B0F621
					699-2-7	B0F623
					699-36-70A	B0F6C7
					FTB001	B0F6K2
					FTB002	B0F6D6
					FTB003	B0F6D7
			PHENOLS	30	299-W6-3	B0DWF4
			TOX	67	199-N-74	B0DYG5
					299-E27-15	B0DQD7
					299-E33-31	B0DQ75
					299-E33-43	B0DQB4
					299-W22-45	B0DQK1
					299-W23-15	B0DQM5
					FTR249	B0DR29
			URANIUM	145	299-W18-25	B0DQF5
					299-W19-19	B0DQ27
	Suspect	Y	ANIONS	124	199-K-110A	B0F633

Table 1-8. RCRA Samples Flagged for Nonconformance Report. (sheet 2 of 2)

Sample Number	Flag Name	Flag	Group	Method Code	Well Name	
	Suspect	Y	ANIONS	124	199-K-110A	B0F634
					199-K-111A	B0F635
					199-K-27	B0F636
					199-K-28	B0F637
					199-K-32A	B0F639
					299-W23-14	B0DQM0
			CONDUCTIVITY	73	199-K-110A	B0F633
					199-K-110A	B0F634
					199-K-111A	B0F635
					199-K-27	B0F636
					199-K-28	B0F637
					199-K-32A	B0F639
			ICP METALS	34	199-K-106A	B0DJF2
			PHENOLS	30	199-N-74	B0DYG5
					199-N-76	B0DYH7
					299-E17-9	B0DFG9
					299-E26-9	B0DP26
					299-W19-31	B0DQH0
					299-W19-32	B0DQH5
					299-W6-9	B0DWM2
			TOX	67	299-W22-40	B0F646
					299-W22-41	B0F653
					299-W22-42	B0F644
					299-W22-43	B0F648
					299-W22-43	B0F649
					299-W22-43	B0F650
					299-W22-43	B0F651
					299-W23-14	B0DQM0
					299-W23-14	B0DQM1
					299-W23-14	B0DQM2
					299-W23-14	B0DQM3
					299-W23-14	B0DQM3
					699-1-18	B0F619
					699-2-3	B0F621
					699-2-7	B0F623
					699-36-70A	B0F6C7
					699-36-70A	B0F6C8
					699-36-70A	B0F6C9
					699-36-70A	B0F6D0
					699-44-42	B0C7C7
					FTB003	B0F6D7
			TURBIDITY	126	299-W23-14	B0DQM0
			VOA (GC)	25	299-W10-20	B0DG56

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.

Daily trip blank--A sample that contains only Type II reagent water. The daily trip blank is used to check for sample contamination by volatile organic compounds arising from conditions encountered during the collection of samples. The daily trip blank is <u>not</u> opened in the field.

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 transfer blank--A sample that contains only Type II reagent water. The field transfer blank is used to check for sample contamination by volatile organic compounds arising from conditions encountered during the collection of samples. The field transfer blank is taken during the collection of samples. The field transfer blank is filled at the sampling site by pouring Type II reagent water from a cleaned container into a volatile organic analysis vial.

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.

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.

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

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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 four columns as follows:

- 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 WHC before the cutoff date for the current quarterly report (May 22, 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 1-9. 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.

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 1-9. Analysis Method Code Definitions. (2 sheets)

Method code	Method name
16	SW-846 8240[a]
17	SW-846 8080[a]
19	SW-846 8270[a]
25	SW-846 8010/8020[a]
29	SW-846 8140[a]
30	SW-846 8040[a]
34	SW-846 6010[a]
36	ASTM D-1385[b]
40	SW-846 7421[a]
41	SW-846 7470[a]
42	SW-846 7841[a]
43	SW-846 7060[a]
48	SW-846 7740[a]
49	SW-846 8150[a]
51	SW-846 8280[a]
52	ASTM D-1067-A
54	ASTM D-1426-D
56	SW-846 9010[a]
62	In-house ion chromatography
63	SW-846 9030[a]
65	Standard Methods #209B[c]
67	SW-846 9020[a]
69	SW-846 9131[a]
73	ASTM D-1125-A
93	Field probe, pH
94	Field probe, conductivity
111	EPA 180.1, Turbidity
114	2320/SMEW16 403
122	SW-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[d]
135	SW-846 9310, Alpha[a]
136	SW-846 9310, Beta[a]
137	SW-846 9315, Radium[a]
139	ITAS I-129 Low level
140	ITAS Gamma scan

Table 1-9. Analysis Method Code Definitions. (2 sheets)

Method code	Method name
141	ITAS Sr-90
142	ITAS H-3
143	ITAS Tc-99
144	SW-846 9132[a]
145	ITAS Gross U
146	ITAS Isotopic Pu
147	ITAS Am-241
148	ITAS Isotopic U
168	USEPA HACH COD[d]
357	EPA 600, 310.2
358	SW-846 9012[a]
550	4500-NO3-E/SMEW17
1083	EPA 300.0 (1983)
1247	GADGPC
1249	GAMMAHI
1252	GBDPC
1255	H3HIGH
1281	SRTOTAL

[a](EPA 1986b).
[b](ASTM 1991).
[c](EPA 1979).
[d](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:

Agency	Suffix	Regulatory basis
EPA	None	Maximum contaminant levels in 40 CFR 141, "National Primary Drinking Water Regulations."
EPAS	s	Secondary maximum contaminant levels in 40 CFR 143, "National Secondary Drinking Water Regulations."
EPAI	i	EPA interim primary DWSs in 40 CFR 265, Appendix III.

Data qualifiers and flags--Data qualifiers and flags used in the "Detected" and "CIP" tables are assigned by the laboratory and WHC 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 - 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 1-10.

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 265, 40 CFR 141, and 40 CFR 143. Where there is overlap in constituents addressed by these regulations, 40 CFR 265 takes precedence over 40 CFR 141, which, in turn, takes precedence over 40 CFR 143. A complete listing of the DWSs used in the Summary, Detected, and CIP tables is shown in Table 1-10.

Table 1-10. Drinking Water Standards. (2 sheets)

Constituent name	Short name	DWS	Units	Agency[a]
1,1,1-Trichloroethane	1,1,1-T	200	ppb	EPA
1,1-Dichloroethene	DICETHY	7	ppb	EPA
1,2-Dibromo-3-chloropropane	DIBRCHL	0.2	ppb	EPA
1,2-Dibromoethane	DIBRETH	0.05	ppb	EPA
1,2-Dichlorobenzene	12-dben	600	ppb	EPA
1,2-Dichloroethane	1,2-DIC	5	ppb	EPA
1,2-Dichloropropane	DICPANE	5	ppb	EPA
1,4-Dichlorobenzene	14-dben	75	ppb	EPA
2,4,5-TP	2,4,5TP	50	ppb	EPA
2,4-D	2,4-D	100	ppb	EPAI
Arsenic	ARSENIC	50	ppb	EPA
Barium	BARIUM	1,000	ppb	EPAI
Benzene	BENZENE	5	ppb	EPA
Cadmium	CADMIUM	10	ppb	EPAI
Carbon tetrachloride	TETRANE	5	ppb	EPA
Cesium-137	CS-137	200	pCi/L	EPA
Chlordane	CHLOANE	2	ppb	EPA
Chloride	CHLORID	250,000	ppb	EPAS
Chlorobenzene	CHLROB	100	ppb	EPA
Chromium	CHROMUM	50	ppb	EPAI
cis-1,2-Dichloroethylene	CIS12DE	70	ppb	EPA
Cobalt-60	CO-60	100	pCi/L	EPA
Coliforms	COLIFORM	1	COL	EPAI
Copper	COPPER	1,000	ppb	EPAS
Endrin	ENDRIN	0.2	ppb	EPA
Ethylbenzene	ETHBENZ	700	ppb	EPA
Fluoride	FLUORID	1,400	ppb	EPAI
gamma-BHC (Lindane)	g-BHC	4	ppb	EPAI
Gross alpha	ALPHA	15	pCi/L	EPA
Heptachlor	HEPTLOR	0.4	ppb	EPA
Heptachlor epoxide	HEPTIDE	0.2	ppb	EPA
Iodine-129	I-129	1	pCi/L	EPA
Iron	IRON	300	ppb	EPAS
Lead	LEAD	50	ppb	EPAI
Manganese	MANGESE	50	ppb	EPAS
Mercury	MERCURY	2	ppb	EPA
Methoxychlor	METHLOR	100	ppb	EPAI

Table 1-10. Drinking Water Standards. (2 sheets)

Constituent name	Short name	DWS	Units	Agency[a]
Nitrate	NITRATE	45,000	ppb	EPA
Nitrite	NITRITE	1,000	ppb	EPA
Pentachlorophenol	PENTCHP	1	ppb	EPA
pH	PH	6.5-8.5	pH	EPAS
Radium	RADIUM	5	pCi/L	EPAI
Ruthenium-106	RU-106	30	pCi/L	EPA
Selenium	SELENUM	10	ppb	EPAI
Silver	SILVER	50	ppb	EPAI
Strontium-90	SR-90	8	pCi/L	EPA
Styrene	STYRENE	100	ppb	EPA
Sulfate	SULFATE	250,000	ppb	EPAS
Technetium-99	TC-99	900	pCi/L	EPA
Tetrachloroethene	PERCENE	5	ppb	EPA
Toluene	TOLUENE	1,000	ppb	EPA
Total dissolved solids	TDS	500	ppm	EPAS
Toxaphene	TOXAENE	5	ppb	EPAI
trans-1,2-Dichloroethylene	TRANDCE	100	ppb	EPA
Trichloroethene	TRICENE	5	ppb	EPA
Tritium	TRITIUM	20,000	pCi/L	EPA
Vinyl chloride	VINYIDE	2	ppb	EPA
Xylenes (total)	XYLENE	10,000	ppb	EPA
Zinc	ZINC	5,000	ppb	EPAS

[a]See Section 1.4.5 for agency listing.
COL = coliform colonies per 100 milliliters.
pCi/L = picocuries per liter.
ppb = parts per billion.

1.5 DATA EVALUATION

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

Sixty-three RADEs were submitted during the January through March quarter of 1995. Of the submitted RADEs, 18 are for field parameters (pH and conductivity), 10 are for ICP metals, 8 are for radionuclides, 5 are for TOX, 5 are for turbidity, 3 are for anions, 2 are for organics, 1 is for ammonium ion, and 1 is for water level. Ten RADEs involve multiple methods indicating a potential problem with their associated sampling events.

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

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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. Water level data are listed in Table 2-2.

2.3 WATER CHEMISTRY DATA

All of the 100-D Ponds wells were sampled as scheduled during the quarter. Data are reported in Tables 2-3, 2-4, and 2-5. Data flags are discussed in Sections 1.2 and 1.4. Drinking water standards exceeded are listed in Table 2-6. Requests for Analytical Data Evaluation are listed in Table 2-7.

Indicator parameter data from the three downgradient wells were compared to critical mean values. No exceedances occurred.

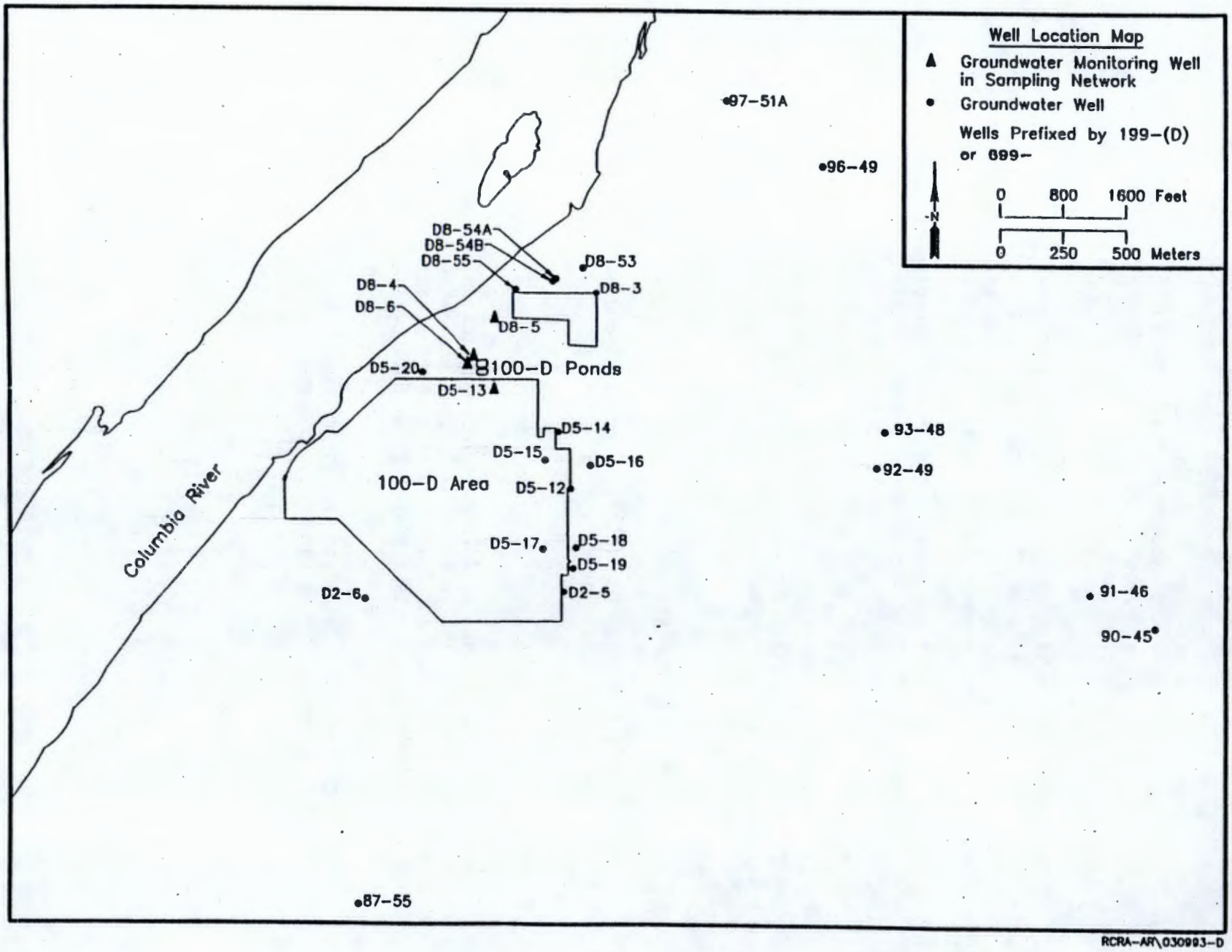

Figure 2-1. Monitoring Well Location Map for the 100-D Ponds.

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

Well no. (199-)	Relative position	Sample frequency	Sample date, 1st Qtr 1995
D5-13	Upgradient	Quarterly*	3/14/95
D8-4	Downgradient	Semiannually	3/14/95
D8-5	Downgradient	Semiannually	3/14/95
D8-6	Downgradient	Semiannually	3/14/95

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

*Well D5-13 is sampled quarterly because background conditions are changing.

Table 2-2. RCRA Water Level Measurement Report, 100-D Ponds, First 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	1/23/95	75.86	384.44	117.18
	2/21/95	75.88	384.42	117.17
	3/21/95	75.74	384.56	117.21
199-D2-6	1/23/95	85.58	383.70	116.95
	2/21/95	85.39	383.89	117.01
	3/21/95	85.21	384.07	117.06
199-D5-12	1/23/95	86.06	383.55	116.91
	2/21/95	86.04	383.57	116.91
	3/21/95	87.96	381.65+	116.33
199-D5-13	1/23/95	88.90	382.59	116.61
	2/21/95	88.64	382.85	116.69
	3/14/95	88.56	382.93*	116.72
	3/21/95	88.59	382.90	116.71
199-D5-17	1/23/95	85.39	384.10	117.07
	2/21/95	85.40	384.09	117.07
	3/21/95	85.40	384.09	117.07
199-D5-20	1/23/95	85.87	382.23	116.50
	2/21/95	85.34	382.76	116.67
	3/21/95	86.02	382.08	116.46
199-D8-3	1/23/95	68.26	380.70	116.04
	2/21/95	67.55	381.41	116.25
	3/21/95	68.52	380.44	115.96
199-D8-4	1/23/95	86.55	382.18	116.49
	2/21/95	86.11	382.62	116.62
	3/14/95	85.35	383.38*	116.85
	3/21/95	86.30	382.43	116.56
199-D8-5	1/23/95	71.11	381.38	116.24
	2/21/95	70.46	382.03	116.44
	3/14/95	70.84	381.65*	116.33
	3/21/95	71.18	381.31	116.22

Table 2-2. RCRA Water Level Measurement Report, 100-D Ponds, First 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-D8-53	1/23/95	55.40	380.63	116.02
	2/21/95	54.43	381.60	116.31
	3/21/95	55.86	380.17	115.88
199-D8-54A	1/23/95	62.13	380.65	116.02
	2/21/95	61.21	381.57	116.30
	3/21/95	62.55	380.23	115.89
199-D8-55	1/23/95	58.66	380.69	116.03
	2/21/95	57.90	381.45	116.27
	3/21/95	59.17	380.18	115.88
199-D8-6	1/23/95	94.39	382.11	116.47
	2/21/95	93.95	382.55	116.60
	3/14/95	93.26	383.24*	116.81
	3/21/95	94.21	382.29	116.52
699-87-55	1/23/95	73.26	386.35	117.76
	2/21/95	73.22	386.39	117.77
	3/21/95	73.08	386.53	117.81
699-90-45	1/23/95	37.96	383.56	116.91
	2/21/95	38.02	383.50	116.89
	3/21/95	38.05	383.47	116.88
699-92-49	1/23/95	49.78	382.08	116.46
	2/21/95	49.71	382.15	116.48
	3/21/95	49.67	382.19	116.49
699-96-49	1/23/95	38.15	381.06	116.15
	2/21/95	38.07	381.14	116.17
	3/21/95	37.96	381.25	116.20
699-97-51A	1/23/95	21.53	380.72	116.04
	2/21/95	21.27	380.98	116.12
	3/21/95	21.22	381.03	116.14

Table 2-2. RCRA Water Level Measurement Report, 100-D Ponds, First 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	1/23/95	61.24	381.27	116.21
	2/21/95	60.50	382.01	116.44
	3/21/95	61.59	380.92	116.10

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. Elevations marked with an '*' were measured at the time of sampling.
4. Elevations 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 January 1 through March 31, 1995. (sheet 1 of 2)

CONTAMINATION INDICATOR PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
CONDUCT	94	Conductivity, field	µmhos	1			16	16	
CONDUCT	73	Conductivity, lab	µmhos				5	5	
TOC		Total Organic Carbon	ppb	110			20	20	
TOX		Total Organic Halogen	ppb	5			20	17	
PH	93	pH, field	pH	.01	6.5-8.5	EPAS	16	16	4
PH	125	pH, lab	pH		6.5-8.5	EPAS	5	5	2

DRINKING WATER PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
FBARIUM		Barium, filtered	ppb	.59	1000	EPAI	5	5	0
FCADMIU		Cadmium, filtered	ppb	3.3	10	EPAI	5	0	0
FCHROMI		Chromium, filtered	ppb	4.5	50	EPAI	5	3	1
FLUORID		Fluoride	ppb	36	1400	EPAI	5	5	0
ALPHA		Gross alpha	pCi/L		15	EPA	5	3	0
FMERCUR		Mercury, filtered	ppb	.05	2	EPA	5	0	0
NITRATE		Nitrate	ppb	11	45000	EPA	5	5	0

GROUNDWATER QUALITY PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
CHLORID		Chloride	ppb	14	250000	EPAS	5	5	0
FIRON		Iron, filtered	ppb	5.24	300	EPAS	5	4	0
FMANGAN		Manganese, filtered	ppb	.72	50	EPAS	5	3	0
LPHENOL		Phenol	ppb	.31			5	0	
FSODIUM		Sodium, filtered	ppb	61			5	5	
SULFATE		Sulfate	ppb	37	250000	EPAS	5	5	0

SITE SPECIFIC AND OTHER CONSTITUENTS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
246-trp		2,4,6-Trichlorophenol	ppb	1.3			5	0	
24-dchp		2,4-Dichlorophenol	ppb	1.3			5	0	
DIMPHEN		2,4-Dimethylphenol	ppb	1.2			5	0	
DINPHEN		2,4-Dinitrophenol	ppb	3			5	0	
26-dchp		2,6-Dichlorophenol	ppb	1.4			5	0	
CHLPHEN		2-Chlorophenol	ppb	1.6			5	0	
2NITPH		2-Nitrophenol	ppb	1.3			5	0	
BUTS1NP		2-sec-Butyl-4,6-dinitrophenol(DN	ppb	1.3			5	0	
46DN2MP		4,6-Dinitro-2-methylphenol	ppb	1.3			5	0	
CHLCRES		4-Chloro-3-methylphenol	ppb	1.3			5	0	
NITPHEN		4-Nitrophenol	ppb	3			5	0	
ALKALIN		Alkalinity	ppm	2.8			5	5	
FALUMIN		Aluminum, filtered	ppb	26			5	0	
FANTIMO		Antimony, filtered	ppb	62			5	0	

Table 2-3. Constituent List and Summary of Results for the 100-D Pond Data for Reporting Period January 1 through March 31, 1995. (sheet 2 of 2)

Constituent Name Short	(Method) Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
FBERYLL	Beryllium, filtered	ppb	.17			5	0	
BROMIDE	Bromide	ppb	11			5	1	
FCALCIU	Calcium, filtered	ppb	34			5	5	
FCOBALT	Cobalt, filtered	ppb	5.9			5	0	
FCOPPER	Copper, filtered	ppb	4.1	1000	EPAS	5	0	0
CRESOLS	Cresols (methylphenols)	ppb	4.8			5	0	
BETA	Gross beta	pCi/L				5	2	
FMAGNES	Magnesium, filtered	ppb	23			5	5	
FNICKEL	Nickel, filtered	ppb	13			5	0	
NITRITE	Nitrite	ppb	18	1000	EPA	5	0	0
PENTCHP	Pentachlorophenol	ppb	1.3	1	EPA	5	0	5*
PHOSPHA	Phosphate	ppb	82			5	0	
FPOTASS	Potassium, filtered	ppb	850			5	5	
FSILVER	Silver, filtered	ppb	3.6	50	EPAI	5	0	0
TETPHNL	Tetrachlorophenols	ppb	1.5			5	0	
FTIN	Tin, filtered	ppb	69			5	0	
TRIPHNL	Trichlorophenols	ppb	1.7			5	0	
TRITIUM	Tritium	pCi/L		20000	EPA	5	4	0
TURBID	Turbidity	NTU	.016			5	5	
FVANADI	Vanadium, filtered	ppb	6.6			5	2	
FZINC	Zinc, filtered	ppb	6.3	5000	EPAS	5	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 January 1 through March 31, 1995. (sheet 1 of 2)

Well Name	Collection Date	Sample Number	ALKALIN 357/ppm 2.8/.	FBARIUM 34/ppb .59/1000	BROMIDE 124/ppb 11/.	FCALCIU 34/ppb 34/.
199-D5-13	3/14/95	B0DPT2	90.00		200.00 L	
199-D5-13	3/14/95	B0DPT6		110.00		61000.00
199-D8-4	3/14/95	B0DPT7	40.00 L		11.00 U	
199-D8-4	3/14/95	B0DPV1		20.00 L		19000.00
199-D8-5	3/14/95	B0DPV2	80.00		11.00 U	
199-D8-5	3/14/95	B0DPV3	90.00		11.00 U	
199-D8-5	3/14/95	B0DPW0		37.00		27000.00
199-D8-5	3/14/95	B0DPW1		38.00		27000.00
199-D8-6	3/14/95	B0DPW2	40.00 L		11.00 U	
199-D8-6	3/14/95	B0DPW6		12.00 L		20000.00

Well Name	Collection Date	Sample Number	CHLORID 124/ppb 14/250000	FCHROMI 34/ppb 4.5/50	FLUORID 124/ppb 36/1400	ALPHA 135/pCi/L ./15
199-D5-13	3/14/95	B0DPT2	26000.00 DBQ		400.00	3.04
199-D5-13	3/14/95	B0DPT6		110.00 F		
199-D8-4	3/14/95	B0DPT7	2900.00 BQ		300.00	.49 U
199-D8-4	3/14/95	B0DPV1		4.50 U		
199-D8-5	3/14/95	B0DPV2	3300.00 BQ		400.00	1.45
199-D8-5	3/14/95	B0DPV3	3300.00 BQ		400.00	1.23
199-D8-5	3/14/95	B0DPW0		12.00 L		
199-D8-5	3/14/95	B0DPW1		9.60 L		
199-D8-6	3/14/95	B0DPW2	2700.00 BQ		300.00	.45 U
199-D8-6	3/14/95	B0DPW6		4.50 U		

Well Name	Collection Date	Sample Number	BETA 136/pCi/L ./.	FIRON 34/ppb 5.24/300	FMAGNES 34/ppb 23/.	FMANGAN 34/ppb .72/50
199-D5-13	3/14/95	B0DPT2	2.82			
199-D5-13	3/14/95	B0DPT6		5.24 U	17000.00	.72 U
199-D8-4	3/14/95	B0DPT7	2.54			
199-D8-4	3/14/95	B0DPV1		27.00	990.00	1.60 L
199-D8-5	3/14/95	B0DPV2	2.06 U			
199-D8-5	3/14/95	B0DPV3	1.82 U			
199-D8-5	3/14/95	B0DPW0		22.00 Q	6800.00	1.50 L
199-D8-5	3/14/95	B0DPW1		15.00 LQ	6900.00	1.50 L
199-D8-6	3/14/95	B0DPW2	-.64 U			
199-D8-6	3/14/95	B0DPW6		11.00 L	1100.00	.72 U

Table 2-4. Constituents with at Least One Detected Value for the 100-D Pond Data for Reporting Period January 1 through March 31, 1995. (sheet 2 of 2)

Well Name	Collection Date	Sample Number	NITRATE 124/ppb 11/45000	FPOTASS 34/ppb 850/.	FSODIUM 34/ppb 61/.	SULFATE 124/ppb 37/250000
199-D5-13	3/14/95	BODPT2	36000.00 DQ			79000.00 D
199-D5-13	3/14/95	BODPT6		3700.00	6600.00	
199-D8-4	3/14/95	BODPT7	1600.00 Q			16000.00 D
199-D8-4	3/14/95	BODPV1		3200.00	3300.00	
199-D8-5	3/14/95	BODPV2	2000.00 Q			17000.00 D
199-D8-5	3/14/95	BODPV3	2100.00 Q			17000.00 D
199-D8-5	3/14/95	BODPW0		3200.00	4700.00	
199-D8-5	3/14/95	BODPW1		3100.00	4700.00	
199-D8-6	3/14/95	BODPW2	2300.00 Q			21000.00 D
199-D8-6	3/14/95	BODPW6		2000.00	3700.00	

Well Name	Collection Date	Sample Number	TRITIUM 142/pCi/L ./20000	TURBID 126/NTU .016/.	FVANADI 34/ppb 6.6/.
199-D5-13	3/14/95	BODPT2	283.00	.75 Q	
199-D5-13	3/14/95	BODPT6			6.60 U
199-D8-4	3/14/95	BODPT7	247.00	14.00 Q	
199-D8-4	3/14/95	BODPV1			6.60 U
199-D8-5	3/14/95	BODPV2	208.00	3.90 Q	
199-D8-5	3/14/95	BODPV3	263.00	3.80 Q	
199-D8-5	3/14/95	BODPW0			8.00 L
199-D8-5	3/14/95	BODPW1			8.30 L
199-D8-6	3/14/95	BODPW2	186.00 U	1.60 Q	
199-D8-6	3/14/95	BODPW6			6.60 U

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 January 1 through March 31, 1995.

Well Name	Collection Date	Sample Number	COND FIELD µmho 1/.	COND LAB µmho 1/.	pH FIELD .01/6.5-8.5s	pH LAB .01/6.5-8.5s	TOC ppb 110/.	TOX ppb 5/.
199-D5-13	3/14/95	B0DPT2	502	500	7.62 R	8.20	800 LQ	10.8
		B0DPT3	502		7.63 R		900 LQ	6.5
		B0DPT4	501		7.64 R		900 LQ	12.2
		B0DPT5	502		7.65 R		900 LQ	7.6
199-D8-4	3/14/95	B0DPT7	135	130	8.42	8.60	400 LQ	9.6
		B0DPT8	135		8.42		400 LQ	6.6
		B0DPT9	135		8.41		500 LQ	6.0
		B0DPV0	135		8.40		500 LQ	8.2
199-D8-5	3/14/95	B0DPV2	221	220	7.97	8.20	400 LQ	5.6
		B0DPV3	220	220	7.96	8.20	400 LQ	6.2
		B0DPV4	221		7.95		500 LQ	6.3
		B0DPV5	220		7.97		400 LQ	5.0 U
		B0DPV6					500 LQ	8.3
		B0DPV7					400 LQ	5.5
		B0DPV8					600 LQ	7.7
		B0DPV9					500 LQ	5.0 U
199-D8-6	3/14/95	B0DPW2	135	140	8.56	8.70	500 LQ	5.0 U
		B0DPW3	134		8.57		500 LQ	12.0
		B0DPW4	134		8.57		600 LQ	6.8
		B0DPW5	133		8.58		600 LQ	10.4

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

Table 2-6. Drinking Water Standards Exceeded for 100-D Ponds.

Constituent (DWS)	Wells exceeding DWS (number of samples)
Field pH (6.5 - 8.5)	D8-6 (4)
Laboratory pH (6.5 - 8.5)	D8-4, D8-6
Chromium, filtered samples (50 ppb)	D5-13[a]

[a]Data are in question. A request for Analytical Data Evaluation was submitted.

DWS = drinking water standard.

Table 2-7. Requests for Analytical Data Evaluation for the 100-D Ponds, First Quarter 1995.

Well no.	Sample date	Constituent	Reason
D5-13	3/14/95	Chromium (filtered)	Higher than historical trend.
D5-13	3/14/95	pH (field)	Lower than historical trend; lower than laboratory pH.

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3.0 183-H SOLAR EVAPORATION BASINS

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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 facility and the basin walls have been partially decontaminated.

Groundwater quality has been affected by leakage from the Basins. 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). The 183-H Basins are included in the new Hanford Facility RCRA Permit and, in the future, will be monitored under final-status requirements (Ecology 1994). A final-status groundwater monitoring plan is being prepared.

The purpose of each RCRA well, its sampling frequency, and the dates sampled during the quarter, are summarized in Table 3-1. Well locations are shown in Figure 3-1. Nine wells were added back into the sampling network for the 183-H Basins late in the first quarter of 1995. These wells had been dropped from the network because either (a) they were not in the groundwater flow path of the Basins, or (b) they were completed at the bottom of the aquifer and groundwater chemistry was similar in adjacent, shallower wells. The wells have been reintroduced to the network to regain compliance with the 183-H Basins Closure Plan (DOE-RL 1991). Three wells currently sampled monthly will be sampled quarterly in the future because monthly sampling is not a requirement of DOE-RL (1991). These changes were made too late to be incorporated during the first quarter of 1995, but will be made during second quarter sampling. A new monitoring plan, which will include a new well list, is expected to be in effect for the September 1995 sampling.

3.2 WATER LEVEL MEASUREMENTS

Water levels were measured once during the past quarter. Water levels also were recorded at the time of sample collection for water quality analyses. Water levels are presented in Table 3-2.

3.3 WATER CHEMISTRY DATA

Quarterly sampling was completed as scheduled in 183-H network wells. Three wells were sampled monthly to provide enhanced monitoring of the contaminant plume. Results are presented in Tables 3-3 through 3-5. Data flags are discussed in Sections 1.2 and 1.4. DWSs exceeded are listed in Table 3-6. Table 3-7 lists RADEs submitted for the past quarter and the reason for the request.

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

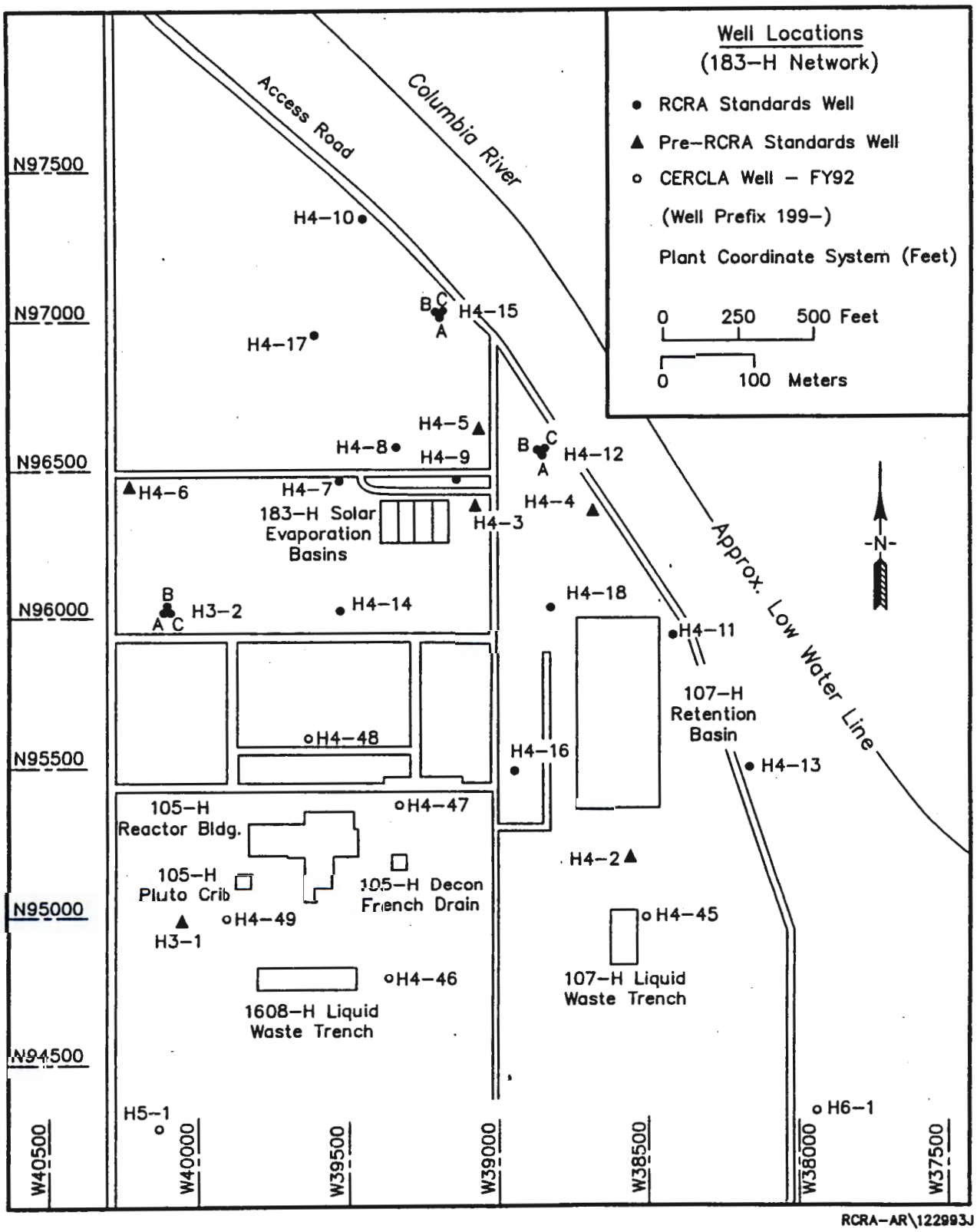

Table 3-1. Monitoring Well Position and Sampling Schedule for the 183-H Solar Evaporation Basins Network.

Well no. (199-)	Relative position	Hydrogeologic unit[a]	Sample frequency	Sample date, 1st Qtr 1995
H3-1	Distant[b]	Hanford: Water Table	Annually	not scheduled
H3-2A	Upgradient	Hanford: Water Table	Quarterly	3/15/95
H3-2B	Upgradient	Hanford: Bottom of aquifer	Annually	not scheduled
H3-2C	Upgradient	Ringold: Silty Sand	Quarterly	3/15/95
H4-10	Distant[b]	Hanford: Water Table	Annually	not scheduled
H4-11	Downgradient	Hanford: Water Table	Quarterly	3/16/95
H4-12A	Downgradient	Hanford: Water Table	Quarterly	3/16/95
H4-12B	Downgradient	Hanford: Bottom of aquifer	Quarterly	not scheduled[c]
H4-12C	Downgradient	Ringold: Silty Sand	Quarterly	3/16/95
H4-13	Distant[b]	Hanford: Water Table	Annually	not scheduled
H4-14	Downgradient	Hanford: Water Table	Quarterly	3/15/95
H4-15A	Distant[b]	Hanford: Water Table	Annually	not scheduled
H4-15B	Distant[b]	Hanford: Bottom of aquifer	Annually	not scheduled
H4-16	Distant[b]	Hanford: Water Table	Annually	not scheduled
H4-17	Distant[b]	Hanford: Water Table	Annually	not scheduled
H4-18	Downgradient	Hanford: Water Table	Quarterly	3/15/95
H4-3	Downgradient	Hanford: Water Table	Monthly	1/24/95 2/22/95 3/15/95
H4-4	Downgradient	Hanford: Water Table	Monthly	1/24/95 2/22/95 3/15/95
H4-5	Downgradient	Hanford: Water Table	Quarterly	3/16/95
H4-6	Upgradient	Hanford: Water Table	Quarterly	3/15/95
H4-7	Upgradient	Hanford: Water Table	Quarterly	3/15/95
H4-8	Upgradient	Hanford: Water Table	Quarterly	3/15/95
H4-9	Downgradient	Hanford: Water Table	Monthly	1/24/95 2/22/95 3/16/95

[a]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.
[b]Wells not located directly in 183-H Basins groundwater flow.

Table 3-2. RCRA Water Level Measurement Report, 183-H Solar Evaporation Basins, First 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 (Hanford Formation)				
199-H3-1	3/29/95	46.41	375.07	114.32
199-H3-2A	3/15/95	42.90	375.47*	114.44
	3/29/95	42.90	375.47	114.44
199-H3-2B	3/29/95	43.44	374.98	114.29
199-H4-10	3/29/95	29.86	374.58	114.17
199-H4-11	3/16/95	44.14	372.70*	113.60
	3/29/95	42.83	374.01	114.00
199-H4-12A	3/16/95	40.19	373.31*	113.78
	3/29/95	39.16	374.34	114.10
199-H4-12B	3/29/95	39.17	374.35	114.10
199-H4-13	3/29/95	44.48	373.72	113.91
199-H4-14	3/15/95	45.87	375.21*	114.36
	3/29/95	45.83	375.25	114.38
199-H4-15A	3/29/95	32.71	375.00	114.30
199-H4-15B	3/29/95	32.40	374.52	114.15
199-H4-16	3/29/95	49.79	374.44	114.13
199-H4-17	3/29/95	44.36	375.23	114.37
199-H4-18	3/15/95	47.82	374.50*	114.15
	3/29/95	47.38	374.94	114.28
199-H4-3	1/24/95	46.98	373.31*	113.78
	2/22/95	46.32	373.97*	113.99
	3/15/95	46.38	373.91*	113.97
	3/29/95	45.82	374.47	114.14

Table 3-2. RCRA Water Level Measurement Report
183-H Solar Evaporation Basins, First 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 (Hanford Formation)				
199-H4-4	1/24/95	40.55	373.15*	113.74
	2/22/95	39.40	374.30*	114.09
	3/15/95	40.73	373.51*	113.85
	3/29/95	39.47	374.77	114.23
199-H4-5	3/16/95	42.66	373.55*	113.86
	3/29/95	41.68	374.53	114.16
199-H4-6	3/15/95	44.63	374.95*	114.28
	3/29/95	44.64	374.94	114.28
199-H4-7	3/15/95	46.18	374.41*	114.12
	3/29/95	46.96	373.63+	113.88
199-H4-8	3/15/95	45.76	374.24*	114.07
	3/29/95	45.49	374.51	114.15
199-H4-9	1/24/95	44.80	373.28*	113.78
	2/22/95	43.96	374.12*	114.03
	3/16/95	44.13	374.45*	114.13
	3/29/95	43.52	375.06	114.32
Wells Monitoring Upper Levels in the Ringold Formation				
199-H3-2C	3/15/95	43.41	375.37*	114.41
	3/29/95	43.28	375.50	114.45
199-H4-12C	3/16/95	40.64	372.88*	113.65
	3/29/95	39.36	374.16	114.04
199-H4-15CS	3/29/95	33.07	374.37	114.11

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

Well	Date	Depth to water (ft)	Water level elevation above msl (ft)	(m)
Well Monitoring Mid-Level in the Ringold Formation				
199-H4-15CR	3/29/95	33.58	373.79	113.93

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. Elevations marked with an '*' were measured at the time of sampling.
4. Elevations 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 January 1 through March 31, 1995. (sheet 1 of 2)

CONTAMINATION INDICATOR PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
CONDUCT	94	Conductivity, field	µmhos	1			20	20	
CONDUCT	73	Conductivity, lab	µmhos				16	16	
TOX		Total Organic Halogen	ppb	5			16	12	
PH		pH, field	pH	.01	6.5-8.5	EPAS	20	20	0

DRINKING WATER PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
BARIUM		Barium	ppb	.59	1000	EPAI	6	6	0
FBARIUM		Barium, filtered	ppb	.59	1000	EPAI	22	22	0
CADMIUM		Cadmium	ppb	3.3	10	EPAI	6	0	0
FCADMIU		Cadmium, filtered	ppb	3.3	10	EPAI	22	0	0
CHROMUM		Chromium	ppb	4.5	50	EPAI	6	6	6
FCHROMI		Chromium, filtered	ppb	4.5	50	EPAI	22	22	17
FLUORID		Fluoride	ppb	36	1400	EPAI	24	24	0
ALPHA		Gross alpha	pCi/L		15	EPA	22	21	7
NITRATE		Nitrate	ppb	11	45000	EPA	24	24	8

GROUNDWATER QUALITY PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
CHLORID		Chloride	ppb	14	250000	EPAS	24	24	0
IRON		Iron	ppb	5.24	300	EPAS	6	6	2
FIRON		Iron, filtered	ppb	5.24	300	EPAS	22	18	0
MANGESE		Manganese	ppb	.72	50	EPAS	6	5	1
FMANGAN		Manganese, filtered	ppb	.72	50	EPAS	22	7	1
SODIUM		Sodium	ppb	61			6	6	
FSODIUM		Sodium, filtered	ppb	61			22	22	
SULFATE		Sulfate	ppb	37	250000	EPAS	24	24	0

SITE SPECIFIC AND OTHER CONSTITUENTS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
ALUMNUM		Aluminum	ppb	26			6	2	
FALUMIN		Aluminum, filtered	ppb	26			22	2	
ANTIONY		Antimony	ppb	62			6	0	
FANTIMO		Antimony, filtered	ppb	62			22	0	
BERYLUM		Beryllium	ppb	.17			6	0	
FBERYLL		Beryllium, filtered	ppb	.17			22	2	
BROMIDE		Bromide	ppb	11			24	19	
CALCIUM		Calcium	ppb	34			6	6	
FCALCIU		Calcium, filtered	ppb	34			22	22	
COBALT		Cobalt	ppb	5.9			6	0	
FCOBALT		Cobalt, filtered	ppb	5.9			22	0	
COPPER		Copper	ppb	4.1	1000	EPAS	6	3	0
FCOPPER		Copper, filtered	ppb	4.1	1000	EPAS	22	4	0

Table 3-3. Constituent List and Summary of Results for 183-H Solar Evaporation Basins Data for Reporting Period January 1 through March 31, 1995. (sheet 2 of 2)

Constituent Name				Lab	DWS		Number of Samples		
Short	(Method)	Full	Units	MDL	Limit	Agency	Total	>MDL	>DWS
BETA		Gross beta	pCi/L				22	21	
MAGNES		Magnesium	ppb	23			6	6	
FMAGNES		Magnesium, filtered	ppb	23			22	22	
NICKEL		Nickel	ppb	13			6	1	
FNICKEL		Nickel, filtered	ppb	13			22	2	
NITRITE		Nitrite	ppb	18	1000	EPA	24	1	0
PHOSPHA		Phosphate	ppb	82			24	0	
POTASUM		Potassium	ppb	850			6	6	
FPOTASS		Potassium, filtered	ppb	850			22	22	
SILVER		Silver	ppb	3.6	50	EPAI	6	2	0
FSILVER		Silver, filtered	ppb	3.6	50	EPAI	22	2	0
SR-90		Strontium-90	pCi/L		8	EPA	6	3	1
TC-99		Technetium-99	pCi/L		900	EPA	16	8	1
TIN		Tin	ppb	69			6	0	
FTIN		Tin, filtered	ppb	69			22	0	
TRITIUM		Tritium	pCi/L		20000	EPA	6	6	0
TURBID	111	Turbidity	NTU				20	20	
TURBID	126	Turbidity	NTU	.016			22	22	
URANIUM		Uranium	ppb				16	16	
VANADUM		Vanadium	ppb	6.6			6	1	
FVANADI		Vanadium, filtered	ppb	6.6			22	5	
ZINC		Zinc	ppb	6.3	5000	EPAS	6	4	0
FZINC		Zinc, filtered	ppb	6.3	5000	EPAS	22	4	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 January 1 through March 31, 1995. (sheet 1 of 9)

Well Name	Collection Date	Sample Number	ALUMNUM 34/ppb 26/.	FALUMIN 34/ppb 26/.	BARIUM 34/ppb .59/1000	FBARIUM 34/ppb .59/1000
199-H3-2A	3/15/95	B0DWD2		26.00 U		29.00
199-H3-2C	3/15/95	B0DWD4		26.00 U		15.00 L
199-H4-11	3/16/95	B0DWF2		26.00 U		33.00
199-H4-11	3/16/95	B0DWF3		26.00 U		32.00
199-H4-12A	3/16/95	B0DWG0		26.00 U		56.00
199-H4-12C	3/16/95	B0DWG7		26.00 U		14.00 L
199-H4-14	3/15/95	B0DWG9		26.00 U		19.00 L
199-H4-18	3/15/95	B0DWH6		26.00 U		33.00
199-H4-3	1/24/95	B0DP88	26.00 U		45.00	
199-H4-3	1/24/95	B0DP89		26.00 U		42.00
199-H4-3	2/22/95	B0DPW7	26.00 U		54.00	
199-H4-3	2/22/95	B0DPW8		26.00 U		55.00
199-H4-3	3/15/95	B0DWJ3		26.00 U		50.00
199-H4-4	1/24/95	B0DP90	26.00 U		41.00	
199-H4-4	1/24/95	B0DP91		82.00 LF		40.00
199-H4-4	2/22/95	B0DPW9	26.00 U		33.00	
199-H4-4	2/22/95	B0DPX0		26.00 U		32.00
199-H4-4	3/15/95	B0DWK6		26.00 U		43.00
199-H4-4	3/15/95	B0DWK7		26.00 U		43.00
199-H4-5	3/16/95	B0DWL6		26.00 U		60.00
199-H4-6	3/15/95	B0DWM0		26.00 U		43.00
199-H4-7	3/15/95	B0DWM9		26.00 U		41.00
199-H4-8	3/15/95	B0DWP0		26.00 U		40.00
199-H4-9	1/24/95	B0DP92	130.00 L		56.00	
199-H4-9	1/24/95	B0DP93		26.00 U		54.00
199-H4-9	2/22/95	B0DPX1	1900.00		73.00	
199-H4-9	2/22/95	B0DPX2		26.00 U		53.00
199-H4-9	3/16/95	B0DWQ2		38.00 L		53.00

Well Name	Collection Date	Sample Number	BERYLUM 34/ppb .17/.	FBERYLL 34/ppb .17/.	BROMIDE 124/ppb 11/.	CALCIUM 34/ppb 34/.
199-H3-2A	3/15/95	B0DWD1			90.00 L	
199-H3-2A	3/15/95	B0DWD2		.17 U		
199-H3-2C	3/15/95	B0DWD3			20.00 L	
199-H3-2C	3/15/95	B0DWD4		.17 U		
199-H4-11	3/16/95	B0DWF0			90.00 L	
199-H4-11	3/16/95	B0DWF1			80.00 L	
199-H4-11	3/16/95	B0DWF2		.17 U		
199-H4-11	3/16/95	B0DWF3		.17 U		
199-H4-12A	3/16/95	B0DWF9			60.00 L	
199-H4-12A	3/16/95	B0DWG0		.25 BL		
199-H4-12C	3/16/95	B0DWG6			11.00 U	
199-H4-12C	3/16/95	B0DWG7		.17 U		
199-H4-14	3/15/95	B0DWG8			20.00 L	
199-H4-14	3/15/95	B0DWG9		.17 U		
199-H4-18	3/15/95	B0DWH5			50.00 L	
199-H4-18	3/15/95	B0DWH6		.17 U		
199-H4-3	11/22/94	B0D754			78.00 L	
199-H4-3	1/24/95	B0DP88	.17 U		11.00 UD	49000.00
199-H4-3	1/24/95	B0DP89		.17 U		
199-H4-3	2/22/95	B0DPW7	.17 U		100.00 LD	59000.00 B
199-H4-3	2/22/95	B0DPW8		.17 U		
199-H4-3	3/15/95	B0DWJ2			11.00 UD	
199-H4-3	3/15/95	B0DWJ3		.17 U		

Table 3-4. Constituents with at Least One Detected Value for the 183-H Solar Evaporation Basins Data for Reporting Period January 1 through March 31, 1995. (sheet 2 of 9)

Well Name	Collection Date	Sample Number	BERYLUM 34/ppb .17/.	FBERYLL 34/ppb .17/.	BROMIDE 124/ppb 11/.	CALCIUM 34/ppb 34/.
199-H4-4	1/24/95	B0DP90	.17 U		60.00 L	35000.00
199-H4-4	1/24/95	B0DP91		.17 U		
199-H4-4	2/22/95	B0DPW9	.17 U		50.00 L	30000.00 B
199-H4-4	2/22/95	B0DPX0		.17 U		
199-H4-4	3/15/95	B0DWK4			11.00 UD	
199-H4-4	3/15/95	B0DWK5			11.00 UD	
199-H4-4	3/15/95	B0DWK6		.17 U		
199-H4-4	3/15/95	B0DWK7		.17 U		
199-H4-5	3/16/95	B0DWL5			90.00 L	
199-H4-5	3/16/95	B0DWL6		.19 BL		
199-H4-6	3/15/95	B0DWL9			100.00 L	
199-H4-6	3/15/95	B0DWM0		.17 U		
199-H4-7	3/15/95	B0DWM8			100.00 L	
199-H4-7	3/15/95	B0DWM9		.17 U		
199-H4-8	3/15/95	B0DWN9			90.00 L	
199-H4-8	3/15/95	B0DWP0		.17 U		
199-H4-9	11/15/94	B0D758			53.00 L	
199-H4-9	1/24/95	B0DP92	.17 U		70.00 L	64000.00
199-H4-9	1/24/95	B0DP93		.17 U		
199-H4-9	2/22/95	B0DPX1	.17 U		90.00 L	70000.00 B
199-H4-9	2/22/95	B0DPX2		.17 U		
199-H4-9	3/16/95	B0DWQ1			70.00 L	
199-H4-9	3/16/95	B0DWQ2		.17 U		

Well Name	Collection Date	Sample Number	FCALCIU 34/ppb 34/.	CHLORID 124/ppb 14/250000	CHROMUM 34/ppb 4.5/50	FCHROMI 34/ppb 4.5/50
199-H3-2A	3/15/95	B0DWD1		8800.00 BD		
199-H3-2A	3/15/95	B0DWD2	52000.00			80.00
199-H3-2C	3/15/95	B0DWD3		1900.00 B		
199-H3-2C	3/15/95	B0DWD4	23000.00			5.90 L
199-H4-11	3/16/95	B0DWF0		5100.00		
199-H4-11	3/16/95	B0DWF1		5100.00		
199-H4-11	3/16/95	B0DWF2	53000.00			46.00
199-H4-11	3/16/95	B0DWF3	51000.00			45.00
199-H4-12A	3/16/95	B0DWF9		8300.00		
199-H4-12A	3/16/95	B0DWG0	60000.00			87.00
199-H4-12C	3/16/95	B0DWG6		2400.00		
199-H4-12C	3/16/95	B0DWG7	30000.00			280.00
199-H4-14	3/15/95	B0DWG8		5100.00 B		
199-H4-14	3/15/95	B0DWG9	36000.00			45.00
199-H4-18	3/15/95	B0DWH5		6900.00 B		
199-H4-18	3/15/95	B0DWH6	55000.00			53.00
199-H4-3	11/22/94	B0D754		9100.00 BQ		
199-H4-3	1/24/95	B0DP88		9800.00	110.00	
199-H4-3	1/24/95	B0DP89	48000.00			88.00
199-H4-3	2/22/95	B0DPW7		9900.00 D	93.00	
199-H4-3	2/22/95	B0DPW8	61000.00 B			84.00
199-H4-3	3/15/95	B0DWJ2		9700.00 BD		
199-H4-3	3/15/95	B0DWJ3	58000.00			95.00
199-H4-4	1/24/95	B0DP90		7600.00	83.00	
199-H4-4	1/24/95	B0DP91	35000.00			81.00
199-H4-4	2/22/95	B0DPW9		6700.00	78.00	
199-H4-4	2/22/95	B0DPX0	29000.00 B			73.00
199-H4-4	3/15/95	B0DWK4		7300.00 B		

Table 3-4. Constituents with at Least One Detected Value for the 183-H Solar Evaporation Basins Data for Reporting Period January 1 through March 31, 1995. (sheet 3 of 9)

Well Name	Collection Date	Sample Number	FCALCIU 34/ppb 34/.	CHLORID 124/ppb 14/250000	CHROMUM 34/ppb 4.5/50	FCHROMI 34/ppb 4.5/50
199-H4-4	3/15/95	BODWK5		7400.00 B		
199-H4-4	3/15/95	BODWK6	39000.00			79.00
199-H4-4	3/15/95	BODWK7	39000.00			79.00
199-H4-5	3/16/95	BODWL5		9200.00		
199-H4-5	3/16/95	BODWL6	64000.00			92.00
199-H4-6	3/15/95	BODWL9		11000.00 BD		
199-H4-6	3/15/95	BODWM0	56000.00			60.00
199-H4-7	3/15/95	BODWM8		9800.00 B		
199-H4-7	3/15/95	BODWM9	57000.00			90.00
199-H4-8	3/15/95	BODWN9		10000.00 BD		
199-H4-8	3/15/95	BODWP0	62000.00			92.00
199-H4-9	11/15/94	BOD758		7200.00		
199-H4-9	1/24/95	BODP92		8600.00	82.00	
199-H4-9	1/24/95	BODP93	62000.00			66.00
199-H4-9	2/22/95	BODPX1		9600.00	390.00	
199-H4-9	2/22/95	BODPX2	68000.00 B			53.00
199-H4-9	3/16/95	BODWQ1		9800.00		
199-H4-9	3/16/95	BODWQ2	70000.00			48.00

Well Name	Collection Date	Sample Number	COPPER 34/ppb 4.1/1000	FCOPPER 34/ppb 4.1/1000	FLUORID 124/ppb 36/1400	ALPHA 135/pCi/L ./15
199-H3-2A	3/15/95	BODWD1			600.00	2.14
199-H3-2A	3/15/95	BODWD2		4.10 U		
199-H3-2C	3/15/95	BODWD3			700.00	.06 U
199-H3-2C	3/15/95	BODWD4		4.10 U		
199-H4-11	3/16/95	BODWF0			600.00	2.11
199-H4-11	3/16/95	BODWF1			500.00	1.77
199-H4-11	3/16/95	BODWF2		4.10 U		
199-H4-11	3/16/95	BODWF3		4.10 U		
199-H4-12A	3/16/95	BODWF9			600.00	4.50
199-H4-12A	3/16/95	BODWG0		4.10 U		
199-H4-12C	3/16/95	BODWG6			500.00	1.28
199-H4-12C	3/16/95	BODWG7		4.10 U		
199-H4-14	3/15/95	BODWG8			500.00	1.50
199-H4-14	3/15/95	BODWG9		5.80 L		
199-H4-18	3/15/95	BODWH5			600.00	2.27
199-H4-18	3/15/95	BODWH6		4.10 U		
199-H4-3	11/22/94	BOD754			500.00	
199-H4-3	1/24/95	BODP88	4.10 U		900.00	46.50
199-H4-3	1/24/95	BODP89		4.10 U		
199-H4-3	2/22/95	BODPW7	5.30 L		1000.00	43.20
199-H4-3	2/22/95	BODPW8		4.10 U		
199-H4-3	3/15/95	BODWJ2			1000.00	51.00
199-H4-3	3/15/95	BODWJ3		4.10 U		
199-H4-4	1/24/95	BODP90	4.90 L		800.00	35.00
199-H4-4	1/24/95	BODP91		4.10 L		
199-H4-4	2/22/95	BODPW9	4.10 U		700.00	18.90
199-H4-4	2/22/95	BODPX0		5.70 L		
199-H4-4	3/15/95	BODWK4			800.00	31.40 Q
199-H4-4	3/15/95	BODWK5			900.00	24.10 Q
199-H4-4	3/15/95	BODWK6		4.10 U		
199-H4-4	3/15/95	BODWK7		4.10 U		
199-H4-5	3/16/95	BODWL5			600.00	2.52
199-H4-5	3/16/95	BODWL6		4.10 U		

Table 3-4. Constituents with at Least One Detected Value for the 183-H Solar Evaporation Basins Data for Reporting Period January 1 through March 31, 1995. (sheet 4 of 9)

Well Name	Collection Date	Sample Number	COPPER 34/ppb 4.1/1000	FCOPPER 34/ppb 4.1/1000	FLUORID 124/ppb 36/1400	ALPHA 135/pCi/L ./15
199-H4-6	3/15/95	B0DWL9			600.00	3.24
199-H4-6	3/15/95	B0DWM0		4.10 U		
199-H4-7	3/15/95	B0DWM8			600.00	3.95
199-H4-7	3/15/95	B0DWM9		4.10 U		
199-H4-8	3/15/95	B0DWN9			600.00	2.23
199-H4-8	3/15/95	B0DWP0		4.10 U		
199-H4-9	11/15/94	B0D758			700.00	
199-H4-9	1/24/95	B0DP92	4.10 U		600.00	3.69
199-H4-9	1/24/95	B0DP93		5.80 L		
199-H4-9	2/22/95	B0DPX1	11.00 L		700.00	6.03
199-H4-9	2/22/95	B0DPX2		4.10 U		
199-H4-9	3/16/95	B0DWQ1			700.00	9.28
199-H4-9	3/16/95	B0DWQ2		4.10 U		

Well Name	Collection Date	Sample Number	BETA 136/pCi/L ./.	IRON 34/ppb 5.24/300	FIRON 34/ppb 5.24/300	MAGNES 34/ppb 23/.
199-H3-2A	3/15/95	B0DWD1	5.07			
199-H3-2A	3/15/95	B0DWD2			14.00 L	
199-H3-2C	3/15/95	B0DWD3	4.34			
199-H3-2C	3/15/95	B0DWD4			11.00 L	
199-H4-11	3/16/95	B0DWF0	42.50			
199-H4-11	3/16/95	B0DWF1	41.20			
199-H4-11	3/16/95	B0DWF2			13.00 L	
199-H4-11	3/16/95	B0DWF3			12.00 L	
199-H4-12A	3/16/95	B0DWF9	14.20			
199-H4-12A	3/16/95	B0DWG0			20.00	
199-H4-12C	3/16/95	B0DWG6	2.15 U			
199-H4-12C	3/16/95	B0DWG7			5.24 U	
199-H4-14	3/15/95	B0DWG8	4.15			
199-H4-14	3/15/95	B0DWG9			13.00 L	
199-H4-18	3/15/95	B0DWH5	13.90			
199-H4-18	3/15/95	B0DWH6			16.00 L	
199-H4-3	1/24/95	B0DP88	257.00	700.00		8800.00
199-H4-3	1/24/95	B0DP89			5.24 U	
199-H4-3	2/22/95	B0DPW7	338.00	190.00 Q		11000.00
199-H4-3	2/22/95	B0DPW8			5.24 UQ	
199-H4-3	3/15/95	B0DWJ2	340.00			
199-H4-3	3/15/95	B0DWJ3			23.00	
199-H4-4	1/24/95	B0DP90	105.00	36.00		5500.00
199-H4-4	1/24/95	B0DP91			14.00 L	
199-H4-4	2/22/95	B0DPW9	79.80	130.00 Q		4700.00
199-H4-4	2/22/95	B0DPX0			14.00 LQ	
199-H4-4	3/15/95	B0DWK4	147.00			
199-H4-4	3/15/95	B0DWK5	156.00			
199-H4-4	3/15/95	B0DWK6			17.00 L	
199-H4-4	3/15/95	B0DWK7			15.00 L	
199-H4-5	3/16/95	B0DWL5	6.11			
199-H4-5	3/16/95	B0DWL6			18.00 L	
199-H4-6	3/15/95	B0DWL9	7.71			
199-H4-6	3/15/95	B0DWM0			60.00	
199-H4-7	3/15/95	B0DWM8	3.75			
199-H4-7	3/15/95	B0DWM9			11.00 L	
199-H4-8	3/15/95	B0DWN9	6.70			
199-H4-8	3/15/95	B0DWP0			13.00 L	

Table 3-4. Constituents with at Least One Detected Value for the 183-H Solar Evaporation Basins Data for Reporting Period January 1 through March 31, 1995. (sheet 5 of 9)

Well Name	Collection Date	Sample Number	BETA 136/pCi/L ./.	IRON 34/ppb 5.24/300	FIRON 34/ppb 5.24/300	MAGNES 34/ppb 23/.
199-H4-9	1/24/95	B0DP92	18.20	240.00		11000.00
199-H4-9	1/24/95	B0DP93			5.24 U	
199-H4-9	2/22/95	B0DPX1	20.60	4000.00 Q		13000.00
199-H4-9	2/22/95	B0DPX2			12.00 LQ	
199-H4-9	3/16/95	B0DWQ1	24.30			
199-H4-9	3/16/95	B0DWQ2			87.00	

Well Name	Collection Date	Sample Number	FMAGNES 34/ppb 23/.	MANGESE 34/ppb .72/50	FMANGAN 34/ppb .72/50	NICKEL 34/ppb 13/.
199-H3-2A	3/15/95	B0DWD2	11000.00		.72 U	
199-H3-2C	3/15/95	B0DWD4	8100.00		.72 U	
199-H4-11	3/16/95	B0DWF2	7700.00		.72 U	
199-H4-11	3/16/95	B0DWF3	7500.00		.81 L	
199-H4-12A	3/16/95	B0DWG0	10000.00		.91 L	
199-H4-12C	3/16/95	B0DWG7	11000.00		.72 U	
199-H4-14	3/15/95	B0DWG9	6900.00		.72 U	
199-H4-18	3/15/95	B0DWH6	9800.00		.72 U	
199-H4-3	1/24/95	B0DP88		9.50 L		13.00 U
199-H4-3	1/24/95	B0DP89	8700.00		1.10 L	
199-H4-3	2/22/95	B0DPW7		3.70 L		13.00 U
199-H4-3	2/22/95	B0DPW8	11000.00		.72 U	
199-H4-3	3/15/95	B0DWJ3	11000.00		1.60 L	
199-H4-4	1/24/95	B0DP90		.72 U		13.00 U
199-H4-4	1/24/95	B0DP91	5400.00		.72 U	
199-H4-4	2/22/95	B0DPW9		.99 L		13.00 U
199-H4-4	2/22/95	B0DPX0	4700.00		.72 U	
199-H4-4	3/15/95	B0DWK6	6300.00		.72 U	
199-H4-4	3/15/95	B0DWK7	6300.00		.72 U	
199-H4-5	3/16/95	B0DWL6	12000.00		.72 U	
199-H4-6	3/15/95	B0DWM0	15000.00		110.00	
199-H4-7	3/15/95	B0DWM9	12000.00		.72 U	
199-H4-8	3/15/95	B0DWP0	12000.00		.72 U	
199-H4-9	1/24/95	B0DP92		4.60 L		13.00 U
199-H4-9	1/24/95	B0DP93	11000.00		.72 U	
199-H4-9	2/22/95	B0DPX1		91.00		170.00
199-H4-9	2/22/95	B0DPX2	13000.00		5.70 L	
199-H4-9	3/16/95	B0DWQ2	14000.00		11.00	

Well Name	Collection Date	Sample Number	FNICKEL 34/ppb 13/.	NITRATE 124/ppb 11/45000	NITRITE 124/ppb 18/1000	POTASUM 34/ppb 850/.
199-H3-2A	3/15/95	B0DWD1		23000.00 D	18.00 U	
199-H3-2A	3/15/95	B0DWD2	13.00 U			
199-H3-2C	3/15/95	B0DWD3		2600.00	18.00 U	
199-H3-2C	3/15/95	B0DWD4	13.00 U			
199-H4-11	3/16/95	B0DWF0		24000.00 D	18.00 U	
199-H4-11	3/16/95	B0DWF1		25000.00 D	18.00 U	
199-H4-11	3/16/95	B0DWF2	13.00 U			
199-H4-11	3/16/95	B0DWF3	13.00 U			
199-H4-12A	3/16/95	B0DWF9		31000.00 D	18.00 U	
199-H4-12A	3/16/95	B0DWG0	13.00 U			
199-H4-12C	3/16/95	B0DWG6		6100.00	18.00 U	

Table 3-4. Constituents with at Least One Detected Value for the 183-H Solar Evaporation Basins Data for Reporting Period January 1 through March 31, 1995. (sheet 6 of 9)

Well Name	Collection Date	Sample Number	FNICKEL 34/ppb 13/.	NITRATE 124/ppb 11/45000	NITRITE 124/ppb 18/1000	POTASUM 34/ppb 850/.
199-H4-12C	3/16/95	B0DWG7	13.00 U			
199-H4-14	3/15/95	B0DWG8		7400.00	18.00 U	
199-H4-14	3/15/95	B0DWG9	13.00 U			
199-H4-18	3/15/95	B0DWH5		24000.00 D	18.00 U	
199-H4-18	3/15/95	B0DWH6	13.00 U			
199-H4-3	11/22/94	B0D754		170000.00 DQ	400.00 R	
199-H4-3	1/24/95	B0DP88		200000.00 D	18.00 U	5900.00
199-H4-3	1/24/95	B0DP89	13.00 U			
199-H4-3	2/22/95	B0DPW7		240000.00 DQ	18.00 U	6300.00
199-H4-3	2/22/95	B0DPW8	13.00 U			
199-H4-3	3/15/95	B0DWJ2		240000.00 D	18.00 U	
199-H4-3	3/15/95	B0DWJ3	14.00 L			
199-H4-4	1/24/95	B0DP90		120000.00 D	18.00 U	4500.00
199-H4-4	1/24/95	B0DP91	13.00 U			
199-H4-4	2/22/95	B0DPW9		78000.00 DQ	18.00 U	4400.00
199-H4-4	2/22/95	B0DPX0	13.00 U			
199-H4-4	3/15/95	B0DWK4		120000.00 D	18.00 U	
199-H4-4	3/15/95	B0DWK5		130000.00 D	18.00 U	
199-H4-4	3/15/95	B0DWK6	13.00 U			
199-H4-4	3/15/95	B0DWK7	13.00 U			
199-H4-5	3/16/95	B0DWL5		28000.00 D	18.00 U	
199-H4-5	3/16/95	B0DWL6	13.00 U			
199-H4-6	3/15/95	B0DWL9		26000.00 D	18.00 U	
199-H4-6	3/15/95	B0DWM0	13.00 U			
199-H4-7	3/15/95	B0DWM8		26000.00 D	18.00 U	
199-H4-7	3/15/95	B0DWM9	13.00 U			
199-H4-8	3/15/95	B0DWN9		28000.00 D	18.00 U	
199-H4-8	3/15/95	B0DWP0	13.00 U			
199-H4-9	11/15/94	B0D758		39000.00 D	18.00 U	
199-H4-9	1/24/95	B0DP92		38000.00 D	18.00 U	5200.00
199-H4-9	1/24/95	B0DP93	13.00 U			
199-H4-9	2/22/95	B0DPX1		38000.00 DQ	18.00 U	5500.00
199-H4-9	2/22/95	B0DPX2	13.00 U			
199-H4-9	3/16/95	B0DWQ1		39000.00 D	18.00 U	
199-H4-9	3/16/95	B0DWQ2	25.00 L			

Well Name	Collection Date	Sample Number	FPOTASS 34/ppb 850/.	SILVER 34/ppb 3.6/50	FSILVER 34/ppb 3.6/50	SODIUM 34/ppb 61/.
199-H3-2A	3/15/95	B0DWD2	5300.00		3.60 U	
199-H3-2C	3/15/95	B0DWD4	4000.00		3.60 U	
199-H4-11	3/16/95	B0DWF2	3100.00		3.60 U	
199-H4-11	3/16/95	B0DWF3	2900.00		3.60 U	
199-H4-12A	3/16/95	B0DWG0	5100.00		3.60 U	
199-H4-12C	3/16/95	B0DWG7	4600.00		3.60 U	
199-H4-14	3/15/95	B0DWG9	4100.00		3.60 U	
199-H4-18	3/15/95	B0DWH6	4700.00		3.60 U	
199-H4-3	1/24/95	B0DP88		3.60 U		110000.00
199-H4-3	1/24/95	B0DP89	5900.00		3.80 L	
199-H4-3	2/22/95	B0DPW7		3.60 U		120000.00 Q
199-H4-3	2/22/95	B0DPW8	6500.00		3.60 U	
199-H4-3	3/15/95	B0DWJ3	6400.00		3.60 U	
199-H4-4	1/24/95	B0DP90		5.70 L		74000.00
199-H4-4	1/24/95	B0DP91	4400.00		4.90 L	
199-H4-4	2/22/95	B0DPW9		3.60 U		66000.00 Q
199-H4-4	2/22/95	B0DPX0	4300.00		3.60 U	

Table 3-4. Constituents with at Least One Detected Value for the 183-H Solar Evaporation Basins Data for Reporting Period January 1 through March 31, 1995. (sheet 7 of 9)

Well Name	Collection Date	Sample Number	FPOTASS 34/ppb 850/.	SILVER 34/ppb 3.6/50	FSILVER 34/ppb 3.6/50	SODIUM 34/ppb 61/.
199-H4-4	3/15/95	B0DWK6	5000.00		3.60 U	
199-H4-4	3/15/95	B0DWK7	4900.00		3.60 U	
199-H4-5	3/16/95	B0DWL6	5400.00		3.60 U	
199-H4-6	3/15/95	B0DWM0	6800.00		3.60 U	
199-H4-7	3/15/95	B0DWM9	5400.00		3.60 U	
199-H4-8	3/15/95	B0DWP0	5200.00		3.60 U	
199-H4-9	1/24/95	B0DP92		3.90 L		21000.00
199-H4-9	1/24/95	B0DP93	5000.00		3.60 U	
199-H4-9	2/22/95	B0DPX1		3.60 U		23000.00 Q
199-H4-9	2/22/95	B0DPX2	5400.00		3.60 U	
199-H4-9	3/16/95	B0DWQ2	5500.00		3.60 U	

Well Name	Collection Date	Sample Number	FSODIUM 34/ppb 61/.	SR-90 141/pCi/L ./8	SULFATE 124/ppb 37/250000	TC-99 143/pCi/L ./900
199-H3-2A	3/15/95	B0DWD1			50000.00 D	-.35 U
199-H3-2A	3/15/95	B0DWD2	17000.00			
199-H3-2C	3/15/95	B0DWD3			13000.00 D	.46 U
199-H3-2C	3/15/95	B0DWD4	10000.00			
199-H4-11	12/05/94	B0DF57		16.90		
199-H4-11	3/16/95	B0DWF0			37000.00 D	9.71
199-H4-11	3/16/95	B0DWF1			38000.00 D	11.40
199-H4-11	3/16/95	B0DWF2	9200.00 B			
199-H4-11	3/16/95	B0DWF3	9100.00 B			
199-H4-12A	3/16/95	B0DWF9			52000.00 D	29.50
199-H4-12A	3/16/95	B0DWG0	16000.00 B			
199-H4-12C	3/16/95	B0DWG6			24000.00 D	.48 U
199-H4-12C	3/16/95	B0DWG7	4400.00 B			
199-H4-14	12/05/94	B0DF65		-.23 U		
199-H4-14	3/15/95	B0DWG8			26000.00 D	-.77 U
199-H4-14	3/15/95	B0DWG9	10000.00			
199-H4-18	3/15/95	B0DWH5			53000.00 D	21.90
199-H4-18	3/15/95	B0DWH6	13000.00			
199-H4-3	11/22/94	B0D754			67000.00 D	
199-H4-3	12/05/94	B0DF69		.35		
199-H4-3	1/24/95	B0DP88			66000.00 D	
199-H4-3	1/24/95	B0DP89	100000.00			
199-H4-3	2/22/95	B0DPW7			69000.00 D	
199-H4-3	2/22/95	B0DPW8	120000.00 Q			
199-H4-3	3/15/95	B0DWJ2			69000.00 D	1490.00
199-H4-3	3/15/95	B0DWJ3	110000.00			
199-H4-4	12/05/94	B0DF71		2.74		
199-H4-4	1/24/95	B0DP90			51000.00 D	
199-H4-4	1/24/95	B0DP91	73000.00			
199-H4-4	2/22/95	B0DPW9			44000.00 D	
199-H4-4	2/22/95	B0DPX0	67000.00 Q			
199-H4-4	3/15/95	B0DWK4			49000.00 D	639.00
199-H4-4	3/15/95	B0DWK5			49000.00 D	606.00
199-H4-4	3/15/95	B0DWK6	76000.00			
199-H4-4	3/15/95	B0DWK7	76000.00			
199-H4-5	12/05/94	B0DF73		-.78 U		
199-H4-5	3/16/95	B0DWL5			58000.00 D	.56 U
199-H4-5	3/16/95	B0DWL6	13000.00 B			
199-H4-6	12/02/94	B0DF75		-.18 U		
199-H4-6	3/15/95	B0DWL9			68000.00 D	-.62 U
199-H4-6	3/15/95	B0DWM0	25000.00			

Table 3-4. Constituents with at Least One Detected Value for the 183-H Solar Evaporation Basins Data for Reporting Period January 1 through March 31, 1995. (sheet 8 of 9)

Well Name	Collection Date	Sample Number	FSODIUM 34/ppb 61/.	SR-90 141/pCi/L ./8	SULFATE 124/ppb 37/250000	TC-99 143/pCi/L ./900
199-H4-7	3/15/95	B0DWM8			58000.00 D	-.67 U
199-H4-7	3/15/95	B0DWM9	17000.00			
199-H4-8	3/15/95	B0DWN9			61000.00 D	-.90 U
199-H4-8	3/15/95	B0DWP0	17000.00			
199-H4-9	11/15/94	B0D758			45000.00 D	
199-H4-9	1/24/95	B0DP92			56000.00 D	
199-H4-9	1/24/95	B0DP93	20000.00			
199-H4-9	2/22/95	B0DPX1			63000.00 D	
199-H4-9	2/22/95	B0DPX2	23000.00 Q			
199-H4-9	3/16/95	B0DWQ1			67000.00 D	49.20
199-H4-9	3/16/95	B0DWQ2	23000.00 B			

Well Name	Collection Date	Sample Number	TRITIUM 142/pCi/L ./20000	TURBID 111/NTU ./.	TURBID 126/NTU .016/.	URANIUM 145/ppb ./.
199-H3-2A	3/15/95	B0DWD1		.40	.14	3.62
199-H3-2C	3/15/95	B0DWD3		.15	.12	1.04
199-H4-11	12/05/94	B0DF57	791.00			
199-H4-11	3/16/95	B0DWF0		.35	.40	4.18
199-H4-11	3/16/95	B0DWF1			.39	3.76
199-H4-12A	3/16/95	B0DWF9		.16	.15	6.77
199-H4-12C	3/16/95	B0DWG6		.36	.09 L	1.68
199-H4-14	12/05/94	B0DF65	956.00			
199-H4-14	3/15/95	B0DWG8		.28	.24	1.83
199-H4-18	3/15/95	B0DWH5		.36	.36	4.04
199-H4-3	12/05/94	B0DF69	3530.00			
199-H4-3	1/24/95	B0DP88		1.71	2.40	
199-H4-3	2/22/95	B0DPW7		.89	1.10 Q	
199-H4-3	3/15/95	B0DWJ2		.55	.55	64.70
199-H4-4	12/05/94	B0DF71	2360.00			
199-H4-4	1/24/95	B0DP90		.34	.65	
199-H4-4	2/22/95	B0DPW9		.38	1.30 Q	
199-H4-4	3/15/95	B0DWK4		.51	.25	51.00
199-H4-4	3/15/95	B0DWK5			.26	40.00
199-H4-5	12/05/94	B0DF73	3370.00			
199-H4-5	3/16/95	B0DWL5		.74	.37	4.38
199-H4-6	12/02/94	B0DF75	5040.00			
199-H4-6	3/15/95	B0DWL9		3.66	4.10	5.22
199-H4-7	3/15/95	B0DWM8		.42	.40	4.09
199-H4-8	3/15/95	B0DWN9		.95	.97	4.23
199-H4-9	1/24/95	B0DP92		2.36	4.80	
199-H4-9	2/22/95	B0DPX1		66.90	80.00 Q	
199-H4-9	3/16/95	B0DWQ1		1.32 F	130.00	8.50

Table 3-4. Constituents with at Least One Detected Value for the 183-H Solar Evaporation Basins Data for Reporting Period January 1 through March 31, 1995. (sheet 9 of 9)

Well Name	Collection Date	Sample Number	VANADUM 34/ppb 6.6/.	FVANADI 34/ppb 6.6/.	ZINC 34/ppb 6.3/5000	FZINC 34/ppb 6.3/5000
199-H3-2A	3/15/95	B0DWD2		6.70 L		6.30 U
199-H3-2C	3/15/95	B0DWD4		32.00		6.30 U
199-H4-11	3/16/95	B0DWF2		6.60 L		6.30 U
199-H4-11	3/16/95	B0DWF3		6.60 U		6.30 U
199-H4-12A	3/16/95	B0DWG0		6.60 L		13.00
199-H4-12C	3/16/95	B0DWG7		25.00 L		6.30 U
199-H4-14	3/15/95	B0DWG9		6.60 U		6.30 U
199-H4-18	3/15/95	B0DWH6		6.60 U		6.30 U
199-H4-3	1/24/95	B0DP88	6.60 U		6.30 U	
199-H4-3	1/24/95	B0DP89		6.60 U		11.00
199-H4-3	2/22/95	B0DPW7	6.60 U		6.30 U	
199-H4-3	2/22/95	B0DPW8		6.60 U		6.30 U
199-H4-3	3/15/95	B0DWJ3		6.60 U		6.30 U
199-H4-4	1/24/95	B0DP90	6.60 U		8.00 L	
199-H4-4	1/24/95	B0DP91		6.60 U		7.70 L
199-H4-4	2/22/95	B0DPW9	6.60 U		7.80 L	
199-H4-4	2/22/95	B0DPX0		6.60 U		6.30 U
199-H4-4	3/15/95	B0DWK6		6.60 U		7.10 L
199-H4-4	3/15/95	B0DWK7		6.60 U		6.30 U
199-H4-5	3/16/95	B0DWL6		6.60 U		6.30 U
199-H4-6	3/15/95	B0DWM0		6.60 U		6.30 U
199-H4-7	3/15/95	B0DWM9		6.60 U		6.30 U
199-H4-8	3/15/95	B0DWP0		6.60 U		6.30 U
199-H4-9	1/24/95	B0DP92	6.60 U		7.70 L	
199-H4-9	1/24/95	B0DP93		6.60 U		6.30 U
199-H4-9	2/22/95	B0DPX1	9.10 L		38.00	
199-H4-9	2/22/95	B0DPX2		6.60 U		6.30 U
199-H4-9	3/16/95	B0DWQ2		6.60 U		6.30 U

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 January 1 through March 31, 1995.

Well Name	Collection Date	Sample Number	COND FIELD µmho 1/.	COND LAB µmho 1/.	pH FIELD .01/6.5-8.5s	pH LAB .01/6.5-8.5s	TOC ppb 110/.	TOX ppb 5/.
199-H3-2A	3/15/95	B0DWD1	445	440	7.89			16.6
199-H3-2C	3/15/95	B0DWD3	236	230	8.08			5.0 U
199-H4-11	3/16/95	B0DWF0	362	370	7.59			25.8
		B0DWF1		370				23.4
199-H4-12A	3/16/95	B0DWF9	448	450	7.80			7.0
199-H4-12C	3/16/95	B0DWG6	263	270	7.75			9.3
199-H4-14	3/15/95	B0DWG8	296	290	7.88			27.8
199-H4-18	3/15/95	B0DWH5	435	430	7.67			16.2
199-H4-3	1/24/95	B0DP88	866		7.60			
	2/22/95	B0DPW7	955		7.68			
	3/15/95	B0DWJ2	981	960	7.71			7.8
199-H4-4	1/24/95	B0DP90	615		7.79			
	2/22/95	B0DPW9	478		7.83			
	3/15/95	B0DWK4	637	630	7.94			5.0 U
		B0DWK5		630				5.0 U
199-H4-5	3/16/95	B0DWL5	477	480	7.49			6.7
199-H4-6	3/15/95	B0DWL9	528	520	7.94			5.0 U
199-H4-7	3/15/95	B0DWM8	474	470	7.75			11.5
199-H4-8	3/15/95	B0DWN9	507	490	7.79			7.7
199-H4-9	1/24/95	B0DP92	524		7.66			
	2/22/95	B0DPX1	527		7.83			
	3/16/95	B0DWQ1	531	560	7.55			5.8

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

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

Constituent (DWS)	Wells exceeding DWS (number of samples)
Field conductivity (700 μmho/cm)	H4-3 (2)
Lab conductivity (700 μmho/cm)	H4-3
Chromium, unfiltered samples (50 ppb)	H4-3 (2), H4-4 (2), H4-9 (2)
Chromium, filtered samples (50 ppb)	All wells except H3-2C, H4-11, and H4-18.
Gross alpha (15 pCi/L)	H4-3 (3), H4-4 (4)
Iron, unfiltered samples (300 ppb)	H4-3, H4-9
Iron, filtered sample (300 ppb)	none.
Manganese, unfiltered samples (50 ppb)	H4-9
Manganese, filtered sample (50 ppb)	H4-6
Nitrate (45,000 ppb)	H4-3 (4), H4-4 (4)
Strontium-90 (8 pCi/L)	H4-11
Technetium-99 (900 pCi/L)	H4-3

[a]Data are in question. Requests for Analytical Data Evaluation were submitted.

DWS = drinking water standard.

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

Well no.	Sample date	Constituent	Reason
H4-4	1/24/95	Aluminum (filtered)	Filtered value is much greater than unfiltered.
HR-9	3/16/95	Turbidity (field)	Two orders of magnitude lower than laboratory value. Apparent data entry error.

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4.0 100-N RCRA SITES

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4.1 INTRODUCTION

Four interim-status RCRA disposal units are located in the 100-N Area of the Hanford Site: (1) the 1301-N Liquid Waste Disposal Facility (LWDF), (2) the 1324-N Surface Impoundment, (3) the 1324-NA Percolation Pond, and (4) the 1325-N LWDF (Figure 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 1325-N and 1301-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.

Well locations in the 100-N Area are illustrated in Figure 4-1. Sampling networks are listed in Table 4-1.

4.2 WATER LEVEL MEASUREMENTS

Water levels were being measured monthly in most of the 100-N Area wells to track changes caused by river stage fluctuations. Many of the wells are now equipped with pressure transducers and data loggers, which record water levels hourly, and monthly meaurements are no longer required. Water levels measured before sample collection are listed in Table 4-2.

4.3 WATER CHEMISTRY DATA

All of the wells in the 100-N RCRA networks were scheduled for sampling this quarter. Sampling of well N-29 (1325-N) was delayed until April because of electrical problems with the pump. Well N-59 (1324-N/NA) had insufficient water to sample. All other wells were sampled as scheduled.

Groundwater sampling for the 100-NR-2 operable unit and sitewide surveillance was coordinated with RCRA sampling. Those projects analyzed some constituents by different methods than RCRA and included some additional constituents (e.g., radionuclides, unfiltered metals, filtered anions).

Groundwater chemistry data from samples collected during the first quarter of 1995 are listed in Tables 4-3 through 4-5. These tables also include data from earlier quarters that were not reported previously. 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. Several analytical results appear anomalous and RADEs were submitted (Table 4-7).

Critical mean values were calculated for the 1301-N LWDF based on recent data from upgradient wells N-57 and N-34. Background conditions were reestablished for this site as described in the revised monitoring plan (Hartman 1993). None of the contamination indicator parameters from the downgradient wells exceeded the critical mean values.

Indicator parameters from 1325-N downgradient wells were compared to critical mean values for that site. Well N-81 exceeded the lower limit for pH. However, the field pH measurements are believed to be erroneous (see Table 4-7). Laboratory pH was consistent with historical data and did not exceed the critical mean. The well was resampled to verify the pH measurements. Two different meters were used to measure pH in the field. All of the results were within the critical range and were consistent with historical values.

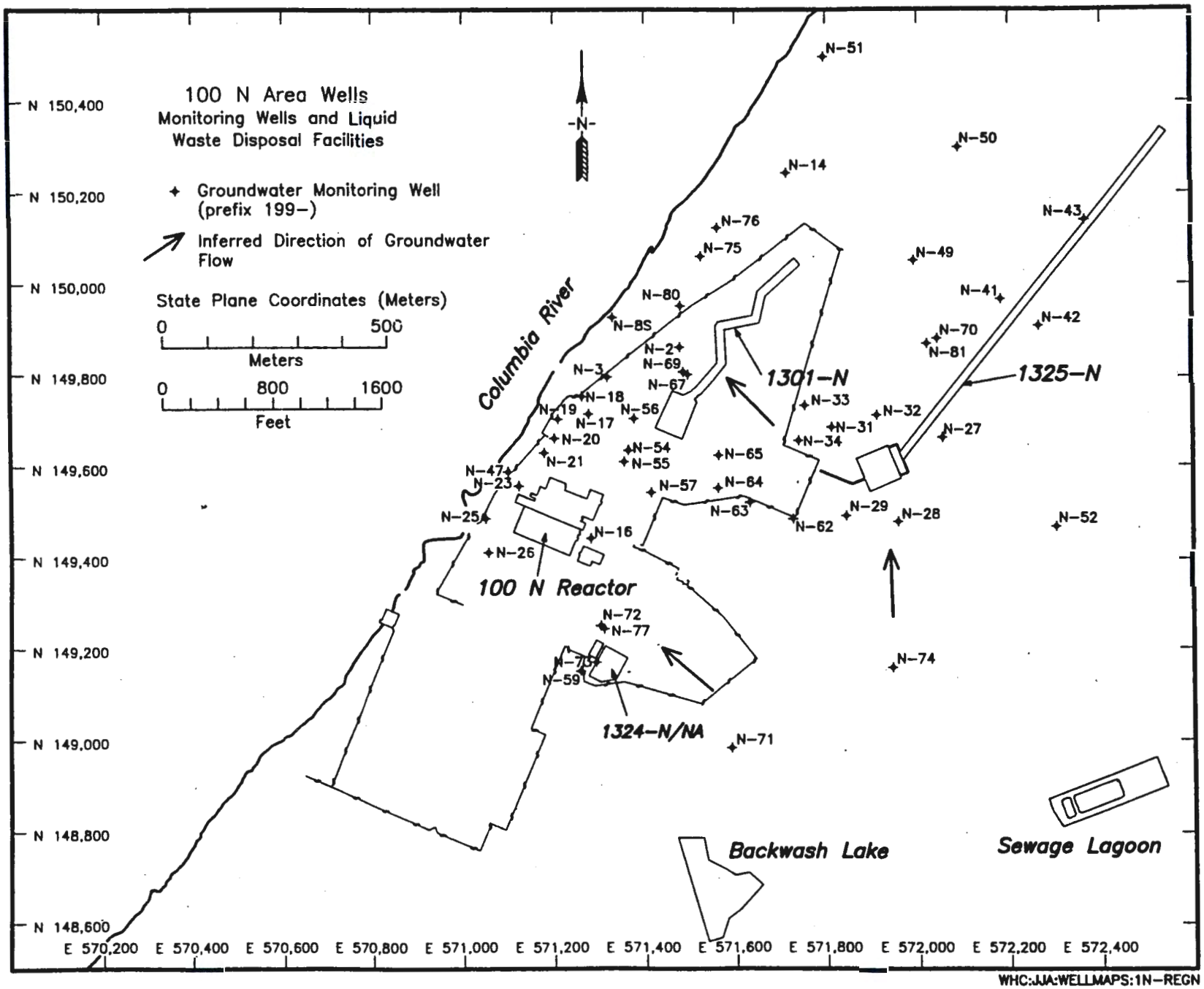

Figure 4-1. Well Location Map for the 1301-N, 1324-N/NA, and 1325-N Facilities.

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, 1st Qtr 1995
N-2	1301-N	Downgradient	Semiannually	2/27/95
N-3	1301-N	Downgradient	Semiannually	3/9/95
N-14	1301-N	Downgradient	Semiannually	3/8/95
N-27	1325-N	Downgradient	Semiannually	3/8/95
N-29	1325-N	Downgradient	Semiannually	Delayed[a]
N-32	1325-N	Downgradient	Semiannually	3/1/95
N-34	1301-N	Upgradient	Semiannually	2/24/95
N-41	1325-N	Downgradient	Semiannually	2/24/95
N-43	1325-N	Downgradient	Semiannually	2/27/95
N-57	1301-N	Upgradient	Semiannually	1/5/95[b] and 2/24/95
N-59	1324-N/NA	Downgradient	Quarterly	Not sampled[c]
N-67	1301-N	Downgradient	Semiannually	3/9/95
N-70	1325-N	Downgradient; bottom of aquifer	Semiannually	2/28/95
N-71	1324-N/NA	Upgradient	Quarterly	3/1/95
N-72	1324-N/NA	Downgradient	Quarterly	2/24/95
N-73	1324-N/NA	Downgradient	Quarterly	3/13/95
N-74	1325-N	Upgradient	Semiannually	3/3/95
N-75	1301-N	Downgradient	Semiannually	3/10/95
N-76	1301-N	Downgradient	Semiannually	3/3/95
N-77	1324-N/NA	Downgradient; bottom of aquifer	Quarterly	3/10/95
N-81	1325-N	Downgradient	Semiannually	2/28/95

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

[a]Sampling delayed until April because of electrical problems in pump.

[b]Rescheduled because of logistical problems during 4th quarter 1994.

[c]Insufficient water in well.

RCRA = *Resource Conservation and Recovery Act of 1976*.

Table 4-2. RCRA Water Level Measurement Report, 100-N Area, First 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-2	2/27/95	--	385.22†	117.42
199-N-3	3.09/95	--	385.48†	117.49
199-N-14	3/08/95	--	385.44†	117.48
199-N-27	3/08/95	63.20	385.88*	117.62
199-N-32	3/01/95	75.08	387.00*	117.96
199-N-34	2/24/95	73.84	385.79*	117.59
199-N-41	2/24/95	72.94	384.65*	117.24
199-N-43	2/27/95	64.80	384.72*	117.26
199-N-57	1/05/95	72.10	385.66*	117.55
	2/24/95	71.71	386.05*	117.67
199-N-67	3/09/95	--	383.28†	116.82
199-N-71	3/01/95	--	388.45†	118.40
199-N-72	2/24/95	--	386.93†	117.94
199-N-73	3/13/95	75.78	387.50*	118.11
199-N-74	3/03/95	69.15	388.51*	118.42
199-N-75	3/10/95	71.97	384.81*	117.29
199-N-76	3/03/95	--	385.38†	117.46
199-N-81	2/28/95	--	385.86†	117.61

Table 4-2. RCRA Water Level Measurement Report, 100-N Area, First 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	3/13/95	73.94	385.39*	117.47
199-N-70	2/28/95	68.99	385.22*	117.42
199-N-77	3/10/95	72.29	387.15*	118.00

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. Elevations marked with a '†' were derived from transducer data; depth to water measurements are not available.
4. Elevations marked with an '*' were measured at the time of sampling.
5. Elevations 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 January 1 through March 31, 1995. (sheet 1 of 5)

CONTAMINATION INDICATOR PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
CONDUCT	94	Conductivity, field	µmhos	1			50	50	
CONDUCT	73	Conductivity, lab	µmhos				16	16	
CONDUCT	1023	Specific conductance	µmho/cm				7	7	
CONDUCT	87	Specific conductance	µmho/cm				4	4	
TOC		Total Organic Carbon	ppb	110			54	54	
TOX		Total Organic Halogen	ppb	5			53	45	
PH	1225	pH			6.5-8.5	EPAS	7	7	0
PH	86	pH			6.5-8.5	EPAS	6	6	0
PH	93	pH, field	pH	.01	6.5-8.5	EPAS	55	55	4
PH	125	pH, lab	pH		6.5-8.5	EPAS	16	16	0

DRINKING WATER PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
ARSENIC		Arsenic	ppb	2.8	50	EPA	1	0	0
FARSENIC		Arsenic, filtered	ppb	2.8	50	EPA	2	0	0
BARIUM	1139	Barium	ppb		1000	EPAI	7	7	0
BARIUM	34	Barium	ppb	.59	1000	EPAI	4	4	0
FBARIUM	1139	Barium, filtered	ppb		1000	EPAI	6	6	0
FBARIUM	34	Barium, filtered	ppb	.59	1000	EPAI	16	16	0
CADMIUM	1139	Cadmium	ppb		10	EPAI	7	0	0
CADMIUM	34	Cadmium	ppb	3.3	10	EPAI	4	0	0
FCADMIU	1139	Cadmium, filtered	ppb		10	EPAI	6	0	0
FCADMIU	34	Cadmium, filtered	ppb	3.3	10	EPAI	16	0	0
CHROMUM	1139	Chromium	ppb		50	EPAI	7	7	0
CHROMUM	34	Chromium	ppb	4.5	50	EPAI	4	3	0
FCHROMI	1139	Chromium, filtered	ppb		50	EPAI	6	5	0
FCHROMI	34	Chromium, filtered	ppb	4.5	50	EPAI	16	4	0
FLUORID	1083	Fluoride	ppm		1.4	EPAI	6	6	0
FLUORID	124	Fluoride	ppb	36	1400	EPAI	20	20	0
FFLUORID	1083	Fluoride, filtered	ppm		1.4	EPAI	8	6	0
ALPHA	1247	Gross alpha	pCi/L		15	EPA	6	0	0
ALPHA	135	Gross alpha	pCi/L		15	EPA	17	10	0
MERCURY		Mercury	ppb	.05	2	EPA	1	0	0
FMERCUR		Mercury, filtered	ppb	.05	2	EPA	1	0	0
NITRATE		Nitrate	ppb	11	45000	EPA	20	20	1
NO3-N		Nitrogen in Nitrate	ppm		10	EPA	6	6	1
FNO3-N		Nitrogen in Nitrate, filtered	ppm		10	EPA	8	8	2
RADIUM		Radium	pCi/L		5	EPAI	1	1	0
SELENUM		Selenium	ppb	.65	10	EPAI	1	1	0
FSELENI		Selenium, filtered	ppb	.65	10	EPAI	1	1	0

GROUNDWATER QUALITY PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
CHLORID		Chloride	ppb	14	250000	EPAS	20	20	0
CHLORID		Chloride	ppm		250	EPAS	6	6	0
FCHLORID		Chloride, filtered	ppm		250	EPAS	8	8	0
IRON	1139	Iron	ppb		300	EPAS	7	7	1
IRON	34	Iron	ppb	5.24	300	EPAS	4	4	3

Table 4-3. Constituent List and Summary of Results for 100-N RCRA Sites Data for Reporting Period January 1 through March 31, 1995. (sheet 2 of 5)

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
FIRON	1139	Iron, filtered	ppb		300	EPAS	6	6	0
FIRON	34	Iron, filtered	ppb	5.24	300	EPAS	16	13	0
MANGESE	1139	Manganese	ppb		50	EPAS	7	7	0
MANGESE	34	Manganese	ppb	.72	50	EPAS	4	4	0
FMANGAN	1139	Manganese, filtered	ppb		50	EPAS	6	6	0
FMANGAN	34	Manganese, filtered	ppb	.72	50	EPAS	16	11	0
LPHENOL		Phenol	ppb	.31			17	0	
SODIUM	1139	Sodium	ppb				7	7	
SODIUM	34	Sodium	ppb	61			4	4	
FSODIUM	1139	Sodium, filtered	ppb				6	6	
FSODIUM	34	Sodium, filtered	ppb	61			16	16	
SULFATE	1083	Sulfate	ppm		250	EPAS	6	6	1
SULFATE	124	Sulfate	ppb	37	250000	EPAS	20	20	2
FSULFATE	1083	Sulfate, filtered	ppm		250	EPAS	8	8	1

SITE SPECIFIC AND OTHER CONSTITUENTS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
1,1,1-T	25	1,1,1-Trichloroethane	ppb	.036	200	EPA	4	0	0
1,1,1-T	83	1,1,1-Trichloroethane	ppb		200	EPA	4	0	0
1,1,2-T		1,1,2-Trichloroethane	ppb	.078			4	0	
1,1-DIC	25	1,1-Dichloroethane	ppb	.058			4	0	
1,1-DIC	83	1,1-Dichloroethane	ppb				4	0	
1,2-DIC	25	1,2-Dichloroethane	ppb	.029	5	EPA	4	0	0
1,2-DIC	83	1,2-Dichloroethane	ppb		5	EPA	4	0	0
14-dben		1,4-Dichlorobenzene	ppb	.055	75	EPA	4	0	0
246-trp		2,4,6-Trichlorophenol	ppb	1.3			17	0	
24-dchp		2,4-Dichlorophenol	ppb	1.3			17	0	
DIMPHEN		2,4-Dimethylphenol	ppb	1.2			17	0	
DINPHEN		2,4-Dinitrophenol	ppb	3			17	0	
26-dchp		2,6-Dichlorophenol	ppb	1.4			17	0	
CHLPHEN		2-Chlorophenol	ppb	1.6			17	0	
2NITPH		2-Nitrophenol	ppb	1.3			17	0	
2PROPAN		2-Propanol	ppb				4	0	
BUTDINP		2-sec-Butyl-4,6-dinitrophenol(DN)	ppb	1.3			17	0	
46DN2MP		4,6-Dinitro-2-methylphenol	ppb	1.3			17	0	
CHLCRES		4-Chloro-3-methylphenol	ppb	1.3			17	0	
MIBK		4-Methyl-2-pentanone	ppb				4	0	
NITPHEN		4-Nitrophenol	ppb	3			17	0	
ACETONE		Acetone	ppb				4	0	
ALKALIN		Alkalinity	ppm	2.8			19	19	
ALUMNUM	1139	Aluminum	ppb				7	3	
ALUMNUM	34	Aluminum	ppb	26			4	3	
FALUMIN	1139	Aluminum, filtered	ppb				6	4	
FALUMIN	34	Aluminum, filtered	ppb	26			16	0	
ANTIONY	1139	Antimony	ppb				7	0	
ANTIONY	34	Antimony	ppb	62			4	0	
FANTIMO	1139	Antimony, filtered	ppb				6	0	
FANTIMO	34	Antimony, filtered	ppb	62			16	0	
SB-125		Antimony-125	pCi/L				5	0	
BENZENE	25	Benzene	ppb	.013	5	EPA	4	0	0
BENZENE	83	Benzene	ppb		5	EPA	4	0	0
BERYLUM	1139	Beryllium	ppb				7	3	
BERYLUM	34	Beryllium	ppb	.17			4	1	
FBERYLL	1139	Beryllium, filtered	ppb				6	2	

Table 4-3. Constituent List and Summary of Results for 100-N RCRA Sites Data for Reporting Period January 1 through March 31, 1995. (sheet 3 of 5)

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
FBERYLL	34	Beryllium, filtered	ppb	.17			16	2	
BROMIDE		Bromide	ppb	11			20	12	
BDCM		Bromodichloromethane	ppb				4	0	
BROMORM		Bromoform	ppb				4	0	
CALCIUM	1139	Calcium	ppb				7	7	
CALCIUM	34	Calcium	ppb	34			4	4	
FCALCIU	1139	Calcium, filtered	ppb				6	6	
FCALCIU	34	Calcium, filtered	ppb	34			16	16	
TETRANE	25	Carbon tetrachloride	ppb	.075	5	EPA	4	0	0
TETRANE	83	Carbon tetrachloride	ppb		5	EPA	4	0	0
CS-137	1249	Cesium-137	pCi/L		200	EPA	5	0	0
CS-137	140	Cesium-137	pCi/L		200	EPA	5	0	0
CHLFORM	25	Chloroform	ppb	.041			4	4	
CHLFORM	83	Chloroform	ppb				4	4	
COBALT	1139	Cobalt	ppb				7	1	
COBALT	34	Cobalt	ppb	5.9			4	0	
FCOBALT	1139	Cobalt, filtered	ppb				6	0	
FCOBALT	34	Cobalt, filtered	ppb	5.9			16	0	
CO-58		Cobalt-58	pCi/L				5	0	
CO-60	1249	Cobalt-60	pCi/L		100	EPA	5	0	0
CO-60	140	Cobalt-60	pCi/L		100	EPA	5	0	0
COLIFORM		Coliforms	COL	1	1	EPAI	1	0	0
COPPER	1139	Copper	ppb		1000	EPAS	7	6	0
COPPER	34	Copper	ppb	4.1	1000	EPAS	4	1	0
FCOPPER	1139	Copper, filtered	ppb		1000	EPAS	6	6	0
FCOPPER	34	Copper, filtered	ppb	4.1	1000	EPAS	16	3	0
CRESOLS		Cresols (methylphenols)	ppb	4.8			17	0	
BRCHLMET		Dibromochloromethane	ppb				4	0	
ETHBENZ	25	Ethylbenzene	ppb	.051	700	EPA	4	0	0
ETHBENZ	83	Ethylbenzene	ppb		700	EPA	4	0	0
EU-152		Europium-152	pCi/L				5	0	
EU-154		Europium-154	pCi/L				5	0	
EU-155		Europium-155	pCi/L				5	0	
BETA	1252	Gross beta	pCi/L				6	6	
BETA	136	Gross beta	pCi/L				17	17	
LHYDRAZ		Hydrazine	ppb	1.6			1	0	
I-129		Iodine-129	pCi/L				3	0	
FE-59		Iron-59	pCi/L				5	0	
LEAD		Lead	ppb	1.5	50	EPAI	1	0	0
FLEAD		Lead, filtered	ppb	1.5	50	EPAI	17	4	0
MAGNES	1139	Magnesium	ppb				7	7	
MAGNES	34	Magnesium	ppb	23			4	4	
FMAGNES	1139	Magnesium, filtered	ppb				6	6	
FMAGNES	34	Magnesium, filtered	ppb	23			16	16	
METHONE		Methyl ethyl ketone	ppb				4	0	
METHYCH	25	Methylene chloride	ppb	.09			4	0	
METHYCH	83	Methylene chloride	ppb				4	0	
MPOTPHOS		Monopotassium phosphate	ppm				2	0	
FMPOTPHO		Monopotassium phosphate, filtere	ppm				2	0	
NICKEL	1139	Nickel	ppb				7	0	
NICKEL	34	Nickel	ppb	13			4	2	
FNICKEL	1139	Nickel, filtered	ppb				6	0	
FNICKEL	34	Nickel, filtered	ppb	13			16	1	
NITRITE		Nitrite	ppb	18	1000	EPA	20	0	0
NO2-N		Nitrogen in Nitrite	ppm				6	0	
FNO2-N		Nitrogen in Nitrite, filtered	ppm				8	0	
OILGRSE		Oil and grease	mg/L				1	1	

Table 4-3. Constituent List and Summary of Results for 100-N RCRA Sites Data for Reporting Period January 1 through March 31, 1995. (sheet 4 of 5)

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
PENTCHP		Pentachlorophenol	ppb	1.3	1	EPA	17	0	17*
PHOSPHA	1083	Phosphate	ppm				4	0	
PHOSPHA	124	Phosphate	ppb	82			20	0	
FPHOSPHA	1083	Phosphate, filtered	ppm				6	0	
POTASUM	1139	Potassium	ppb				7	6	
POTASUM	34	Potassium	ppb	850			4	4	
FPOTASS	1139	Potassium, filtered	ppb				6	4	
FPOTASS	34	Potassium, filtered	ppb	850			16	16	
K-40		Potassium-40	pCi/L				1	1	
RSTRONUM		Radiostrontium	pCi/L				5	2	
RU-106		Ruthenium-106	pCi/L		30	EPA	5	0	0
SILVER	1139	Silver	ppb		50	EPAI	7	2	0
SILVER	34	Silver	ppb	3.6	50	EPAI	4	0	0
FSILVER	1139	Silver, filtered	ppb		50	EPAI	6	0	0
FSILVER	34	Silver, filtered	ppb	3.6	50	EPAI	16	0	0
STRONUM		Strontium					2	0	
SR-90		Strontium-90	pCi/L		8	EPA	5	5	5
FSR-90		Strontium-90, filtered	pCi/L		8	EPA	4	4	3
TC-99		Technetium-99	pCi/L		900	EPA	4	3	0
PERCENE	25	Tetrachloroethene	ppb	.22	5	EPA	4	0	0
PERCENE	83	Tetrachloroethene	ppb		5	EPA	4	2	0
TETPHNL		Tetrachlorophenols	ppb	1.5			17	0	
TAF		Tetrahydrofuran	ppb				4	0	
TIN		Tin	ppb	69			4	0	
FTIN		Tin, filtered	ppb	69			16	0	
TOLUENE	25	Toluene	ppb	.016	1000	EPA	4	0	0
TOLUENE	83	Toluene	ppb		1000	EPA	4	0	0
TC		Total Carbon	ppb				1	1	
TDS		Total Dissolved Solids	ppm	10	500	EPAS	4	4	3
TPH		Total petrolium hydrocarbons	mg/L				1	0	
TRICENE	25	Trichloroethene	ppb	.11	5	EPA	4	0	0
TRICENE	83	Trichloroethene	ppb		5	EPA	4	0	0
TRIPHNL		Trichlorophenols	ppb	1.7			17	0	
TRITIUM	1255	Tritium	pCi/L		20000	EPA	5	5	4
TRITIUM	142	Tritium	pCi/L		20000	EPA	5	5	3
TURBID	1044	Turbidity	NTU				7	7	
TURBID	111	Turbidity	NTU				1	1	
TURBID	126	Turbidity	NTU	.016			16	16	
URANIUM		Uranium	ppb				1	1	
U-234		Uranium-234	pCi/L				2	2	
U-235		Uranium-235	pCi/L				2	1	
U-238		Uranium-238	pCi/L				2	2	
VANADUM	1139	Vanadium	ppb				7	7	
VANADUM	34	Vanadium	ppb	6.6			4	1	
FVANADI	1139	Vanadium, filtered	ppb				6	6	
FVANADI	34	Vanadium, filtered	ppb	6.6			16	8	
VINYIDE		Vinyl chloride	ppb	.13	2	EPA	4	0	0
XYLENE	25	Xylenes (total)	ppb	.035	10000	EPA	4	0	0
XYLENE	83	Xylenes (total)	ppb		10000	EPA	4	0	0
ZINC	1139	Zinc	ppb		5000	EPAS	7	7	0
ZINC	34	Zinc	ppb	6.3	5000	EPAS	4	2	0
FZINC	1139	Zinc, filtered	ppb		5000	EPAS	6	6	0
FZINC	34	Zinc, filtered	ppb	6.3	5000	EPAS	16	1	0
CIS12DE	25	cis-1,2-Dichloroethylene	ppb	.11	70	EPA	4	0	0

Table 4-3. Constituent List and Summary of Results for 100-N RCRA Sites Data for Reporting Period January 1 through March 31, 1995. (sheet 5 of 5)

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
CIS12DE	83	cis-1,2-Dichloroethylene	ppb		70	EPA	4	0	0
TRANDCE	25	trans-1,2-Dichloroethylene	ppb	.073	100	EPA	4	0	0
TRANDCE	83	trans-1,2-Dichloroethylene	ppb		100	EPA	4	0	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 January 1 through March 31, 1995. (sheet 1 of 16)

Well Name	Collection Date	Sample Number	ALKALIN 357/ppm 2.8/.	ALUMNUM 1139/ppb ./.	ALUMNUM 34/ppb 26/.	FALUMIN 1139/ppb ./.
199-N-14	3/08/95	B0DTK1	60.00		26.00 U	
199-N-2	2/27/95	B0DWN7	60.00			
199-N-27	3/08/95	B0DWZ1	80.00			
199-N-3	3/09/95	B0DRS5	230.00 B F			
199-N-3	3/09/95	B0DX42		44.30 B		
199-N-3	3/09/95	B0DX43				23.50 U
199-N-32	3/01/95	B0DYG0	70.00			
199-N-34	2/24/95	B0DWP6	70.00			
199-N-41	2/24/95	B0DX01	60.00			
199-N-43	2/27/95	B0DX06	80.00			
199-N-57	1/05/95	B0D707			40.00 L	
199-N-57	2/24/95	B0DWQ8	120.00			
199-N-67	3/09/95	B0DRS0	80.00 B		450.00	
199-N-67	3/09/95	B0DX77		23.50 U		
199-N-70	2/28/95	B0DX67		23.50 U		
199-N-70	2/28/95	B0DX68				32.10 B
199-N-70	2/28/95	B0DX94		23.50 U		
199-N-70	2/28/95	B0DX95				23.50 U
199-N-70	2/28/95	B0DYH0	70.00			
199-N-71	3/01/95	B0DYF3	110.00			
199-N-72	2/24/95	B0DWY9	90.00			
199-N-73	3/13/95	B0DYF8	120.00 B			
199-N-74	3/03/95	B0DYG5	80.00			
199-N-75	3/10/95	B0DX69		39.30 B		
199-N-75	3/10/95	B0DX70				31.90 B
199-N-75	3/10/95	B0DX96		44.40 B		
199-N-75	3/10/95	B0DX97				25.30 B
199-N-75	3/10/95	B0DYH5	60.00 B			
199-N-76	3/03/95	B0DTJ7	70.00		55.00 L	
199-N-77	3/10/95	B0DX71		23.50 U		
199-N-77	3/10/95	B0DX72				38.40 B
199-N-77	3/10/95	B0DYH9	110.00 B			
199-N-81	2/28/95	B0DX11	70.00			

Well Name	Collection Date	Sample Number	FALUMIN 34/ppb 26/.	BARIUM 1139/ppb ./1000	BARIUM 34/ppb .59/1000	FBARIUM 1139/ppb ./1000
199-N-14	3/08/95	B0DTK1			14.00 L	
199-N-14	3/08/95	B0DTK2	26.00 U			
199-N-2	2/27/95	B0DWN8	26.00 U			
199-N-27	3/08/95	B0DWZ5	26.00 U			
199-N-3	3/09/95	B0DX42		422.00 F		
199-N-3	3/09/95	B0DX43				140.00 B
199-N-32	3/01/95	B0DYG4	26.00 U			
199-N-34	2/24/95	B0DWQ0	26.00 U			
199-N-41	2/24/95	B0DX05	26.00 U			
199-N-43	2/27/95	B0DX10	26.00 U			
199-N-57	1/05/95	B0D707			67.00	
199-N-57	1/05/95	B0D711	26.00 U			
199-N-57	2/24/95	B0DWR2	26.00 U			
199-N-67	3/09/95	B0DRS0			68.00	
199-N-67	3/09/95	B0DX77		72.30 B		
199-N-69	3/13/95	B0DWY4	26.00 U			

Table 4-4. Constituents with at Least One Detected Value for the 100-N RCRA Sites Data for Reporting Period January 1 through March 31, 1995. (sheet 2 of 16)

Well Name	Collection Date	Sample Number	FALUMIN 34/ppb 26/.	BARIUM 1139/ppb ./1000	BARIUM 34/ppb .59/1000	FBARIUM 1139/ppb ./1000
199-N-70	2/28/95	B0DX67		41.20 B		
199-N-70	2/28/95	B0DX68				39.90 B
199-N-70	2/28/95	B0DX94		33.10 B		
199-N-70	2/28/95	B0DX95				42.70 B
199-N-71	3/01/95	B0DYF7	26.00 U			
199-N-72	2/24/95	B0DWZ0	26.00 U			
199-N-73	3/13/95	B0DYF9	26.00 U			
199-N-74	3/03/95	B0DYG9	26.00 U			
199-N-75	3/10/95	B0DX69		26.60 B		
199-N-75	3/10/95	B0DX70				25.90 B
199-N-75	3/10/95	B0DX96		26.50 B		
199-N-75	3/10/95	B0DX97				32.40 B
199-N-76	3/03/95	B0DTJ7			16.00 L	
199-N-76	3/03/95	B0DTJ8	26.00 U			
199-N-77	3/10/95	B0DX71		47.40 B		
199-N-77	3/10/95	B0DX72				50.50 B
199-N-81	2/28/95	B0DX15	26.00 U			

Well Name	Collection Date	Sample Number	FBARIUM 34/ppb .59/1000	BERYLUM 1139/ppb ./.	BERYLUM 34/ppb .17/.	FBERYLL 1139/ppb ./.
199-N-14	3/08/95	B0DTK1			.17 UQ	
199-N-14	3/08/95	B0DTK2	13.00 L			
199-N-2	2/27/95	B0DWN8	30.00			
199-N-27	3/08/95	B0DWZ5	63.00			
199-N-3	3/09/95	B0DX42		.24 B		
199-N-3	3/09/95	B0DX43				.20 U
199-N-32	3/01/95	B0DYG4	23.00			
199-N-34	2/24/95	B0DWQ0	32.00			
199-N-41	2/24/95	B0DX05	18.00 L			
199-N-43	2/27/95	B0DX10	26.00			
199-N-57	1/05/95	B0D707			.17 U	
199-N-57	1/05/95	B0D711	69.00			
199-N-57	2/24/95	B0DWR2	67.00			
199-N-67	3/09/95	B0DRS0			.60 BLQ	
199-N-67	3/09/95	B0DX77		.20 U		
199-N-69	3/13/95	B0DWY4	20.00 L			
199-N-70	2/28/95	B0DX67		1.10 B		
199-N-70	2/28/95	B0DX68				.64 B
199-N-70	2/28/95	B0DX94		.96 B		
199-N-70	2/28/95	B0DX95				.96 B
199-N-71	3/01/95	B0DYF7	18.00 L			
199-N-72	2/24/95	B0DWZ0	63.00			
199-N-73	3/13/95	B0DYF9	47.00			
199-N-74	3/03/95	B0DYG9	27.00			
199-N-75	3/10/95	B0DX69		.20 U		
199-N-75	3/10/95	B0DX70				.20 U
199-N-75	3/10/95	B0DX96		.20 U		
199-N-75	3/10/95	B0DX97				.20 U
199-N-76	3/03/95	B0DTJ7			.17 UQ	
199-N-76	3/03/95	B0DTJ8	16.00 L			
199-N-77	3/10/95	B0DX71		.20 U		
199-N-77	3/10/95	B0DX72				.20 U
199-N-81	2/28/95	B0DX15	34.00			

Table 4-4. Constituents with at Least One Detected Value for the 100-N RCRA Sites Data for Reporting Period January 1 through March 31, 1995. (sheet 3 of 16)

Well Name	Collection Date	Sample Number	FBERYLL 34/ppb .17/.	BROMIDE 124/ppb 11/.	CALCIUM 1139/ppb ./.	CALCIUM 34/ppb 34/.
199-N-14	3/08/95	B0DTK1		11.00 U		27000.00
199-N-14	3/08/95	B0DTK2	.17 UQ			
199-N-2	2/27/95	B0DWN7		11.00 U		
199-N-2	2/27/95	B0DWN8	.17 U			
199-N-27	3/08/95	B0DWZ1		40.00 L		
199-N-27	3/08/95	B0DWZ5	.27 LQ			
199-N-3	3/09/95	B0DRS5		200.00 L		
199-N-3	3/09/95	B0DX42			148000.00	
199-N-32	3/01/95	B0DYG0		11.00 U		
199-N-32	3/01/95	B0DYG4	.17 UQ			
199-N-34	11/04/94	B0D6Z4		23.00 L		
199-N-34	2/24/95	B0DWP6		30.00 L		
199-N-34	2/24/95	B0DWQ0	.17 U			
199-N-41	2/24/95	B0DX01		30.00 L		
199-N-41	2/24/95	B0DX05	.17 U			
199-N-43	10/31/94	B0D613		37.00 L		
199-N-43	2/27/95	B0DX06		40.00 L		
199-N-43	2/27/95	B0DX10	.17 U			
199-N-57	1/05/95	B0D707		80.00 L		80000.00
199-N-57	1/05/95	B0D711	.17 U			
199-N-57	2/24/95	B0DWQ8		100.00 L		
199-N-57	2/24/95	B0DWR2	.17 U			
199-N-67	3/09/95	B0DRS0				65000.00
199-N-67	3/09/95	B0DX77			68200.00	
199-N-69	3/13/95	B0DWY3		11.00 U		
199-N-69	3/13/95	B0DWY4	.17 U			
199-N-70	2/28/95	B0DX67			37100.00	
199-N-70	2/28/95	B0DX94			30800.00	
199-N-71	3/01/95	B0DYF3		11.00 U		
199-N-71	3/01/95	B0DYF7	.17 UQ			
199-N-72	2/24/95	B0DWY9		11.00 U		
199-N-72	2/24/95	B0DWZ0	.17 U			
199-N-73	11/07/94	B0D723		18.00 L		
199-N-73	3/13/95	B0DYF8		20.00 L		
199-N-73	3/13/95	B0DYF9	.17 U			
199-N-74	3/03/95	B0DYG5		40.00 L		
199-N-74	3/03/95	B0DYG9	.17 UQ			
199-N-75	3/10/95	B0DX69			28700.00	
199-N-75	3/10/95	B0DX96			28400.00	
199-N-76	3/03/95	B0DTJ7		11.00 U		27000.00
199-N-76	3/03/95	B0DTJ8	.17 UQ			
199-N-77	3/10/95	B0DX71			42000.00	
199-N-81	2/28/95	B0DX11		11.00 U		
199-N-81	2/28/95	B0DX15	.21 BLQ			

Table 4-4. Constituents with at Least One Detected Value for the 100-N RCRA Sites Data for Reporting Period January 1 through March 31, 1995. (sheet 4 of 16)

Well Name	Collection Date	Sample Number	FCALCIU 1139/ppb ./.	FCALCIU 34/ppb 34/.	CHLORID 1083/ppm ./250	CHLORID 124/ppb 14/250000
199-N-14	3/08/95	B0DTK1				1600.00
199-N-14	3/08/95	B0DTK2		27000.00		
199-N-2	2/27/95	B0DWN7				1700.00
199-N-2	2/27/95	B0DWN8		41000.00 B		
199-N-27	3/08/95	B0DWZ1				7000.00
199-N-27	3/08/95	B0DWZ5		100000.00 F		
199-N-3	3/09/95	B0DRS5				26000.00 DQ
199-N-3	3/09/95	B0DX43	150000.00			
199-N-32	3/01/95	B0DYG0				2100.00 Q
199-N-32	3/01/95	B0DYG4		35000.00		
199-N-34	11/04/94	B0D6Z4				4600.00
199-N-34	2/24/95	B0DWP6				5500.00
199-N-34	2/24/95	B0DWQ0		54000.00 B		
199-N-41	2/24/95	B0DX01				5400.00
199-N-41	2/24/95	B0DX05		30000.00 B		
199-N-43	10/31/94	B0D613				6800.00
199-N-43	2/27/95	B0DX06				6800.00
199-N-43	2/27/95	B0DX10		33000.00 B		
199-N-57	1/05/95	B0D707				77000.00 DY
199-N-57	1/05/95	B0D711		82000.00		
199-N-57	2/24/95	B0DWQ8				49000.00 D
199-N-57	2/24/95	B0DWR2		72000.00 B		
199-N-67	3/09/95	B0DX77			2.59	
199-N-69	3/13/95	B0DWY3				2000.00
199-N-69	3/13/95	B0DWY4		27000.00		
199-N-70	2/28/95	B0DX67			4.60	
199-N-70	2/28/95	B0DX68	36600.00			
199-N-70	2/28/95	B0DX94			4.62	
199-N-70	2/28/95	B0DX95	38100.00			
199-N-71	3/01/95	B0DYF3				3400.00 Q
199-N-71	3/01/95	B0DYF7		17000.00		
199-N-72	2/24/95	B0DWY9				7000.00
199-N-72	2/24/95	B0DWZ0		86000.00 B		
199-N-73	11/07/94	B0D723				7100.00
199-N-73	3/13/95	B0DYF8				6100.00
199-N-73	3/13/95	B0DYF9		31000.00		
199-N-74	3/03/95	B0DYG5				6400.00 B
199-N-74	3/03/95	B0DYG9		38000.00		
199-N-75	3/10/95	B0DX69			1.28	
199-N-75	3/10/95	B0DX70	27900.00			
199-N-75	3/10/95	B0DX96			1.26	
199-N-75	3/10/95	B0DX97	27600.00			
199-N-76	3/03/95	B0DTJ7				1500.00 B
199-N-76	3/03/95	B0DTJ8		27000.00		
199-N-77	3/10/95	B0DX71			5.48	
199-N-77	3/10/95	B0DX72	44300.00			
199-N-81	2/28/95	B0DX11				5000.00
199-N-81	2/28/95	B0DX15		42000.00		

Table 4-4. Constituents with at Least One Detected Value for the 100-N RCRA Sites Data for Reporting Period January 1 through March 31, 1995. (sheet 5 of 16)

Well Name	Collection Date	Sample Number	FCHLORID 1083/ppm ./250	CHLFORM 25/ppb .041/.	CHLFORM 83/ppb ./.	CHROMUM 1139/ppb ./50
199-N-14	3/08/95	B0DTK1			2.90	
199-N-3	3/09/95	B0DRS5			2.70	
199-N-3	3/09/95	B0DX42				10.00 B
199-N-3	3/09/95	B0DX43	25.30			
199-N-67	3/09/95	B0DRS0			2.20	
199-N-67	3/09/95	B0DX77				3.40 B
199-N-67	3/09/95	B0DX78	2.77			
199-N-70	2/28/95	B0DX67				15.20 B
199-N-70	2/28/95	B0DX68	4.93			
199-N-70	2/28/95	B0DX94				5.70 B
199-N-70	2/28/95	B0DX95	4.93			
199-N-71	3/01/95	B0DYF3		4.30		
199-N-72	2/24/95	B0DWY9		8.50		
199-N-73	3/13/95	B0DYF8		7.40		
199-N-75	3/10/95	B0DX69				7.60 B
199-N-75	3/10/95	B0DX70	1.32			
199-N-75	3/10/95	B0DX96				8.70 B
199-N-75	3/10/95	B0DX97	1.28			
199-N-76	3/03/95	B0DTJ7			5.00	
199-N-76	3/03/95	B0DX79	1.44			
199-N-77	3/10/95	B0DX71				9.60 B
199-N-77	3/10/95	B0DX72	5.54			
199-N-77	3/10/95	B0DYH9		7.60		

Well Name	Collection Date	Sample Number	CHROMUM 34/ppb 4.5/50	FCHROMI 1139/ppb ./50	FCHROMI 34/ppb 4.5/50	COBALT 1139/ppb ./.
199-N-14	3/08/95	B0DTK1	4.50 U			
199-N-14	3/08/95	B0DTK2			4.50 U	
199-N-2	2/27/95	B0DWN8			4.50 U	
199-N-27	3/08/95	B0DWZ5			25.00	
199-N-3	3/09/95	B0DX42				4.10 U
199-N-3	3/09/95	B0DX43		3.20 B		
199-N-32	3/01/95	B0DYG4			4.50 U	
199-N-34	2/24/95	B0DWQ0			4.50 U	
199-N-41	2/24/95	B0DX05			4.50 U	
199-N-43	2/27/95	B0DX10			19.00 L	
199-N-57	1/05/95	B0D707	15.00 L			
199-N-57	1/05/95	B0D711			4.50 U	
199-N-57	2/24/95	B0DWR2			4.50 U	
199-N-67	3/09/95	B0DRS0	36.00			
199-N-67	3/09/95	B0DX77				4.10 U
199-N-69	3/13/95	B0DWY4			4.50 U	
199-N-70	2/28/95	B0DX67				4.10 U
199-N-70	2/28/95	B0DX68		8.00 B		
199-N-70	2/28/95	B0DX94				4.10 U
199-N-70	2/28/95	B0DX95		7.30 B		
199-N-71	3/01/95	B0DYF7			4.50 U	
199-N-72	2/24/95	B0DWZ0			4.50 U	
199-N-73	3/13/95	B0DYF9			4.50 U	
199-N-74	3/03/95	B0DYG9			13.00 L	
199-N-75	3/10/95	B0DX69				4.10 U
199-N-75	3/10/95	B0DX70		4.70 B		
199-N-75	3/10/95	B0DX96				4.10 U
199-N-75	3/10/95	B0DX97		2.90 U		
199-N-76	3/03/95	B0DTJ7	9.60 L			

Table 4-4. Constituents with at Least One Detected Value for the 100-N RCRA Sites Data for Reporting Period January 1 through March 31, 1995. (sheet 6 of 16)

Well Name	Collection Date	Sample Number	CHROMUM 34/ppb 4.5/50	FCHROMI 1139/ppb ./50	FCHROMI 34/ppb 4.5/50	COBALT 1139/ppb ./.
199-N-76	3/03/95	B0DTJ8			4.50 U	
199-N-77	3/10/95	B0DX71				4.60 B
199-N-77	3/10/95	B0DX72		3.30 B		
199-N-81	2/28/95	B0DX15			4.50 L	

Well Name	Collection Date	Sample Number	FCOBALT 1139/ppb ./.	COPPER 1139/ppb ./1000	COPPER 34/ppb 4.1/1000	FCOPPER 1139/ppb ./1000
199-N-14	3/08/95	B0DTK1			4.10 U	
199-N-3	3/09/95	B0DX42		15.80 B		
199-N-3	3/09/95	B0DX43	4.10 U			13.80 B
199-N-57	1/05/95	B0D707			4.10 U	
199-N-67	3/09/95	B0DRS0			4.10 L	
199-N-67	3/09/95	B0DX77		6.90 B		
199-N-70	2/28/95	B0DX67		31.00		
199-N-70	2/28/95	B0DX68	4.10 U			22.70 B
199-N-70	2/28/95	B0DX94		25.50		
199-N-70	2/28/95	B0DX95	4.10 U			19.20 B
199-N-75	3/10/95	B0DX69		9.10 B		
199-N-75	3/10/95	B0DX70	4.10 U			11.00 B
199-N-75	3/10/95	B0DX96		9.80 B		
199-N-75	3/10/95	B0DX97	4.10 U			8.40 B
199-N-76	3/03/95	B0DTJ7			4.10 U	
199-N-77	3/10/95	B0DX71		3.20 U		
199-N-77	3/10/95	B0DX72	4.10 U			12.20 B

Well Name	Collection Date	Sample Number	FCOPPER 34/ppb 4.1/1000	FLUORID 1083/ppm ./1.4	FLUORID 124/ppb 36/1400	FFLUORID 1083/ppm ./1.4
199-N-14	3/08/95	B0DTK1			200.00	
199-N-14	3/08/95	B0DTK2	4.10 U			
199-N-2	2/27/95	B0DWN7			300.00	
199-N-2	2/27/95	B0DWN8	4.10 U			
199-N-27	3/08/95	B0DWZ1			400.00	
199-N-27	3/08/95	B0DWZ5	4.10 L			
199-N-3	3/09/95	B0DRS5			700.00	
199-N-3	3/09/95	B0DX43				.10 U
199-N-32	3/01/95	B0DYG0			400.00 Q	
199-N-32	3/01/95	B0DYG4	4.10 U			
199-N-34	11/04/94	B0D6Z4			500.00	
199-N-34	2/24/95	B0DWP6			400.00	
199-N-34	2/24/95	B0DWQ0	4.10 U			
199-N-41	2/24/95	B0DX01			400.00	
199-N-41	2/24/95	B0DX05	4.10 U			
199-N-43	10/31/94	B0D613			400.00	
199-N-43	2/27/95	B0DX06			300.00	
199-N-43	2/27/95	B0DX10	4.10 U			
199-N-57	1/05/95	B0D707			300.00 Y	
199-N-57	1/05/95	B0D711	4.10 U			
199-N-57	2/24/95	B0DWQ8			700.00	
199-N-57	2/24/95	B0DWR2	4.10 U			
199-N-67	3/09/95	B0DX77		.13		
199-N-67	3/09/95	B0DX78				.10 U

Table 4-4. Constituents with at Least One Detected Value for the 100-N RCRA Sites Data for Reporting Period January 1 through March 31, 1995. (sheet 7 of 16)

Well Name	Collection Date	Sample Number	FCOPPER 34/ppb 4.1/1000	FLUORID 1083/ppm ./1.4	FLUORID 124/ppb 36/1400	FFLUORID 1083/ppm ./1.4
199-N-69	3/13/95	B0DWY3			400.00	
199-N-69	3/13/95	B0DWY4	4.10 U			
199-N-70	2/28/95	B0DX67		.17		
199-N-70	2/28/95	B0DX68				.18
199-N-70	2/28/95	B0DX94		.17		
199-N-70	2/28/95	B0DX95				.18
199-N-71	3/01/95	B0DYF3			700.00 Q	
199-N-71	3/01/95	B0DYF7	4.10 L			
199-N-72	2/24/95	B0DWY9			1000.00	
199-N-72	2/24/95	B0DWZ0	4.10 U			
199-N-73	11/07/94	B0D723			700.00	
199-N-73	3/13/95	B0DYF8			1400.00	
199-N-73	3/13/95	B0DYF9	4.10 U			
199-N-74	3/03/95	B0DYG5			400.00	
199-N-74	3/03/95	B0DYG9	4.10 U			
199-N-75	3/10/95	B0DX69		.16		
199-N-75	3/10/95	B0DX70				.15
199-N-75	3/10/95	B0DX96		.16		
199-N-75	3/10/95	B0DX97				.15
199-N-76	3/03/95	B0DTJ7			400.00	
199-N-76	3/03/95	B0DTJ8	4.10 U			
199-N-76	3/03/95	B0DX79				.13
199-N-77	3/10/95	B0DX71		.78		
199-N-77	3/10/95	B0DX72				.80
199-N-81	2/28/95	B0DX11			100.00	
199-N-81	2/28/95	B0DX15	6.60 L			

Well Name	Collection Date	Sample Number	ALPHA 135/pCi/L ./15	BETA 1252/pCi/L ./.	BETA 136/pCi/L ./.	IRON 1139/ppb ./300
199-N-14	3/08/95	B0DTK1	.17 U		2080.00	
199-N-2	2/27/95	B0DWN7	.32 U		216.00	
199-N-27	3/08/95	B0DWZ1	1.32		285.00	
199-N-3	3/09/95	B0DRS5	5.60		1800.00	
199-N-3	3/09/95	B0DX42				178.00
199-N-32	3/01/95	B0DYG0	1.09		13.40	
199-N-34	2/24/95	B0DWP6	1.85		88.00	
199-N-41	2/24/95	B0DX01	.48 U		5.54	
199-N-43	2/27/95	B0DX06	1.82		5.24	
199-N-57	1/05/95	B0D707	3.63		58.90	
199-N-57	2/24/95	B0DWQ8	2.51		43.00	
199-N-67	3/09/95	B0DX77		11100.00		30.50 B
199-N-69	3/13/95	B0DWY3	1.28		4.39	
199-N-70	2/28/95	B0DX67		5.08		158.00
199-N-70	2/28/95	B0DX94		7.20		277.00
199-N-71	3/01/95	B0DYF3	2.16		11.40	
199-N-72	2/24/95	B0DWY9	.75 U		5.19	
199-N-73	3/13/95	B0DYF8	-.43 U		4.02	
199-N-74	3/03/95	B0DYG5	1.76		4.73	
199-N-75	3/10/95	B0DX69		2290.00		152.00
199-N-75	3/10/95	B0DX96		2450.00		469.00
199-N-76	3/03/95	B0DTJ7	.49 U		165.00	
199-N-77	3/10/95	B0DX71		7.63		181.00
199-N-81	2/28/95	B0DX11	.97 U		1220.00	

Table 4-4. Constituents with at Least One Detected Value for the 100-N RCRA Sites Data for Reporting Period January 1 through March 31, 1995. (sheet 8 of 16)

Well Name	Collection Date	Sample Number	IRON 34/ppb 5.24/300	FIRON 1139/ppb ./300	FIRON 34/ppb 5.24/300	LEAD 40/ppb 1.5/50
199-N-14	3/08/95	B0DTK1	420.00 Q			
199-N-14	3/08/95	B0DTK2			5.24 UQ	
199-N-2	2/27/95	B0DWN8			5.24 UQ	
199-N-27	3/08/95	B0DWZ5			96.00 Q	
199-N-3	3/09/95	B0DX43		44.70 B		
199-N-32	3/01/95	B0DYG4			31.00 Q	
199-N-34	2/24/95	B0DWQ0			38.00 Q	
199-N-41	2/24/95	B0DX05			17.00 LQ	
199-N-43	2/27/95	B0DX10			14.00 LQ	
199-N-57	1/05/95	B0D707	340.00 Q			1.50 U
199-N-57	1/05/95	B0D711			28.00 Q	
199-N-57	2/24/95	B0DWR2			12.00 LQ	
199-N-67	3/09/95	B0DRS0	710.00 BQ			
199-N-69	3/13/95	B0DWY4			15.00 BL	
199-N-70	2/28/95	B0DX68		65.40 B		
199-N-70	2/28/95	B0DX95		91.10 B		
199-N-71	3/01/95	B0DYF7			54.00 Q	
199-N-72	2/24/95	B0DWZ0			5.24 UQ	
199-N-73	3/13/95	B0DYF9			22.00 B	
199-N-74	3/03/95	B0DYG9			15.00 LQ	
199-N-75	3/10/95	B0DX70		133.00		
199-N-75	3/10/95	B0DX97		127.00		
199-N-76	3/03/95	B0DTJ7	120.00 BQ			
199-N-76	3/03/95	B0DTJ8			13.00 BLQ	
199-N-77	3/10/95	B0DX72		146.00		
199-N-81	2/28/95	B0DX15			32.00 Q	

Well Name	Collection Date	Sample Number	FLEAD 40/ppb 1.5/50	MAGNES 1139/ppb ./.	MAGNES 34/ppb 23/.	FMAGNES 1139/ppb ./.
199-N-14	3/08/95	B0DTK1			4500.00	
199-N-14	3/08/95	B0DWY6	3.40 L			
199-N-2	2/27/95	B0DWN8	1.50 U			
199-N-27	3/08/95	B0DWZ5	1.50 U			
199-N-3	3/09/95	B0DX42		25600.00		
199-N-3	3/09/95	B0DX43				25900.00
199-N-3	3/09/95	B0DYF0	1.50 U			
199-N-32	3/01/95	B0DYG4	1.60 L			
199-N-34	2/24/95	B0DWQ0	1.50 U			
199-N-41	2/24/95	B0DX05	1.50 U			
199-N-43	2/27/95	B0DX10	2.00 L			
199-N-57	1/05/95	B0D707			16000.00	
199-N-57	1/05/95	B0D711	1.50 U			
199-N-57	2/24/95	B0DWR2	1.50 U			
199-N-67	3/09/95	B0DRS0			10000.00	
199-N-67	3/09/95	B0DX77		11200.00		
199-N-67	3/09/95	B0DYF2	1.50 U			
199-N-69	3/13/95	B0DWY4	1.50 U			
199-N-70	2/28/95	B0DX67		10500.00		
199-N-70	2/28/95	B0DX68				10300.00
199-N-70	2/28/95	B0DX94		9040.00		
199-N-70	2/28/95	B0DX95				10800.00
199-N-70	2/28/95	B0DYH4	1.50 U			
199-N-74	3/03/95	B0DYG9	1.50 U			

Table 4-4. Constituents with at Least One Detected Value for the 100-N RCRA Sites Data for Reporting Period January 1 through March 31, 1995. (sheet 9 of 16)

Well Name	Collection Date	Sample Number	FLEAD 40/ppb 1.5/50	MAGNES 1139/ppb ./.	MAGNES 34/ppb 23/.	FMAGNES 1139/ppb ./.
199-N-75	3/10/95	B0DX69		4800.00 B		
199-N-75	3/10/95	B0DX70				4670.00 B
199-N-75	3/10/95	B0DX96		4780.00 B		
199-N-75	3/10/95	B0DX97				4620.00 B
199-N-75	3/10/95	B0DYH6	1.50 U			
199-N-76	3/03/95	B0DTJ7			4300.00	
199-N-76	3/03/95	B0DYH8	1.50 U			
199-N-77	3/10/95	B0DX71		10800.00		
199-N-77	3/10/95	B0DX72				11300.00
199-N-81	2/28/95	B0DX15	8.50			

Well Name	Collection Date	Sample Number	FMAGNES 34/ppb 23/.	MANGESE 1139/ppb ./50	MANGESE 34/ppb .72/50	FMANGAN 1139/ppb ./50
199-N-14	3/08/95	B0DTK1			7.20 L	
199-N-14	3/08/95	B0DTK2	4500.00			
199-N-2	2/27/95	B0DWN8	8000.00			
199-N-27	3/08/95	B0DWZ5	20000.00 F			
199-N-3	3/09/95	B0DX42		12.00 B		
199-N-3	3/09/95	B0DX43				6.80 B
199-N-32	3/01/95	B0DYG4	10000.00			
199-N-34	2/24/95	B0DWQ0	9800.00			
199-N-41	2/24/95	B0DX05	7100.00			
199-N-43	2/27/95	B0DX10	12000.00			
199-N-57	1/05/95	B0D707			7.10 L	
199-N-57	1/05/95	B0D711	17000.00			
199-N-57	2/24/95	B0DWR2	15000.00			
199-N-67	3/09/95	B0DRS0			15.00	
199-N-67	3/09/95	B0DX77		6.50 B		
199-N-69	3/13/95	B0DWY4	5700.00			
199-N-70	2/28/95	B0DX67		5.40 B		
199-N-70	2/28/95	B0DX68				4.40 B
199-N-70	2/28/95	B0DX94		8.20 B		
199-N-70	2/28/95	B0DX95				4.40 B
199-N-71	3/01/95	B0DYF7	4900.00			
199-N-72	2/24/95	B0DWZ0	19000.00			
199-N-73	3/13/95	B0DYF9	6300.00			
199-N-74	3/03/95	B0DYG9	12000.00			
199-N-75	3/10/95	B0DX69		2.00 B		
199-N-75	3/10/95	B0DX70				2.40 B
199-N-75	3/10/95	B0DX96		2.90 B		
199-N-75	3/10/95	B0DX97				2.30 B
199-N-76	3/03/95	B0DTJ7			3.40 L	
199-N-76	3/03/95	B0DTJ8	4300.00			
199-N-77	3/10/95	B0DX71		1.70 B		
199-N-77	3/10/95	B0DX72				2.90 B
199-N-81	2/28/95	B0DX15	7900.00			

Table 4-4. Constituents with at Least One Detected Value for the 100-N RCRA Sites Data for Reporting Period January 1 through March 31, 1995. (sheet 10 of 16)

Well Name	Collection Date	Sample Number	FMANGAN 34/ppb .72/50	NICKEL 34/ppb 13/.	FNICKEL 34/ppb 13/.	NITRATE 124/ppb 11/45000
199-N-14	3/08/95	B0DTK1		13.00 U		12000.00 D
199-N-14	3/08/95	B0DTK2	.72 U		13.00 U	
199-N-2	2/27/95	B0DWN7				67000.00 D
199-N-2	2/27/95	B0DWN8	.72 U		13.00 U	
199-N-27	3/08/95	B0DWZ1				18000.00 D
199-N-27	3/08/95	B0DWZ5	4.90 L		13.00 U	
199-N-3	3/09/95	B0DRS5				43000.00 DQ
199-N-32	3/01/95	B0DYG0				43000.00 DQ
199-N-32	3/01/95	B0DYG4	9.90 L		13.00 U	
199-N-34	11/04/94	B0D6Z4				14000.00 D
199-N-34	2/24/95	B0DWP6				14000.00 D
199-N-34	2/24/95	B0DWQ0	1.80 L		13.00 U	
199-N-41	2/24/95	B0DX01				13000.00 D
199-N-41	2/24/95	B0DX05	.73 L		13.00 U	
199-N-43	10/31/94	B0D613				19000.00 D
199-N-43	2/27/95	B0DX06				18000.00 D
199-N-43	2/27/95	B0DX10	.72 U		13.00 U	
199-N-57	1/05/95	B0D707		13.00 U		21000.00 D
199-N-57	1/05/95	B0D711	1.00 L		13.00 U	
199-N-57	2/24/95	B0DWQ8				19000.00 DH
199-N-57	2/24/95	B0DWR2	.72 U		13.00 U	
199-N-67	3/09/95	B0DRS0		18.00 L		
199-N-69	3/13/95	B0DWY3				10000.00 D
199-N-69	3/13/95	B0DWY4	.83 L		13.00 U	
199-N-71	3/01/95	B0DYF3				1900.00 Q
199-N-71	3/01/95	B0DYF7	2.50 L		13.00 U	
199-N-72	2/24/95	B0DWY9				4600.00
199-N-72	2/24/95	B0DWZ0	.72 U		13.00 U	
199-N-73	11/07/94	B0D723				5600.00
199-N-73	3/13/95	B0DYF8				4300.00
199-N-73	3/13/95	B0DYF9	3.80 L		13.00 U	
199-N-74	3/03/95	B0DYG5				8000.00
199-N-74	3/03/95	B0DYG9	1.10 L		13.00 U	
199-N-76	3/03/95	B0DTJ7		14.00 L		8300.00
199-N-76	3/03/95	B0DTJ8	.98 L		13.00 U	
199-N-81	2/28/95	B0DX11				22000.00 D
199-N-81	2/28/95	B0DX15	6.10 L		16.00 L	

Well Name	Collection Date	Sample Number	NO3-N 1083/ppm ./10	FNO3-N 1083/ppm ./10	OIL/GRSE 1130/mg/L ./.	POTASUM 1139/ppb ./.
199-N-3	3/09/95	B0DX42			1.43	4340.00 B
199-N-3	3/09/95	B0DX43		11.70		
199-N-67	3/09/95	B0DX77	33.80 F			3620.00 B
199-N-67	3/09/95	B0DX78		35.80 F		
199-N-70	2/28/95	B0DX67	4.50			2950.00 B
199-N-70	2/28/95	B0DX68		4.46		
199-N-70	2/28/95	B0DX94	4.49			3570.00 B
199-N-70	2/28/95	B0DX95		4.56		
199-N-75	3/10/95	B0DX69	1.64			2780.00 B
199-N-75	3/10/95	B0DX70		1.65		
199-N-75	3/10/95	B0DX96	1.63			2670.00 U
199-N-75	3/10/95	B0DX97		1.64		
199-N-76	3/03/95	B0DX79		1.97		
199-N-77	3/10/95	B0DX71	.69			4440.00 B
199-N-77	3/10/95	B0DX72		.72		

Table 4-4. Constituents with at Least One Detected Value for the 100-N RCRA Sites Data for Reporting Period January 1 through March 31, 1995. (sheet 11 of 16)

Well Name	Collection Date	Sample Number	POTASUM 34/ppb 850/.	FPOTASS 1139/ppb ./.	FPOTASS 34/ppb 850/.	K-40 1249/pCi/L ./.
199-N-14	3/08/95	B0DTK1	1500.00			
199-N-14	3/08/95	B0DTK2			1600.00	
199-N-2	2/27/95	B0DWN8			2100.00	
199-N-27	3/08/95	B0DWZ5			8100.00 F	
199-N-3	3/09/95	B0DX43		3810.00 B		
199-N-32	3/01/95	B0DYG4			3500.00	
199-N-34	2/24/95	B0DWQ0			3500.00	
199-N-41	2/24/95	B0DX05			2900.00	
199-N-43	2/27/95	B0DX10			3400.00	
199-N-57	1/05/95	B0D707	6100.00			
199-N-57	1/05/95	B0D711			6400.00	
199-N-57	2/24/95	B0DWR2			5800.00	
199-N-67	3/09/95	B0DRS0	3200.00			
199-N-69	3/13/95	B0DWY4			1900.00	
199-N-70	2/28/95	B0DX68		3820.00 B		
199-N-70	2/28/95	B0DX95		3670.00 B		
199-N-71	3/01/95	B0DYF7			4300.00	
199-N-72	2/24/95	B0DWZ0			5400.00	
199-N-73	3/13/95	B0DYF9			3200.00	
199-N-74	3/03/95	B0DYG9			4400.00	
199-N-75	3/10/95	B0DX70		2670.00 U		
199-N-75	3/10/95	B0DX96				166.00
199-N-75	3/10/95	B0DX97		2670.00 U		
199-N-76	3/03/95	B0DTJ7	1800.00			
199-N-76	3/03/95	B0DTJ8			1900.00	
199-N-77	3/10/95	B0DX72		4310.00 B		
199-N-81	2/28/95	B0DX15			3800.00	

Well Name	Collection Date	Sample Number	RSTRONUM 1281/pCi/L ./.	RADIUM 137/pCi/L ./5	SELENUM 48/ppb .65/10	FSELENI 48/ppb .65/10
199-N-57	1/05/95	B0D707		.15	1.30 L	
199-N-57	1/05/95	B0D711				.69 L
199-N-70	2/28/95	B0DX67	.26 U			
199-N-70	2/28/95	B0DX94	-.32 U			
199-N-75	3/10/95	B0DX69	1250.00			
199-N-75	3/10/95	B0DX96	1130.00			
199-N-77	3/10/95	B0DX71	.14 U			

Well Name	Collection Date	Sample Number	SILVER 1139/ppb ./50	FSILVER 1139/ppb ./50	SODIUM 1139/ppb ./.	SODIUM 34/ppb 61/.
199-N-14	3/08/95	B0DTK1				3400.00 Q
199-N-3	3/09/95	B0DX42	4.10 B		16500.00	
199-N-3	3/09/95	B0DX43		3.80 U		
199-N-57	1/05/95	B0D707				71000.00 B
199-N-67	3/09/95	B0DRS0				4700.00 Q
199-N-67	3/09/95	B0DX77	3.80 U		4920.00	
199-N-70	2/28/95	B0DX67	3.80 U		7030.00	
199-N-70	2/28/95	B0DX68		3.80 U		
199-N-70	2/28/95	B0DX94	3.80 U		7620.00	
199-N-70	2/28/95	B0DX95		3.80 U		

Table 4-4. Constituents with at Least One Detected Value for the 100-N RCRA Sites Data for Reporting Period January 1 through March 31, 1995. (sheet 12 of 16)

Well Name	Collection Date	Sample Number	SILVER 1139/ppb ./50	FSILVER 1139/ppb ./50	SODIUM 1139/ppb ./.	SODIUM 34/ppb 61/.
199-N-75	3/10/95	B0DX69	5.40 B		3050.00	
199-N-75	3/10/95	B0DX70		3.80 U		
199-N-75	3/10/95	B0DX96	3.80 U		2960.00	
199-N-75	3/10/95	B0DX97		3.80 U		
199-N-76	3/03/95	B0DTJ7				2900.00 Q
199-N-77	3/10/95	B0DX71	3.80 U		182000.00	
199-N-77	3/10/95	B0DX72		3.80 U		

Well Name	Collection Date	Sample Number	FSODIUM 1139/ppb ./.	FSODIUM 34/ppb 61/.	SR-90 141/pCi/L ./8	FSR-90 141/pCi/L ./8
199-N-14	3/08/95	B0DTK1			1010.00	
199-N-14	3/08/95	B0DTK2		3300.00 Q		1090.00
199-N-2	2/27/95	B0DWN8		3300.00 Q		
199-N-27	3/08/95	B0DWZ5		17000.00 QF		
199-N-3	3/09/95	B0DRS5			960.00	
199-N-3	3/09/95	B0DRS6				1.40 F
199-N-3	3/09/95	B0DX43	16600.00			
199-N-32	3/01/95	B0DYG4		3500.00 Q		
199-N-34	2/24/95	B0DWQ0		4400.00 Q		
199-N-41	2/24/95	B0DX05		4700.00 Q		
199-N-43	2/27/95	B0DX10		13000.00 Q		
199-N-57	1/05/95	B0D707			29.10	
199-N-57	1/05/95	B0D711		73000.00 B		
199-N-57	2/24/95	B0DWR2		74000.00 Q		
199-N-67	3/09/95	B0DRS0			5030.00	
199-N-67	3/09/95	B0DRS1				5230.00
199-N-69	3/13/95	B0DWY4		3300.00		
199-N-70	2/28/95	B0DX68	6940.00			
199-N-70	2/28/95	B0DX95	7250.00			
199-N-71	3/01/95	B0DYF7		37000.00 Q		
199-N-72	2/24/95	B0DWZ0		53000.00 Q		
199-N-73	3/13/95	B0DYF9		240000.00		
199-N-74	3/03/95	B0DYG9		14000.00 Q		
199-N-75	3/10/95	B0DX70	3100.00			
199-N-75	3/10/95	B0DX97	2920.00			
199-N-76	3/03/95	B0DTJ7			81.80	
199-N-76	3/03/95	B0DTJ8		2800.00 Q		88.20
199-N-77	3/10/95	B0DX72	183000.00			
199-N-81	2/28/95	B0DX15		5200.00 Q		

Table 4-4. Constituents with at Least One Detected Value for the 100-N RCRA Sites Data for Reporting Period January 1 through March 31, 1995. (sheet 13 of 16)

Well Name	Collection Date	Sample Number	SULFATE 1083/ppm ./250	SULFATE 124/ppb 37/250000	FSULFATE 1083/ppm ./250	TC-99 143/pCi/L ./900
199-N-14	3/08/95	B0DTK1		16000.00 D		5.10
199-N-2	2/27/95	B0DWN7		20000.00 D		
199-N-27	3/08/95	B0DWZ1		84000.00 D		
199-N-3	3/09/95	B0DRS5		160000.00 D		.61 U
199-N-3	3/09/95	B0DX43			197.00	
199-N-32	3/01/95	B0DYG0		23000.00 D		
199-N-34	11/04/94	B0D6Z4		82000.00 D		
199-N-34	2/24/95	B0DWP6		88000.00 D		
199-N-41	2/24/95	B0DX01		34000.00 D		
199-N-43	10/31/94	B0D613		55000.00 D		
199-N-43	2/27/95	B0DX06		52000.00 D		
199-N-57	1/05/95	B0D707		170000.00 D		
199-N-57	2/24/95	B0DWQ8		160000.00 D		
199-N-67	3/09/95	B0DRS0				3.60
199-N-67	3/09/95	B0DX77	16.30			
199-N-67	3/09/95	B0DX78			16.30	
199-N-69	3/13/95	B0DWY3		29000.00 D		
199-N-70	2/28/95	B0DX67	53.50			
199-N-70	2/28/95	B0DX68			53.40	
199-N-70	2/28/95	B0DX94	53.50			
199-N-70	2/28/95	B0DX95			53.60	
199-N-71	3/01/95	B0DYF3		27000.00 D		
199-N-72	2/24/95	B0DWY9		230000.00 D		
199-N-73	11/07/94	B0D723		530000.00 D		
199-N-73	3/13/95	B0DYF8		400000.00 D		
199-N-74	3/03/95	B0DYG5		90000.00 D		
199-N-75	3/10/95	B0DX69	14.20			
199-N-75	3/10/95	B0DX70			14.40	
199-N-75	3/10/95	B0DX96	14.30			
199-N-75	3/10/95	B0DX97			14.30	
199-N-76	3/03/95	B0DTJ7		12000.00 D		6.75
199-N-76	3/03/95	B0DX79			11.80	
199-N-77	3/10/95	B0DX71	413.00			
199-N-77	3/10/95	B0DX72			420.00	
199-N-81	2/28/95	B0DX11		53000.00 D		

Well Name	Collection Date	Sample Number	PERCENE 83/ppb ./5	TC 113/ppb ./.	TDS 65/ppm 10/500	TRITIUM 1255/pCi/L ./20000
199-N-14	3/08/95	B0DTK1	.50 U			
199-N-3	3/09/95	B0DRS5	.90			
199-N-67	3/09/95	B0DRS0	.70	20000.00		
199-N-70	2/28/95	B0DX67				35300.00
199-N-70	2/28/95	B0DX94				34100.00
199-N-71	3/01/95	B0DYF3			180.00	
199-N-72	2/24/95	B0DWY9			590.00	
199-N-73	3/13/95	B0DYF8			930.00	
199-N-75	3/10/95	B0DX69				70200.00
199-N-75	3/10/95	B0DX96				69900.00
199-N-76	3/03/95	B0DTJ7	.50 U			
199-N-77	3/10/95	B0DX71				822.00
199-N-77	3/10/95	B0DYH9			770.00	

Table 4-4. Constituents with at Least One Detected Value for the 100-N RCRA Sites Data for Reporting Period January 1 through March 31, 1995. (sheet 14 of 16)

Well Name	Collection Date	Sample Number	TRITIUM 142/pCi/L ./20000	TURBID 1044/NTU ./.	TURBID 111/NTU ./.	TURBID 126/NTU .016/.
199-N-14	3/08/95	B0DTK1	59800.00			
199-N-14	3/08/95	B0DWY5				1.90 Q
199-N-2	2/27/95	B0DWN7				.93
199-N-27	3/08/95	B0DWZ1				.98 Q
199-N-3	3/09/95	B0DRS5	19400.00			
199-N-3	3/09/95	B0DX42		1.04		
199-N-32	3/01/95	B0DYG0				9.10 Q
199-N-34	2/24/95	B0DWP6				2.10
199-N-41	2/24/95	B0DX01				8.10
199-N-43	2/27/95	B0DX06				1.80
199-N-57	1/05/95	B0D707	3790.00			3.10 Q
199-N-57	2/24/95	B0DWQ8			1.20	1.80 H
199-N-67	3/09/95	B0DRS0	31000.00			
199-N-67	3/09/95	B0DX77		10.33		
199-N-69	3/13/95	B0DWY3				.71 Q
199-N-70	2/28/95	B0DX67		.82		
199-N-70	2/28/95	B0DX94		1.22		
199-N-71	3/01/95	B0DYF3				2.60 Q
199-N-72	2/24/95	B0DWY9				5.10
199-N-73	3/13/95	B0DYF8				2.50 Q
199-N-74	3/03/95	B0DYG5				1.10 Q
199-N-75	3/10/95	B0DX69		1.16		
199-N-75	3/10/95	B0DX96		.97		
199-N-76	3/03/95	B0DTJ7	63900.00			1.50 Q
199-N-77	3/10/95	B0DX71		.94		
199-N-81	2/28/95	B0DX11				42.00

Well Name	Collection Date	Sample Number	URANIUM 145/ppb ./.	U-234 148/pCi/L ./.	U-235 148/pCi/L ./.	U-238 148/pCi/L ./.
199-N-14	3/08/95	B0DTK1	.31	.16	.00 U	.13
199-N-3	3/09/95	B0DRS5		3.12	.11	2.45

Table 4-4. Constituents with at Least One Detected Value for the 100-N RCRA Sites Data for Reporting Period January 1 through March 31, 1995. (sheet 15 of 16)

Well Name	Collection Date	Sample Number	VANADUM 1139/ppb ./.	VANADUM 34/ppb 6.6/.	FVANADI 1139/ppb ./.	FVANADI 34/ppb 6.6/.
199-N-14	3/08/95	B0DTK1		7.40 L		
199-N-14	3/08/95	B0DTK2				7.20 L
199-N-2	2/27/95	B0DWN8				6.60 U
199-N-27	3/08/95	B0DWZ5				14.00 L
199-N-3	3/09/95	B0DX42	14.80 B			
199-N-3	3/09/95	B0DX43			15.40 B	
199-N-32	3/01/95	B0DYG4				9.60 L
199-N-34	2/24/95	B0DWQ0				6.60 U
199-N-41	2/24/95	B0DX05				14.00 L
199-N-43	2/27/95	B0DX10				23.00 L
199-N-57	1/05/95	B0D707		6.60 U		
199-N-57	1/05/95	B0D711				6.60 U
199-N-57	2/24/95	B0DWR2				6.60 U
199-N-67	3/09/95	B0DRS0		6.60 U		
199-N-67	3/09/95	B0DX77	5.40 B			
199-N-69	3/13/95	B0DWY4				6.60 U
199-N-70	2/28/95	B0DX67	29.50 B			
199-N-70	2/28/95	B0DX68			27.80 B	
199-N-70	2/28/95	B0DX94	38.50 B			
199-N-70	2/28/95	B0DX95			26.00 B	
199-N-71	3/01/95	B0DYF7				28.00 L
199-N-72	2/24/95	B0DWZ0				6.60 U
199-N-73	3/13/95	B0DYF9				9.00 L
199-N-74	3/03/95	B0DYG9				17.00 L
199-N-75	3/10/95	B0DX69	5.30 B			
199-N-75	3/10/95	B0DX70			6.30 B	
199-N-75	3/10/95	B0DX96	10.20 B			
199-N-75	3/10/95	B0DX97			5.50 B	
199-N-76	3/03/95	B0DTJ7		6.60 U		
199-N-76	3/03/95	B0DTJ8				6.60 U
199-N-77	3/10/95	B0DX71	9.90 B			
199-N-77	3/10/95	B0DX72			19.20 B	
199-N-81	2/28/95	B0DX15				6.60 U

Well Name	Collection Date	Sample Number	ZINC 1139/ppb ./5000	ZINC 34/ppb 6.3/5000	FZINC 1139/ppb ./5000	FZINC 34/ppb 6.3/5000
199-N-14	3/08/95	B0DTK1		6.30 UQ		
199-N-14	3/08/95	B0DTK2				6.30 UQ
199-N-2	2/27/95	B0DWN8				6.30 U
199-N-27	3/08/95	B0DWZ5				6.30 UQ
199-N-3	3/09/95	B0DX42	53.50			
199-N-3	3/09/95	B0DX43			13.10 B	
199-N-32	3/01/95	B0DYG4				6.30 UQ
199-N-34	2/24/95	B0DWQ0				6.30 U
199-N-41	2/24/95	B0DX05				6.30 U

Table 4-4. Constituents with at Least One Detected Value for the 100-N RCRA Sites Data for Reporting Period January 1 through March 31, 1995. (sheet 16 of 16)

Well Name	Collection Date	Sample Number	ZINC 1139/ppb ./5000	ZINC 34/ppb 6.3/5000	FZINC 1139/ppb ./5000	FZINC 34/ppb 6.3/5000
199-N-43	2/27/95	B0DX10				6.30 U
199-N-57	1/05/95	B0D707		20.00		
199-N-57	1/05/95	B0D711				6.30 U
199-N-57	2/24/95	B0DWR2				6.30 U
199-N-67	3/09/95	B0DRS0		6.30 UQ		
199-N-67	3/09/95	B0DX77	16.70 B			
199-N-69	3/13/95	B0DWY4				6.30 U
199-N-70	2/28/95	B0DX67	46.50			
199-N-70	2/28/95	B0DX68			59.30	
199-N-70	2/28/95	B0DX94	61.40			
199-N-70	2/28/95	B0DX95			58.80	
199-N-71	3/01/95	B0DYF7				6.30 UQ
199-N-72	2/24/95	B0DWZ0				6.30 U
199-N-73	3/13/95	B0DYF9				6.30 U
199-N-74	3/03/95	B0DYG9				6.30 UQ
199-N-75	3/10/95	B0DX69	14.40 B			
199-N-75	3/10/95	B0DX70			9.60 B	
199-N-75	3/10/95	B0DX96	15.70 B			
199-N-75	3/10/95	B0DX97			38.50	
199-N-76	3/03/95	B0DTJ7		17.00 Q		
199-N-76	3/03/95	B0DTJ8				6.30 UQ
199-N-77	3/10/95	B0DX71	10.40 B			
199-N-77	3/10/95	B0DX72			15.00 B	
199-N-81	2/28/95	B0DX15				11.00 Q

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 January 1 through March 31, 1995. (sheet 1 of 2)

Well Name	Collection Date	Sample Number	COND FIELD µmho 1/.	COND LAB µmho 1/.	pH FIELD .01/6.5-8.5s	pH LAB .01/6.5-8.5s	TOC ppb 110/.	TOX ppb 5/.
199-N-14	3/08/95	B0DWY5	109 F	190	8.13	8.30	200 L	10.0
199-N-2	2/27/95	B0DWN7	296	310	7.76	8.10	200 L	9.3
199-N-27	3/08/95	B0DWZ1	211 F	390	8.07	8.00	300 L	8.1
		B0DWZ2	210 F		8.06		300 L	5.0 U
		B0DWZ3	211 F		8.07		300 L	6.1
		B0DWZ4	211 F		8.07		300 L	7.1
199-N-3	3/09/95	B0DX42	858	882	6.64 F	7.89		
		B0DYD9	841		7.31		600 L	5.8
199-N-32	3/01/95	B0DYG0	257	290	7.92	8.20	400 L	5.0 U
		B0DYG1	260		7.90		400 L	5.0 U
		B0DYG2	260		7.90		400 L	5.0 U
		B0DYG3	260		7.90		500 L	5.0 U
199-N-34	2/24/95	B0DWP6	327	380	8.03	8.10	200 L	10.1
		B0DWP7	328		8.05		200 L	9.5
		B0DWP8	329		8.07		200 L	7.6
		B0DWP9	329		8.06		200 L	5.0 U
199-N-41	2/24/95	B0DX01	236	250	7.10 R	8.30	200 L	6.2
		B0DX02	235		7.11 R		200 L	5.9
		B0DX03	236		7.11 R		300 L	5.8
		B0DX04	238		7.12 R		200 L	7.7
199-N-43	2/27/95	B0DX06	318	340	7.82	8.10	300 L	12.4
		B0DX07	318		7.82		300 L	11.8
		B0DX08	319		7.83		300 L	13.1
		B0DX09	318		7.83		300 L	13.1
199-N-57	1/05/95	B0D707	923	920	7.83	8.00 H	700 L	19.4
		B0D708	923		7.83		700 L	12.8
		B0D709	923		7.83		700 L	13.7
		B0D710	924		7.84		700 L	15.7
	2/24/95	B0DWQ8	803	820	7.84	8.10 H	600 L	17.3
		B0DWQ9	802		7.84		600 L	14.6
		B0DWR0	802		7.84		600 L	14.9
		B0DWR1	801		7.84		600 L	31.0 F
199-N-67	3/09/95	B0DX77		447		8.09		
		B0DYF1	403		7.91		300 L	5.7
199-N-69	3/13/95	B0DWY3	202	210	7.90	8.30	200 L	5.0
199-N-70	2/28/95	B0DX67		313	7.77	8.10		
		B0DX94		311	7.77	8.10		
		B0DYH0			7.77		300 L	7.6
		B0DYH1			7.77		300 L	6.3
		B0DYH2			7.78		300 L	7.2
		B0DYH3			7.77		300 L	6.0
199-N-71	3/01/95	B0DYF3	183 F	280	8.35	8.30	300 L	10.1
		B0DYF4	182 F		8.35		300 L	9.0
	3/01/95	B0DYF5	186 F		8.33		400 L	5.0 U
		B0DYF6	185 F		8.34		300 L	5.0 U
199-N-72	2/24/95	B0DWY9	783	810	7.91	8.00	300 L	16.9
199-N-73	3/13/95	B0DYF8	1331	1300	7.04 R	8.20	500 L	8.8
199-N-74	3/03/95	B0DYG5	390	400	7.62	8.10	300 L	
		B0DYG6	389		7.63		400 L	13.5
		B0DYG7	389		7.62		400 L	12.3
		B0DYG8	388		7.63		300 L	12.5

Table 4-5. Contamination Indicator Parameters for the 100-N RCRA Sites Data for Reporting Period January 1 through March 31, 1995. (sheet 2 of 2)

Well Name	Collection Date	Sample Number	COND FIELD µmho 1/.	COND LAB µmho 1/.	pH FIELD .01/6.5-8.5s	pH LAB .01/6.5-8.5s	TOC ppb 110/.	TOX ppb 5/.
199-N-75	3/10/95	B0DX69	215 F	176	8.24	8.19		
		B0DX96	215 F	175	8.24	8.21		
		B0DYH5	216 F		8.24		400 L	17.1
199-N-76	3/03/95	B0DYH7	187	180	7.25 F	8.30	300 L	6.8
199-N-77	3/10/95	B0DX71	1148	1086	8.12	8.19		
		B0DYH9	1150		8.11		400 L	15.2
199-N-81	2/28/95	B0DX11	290	310	5.85 R	8.10	300 L	6.5
		B0DX12	288		5.85 R		400 L	7.8
		B0DX13	288		5.87 R		400 L	12.4
		B0DX14	288		5.89 R		400 L	7.5

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)	1324-N: N-81 (4)[a]
Field conductivity (700 μmho/cm)	1301-N: N-3, N-57 (8). 1324-N/NA: N-72, N-73, N-77.
Laboratory conductivity (700 μmho/cm)	1301-N: N-57 (2). 1324-N/NA: N-72, N-73.
Nitrate as NO_3 (45,000 ppb)	1301-N: N-2.
Nitrate as N, filtered and unfiltered (10 ppm)	1301-N: N-3, N-67 (2).
Iron, unfiltered samples (300 ppb)	1301-N: N-14, N-57, N-67, N-75.
Iron, filtered samples (300 ppb)	none.
Strontium-90, unfiltered (8 pCi/L)	1301-N: N-3, N-14, N-57, N-67, N-76.
Strontium-90, filtered (8 pCi/L)	1301-N: N-14, N-67, N-76.
Sulfate, filtered and unfiltered (250,000 ppb)	1324-N/NA: N-73 (2), N-77 (2).
Strontium-90 (8 pCi/L)	1301-N: N-57.
Total dissolved solids (500 ppb)	1324-N/NA: N-72, N-73, N-77.
Tritium (20,000 pCi/L)	1301-N: N-14, N-67, N-75 (2), N-76. 1325-N: N-70 (2).

[a]Data are in question. Requests for Analytical Data Evaluation were submitted.

DWS = drinking water standard.

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

Well no.	Sample date	Constituent	Reason
1301-N LWDF			
N-3	3/9/95	Alkalinity	Greater than historical values or nearby wells; charges do not balance.
N-3	3/9/95	Barium (unfiltered)	Greater than historical trend.
N-3	3/9/95	^{90}Sr (filtered)	Lower than historical trend; lower than unfiltered.
N-3	3/9/95	pH (field)	Lower than historical trend; lower than laboratory pH.
N-14	3/8/95	Conductivity (field)	Lower than historical trend; lower than laboratory conductivity.
N-57	2/24/95	TOX	One value is much higher than the other 3 replicates.
N-57	1/5/95	Chloride	Higher than historical trend.
N-67	3/9/95	Nitrogen in nitrate (filtered and unfiltered)	Higher than historical nitrate (as nitrate) when converted.
N-75	3/10/95	Conductivity (field)	Higher than historical trend; higher than laboratory conductivity.
N-76	3/3/95	pH (field)	Lower than historical trend; lower than lab pH.
1325-N LWDF			
N-27	3/8/95	Barium (filtered) Calcium (filtered) Magnesium (filtered) Potassium (filtered) Sodium (filtered)	Measured values were approximately twice as high as normal, and higher than nearby wells. Charges do not balance.
N-27	3/8/95	Conductivity (field)	Lower than historical trend; lower than laboratory conductivity.
N-41	2/24/95	pH (field)	Lower than historical trend; lower than laboratory pH.
N-81	2/28/95	pH (field)	Lower than historical trend; lower than laboratory pH.
1324-N/NA Facility			
N-71	3/1/95	Conductivity (field)	Lower than historical trend; lower than laboratory pH.

LWDF = Liquid Waste Disposal Facility.

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5.0 216-B-3 POND SYSTEM

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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 wastewater 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 wastewater. 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 (699-43-41E and 699-43-41F). 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 were measured monthly, and once during sample events, in all wells during the January through March 1995 period. Table 5-2 lists the results of the water level measurements. Results for wells 299-E18-1 and 299-E32-4 (on March 13, 1995) are outside of the expected range of water levels for those wells, and may be in error.

5.3 WATER CHEMISTRY DATA

All wells scheduled for the January through March 1995 sampling were sampled during January, except upgradient well 299-E18-1, which was sampled in March. 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.

Constituents exceeding DWS during the January through March 1995 period are listed in Table 5-6. The constituent list for this quarter includes those 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 by Sweeney (1995).

Contaminated blank samples and/or suspect QC data were associated with most analyses for iron and sodium in filtered samples, alkalinity, and TOC.

The replicate averages for TOX in well 699-40-40B (45.5 ppb) and well 699-43-41G (17.7ppb) apparently exceed the critical mean established for the network in early days of monitoring at B Pond. A RADE has been submitted for these results. Also, laboratory performance for TOX analysis is currently under scrutiny (see Section 1.2.3). RADEs were also submitted for field pH results in wells 699-42-41 and 699-44-39B.

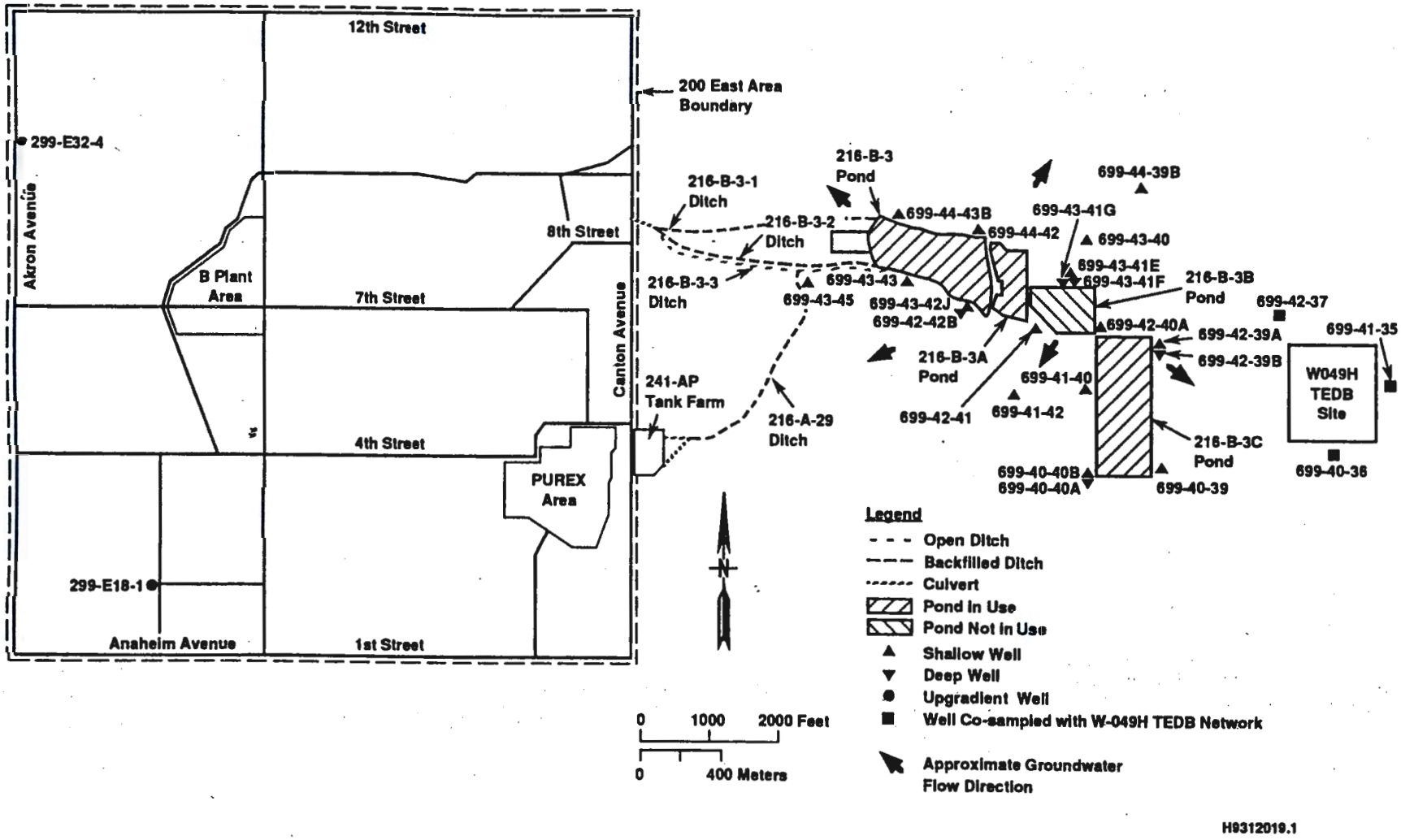

Figure 5-1. 216-B-3 Pond Groundwater Monitoring Network.

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[a]	Upgradient	Hanford: Water Table	Quarterly	3/16/95
299-E32-4[b]	Upgradient	Hanford: Water Table	Quarterly	1/6/95
699-40-36[c]	Downgradient	Ringold: Top of Confined	Quarterly	1/9/95
699-40-39	Downgradient	Ringold: Upper Confined	Quarterly	1/5/95
699-40-40A	Downgradient	Ringold: Lower Confined	Quarterly	1/6/95
699-40-40B	Downgradient	Ringold: Upper Confined	Quarterly	1/5/95
699-41-35[c]	Downgradient	Ringold: Top of Confined	Quarterly	1/9/95
699-41-40	Downgradient	Ringold: Upper Confined	Quarterly	1/10/95
699-41-42	Downgradient	Ringold: Top of Confined	Quarterly	1/5/95
699-42-37[c]	Downgradient	Ringold: Top of Confined	Quarterly	1/9/95
699-42-39A	Downgradient	Ringold: Upper Confined	Quarterly	1/9/95
699-42-39B	Downgradient	Ringold: Lower Confined	Quarterly	1/9/95
699-42-40A	Downgradient	Ringold: Upper Confined	Quarterly	1/5/95
699-42-41	Downgradient	Ringold: Water Table	Quarterly	1/5/95
699-42-42B	Downgradient	Ringold: Lower Unconfined	Quarterly	1/10/95
699-43-40	Downgradient	Ringold: Water Table	Quarterly	1/10/95
699-43-41E	Downgradient	Ringold: Upper Confined	Quarterly	1/9/95
699-43-41F	Downgradient	Ringold: Lower Confined	Quarterly	1/6/95
699-43-41G	Downgradient	Ringold: Bottom of Confined	Quarterly	1/17/95
699-43-42J	Downgradient	Ringold: Water Table	Quarterly	1/5/95
699-43-43[d]	Downgradient	Hanford/Ringold: Water Table	Quarterly	1/10/95
699-43-45[d]	Downgradient	Hanford/Ringold: Water Table	Quarterly	1/11/95
699-44-39B	Downgradient	Ringold: Water Table	Quarterly	1/6/95
699-44-42	Downgradient	Ringold: Water Table	Quarterly	1/6/95
699-44-43B	Downgradient	Ringold: Water Table	Quarterly	1/9/95

[a]Well shared with the 2101-M Pond network.
[b]Well shared with the Low-Level Waste Burial Grounds network.
[c]Wells shared with the W-049H Treated Effluent Disposal Basin network.
[d]Wells shared with the 216-A-29 Ditch network.

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

Well	Date	Depth to water (ft)	Water level elevation above msl (ft)	(m)
299-E18-1	3/16/95	319.40	400.84*+	122.18
	3/16/95	318.98	401.26	122.30
299-E32-4	1/06/95	284.96	400.92*	122.20
	3/13/95	285.87	400.01+	121.92
699-40-36	1/09/95	117.80	411.12*	125.31
	1/20/95	118.25	410.67	125.17
	2/16/95	118.11	410.81	125.21
	3/09/95	117.78	411.14	125.32
	3/22/95	117.90	411.02*	125.28
699-40-39	1/05/95	129.24	412.60*	125.76
	1/20/95	129.66	412.18	125.63
	2/16/95	129.45	412.39	125.70
	3/09/95	129.07	412.77	125.81
699-40-40A	1/06/95	129.75	411.46*	125.41
	1/20/95	130.33	410.88	125.24
	2/16/95	130.14	411.07	125.29
	3/09/95	129.76	411.45	125.41
699-40-40B	1/05/95	129.30	412.88*	125.85
	1/20/95	130.99	411.19	125.33
	2/16/95	130.82	411.36	125.38
	3/09/95	130.44	411.74	125.50
699-41-35	1/09/95	108.15	412.23*	125.65
	1/20/95	108.75	411.63	125.46
	2/16/95	108.48	411.90	125.55
	3/09/95	108.03	412.35	125.68
	3/22/95	108.22	412.16*	125.63
	3/30/95	108.59	411.79*	125.51
699-41-40	1/10/95	130.38	415.56*	126.66
	1/20/95	131.06	414.88	126.46
	2/16/95	130.72	415.22	126.56
	3/09/95	130.77	415.17	126.54

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

Well	Date	Depth to water (ft)	Water level elevation above msl (ft)	(m)
699-41-42	1/05/95	232.79	411.12*	125.31
	1/20/95	233.14	410.77	125.20
	2/16/95	233.03	410.88	125.24
	3/09/95	232.69	411.22	125.34
699-42-37	1/09/95	104.50	414.92*	126.47
	1/20/95	104.80	414.62	126.38
	2/16/95	104.39	415.03	126.50
	3/09/95	103.68	415.74	126.72
	3/22/95	104.06	415.36*	126.60
699-42-39A	1/09/95	137.75	420.39*	128.13
	1/20/95	139.44	418.70	127.62
	2/16/95	138.98	419.16	127.76
	3/09/95	138.30	419.84	127.97
699-42-39B	1/09/95	138.63	419.69*	127.92
	1/20/95	139.88	418.44	127.54
	2/16/95	139.44	418.88	127.67
	3/09/95	138.98	419.34	127.81
699-42-40A	1/05/95	123.89	421.64*	128.52
	1/20/95	124.09	421.44	128.45
	2/16/95	123.73	421.80	128.56
	3/09/95	123.60	421.93	128.60
699-42-41	1/05/95	146.23	421.07*	128.34
	3/09/95	146.92	420.38	128.13
699-42-42B	1/10/95	166.86	416.37*	126.91
	3/09/95	167.25	415.98	126.79
699-43-40	1/10/95	121.85	420.35*	128.12
	3/09/95	120.64	421.56	128.49
699-43-41E	1/09/95	128.85	422.01*	128.63
	3/09/95	129.99	420.87	128.28
699-43-41F	1/06/95	130.55	420.46*	128.16
	3/09/95	130.07	420.94	128.30

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

Well	Date	Depth to water (ft)	Water level elevation above msl (ft)	(m)
699-43-41G	1/17/95	134.88	416.46*	126.94
	3/09/95	134.61	416.73	127.02
699-43-42J	1/05/95	164.05	417.63*	127.29
	3/09/95	164.24	417.44	127.24
699-43-43	1/10/95	164.85	414.52*	126.35
	3/09/95	165.20	414.17	126.24
699-43-45	1/11/95	195.50	402.18*	122.58
	3/09/95	195.42	402.26	122.61
699-44-39B	1/06/95	91.92	421.48*	128.47
	3/09/95	92.96	420.44	128.15
699-44-42	1/06/95	159.98	419.24*	127.78
	3/09/95	159.99	419.23	127.78
699-44-43B	1/09/95	164.66	415.46*	126.63
	3/09/95	166.65	413.47	126.03

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. Elevations marked with an '*' were measured at the time of sampling.
4. Elevation marked with a '+' are outside of the expected range, and are supected of error.

Table 5-3. Constituent List and Summary of Results for the 216-B-3 Pond Data for Reporting Period January 1 through March 31, 1995. (sheet 1 of 3)

CONTAMINATION INDICATOR PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
CONDUCT	94	Conductivity, field	µmhos	1			105	105	
CONDUCT	73	Conductivity, lab	µmhos				28	28	
TOC		Total Organic Carbon	ppb	110			112	108	
TOX		Total Organic Halogen	ppb	5			107	48	
PH	93	pH, field	pH	.01	6.5-8.5	EPAS	105	105	4
PH	125	pH, lab	pH		6.5-8.5	EPAS	28	28	3

DRINKING WATER PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
FARSENIC		Arsenic, filtered	ppb	2.8	50	EPA	2	2	0
BARIUM		Barium	ppb	.59	1000	EPAI	2	2	0
FBARIUM		Barium, filtered	ppb	.59	1000	EPAI	28	28	0
CADMIUM		Cadmium	ppb	3.3	10	EPAI	2	0	0
FCADMIU		Cadmium, filtered	ppb	3.3	10	EPAI	28	0	0
CHROMUM		Chromium	ppb	4.5	50	EPAI	2	2	0
FCHROMI		Chromium, filtered	ppb	4.5	50	EPAI	28	11	0
FLUORID		Fluoride	ppb	36	1400	EPAI	28	28	0
ALPHA		Gross alpha	pCi/L		15	EPA	28	25	0
NITRATE		Nitrate	ppb	11	45000	EPA	28	28	0

GROUNDWATER QUALITY PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
CHLORID		Chloride	ppb	14	250000	EPAS	28	28	0
IRON		Iron	ppb	5.24	300	EPAS	2	2	1
FIRON		Iron, filtered	ppb	5.24	300	EPAS	28	28	1
MANGESE		Manganese	ppb	.72	50	EPAS	2	2	0
FMANGAN		Manganese, filtered	ppb	.72	50	EPAS	28	22	5
LPHENOL	19	Phenol	ppb	.54			28	0	
LPHENOL	30	Phenol	ppb	.31			2	0	
SODIUM		Sodium	ppb	61			2	2	
FSODIUM		Sodium, filtered	ppb	61			28	28	
SULFATE		Sulfate	ppb	37	250000	EPAS	28	28	0

SITE SPECIFIC AND OTHER CONSTITUENTS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
246-trp		2,4,6-Trichlorophenol	ppb	1.3			2	0	
24-dchp	19	2,4-Dichlorophenol	ppb	4			28	0	
24-dchp	30	2,4-Dichlorophenol	ppb	1.3			2	0	
DIMPHEN		2,4-Dimethylphenol	ppb	1.2			2	1	
DINPHEN		2,4-Dinitrophenol	ppb	3			2	0	
26-dchp		2,6-Dichlorophenol	ppb	1.4			2	0	
CHLPHEN		2-Chlorophenol	ppb	1.6			2	0	
26-dchp		2,6-Dichlorophenol	ppb	1.4			2	0	

Table 5-3. Constituent List and Summary of Results for the 216-B-3 Pond Data for Reporting Period January 1 through March 31, 1995. (sheet 2 of 3)

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
CHLPHEN		2-Chlorophenol	ppb	1.6			2	0	
2METHPH		2-Methylphenol	ppb	5.1			28	0	
2NITPH	19	2-Nitrophenol	ppb	1.9			28	0	
2NITPH	30	2-Nitrophenol	ppb	1.3			2	0	
BUTDINP		2-sec-Butyl-4,6-dinitrophenol(DN)	ppb	1.3			2	0	
46DN2MP		4,6-Dinitro-2-methylphenol	ppb	1.3			2	0	
CHLCRES		4-Chloro-3-methylphenol	ppb	1.3			2	0	
4METHPH		4-Methylphenol	ppb	7			28	0	
NITPHEN		4-Nitrophenol	ppb	3			2	0	
ALKALIN		Alkalinity	ppm	2.8			28	28	
ALUMNUM		Aluminum	ppb	26			2	2	
FALUMIN		Aluminum, filtered	ppb	26			28	4	
ANTIONY		Antimony	ppb	62			2	0	
FANTIMO		Antimony, filtered	ppb	62			28	0	
BENZOTH		Benzothiazole	ppb	1.3			28	0	
BERYLUM		Beryllium	ppb	.17			2	0	
FBERYLL		Beryllium, filtered	ppb	.17			28	5	
BIS2EPH		Bis(2-ethylhexyl) phthalate	ppb	5.3			28	0	
BROMIDE		Bromide	ppb	11			28	16	
CALCIUM		Calcium	ppb	34			2	2	
FCALCIU		Calcium, filtered	ppb	34			28	28	
COBALT		Cobalt	ppb	5.9			2	0	
FCOBALT		Cobalt, filtered	ppb	5.9			28	0	
COPPER		Copper	ppb	4.1	1000	EPAS	2	1	0
FCOPPER		Copper, filtered	ppb	4.1	1000	EPAS	28	4	0
CRESOLS		Cresols (methylphenols)	ppb	4.8			2	0	
DECANE		Decane	ppb	1.9			28	0	
DODECAN		Dodecane	ppb	1.1			28	0	
BETA		Gross beta	pCi/L				28	27	
MAGNES		Magnesium	ppb	23			2	2	
FMAGNES		Magnesium, filtered	ppb	23			28	28	
NAPHTHA		Naphthalene	ppb	1.2			28	0	
NICKEL		Nickel	ppb	13			2	1	
FNICKEL		Nickel, filtered	ppb	13			28	1	
NITRITE		Nitrite	ppb	18	1000	EPA	28	1	0
PENTCHP	19	Pentachlorophenol	ppb	8.3	1	EPA	28	0	28*
PENTCHP	30	Pentachlorophenol	ppb	1.3	1	EPA	2	0	2*
PHOSPHA		Phosphate	ppb	82			28	2	
POTASUM		Potassium	ppb	850			2	2	
FPOTASS		Potassium, filtered	ppb	850			28	28	
SILVER		Silver	ppb	3.6	50	EPAI	2	0	0
FSILVER		Silver, filtered	ppb	3.6	50	EPAI	28	2	0
TMP_C		Temperature, field	DegC	.1			9	9	
TETPHNL		Tetrachlorophenols	ppb	1.5			2	0	
TETRADE		Tetradecane	ppb	1.6			28	0	
TIN		Tin	ppb	69			2	0	
FTIN		Tin, filtered	ppb	69			28	0	
TDS		Total Dissolved Solids	ppm	10	500	EPAS	2	2	0
TRIBUTPH		Tributyl Phosphate	ppb	1.1			28	0	
TRIPHNL		Trichlorophenols	ppb	1.7			2	0	
TDICHPH		Tris-2-chloroethyl phosphate	ppb	.61			28	0	
TRITIUM		Tritium	pCi/L		20000	EPA	2	2	0
TURBID	111	Turbidity	NTU				2	2	
TURBID	126	Turbidity	NTU	.016			28	28	
VANADUM		Vanadium	ppb	6.6			2	2	

Table 5-3. Constituent List and Summary of Results for the 216-B-3 Pond Data for Reporting Period January 1 through March 31, 1995. (sheet 3 of 3)

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
FVANADI		Vanadium, filtered	ppb	6.6			28	21	
ZINC		Zinc	ppb	6.3	5000	EPAS	2	1	0
FZINC		Zinc, filtered	ppb	6.3	5000	EPAS	28	5	0
MCRESOL		m-Cresol	ppb	2.2			28	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 January 1 through March 31, 1995. (sheet 1 of 10)

Well Name	Collection Date	Sample Number	DIMPHEN 30/ppb 1.2/.	ALKALIN 357/ppm 2.8/.	ALUMNUM 34/ppb 26/.	FALUMIN 34/ppb 26/.
299-E18-1	3/16/95	B0DWJ4		100.00		
299-E18-1	3/16/95	B0DWJ8				26.00 U
299-E32-4	1/06/95	B0DHV3		120.00 BQ		
299-E32-4	1/06/95	B0DHV7				26.00 U
699-40-36	1/09/95	B0DJK3		150.00 BQ		
699-40-36	1/09/95	B0DJK7				26.00 U
699-40-39	1/05/95	B0DHW8		160.00 Q		
699-40-39	1/05/95	B0DHX2				34.00 L
699-40-40A	1/06/95	B0DHX3		150.00 BQ		
699-40-40A	1/06/95	B0DHX7				26.00 U
699-40-40B	1/05/95	B0DHY3		140.00 Q		
699-40-40B	1/05/95	B0DHY7				31.00 L
699-41-35	1/09/95	B0DJK8		160.00 BQ		
699-41-35	1/09/95	B0DJL2				26.00 U
699-41-40	1/10/95	B0DHZ5		130.00		
699-41-40	1/10/95	B0DHZ9				26.00 U
699-41-42	1/05/95	B0DJ07		100.00 Q		
699-41-42	1/05/95	B0DJ11				26.00 U
699-42-37	1/09/95	B0DJL3		140.00 BQ		
699-42-37	1/09/95	B0DJL7				26.00 U
699-42-39A	1/09/95	B0DJ19		120.00 BQ		
699-42-39A	1/09/95	B0DJ23				26.00 U
699-42-39B	1/09/95	B0DJ31		120.00 BQ		
699-42-39B	1/09/95	B0DJ35				26.00 U
699-42-40A	1/05/95	B0DJ41		80.00 Q		
699-42-40A	1/05/95	B0DJ45				26.00 U
699-42-40C	1/24/95	B0DJ46		130.00		
699-42-40C	1/24/95	B0DJ50				26.00 U
699-42-41	1/05/95	B0DJ51		70.00 Q		
699-42-41	1/05/95	B0DJ55				26.00 U
699-42-42B	1/10/95	B0DJ56		110.00		
699-42-42B	1/10/95	B0DJ60				26.00 U
699-43-40	1/10/95	B0DJ61		110.00		
699-43-40	1/10/95	B0DJ62		110.00		
699-43-40	1/10/95	B0DJ69				26.00 U
699-43-40	1/10/95	B0DJ70				27.00 L
699-43-41E	1/09/95	B0DJ71		110.00 BQ		
699-43-41E	1/09/95	B0DJ75				26.00 U
699-43-41F	1/06/95	B0DJ76		110.00 BQ		
699-43-41F	1/06/95	B0DJ80				26.00 U
699-43-41G	1/17/95	B0DJ81		100.00		
699-43-41G	1/17/95	B0DJ85				26.00 U
699-43-42J	1/05/95	B0DJ86		130.00 Q		
699-43-42J	1/05/95	B0DJ90				26.00 U
699-43-43	1/10/95	B0DJ26	7.70 F	70.00	30.00 L	
699-43-43	1/10/95	B0DJ30				26.00 L
699-43-45	1/11/95	B0DJ36	1.20 U	90.00	110.00 L	
699-43-45	1/11/95	B0DJ40				26.00 U
699-44-39B	1/06/95	B0DJ91		80.00 BQ		
699-44-39B	1/06/95	B0DJ95				26.00 U
699-44-42	1/06/95	B0DJ96		110.00 BQ		
699-44-42	1/06/95	B0DJ97		100.00 BQ		
699-44-42	1/06/95	B0DJB4				26.00 U
699-44-42	1/06/95	B0DJB5				26.00 U
699-44-43B	1/09/95	B0DJB6		120.00 BQ		
699-44-43B	1/09/95	B0DJC0				26.00 U

Table 5-4. Constituents with at Least One Detected Value for the 216-B-3 Pond Data for Reporting Period January 1 through March 31, 1995. (sheet 2 of 10)

Well Name	Collection Date	Sample Number	FARSENIC 43/ppb 2.8/50	BARIUM 34/ppb .59/1000	FBARIUM 34/ppb .59/1000	BERYLUM 34/ppb .17/.
299-E18-1	3/16/95	B0DWJ8			28.00	
299-E32-4	1/06/95	B0DHV7			68.00	
699-40-36	1/09/95	B0DJK7			62.00	
699-40-39	1/05/95	B0DHX2			98.00	
699-40-40A	1/06/95	B0DHX7			110.00	
699-40-40B	1/05/95	B0DHY7			84.00	
699-41-35	1/09/95	B0DJL2			130.00	
699-41-40	1/10/95	B0DHZ9			58.00	
699-41-42	1/05/95	B0DJ11			27.00	
699-42-37	1/09/95	B0DJL7			56.00	
699-42-39A	1/09/95	B0DJ23			51.00	
699-42-39B	1/09/95	B0DJ35			62.00	
699-42-40A	1/05/95	B0DJ45			6.20 L	
699-42-40C	1/24/95	B0DJ50			110.00	
699-42-41	1/05/95	B0DJ55			5.80 L	
699-42-42B	1/10/95	B0DJ60			20.00	
699-43-40	1/10/95	B0DJ69			44.00	
699-43-40	1/10/95	B0DJ70			44.00	
699-43-41E	1/09/95	B0DJ75			34.00	
699-43-41F	1/06/95	B0DJ80			33.00	
699-43-41G	1/17/95	B0DJ85			48.00	
699-43-42J	1/05/95	B0DJ90			14.00 L	
699-43-43	1/10/95	B0DJ26		9.30 L		.17 U
699-43-43	1/10/95	B0DJ30	4.80 L		9.50 L	
699-43-45	1/11/95	B0DJ36		29.00		.17 U
699-43-45	1/11/95	B0DJ40	10.00		27.00	
699-44-39B	1/06/95	B0DJ95			7.20 L	
699-44-42	1/06/95	B0DJB4			36.00	
699-44-42	1/06/95	B0DJB5			36.00	
699-44-43B	1/09/95	B0DJC0			41.00	

Well Name	Collection Date	Sample Number	FBERYLL 34/ppb .17/.	BROMIDE 124/ppb 11/.	CALCIUM 34/ppb 34/.	FCALCIU 34/ppb 34/.
299-E18-1	3/16/95	B0DWJ4		80.00 L		
299-E18-1	3/16/95	B0DWJ8	.17 U			53000.00
299-E32-4	1/06/95	B0DHV3		100.00 L		
299-E32-4	1/06/95	B0DHV7	.17 U			39000.00
699-40-36	1/09/95	B0DJK3		20.00 L		
699-40-36	1/09/95	B0DJK7	.17 U			14000.00
699-40-39	1/05/95	B0DHW8		11.00 U		
699-40-39	1/05/95	B0DHX2	.17 U			20000.00
699-40-40A	1/06/95	B0DHX3		30.00 L		
699-40-40A	1/06/95	B0DHX7	.17 U			20000.00
699-40-40B	1/05/95	B0DHY3		30.00 L		
699-40-40B	1/05/95	B0DHY7	.19 L			24000.00
699-41-35	1/09/95	B0DJK8		20.00 L		
699-41-35	1/09/95	B0DJL2	.17 U			18000.00
699-41-40	1/10/95	B0DHZ5		20.00 L		
699-41-40	1/10/95	B0DHZ9	.17 U			25000.00
699-41-42	1/05/95	B0DJ07		11.00 U		
699-41-42	1/05/95	B0DJ11	.19 L			17000.00
699-42-37	1/09/95	B0DJL3		50.00 L		
699-42-37	1/09/95	B0DJL7	.17 U			23000.00

Table 5-4. Constituents with at Least One Detected Value for the 216-B-3 Pond Data for Reporting Period January 1 through March 31, 1995. (sheet 3 of 10)

Well Name	Collection Date	Sample Number	FBERYLL 34/ppb .17/.	BROMIDE 124/ppb 11/.	CALCIUM 34/ppb 34/.	FCALCIU 34/ppb 34/.
699-42-39A	1/09/95	B0DJ19		30.00 L		
699-42-39A	1/09/95	B0DJ23	.17 U			27000.00
699-42-39B	1/09/95	B0DJ31		20.00 L		
699-42-39B	1/09/95	B0DJ35	.17 U			27000.00
699-42-40A	1/05/95	B0DJ41		11.00 U		
699-42-40A	1/05/95	B0DJ45	.17 U			21000.00
699-42-40C	1/24/95	B0DJ46		30.00 L		
699-42-40C	1/24/95	B0DJ50	.61 L			20000.00
699-42-41	1/05/95	B0DJ51		11.00 U		
699-42-41	1/05/95	B0DJ55	.19 L			21000.00
699-42-42B	1/10/95	B0DJ56		11.00 U		
699-42-42B	1/10/95	B0DJ60	.17 U			21000.00
699-43-40	1/10/95	B0DJ61		20.00 LQ		
699-43-40	1/10/95	B0DJ62		30.00 LQ		
699-43-40	1/10/95	B0DJ69	.17 U			26000.00
699-43-40	1/10/95	B0DJ70	.17 U			25000.00
699-43-41E	1/09/95	B0DJ71		20.00 L		
699-43-41E	1/09/95	B0DJ75	.17 U			26000.00
699-43-41F	1/06/95	B0DJ76		20.00 L		
699-43-41F	1/06/95	B0DJ80	.17 U			26000.00
699-43-41G	1/17/95	B0DJ81		13.00 L		
699-43-41G	1/17/95	B0DJ85	.69 L			21000.00
699-43-42J	1/05/95	B0DJ86		11.00 U		
699-43-42J	1/05/95	B0DJ90	.17 U			17000.00
699-43-43	1/10/95	B0DJ26		11.00 U	21000.00	
699-43-43	1/10/95	B0DJ30	.17 U			21000.00
699-43-45	1/11/95	B0DJ36		11.00 U	25000.00	
699-43-45	1/11/95	B0DJ40	.17 U			24000.00
699-44-39B	1/06/95	B0DJ91		11.00 U		
699-44-39B	1/06/95	B0DJ95	.17 U			19000.00
699-44-42	1/06/95	B0DJ96		11.00 U		
699-44-42	1/06/95	B0DJ97		11.00 U		
699-44-42	1/06/95	B0DJB4	.17 U			20000.00
699-44-42	1/06/95	B0DJB5	.17 U			21000.00
699-44-43B	1/09/95	B0DJB6		11.00 U		
699-44-43B	1/09/95	B0DJC0	.17 U			24000.00

Well Name	Collection Date	Sample Number	CHLORID 124/ppb 14/250000	CHROMUM 34/ppb 4.5/50	FCHROMI 34/ppb 4.5/50	COPPER 34/ppb 4.1/1000
299-E18-1	3/16/95	B0DWJ4	8000.00			
299-E18-1	3/16/95	B0DWJ8			7.90 L	
299-E32-4	1/06/95	B0DHV3	9100.00			
299-E32-4	1/06/95	B0DHV7			18.00 L	
699-40-36	1/09/95	B0DJK3	3300.00			
699-40-36	1/09/95	B0DJK7			4.50 U	
699-40-39	1/05/95	B0DHW8	3200.00			
699-40-39	1/05/95	B0DHX2			10.00 L	
699-40-40A	1/06/95	B0DHX3	5400.00			
699-40-40A	1/06/95	B0DHX7			4.50 U	
699-40-40B	1/05/95	B0DHY3	4600.00			
699-40-40B	1/05/95	B0DHY7			5.30 L	
699-41-35	1/09/95	B0DJK8	3300.00			

Table 5-4. Constituents with at Least One Detected Value for the 216-B-3 Pond Data for Reporting Period January 1 through March 31, 1995. (sheet 4 of 10)

Well Name	Collection Date	Sample Number	CHLORID 124/ppb 14/250000	CHROMUM 34/ppb 4.5/50	FCHROMI 34/ppb 4.5/50	COPPER 34/ppb 4.1/1000
699-41-35	1/09/95	BODJL2			4.50 U	
699-41-40	1/10/95	BODHZ5	6700.00 Q			
699-41-40	1/10/95	BODHZ9			5.80 L	
699-41-42	1/05/95	BODJ07	3200.00			
699-41-42	1/05/95	BODJ11			4.50 U	
699-42-37	1/09/95	BODJL3	7800.00			
699-42-37	1/09/95	BODJL7			4.50 U	
699-42-39A	1/09/95	BODJ19	7800.00			
699-42-39A	1/09/95	BODJ23			4.50 U	
699-42-39B	1/09/95	BODJ31	7800.00			
699-42-39B	1/09/95	BODJ35			4.50 U	
699-42-40A	1/05/95	BODJ41	1600.00			
699-42-40A	1/05/95	BODJ45			4.50 U	
699-42-40C	1/24/95	BODJ46	6600.00			
699-42-40C	1/24/95	BODJ50			4.50 U	
699-42-41	1/05/95	BODJ51	1300.00			
699-42-41	1/05/95	BODJ55			5.30 L	
699-42-42B	1/10/95	BODJ56	3300.00 Q			
699-42-42B	1/10/95	BODJ60			4.50 U	
699-43-40	1/10/95	BODJ61	5900.00 Q			
699-43-40	1/10/95	BODJ62	6000.00 Q			
699-43-40	1/10/95	BODJ69			5.80 L	
699-43-40	1/10/95	BODJ70			4.80 L	
699-43-41E	1/09/95	BODJ71	7000.00			
699-43-41E	1/09/95	BODJ75			5.80 L	
699-43-41F	1/06/95	BODJ76	6000.00			
699-43-41F	1/06/95	BODJ80			4.50 U	
699-43-41G	1/17/95	BODJ81	5400.00 B			
699-43-41G	1/17/95	BODJ85			4.50 U	
699-43-42J	1/05/95	BODJ86	2700.00			
699-43-42J	1/05/95	BODJ90			8.50 L	
699-43-43	1/10/95	BODJ26	1200.00 Q	31.00		4.10 U
699-43-43	1/10/95	BODJ30			4.50 U	
699-43-45	1/11/95	BODJ36	1900.00 Q	49.00		4.50 L
699-43-45	1/11/95	BODJ40			4.50 U	
699-44-39B	1/06/95	BODJ91	1200.00			
699-44-39B	1/06/95	BODJ95			4.50 U	
699-44-42	1/06/95	BODJ96	3400.00			
699-44-42	1/06/95	BODJ97	3400.00			
699-44-42	1/06/95	BODJB4			4.50 U	
699-44-42	1/06/95	BODJB5			5.10 L	
699-44-43B	1/09/95	BODJB6	3400.00			
699-44-43B	1/09/95	BODJC0			4.50 U	

Well Name	Collection Date	Sample Number	FCOPPER 34/ppb 4.1/1000	FLUORID 124/ppb 36/1400	ALPHA 135/pCi/L ./15	BETA 136/pCi/L ./.
299-E18-1	3/16/95	BODWJ4		800.00	2.45	4.87
299-E18-1	3/16/95	BODWJ8	4.10 U			
299-E32-4	1/06/95	BODHV3		700.00	2.41	8.78
299-E32-4	1/06/95	BODHV7	4.10 U			
699-40-36	1/09/95	BODJK3		900.00	5.28	6.68
699-40-36	1/09/95	BODJK7	4.10 U			
699-40-39	1/05/95	BODHW8		800.00	3.03	3.46

Table 5-4. Constituents with at Least One Detected Value for the 216-B-3 Pond Data for Reporting Period January 1 through March 31, 1995. (sheet 5 of 10)

Well Name	Collection Date	Sample Number	FCOPPER 34/ppb 4.1/1000	FLUORID 124/ppb 36/1400	ALPHA 135/pCi/L ./15	BETA 136/pCi/L ./.
699-40-39	1/05/95	B0DHX2	4.10 U			
699-40-40A	1/06/95	B0DHX3		700.00	1.60	10.50
699-40-40A	1/06/95	B0DHX7	6.10 L			
699-40-40B	1/05/95	B0DHY3		600.00	3.11	3.80
699-40-40B	1/05/95	B0DHY7	4.80 L			
699-41-35	1/09/95	B0DJK8		900.00	5.37	6.76
699-41-35	1/09/95	B0DJL2	4.10 U			
699-41-40	1/10/95	B0DHZ5		800.00	1.94	2.59
699-41-40	1/10/95	B0DHZ9	4.10 U			
699-41-42	1/05/95	B0DJ07		600.00	2.53	15.50
699-41-42	1/05/95	B0DJ11	4.10 U			
699-42-37	1/09/95	B0DJL3		800.00	8.26	8.56
699-42-37	1/09/95	B0DJL7	4.10 U			
699-42-39A	1/09/95	B0DJ19		700.00	4.53	6.49
699-42-39A	1/09/95	B0DJ23	4.10 U			
699-42-39B	1/09/95	B0DJ31		700.00	2.56	5.21
699-42-39B	1/09/95	B0DJ35	4.10 U			
699-42-40A	1/05/95	B0DJ41		200.00	3.76	6.97
699-42-40A	1/05/95	B0DJ45	4.10 U			
699-42-40C	1/24/95	B0DJ46		900.00	4.49	10.20
699-42-40C	1/24/95	B0DJ50	4.10 U			
699-42-41	1/05/95	B0DJ51		100.00	1.02	5.96
699-42-41	1/05/95	B0DJ55	4.30 L			
699-42-42B	1/10/95	B0DJ56		500.00	2.32	3.67
699-42-42B	1/10/95	B0DJ60	4.10 U			
699-43-40	1/10/95	B0DJ61		500.00	1.91	8.15 Q
699-43-40	1/10/95	B0DJ62		500.00	1.99	6.14 Q
699-43-40	1/10/95	B0DJ69	4.10 U			
699-43-40	1/10/95	B0DJ70	4.10 U			
699-43-41E	1/09/95	B0DJ71		500.00	2.34	1.83 U
699-43-41E	1/09/95	B0DJ75	4.10 U			
699-43-41F	1/06/95	B0DJ76		700.00	2.93	7.62
699-43-41F	1/06/95	B0DJ80	4.10 U			
699-43-41G	1/17/95	B0DJ81		600.00	2.38	3.09
699-43-41G	1/17/95	B0DJ85	4.10 U			
699-43-42J	1/05/95	B0DJ86		500.00	2.51	8.43
699-43-42J	1/05/95	B0DJ90	6.90 L			
699-43-43	1/10/95	B0DJ26		200.00	.50 U	4.65
699-43-43	1/10/95	B0DJ30	4.10 U			
699-43-45	1/11/95	B0DJ36		300.00	.37 U	5.81
699-43-45	1/11/95	B0DJ40	4.10 U			
699-44-39B	1/06/95	B0DJ91		200.00	.41 U	8.90
699-44-39B	1/06/95	B0DJ95	4.10 U			
699-44-42	1/06/95	B0DJ96		500.00	1.21	10.90 Q
699-44-42	1/06/95	B0DJ97		400.00	1.39	15.90 Q
699-44-42	1/06/95	B0DJB4	4.10 U			
699-44-42	1/06/95	B0DJB5	4.10 U			
699-44-43B	1/09/95	B0DJB6		500.00	2.25	5.57
699-44-43B	1/09/95	B0DJC0	4.10 U			

Table 5-4. Constituents with at Least One Detected Value for the 216-B-3 Pond Data for Reporting Period January 1 through March 31, 1995. (sheet 6 of 10)

Well Name	Collection Date	Sample Number	IRON 34/ppb 5.24/300	FIRON 34/ppb 5.24/300	MAGNES 34/ppb 23/.	FMAGNES 34/ppb 23/.
299-E18-1	3/16/95	B0DWJ8		24.00		13000.00
299-E32-4	1/06/95	B0DHV7		380.00 QF		13000.00
699-40-36	1/09/95	B0DJK7		68.00 Q		4900.00
699-40-39	1/05/95	B0DHX2		42.00 BQ		7900.00
699-40-40A	1/06/95	B0DHX7		84.00 Q		7700.00
699-40-40B	1/05/95	B0DHY7		39.00 BQ		6600.00
699-41-35	1/09/95	B0DJL2		52.00 Q		6600.00
699-41-40	1/10/95	B0DHZ9		15.00 BLQ		11000.00
699-41-42	1/05/95	B0DJ11		29.00 BQ		6500.00
699-42-37	1/09/95	B0DJL7		31.00 Q		9800.00
699-42-39A	1/09/95	B0DJ23		28.00 Q		11000.00
699-42-39B	1/09/95	B0DJ35		25.00 Q		10000.00
699-42-40A	1/05/95	B0DJ45		72.00 BQ		5200.00
699-42-40C	1/24/95	B0DJ50		19.00 BL		6000.00
699-42-41	1/05/95	B0DJ55		18.00 BLQ		4900.00
699-42-42B	1/10/95	B0DJ60		20.00 BQ		7400.00
699-43-40	1/10/95	B0DJ69		46.00 BQ		9400.00
699-43-40	1/10/95	B0DJ70		40.00 BQ		9400.00
699-43-41E	1/09/95	B0DJ75		18.00 LQ		9700.00
699-43-41F	1/06/95	B0DJ80		30.00 Q		11000.00
699-43-41G	1/17/95	B0DJ85		11.00 BL		10000.00
699-43-42J	1/05/95	B0DJ90		22.00 BQ		4700.00
699-43-43	1/10/95	B0DJ26	140.00 BQ		5000.00	
699-43-43	1/10/95	B0DJ30		29.00 BQ		4900.00
699-43-45	1/11/95	B0DJ36	380.00 Q		6100.00	
699-43-45	1/11/95	B0DJ40		19.00 LQ		6000.00
699-44-39B	1/06/95	B0DJ95		19.00 LQ		7200.00
699-44-42	1/06/95	B0DJB4		16.00 LQ		7000.00
699-44-42	1/06/95	B0DJB5		32.00 Q		7100.00
699-44-43B	1/09/95	B0DJC0		15.00 LQ		9300.00

Well Name	Collection Date	Sample Number	MANGESE 34/ppb .72/50	FMANGAN 34/ppb .72/50	NICKEL 34/ppb 13/.	FNICKEL 34/ppb 13/.
299-E18-1	3/16/95	B0DWJ8		1.50 L		13.00 U
299-E32-4	1/06/95	B0DHV7		3.40 L		13.00 U
699-40-36	1/09/95	B0DJK7		83.00		13.00 U
699-40-39	1/05/95	B0DHX2		9.80 L		13.00 U
699-40-40A	1/06/95	B0DHX7		72.00		13.00 U
699-40-40B	1/05/95	B0DHY7		92.00		13.00 U
699-41-35	1/09/95	B0DJL2		85.00		13.00 U
699-41-40	1/10/95	B0DHZ9		.72 U		13.00 U
699-41-42	1/05/95	B0DJ11		1.70 L		13.00 U
699-42-37	1/09/95	B0DJL7		47.00		13.00 U
699-42-39A	1/09/95	B0DJ23		2.40 L		13.00 U
699-42-39B	1/09/95	B0DJ35		57.00		13.00 U
699-42-40A	1/05/95	B0DJ45		6.90 L		13.00 U
699-42-40C	1/24/95	B0DJ50		2.50 BL		13.00 U
699-42-41	1/05/95	B0DJ55		1.60 L		17.00 L
699-42-42B	1/10/95	B0DJ60		.72 U		13.00 U
699-43-40	1/10/95	B0DJ69		5.20 L		13.00 U
699-43-40	1/10/95	B0DJ70		4.90 L		13.00 U
699-43-41E	1/09/95	B0DJ75		1.80 L		13.00 U
699-43-41F	1/06/95	B0DJ80		1.60 L		13.00 U

Table 5-4. Constituents with at Least One Detected Value for the 216-B-3 Pond Data for Reporting Period January 1 through March 31, 1995. (sheet 7 of 10)

Well Name	Collection Date	Sample Number	MANGESE 34/ppb .72/50	FMANGAN 34/ppb .72/50	NICKEL 34/ppb 13/.	FNICKEL 34/ppb 13/.
699-43-41G	1/17/95	B0DJ85		23.00 B		13.00 U
699-43-42J	1/05/95	B0DJ90		1.50 L		13.00 U
699-43-43	1/10/95	B0DJ26	3.20 L		13.00 U	
699-43-43	1/10/95	B0DJ30		1.80 L		13.00 U
699-43-45	1/11/95	B0DJ36	11.00		23.00 L	
699-43-45	1/11/95	B0DJ40		1.00 L		13.00 U
699-44-39B	1/06/95	B0DJ95		.72 U		13.00 U
699-44-42	1/06/95	B0DJB4		.72 U		13.00 U
699-44-42	1/06/95	B0DJB5		.72 U		13.00 U
699-44-43B	1/09/95	B0DJC0		.72 U		13.00 U

Well Name	Collection Date	Sample Number	NITRATE 124/ppb 11/45000	NITRITE 124/ppb 18/1000	PHOSPHA 124/ppb 82/.	POTASUM 34/ppb 850/.
299-E18-1	3/16/95	B0DWJ4	14000.00 D	18.00 U	82.00 U	
299-E32-4	1/06/95	B0DHV3	28000.00 D	18.00 U	82.00 U	
699-40-36	1/09/95	B0DJK3	100.00 L	18.00 U	82.00 U	
699-40-39	1/05/95	B0DHW8	200.00	18.00 U	82.00 U	
699-40-40A	1/06/95	B0DHX3	2900.00	18.00 U	82.00 U	
699-40-40B	1/05/95	B0DHY3	1100.00	18.00 U	82.00 U	
699-41-35	1/09/95	B0DJK8	300.00	18.00 U	82.00 U	
699-41-40	1/10/95	B0DHZ5	17000.00 DQ	18.00 U	82.00 U	
699-41-42	1/05/95	B0DJ07	3200.00	18.00 U	82.00 U	
699-42-37	1/09/95	B0DJL3	4200.00	170.00 L	82.00 U	
699-42-39A	1/09/95	B0DJ19	9900.00 D	18.00 U	82.00 U	
699-42-39B	1/09/95	B0DJ31	10000.00 D	18.00 U	82.00 U	
699-42-40A	1/05/95	B0DJ41	900.00	18.00 U	82.00 U	
699-42-40C	1/24/95	B0DJ46	4900.00	18.00 U	82.00 U	
699-42-41	1/05/95	B0DJ51	800.00	18.00 U	82.00 U	
699-42-42B	1/10/95	B0DJ56	4400.00 Q	18.00 U	82.00 U	
699-43-40	1/10/95	B0DJ61	3600.00 Q	18.00 U	82.00 U	
699-43-40	1/10/95	B0DJ62	3600.00 Q	18.00 U	82.00 U	
699-43-41E	1/09/95	B0DJ71	12000.00 D	18.00 U	400.00 L	
699-43-41F	1/06/95	B0DJ76	8300.00	18.00 U	900.00	
699-43-41G	1/17/95	B0DJ81	5600.00	18.00 U	82.00 U	
699-43-42J	1/05/95	B0DJ86	4300.00	18.00 U	82.00 U	
699-43-43	1/10/95	B0DJ26	800.00 Q	18.00 U	82.00 U	4900.00
699-43-45	1/11/95	B0DJ36	1100.00 Q	18.00 U	82.00 U	4300.00
699-44-39B	1/06/95	B0DJ91	1200.00	18.00 U	82.00 U	
699-44-42	1/06/95	B0DJ96	2900.00	18.00 U	82.00 U	
699-44-42	1/06/95	B0DJ97	3000.00	18.00 U	82.00 U	
699-44-43B	1/09/95	B0DJB6	4000.00	18.00 U	82.00 U	

Well Name	Collection Date	Sample Number	FPOTASS 34/ppb 850/.	SILVER 34/ppb 3.6/50	FSILVER 34/ppb 3.6/50	SODIUM 34/ppb 61/.
299-E18-1	3/16/95	B0DWJ8	5700.00		3.60 U	
299-E32-4	1/06/95	B0DHV7	6000.00		3.60 U	
699-40-36	1/09/95	B0DJK7	7400.00		3.60 U	
699-40-39	1/05/95	B0DHX2	5000.00		3.60 U	

Table 5-4. Constituents with at Least One Detected Value for the 216-B-3 Pond Data for Reporting Period January 1 through March 31, 1995. (sheet 8 of 10)

Well Name	Collection Date	Sample Number	FPOTASS 34/ppb 850/.	SILVER 34/ppb 3.6/50	FSILVER 34/ppb 3.6/50	SODIUM 34/ppb 61/.
699-40-40A	1/06/95	BODHX7	6700.00		3.60 U	
699-40-40B	1/05/95	BODHY7	4800.00		3.60 U	
699-41-35	1/09/95	BODJL2	6500.00		3.60 U	
699-41-40	1/10/95	BODHZ9	4300.00		5.20 L	
699-41-42	1/05/95	BODJ11	5900.00		3.60 U	
699-42-37	1/09/95	BODJL7	5000.00		3.60 U	
699-42-39A	1/09/95	BODJ23	3900.00		3.60 U	
699-42-39B	1/09/95	BODJ35	5100.00		3.60 U	
699-42-40A	1/05/95	BODJ45	2900.00		3.60 U	
699-42-40C	1/24/95	BODJ50	12000.00		3.60 U	
699-42-41	1/05/95	BODJ55	2500.00		3.60 U	
699-42-42B	1/10/95	BODJ60	3600.00		3.60 U	
699-43-40	1/10/95	BODJ69	5100.00		3.60 U	
699-43-40	1/10/95	BODJ70	5200.00		3.60 U	
699-43-41E	1/09/95	BODJ75	3900.00		3.60 U	
699-43-41F	1/06/95	BODJ80	4100.00		3.60 U	
699-43-41G	1/17/95	BODJ85	5400.00		3.60 U	
699-43-42J	1/05/95	BODJ90	3900.00		3.60 U	
699-43-43	1/10/95	BODJ26		3.60 U		5000.00
699-43-43	1/10/95	BODJ30	4900.00		4.80 L	
699-43-45	1/11/95	BODJ36		3.60 U		7800.00
699-43-45	1/11/95	BODJ40	4100.00		3.60 U	
699-44-39B	1/06/95	BODJ95	3400.00		3.60 U	
699-44-42	1/06/95	BODJB4	3900.00		3.60 U	
699-44-42	1/06/95	BODJB5	4300.00		3.60 U	
699-44-43B	1/09/95	BODJC0	4300.00		3.60 U	

Well Name	Collection Date	Sample Number	FSODIUM 34/ppb 61/.	SULFATE 124/ppb 37/250000	TMP_C 170/DegC .1/.	TDS 65/ppm 10/500
299-E18-1	3/16/95	BODWJ4		110000.00 D		
299-E18-1	3/16/95	BODWJ8	26000.00 B			
299-E32-4	1/06/95	BODHV3		48000.00 D		
299-E32-4	1/06/95	BODHV7	24000.00 B			
699-40-36	1/09/95	BODJK3		8900.00 D	16.80	
699-40-36	1/09/95	BODJK4			16.80	
699-40-36	1/09/95	BODJK5			16.80	
699-40-36	1/09/95	BODJK6			16.80	
699-40-36	1/09/95	BODJK7	47000.00 B			
699-40-39	1/05/95	BODHW8		4100.00		
699-40-39	1/05/95	BODHX2	33000.00 B			
699-40-40A	1/06/95	BODHX3		17000.00 D		
699-40-40A	1/06/95	BODHX7	39000.00 B			
699-40-40B	1/05/95	BODHY3		17000.00 D		
699-40-40B	1/05/95	BODHY7	28000.00 B			
699-41-35	1/09/95	BODJK8		7000.00	16.40	
699-41-35	1/09/95	BODJL2	41000.00 B			
699-41-40	1/10/95	BODHZ5		31000.00 D		
699-41-40	1/10/95	BODHZ9	31000.00			
699-41-42	1/05/95	BODJ07		17000.00 D		
699-41-42	1/05/95	BODJ11	22000.00 B			
699-42-37	1/09/95	BODJL3		24000.00 D	16.30	
699-42-37	1/09/95	BODJL4			16.30	
699-42-37	1/09/95	BODJL5			16.30	

Table 5-4. Constituents with at Least One Detected Value for the 216-B-3 Pond Data for Reporting Period January 1 through March 31, 1995. (sheet 9 of 10)

Well Name	Collection Date	Sample Number	FSODIUM 34/ppb 61/.	SULFATE 124/ppb 37/250000	TMP_C 170/DegC .1/.	TDS 65/ppm 10/500
699-42-37	1/09/95	B0DJL6			16.30	
699-42-37	1/09/95	B0DJL7	35000.00 B			
699-42-39A	1/09/95	B0DJ19		34000.00 D		
699-42-39A	1/09/95	B0DJ23	25000.00 B			
699-42-39B	1/09/95	B0DJ31		38000.00 D		
699-42-39B	1/09/95	B0DJ35	28000.00			
699-42-40A	1/05/95	B0DJ41		9600.00		
699-42-40A	1/05/95	B0DJ45	3500.00 B			
699-42-40C	1/24/95	B0DJ46		27000.00 D		
699-42-40C	1/24/95	B0DJ50	35000.00 B			
699-42-41	1/05/95	B0DJ51		10000.00 D		
699-42-41	1/05/95	B0DJ55	2600.00 B			
699-42-42B	1/10/95	B0DJ56		16000.00 D		
699-42-42B	1/10/95	B0DJ60	18000.00			
699-43-40	1/10/95	B0DJ61		33000.00 D		
699-43-40	1/10/95	B0DJ62		33000.00 D		
699-43-40	1/10/95	B0DJ69	19000.00			
699-43-40	1/10/95	B0DJ70	19000.00			
699-43-41E	1/09/95	B0DJ71		34000.00 D		
699-43-41E	1/09/95	B0DJ75	25000.00 B			
699-43-41F	1/06/95	B0DJ76		24000.00 D		
699-43-41F	1/06/95	B0DJ80	17000.00 B			
699-43-41G	1/17/95	B0DJ81		27000.00 D		
699-43-41G	1/17/95	B0DJ85	20000.00 B			
699-43-42J	1/05/95	B0DJ86		14000.00 D		
699-43-42J	1/05/95	B0DJ90	29000.00 B			
699-43-43	1/10/95	B0DJ26		9800.00		110.00
699-43-43	1/10/95	B0DJ30	4900.00			
699-43-45	1/11/95	B0DJ36		10000.00 D		130.00
699-43-45	1/11/95	B0DJ40	7800.00			
699-44-39B	1/06/95	B0DJ91		11000.00 D		
699-44-39B	1/06/95	B0DJ95	5300.00 B			
699-44-42	1/06/95	B0DJ96		18000.00 D		
699-44-42	1/06/95	B0DJ97		18000.00 D		
699-44-42	1/06/95	B0DJB4	20000.00 B			
699-44-42	1/06/95	B0DJB5	20000.00 B			
699-44-43B	1/09/95	B0DJB6		20000.00 D		
699-44-43B	1/09/95	B0DJC0	18000.00 B			

Well Name	Collection Date	Sample Number	TRITIUM 142/pCi/L ./20000	TURBID 111/NTU ./.	TURBID 126/NTU .016/.	VANADUM 34/ppb 6.6/.
299-E18-1	3/16/95	B0DWJ4		1.62	2.00	
299-E32-4	1/06/95	B0DHV3			26.00 Q	
699-40-36	1/09/95	B0DJK3			15.00 Q	
699-40-39	1/05/95	B0DHW8			2.80 Q	
699-40-40A	1/06/95	B0DHX3			2.60 Q	
699-40-40B	1/05/95	B0DHY3			4.10 Q	
699-41-35	1/09/95	B0DJK8			5.60 Q	
699-41-40	1/10/95	B0DHZ5			1.70 Q	
699-41-42	1/05/95	B0DJ07			3.40 Q	
699-42-37	1/09/95	B0DJL3			110.00 Q	
699-42-39A	1/09/95	B0DJ19			7.80 Q	
699-42-39B	1/09/95	B0DJ31			5.40 Q	

Table 5-4. Constituents with at Least One Detected Value for the 216-B-3 Pond Data for Reporting Period January 1 through March 31, 1995. (sheet 10 of 10)

Well Name	Collection Date	Sample Number	TRITIUM 142/pCi/L ./20000	TURBID 111/NTU ./.	TURBID 126/NTU .016/.	VANADUM 34/ppb 6.6/.
699-42-40A	1/05/95	B0DJ41			150.00 Q	
699-42-40C	1/24/95	B0DJ46			.23	
699-42-40C	2/18/95	B0DW40		.07		
699-42-41	1/05/95	B0DJ51			.99 Q	
699-42-42B	1/10/95	B0DJ56			1.20 Q	
699-43-40	1/10/95	B0DJ61			2.10 Q	
699-43-40	1/10/95	B0DJ62			2.20 Q	
699-43-41E	1/09/95	B0DJ71			2.40 Q	
699-43-41F	1/06/95	B0DJ76			3.20 Q	
699-43-41G	1/17/95	B0DJ81			3.50	
699-43-42J	1/05/95	B0DJ86			1.20 Q	
699-43-43	1/10/95	B0DJ26	421.00		.81 Q	24.00 L
699-43-45	1/11/95	B0DJ36	302.00		4.00 Q	30.00
699-44-39B	1/06/95	B0DJ91			1.50 Q	
699-44-42	1/06/95	B0DJ96			.89 Q	
699-44-42	1/06/95	B0DJ97			.81 Q	
699-44-43B	1/09/95	B0DJB6			2.50 Q	

Well Name	Collection Date	Sample Number	FVANADI 34/ppb 6.6/.	ZINC 34/ppb 6.3/5000	FZINC 34/ppb 6.3/5000
299-E18-1	3/16/95	B0DWJ8	12.00 L		6.30 U
299-E32-4	1/06/95	B0DHV7	18.00 L		6.70 L
699-40-36	1/09/95	B0DJK7	6.60 U		6.30 U
699-40-39	1/05/95	B0DHX2	6.60 U		6.30 U
699-40-40A	1/06/95	B0DHX7	6.60 U		14.00
699-40-40B	1/05/95	B0DHY7	6.60 U		6.90 BL
699-41-35	1/09/95	B0DJL2	7.10 L		6.30 U
699-41-40	1/10/95	B0DHZ9	20.00 L		6.30 U
699-41-42	1/05/95	B0DJ11	21.00 L		74.00 B
699-42-37	1/09/95	B0DJL7	18.00 L		6.30 U
699-42-39A	1/09/95	B0DJ23	16.00 L		6.30 U
699-42-39B	1/09/95	B0DJ35	7.20 L		6.30 U
699-42-40A	1/05/95	B0DJ45	6.60 U		6.30 U
699-42-40C	1/24/95	B0DJ50	16.00 L		6.30 U
699-42-41	1/05/95	B0DJ55	6.60 U		6.30 U
699-42-42B	1/10/95	B0DJ60	30.00 L		6.30 U
699-43-40	1/10/95	B0DJ69	12.00 L		6.30 U
699-43-40	1/10/95	B0DJ70	12.00 L		6.30 U
699-43-41E	1/09/95	B0DJ75	6.60 U		6.30 U
699-43-41F	1/06/95	B0DJ80	20.00 L		6.30 U
699-43-41G	1/17/95	B0DJ85	19.00 L		6.30 U
699-43-42J	1/05/95	B0DJ90	57.00		7.60 BL
699-43-43	1/10/95	B0DJ26		6.30 U	
699-43-43	1/10/95	B0DJ30	23.00 L		6.30 U
699-43-45	1/11/95	B0DJ36		12.00	
699-43-45	1/11/95	B0DJ40	27.00 L		6.30 U
699-44-39B	1/06/95	B0DJ95	9.10 L		6.30 U
699-44-42	1/06/95	B0DJB4	36.00		6.30 U
699-44-42	1/06/95	B0DJB5	37.00		6.30 U
699-44-43B	1/09/95	B0DJC0	30.00 L		6.30 U

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 January 1 through March 31, 1995. (sheet 1 of 3)

Well Name	Collection Date	Sample Number	COND FIELD µmho 1/.	COND LAB µmho 1/.	pH FIELD .01/6.5-8.5s	pH LAB .01/6.5-8.5s	TOC ppb 110/.	TOX ppb 5/.
299-E18-1	3/16/95	B0DWJ4	494	500	8.19	8.10 H	110 U	5.0 U
		B0DWJ5	495		8.19		200 L	5.0 U
		B0DWJ6	495		8.19		110 U	5.0 U
		B0DWJ7	495		8.19		110 U	5.0 U
299-E32-4	1/06/95	B0DHV3	411	430	7.12	8.10	110 UQ	5.0 U
		B0DHV4	412		7.12		120 LQ	5.0 U
		B0DHV5	413		7.14		140 L	5.0 U
		B0DHV6	413		7.12		140 L	5.0 U
699-40-36	1/09/95	B0DJK3	316	330	7.40	8.20	200 LQ	5.0 U
		B0DJK4	316		7.32		300 LQ	5.0 U
		B0DJK5	317		7.32		300 LQ	5.0 U
		B0DJK6	315		7.33		200 LQ	5.0 U
699-40-39	1/05/95	B0DHW8	302	310	7.28	8.30	300 LB	5.0 U
		B0DHW9	301		7.31		300 LB	5.0 U
		B0DHX0	300		7.31		300 L	5.0 U
		B0DHX1	301		7.32		200 L	5.0 U
699-40-40A	1/06/95	B0DHX3	316	340	7.87	8.20	120 L	5.0 U
		B0DHX4	316		7.88		200 L	
		B0DHX5	315		7.86		130 L	5.0 U
		B0DHX6	315		7.88		200 LQ	5.0 U
699-40-40B	1/05/95	B0DHY3	292	310	7.47	8.20	500 LB	43.5 F
		B0DHY4	295		7.47		400 LB	42.7 F
		B0DHY5	295		7.47		300 LB	51.7 F
		B0DHY6	296		7.48		200 LB	44.3 F
699-41-35	1/09/95	B0DJK8	315	320	7.60	8.10	200 LQ	6.5
		B0DJK9	315		7.58		200 LQ	8.2
		B0DJL0	314		7.58		200 LQ	5.0 U
		B0DJL1	313		7.58		300 LQ	5.0 U
699-41-40	1/10/95	B0DHZ5	302	360	8.28	8.60	200 L	6.1
		B0DHZ6	304		8.26		300 L	5.5
		B0DHZ7	303		8.25		200 L	5.8
		B0DHZ8	303		8.23		200 L	5.0 U
699-41-42	1/05/95	B0DJ07	234	250	8.26	8.50	400 LB	
		B0DJ08	232		8.26		600 LB	
		B0DJ09	233		8.29		500 LB	
		B0DJ10	234		8.28		400 LB	
699-42-37	1/09/95	B0DJL3	344	360	7.77	8.20	200 LQ	6.0
		B0DJL4	342		7.78		200 LQ	5.0 U
		B0DJL5	344		7.77		300 LQ	5.0 U
		B0DJL6	345		7.78		200 LQ	9.2
699-42-39A	1/09/95	B0DJ19	346	350	7.62	8.10	300 LQ	6.3
		B0DJ20	344		7.61		300 LQ	5.0 U
		B0DJ21	342		7.60		300 LQ	5.8
699-42-39A	1/09/95	B0DJ22	342		7.61		200 LQ	5.0 U
699-42-39B	1/09/95	B0DJ31	350	360	7.88	8.00	400 LBQ	5.0 U
		B0DJ32	349		7.85		500 LBQ	5.3
		B0DJ33	350		7.83		700 LBQ	16.0
		B0DJ34	351		7.84		400 LBQ	9.0
699-42-40A	1/05/95	B0DJ41	155	170	8.20	8.40	900 LB	5.0 U
		B0DJ42	154		8.20		800 LB	5.0 U
		B0DJ43	154		8.19		800 LB	6.7
		B0DJ44	154		8.19		900 LB	5.8
699-42-40C	1/24/95	B0DJ46	323	330	7.98	8.20	200 L	11.0
		B0DJ47					140 L	24.1
		B0DJ48					300 L	5.0 U
		B0DJ49					120 L	12.5

Table 5-5. Contamination Indicator Parameters for the 216-B-3 Pond Data for Reporting Period January 1 through March 31, 1995. (sheet 2 of 3)

Well Name	Collection Date	Sample Number	COND FIELD µmho 1/.	COND LAB µmho 1/.	pH FIELD .01/6.5-8.5s	pH LAB .01/6.5-8.5s	TOC ppb 110/.	TOX ppb 5/.
	2/18/95	B0DW40	334		8.06			
		B0DW41	334		8.06			
		B0DW42	334		8.06			
		B0DW43	333		8.06			
699-42-41	1/05/95	B0DJ51	160	170	6.94	8.30	700 LB	8.4
		B0DJ52	160		6.98		700 LB	5.0 U
		B0DJ53	158		6.98		700 LB	5.0 U
		B0DJ54	159		6.98		700 LB	5.0 U
699-42-42B	1/10/95	B0DJ56	257	260	7.70	8.10	300 L	38.7 F
		B0DJ57	258		7.71		300 L	12.0 F
		B0DJ58	257		7.69		300 L	12.5 F
		B0DJ59	258		7.70		300 L	7.6 F
699-43-40	1/10/95	B0DJ61	291	300	7.95	8.10	600 L	13.8
		B0DJ62	291	300	7.94	8.10	500 L	11.1 Q
		B0DJ63	291		7.95		500 L	14.9 Q
		B0DJ64	291		7.94		400 L	10.6
		B0DJ65					200 L	7.3
		B0DJ66					400 L	16.2
		B0DJ67					400 L	5.5
		B0DJ68					500 L	13.5
699-43-41E	1/09/95	B0DJ71	320	340	8.07	8.60	400 LBQ	8.5
		B0DJ72	318		8.09		500 LBQ	5.0 U
		B0DJ73	317		8.10		400 LBQ	14.6
		B0DJ74	317		8.11		500 LBQ	10.8
699-43-41F	1/06/95	B0DJ76	293	300	8.06	8.10	300 L	5.0 U
		B0DJ77	294		8.04		300 L	5.0 U
		B0DJ78	293		8.03		300 L	5.0 U
		B0DJ79	294		8.02		200 L	5.0 U
699-43-41G	1/17/95	B0DJ81	272	280	8.56	8.60	300 L	6.7
		B0DJ82	270		8.56		300 L	7.0
699-43-41G	1/17/95	B0DJ83	269		8.58		300 L	14.0
		B0DJ84	269		8.58		200 L	7.2
699-43-42J	1/05/95	B0DJ86	240	280	8.03	8.40	600 LB	5.0 U
		B0DJ87	243		8.02		500 LB	5.0 U
		B0DJ88	244		8.01		500 LB	5.0 U
		B0DJ89	242		8.01		500 LB	5.0 U
699-43-43	1/10/95	B0DJ26	169	180	8.26	8.20	500 L	8.2
		B0DJ27	169		8.08		600 L	5.0 U
		B0DJ28	169		8.09		500 L	10.9
		B0DJ29	169		8.11		600 L	5.0 U
699-43-45	1/11/95	B0DJ36	210	210	7.50	8.30	400 L	6.8
		B0DJ37	209		7.57		400 L	9.6
		B0DJ38	209		7.59		400 L	16.0 F
		B0DJ39	208		7.61		400 L	5.6
699-44-39B	1/06/95	B0DJ91	174	190	6.42	8.20	500 L	5.0 U
		B0DJ92	174		6.42		400 L	5.0 U
		B0DJ93	173		6.45		500 L	5.0 U
		B0DJ94	173		6.47		500 L	5.0 U

Table 5-5. Contamination Indicator Parameters for the 216-B-3 Pond Data for Reporting Period January 1 through March 31, 1995. (sheet 3 of 3)

Well Name	Collection Date	Sample Number	COND FIELD µmho 1/.	COND LAB µmho 1/.	pH FIELD .01/6.5-8.5s	pH LAB .01/6.5-8.5s	TOC ppb 110/.	TOX ppb 5/.
699-44-42	1/06/95	B0DJ96	247	260	7.63	8.20	400 L	5.0 U
		B0DJ97	245	260	7.63	8.20	400 L	5.0 U
		B0DJ98	246		7.63		400 L	5.0 U
		B0DJ99	246		7.61		400 L	5.0 U
		B0DJB0					400 L	5.0 U
		B0DJB1					400 LQ	5.0 U
		B0DJB2					300 LQ	5.0 U
		B0DJB3					400 LQ	5.0 U
699-44-43B	1/09/95	B0DJB6	285	290	7.54	8.20	500 LBQ	6.7
		B0DJB7	285		7.51		300 LBQ	5.0 U
		B0DJB8	286		7.52		300 LBQ	5.0 U
		B0DJB9	285		7.51		400 LBQ	5.0 U

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

Table 5-6. Constituents Exceeding Drinking Water Standards for the 216-B-3 Pond System for Reporting Period January 1 through March 31, 1995.

Constituent	DWS (units)	Wells with results exceeding DWS
Iron (filtered samples)	300 (ppb)	299-E32-4[a]
Iron (unfiltered samples)	300 (ppb)	699-43-45[a]
Manganese (filtered samples)	50 (ppb)	699-40-40A, 699-40-40B, 699-42-39B
pH (lab)	6.5-8.5	699-41-40, 699-43-41G
pH (field)	6.5-8.5	699-43-41G

[a]A laboratory qualifier(s) or data flag is associated with this result.

DWS = drinking water standard.

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6.0 216-A-29 DITCH

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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. One inconsistency was noted when a recent measurement was compared to the water levels previously measured. The water level reported for well 299-E25-47 on January 11 fell outside the expected range. Inspection of the field report sheets does not reveal any data transcription or retrieval errors. This data item is flagged in Table 6-2.

6.3 WATER CHEMISTRY DATA

Groundwater beneath the A-29 Ditch is sampled quarterly according to 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 CIPs are reported in Table 6-5. Previously not reported analytical data for the A-29 groundwater monitoring network are included in these tables.

Wells 299-E25-31, 299-E25-43, and 299-E25-48 had turbidity results that are higher than historical trends. Some data obtained from unfiltered samples associated with these high turbidity values may be affected. RADES have been submitted.

Two wells in the A-29 Ditch detection network had individual constituent results that are higher than the historical trends. Well 699-43-43 reported 2,4-Dimethylphenol at the 7.7-ppb level and well 299-E25-26 reported 2-sec-Butyl-4,6-dinitrophenol at the 8.2-ppb level. TOX levels were also higher than the historical trends for wells 299-E25-28, 299-E25-32P, 299-E25-36, 299-E25-43, and 699-43-45. RADES have been submitted for these wells. 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, unfiltered iron, manganese, and tritium (Table 6-6).

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

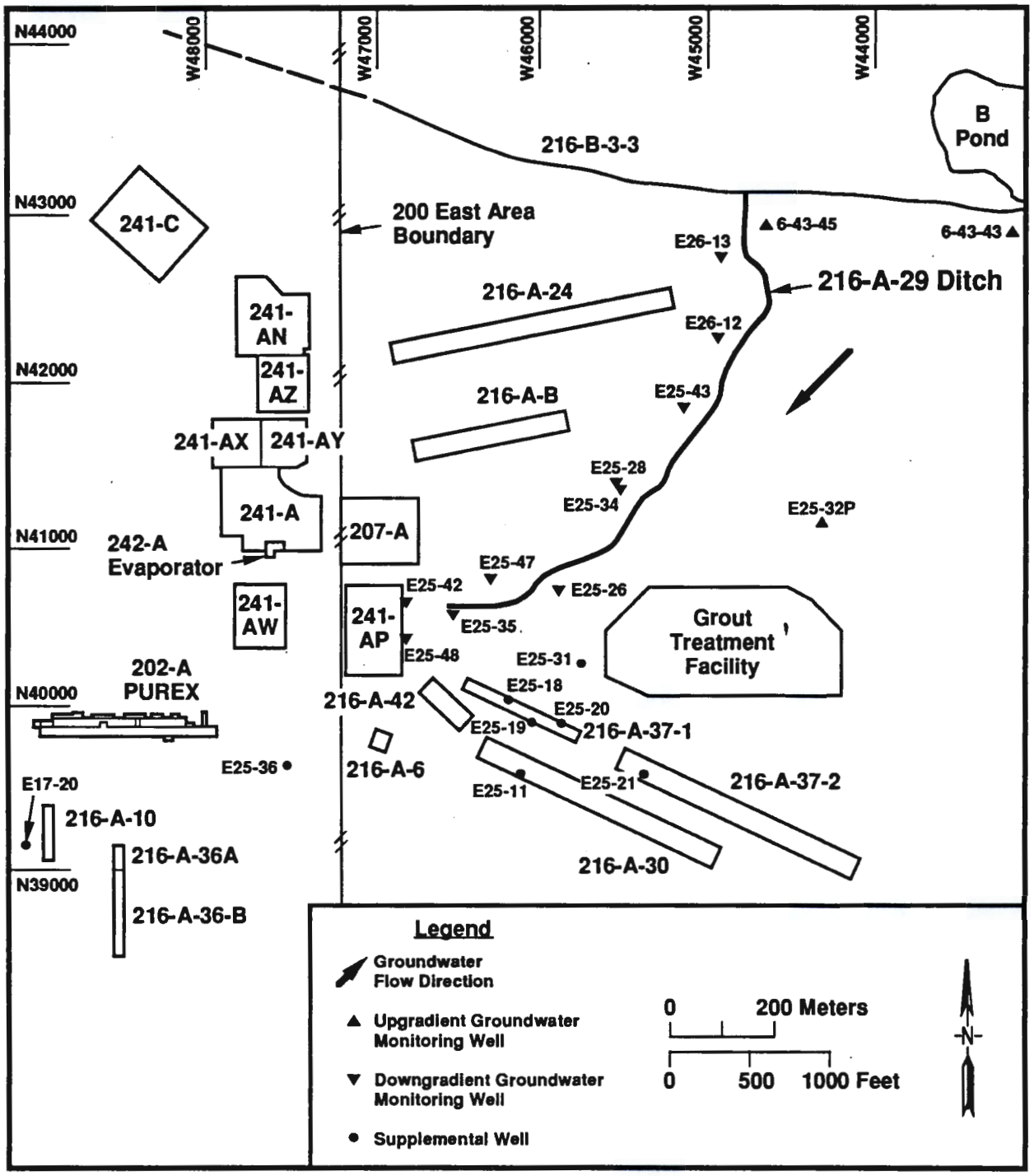

Table 6-1. Monitoring Well Purpose and Sampling Schedule for the 216-A-29 Ditch. (2 sheets)

Well no.	Relative position	Hydrogeologic unit[a]	Sample frequency	Sample date, 1st Qtr 1995
699-43-43[b]	Upgradient	Hanford: Water Table	Quarterly	1/10/95
699-43-45[b]	Upgradient	Hanford: Water Table	Quarterly	1/11/95
299-E25-32P	Downgradient	Hanford: Water Table	Quarterly	1/11/95
299-E25-26	Downgradient	Hanford: Mid-Depth	Quarterly	1/12/95
299-E25-28	Downgradient	Ringold: Deep	Quarterly	1/13/95
299-E25-34	Downgradient	Hanford: Water Table	Quarterly	1/13/95
299-E25-35	Downgradient	Hanford: Water Table	Quarterly	1/13/95
299-E25-42	Downgradient	Hanford: Water Table	Quarterly	1/18/95
299-E25-43	Downgradient	Hanford: Water Table	Quarterly	1/11/95
299-E25-47	Downgradient	Hanford: Water Table	Quarterly	1/11/95
299-E25-48	Downgradient	Hanford: Water Table	Quarterly	1/11/95
299-E26-12	Downgradient	Hanford: Water Table	Quarterly	1/18/95
299-E26-13	Downgradient	Hanford: Water Table	Quarterly	1/17/95
299-E17-20[d,e]	Downgradient	Ringold: Water Table	Quarterly	1/11/95
299-E25-11[e]	Downgradient	Undetermined: Mid-Depth	Quarterly	1/17/95
299-E25-18[e]	Downgradient	Undetermined: Mid-Depth	Quarterly	1/12/95
299-E25-19[e]	Downgradient	Undetermined: Mid-Depth	Quarterly	1/12/95
299-E25-20[e]	Downgradient	Undetermined: Mid-Depth	Quarterly	1/11/95

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, 1st Qtr 1995
299-E25-21[e]	Downgradient	Hanford: Water Table	Quarterly	1/12/95
299-E25-31[e]	Downgradient	Hanford: Water Table	Quarterly	1/11/95
299-E25-36[c,d,e]	Downgradient	Ringold: Water Table	Quarterly	1/10/95

[a]Hydrogeologic units include the sandy gravels of the Hanford formation and the silty sands of the Ringold Formation.
[b]Wells shared with the 216-B-3 Pond monitoring network.
[c]Wells shared with the 216-A-36B monitoring network.
[d]Wells shared with the 216-A-10 monitoring network.
[e]Wells used for supplemental groundwater quality.

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

Well	Date	Depth to water (ft)	Water level elevation above msl (ft)	(m)
Wells in the Monitoring System				
299-E25-26	1/12/95	266.76	401.76*	122.46
	1/20/95	266.57	401.95	122.51
	2/16/95	267.12	401.40	122.35
	3/10/95	267.14	401.38	122.34
299-E25-28	1/13/95	260.81	401.63*	122.42
	1/20/95	260.63	401.81	122.47
	2/16/95	260.65	401.79	122.47
	3/10/95	260.71	401.73	122.45
299-E25-32P	1/11/95	267.86	401.33*	122.33
	1/20/95	268.33	400.86	122.18
	2/16/95	268.40	400.79	122.16
	3/10/95	268.49	400.70	122.13
299-E25-34	1/13/95	260.92	401.95*	122.51
	1/20/95	261.15	401.72	122.44
	2/16/95	261.98	400.89	122.19
	3/10/95	262.73	400.14	121.96
299-E25-35	1/13/95	272.64	401.75*	122.45
	1/20/95	272.79	401.60	122.41
	2/16/95	272.82	401.57	122.40
	3/10/95	272.83	401.56	122.40
299-E25-42	1/18/95	281.77	401.52*	122.38
	1/20/95	281.61	401.68	122.43
	2/16/95	281.72	401.57	122.40
	3/10/95	281.70	401.59	122.40
299-E25-43	1/11/95	247.91	401.98*	122.52
	1/20/95	248.01	401.88	122.49
299-E25-47	1/11/95	273.43	400.34*+	122.02
	1/20/95	271.56	402.21	122.59
	2/16/95	271.98	401.79	122.47
	3/10/95	271.99	401.78	122.46

Table 6-2. RCRA Water Level Measurement Report, 216-A-29 Ditch, First 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	1/11/95	280.70	401.61*	122.41
	1/20/95	280.46	401.85	122.48
	2/16/95	280.60	401.71	122.44
299-E26-12	1/18/95	228.66	402.08*	122.55
	1/20/95	228.71	402.03	122.54
	2/16/95	228.85	401.89	122.50
	3/10/95	228.80	401.94	122.51
299-E26-13	1/20/95	203.09	401.93	122.51
	2/16/95	203.21	401.81	122.47
	3/10/95	203.18	401.84	122.48
699-43-43	1/10/95	164.85	414.52*	126.35
	3/09/95	165.20	414.17	126.24
699-43-45	1/11/95	195.50	402.18*	122.58
	3/09/95	195.42	402.26	122.61
	Supplemental Wells for Monitoring			
299-E17-20	3/15/95	318.89	400.34	122.02
299-E25-11	1/17/95	279.85	401.43*	122.36
	3/15/95	280.13	401.15	122.27
299-E25-18	1/12/95	277.82	401.23*	122.29
	3/15/95	277.71	401.34	122.33
299-E25-19	1/12/95	276.06	401.14*	122.27
	3/15/95	276.03	401.17	122.28
299-E25-20	1/11/95	275.20	401.10*	122.26
	3/15/95	275.15	401.15	122.27
299-E25-21	1/12/95	275.86	401.41*	122.35
	3/15/95	275.75	401.52	122.38

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

Well	Date	Depth to water (ft)	Water level elevation above msl (ft)	(m)
	Supplemental Wells for Monitoring			
299-E25-31	1/11/95	272.65	399.88*	121.88
	3/15/95	273.02	401.62	122.41
299-E25-36	1/10/95	306.43	400.96*	122.21
	3/15/95	306.33	401.06	122.24
299-E25-6	3/15/95	259.65	398.66	121.51
299-E25-9	3/15/95	255.72	399.14	121.66
299-E26-2	1/17/95	233.49	401.81*	122.47
	3/15/95	234.00	401.30	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. Elevations marked with an '*' were measured at the time of sampling.
4. Elevations 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 January 1 through March 31, 1995. (sheet 1 of 2)

CONTAMINATION INDICATOR PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
CONDUCT	94	Conductivity, field	µmhos	1			63	63	
CONDUCT	73	Conductivity, lab	µmhos				22	22	
TOC		Total Organic Carbon	ppb	110			60	60	
TOX		Total Organic Halogen	ppb	5			60	49	
PH	93	pH, field	pH	.01	6.5-8.5	EPAS	63	63	0
PH	125	pH, lab	pH		6.5-8.5	EPAS	15	15	0

DRINKING WATER PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
FARSENIC		Arsenic, filtered	ppb	2.8	50	EPA	15	14	0
BARIUM		Barium	ppb	.59	1000	EPAI	26	26	0
FBARIUM		Barium, filtered	ppb	.59	1000	EPAI	26	26	0
CADMIUM		Cadmium	ppb	3.3	10	EPAI	26	0	0
FCADMIU		Cadmium, filtered	ppb	3.3	10	EPAI	26	0	0
CHROMUM		Chromium	ppb	4.5	50	EPAI	26	20	15
FCHROMI		Chromium, filtered	ppb	4.5	50	EPAI	26	7	0
FLUORID		Fluoride	ppb	36	1400	EPAI	23	23	0
ALPHA		Gross alpha	pCi/L		15	EPA	15	7	0
NITRATE		Nitrate	ppb	11	45000	EPA	23	23	3

GROUNDWATER QUALITY PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
CHLORID		Chloride	ppb	14	250000	EPAS	23	23	0
IRON		Iron	ppb	5.24	300	EPAS	26	26	20
FIRON		Iron, filtered	ppb	5.24	300	EPAS	26	26	0
MANGESE		Manganese	ppb	.72	50	EPAS	26	26	2
FMANGAN		Manganese, filtered	ppb	.72	50	EPAS	26	23	0
LPHENOL	19	Phenol	ppb	.54			2	0	
LPHENOL	30	Phenol	ppb	.31			15	0	
SODIUM		Sodium	ppb	61			26	26	
FSODIUM		Sodium, filtered	ppb	61			26	26	
SULFATE		Sulfate	ppb	37	250000	EPAS	23	23	0

SITE-SPECIFIC AND OTHER CONSTITUENTS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
246-trp		2,4,6-Trichlorophenol	ppb	1.3			15	0	
24-dchp	19	2,4-Dichlorophenol	ppb	4			2	0	
24-dchp	30	2,4-Dichlorophenol	ppb	1.3			15	0	
DIMPHEN		2,4-Dimethylphenol	ppb	1.2			15	1	
DINPHEN		2,4-Dinitrophenol	ppb	3			15	0	
26-dchp		2,6-Dichlorophenol	ppb	1.4			15	0	
CHLPHEN		2-Chlorophenol	ppb	1.6			15	0	
2METHPH		2-Methylphenol	ppb	5.1			2	0	
2NITPH	19	2-Nitrophenol	ppb	1.9			2	0	

Table 6-3. Constituent List and Summary of Results for the 216-A-29 Ditch Data for Reporting Period January 1 through March 31, 1995. (sheet 2 of 2)

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
2NITPH	30	2-Nitrophenol	ppb	1.3			15	0	
BUTDINP		2-sec-Butyl-4,6-dinitrophenol(DN)	ppb	1.3			15	1	
46DN2MP		4,6-Dinitro-2-methylphenol	ppb	1.3			15	0	
CHLCRES		4-Chloro-3-methylphenol	ppb	1.3			15	0	
4METHPH		4-Methylphenol	ppb	7			2	0	
NITPHEN		4-Nitrophenol	ppb	3			15	0	
ALKALIN		Alkalinity	ppm	2.8			22	22	
ALUMNUM		Aluminum	ppb	26			26	16	
FALUMIN		Aluminum, filtered	ppb	26			26	3	
ANTIONY		Antimony	ppb	62			26	0	
FANTIMO		Antimony, filtered	ppb	62			26	0	
BENZOTH		Benzothiazole	ppb	1.3			2	0	
BERYLUM		Beryllium	ppb	.17			26	9	
FBERYLL		Beryllium, filtered	ppb	.17			26	10	
BIS2EPH		Bis(2-ethylhexyl) phthalate	ppb	5.3			2	0	
BROMIDE		Bromide	ppb	11			23	3	
CALCIUM		Calcium	ppb	34			26	26	
FCALCIU		Calcium, filtered	ppb	34			26	26	
COBALT		Cobalt	ppb	5.9			26	3	
FCOBALT		Cobalt, filtered	ppb	5.9			26	1	
COPPER		Copper	ppb	4.1	1000	EPAS	26	15	0
FCOPPER		Copper, filtered	ppb	4.1	1000	EPAS	26	2	0
CRESOLS		Cresols (methylphenols)	ppb	4.8			15	0	
DECANE		Decane	ppb	1.9			2	0	
DODECAN		Dodecane	ppb	1.1			2	0	
BETA		Gross beta	pCi/L				15	15	
MAGNES		Magnesium	ppb	23			26	26	
FMAGNES		Magnesium, filtered	ppb	23			26	26	
NAPHTHA		Naphthalene	ppb	1.2			2	0	
NICKEL		Nickel	ppb	13			26	19	
FNICKEL		Nickel, filtered	ppb	13			26	3	
NITRITE		Nitrite	ppb	18	1000	EPA	23	0	0
PENTCHP	19	Pentachlorophenol	ppb	8.3	1	EPA	2	0	2*
PENTCHP	30	Pentachlorophenol	ppb	1.3	1	EPA	15	0	15*
PHOSPHA		Phosphate	ppb	82			23	0	
POTASUM		Potassium	ppb	850			26	26	
FPOTASS		Potassium, filtered	ppb	850			26	26	
SILVER		Silver	ppb	3.6	50	EPAI	26	2	0
FSILVER		Silver, filtered	ppb	3.6	50	EPAI	26	2	0
TETPHNL		Tetrachlorophenols	ppb	1.5			15	0	
TETRADE		Tetradecane	ppb	1.6			2	0	
TIN		Tin	ppb	69			26	0	
FTIN		Tin, filtered	ppb	69			26	0	
TDS		Total Dissolved Solids	ppm	10	500	EPAS	22	22	0
TRIBUTPH		Tributyl Phosphate	ppb	1.1			2	0	
TRIPHNL		Trichlorophenols	ppb	1.7			15	0	
TDICHPH		Tris-2-chloroethyl phosphate	ppb	.61			2	0	
TRITIUM		Tritium	pCi/L		20000	EPA	15	15	2
TURBID		Turbidity	NTU	.016			22	22	
VANADUM		Vanadium	ppb	6.6			26	26	
FVANADI		Vanadium, filtered	ppb	6.6			26	26	
ZINC		Zinc	ppb	6.3	5000	EPAS	26	16	0
FZINC		Zinc, filtered	ppb	6.3	5000	EPAS	26	2	0
MCRESOL		m-Cresol	ppb	2.2			2	0	

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

Table 6-4. Constituents with at Least One Detected Value for the 216-A-29 Ditch Data for Reporting Period January 1 through March 31, 1995. (sheet 1 of 12)

Well Name	Collection Date	Sample Number	DIMPHEN 30/ppb 1.2/.	BUTDINP 30/ppb 1.3/.	ALKALIN 357/ppm 2.8/.	ALUMNUM 34/ppb 26/.
299-E17-20	1/11/95	B0DHP4			90.00 H	26.00 U
299-E25-11	1/17/95	B0DHP6			80.00	26.00 U
299-E25-18	1/12/95	B0DHP8			80.00	31.00 L
299-E25-19	1/12/95	B0DHQ0			90.00	34.00 L
299-E25-20	1/11/95	B0DHQ2			90.00	26.00 U
299-E25-21	1/12/95	B0DHQ9			80.00	26.00 U
299-E25-26	1/12/95	B0DHQ4	1.20 U	8.20 F	70.00	26.00 U
299-E25-28	1/13/95	B0DHR3	1.20 U	1.30 U	70.00	26.00 U
299-E25-31	1/11/95	B0DHR1			90.00	480.00
299-E25-32P	10/11/94	B0D2M0				26.00 UQ
299-E25-32P	1/11/95	B0DHR8	1.20 U	1.30 U	70.00	29.00 L
299-E25-34	1/13/95	B0DHS3	1.20 U	1.30 U	70.00	26.00 U
299-E25-35	1/13/95	B0DHS8	1.20 U	1.30 U	100.00	26.00 U
299-E25-36	1/10/95	B0DHT3	1.20 U	1.30 U	90.00	29.00 L
299-E25-42	10/11/94	B0D2N5				490.00 Q
299-E25-42	1/18/95	B0DHT8	1.20 U	1.30 U	110.00	180.00 BL
299-E25-43	10/11/94	B0D2P0				56.00 LQ
299-E25-43	1/11/95	B0DHV8	1.20 U	1.30 U	70.00	250.00 Q
299-E25-43	1/11/95	B0DHV9	1.20 U	1.30 U	80.00	120.00 LQ
299-E25-47	1/11/95	B0DHX8	1.20 U	1.30 U	100.00	130.00 L
299-E25-48	1/11/95	B0DHY9	1.20 U	1.30 U	80.00	600.00
299-E26-12	10/11/94	B0D2Q5				26.00 UQ
299-E26-12	1/18/95	B0DJ02	1.20 U	1.30 U	80.00	29.00 BL
299-E26-13	1/17/95	B0DJ14	1.20 U	1.30 U	90.00	35.00 BL
699-43-43	1/10/95	B0DJ26	7.70 F	1.30 U	70.00	30.00 L
699-43-45	1/11/95	B0DJ36	1.20 U	1.30 U	90.00	110.00 L

Well Name	Collection Date	Sample Number	FALUMIN 34/ppb 26/.	FARSENIC 43/ppb 2.8/50	BARIUM 34/ppb .59/1000	FBARIUM 34/ppb .59/1000
299-E17-20	1/11/95	B0DHP4			64.00	
299-E17-20	1/11/95	B0DHP5	26.00 U			60.00
299-E25-11	1/17/95	B0DHP6			16.00 L	
299-E25-11	1/17/95	B0DHP7	30.00 BL			16.00 L
299-E25-18	1/12/95	B0DHP8			11.00 L	
299-E25-18	1/12/95	B0DHP9	26.00 U			11.00 L
299-E25-19	1/12/95	B0DHQ0			34.00 B	
299-E25-19	1/12/95	B0DHQ1	26.00 U			34.00 B
299-E25-20	1/11/95	B0DHQ2			23.00	
299-E25-20	1/11/95	B0DHQ3	26.00 U			21.00
299-E25-21	1/12/95	B0DHQ9			11.00 L	
299-E25-21	1/12/95	B0DHR0	26.00 U			11.00 L
299-E25-26	1/12/95	B0DHQ4			11.00 L	
299-E25-26	1/12/95	B0DHQ8	26.00 U	5.30		11.00 L
299-E25-28	1/13/95	B0DHR3			13.00 L	
299-E25-28	1/13/95	B0DHR7	26.00 U	7.90		11.00 L
299-E25-31	1/11/95	B0DHR1			30.00	
299-E25-31	1/11/95	B0DHR2	26.00 U			20.00
299-E25-32P	10/11/94	B0D2M0			11.00 LQ	
299-E25-32P	10/11/94	B0D2M4	26.00 UQ			11.00 LQ
299-E25-32P	1/11/95	B0DHR8			9.80 L	
299-E25-32P	1/11/95	B0DHS2	26.00 U	2.80 U		10.00 L
299-E25-34	1/13/95	B0DHS3			15.00 L	
299-E25-34	1/13/95	B0DHS7	26.00 U	6.00		14.00 L
299-E25-35	1/13/95	B0DHS8			28.00	
299-E25-35	1/13/95	B0DHT2	26.00 U	11.00		29.00

Table 6-4. Constituents with at Least One Detected Value for the 216-A-29 Ditch Data for Reporting Period January 1 through March 31, 1995. (sheet 2 of 12)

Well Name	Collection Date	Sample Number	FALUMIN 34/ppb 26/.	FARSENIC 43/ppb 2.8/50	BARIUM 34/ppb .59/1000	FBARIUM 34/ppb .59/1000
299-E25-36	1/10/95	B0DHT3			20.00	
299-E25-36	1/10/95	B0DHT7	26.00 U	7.60		21.00
299-E25-42	10/11/94	B0D2N5			29.00 Q	
299-E25-42	10/11/94	B0D2N9	26.00 UQ			24.00 Q
299-E25-42	1/18/95	B0DHT8			27.00	
299-E25-42	1/18/95	B0DHV2	36.00 BL	6.10		26.00
299-E25-43	10/11/94	B0D2P0			16.00 LQ	
299-E25-43	10/11/94	B0D2P4	26.00 UQ			16.00 LQ
299-E25-43	1/11/95	B0DHV8			18.00 L	
299-E25-43	1/11/95	B0DHV9			16.00 L	
299-E25-43	1/11/95	B0DHW6	26.00 U	8.10		14.00 L
299-E25-43	1/11/95	B0DHW7	26.00 U	9.60		14.00 L
299-E25-47	1/11/95	B0DHX8			22.00	
299-E25-47	1/11/95	B0DHY2	26.00 U	12.00		20.00
299-E25-48	1/11/95	B0DHY9			31.00	
299-E25-48	1/11/95	B0DHZ4	26.00 U	6.00		20.00
299-E26-12	10/11/94	B0D2Q5			11.00 LQ	
299-E26-12	10/11/94	B0D2Q9	26.00 UQ			11.00 LQ
299-E26-12	1/18/95	B0DJ02			11.00 L	
299-E26-12	1/18/95	B0DJ06	26.00 U	6.80		11.00 L
299-E26-13	1/17/95	B0DJ14			11.00 L	
299-E26-13	1/17/95	B0DJ18	26.00 U	8.20		11.00 L
699-43-43	1/10/95	B0DJ26			9.30 L	
699-43-43	1/10/95	B0DJ30	26.00 L	4.80 L		9.50 L
699-43-45	1/11/95	B0DJ36			29.00	
699-43-45	1/11/95	B0DJ40	26.00 U	10.00		27.00

Well Name	Collection Date	Sample Number	BERYLUM 34/ppb .17/.	FBERYLL 34/ppb .17/.	BROMIDE 124/ppb 11/.	CALCIUM 34/ppb 34/.
299-E17-20	1/11/95	B0DHP4	.17 U		11.00 UD	54000.00
299-E17-20	1/11/95	B0DHP5		.17 U		
299-E25-11	1/17/95	B0DHP6	.85 L		11.00 U	22000.00
299-E25-11	1/17/95	B0DHP7		.58 L		
299-E25-18	1/12/95	B0DHP8	.66 BL		11.00 U	25000.00
299-E25-18	1/12/95	B0DHP9		.70 BL		
299-E25-19	1/12/95	B0DHQ0	.17 U		11.00 U	29000.00
299-E25-19	1/12/95	B0DHQ1		.17 U		
299-E25-20	1/11/95	B0DHQ2	.17 U		11.00 U	28000.00
299-E25-20	1/11/95	B0DHQ3		.17 U		
299-E25-21	1/12/95	B0DHQ9	.68 BL		11.00 U	21000.00
299-E25-21	1/12/95	B0DHR0		.54 BL		
299-E25-26	1/12/95	B0DHQ4	.17 U		11.00 U	20000.00
299-E25-26	1/12/95	B0DHQ8		.66 BL		
299-E25-28	1/13/95	B0DHR3	.63 BL		11.00 U	20000.00
299-E25-28	1/13/95	B0DHR7		.59 BL		
299-E25-31	1/11/95	B0DHR1	.17 U		11.00 U	22000.00
299-E25-31	1/11/95	B0DHR2		.17 U		
299-E25-32P	10/11/94	B0D2M0	.17 U			20000.00 Q
299-E25-32P	10/11/94	B0D2M4		.17 U		
299-E25-32P	1/11/95	B0DHR8	.17 U		11.00 U	20000.00
299-E25-32P	1/11/95	B0DHS2		.17 U		
299-E25-34	1/13/95	B0DHS3	.60 BL		11.00 U	20000.00
299-E25-34	1/13/95	B0DHS7		.60 BL		
299-E25-35	1/13/95	B0DHS8	.70 BL		11.00 U	33000.00
299-E25-35	1/13/95	B0DHT2		.69 BL		

Table 6-4. Constituents with at Least One Detected Value for the 216-A-29 Ditch Data for Reporting Period January 1 through March 31, 1995. (sheet 3 of 12)

Well Name	Collection Date	Sample Number	BERYLUM 34/ppb .17/.	FBERYLL 34/ppb .17/.	BROMIDE 124/ppb 11/.	CALCIUM 34/ppb 34/.
299-E25-36	10/13/94	BOD254			19.00 L	
299-E25-36	1/10/95	BODHT3	.17 U		20.00 L	28000.00
299-E25-36	1/10/95	BODHT7		.17 U		
299-E25-42	10/11/94	BOD2N5	.17 U			28000.00 Q
299-E25-42	10/11/94	BOD2N9		.17 U		
299-E25-42	1/18/95	BODHT8	.71 L		13.00 L	33000.00
299-E25-42	1/18/95	BODHV2		.68 L		
299-E25-43	10/11/94	BOD2P0	.17 U			21000.00 Q
299-E25-43	10/11/94	BOD2P4		.17 U		
299-E25-43	1/11/95	BODHV8	.17 U		11.00 U	20000.00
299-E25-43	1/11/95	BODHV9	.17 U		11.00 U	20000.00
299-E25-43	1/11/95	BODHW6		.17 U		
299-E25-43	1/11/95	BODHW7		.17 U		
299-E25-47	1/11/95	BODHX8	.17 U		11.00 U	25000.00
299-E25-47	1/11/95	BODHY2		.17 U		
299-E25-48	1/11/95	BODHY9	.17 U		11.00 U	23000.00
299-E25-48	1/11/95	BODHZ4		.17 U		
299-E26-12	10/11/94	BOD2Q5	.17 U			22000.00 Q
299-E26-12	10/11/94	BOD2Q9		.17 U		
299-E26-12	1/18/95	BODJ02	.62 L		11.00 U	21000.00
299-E26-12	1/18/95	BODJ06		.36 L		
299-E26-13	1/17/95	BODJ14	.68 L		11.00 U	24000.00
299-E26-13	1/17/95	BODJ18		.69 L		
699-43-43	1/10/95	BODJ26	.17 U		11.00 U	21000.00
699-43-43	1/10/95	BODJ30		.17 U		
699-43-45	1/11/95	BODJ36	.17 U		11.00 U	25000.00
699-43-45	1/11/95	BODJ40		.17 U		

Well Name	Collection Date	Sample Number	FCALCIU 34/ppb 34/.	CHLORID 124/ppb 14/250000	CHROMUM 34/ppb 4.5/50	FCHROMI 34/ppb 4.5/50
299-E17-20	1/11/95	BODHP4		4400.00 Q	340.00	
299-E17-20	1/11/95	BODHP5	51000.00			4.50 U
299-E25-11	1/17/95	BODHP6		2400.00 B	37.00	
299-E25-11	1/17/95	BODHP7	21000.00			4.50 U
299-E25-18	1/12/95	BODHP8		2700.00	4.50 U	
299-E25-18	1/12/95	BODHP9	25000.00			4.50 U
299-E25-19	1/12/95	BODHQ0		2700.00	4.50 U	
299-E25-19	1/12/95	BODHQ1	29000.00			4.50 U
299-E25-20	1/11/95	BODHQ2		3300.00 Q	4.50 U	
299-E25-20	1/11/95	BODHQ3	28000.00			4.50 U
299-E25-21	1/12/95	BODHQ9		2600.00	4.50 U	
299-E25-21	1/12/95	BODHR0	21000.00			4.50 U
299-E25-26	1/12/95	BODHQ4		1600.00	4.50 U	
299-E25-26	1/12/95	BODHQ8	20000.00			4.50 U
299-E25-28	1/13/95	BODHR3		1700.00	4.50 U	
299-E25-28	1/13/95	BODHR7	19000.00			4.50 U
299-E25-31	1/11/95	BODHR1		2000.00 Q	120.00	
299-E25-31	1/11/95	BODHR2	22000.00			4.50 U
299-E25-32P	10/11/94	BOD2M0			170.00 Q	
299-E25-32P	10/11/94	BOD2M4	20000.00 Q			6.80 LQ
299-E25-32P	1/11/95	BODHR8		1200.00 Q	220.00	
299-E25-32P	1/11/95	BODHS2	19000.00			4.50 U
299-E25-34	1/13/95	BODHS3		1600.00	84.00	
299-E25-34	1/13/95	BODHS7	20000.00			7.70 L

Table 6-4. Constituents with at Least One Detected Value for the 216-A-29 Ditch Data for Reporting Period January 1 through March 31, 1995. (sheet 4 of 12)

Well Name	Collection Date	Sample Number	FCALCIU 34/ppb 34/.	CHLORID 124/ppb 14/250000	CHROMUM 34/ppb 4.5/50	FCHROMI 34/ppb 4.5/50
299-E25-35	1/13/95	BODHS8		4200.00	81.00	
299-E25-35	1/13/95	BODHT2	33000.00			15.00 L
299-E25-36	10/13/94	BOD254		4600.00		
299-E25-36	1/10/95	BODHT3		4300.00 Q	110.00	
299-E25-36	1/10/95	BODHT7	29000.00			4.50 U
299-E25-42	10/11/94	BOD2N5			370.00 Q	
299-E25-42	10/11/94	BOD2N9	28000.00 Q			6.10 LQ
299-E25-42	1/18/95	BODHT8		4300.00	160.00	
299-E25-42	1/18/95	BODHV2	33000.00			31.00
299-E25-43	10/11/94	BOD2P0			170.00 Q	
299-E25-43	10/11/94	BOD2P4	21000.00 Q			4.50 UQ
299-E25-43	1/11/95	BODHV8		1500.00 Q	100.00 Q	
299-E25-43	1/11/95	BODHV9		1500.00 Q	28.00 Q	
299-E25-43	1/11/95	BODHW6	20000.00			4.50 U
299-E25-43	1/11/95	BODHW7	20000.00			4.50 U
299-E25-47	1/11/95	BODHX8		2700.00 Q	49.00	
299-E25-47	1/11/95	BODHY2	24000.00			4.50 U
299-E25-48	1/11/95	BODHY9		3100.00 Q	58.00	
299-E25-48	1/11/95	BODHZ4	23000.00			23.00
299-E26-12	10/11/94	BOD2Q5			110.00 Q	
299-E26-12	10/11/94	BOD2Q9	22000.00 Q			5.10 LQ
299-E26-12	1/18/95	BODJ02		1400.00	150.00	
299-E26-12	1/18/95	BODJ06	21000.00			4.50 U
299-E26-13	1/17/95	BODJ14		1700.00 B	230.00	
299-E26-13	1/17/95	BODJ18	24000.00			4.50 U
699-43-43	1/10/95	BODJ26		1200.00 Q	31.00	
699-43-43	1/10/95	BODJ30	21000.00			4.50 U
699-43-45	1/11/95	BODJ36		1900.00 Q	49.00	
699-43-45	1/11/95	BODJ40	24000.00			4.50 U

Well Name	Collection Date	Sample Number	COBALT 34/ppb 5.9/.	FCOBALT 34/ppb 5.9/.	COPPER 34/ppb 4.1/1000	FCOPPER 34/ppb 4.1/1000
299-E17-20	1/11/95	BODHP4	5.90 U		15.00 BL	
299-E17-20	1/11/95	BODHP5		5.90 U		4.10 U
299-E25-11	1/17/95	BODHP6	5.90 U		4.10 U	
299-E25-11	1/17/95	BODHP7		5.90 U		4.10 U
299-E25-18	1/12/95	BODHP8	5.90 U		4.10 U	
299-E25-18	1/12/95	BODHP9		5.90 U		4.10 U
299-E25-19	1/12/95	BODHQ0	5.90 U		4.10 U	
299-E25-19	1/12/95	BODHQ1		5.90 U		4.10 U
299-E25-20	1/11/95	BODHQ2	5.90 U		4.10 U	
299-E25-20	1/11/95	BODHQ3		5.90 U		4.10 U
299-E25-21	1/12/95	BODHQ9	5.90 U		4.10 U	
299-E25-21	1/12/95	BODHR0		5.90 U		4.10 U
299-E25-26	1/12/95	BODHQ4	5.90 U		4.10 U	
299-E25-26	1/12/95	BODHQ8		5.90 U		4.10 U
299-E25-28	1/13/95	BODHR3	5.90 U		4.10 U	
299-E25-28	1/13/95	BODHR7		5.90 U		4.10 U
299-E25-31	1/11/95	BODHR1	5.90 U		11.00 L	
299-E25-31	1/11/95	BODHR2		5.90 U		4.10 U
299-E25-32P	10/11/94	BOD2M0	6.00 L		4.10 U	
299-E25-32P	10/11/94	BOD2M4		5.90 U		4.10 U
299-E25-32P	1/11/95	BODHR8	5.90 U		4.10 U	
299-E25-32P	1/11/95	BODHS2		5.90 U		4.10 U

Table 6-4. Constituents with at Least One Detected Value for the 216-A-29 Ditch Data for Reporting Period January 1 through March 31, 1995. (sheet 5 of 12)

Well Name	Collection Date	Sample Number	COBALT 34/ppb 5.9/.	FCOBALT 34/ppb 5.9/.	COPPER 34/ppb 4.1/1000	FCOPPER 34/ppb 4.1/1000
299-E25-34	1/13/95	B0DHS3	5.90 U		4.40 L	
299-E25-34	1/13/95	B0DHS7		5.90 U		4.10 U
299-E25-35	1/13/95	B0DHS8	5.90 U		4.40 L	
299-E25-35	1/13/95	B0DHT2		5.90 U		4.10 U
299-E25-36	1/10/95	B0DHT3	5.90 U		6.50 L	
299-E25-36	1/10/95	B0DHT7		5.90 U		4.10 U
299-E25-42	10/11/94	B0D2N5	7.60 L		14.00 L	
299-E25-42	10/11/94	B0D2N9		7.80 L		4.10 U
299-E25-42	1/18/95	B0DHT8	5.90 U		6.80 L	
299-E25-42	1/18/95	B0DHV2		5.90 U		5.20 L
299-E25-43	10/11/94	B0D2P0	6.60 L		8.10 L	
299-E25-43	10/11/94	B0D2P4		5.90 U		4.10 U
299-E25-43	1/11/95	B0DHV8	5.90 U		4.90 L	
299-E25-43	1/11/95	B0DHV9	5.90 U		4.50 L	
299-E25-43	1/11/95	B0DHW6		5.90 U		4.10 U
299-E25-43	1/11/95	B0DHW7		5.90 U		4.10 U
299-E25-47	1/11/95	B0DHX8	5.90 U		4.10 U	
299-E25-47	1/11/95	B0DHY2		5.90 U		4.10 U
299-E25-48	1/11/95	B0DHY9	5.90 U		9.40 L	
299-E25-48	1/11/95	B0DHZ4		5.90 U		4.10 U
299-E26-12	10/11/94	B0D2Q5	5.90 U		5.50 L	
299-E26-12	10/11/94	B0D2Q9		5.90 U		4.50 L
299-E26-12	1/18/95	B0DJ02	5.90 U		4.80 L	
299-E26-12	1/18/95	B0DJ06		5.90 U		4.10 U
299-E26-13	1/17/95	B0DJ14	5.90 U		8.00 L	
299-E26-13	1/17/95	B0DJ18		5.90 U		4.10 U
699-43-43	1/10/95	B0DJ26	5.90 U		4.10 U	
699-43-43	1/10/95	B0DJ30		5.90 U		4.10 U
699-43-45	1/11/95	B0DJ36	5.90 U		4.50 L	
699-43-45	1/11/95	B0DJ40		5.90 U		4.10 U

Well Name	Collection Date	Sample Number	FLUORID 124/ppb 36/1400	ALPHA 135/pCi/L ./15	BETA 136/pCi/L ./.	IRON 34/ppb 5.24/300
299-E17-20	1/11/95	B0DHP4	700.00			1700.00 BQ
299-E25-11	1/17/95	B0DHP6	400.00			410.00 B
299-E25-18	1/12/95	B0DHP8	500.00			780.00 B
299-E25-19	1/12/95	B0DHQ0	600.00			110.00 B
299-E25-20	1/11/95	B0DHQ2	700.00			240.00 Q
299-E25-21	1/12/95	B0DHQ9	400.00			180.00 B
299-E25-26	1/12/95	B0DHQ4	300.00	.93	6.69	140.00 B
299-E25-28	1/13/95	B0DHR3	300.00	.70 U	2.26	100.00 B
299-E25-31	1/11/95	B0DHR1	400.00			6200.00 Q
299-E25-32P	10/11/94	B0D2M0				710.00 BQ
299-E25-32P	1/11/95	B0DHR8	200.00	1.16	4.10	890.00 Q
299-E25-34	1/13/95	B0DHS3	300.00	.44 U	4.38	390.00 B
299-E25-35	1/13/95	B0DHS8	800.00	1.02 U	7.59	410.00 B
299-E25-36	10/13/94	B0D254	600.00			
299-E25-36	1/10/95	B0DHT3	400.00	1.55	6.06	510.00 BQ
299-E25-42	10/11/94	B0D2N5				2500.00 BQ
299-E25-42	1/18/95	B0DHT8	1000.00	2.03	6.41	880.00 B
299-E25-43	10/11/94	B0D2P0				770.00 BQ
299-E25-43	1/11/95	B0DHV8	300.00	.69 U	6.01 Q	2700.00 Q
299-E25-43	1/11/95	B0DHV9	300.00	.72 U	3.84 Q	1900.00 Q
299-E25-47	1/11/95	B0DHX8	500.00	.92 U	7.16	420.00 Q

Table 6-4. Constituents with at Least One Detected Value for the 216-A-29 Ditch Data for Reporting Period January 1 through March 31, 1995. (sheet 6 of 12)

Well Name	Collection Date	Sample Number	FLUORID 124/ppb 36/1400	ALPHA 135/pCi/L ./15	BETA 136/pCi/L ./.	IRON 34/ppb 5.24/300
299-E25-48	1/11/95	B0DHY9	400.00	2.16	6.83	1800.00 Q
299-E26-12	10/11/94	B0D2Q5				470.00 BQ
299-E26-12	1/18/95	B0DJ02	300.00	1.72	3.84	620.00 B
299-E26-13	1/17/95	B0DJ14	300.00	.87	3.50	940.00 B
699-43-43	1/10/95	B0DJ26	200.00	.50 U	4.65	140.00 BQ
699-43-45	1/11/95	B0DJ36	300.00	.37 U	5.81	380.00 Q

Well Name	Collection Date	Sample Number	FIRON 34/ppb 5.24/300	MAGNES 34/ppb 23/.	FMAGNES 34/ppb 23/.	MANGESE 34/ppb .72/50
299-E17-20	1/11/95	B0DHP4		16000.00		27.00
299-E17-20	1/11/95	B0DHP5	34.00 BQ		15000.00	
299-E25-11	1/17/95	B0DHP6		5800.00		16.00 B
299-E25-11	1/17/95	B0DHP7	26.00 B		5600.00	
299-E25-18	1/12/95	B0DHP8		6900.00		11.00
299-E25-18	1/12/95	B0DHP9	32.00 B		6900.00	
299-E25-19	1/12/95	B0DHQ0		7500.00		11.00
299-E25-19	1/12/95	B0DHQ1	31.00 B		7400.00	
299-E25-20	1/11/95	B0DHQ2		7400.00		9.10 L
299-E25-20	1/11/95	B0DHQ3	15.00 LQ		7400.00	
299-E25-21	1/12/95	B0DHQ9		5900.00		5.50 L
299-E25-21	1/12/95	B0DHR0	14.00 BL		5700.00	
299-E25-26	1/12/95	B0DHQ4		5500.00		2.40 L
299-E25-26	1/12/95	B0DHQ8	18.00 BL		5600.00	
299-E25-28	1/13/95	B0DHR3		5800.00		.82 L
299-E25-28	1/13/95	B0DHR7	19.00 BL		5700.00	
299-E25-31	1/11/95	B0DHR1		6200.00		110.00
299-E25-31	1/11/95	B0DHR2	34.00 Q		6100.00	
299-E25-32P	10/11/94	B0D2M0		5600.00 Q		17.00 Q
299-E25-32P	10/11/94	B0D2M4	45.00 BQ		5700.00 Q	
299-E25-32P	1/11/95	B0DHR8		5400.00		19.00
299-E25-32P	1/11/95	B0DHS2	45.00 Q		5400.00	
299-E25-34	1/13/95	B0DHS3		5500.00		8.00 L
299-E25-34	1/13/95	B0DHS7	62.00 B		5500.00	
299-E25-35	1/13/95	B0DHS8		9800.00		10.00
299-E25-35	1/13/95	B0DHT2	37.00 B		10000.00	
299-E25-36	1/10/95	B0DHT3		7800.00		11.00
299-E25-36	1/10/95	B0DHT7	23.00 BQ		7900.00	
299-E25-42	10/11/94	B0D2N5		7800.00 Q		41.00 Q
299-E25-42	10/11/94	B0D2N9	37.00 BQ		7400.00 Q	
299-E25-42	1/18/95	B0DHT8		7900.00		21.00 B
299-E25-42	1/18/95	B0DHV2	68.00 B		7800.00	
299-E25-43	10/11/94	B0D2P0		5500.00 Q		16.00 Q
299-E25-43	10/11/94	B0D2P4	28.00 BQ		5600.00 Q	
299-E25-43	1/11/95	B0DHV8		5300.00		19.00 Q
299-E25-43	1/11/95	B0DHV9		5200.00		13.00 Q
299-E25-43	1/11/95	B0DHW6	47.00 Q		5300.00	
299-E25-43	1/11/95	B0DHW7	47.00 Q		5200.00	
299-E25-47	1/11/95	B0DHX8		6900.00		9.90 L
299-E25-47	1/11/95	B0DHY2	15.00 LQ		6800.00	
299-E25-48	1/11/95	B0DHY9		6800.00		59.00
299-E25-48	1/11/95	B0DHZ4	41.00 Q		6500.00	
299-E26-12	10/11/94	B0D2Q5		5500.00 Q		10.00 Q
299-E26-12	10/11/94	B0D2Q9	25.00 BQ		5500.00 Q	
299-E26-12	1/18/95	B0DJ02		5300.00		12.00 B
299-E26-12	1/18/95	B0DJ06	28.00 B		5300.00	

Table 6-4. Constituents with at Least One Detected Value for the 216-A-29 Ditch Data for Reporting Period January 1 through March 31, 1995. (sheet 7 of 12)

Well Name	Collection Date	Sample Number	FIRON 34/ppb 5.24/300	MAGNES 34/ppb 23/.	FMAGNES 34/ppb 23/.	MANGESE 34/ppb .72/50
299-E26-13	1/17/95	B0DJ14		6000.00		18.00 B
299-E26-13	1/17/95	B0DJ18	20.00 B		6100.00	
699-43-43	1/10/95	B0DJ26		5000.00		3.20 L
699-43-43	1/10/95	B0DJ30	29.00 BQ		4900.00	
699-43-45	1/11/95	B0DJ36		6100.00		11.00
699-43-45	1/11/95	B0DJ40	19.00 LQ		6000.00	

Well Name	Collection Date	Sample Number	FMANGAN 34/ppb .72/50	NICKEL 34/ppb 13/.	FNICKEL 34/ppb 13/.	NITRATE 124/ppb 11/45000
299-E17-20	1/11/95	B0DHP4		160.00		120000.00 DHQ
299-E17-20	1/11/95	B0DHP5	.72 U		13.00 U	
299-E25-11	1/17/95	B0DHP6		22.00 L		5700.00
299-E25-11	1/17/95	B0DHP7	4.70 BL		13.00 U	
299-E25-18	1/12/95	B0DHP8		13.00 U		15000.00 D
299-E25-18	1/12/95	B0DHP9	5.90 L		13.00 U	
299-E25-19	1/12/95	B0DHQ0		13.00 U		56000.00 D
299-E25-19	1/12/95	B0DHQ1	9.50 L		13.00 U	
299-E25-20	1/11/95	B0DHQ2		13.00 U		48000.00 DQ
299-E25-20	1/11/95	B0DHQ3	2.70 L		13.00 U	
299-E25-21	1/12/95	B0DHQ9		13.00 U		2600.00
299-E25-21	1/12/95	B0DHR0	3.40 L		13.00 U	
299-E25-26	1/12/95	B0DHQ4		13.00 U		900.00
299-E25-26	1/12/95	B0DHQ8	.72 U		13.00 U	
299-E25-28	1/13/95	B0DHR3		13.00 U		900.00
299-E25-28	1/13/95	B0DHR7	.72 U		13.00 U	
299-E25-31	1/11/95	B0DHR1		64.00		1700.00 Q
299-E25-31	1/11/95	B0DHR2	3.10 L		13.00 U	
299-E25-32P	10/11/94	B0D2M0		93.00		
299-E25-32P	10/11/94	B0D2M4	2.40 LQ		20.00 L	
299-E25-32P	1/11/95	B0DHR8		96.00		800.00 Q
299-E25-32P	1/11/95	B0DHS2	1.70 L		13.00 U	
299-E25-34	1/13/95	B0DHS3		33.00		1200.00
299-E25-34	1/13/95	B0DHS7	2.10 L		13.00 U	
299-E25-35	1/13/95	B0DHS8		33.00		3800.00
299-E25-35	1/13/95	B0DHT2	2.10 L		13.00 U	
299-E25-36	10/13/94	B0D254				14000.00 DQ
299-E25-36	1/10/95	B0DHT3		47.00		12000.00 DQ
299-E25-36	1/10/95	B0DHT7	1.70 L		13.00 U	
299-E25-42	10/11/94	B0D2N5		180.00		
299-E25-42	10/11/94	B0D2N9	3.70 LQ		14.00 L	
299-E25-42	1/18/95	B0DHT8		74.00		5500.00
299-E25-42	1/18/95	B0DHV2	8.30 BL		16.00 L	
299-E25-43	10/11/94	B0D2P0		93.00		
299-E25-43	10/11/94	B0D2P4	2.30 LQ		13.00 U	
299-E25-43	1/11/95	B0DHV8		49.00 Q		900.00 Q
299-E25-43	1/11/95	B0DHV9		21.00 LQ		1000.00 Q
299-E25-43	1/11/95	B0DHW6	5.30 L		13.00 U	
299-E25-43	1/11/95	B0DHW7	4.60 L		13.00 U	
299-E25-47	1/11/95	B0DHX8		28.00 L		600.00 Q
299-E25-47	1/11/95	B0DHY2	.91 L		13.00 U	
299-E25-48	1/11/95	B0DHY9		38.00		2500.00 Q
299-E25-48	1/11/95	B0DHZ4	11.00		13.00 U	

Table 6-4. Constituents with at Least One Detected Value for the 216-A-29 Ditch Data for Reporting Period January 1 through March 31, 1995. (sheet 8 of 12)

Well Name	Collection Date	Sample Number	FMANGAN 34/ppb .72/50	NICKEL 34/ppb 13/.	FNICKEL 34/ppb 13/.	NITRATE 124/ppb 11/45000
299-E26-12	10/11/94	B0D2Q5		62.00		
299-E26-12	10/11/94	B0D2Q9	2.10 LQ		13.00 U	
299-E26-12	1/18/95	B0DJ02		64.00		900.00
299-E26-12	1/18/95	B0DJ06	1.90 BL		13.00 U	
299-E26-13	1/17/95	B0DJ14		98.00		1100.00
299-E26-13	1/17/95	B0DJ18	2.00 BL		13.00 U	
699-43-43	1/10/95	B0DJ26		13.00 U		800.00 Q
699-43-43	1/10/95	B0DJ30	1.80 L		13.00 U	
699-43-45	1/11/95	B0DJ36		23.00 L		1100.00 Q
699-43-45	1/11/95	B0DJ40	1.00 L		13.00 U	

Well Name	Collection Date	Sample Number	POTASUM 34/ppb 850/.	FPOTASS 34/ppb 850/.	SILVER 34/ppb 3.6/50	FSILVER 34/ppb 3.6/50
299-E17-20	1/11/95	B0DHP4	6100.00		3.60 U	
299-E17-20	1/11/95	B0DHP5		6100.00		3.60 U
299-E25-11	1/17/95	B0DHP6	4900.00		3.60 U	
299-E25-11	1/17/95	B0DHP7		4900.00		3.60 U
299-E25-18	1/12/95	B0DHP8	4900.00		3.60 U	
299-E25-18	1/12/95	B0DHP9		5100.00		3.70 L
299-E25-19	1/12/95	B0DHQ0	6800.00		3.60 U	
299-E25-19	1/12/95	B0DHQ1		6800.00		3.60 U
299-E25-20	1/11/95	B0DHQ2	6800.00		3.60 U	
299-E25-20	1/11/95	B0DHQ3		6500.00		3.60 U
299-E25-21	1/12/95	B0DHQ9	4700.00		3.60 U	
299-E25-21	1/12/95	B0DHR0		4800.00		3.60 U
299-E25-26	1/12/95	B0DHQ4	3800.00		3.60 U	
299-E25-26	1/12/95	B0DHQ8		3700.00		3.60 U
299-E25-28	1/13/95	B0DHR3	3700.00		3.70 L	
299-E25-28	1/13/95	B0DHR7		3400.00		3.60 U
299-E25-31	1/11/95	B0DHR1	4300.00		3.60 U	
299-E25-31	1/11/95	B0DHR2		4300.00		3.60 U
299-E25-32P	10/11/94	B0D2M0	3500.00 Q		3.60 U	
299-E25-32P	10/11/94	B0D2M4		3500.00 Q		3.60 U
299-E25-32P	1/11/95	B0DHR8	3700.00		3.60 U	
299-E25-32P	1/11/95	B0DHS2		3500.00		3.60 U
299-E25-34	1/13/95	B0DHS3	3800.00		3.60 U	
299-E25-34	1/13/95	B0DHS7		3800.00		3.60 U
299-E25-35	1/13/95	B0DHS8	5800.00		3.60 U	
299-E25-35	1/13/95	B0DHT2		5800.00		3.60 U
299-E25-36	1/10/95	B0DHT3	4800.00		5.20 L	
299-E25-36	1/10/95	B0DHT7		5000.00		3.60 U
299-E25-42	10/11/94	B0D2N5	5700.00 Q		3.60 U	
299-E25-42	10/11/94	B0D2N9		5500.00 Q		3.60 U
299-E25-42	1/18/95	B0DHT8	5400.00		3.60 U	
299-E25-42	1/18/95	B0DHV2		5300.00		3.60 U
299-E25-43	10/11/94	B0D2P0	4200.00 Q		3.60 U	
299-E25-43	10/11/94	B0D2P4		3900.00 Q		3.60 U
299-E25-43	1/11/95	B0DHV8	3900.00		3.60 U	
299-E25-43	1/11/95	B0DHV9	4100.00		3.60 U	
299-E25-43	1/11/95	B0DHW6		3900.00		3.60 U
299-E25-43	1/11/95	B0DHW7		4100.00		3.60 U
299-E25-47	1/11/95	B0DHX8	4900.00		3.60 U	
299-E25-47	1/11/95	B0DHY2		4800.00		3.60 U
299-E25-48	1/11/95	B0DHY9	4500.00		3.60 U	
299-E25-48	1/11/95	B0DHZ4		4500.00		3.60 U

Table 6-4. Constituents with at Least One Detected Value for the 216-A-29 Ditch Data for Reporting Period January 1 through March 31, 1995. (sheet 9 of 12)

Well Name	Collection Date	Sample Number	POTASUM 34/ppb 850/.	FPOTASS 34/ppb 850/.	SILVER 34/ppb 3.6/50	FSILVER 34/ppb 3.6/50
299-E26-12	10/11/94	B0D2Q5	4200.00 Q		3.60 U	
299-E26-12	10/11/94	B0D2Q9		4100.00 Q		3.60 U
299-E26-12	1/18/95	B0DJ02	4300.00		3.60 U	
299-E26-12	1/18/95	B0DJ06		4300.00		3.60 U
299-E26-13	1/17/95	B0DJ14	3900.00		3.60 U	
299-E26-13	1/17/95	B0DJ18		3600.00		3.60 U
699-43-43	1/10/95	B0DJ26	4900.00		3.60 U	
699-43-43	1/10/95	B0DJ30		4900.00		4.80 L
699-43-45	1/11/95	B0DJ36	4300.00		3.60 U	
699-43-45	1/11/95	B0DJ40		4100.00		3.60 U

Well Name	Collection Date	Sample Number	SODIUM 34/ppb 61/.	FSODIUM 34/ppb 61/.	SULFATE 124/ppb 37/250000	TDS 65/ppm 10/500
299-E17-20	1/11/95	B0DHP4	22000.00 B		30000.00 D	350.00 H
299-E17-20	1/11/95	B0DHP5		21000.00 B		
299-E25-11	1/17/95	B0DHP6	12000.00 B		14000.00 D	160.00
299-E25-11	1/17/95	B0DHP7		12000.00 B		
299-E25-18	1/12/95	B0DHP8	14000.00		25000.00 D	160.00
299-E25-18	1/12/95	B0DHP9		14000.00		
299-E25-19	1/12/95	B0DHQ0	24000.00 B		27000.00 D	260.00
299-E25-19	1/12/95	B0DHQ1		24000.00 B		
299-E25-20	1/11/95	B0DHQ2	23000.00		28000.00 D	200.00
299-E25-20	1/11/95	B0DHQ3		24000.00		
299-E25-21	1/12/95	B0DHQ9	14000.00		18000.00 D	150.00
299-E25-21	1/12/95	B0DHR0		14000.00		
299-E25-26	1/12/95	B0DHQ4	6500.00		11000.00 D	120.00
299-E25-26	1/12/95	B0DHQ8		6700.00		
299-E25-28	1/13/95	B0DHR3	8300.00		11000.00 D	130.00
299-E25-28	1/13/95	B0DHR7		8400.00		
299-E25-31	1/11/95	B0DHR1	13000.00		17000.00 D	150.00
299-E25-31	1/11/95	B0DHR2		13000.00		
299-E25-32P	10/11/94	B0D2M0	5600.00 Q			
299-E25-32P	10/11/94	B0D2M4		5700.00 Q		
299-E25-32P	1/11/95	B0DHR8	5500.00		10000.00 D	110.00
299-E25-32P	1/11/95	B0DHS2		5600.00		
299-E25-34	1/13/95	B0DHS3	7700.00		13000.00 D	130.00
299-E25-34	1/13/95	B0DHS7		7700.00		
299-E25-35	1/13/95	B0DHS8	26000.00		69000.00 D	270.00
299-E25-35	1/13/95	B0DHT2		26000.00		
299-E25-36	10/13/94	B0D254			34000.00 D	
299-E25-36	1/10/95	B0DHT3	15000.00		31000.00 D	200.00
299-E25-36	1/10/95	B0DHT7		15000.00		
299-E25-42	10/11/94	B0D2N5	25000.00 Q			
299-E25-42	10/11/94	B0D2N9		25000.00 Q		
299-E25-42	1/18/95	B0DHT8	23000.00 B		44000.00 D	240.00
299-E25-42	1/18/95	B0DHV2		23000.00 B		
299-E25-43	10/11/94	B0D2P0	8500.00 Q			
299-E25-43	10/11/94	B0D2P4		8500.00 Q		
299-E25-43	1/11/95	B0DHV8	8000.00		10000.00 D	130.00
299-E25-43	1/11/95	B0DHV9	7900.00		11000.00 D	120.00
299-E25-43	1/11/95	B0DHW6		8100.00		
299-E25-43	1/11/95	B0DHW7		7900.00		
299-E25-47	1/11/95	B0DHX8	20000.00		31000.00 D	200.00
299-E25-47	1/11/95	B0DHY2		20000.00		

Table 6-4. Constituents with at Least One Detected Value for the 216-A-29 Ditch Data for Reporting Period January 1 through March 31, 1995. (sheet 10 of 12)

Well Name	Collection Date	Sample Number	SODIUM 34/ppb 61/.	FSODIUM .34/ppb 61/.	SULFATE 124/ppb 37/250000	TDS 65/ppm 10/500
299-E25-48	1/11/95	B0DHY9	12000.00		24000.00 D	160.00
299-E25-48	1/11/95	B0DHZ4		12000.00		
299-E26-12	10/11/94	B0D2Q5	7700.00 Q			
299-E26-12	10/11/94	B0D2Q9		7700.00 Q		
299-E26-12	1/18/95	B0DJ02	7400.00 B		11000.00 D	160.00
299-E26-12	1/18/95	B0DJ06		7500.00 B		
299-E26-13	1/17/95	B0DJ14	7300.00 B		11000.00 D	150.00
299-E26-13	1/17/95	B0DJ18		7300.00 B		
699-43-43	1/10/95	B0DJ26	5000.00		9800.00	110.00
699-43-43	1/10/95	B0DJ30		4900.00		
699-43-45	1/11/95	B0DJ36	7800.00		10000.00 D	130.00
699-43-45	1/11/95	B0DJ40		7800.00		

Well Name	Collection Date	Sample Number	TRITIUM 142/pCi/L ./20000	TURBID 126/NTU .016/.	VANADUM 34/ppb 6.6/.	FVANADI 34/ppb 6.6/.
299-E17-20	1/11/95	B0DHP4		2.50 QH	23.00 L	
299-E17-20	1/11/95	B0DHP5				21.00 L
299-E25-11	1/17/95	B0DHP6		2.70	35.00	
299-E25-11	1/17/95	B0DHP7				35.00
299-E25-18	1/12/95	B0DHP8		5.10 Q	28.00 L	
299-E25-18	1/12/95	B0DHP9				28.00 L
299-E25-19	1/12/95	B0DHQ0		.85 Q	37.00	
299-E25-19	1/12/95	B0DHQ1				39.00
299-E25-20	1/11/95	B0DHQ2		1.50 Q	42.00	
299-E25-20	1/11/95	B0DHQ3				42.00
299-E25-21	1/12/95	B0DHQ9		1.60 Q	35.00	
299-E25-21	1/12/95	B0DHR0				35.00
299-E25-26	1/12/95	B0DHQ4	708.00	2.20 Q	17.00 L	
299-E25-26	1/12/95	B0DHQ8				17.00 L
299-E25-28	1/13/95	B0DHR3	831.00	1.10 Q	35.00	
299-E25-28	1/13/95	B0DHR7				32.00
299-E25-31	1/11/95	B0DHR1		46.00 Q F	30.00	
299-E25-31	1/11/95	B0DHR2				23.00 L
299-E25-32P	10/11/94	B0D2M0			11.00 L	
299-E25-32P	10/11/94	B0D2M4				11.00 L
299-E25-32P	1/11/95	B0DHR8	350.00	2.40 Q	8.80 L	
299-E25-32P	1/11/95	B0DHS2				7.90 L
299-E25-34	1/13/95	B0DHS3	703.00	1.20 Q	32.00	
299-E25-34	1/13/95	B0DHS7				32.00
299-E25-35	1/13/95	B0DHS8	25300.00	2.50 Q	30.00 L	
299-E25-35	1/13/95	B0DHT2				30.00
299-E25-36	1/10/95	B0DHT3	9100.00	1.50 Q	24.00 L	
299-E25-36	1/10/95	B0DHT7				24.00 L
299-E25-42	10/11/94	B0D2N5			34.00	
299-E25-42	10/11/94	B0D2N9				29.00 L
299-E25-42	1/18/95	B0DHT8	22300.00	6.40	25.00 L	
299-E25-42	1/18/95	B0DHV2				23.00 L
299-E25-43	10/11/94	B0D2P0			40.00	
299-E25-43	10/11/94	B0D2P4				38.00
299-E25-43	1/11/95	B0DHV8	371.00	29.00 Q F	40.00	
299-E25-43	1/11/95	B0DHV9	451.00	29.00 Q F	40.00	
299-E25-43	1/11/95	B0DHW6				33.00
299-E25-43	1/11/95	B0DHW7				34.00
299-E25-47	1/11/95	B0DHX8	17400.00	4.00 Q	28.00 L	
299-E25-47	1/11/95	B0DHY2				28.00 L

Table 6-4. Constituents with at Least One Detected Value for the 216-A-29 Ditch Data for Reporting Period January 1 through March 31, 1995. (sheet 11 of 12)

Well Name	Collection Date	Sample Number	TRITIUM 142/pCi/L ./20000	TURBID 1.26/NTU .016/.	VANADUM 34/ppb 6.6/.	FVANADI 34/ppb 6.6/.
299-E25-48	1/11/95	B0DHY9	7230.00	32.00 Q F	27.00 L	
299-E25-48	1/11/95	B0DHZ4				18.00 L
299-E26-12	10/11/94	B0D2Q5			40.00	
299-E26-12	10/11/94	B0D2Q9				37.00
299-E26-12	1/18/95	B0DJ02	758.00	1.60	37.00	
299-E26-12	1/18/95	B0DJ06				35.00
299-E26-13	1/17/95	B0DJ14	582.00	2.70	35.00	
299-E26-13	1/17/95	B0DJ18				32.00
699-43-43	1/10/95	B0DJ26	421.00	.81 Q	24.00 L	
699-43-43	1/10/95	B0DJ30				23.00 L
699-43-45	1/11/95	B0DJ36	302.00	4.00 Q	30.00	
699-43-45	1/11/95	B0DJ40				27.00 L

Well Name	Collection Date	Sample Number	ZINC 34/ppb 6.3/5000	FZINC 34/ppb 6.3/5000
299-E17-20	1/11/95	B0DHP4	11.00 B	
299-E17-20	1/11/95	B0DHP5		6.30 U
299-E25-11	1/17/95	B0DHP6	6.30 U	
299-E25-11	1/17/95	B0DHP7		6.30 U
299-E25-18	1/12/95	B0DHP8	16.00	
299-E25-18	1/12/95	B0DHP9		6.30 U
299-E25-19	1/12/95	B0DHQ0	15.00	
299-E25-19	1/12/95	B0DHQ1		6.30 U
299-E25-20	1/11/95	B0DHQ2	12.00	
299-E25-20	1/11/95	B0DHQ3		6.30 U
299-E25-21	1/12/95	B0DHQ9	15.00	
299-E25-21	1/12/95	B0DHR0		6.30 U
299-E25-26	1/12/95	B0DHQ4	7.90 L	
299-E25-26	1/12/95	B0DHQ8		8.30 L
299-E25-28	1/13/95	B0DHR3	11.00	
299-E25-28	1/13/95	B0DHR7		6.30 U
299-E25-31	1/11/95	B0DHR1	160.00	
299-E25-31	1/11/95	B0DHR2		6.30 U
299-E25-32P	10/11/94	B0D2M0	6.90 LQ	
299-E25-32P	10/11/94	B0D2M4		6.30 UQ
299-E25-32P	1/11/95	B0DHR8	6.30 U	
299-E25-32P	1/11/95	B0DHS2		6.30 U
299-E25-34	1/13/95	B0DHS3	9.20 L	
299-E25-34	1/13/95	B0DHS7		6.30 U
299-E25-35	1/13/95	B0DHS8	6.30 U	
299-E25-35	1/13/95	B0DHT2		6.30 U
299-E25-36	1/10/95	B0DHT3	6.30 U	
299-E25-36	1/10/95	B0DHT7		6.30 U
299-E25-42	10/11/94	B0D2N5	6.30 UQ	
299-E25-42	10/11/94	B0D2N9		6.30 UQ
299-E25-42	1/18/95	B0DHT8	6.30 U	
299-E25-42	1/18/95	B0DHV2		6.90 L
299-E25-43	10/11/94	B0D2P0	9.40 LQ	
299-E25-43	10/11/94	B0D2P4		6.30 UQ
299-E25-43	1/11/95	B0DHV8	17.00 Q	
299-E25-43	1/11/95	B0DHV9	27.00 Q	
299-E25-43	1/11/95	B0DHW6		6.30 U
299-E25-43	1/11/95	B0DHW7		6.30 U
299-E25-47	1/11/95	B0DHX8	6.30 U	
299-E25-47	1/11/95	B0DHY2		6.30 U

Table 6-4. Constituents with at Least One Detected Value for the 216-A-29 Ditch Data for Reporting Period January 1 through March 31, 1995. (sheet 12 of 12)

Well Name	Collection Date	Sample Number	ZINC 34/ppb 6.3/5000	FZINC 34/ppb 6.3/5000
299-E25-48	1/11/95	B0DHY9	16.00	
299-E25-48	1/11/95	B0DHZ4		6.30 U
299-E26-12	10/11/94	B0D2Q5	6.30 UQ	
299-E26-12	10/11/94	B0D2Q9		6.30 UQ
299-E26-12	1/18/95	B0DJ02	6.30 U	
299-E26-12	1/18/95	B0DJ06		6.30 U
299-E26-13	1/17/95	B0DJ14	6.50 L	
299-E26-13	1/17/95	B0DJ18		6.30 U
699-43-43	1/10/95	B0DJ26	6.30 U	
699-43-43	1/10/95	B0DJ30		6.30 U
699-43-45	1/11/95	B0DJ36	12.00	
699-43-45	1/11/95	B0DJ40		6.30 U

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 January 1 through March 31, 1995. (sheet 1 of 2)

Well Name	Collection Date	Sample Number	COND FIELD µmho 1/.	COND LAB µmho 1/.	pH FIELD .01/6.5-8.5s	pH LAB .01/6.5-8.5s	TOC ppb 110/.	TOX ppb 5/.
299-E17-20	1/11/95	B0DHP4	365 F	520	7.71			
299-E25-11	1/17/95	B0DHP6	209	210	7.64			
299-E25-18	1/12/95	B0DHP8	247	250	7.26			
299-E25-19	1/12/95	B0DHQ0	352	350	7.51			
299-E25-20	1/11/95	B0DHQ2	325	340	8.02			
299-E25-21	1/12/95	B0DHQ9	218	220	7.94			
299-E25-26	1/12/95	B0DHQ4	176	180	8.08	8.20	400 L	9.7
		B0DHQ5	174		8.08		400 L	7.6
		B0DHQ6	174		8.08		400 L	9.9
		B0DHQ7	175		8.08		400 L	7.9
299-E25-28	1/13/95	B0DHR3	189	190	8.05	8.30	400 L	5.0 UF
		B0DHR4	191		8.06		500 L	9.8 F
		B0DHR5	192		8.07		400 L	15.7 F
		B0DHR6	193		8.08		500 L	5.7 F
299-E25-31	1/11/95	B0DHR1	255	230	8.03			
299-E25-32P	1/11/95	B0DHR8	166	170	7.11	8.30	400 L	8.1
		B0DHR9	165		7.15		600 L	14.2 F
		B0DHS0	164		7.17		400 L	17.7 F
		B0DHS1	164		7.18		400 L	8.2
299-E25-34	1/13/95	B0DHS3	198	180	8.00	8.20	400 L	5.0 U
		B0DHS4	194		7.97		400 L	12.8
		B0DHS5	200		8.02		400 L	12.3
		B0DHS6	201		8.00		400 L	5.2
299-E25-35	1/13/95	B0DHS8	395	370	7.71	8.10	300 L	5.0 U
		B0DHS9	395		7.67		300 L	5.0 U
		B0DHT0	395		7.65		400 L	6.3
		B0DHT1	396		7.63		300 L	5.0 U
299-E25-36	1/10/95	B0DHT3	278	290	7.92	8.10	500 L	10.4
		B0DHT4	277		7.92		500 L	8.3
		B0DHT5	277		7.92		600 L	22.3 F
		B0DHT6	278		7.92		400 L	7.1
299-E25-42	1/18/95	B0DHT8	314	330	7.28	7.40	300 L	6.6
		B0DHT9	322		7.26		300 L	5.0 U
		B0DHV0	328		7.25		300 L	8.2
		B0DHV1	325		7.25		200 L	10.5
299-E25-43	1/11/95	B0DHV8	182	190	7.84	8.20	500 L	17.7 F
		B0DHV9	178	190	7.84	8.20	400 L	15.1 QF
		B0DHW0	179		7.85		500 L	25.4 QF
		B0DHW1	179		7.85		600 L	25.7 F
		B0DHW2					500 L	17.8 F
		B0DHW3					500 L	7.7 F
		B0DHW4					500 L	5.0 UF
		B0DHW5					500 L	8.6 F
299-E25-47	1/11/95	B0DHX8	277	280	7.88	8.20	300 L	6.5
		B0DHX9	277		7.87		300 L	14.8
		B0DHY0	276		7.88		500 L	5.0 U
		B0DHY1	276		7.88		400 L	5.5
299-E25-48	1/11/95	B0DHY9	224	240	7.76	8.00	400 L	9.6
		B0DHZ1	224		7.76		400 L	5.0 U
		B0DHZ2	223		7.76		500 L	5.5
		B0DHZ3	222		7.77		400 L	14.0
299-E26-12	1/18/95	B0DJ02	180	190	7.74	8.20	500 L	11.9
		B0DJ03	180		7.75		400 L	5.1
		B0DJ04	179		7.75		300 L	6.8
		B0DJ05	179		7.75		300 L	9.2

Table 6-5. Contamination Indicator Parameters for the 216-A-29 Ditch Data for Reporting Period January 1 through March 31, 1995. (sheet 2 of 2)

Well Name	Collection Date	Sample Number	COND FIELD µmho 1/.	COND LAB µmho 1/.	pH FIELD .01/6.5-8.5s	pH LAB .01/6.5-8.5s	TOC ppb 110/.	TOX ppb 5/.
299-E26-13	1/17/95	B0DJ14	197	200	8.11	8.20	400 L	8.6
		B0DJ15	196		8.13		500 L	9.4
		B0DJ16	196		8.13		500 L	7.4
		B0DJ17	196		8.13		500 L	10.9
699-43-43	1/10/95	B0DJ26	169	180	8.26	8.20	500 L	8.2
		B0DJ27	169		8.08		600 L	5.0 U
		B0DJ28	169		8.09		500 L	10.9
		B0DJ29	169		8.11		600 L	5.0 U
699-43-45	1/11/95	B0DJ36	210	210	7.50	8.30	400 L	6.8
		B0DJ37	209		7.57		400 L	9.6
		B0DJ38	209		7.59		400 L	16.0 F
		B0DJ39	208		7.61		400 L	5.6

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 (50 ppb)	299-E17-20[a], 299-E25-31[a], 299-E25-32P, 299-E25-34, 299-E25-35, 299-E25-36[a], 299-E25-42, 299-E25-43, 299-E25-48, 299-E26-12, 299-E26-13
Iron, unfiltered (300 ppb)	299-E17-20[a], 299-E25-11[a], 299-E25-18[a], 299-E25-31[a], 299-E25-32P, 299-E25-34, 299-E25-35, 299-E25-36[a], 299-E25-42, 299-E25-43, 299-E25-47, 299-E25-48, 299-E26-12, 299-E26-13, 699-43-45
Nitrate (45,000 ppb)	299-E17-20[a], 299-E25-19[a], 299-E25-20[a]
Tritium (20,000 pCi/L)	299-E25-35, 299-E25-42
Manganese, unfiltered (50 ppb)	299-E25-31[a], 299-E25-48

[a]Wells in supplemental network.
DWS - Drinking Water Standard.

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7.0 216-A-36B CRIB

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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 January 1 through March 30, 1995 period are reported in Table 7-2. Water level measurements were not taken for well 299-E17-15.

7.3 WATER CHEMISTRY DATA

Groundwater samples are collected semiannually during second and fourth quarters for the A-36B Crib. Analytical data for some of the samples from well 299-E17-9 were not reported in the last quarterly report because the samples were misplaced during the October 1 through December 31 sampling. Therefore, the remaining data are reported in this section. The data collected on January 31, 1995, resulted from a request for field verification of specific conductance, pH, and turbidity because holding times were missed for samples to be tested for these properties. The constituent list and summary of results are provided in Table 7-3. Constituents with at least one value above the MDL for all available data are presented in Table 7-4. Table 7-5 lists the results of the CIPs. Data flags are discussed in Section 1.2 and 1.4.

Constituents exceeding the drinking water standards during the reporting period were iodine-129, tritium, and nitrate for well 299-E17-9 (Table 7-6).

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

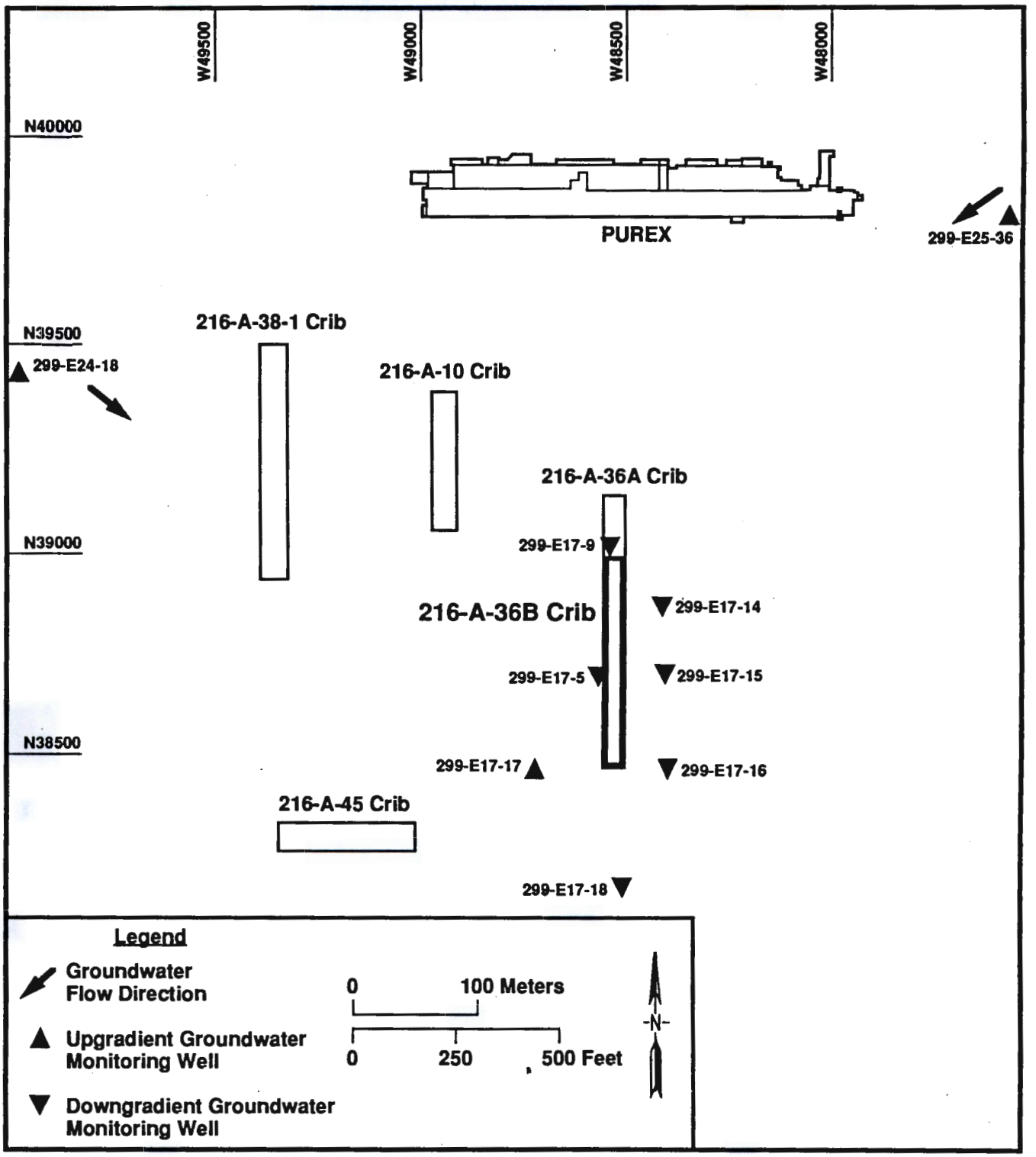

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Table 7-1. Well Identification and Sampling Schedule for the 216-A-36B Crib Groundwater Monitoring Network.

Well no. (299-)	Relative position	Hydrogeologic unit	Sample frequency	Sample date, 1st Qtr 1995
E17-17	Upgradient	Ringold: Water Table	Semiannually	Not scheduled
E24-18	Upgradient	Ringold: Water Table	Semiannually	Not scheduled
E25-36[a]	Upgradient	Ringold: Water Table	Semiannually	Not scheduled
E17-5	Downgradient	Ringold: Water Table	water level only	—
E17-9	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

[a]Well shared with the 216-A-29 Ditch network.

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

Well	Date	Depth to water (ft)	Water level elevation above msl (ft)	(m)
299-E17-16	3/15/95	319.27	401.31	122.32
299-E17-17	3/15/95	318.96	400.96	122.21
299-E17-18	3/15/95	319.57	401.08	122.25
299-E17-5	3/15/95	318.21	400.48	122.07
299-E17-9	1/31/95	316.81	400.83*	122.17
	3/15/95	316.90	400.74	122.15
299-E24-18	3/15/95	318.60	400.68	122.13
299-E25-36	1/10/95	306.43	400.96*	122.21
	3/15/95	306.33	401.06	122.24

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. Elevations marked with an '*' were measured at the time of sampling.
4. Elevation marked with a '+' are outside of the expected range, and are supected of error.

Table 7-3. Constituent List and Summary of Results for the 216-A-36B Crib Data for Reporting Period January 1 through March 31, 1995. (sheet 1 of 2)

CONTAMINATION INDICATOR PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
CONDUCT		Conductivity, field	µmhos	1			4	4	
PH		pH, field	pH	.01	6.5-8.5	EPAS	4	4	0

DRINKING WATER PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
BARIUM		Barium	ppb	.59	1000	EPAI	1	1	0
CADMIUM		Cadmium	ppb	3.3	10	EPAI	1	0	0
CHROMUM		Chromium	ppb	4.5	50	EPAI	1	1	0
FLUORID		Fluoride	ppb	36	1400	EPAI	1	1	0
ALPHA		Gross alpha	pCi/L		15	EPA	1	1	0
NITRATE	124	Nitrate	ppb	11	45000	EPA	1	1	1
NITRATE	550	Nitrate					1	1	

GROUNDWATER QUALITY PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
CHLORID		Chloride	ppb	14	250000	EPAS	1	1	0
IRON		Iron	ppb	5.24	300	EPAS	1	1	0
MANGESE		Manganese	ppb	.72	50	EPAS	1	1	0
LPHENOL		Phenol	ppb	.31			1	0	
SODIUM		Sodium	ppb	61			1	1	
SULFATE		Sulfate	ppb	37	250000	EPAS	1	1	0

SITE SPECIFIC AND OTHER CONSTITUENTS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
246-trp		2,4,6-Trichlorophenol	ppb	1.3			1	0	
24-dchp		2,4-Dichlorophenol	ppb	1.3			1	0	
DIMPHEN		2,4-Dimethylphenol	ppb	1.2			1	0	
DINPHEN		2,4-Dinitrophenol	ppb	3			1	0	
26-dchp		2,6-Dichlorophenol	ppb	1.4			1	0	
CHLPHEN		2-Chlorophenol	ppb	1.6			1	0	
2NITPH		2-Nitrophenol	ppb	1.3			1	0	
BUTDINP		2-sec-Butyl-4,6-dinitrophenol(DN)	ppb	1.3			1	0	
46DN2MP		4,6-Dinitro-2-methylphenol	ppb	1.3			1	0	
CHLCRES		4-Chloro-3-methylphenol	ppb	1.3			1	0	
NITPHEN		4-Nitrophenol	ppb	3			1	0	
ALUMNUM		Aluminum	ppb	26			1	1	
AMMONIU		Ammonium ion	ppb	37			1	0	
ANTIONY		Antimony	ppb	62			1	0	
SB-125		Antimony-125	pCi/L				1	0	
BERYLUM		Beryllium	ppb	.17			1	0	
BROMIDE		Bromide	ppb	11			1	0	
CALCIUM		Calcium	ppb	34			1	1	

Table 7-3. Constituent List and Summary of Results for the 216-A-36B Crib Data for Reporting Period January 1 through March 31, 1995. (sheet 2 of 2)

Constituent Name Short	(Method) Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
CS-137	Cesium-137	pCi/L		200	EPA	1	0	0
COBALT	Cobalt	ppb	5.9			1	0	
CO-60	Cobalt-60	pCi/L		100	EPA	1	1	0
COPPER	Copper	ppb	4.1	1000	EPAS	1	0	0
CRESOLS	Cresols (methylphenols)	ppb	4.8			1	0	
BETA	Gross beta	pCi/L				1	1	
I-129L	Iodine-129, Low level	pCi/L		1	EPA	1	1	1
MAGNES	Magnesium	ppb	23			1	1	
NICKEL	Nickel	ppb	13			1	0	
NITRITE	Nitrite	ppb	18	1000	EPA	1	0	0
PENTCHP	Pentachlorophenol	ppb	1.3	1	EPA	1	0	1*
PHOSPHA	Phosphate	ppb	82			1	0	
POTASUM	Potassium	ppb	850			1	1	
RU-106	Ruthenium-106	pCi/L		30	EPA	1	0	0
SILVER	Silver	ppb	3.6	50	EPAI	1	0	0
TETPHNL	Tetrachlorophenols	ppb	1.5			1	0	
TIN	Tin	ppb	69			1	0	
TRIPHNL	Trichlorophenols	ppb	1.7			1	0	
TRITIUM	Tritium	pCi/L		20000	EPA	1	1	1
TURBID	Turbidity	NTU				1	1	
VANADUM	Vanadium	ppb	6.6			1	1	
ZINC	Zinc	ppb	6.3	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-36B Crib Data for Reporting Period January 1 through March 31, 1995.

Well Name	Collection Date	Sample Number	ALUMNUM 34/ppb 26/.	BARIUM 34/ppb .59/1000	CALCIUM CHLORID 34/ppb 34/.	124/ppb 14/250000
299-E17-9	12/07/94	BODFG9	28.00 L	66.00 Q	49000.00	4200.00 QH

Well Name	Collection Date	Sample Number	CHROMUM 34/ppb 4.5/50	CO-60 140/pCi/L ./100	FLUORID 124/ppb 36/1400	ALPHA 135/pCi/L ./15
299-E17-9	12/07/94	BODFG9	6.20 L	7.45	800.00 H	1.47

Well Name	Collection Date	Sample Number	BETA 136/pCi/L ./.	I-129 139/pCi/L ./1	IRON 34/ppb 5.24/300	MAGNES 34/ppb 23/.
299-E17-9	12/07/94	BODFG9	14.90	11.80	110.00 B	14000.00

Well Name	Collection Date	Sample Number	MANGESE 34/ppb .72/50	NITRATE 124/ppb 11/45000	NITRATE 550/ppm ./45	POTASUM 34/ppb 850/.
299-E17-9	12/07/94	BODFG9	1.80 L	100000.00 DQH		6300.00
299-E17-9	1/31/95	BODVM2			31.90	

Well Name	Collection Date	Sample Number	SODIUM 34/ppb 61/.	SULFATE 124/ppb 37/250000	TRITIUM 142/pCi/L ./20000	TURBID 111/NTU ./.
299-E17-9	12/07/94	BODFG9	29000.00 BQ	44000.00 DH	2890000.00	
299-E17-9	1/31/95	BODVM2				3.36

Well Name	Collection Date	Sample Number	VANADUM 34/ppb 6.6/.	ZINC 34/ppb 6.3/5000
299-E17-9	12/07/94	BODFG9	20.00 L	18.00 B

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 January 1 through March 31, 1995.

Well Name	Collection Date	Sample Number	COND FIELD µmho 1/.	COND LAB µmho 1/.	pH FIELD .01/6.5-8.5s	pH LAB .01/6.5-8.5s	TOC ppb 110/.	TOX ppb 5/.
299-E17-9	1/31/95	B0DVM2	570		7.94			
		B0DVM3	561		7.95			
		B0DVM4	560		7.95			
		B0DVM5	560		7.95			

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

Table 7-6. Drinking Water Standards Exceeded in the 216-A-36B Crib Groundwater Monitoring Network.

Constituent (DWS)	Wells exceeding DWS (299-)
Nitrate (45,000 ppb)	E17-9
Tritium (20,000 pCi/L)	E17-9
Iodine-129 (1 pCi/L)	E17-9

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8.0 216-A-10 CRIB

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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 during the January through March 1995 period are reported in Table 8-2. Well 299-E17-19 had a water level measurement outside of the expected range and is flagged as suspect in Table 8-2.

8.3 WATER CHEMISTRY DATA

Groundwater samples were collected from the 216-A-10 Crib monitoring network during October 1994 as part of the semi-annual sampling. The majority of the data was reported in the October through December 1994 quarterly report. Because data were received late, anion and ICP metal data for wells 299-E24-18, 299-E25-36 and 299-E24-2 are reported in this quarterly. Wells 299-E15-20 and 299-E25-36 were sampled during the report period for the 216-A-29 groundwater quality assessment; the analytical results are presented in Chapter 6.

The constituent list and summary of results are provided in Table 8-3. Constituents with at least one value above the MDL for all available data are presented in Table 8-4. Table 8-5 lists the results of the CIPs. Data flags are discussed in Sections 1.2 and 1.4. Constituents reported in concentrations that exceed the DWS for the A-10 Crib network include unfiltered chromium and unfiltered iron.

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

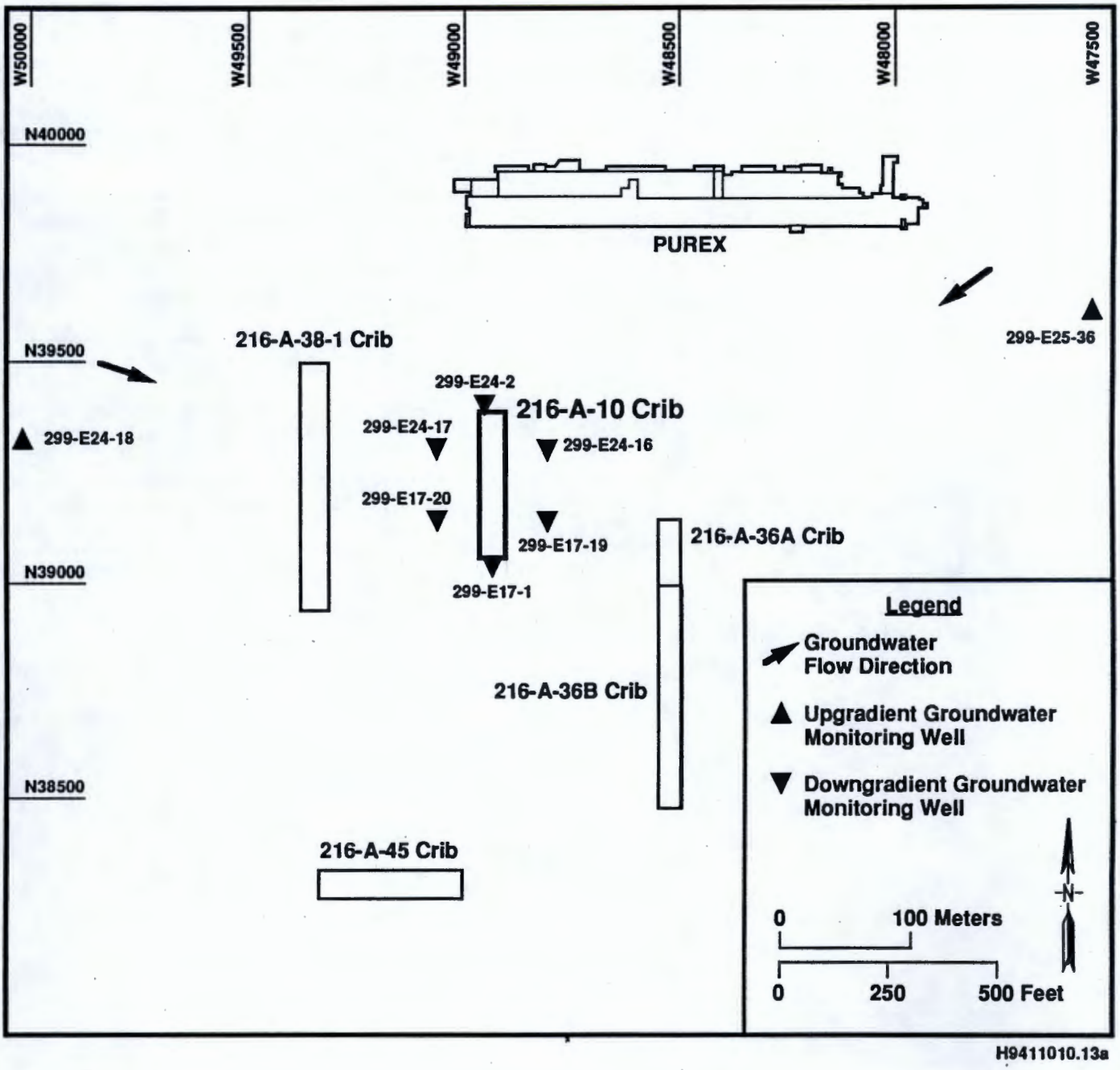

Table 8-1. Well Identification and Sampling Schedule for the 216-A-10 Crib Groundwater Monitoring Network.

Well no. (299-)	Relative position	Hydrogeologic unit	Sample frequency	Sample date, 1st Qtr 1995
E24-18	Upgradient	Ringold: Water Table	Semiannually	Not sampled
E25-36[a]	Upgradient	Ringold: Water Table	Semiannually	---
E17-1	Downgradient	Ringold: Water Table	Semiannually	Not sampled
E17-19	Downgradient	Ringold: Water Table	Semiannually	Not sampled
E17-20[a]	Downgradient	Ringold: Water Table	Semiannually	---
E24-2	Downgradient	Ringold: Water Table	Semiannually	Not sampled
E24-16	Downgradient	Ringold: Water Table	Semiannually	Not sampled
E24-17	Downgradient	Ringold: Water Table	Semiannually	Not sampled

[a]Well sampled during period for 216-A-29 Ditch groundwater quality assessment.

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

Well	Date	Depth to water (ft)	Water level elevation above msl (ft)	(m)
299-E17-1	3/15/95	318.16	401.01	122.23
299-E17-19	3/15/95	319.68	399.65+	121.81
299-E17-20	3/15/95	318.89	400.34	122.02
299-E24-16	3/15/95	317.18	401.09	122.25
299-E24-17	3/15/95	318.57	400.12	121.96
299-E24-18	3/15/95	318.60	400.68	122.13
299-E24-2	3/15/95	316.13	401.34	122.33
299-E25-36	1/10/95	306.43	400.96*	122.21
	3/15/95	306.33	401.06	122.24

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. Elevations marked with an '*' were measured at the time of sampling.
4. Elevation marked with a '+' are outside of the expected range, and are supected of error.

Table 8-3. Constituent List and Summary of Results for the 216-A-10 Crib Data for Reporting Period January 1 through March 31, 1995. (sheet 1 of 2)

CONTAMINATION INDICATOR PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
CONDUCT	94	Conductivity, field	µmhos	1			5	5	
CONDUCT	73	Conductivity, lab	µmhos				2	2	
TOC		Total Organic Carbon	ppb	110			4	4	
TOX		Total Organic Halogen	ppb	5			4	4	
PH	93	pH, field	pH	.01	6.5-8.5	EPAS	5	5	0
PH	125	pH, lab	pH		6.5-8.5	EPAS	1	1	0

DRINKING WATER PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
FARSENIC		Arsenic, filtered	ppb	2.8	50	EPA	1	1	0
BARIUM		Barium	ppb	.59	1000	EPAI	2	2	0
FBARIUM		Barium, filtered	ppb	.59	1000	EPAI	2	2	0
CADMIUM		Cadmium	ppb	3.3	10	EPAI	2	0	0
FCADMIU		Cadmium, filtered	ppb	3.3	10	EPAI	2	0	0
CHROMUM		Chromium	ppb	4.5	50	EPAI	2	2	2
FCHROMI		Chromium, filtered	ppb	4.5	50	EPAI	2	0	0
FLUORID		Fluoride	ppb	36	1400	EPAI	5	5	0
ALPHA		Gross alpha	pCi/L		15	EPA	1	1	0
NITRATE		Nitrate	ppb	11	45000	EPA	5	5	1

GROUNDWATER QUALITY PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
CHLORID		Chloride	ppb	14	250000	EPAS	5	5	0
IRON		Iron	ppb	5.24	300	EPAS	2	2	2
FIRON		Iron, filtered	ppb	5.24	300	EPAS	2	2	0
MANGESE		Manganese	ppb	.72	50	EPAS	2	2	0
FMANGAN		Manganese, filtered	ppb	.72	50	EPAS	2	1	0
LPHENOL		Phenol	ppb	.31			1	0	
SODIUM		Sodium	ppb	61			2	2	
FSODIUM		Sodium, filtered	ppb	61			2	2	
SULFATE		Sulfate	ppb	37	250000	EPAS	5	5	0

SITE SPECIFIC AND OTHER CONSTITUENTS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
246-trp		2,4,6-Trichlorophenol	ppb	1.3			1	0	
24-dchp		2,4-Dichlorophenol	ppb	1.3			1	0	
DIMPHEN		2,4-Dimethylphenol	ppb	1.2			1	0	
DINPHEN		2,4-Dinitrophenol	ppb	3			1	0	
26-dchp		2,6-Dichlorophenol	ppb	1.4			1	0	
CHLPHEN		2-Chlorophenol	ppb	1.6			1	0	
2NITPH		2-Nitrophenol	ppb	1.3			1	0	
BUTDINP		2-sec-Butyl-4,6-dinitrophenol(DN)	ppb	1.3			1	0	

Table 8-3. Constituent List and Summary of Results for the 216-A-10 Crib Data for Reporting Period January 1 through March 31, 1995. (sheet 2 of 2)

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
46DN2MP		4,6-Dinitro-2-methylphenol	ppb	1.3			1	0	
CHLCRES		4-Chloro-3-methylphenol	ppb	1.3			1	0	
NITPHEN		4-Nitrophenol	ppb	3			1	0	
ALKALIN		Alkalinity	ppm	2.8			2	2	
ALUMNUM		Aluminum	ppb	26			2	1	
FALUMIN		Aluminum, filtered	ppb	26			2	0	
ANTIONY		Antimony	ppb	62			2	0	
FANTIMO		Antimony, filtered	ppb	62			2	0	
BERYLUM		Beryllium	ppb	.17			2	0	
FBERYLL		Beryllium, filtered	ppb	.17			2	0	
BROMIDE		Bromide	ppb	11			5	4	
CALCIUM		Calcium	ppb	34			2	2	
FCALCIU		Calcium, filtered	ppb	34			2	2	
COBALT		Cobalt	ppb	5.9			2	0	
FCOBALT		Cobalt, filtered	ppb	5.9			2	0	
COPPER		Copper	ppb	4.1	1000	EPAS	2	2	0
FCOPPER		Copper, filtered	ppb	4.1	1000	EPAS	2	0	0
CRESOLS		Cresols (methylphenols)	ppb	4.8			1	0	
BETA		Gross beta	pCi/L				1	1	
MAGNES		Magnesium	ppb	23			2	2	
FMAGNES		Magnesium, filtered	ppb	23			2	2	
NICKEL		Nickel	ppb	13			2	2	
FNICKEL		Nickel, filtered	ppb	13			2	0	
NITRITE		Nitrite	ppb	18	1000	EPA	5	0	0
PENTCHP		Pentachlorophenol	ppb	1.3	1	EPA	1	0	1*
PHOSPHA		Phosphate	ppb	82			5	0	
POTASUM		Potassium	ppb	850			2	2	
FPOTASS		Potassium, filtered	ppb	850			2	2	
SILVER		Silver	ppb	3.6	50	EPAI	2	1	0
FSILVER		Silver, filtered	ppb	3.6	50	EPAI	2	0	0
TETPHNL		Tetrachlorophenols	ppb	1.5			1	0	
TIN		Tin	ppb	69			2	0	
FTIN		Tin, filtered	ppb	69			2	0	
TDS		Total Dissolved Solids	ppm	10	500	EPAS	2	2	0
TRIPHNL		Trichlorophenols	ppb	1.7			1	0	
TRITIUM		Tritium	pCi/L		20000	EPA	1	1	0
TURBID		Turbidity	NTU	.016			2	2	
VANADUM		Vanadium	ppb	6.6			2	2	
FVANADI		Vanadium, filtered	ppb	6.6			2	2	
ZINC		Zinc	ppb	6.3	5000	EPAS	2	1	0
FZINC		Zinc, filtered	ppb	6.3	5000	EPAS	2	0	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 January 1 through March 31, 1995. (sheet 1 of 2)

Well Name	Collection Date	Sample Number	ALKALIN 357/ppm 2.8/.	ALUMNUM 34/ppb 26/.	FALUMIN 34/ppb 26/.	FARSENIC 43/ppb 2.8/50
299-E17-20	1/11/95	BODHP4	90.00 H	26.00 U		
299-E17-20	1/11/95	BODHP5			26.00 U	
299-E25-36	1/10/95	BODHT3	90.00	29.00 L		
299-E25-36	1/10/95	BODHT7			26.00 U	7.60

Well Name	Collection Date	Sample Number	BARIUM 34/ppb .59/1000	FBARIUM 34/ppb .59/1000	BROMIDE 124/ppb 11/.	CALCIUM 34/ppb 34/.
299-E17-20	1/11/95	BODHP4	64.00		11.00 UD	54000.00
299-E17-20	1/11/95	BODHP5		60.00		
299-E24-18	10/14/94	BOD246			44.00 L	
299-E24-2	10/14/94	BOD250			18.00 L	
299-E25-36	10/13/94	BOD254			19.00 L	
299-E25-36	1/10/95	BODHT3	20.00		20.00 L	28000.00
299-E25-36	1/10/95	BODHT7		21.00		

Well Name	Collection Date	Sample Number	FCALCIU 34/ppb 34/.	CHLORID 124/ppb 14/250000	CHROMUM 34/ppb 4.5/50	FCHROMI 34/ppb 4.5/50
299-E17-20	1/11/95	BODHP4		4400.00 Q	340.00	
299-E17-20	1/11/95	BODHP5	51000.00			4.50 U
299-E24-18	10/14/94	BOD246		7600.00		
299-E24-2	10/14/94	BOD250		4900.00		
299-E25-36	10/13/94	BOD254		4600.00		
299-E25-36	1/10/95	BODHT3		4300.00 Q	110.00	
299-E25-36	1/10/95	BODHT7	29000.00			4.50 U

Well Name	Collection Date	Sample Number	COPPER 34/ppb 4.1/1000	FCOPPER 34/ppb 4.1/1000	FLUORID 124/ppb 36/1400	ALPHA 135/pCi/L ./15
299-E17-20	1/11/95	BODHP4	15.00 BL		700.00	
299-E17-20	1/11/95	BODHP5		4.10 U		
299-E24-18	10/14/94	BOD246			900.00	
299-E24-2	10/14/94	BOD250			800.00	
299-E25-36	10/13/94	BOD254			600.00	
299-E25-36	1/10/95	BODHT3	6.50 L		400.00	1.55
299-E25-36	1/10/95	BODHT7		4.10 U		

Well Name	Collection Date	Sample Number	BETA 136/pCi/L ./.	IRON 34/ppb 5.24/300	FIRON 34/ppb 5.24/300	MAGNES 34/ppb 23/.
299-E17-20	1/11/95	BODHP4		1700.00 BQ		16000.00
299-E17-20	1/11/95	BODHP5			34.00 BQ	
299-E25-36	1/10/95	BODHT3	6.06	510.00 BQ		7800.00
299-E25-36	1/10/95	BODHT7			23.00 BQ	

Table 8-4. Constituents with at Least One Detected Value for the 216-A-10 Crib Data for Reporting Period January 1 through March 31, 1995. (sheet 2 of 2)

Well Name	Collection Date	Sample Number	FMAGNES 34/ppb 23/.	MANGESE 34/ppb .72/50	FMANGAN 34/ppb .72/50	NICKEL 34/ppb 13/.
299-E17-20	1/11/95	BODHP4		27.00		160.00
299-E17-20	1/11/95	BODHP5	15000.00		.72 U	
299-E25-36	1/10/95	BODHT3		11.00		47.00
299-E25-36	1/10/95	BODHT7	7900.00		1.70 L	

Well Name	Collection Date	Sample Number	FNICKEL 34/ppb 13/.	NITRATE 124/ppb 11/45000	POTASUM 34/ppb 850/.	FPOTASS 34/ppb 850/.
299-E17-20	1/11/95	BODHP4		120000.00 DHQ	6100.00	
299-E17-20	1/11/95	BODHP5	13.00 U			6100.00
299-E24-18	10/14/94	BOD246		22000.00 DQ		
299-E24-2	10/14/94	BOD250		45000.00 DQ		
299-E25-36	10/13/94	BOD254		14000.00 DQ		
299-E25-36	1/10/95	BODHT3		12000.00 DQ	4800.00	
299-E25-36	1/10/95	BODHT7	13.00 U			5000.00

Well Name	Collection Date	Sample Number	SILVER 34/ppb 3.6/50	FSILVER 34/ppb 3.6/50	SODIUM 34/ppb 61/.	FSODIUM 34/ppb 61/.
299-E17-20	1/11/95	BODHP4	3.60 U		22000.00 B	
299-E17-20	1/11/95	BODHP5		3.60 U		21000.00 B
299-E25-36	1/10/95	BODHT3	5.20 L		15000.00	
299-E25-36	1/10/95	BODHT7		3.60 U		15000.00

Well Name	Collection Date	Sample Number	SULFATE 124/ppb 37/250000	TDS 65/ppm 10/500	TRITIUM 142/pCi/L ./20000	TURBID 126/NTU .016/.
299-E17-20	1/11/95	BODHP4	30000.00 D	350.00 H		2.50 QH
299-E24-18	10/14/94	BOD246	32000.00 D			
299-E24-2	10/14/94	BOD250	30000.00 D			
299-E25-36	10/13/94	BOD254	34000.00 D			
299-E25-36	1/10/95	BODHT3	31000.00 D	200.00	9100.00	1.50 Q

Well Name	Collection Date	Sample Number	VANADUM 34/ppb 6.6/.	FVANADI 34/ppb 6.6/.	ZINC 34/ppb 6.3/5000	FZINC 34/ppb 6.3/5000
299-E17-20	1/11/95	BODHP4	23.00 L		11.00 B	
299-E17-20	1/11/95	BODHP5		21.00 L		6.30 U
299-E25-36	1/10/95	BODHT3	24.00 L		6.30 U	
299-E25-36	1/10/95	BODHT7		24.00 L		6.30 U

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 January 1 through March 31, 1995.

Well Name	Collection Date	Sample Number	COND FIELD µmho 1/.	COND LAB µmho 1/.	pH FIELD .01/6.5-8.5s	pH LAB .01/6.5-8.5s	TOC ppb 110/.	TOX ppb 5/.
299-E17-20	1/11/95	BODHP4	365 F	520	7.71			
299-E25-36	1/10/95	BODHT3	278	290	7.92	8.10	500 L	10.4
		BODHT4	277		7.92		500 L	8.3
		BODHT5	277		7.92		600 L	22.3 F
		BODHT6	278		7.92		400 L	7.1

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

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9.0 216-B-63 TRENCH

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9.1 INTRODUCTION

The 216-B-63 Trench was an open, unlined earthen trench that was in service from March 1970 until February 1992. The trench received from 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 been subsequently backfilled and stablized and the diversion box leading to it has been filled with concrete.

A RCRA interim-status detection-level groundwater monitoring network is being 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.

Four quarters of groundwater background sampling have been completed for all the wells in the network. 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 within 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 January 1 through March 31, 1995 period are presented in Table 9-2. 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

Wells in the 216-B-63 Trench groundwater monitoring network are sampled semiannually. Samples were not taken from the wells during this quarter. Data in Tables 9-3, 9-4, and 9-5 represent analyses reported after the cutoff

date for the fourth quarter of 1994, and cosampled data from Single-Shell Tank Farm B-BX-By.

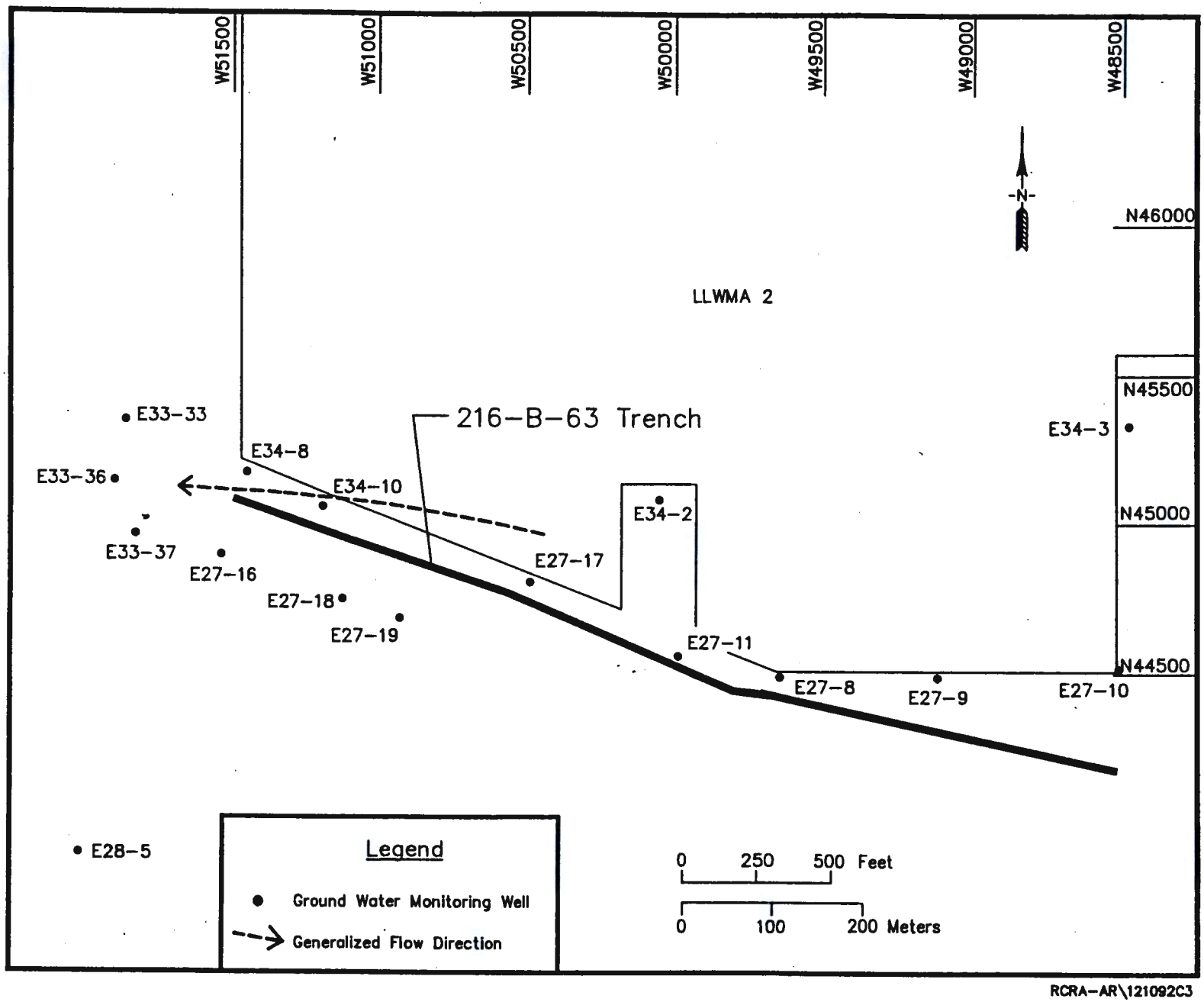

Figure 9-1. Well Location Map for the 216-B-63 Trench.

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, 1st 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	Not Sampled
E33-36[b]	Downgradient	Hanford: Water Table	Semiannually	Not Sampled
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

[a]Well shared with the Low-Level Burial Grounds facility network.
[b]Well shared with the single-shell tanks facility network.

Table 9-2. RCRA Water Level Measurement Report, 216-B-63 Trench, First 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	3/13/95	242.23	401.06	122.24
299-E27-16	3/16/95	251.94	400.19+	121.98+
299-E27-17	3/13/95	233.30	401.42	122.35
299-E27-18	3/16/95	248.83	401.32	122.32
299-E27-19	3/16/95	249.80	401.08	122.25
299-E27-8	3/13/95	236.66	401.17	122.28
299-E27-9	3/13/95	227.93	401.28	122.31
299-E33-33	1/30/95	238.79	401.60	122.41
	2/07/95	238.95	401.44*	122.36
	2/22/95	238.98	401.41	122.35
	3/22/95	239.00	401.39	122.34
299-E33-36	2/07/95	246.81	399.86*	121.88
	3/06/95	247.40	399.27*	121.70
	3/16/95	247.59	399.08	121.64
299-E33-37	3/16/95	251.81	401.20	122.29
299-E34-10	3/13/95	238.32	401.45	122.36
299-E34-8	3/16/95	240.98	399.54	121.78

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. Elevations marked with an '*' were measured at the time of sampling.
4. Elevations 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 January 1 through March 31, 1995. (sheet 1 of 2)

CONTAMINATION INDICATOR PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
CONDUCT	94	Conductivity, field	µmhos	1			16	16	
CONDUCT	73	Conductivity, lab	µmhos				2	2	
TOC		Total Organic Carbon	ppb	110			8	8	
TOX		Total Organic Halogen	ppb	5			8	8	
PH	93	pH, field	pH	.01	6.5-8.5	EPAS	16	16	0
PH	125	pH, lab	pH		6.5-8.5	EPAS	3	3	0

DRINKING WATER PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
FBARIUM		Barium, filtered	ppb	.59	1000	EPAI	2	2	0
FCADMIU		Cadmium, filtered	ppb	3.3	10	EPAI	2	0	0
FCHROMI		Chromium, filtered	ppb	4.5	50	EPAI	2	1	0
FLUORID		Fluoride	ppb	36	1400	EPAI	11	11	0
ALPHA		Gross alpha	pCi/L		15	EPA	2	2	0
NITRATE		Nitrate	ppb	11	45000	EPA	11	11	0

GROUNDWATER QUALITY PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
CHLORID		Chloride	ppb	14	250000	EPAS	11	11	0
FIRON		Iron, filtered	ppb	5.24	300	EPAS	2	2	0
FMANGAN		Manganese, filtered	ppb	.72	50	EPAS	2	1	0
LPHENOL		Phenol	ppb	.31			2	0	
FSODIUM		Sodium, filtered	ppb	61			2	2	
SULFATE		Sulfate	ppb	37	250000	EPAS	11	11	0

SITE SPECIFIC AND OTHER CONSTITUENTS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
246-trp		2,4,6-Trichlorophenol	ppb	1.3			2	0	
24-dchp		2,4-Dichlorophenol	ppb	1.3			2	0	
DIMPHEN		2,4-Dimethylphenol	ppb	1.2			2	0	
DINPHEN		2,4-Dinitrophenol	ppb	3			2	0	
26-dchp		2,6-Dichlorophenol	ppb	1.4			2	0	
CHLPHEN		2-Chlorophenol	ppb	1.6			2	0	
2NITPH		2-Nitrophenol	ppb	1.3			2	0	
BUTDINP		2-sec-Butyl-4,6-dinitrophenol(DN)	ppb	1.3			2	0	
46DN2MP		4,6-Dinitro-2-methylphenol	ppb	1.3			2	0	
CHLCRES		4-Chloro-3-methylphenol	ppb	1.3			2	0	
NITPHEN		4-Nitrophenol	ppb	3			2	0	
ALKALIN		Alkalinity	ppm	2.8			2	2	
FALUMIN		Aluminum, filtered	ppb	26			2	1	
FANTIMO		Antimony, filtered	ppb	62			2	0	
FBERYLL		Beryllium, filtered	ppb	.17			2	0	
BROMIDE		Bromide	ppb	11			11	9	

Table 9-3. Constituent List and Summary of Results for the 216-B-63 Trench Data for Reporting Period January 1 through March 31, 1995. (sheet 2 of 2)

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
FCALCIU		Calcium, filtered	ppb	34			2	2	
FCOBALT		Cobalt, filtered	ppb	5.9			2	0	
FCOPPER		Copper, filtered	ppb	4.1	1000	EPAS	2	0	0
CRESOLS		Cresols (methylphenols)	ppb	4.8			2	0	
BETA		Gross beta	pCi/L				2	2	
I-129L		Iodine-129, Low level	pCi/L		1	EPA	2	2	2
FMAGNES		Magnesium, filtered	ppb	23			2	2	
FNICKEL		Nickel, filtered	ppb	13			2	0	
NITRITE		Nitrite	ppb	18	1000	EPA	11	0	0
PENTCHP		Pentachlorophenol	ppb	1.3	1	EPA	2	0	2*
PHOSPHA		Phosphate	ppb	82			11	0	
FPOTASS		Potassium, filtered	ppb	850			2	2	
FSILVER		Silver, filtered	ppb	3.6	50	EPAI	2	0	0
TC-99		Technetium-99	pCi/L		900	EPA	2	2	0
TETPHNL		Tetrachlorophenols	ppb	1.5			2	0	
FTIN		Tin, filtered	ppb	69			2	0	
TDS		Total Dissolved Solids	ppm	10	500	EPAS	2	2	0
TRIPHNL		Trichlorophenols	ppb	1.7			2	0	
TRITIUM		Tritium	pCi/L		20000	EPA	2	2	0
TURBID	111	Turbidity	NTU				3	3	
TURBID	126	Turbidity	NTU	.016			2	2	
URANIUM		Uranium	ppb				2	2	
FVANADI		Vanadium, filtered	ppb	6.6			2	2	
FZINC		Zinc, filtered	ppb	6.3	5000	EPAS	2	0	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 January 1 through March 31, 1995. (sheet 1 of 2)

Well Name	Collection Date	Sample Number	ALKALIN 357/ppm 2.8/.	FALUMIN 34/ppb 26/.	FBARIUM 34/ppb .59/1000	BROMIDE 124/ppb 11/.
299-E27-11	11/18/94	B0D7Y4				46.00 L
299-E27-16	11/21/94	B0D760				16.00 L
299-E27-17	11/18/94	B0D7Q9				48.00 L
299-E27-8	11/17/94	B0D7R4				38.00 L
299-E27-9	11/17/94	B0D7R9				40.00 L
299-E33-33	11/21/94	B0D776				23.00 L
299-E33-33	2/07/95	B0DQ84	100.00			11.00 U
299-E33-33	2/07/95	B0DQ88		26.00 U	33.00	
299-E33-36	11/21/94	B0D780				23.00 L
299-E33-36	2/07/95	B0DQ89	110.00			11.00 U
299-E33-36	2/07/95	B0DQ93		28.00 BL	33.00	
299-E33-37	11/21/94	B0D784				16.00 L
299-E34-10	11/21/94	B0D7S4				46.00 L

Well Name	Collection Date	Sample Number	FCALCIU 34/ppb 34/.	CHLORID 124/ppb 14/250000	FCHROMI 34/ppb 4.5/50	FLUORID 124/ppb 36/1400
299-E27-11	11/18/94	B0D7Y4		7500.00		400.00
299-E27-16	11/21/94	B0D760		4200.00 BQ		400.00
299-E27-17	11/18/94	B0D7Q9		8000.00		400.00
299-E27-8	11/17/94	B0D7R4		6800.00		400.00
299-E27-9	11/17/94	B0D7R9		7000.00		400.00
299-E33-33	11/21/94	B0D776		5900.00 BQ		400.00
299-E33-33	2/07/95	B0DQ84		5500.00		400.00
299-E33-33	2/07/95	B0DQ88	30000.00		4.50 U	
299-E33-36	11/21/94	B0D780		4400.00 BQ		400.00
299-E33-36	2/07/95	B0DQ89		3900.00		400.00
299-E33-36	2/07/95	B0DQ93	28000.00		6.00 L	
299-E33-37	11/21/94	B0D784		4000.00 BQ		400.00
299-E34-10	11/21/94	B0D7S4		8300.00 BQ		400.00

Well Name	Collection Date	Sample Number	ALPHA 135/pCi/L ./15	BETA 136/pCi/L ./.	I-129 139/pCi/L ./1	FIRON 34/ppb 5.24/300
299-E33-33	2/07/95	B0DQ84	2.29	4.68	3.62	
299-E33-33	2/07/95	B0DQ88				12.00 LQ
299-E33-36	2/07/95	B0DQ89	1.39	5.84	5.30	
299-E33-36	2/07/95	B0DQ93				27.00 Q

Well Name	Collection Date	Sample Number	FMAGNES 34/ppb 23/.	FMANGAN 34/ppb .72/50	NITRATE 124/ppb 11/45000	FPOTASS 34/ppb 850/.
299-E27-11	11/18/94	B0D7Y4			7000.00	
299-E27-16	11/21/94	B0D760			3000.00 Q	
299-E27-17	11/18/94	B0D7Q9			6600.00	
299-E27-8	11/17/94	B0D7R4			5900.00	
299-E27-9	11/17/94	B0D7R9			6900.00	
299-E33-33	11/21/94	B0D776			5100.00 Q	

Table 9-4. Constituents with at Least One Detected Value for the 216-B-63 Trench Data for Reporting Period January 1 through March 31, 1995. (sheet 2 of 2)

299-E33-33	2/07/95	B0DQ84			4700.00	
299-E33-33	2/07/95	B0DQ88	8700.00	.72 U		5900.00
299-E33-36	11/21/94	B0D780			2800.00 Q	
299-E33-36	2/07/95	B0DQ89			2500.00	
299-E33-36	2/07/95	B0DQ93	8000.00	1.90 L		5700.00
299-E33-37	11/21/94	B0D784			2500.00 Q	
299-E34-10	11/21/94	B0D7S4			6600.00 Q	

Well Name	Collection Date	Sample Number	FSODIUM 34/ppb 61/.	SULFATE 124/ppb 37/250000	TC-99 143/pCi/L ./900	TDS 65/ppm 10/500
299-E27-11	11/18/94	B0D7Y4		48000.00 D		
299-E27-16	11/21/94	B0D760		22000.00 D		
299-E27-17	11/18/94	B0D7Q9		51000.00 D		
299-E27-8	11/17/94	B0D7R4		44000.00 D		
299-E27-9	11/17/94	B0D7R9		49000.00 D		
299-E33-33	11/21/94	B0D776		33000.00 D		
299-E33-33	2/07/95	B0DQ84		31000.00 D	2.82	200.00
299-E33-33	2/07/95	B0DQ88	15000.00 BQ			
299-E33-36	11/21/94	B0D780		19000.00 D		
299-E33-36	2/07/95	B0DQ89		17000.00 D	4.14	190.00
299-E33-36	2/07/95	B0DQ93	13000.00 BQ			
299-E33-37	11/21/94	B0D784		18000.00 D		
299-E34-10	11/21/94	B0D7S4		53000.00 D		

Well Name	Collection Date	Sample Number	TRITIUM 142/pCi/L ./20000	TURBID 111/NTU ./.	TURBID 126/NTU .016/.	URANIUM 145/ppb ./.
299-E33-33	2/07/95	B0DQ84	3860.00	.96	2.20	2.64
299-E33-36	2/07/95	B0DQ89	2410.00	.73	1.30	2.25
299-E33-36	3/06/95	B0CVW9		.82		

Well Name	Collection Date	Sample Number	FVANADI 34/ppb 6.6/.
299-E33-33	2/07/95	B0DQ88	23.00 L
299-E33-36	2/07/95	B0DQ93	21.00 L

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 January 1 through March 31, 1995.

Well Name	Collection Date	Sample Number	COND FIELD µmho 1/.	COND LAB µmho 1/.	pH FIELD .01/6.5-8.5s	pH LAB .01/6.5-8.5s	TOC ppb 110/.	TOX ppb 5/.
299-E33-33	2/07/95	B0DQ84	306	300	8.20	8.20 H	300 L	8.9
		B0DQ85	306		8.19		200 L	13.6
		B0DQ86	306		8.18		400 L	10.2
		B0DQ87	306		8.18		300 L	9.8
299-E33-36	2/07/95	B0DQ89	255	270	8.41	8.20 H	200 L	8.4
		B0DQ90	255		8.41		200 L	7.7
		B0DQ91	254		8.40		400 L	6.3
		B0DQ92	258		8.21		300 L	9.5
	3/06/95	B0CVW9	267		8.27	8.20 H		
		B0CVX0	267		8.29			
		B0CVX1	267		8.29			
		B0CVX2	267		8.28			
		B0CVX3	267		8.26			
		B0CVX4	267		8.25			
		B0CVX5	267		8.25			
		B0CVX6	267		8.25			

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

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10.0 216-S-10 POND AND DITCH

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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 size, 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 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 $Al(NO_3)_3$, $NaNO_3$, NaOH, Na_3PO_4, NaF, NaCl, and $K_2Cr_2O_7$.

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). This volume of discharge 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* (WHC 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 1993. 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 level measurements obtained during the first quarter of calendar year 1995 are presented in Table 10-2. Water levels are measured at all wells at the time of sampling. Also, quarterly water level measurements are made at six wells at the S-10 Facility including 299-W26-7, 299-W26-8, 299-W26-9, 299-W26-10, 299-W26-12, and 299-W27-2.

10.3 WATER CHEMISTRY DATA

Groundwater sampling during the first quarter of calendar year 1995 included the one well of the monitoring network that is screened in the lower portion of the unconfined aquifer (299-W27-2) (Figure 10-1). It was sampled on January 20, 1995. The six wells of the network are on a semiannual sampling schedule, and five were sampled during the fourth quarter of 1994. However, well 299-W27-2 was sampled early in the first quarter of 1995 and the results are included in this report. Well 299-W27-2 monitors the base of the unconfined aquifer, and results are not used for statistical evaluation. Available data for the reporting period January 1 through March 31, 1995 are shown in Tables 10-3 through 10-5. Table 10-5 also shows the results of verification sampling for field parameters (i.e., field specific conductivity and field measured pH) in all of the facility network wells. The field parameters were rechecked because field-measured pH in the previous quarter appeared to be in error.

Drinking water parameters, groundwater quality parameters, and site-specific and other constituents (Table 10-3) did not exceed DWSs in well 299-W27-2 except for unfiltered chromium, unfiltered iron, and carbon tetrachloride (Table 10-4). High levels of chromium and iron have been reported in the past in Hanford wells and are assumed to be artifacts of well construction or the use of stainless steel well screens.

Averages of quadruplicate samples from downgradient well 299-W27-2, which monitors the base of the aquifer, exceed the critical mean value for specific conductance of 301.1 μmhos/cm and for TOX of 12.9 ppb (Table 10-5).

Verification sampling for pH and specific conductance showed that all of the network wells are less than critical mean (specific conductance) or within the critical range (pH) (Table 10-5). However, pH in upgradient well 299-W26-8 exceeded the DWS of 8.5.

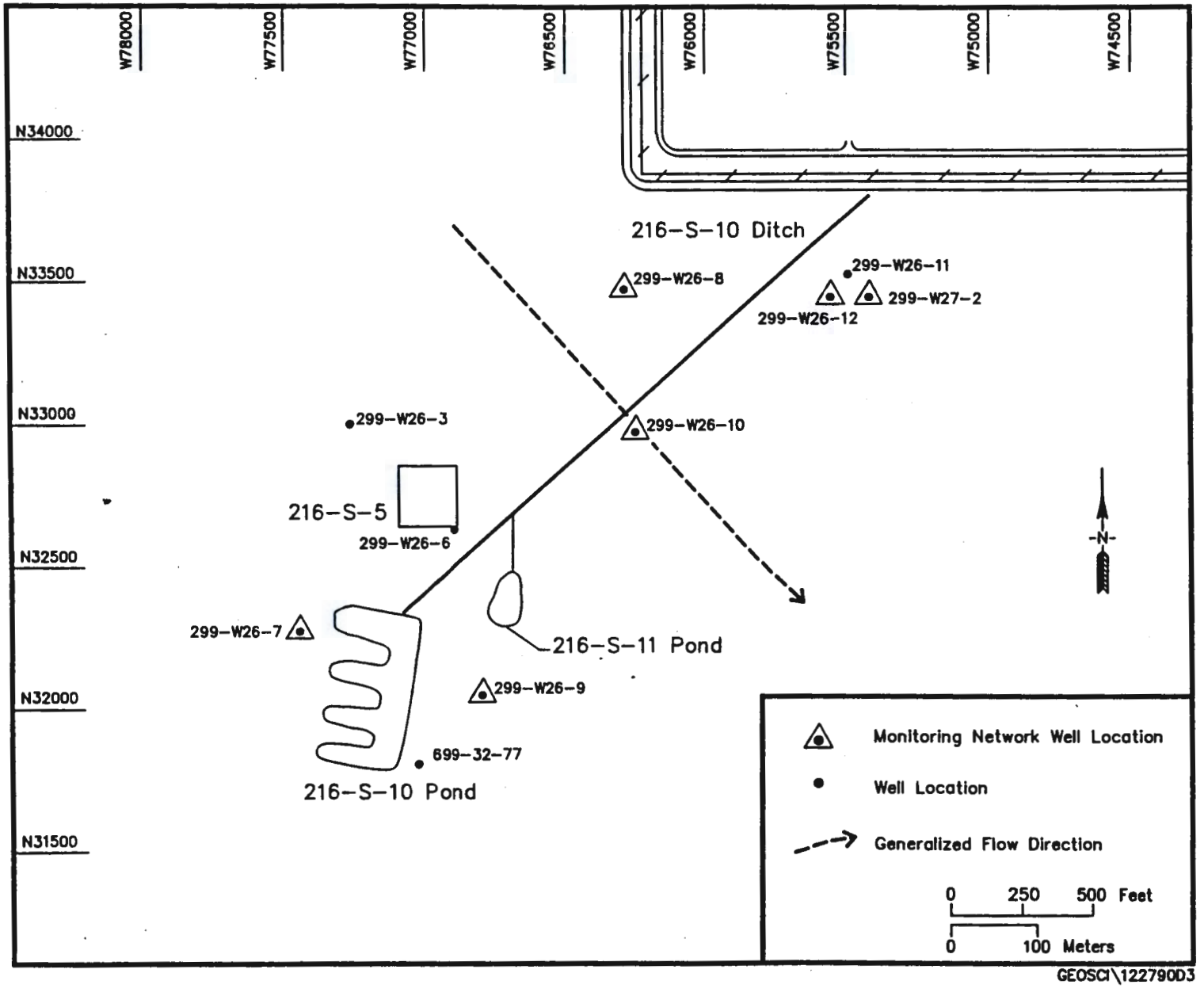

Figure 10-1. Well Location Map for the 216-S-10 Facility.

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	12/07/94
W26-8	Upgradient	Ringold: Water Table	Semiannually	12/07/94
W26-9	Downgradient	Ringold: Water Table	Semiannually	12/07/94
W26-10	Downgradient	Ringold: Water Table	Semiannually	12/07/94
W26-12	Downgradient	Ringold: Water Table	Semiannually	12/07/94
W27-2	Downgradient	Ringold: Base of Unconfined Aquifer	Semiannually	01/20/95

Table 10-2. RCRA Water Level Measurement Report, 216-S-10 Facility, First 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	2/09/95	216.10	454.77*	138.61
	3/16/95	216.49	454.38	138.50
299-W26-12	2/09/95	220.63	455.06*	138.70
	3/16/95	220.96	454.73	138.60
299-W26-7	2/09/95	195.28	456.71*	139.21
	3/16/95	195.69	456.30	139.08
299-W26-8	2/09/95	210.80	455.51*	138.84
	3/16/95	210.58	455.73	138.91
299-W26-9	2/09/95	198.96	455.20*	138.74
	3/16/95	199.38	454.78	138.62
299-W27-2	1/20/95	222.37	454.74*	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. Elevations marked with an '*' were measured at the time of sampling.
4. Elevations 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 January 1 through March 31, 1995. (sheet 1 of 2)

CONTAMINATION INDICATOR PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
CONDUCT	94	Conductivity, field	µmhos	1			32	32	
CONDUCT	73	Conductivity, lab	µmhos				1	1	
TOC		Total Organic Carbon	ppb	110			4	4	
TOX		Total Organic Halogen	ppb	5			4	4	
PH	93	pH, field	pH	.01	6.5-8.5	EPAS	32	32	4
PH	125	pH, lab	pH		6.5-8.5	EPAS	3	3	0

DRINKING WATER PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
BARIUM		Barium	ppb	.59	1000	EPAI	1	1	0
FBARIUM		Barium, filtered	ppb	.59	1000	EPAI	1	1	0
CADMIUM		Cadmium	ppb	3.3	10	EPAI	1	0	0
FCADMIU		Cadmium, filtered	ppb	3.3	10	EPAI	1	0	0
CHROMUM		Chromium	ppb	4.5	50	EPAI	1	1	1
FCHROMI		Chromium, filtered	ppb	4.5	50	EPAI	1	1	0
FLUORID		Fluoride	ppb	36	1400	EPAI	1	1	0
ALPHA		Gross alpha	pCi/L		15	EPA	1	1	0
NITRATE		Nitrate	ppb	11	45000	EPA	1	1	0

GROUNDWATER QUALITY PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
CHLORID		Chloride	ppb	14	250000	EPAS	1	1	0
IRON		Iron	ppb	5.24	300	EPAS	1	1	1
FIRON		Iron, filtered	ppb	5.24	300	EPAS	1	1	0
MANGESE		Manganese	ppb	.72	50	EPAS	1	1	0
FMANGAN		Manganese, filtered	ppb	.72	50	EPAS	1	1	0
LPHENOL		Phenol	ppb	.31			1	0	
SODIUM		Sodium	ppb	61			1	1	
FSODIUM		Sodium, filtered	ppb	61			1	1	
SULFATE		Sulfate	ppb	37	250000	EPAS	1	1	0

SITE SPECIFIC AND OTHER CONSTITUENTS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
1,1,1-T		1,1,1-Trichloroethane	ppb	.036	200	EPA	1	0	0
1,1,2-T		1,1,2-Trichloroethane	ppb	.078			1	0	
1,1-DIC		1,1-Dichloroethane	ppb	.058			1	0	
1,2-DIC		1,2-Dichloroethane	ppb	.029	5	EPA	1	0	0
14-dben		1,4-Dichlorobenzene	ppb	.055	75	EPA	1	0	0
246-trp		2,4,6-Trichlorophenol	ppb	1.3			1	0	
24-dchp		2,4-Dichlorophenol	ppb	1.3			1	0	
DIMPHEN		2,4-Dimethylphenol	ppb	1.2			1	0	
DINPHEN		2,4-Dinitrophenol	ppb	3			1	0	
26-dchp		2,6-Dichlorophenol	ppb	1.4			1	0	
CHLPHEN		2-Chlorophenol	ppb	1.6			1	0	

Table 10-3. Constituent List and Summary of Results for the 216-S-10 Facility Data for Reporting Period January 1 through March 31, 1995. (sheet 2 of 2)

Constituent Name Short	(Method) Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
2NITPH	2-Nitrophenol	ppb	1.3			1	0	
BUTDINP	2-sec-Butyl-4,6-dinitrophenol(DN)	ppb	1.3			1	0	
46DN2MP	4,6-Dinitro-2-methylphenol	ppb	1.3			1	0	
CHLCRES	4-Chloro-3-methylphenol	ppb	1.3			1	0	
NITPHEN	4-Nitrophenol	ppb	3			1	0	
ALUMNUM	Aluminum	ppb	26			1	1	
FALUMIN	Aluminum, filtered	ppb	26			1	0	
ANTIONY	Antimony	ppb	62			1	0	
FANTIMO	Antimony, filtered	ppb	62			1	0	
BENZENE	Benzene	ppb	.013	5	EPA	1	0	0
BERYLUM	Beryllium	ppb	.17			1	1	
FBERYLL	Beryllium, filtered	ppb	.17			1	1	
BROMIDE	Bromide	ppb	11			1	0	
CALCIUM	Calcium	ppb	34			1	1	
FCALCIU	Calcium, filtered	ppb	34			1	1	
TETRANE	Carbon tetrachloride	ppb	.075	5	EPA	1	1	1
CHLFORM	Chloroform	ppb	.041			1	1	
COBALT	Cobalt	ppb	5.9			1	0	
FCOBALT	Cobalt, filtered	ppb	5.9			1	0	
COPPER	Copper	ppb	4.1	1000	EPAS	1	1	0
FCOPPER	Copper, filtered	ppb	4.1	1000	EPAS	1	0	0
CRESOLS	Cresols (methylphenols)	ppb	4.8			1	0	
ETHBENZ	Ethylbenzene	ppb	.051	700	EPA	1	0	0
BETA	Gross beta	pCi/L				1	1	
MAGNES	Magnesium	ppb	23			1	1	
FMAGNES	Magnesium, filtered	ppb	23			1	1	
METHYCH	Methylene chloride	ppb	.09			1	0	
NICKEL	Nickel	ppb	13			1	1	
FNICKEL	Nickel, filtered	ppb	13			1	1	
NITRITE	Nitrite	ppb	18	1000	EPA	1	0	0
PENTCHP	Pentachlorophenol	ppb	1.3	1	EPA	1	0	1*
PHOSPHA	Phosphate	ppb	82			1	0	
POTASUM	Potassium	ppb	850			1	1	
FPOTASS	Potassium, filtered	ppb	850			1	1	
SILVER	Silver	ppb	3.6	50	EPAI	1	1	0
FSILVER	Silver, filtered	ppb	3.6	50	EPAI	1	0	0
TC-99	Technetium-99	pCi/L		900	EPA	1	1	0
PERCENE	Tetrachloroethene	ppb	.22	5	EPA	1	0	0
TETPHNL	Tetrachlorophenols	ppb	1.5			1	0	
TIN	Tin	ppb	69			1	0	
FTIN	Tin, filtered	ppb	69			1	0	
TOLUENE	Toluene	ppb	.016	1000	EPA	1	0	0
TRICENE	Trichloroethene	ppb	.11	5	EPA	1	0	0
TRIPHNL	Trichlorophenols	ppb	1.7			1	0	
TRITIUM	Tritium	pCi/L		20000	EPA	1	0	0
TURBID	Turbidity	NTU				5	5	
URANIUM	Uranium	ppb				1	1	
VANADUM	Vanadium	ppb	6.6			1	1	
FVANADI	Vanadium, filtered	ppb	6.6			1	1	
VINYIDE	Vinyl chloride	ppb	.13	2	EPA	1	0	0
XYLENE	Xylenes (total)	ppb	.035	10000	EPA	1	0	0
ZINC	Zinc	ppb	6.3	5000	EPAS	1	1	0
FZINC	Zinc, filtered	ppb	6.3	5000	EPAS	1	1	0
CIS12DE	cis-1,2-Dichloroethylene	ppb	.11	70	EPA	1	0	0
TRANDCE	trans-1,2-Dichloroethylene	ppb	.073	100	EPA	1	0	0

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

Table 10-4. Constituents with at Least One Detected Value for the 216-S-10 Facility Data for Reporting Period January 1 through March 31, 1995. (sheet 1 of 2)

Well Name	Collection Date	Sample Number	ALUMNUM 34/ppb 26/.	FALUMIN 34/ppb 26/.	BARIUM 34/ppb .59/1000	FBARIUM 34/ppb .59/1000
299-W27-2	1/20/95	B0DFM4	170.00 L		49.00	
299-W27-2	1/20/95	B0DFM8		26.00 U		45.00

Well Name	Collection Date	Sample Number	BERYLUM 34/ppb .17/.	FBERYLL 34/ppb .17/.	CALCIUM 34/ppb 34/.	FCALCIU 34/ppb 34/.
299-W27-2	1/20/95	B0DFM4	.72 L		34000.00	
299-W27-2	1/20/95	B0DFM8		.38 L		34000.00

Well Name	Collection Date	Sample Number	TETRANE 25/ppb .075/5	CHLORID 124/ppb 14/250000	CHLFORM 25/ppb .041/.	CHROMUM 34/ppb 4.5/50
299-W27-2	1/20/95	B0DFM4	5.30	22000.00 D	.35 L	220.00

Well Name	Collection Date	Sample Number	FCHROMI 34/ppb 4.5/50	COPPER 34/ppb 4.1/1000	FCOPPER 34/ppb 4.1/1000	FLUORID 124/ppb 36/1400
299-W27-2	1/20/95	B0DFM4		8.80 L		500.00
299-W27-2	1/20/95	B0DFM8	4.50 L		4.10 U	

Well Name	Collection Date	Sample Number	ALPHA 135/pCi/L ./15	BETA 136/pCi/L ./.	IRON 34/ppb 5.24/300	FIRON 34/ppb 5.24/300
299-W27-2	1/20/95	B0DFM4	1.39	4.22	1400.00	
299-W27-2	1/20/95	B0DFM8				22.00

Well Name	Collection Date	Sample Number	MAGNES 34/ppb 23/.	FMAGNES 34/ppb 23/.	MANGESE 34/ppb .72/50	FMANGAN 34/ppb .72/50
299-W27-2	1/20/95	B0DFM4	12000.00		27.00	
299-W27-2	1/20/95	B0DFM8		12000.00		4.90 L

Well Name	Collection Date	Sample Number	NICKEL 34/ppb 13/.	FNICKEL 34/ppb 13/.	NITRATE 124/ppb 11/45000	POTASUM 34/ppb 850/.
299-W27-2	1/20/95	B0DFM4	120.00		4300.00	3700.00
299-W27-2	1/20/95	B0DFM8		27.00 L		

Table 10-4. Constituents with at Least One Detected Value for the 216-S-10 Facility Data for Reporting Period January 1 through March 31, 1995. (sheet 2 of 2)

Well Name	Collection Date	Sample Number	FPOTASS 34/ppb 850/.	SILVER 34/ppb 3.6/50	FSILVER 34/ppb 3.6/50	SODIUM 34/ppb 61/.
299-W27-2	1/20/95	B0DFM4		4.20 L		15000.00 B
299-W27-2	1/20/95	B0DFM8	3800.00		3.60 U	

Well Name	Collection Date	Sample Number	FSODIUM 34/ppb 61/.	SULFATE 124/ppb 37/250000	TC-99 143/pCi/L ./900	TURBID 111/NTU ./.
299-W26-10	2/09/95	B0DTS6				64.30
299-W26-12	2/09/95	B0DTT0				11.90
299-W26-7	2/09/95	B0DV51				.93
299-W26-8	2/09/95	B0DV55				8.14
299-W26-9	2/09/95	B0DV59				3.31
299-W27-2	1/20/95	B0DFM4		16000.00 D	4.24	
299-W27-2	1/20/95	B0DFM8	15000.00 B			

Well Name	Collection Date	Sample Number	URANIUM 145/ppb ./.	VANADUM 34/ppb 6.6/.	FVANADI 34/ppb 6.6/.	ZINC 34/ppb 6.3/5000
299-W27-2	1/20/95	B0DFM4	.44	23.00 L		44.00 B
299-W27-2	1/20/95	B0DFM8			19.00 L	

Well Name	Collection Date	Sample Number	FZINC 34/ppb 6.3/5000
299-W27-2	1/20/95	B0DFM8	7.40 BL

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

Table 10-5. Contamination Indicator Parameters for the 216-S-10 Facility Data for Reporting Period January 1 through March 31, 1995.

Well Name	Collection Date	Sample Number	COND FIELD µmho 1/.	COND LAB µmho 1/.	pH FIELD .01/6.5-8.5s	pH LAB .01/6.5-8.5s	TOC ppb 110/.	TOX ppb 5/.
299-W26-10	8/26/94	B0CSQ2	258		7.88	8.00 H		
		B0CSQ3	258		7.87	8.00 H		
		B0DZH5	257		7.86			
		B0DZH6	256		7.87			
		B0DZH7	257		7.85			
		B0DZH8	257		7.84			
		B0DZH9	257		7.84			
		B0DZJ0	257		7.84			
	2/09/95	B0DTS6	267		7.94			
		B0DTS7	267		7.90			
		B0DTS8	267		7.91			
		B0DTS9	268		7.95			
299-W26-12	2/09/95	B0DTT0	237		8.20			
		B0DV48	236		8.18			
		B0DV49	238		8.19			
		B0DV50	236		8.17			
299-W26-7	2/09/95	B0DV51	266		8.01			
		B0DV52	266		8.01			
		B0DV53	267		8.02			
		B0DV54	267		8.02			
299-W26-8	2/09/95	B0DV55	259		8.88			
		B0DV56	259		8.86			
		B0DV57	259		8.87			
		B0DV58	264		8.86			
299-W26-9	2/09/95	B0DV59	281		8.02			
		B0DV60	280		8.02			
		B0DV61	279		8.02			
		B0DV62	279		8.02			
299-W27-2	1/20/95	B0DFM4	341	350	7.88	7.90	200 L	11.7
		B0DFM5	340		7.87		300 L	16.4
		B0DFM6	339		7.87		300 L	12.8
		B0DFM7	339		7.86		200 L	17.5

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

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11.0 216-U-12 CRIB

B. A. Williams
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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 Figure 1-1). The crib is an unlined, gravel-bottom percolation crib that is 3 by 30.5 m (10 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 dispersed 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. Wastewater disposed of in the U-12 Crib contained hazardous waste and radioactive materials. The U.S. Department of Energy, Richland Operations Office (RL) has proposed that the facility be closed under RCRA interim status (40 CFR 265). This closure 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 waste was composed 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. 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. Hydrogeologic evaluation of the crib in 1983 revealed radioactive contamination to a depth of a least 43 m (140 ft). The depth to water below the crib is approximately 72 m (236 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 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).

The sample results for the first quarter of 1995 represent the fifteenth 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 in accordance with the *Interim-Status Groundwater Quality Assessment Plan for the 216-U-12 Crib* (WHC 1993a).

The current network consists of six wells, two upgradient wells, 299-W22-23 and 299-W22-43, and four downgradient wells, 299-W22-40, -41, -42, and 699-36-70A. Assessment well, 699-36-70A, was added to the network and sampled for the first time on January 3, 1995. 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 quarter are presented in Table 11-2.

11.3 WATER CHEMISTRY DATA

Groundwater samples were collected on March 28-30, 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. For this reporting period, only results for 699-36-70A are available.

Initial specific conductivity results in well 699-36-70A exceed the critical mean of 437 μmho/cm. Results for nitrate (DWS = 45,000 ppb), the principal constituent suspected of causing elevated conductivity, are 150,000 ppb (1/03/95 result). The results in this well for technetium-99, tritium, and iodine-129 are also elevated, which is consistent with previous downgradient well data from 299-W22-41, and 299-W22-42. An explanation of any data flags can be found in Sections 1.2 and 1.4.

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

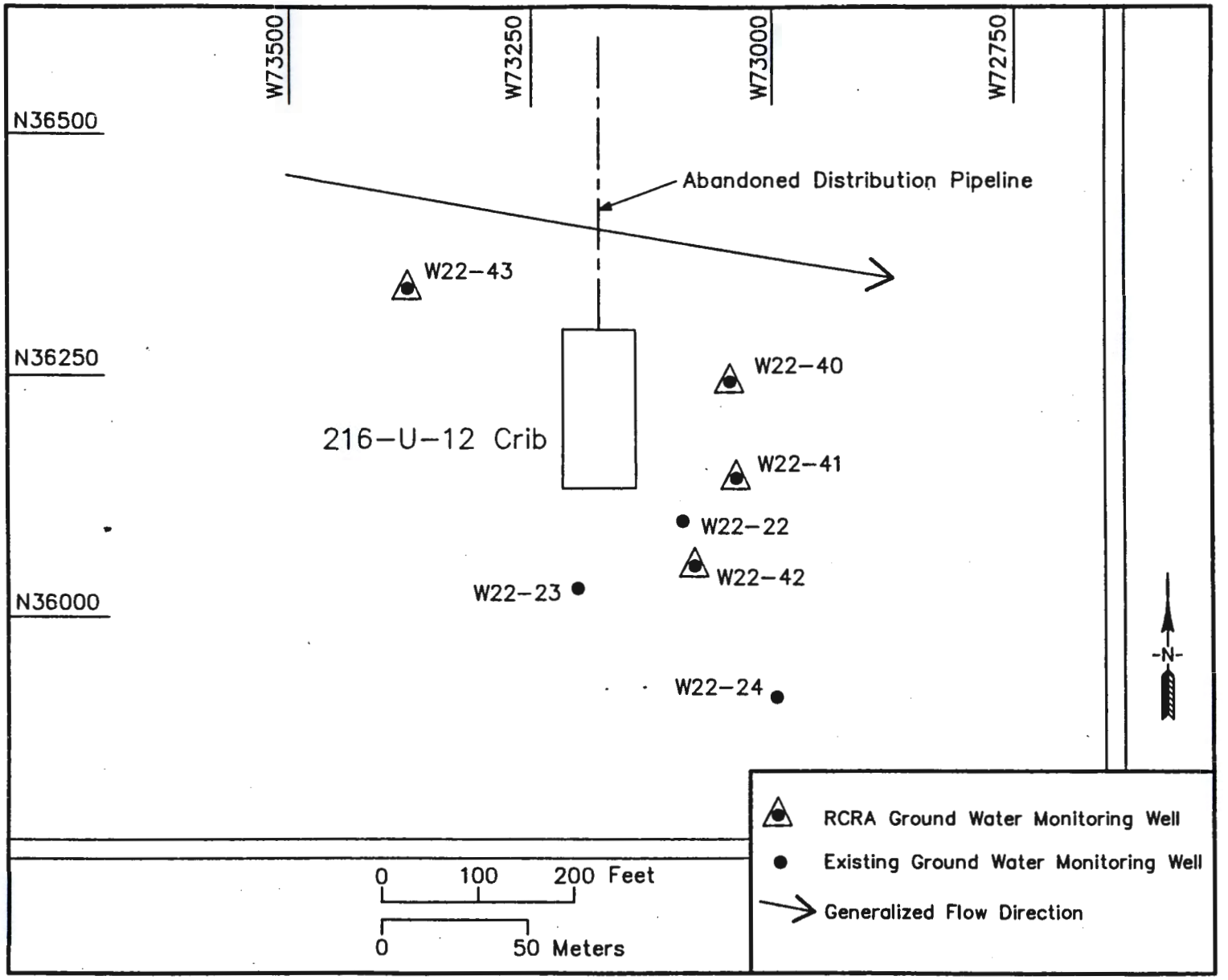

Table 11-1. Monitoring Well Purpose and Sampling Schedule for the 216-U-12 Crib.

Well no. (229-)	Relative position	Hydrogeologic unit	Sample frequency	Sample date, 1st Qtr 1995
W22-43	Upgradient	Ringold: Water Table	Quarterly	03/28/95
W22-40	Downgradient	Ringold: Water Table	Quarterly	03/30/95
W22-41	Downgradient	Ringold: Water Table	Quarterly	03/30/95
W22-42	Downgradient	Ringold: Water Table	Quarterly	03/28/95
699-36-70A	Downgradient	Ringold: Water Table	Quarterly	03/29/95
W22-23	Upgradient	Ringold: Water Table	Quarterly	03/28/95

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, First 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	3/16/95	238.96	453.27	138.16
	3/30/95	238.60	453.63*	138.27
299-W22-41	3/16/95	238.53	453.21	138.14
	3/30/95	238.14	453.60*	138.26
299-W22-42	3/16/95	238.98	452.44	137.90
	3/28/95	237.97	453.45*	138.21
299-W22-43	3/16/95	237.27	454.08	138.40
	3/28/95	237.26	454.09*	138.41
699-36-70A	1/03/95	257.75	447.68*	136.45
	3/16/95	258.67	446.76	136.17
	3/29/95	258.15	447.28*	136.33

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. Elevations marked with an '*' were measured at the time of sampling.
4. Elevations 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 January 1 through March 31, 1995. (sheet 1 of 3)

CONTAMINATION INDICATOR PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
CONDUCT	94	Conductivity, field	µmhos	1			24	23	
CONDUCT	73	Conductivity, lab	µmhos				2	2	
TOC		Total Organic Carbon	ppb	110			10	8	
TOX		Total Organic Halogen	ppb	5			17	17	
PH		pH, field	pH	.01	6.5-8.5	EPAS	24	24	3

DRINKING WATER PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
2,4,5TP		2,4,5-TP	ppb	.015	50	EPA	1	0	0
2,4-D		2,4-D	ppb	.052	100	EPAI	1	0	0
ARSENIC		Arsenic	ppb	2.8	50	EPA	1	0	0
FARSENIC		Arsenic, filtered	ppb	2.8	50	EPA	1	1	0
BARIUM		Barium	ppb	.59	1000	EPAI	1	1	0
FBARIUM		Barium, filtered	ppb	.59	1000	EPAI	1	1	0
CADMIUM		Cadmium	ppb	3.3	10	EPAI	1	0	0
FCADMIU		Cadmium, filtered	ppb	3.3	10	EPAI	1	0	0
CHROMUM		Chromium	ppb	4.5	50	EPAI	1	1	1
FCHROMI		Chromium, filtered	ppb	4.5	50	EPAI	1	1	0
ENDRIN		Endrin	ppb	.0011	.2	EPA	1	0	0
FLUORID		Fluoride	ppb	36	1400	EPAI	4	4	0
ALPHA		Gross alpha	pCi/L		15	EPA	1	1	0
MERCURY		Mercury	ppb	.05	2	EPA	1	0	0
FMERCUR		Mercury, filtered	ppb	.05	2	EPA	1	1	0
METHLOR		Methoxychlor	ppb	.016	100	EPAI	1	0	0
NITRATE		Nitrate	ppb	11	45000	EPA	4	4	2
RADIUM		Radium	pCi/L		5	EPAI	1	0	0
SELENUM		Selenium	ppb	.65	10	EPAI	1	1	0
FSELENI		Selenium, filtered	ppb	.65	10	EPAI	1	1	0
TOXAENE		Toxaphene	ppb	.85	5	EPAI	1	0	0
g-BHC		gamma-BHC (Lindane)	ppb	.0013	4	EPAI	1	0	0

GROUNDWATER QUALITY PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
CHLORID		Chloride	ppb	14	250000	EPAS	4	4	0
IRON		Iron	ppb	5.24	300	EPAS	1	1	1
FIRON		Iron, filtered	ppb	5.24	300	EPAS	1	1	0
MANGESE		Manganese	ppb	.72	50	EPAS	1	1	0
FMANGAN		Manganese, filtered	ppb	.72	50	EPAS	1	1	0
LPHENOL		Phenol	ppb	.31			1	0	
SODIUM		Sodium	ppb	61			1	1	
FSODIUM		Sodium, filtered	ppb	61			1	1	
SULFATE		Sulfate	ppb	37	250000	EPAS	4	4	0

Table 11-3. Constituent List and Summary of Results for the 216-U-12 Crib Data for Reporting Period January 1 through March 31, 1995. (sheet 2 of 3)

SITE SPECIFIC AND OTHER CONSTITUENTS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
2,4,5-T		2,4,5-T	ppb	.014			1	0	
246-trp		2,4,6-Trichlorophenol	ppb	1.3			1	0	
24-dchp		2,4-Dichlorophenol	ppb	1.3			1	0	
DIMPHEN		2,4-Dimethylphenol	ppb	1.2			1	0	
DINPHEN		2,4-Dinitrophenol	ppb	3			1	0	
26-dchp		2,6-Dichlorophenol	ppb	1.4			1	0	
CHLPHEN		2-Chlorophenol	ppb	1.6			1	0	
2NITPH		2-Nitrophenol	ppb	1.3			1	0	
BUTDINP	30	2-sec-Butyl-4,6-dinitrophenol(DN)	ppb	1.3			1	0	
BUTDINP	49	2-sec-Butyl-4,6-dinitrophenol(DN	ppb	.077			1	0	
DDD		4,4'-DDD	ppb	.0013			1	0	
DDE		4,4'-DDE	ppb	.0012			1	0	
DDT		4,4'-DDT	ppb	.0011			1	0	
46DN2MP		4,6-Dinitro-2-methylphenol	ppb	1.3			1	0	
CHLCRES		4-Chloro-3-methylphenol	ppb	1.3			1	0	
NITPHEN		4-Nitrophenol	ppb	3			1	0	
ALDRIN		Aldrin	ppb	.0026			1	0	
a-BHC		Alpha-BHC	ppb	.0011			1	0	
ALUMNUM		Aluminum	ppb	26			1	1	
FALUMIN		Aluminum, filtered	ppb	26			1	0	
ANTIONY		Antimony	ppb	62			1	0	
FANTIMO		Antimony, filtered	ppb	62			1	0	
BERYLUM		Beryllium	ppb	.17			1	0	
FBERYLL		Beryllium, filtered	ppb	.17			1	0	
b-BHC		Beta-BHC	ppb	.0014			1	0	
BROMIDE		Bromide	ppb	11			4	4	
CALCIUM		Calcium	ppb	34			1	1	
FCALCIU		Calcium, filtered	ppb	34			1	1	
CHLOANE		Chlordane	ppb	.022	2	EPA	1	0	0
COBALT		Cobalt	ppb	5.9			1	0	
FCOBALT		Cobalt, filtered	ppb	5.9			1	0	
COPPER		Copper	ppb	4.1	1000	EPAS	1	1	0
FCOPPER		Copper, filtered	ppb	4.1	1000	EPAS	1	0	0
CRESOLS		Cresols (methylphenols)	ppb	4.8			1	0	
d-BHC		Delta-BHC	ppb	.0017			1	0	
DIELRIN		Dieldrin	ppb	.0014			1	0	
ENDO1		Endosulfan I	ppb	.0013			1	0	
ENDO2		Endosulfan II	ppb	.0011			1	0	
ENDSFAN		Endosulfan sulfate	ppb	.0021			1	0	
ENDRALD		Endrin Aldehyde	ppb	.0017			1	0	
BETA		Gross beta	pCi/L				1	1	
HEPTLOR		Heptachlor	ppb	.0027	.4	EPA	1	0	0
HEPTIDE		Heptachlor epoxide	ppb	.0013	.2	EPA	1	0	0
I-129L		Iodine-129, Low level	pCi/L		1	EPA	1	1	1
LEAD		Lead	ppb	1.5	50	EPAI	1	1	0
FLEAD		Lead, filtered	ppb	1.5	50	EPAI	1	1	0
MAGNES		Magnesium	ppb	23			1	1	
FMAGNES		Magnesium, filtered	ppb	23			1	1	
NICKEL		Nickel	ppb	13			1	1	
FNICKEL		Nickel, filtered	ppb	13			1	0	
NITRITE		Nitrite	ppb	18	1000	EPA	4	2	0
PENTCHP		Pentachlorophenol	ppb	1.3	1	EPA	1	0	1*

Table 11-3. Constituent List and Summary of Results for the 216-U-12 Crib Data for Reporting Period January 1 through March 31, 1995. (sheet 3 of 3)

Constituent Name				Lab	DWS		Number of Samples		
Short	(Method)	Full	Units	MDL	Limit	Agency	Total	>MDL	>DWS
PHOSPHA		Phosphate	ppb	82			4	0	
POTASUM		Potassium	ppb	850			1	1	
FPOTASS		Potassium, filtered	ppb	850			1	1	
SILVER		Silver	ppb	3.6	50	EPAI	1	0	0
FSILVER		Silver, filtered	ppb	3.6	50	EPAI	1	0	0
SR-90		Strontium-90	pCi/L		8	EPA	1	0	0
TC-99		Technetium-99	pCi/L		900	EPA	1	1	0
TETPHNL		Tetrachlorophenols	ppb	1.5			1	0	
TIN		Tin	ppb	69			1	0	
FTIN		Tin, filtered	ppb	69			1	0	
TRIPHNL		Trichlorophenols	ppb	1.7			1	0	
TRITIUM		Tritium	pCi/L		20000	EPA	1	1	1
TURBID	111	Turbidity	NTU				5	5	
TURBID	126	Turbidity	NTU	.016			1	1	
U-234		Uranium-234	pCi/L				1	1	
U-235		Uranium-235	pCi/L				1	1	
U-238		Uranium-238	pCi/L				1	1	
VANADUM		Vanadium	ppb	6.6			1	1	
FVANADI		Vanadium, filtered	ppb	6.6			1	1	
ZINC		Zinc	ppb	6.3	5000	EPAS	1	1	0
FZINC		Zinc, filtered	ppb	6.3	5000	EPAS	1	1	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 January 1 through March 31, 1995. (sheet 1 of 3)

Well Name	Collection Date	Sample Number	ALUMNUM 34/ppb 26/.	FALUMIN 34/ppb 26/.	ARSENIC 43/ppb 2.8/50	FARSENIC 43/ppb 2.8/50
699-36-70A	1/03/95	B0DFW1	520.00		2.80 U	
699-36-70A	1/03/95	B0DFW5		26.00 U		3.90 L

Well Name	Collection Date	Sample Number	BARIUM 34/ppb .59/1000	FBARIUM 34/ppb .59/1000	BROMIDE 124/ppb 11/.	CALCIUM 34/ppb 34/.
299-W22-23	9/22/94	B0CZK8			56.00 L	
699-36-70A	10/21/94	B0CTJ3			25.00 LY	
699-36-70A	11/02/94	B0CTJ5			63.00 L	
699-36-70A	1/03/95	B0DFW1	100.00		60.00 L	66000.00 B
699-36-70A	1/03/95	B0DFW5		96.00		

Well Name	Collection Date	Sample Number	FCALCIU 34/ppb 34/.	CHLORID 124/ppb 14/250000	CHROMUM 34/ppb 4.5/50	FCHROMI 34/ppb 4.5/50
299-W22-23	9/22/94	B0CZK8		17000.00 D		
699-36-70A	10/21/94	B0CTJ3		24000.00 DY		
699-36-70A	11/02/94	B0CTJ5		11000.00 D		
699-36-70A	1/03/95	B0DFW1		23000.00 D	58.00 B	
699-36-70A	1/03/95	B0DFW5	64000.00 B			10.00 BL

Well Name	Collection Date	Sample Number	COPPER 34/ppb 4.1/1000	FCOPPER 34/ppb 4.1/1000	FLUORID 124/ppb 36/1400	ALPHA 135/pCi/L ./15
299-W22-23	9/22/94	B0CZK8			1000.00	
699-36-70A	10/21/94	B0CTJ3			500.00 Y	
699-36-70A	11/02/94	B0CTJ5			600.00	
699-36-70A	1/03/95	B0DFW1	7.40 L		600.00	4.45
699-36-70A	1/03/95	B0DFW5		4.10 U		

Well Name	Collection Date	Sample Number	BETA 136/pCi/L ./.	I-129 139/pCi/L ./1	IRON 34/ppb 5.24/300	FIRON 34/ppb 5.24/300
699-36-70A	1/03/95	B0DFW1	28.10	18.00	1400.00 BQ	
699-36-70A	1/03/95	B0DFW5				30.00 BQ

Well Name	Collection Date	Sample Number	LEAD 40/ppb 1.5/50	FLEAD 40/ppb 1.5/50	MAGNES 34/ppb 23/.	FMAGNES 34/ppb 23/.
699-36-70A	1/03/95	B0DFW1	4.10 L		24000.00	
699-36-70A	1/03/95	B0DFW5		2.20 L		23000.00

Table 11-4. Constituents with at Least One Detected Value for the 216-U-12 Crib Data for Reporting Period January 1 through March 31, 1995. (sheet 2 of 3)

Well Name	Collection Date	Sample Number	MANGESE 34/ppb .72/50	FMANGAN 34/ppb .72/50	MERCURY 41/ppb .05/2	FMERCUR 41/ppb .05/2
699-36-70A	1/03/95	B0DFW1	42.00		.05 U	
699-36-70A	1/03/95	B0DFW5		8.30 L		.16 L

Well Name	Collection Date	Sample Number	NICKEL 34/ppb 13/.	FNICKEL 34/ppb 13/.	NITRATE 124/ppb 11/45000	NITRITE 124/ppb 18/1000
299-W22-23	9/22/94	B0CZK8			1600.00	18.00 U
699-36-70A	10/21/94	B0CTJ3			62000.00 BDHY	600.00 HY
699-36-70A	11/02/94	B0CTJ5			15000.00 D	190.00 L
699-36-70A	1/03/95	B0DFW1	35.00		150000.00 D	18.00 U
699-36-70A	1/03/95	B0DFW5		13.00 U		

Well Name	Collection Date	Sample Number	POTASUM 34/ppb 850/.	FPOTASS 34/ppb 850/.	SELENUM 48/ppb .65/10	FSELENI 48/ppb .65/10
699-36-70A	1/03/95	B0DFW1	6600.00		4.80 L	
699-36-70A	1/03/95	B0DFW5		6400.00		6.10 L

Well Name	Collection Date	Sample Number	SODIUM 34/ppb 61/.	FSODIUM 34/ppb 61/.	SULFATE 124/ppb 37/250000	TC-99 143/pCi/L ./900
299-W22-23	9/22/94	B0CZK8			13000.00 D	
699-36-70A	10/21/94	B0CTJ3			25000.00 DY	
699-36-70A	11/02/94	B0CTJ5			23000.00 D	
699-36-70A	1/03/95	B0DFW1	23000.00 Q		36000.00 D	57.90
699-36-70A	1/03/95	B0DFW5		23000.00 Q		

Well Name	Collection Date	Sample Number	TRITIUM 142/pCi/L ./20000	TURBID 111/NTU ./.	TURBID 126/NTU .016/.	U-234 148/pCi/L ./.
299-W22-40	3/30/95	B0F646		.99		
299-W22-41	3/30/95	B0F653		.60		
299-W22-42	3/28/95	B0F644		.87		
299-W22-43	3/28/95	B0F648		.65		
699-36-70A	1/03/95	B0DFW1	388000.00		20.00	1.50
699-36-70A	3/29/95	B0F6C7		1.34		

Table 11-4. Constituents with at Least One Detected Value for the 216-U-12 Crib Data for Reporting Period January 1 through March 31, 1995. (sheet 3 of 3)

Well Name	Collection Date	Sample Number	U-235 148/pCi/L ./.	U-238 148/pCi/L ./.	VANADUM 34/ppb 6.6/.	FVANADI 34/ppb 6.6/.
699-36-70A	1/03/95	BODFW1	.06	1.10	20.00 L	
699-36-70A	1/03/95	BODFW5				19.00 L

Well Name	Collection Date	Sample Number	ZINC 34/ppb 6.3/5000	FZINC 34/ppb 6.3/5000
699-36-70A	1/03/95	BODFW1	33.00 B	
699-36-70A	1/03/95	BODFW5		23.00 B

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 January 1 through March 31, 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 110/.	TOX ppb 5/.
299-W22-22	8/01/94	B0C136	330	330	7.70		320 U	9.2
		B0C137	319		7.69		500 L	9.3
		B0C138	319		7.69		400 L	10.2
		B0C139	323		7.98		320 U	12.2
299-W22-40	3/30/95	B0F646	392		7.90			
		B0FBQ1						15.6
299-W22-41	3/30/95	B0F653	617		7.84			
		B0FBQ2						9.9
299-W22-42	3/28/95	B0F644	1400		7.62			
		B0FB69						7.3
299-W22-43	3/28/95	B0F648	383		7.80			
		B0F649	380		7.81			
		B0F650	377		7.82			
		B0F651	377		7.82			
		B0FB70						16.2
		B0FB71						15.2
		B0FB72						14.1
		B0FB73						16.3
699-36-70A	1/03/95	B0DFW1	644	690	7.12		400 L	
		B0DFW2	642		7.12		400 L	
		B0DFW3	640		7.12		500 L	
		B0DFW4	644		7.13		500 L	
	3/29/95	B0F6C7	640		7.61			
		B0F6C8	641		7.61			
		B0F6C9	641		7.61			
		B0F6D0	641		7.61			
		B0FB74						9.3
		B0FB75						11.3
		B0FB76						13.0
		B0FB77						11.8

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

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12.0 LIQUID EFFLUENT RETENTION FACILITY

M. D. Sweeney
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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 spent 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. 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 levels are measured quarterly and when groundwater samples are collected at each of the four wells in the network. Water level measurements obtained during the quarter are presented in Table 12-2.

12.3 WATER CHEMISTRY DATA

Chemistry data received before the cutoff date for this report are reported in Tables 9-3 through 9-5. A statistical evaluation has been completed for indicator parameters for the LERF. A pH exceedance was noted during sampling in well 299-E35-2. The pH measurements were obtained during sampling with field-grade instrumentation. It is possible that these readings are in error because they are not consistent with the historical trend or laboratory analysis. This well will be resampled and the verification

analysis will be performed by a laboratory to determine the validity of the data. An explanation of data flags can be found in Section 1.4.

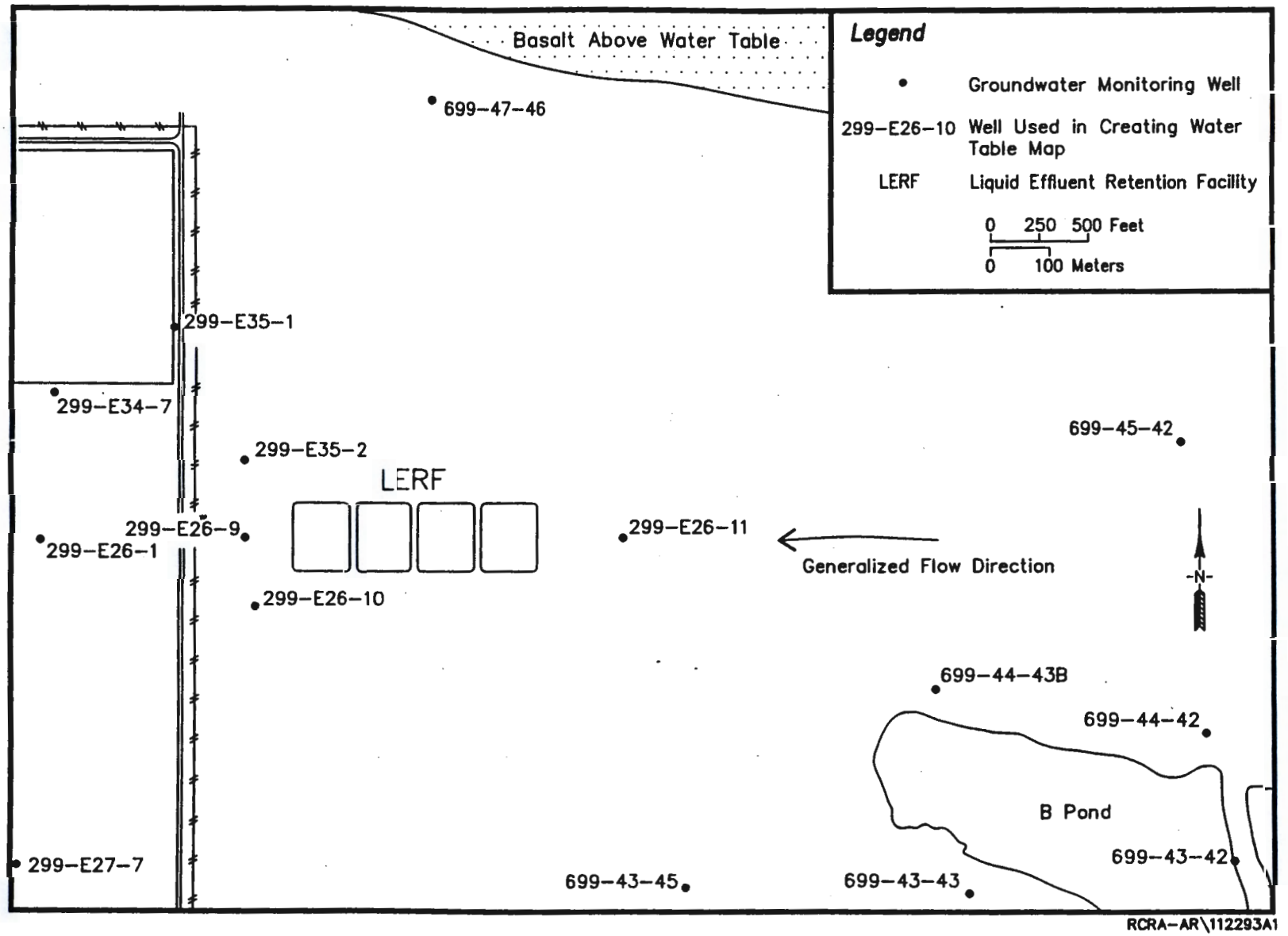

Figure 12-1. Well Location Map for the Liquid Effluent Retention Facility.

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, 1st Qtr 1995
E26-9	Downgradient	Hanford: Water Table	Semiannually	02/07/95
E26-10	Downgradient	Hanford: Water Table	Semiannually	01/24/95
E26-11	Upgradient	Hanford: Water Table	Semiannually	01/28/95
E35-2	Downgradient	Hanford: Water Table	Semiannually	01/31/95

Table 12-2. RCRA Water Level Measurement Report, Liquid Effluent Retention Facility, First Quarter 1995.

Well	Date	Depth to water (ft)	Water level elevation above msl (ft)	(m)
299-E26-10	1/24/95	199.71	401.76*	122.46
	3/09/95	199.68	401.79	122.47
299-E26-11	1/28/95	194.12	405.56*	123.61
	3/09/95	193.80	405.88	123.71
299-E26-9	2/07/95	201.19	401.70*	122.44
	3/09/95	200.93	401.96	122.52
299-E35-2	1/31/95	200.35	401.75*	122.45
	3/09/95	200.09	402.27	122.61

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. Elevations marked with an '*' were measured at the time of sampling.
4. Elevation marked with a '+' are outside of the expected range, and are supected of error.

Table 12-3. Constituent List and Summary of Results for the Liquid Effluent Retention Facility Data for Reporting Period January 1 through March 31, 1995. (sheet 1 of 2)

CONTAMINATION INDICATOR PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
CONDUCT	94	Conductivity, field	µmhos	1			20	20	
CONDUCT	73	Conductivity, lab	µmhos				3	3	
TOC		Total Organic Carbon	ppb	110			18	18	
TOX		Total Organic Halogen	ppb	5			20	14	
PH	93	pH, field	pH	.01	6.5-8.5	EPAS	20	20	4
PH	125	pH, lab	pH		6.5-8.5	EPAS	5	5	0

DRINKING WATER PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
FBARIUM		Barium, filtered	ppb	.59	1000	EPAI	4	4	0
FCADMIU		Cadmium, filtered	ppb	3.3	10	EPAI	4	0	0
FCHROMI		Chromium, filtered	ppb	4.5	50	EPAI	4	1	0
FLUORID		Fluoride	ppb	36	1400	EPAI	2	2	0
ALPHA		Gross alpha	pCi/L		15	EPA	2	2	0
NITRATE		Nitrate	ppb	11	45000	EPA	2	2	0

GROUNDWATER QUALITY PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
CHLORID		Chloride	ppb	14	250000	EPAS	2	2	0
FIRON		Iron, filtered	ppb	5.24	300	EPAS	4	3	0
FMANGAN		Manganese, filtered	ppb	.72	50	EPAS	4	4	0
LPHENOL		Phenol	ppb	.31			4	0	
FSODIUM		Sodium, filtered	ppb	61			4	4	
SULFATE		Sulfate	ppb	37	250000	EPAS	2	2	0

SITE SPECIFIC AND OTHER CONSTITUENTS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
1,1,1-T		1,1,1-Trichloroethane	ppb	.24	200	EPA	4	0	0
1,1,2-T		1,1,2-Trichloroethane	ppb	.21			4	0	
1,1-DIC		1,1-Dichloroethane	ppb	.17			4	0	
1,2-DIC		1,2-Dichloroethane	ppb	.14	5	EPA	4	0	0
12-DCE		1,2-Dichloroethene	ppb	.27			4	0	
14-dben		1,4-Dichlorobenzene	ppb	.14	75	EPA	4	0	0
1BUTYN		1-Butanol	ppb	160			4	0	
246-trp		2,4,6-Trichlorophenol	ppb	1.3			4	0	
24-dchp		2,4-Dichlorophenol	ppb	1.3			4	0	
DIMPHEN		2,4-Dimethylphenol	ppb	1.2			4	0	
DINPHEN		2,4-Dinitrophenol	ppb	3			4	0	
26-dchp		2,6-Dichlorophenol	ppb	1.4			4	0	
CHLPHEN		2-Chlorophenol	ppb	1.6			4	0	
2NITPH		2-Nitrophenol	ppb	1.3			4	0	

Table 12-3. Constituent List and Summary of Results for the Liquid Effluent Retention Facility Data for Reporting Period January 1 through March 31, 1995. (sheet 2 of 2)

Constituent Name Short	(Method) Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
BUTDINP	2-sec-Butyl-4,6-dinitrophenol(DN)	ppb	1.3			4	0	
46DN2MP	4,6-Dinitro-2-methylphenol	ppb	1.3			4	0	
CHLCRES	4-Chloro-3-methylphenol	ppb	1.3			4	0	
MIBK	4-Methyl-2-pentanone	ppb	.11			4	0	
NITPHEN	4-Nitrophenol	ppb	3			4	0	
ACETONE	Acetone	ppb	3.8			4	0	
ALKALIN	Alkalinity	ppm	2.8			4	4	
FALUMIN	Aluminum, filtered	ppb	26			4	1	
AMMONIU	Ammonium ion	ppb	37			4	0	
FANTIMO	Antimony, filtered	ppb	62			4	0	
BENZENE	Benzene	ppb	.13	5	EPA	4	0	0
FBERYLL	Beryllium, filtered	ppb	.17			4	0	
BROMIDE	Bromide	ppb	11			2	2	
FCALCIU	Calcium, filtered	ppb	34			4	4	
CARBIDE	Carbon disulfide	ppb	.31			4	0	
TETRANE	Carbon tetrachloride	ppb	.29	5	EPA	4	0	0
CHLFORM	Chloroform	ppb	.14			4	0	
FCOBALT	Cobalt, filtered	ppb	5.9			4	0	
FCOPPER	Copper, filtered	ppb	4.1	1000	EPAS	4	0	0
CRESOLS	Cresols (methylphenols)	ppb	4.8			4	0	
ETHCYAN	Ethyl cyanide	ppb	1.3			4	0	
BETA	Gross beta	pCi/L				2	2	
FMAGNES	Magnesium, filtered	ppb	23			4	4	
METHONE	Methyl ethyl ketone	ppb	2.5			4	0	
METHYCH	Methylene chloride	ppb	.17			4	0	
FNICKEL	Nickel, filtered	ppb	13			4	0	
NITRITE	Nitrite	ppb	18	1000	EPA	2	0	0
PENTCHP	Pentachlorophenol	ppb	1.3	1	EPA	4	0	4*
PHOSPHA	Phosphate	ppb	82			2	0	
FPOTASS	Potassium, filtered	ppb	850			4	4	
FSILVER	Silver, filtered	ppb	3.6	50	EPAI	4	1	0
PERCENE	Tetrachloroethene	ppb	.18	5	EPA	4	0	0
TETPHNL	Tetrachlorophenols	ppb	1.5			4	0	
TAF	Tetrahydrofuran	ppb	1.4			4	0	
FTIN	Tin, filtered	ppb	69			4	0	
TOLUENE	Toluene	ppb	.16	1000	EPA	4	0	0
TRICENE	Trichloroethene	ppb	.2	5	EPA	4	0	0
TRIPHNL	Trichlorophenols	ppb	1.7			4	0	
TURBID	Turbidity	NTU				3	3	
FVANADI	Vanadium, filtered	ppb	6.6			4	4	
VINYIDE	Vinyl chloride	ppb	.22	2	EPA	4	0	0
XYLENE	Xylenes (total)	ppb	.37	10000	EPA	4	0	0
FZINC	Zinc, filtered	ppb	6.3	5000	EPAS	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 January 1 through March 31, 1995. (sheet 1 of 2)

Well Name	Collection Date	Sample Number	ALKALIN 357/ppm 2.8/.	FALUMIN 34/ppb 26/.	FBARIUM 34/ppb .59/1000	BROMIDE 124/ppb 11/.
299-E26-10	1/24/95	BODP11	90.00			90.00 L
299-E26-10	1/24/95	BODP15		26.00 U	32.00	
299-E26-11	1/28/95	BODP21	90.00			
299-E26-11	1/28/95	BODP25		26.00 U	36.00	
299-E26-9	2/07/95	BODP26	100.00			
299-E26-9	2/07/95	BODP30		45.00 BL	43.00	
299-E35-2	1/31/95	BODP16	90.00			100.00 L
299-E35-2	1/31/95	BODP20		26.00 U	41.00	

Well Name	Collection Date	Sample Number	FCALCIU 34/ppb 34/.	CHLORID 124/ppb 14/250000	FCHROMI 34/ppb 4.5/50	FLUORID 124/ppb 36/1400
299-E26-10	1/24/95	BODP11		15000.00 D		600.00
299-E26-10	1/24/95	BODP15	40000.00		4.50 U	
299-E26-11	1/28/95	BODP25	34000.00		4.50 U	
299-E26-9	2/07/95	BODP30	43000.00		5.90 L	
299-E35-2	1/31/95	BODP16		17000.00 D		400.00
299-E35-2	1/31/95	BODP20	43000.00		4.50 U	

Well Name	Collection Date	Sample Number	ALPHA 135/pCi/L ./15	BETA 136/pCi/L ./.	FIRON 34/ppb 5.24/300	FMAGNES 34/ppb 23/.
299-E26-10	1/24/95	BODP11	2.14	5.86		
299-E26-10	1/24/95	BODP15			18.00 L	10000.00
299-E26-11	1/28/95	BODP25			17.00 L	12000.00
299-E26-9	2/07/95	BODP30			38.00 Q	12000.00
299-E35-2	1/31/95	BODP16	2.86	8.64		
299-E35-2	1/31/95	BODP20			5.24 U	12000.00

Well Name	Collection Date	Sample Number	FMANGAN 34/ppb .72/50	NITRATE 124/ppb 11/45000	FPOTASS 34/ppb 850/.	FSILVER 34/ppb 3.6/50
299-E26-10	1/24/95	BODP11		9800.00		
299-E26-10	1/24/95	BODP15	1.30 L		5000.00	3.60 U
299-E26-11	1/28/95	BODP25	1.10 L		5000.00	3.60 U
299-E26-9	2/07/95	BODP30	1.10 L		7100.00	3.60 U
299-E35-2	1/31/95	BODP16		8800.00		
299-E35-2	1/31/95	BODP20	.94 L		6700.00	6.90 BL

Well Name	Collection Date	Sample Number	FSODIUM 34/ppb 61/.	SULFATE 124/ppb 37/250000	TURBID 111/NTU ./.	FVANADI 34/ppb 6.6/.
299-E26-10	1/24/95	BODP11		70000.00 D	.93	
299-E26-10	1/24/95	BODP15	18000.00			17.00 L
299-E26-11	1/28/95	BODP25	20000.00 B			25.00 L

Table 12-4. Constituents with at Least One Detected Value for the Liquid Effluent Retention Facility Data for Reporting Period January 1 through March 31, 1995. (sheet 2 of 2)

Well Name	Collection Date	Sample Number	FSODIUM 34/ppb 61/.	SULFATE 124/ppb 37/250000	TURBID 111/NTU ./.	FVANADI 34/ppb 6.6/.
299-E26-9	2/07/95	B0DP26			.74	
299-E26-9	2/07/95	B0DP30	18000.00 BQ			18.00 L
299-E35-2	1/31/95	B0DP16		74000.00 D	.61	
299-E35-2	1/31/95	B0DP20	18000.00 B			19.00 L

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 January 1 through March 31, 1995.

Well Name	Collection Date	Sample Number	COND FIELD µmho 1/.	COND LAB µmho 1/.	pH FIELD .01/6.5-8.5s	pH LAB .01/6.5-8.5s	TOC ppb 110/.	TOX ppb 5/.
299-E26-10	1/24/95	B0DP11	402	400	8.06	8.20 H	300 L	5.0 U
		B0DP12	402		8.05		200 L	5.3
		B0DP13	402		8.05		300 L	11.0
		B0DP14	402		8.06		200 L	5.0 U
299-E26-11	1/28/95	B0DP21	380		8.18	8.20 H	200 L	5.0 U
		B0DP22	379		8.17		300 L	5.4
		B0DP23	378		8.17		200 L	5.0 U
		B0DP24	378		8.17		200 L	6.1
299-E26-9	8/28/94	B0C7G5	438	410	8.19	8.20 H		9.1
		B0C7G6	434		8.18			5.6
		B0C7G7	433		8.19		500 L	6.3
		B0C7G8	433		8.20		400 L	7.7
	2/07/95	B0DP26	403		8.18	8.10 H	400 L	5.1
		B0DP27	407		8.17		500 L	13.9
		B0DP28	413		8.10		400 L	11.4
		B0DP29	416		8.09		500 L	8.6
299-E35-2	1/31/95	B0DP16	434	420	5.55 F	8.20 H	200 L	8.2
		B0DP17	435		5.54 F		400 L	6.1
		B0DP18	435		5.53 F		200 L	5.0 U
		B0DP19	435		5.52 F		300 L	5.0 U

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

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13.0 2101-M POND

E. C. Thornton
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13.1 INTRODUCTION

The 2101-M Pond is a U-shaped, unlined trench located in the 200 East Area. It has received wastewater from the 2101-M Building heating and air conditioning system since 1953. In 1981, Basalt Waste Isolation Project laboratories were plumbed into the discharge line from the 2101-M Building to the 2101-M Pond. From 1981 until mid-1985, these laboratories may have discharged dangerous waste into the 2101-M Pond. The most important chemicals used in the 2101-M laboratories were barium chloride and hydrochloric and nitric acids; they are assumed to have been disposed of in laboratory drains connected to the 2101-M Pond.

The groundwater monitoring network for the 2101-M Pond consists of one upgradient (299-E18-1) and three downgradient (299-E18-2, 299-E18-3, and 299-E18-4) wells installed in the uppermost portion of the unconfined aquifer (Figure 13-1). Well 299-E18-1 is also used as a background monitoring well for the 216-B-3 Pond System.

Groundwater sampling began in August 1988 for the 2101-M Pond and was conducted quarterly until August 1989 to establish background values. Semiannual indicator parameter evaluation monitoring was initiated in November 1989 under RCRA interim-status regulations and is ongoing (Chamness et al. 1989). Groundwater analyses have indicated that the site contains no contamination. Table 13-1 provides information on the relative position of each well in the network, the hydrogeologic unit monitored, the sampling frequency, and the latest sampling date.

The 2101-M Pond will be clean-closed by the end of the year. The wells at this facility are scheduled to be sampled again in June 1995. It is anticipated that no further groundwater monitoring activities will be conducted at this location after clean-closure is certified, except for sampling of well 299-E18-1 in support of the 216-B-3 Pond System.

13.2 WATER LEVEL DATA

Water level measurements were performed in March 1995 for all four wells. These data are presented in Table 13-2. These measurements include routine measurements plus a measurement performed for well 299-E18-1 at the time of sampling. Water levels have been corrected for vertical deviations for each well based on inclinometer measurements.

13.3 WATER CHEMISTRY DATA

Semiannual groundwater sampling was not scheduled for the first quarter of 1995 at 2101-M Pond. Semiannual samples were most recently collected on

December 1, 1994, for the four wells at the facility; these data were presented in the quarterly report for the last quarter of 1994. In addition, however, well 299-E18-1 was sampled on March 16, 1995; this was required because this well is also designated as an upgradient monitoring well for the 216-B-3 Pond System and is currently being sampled quarterly as part of the assessment monitoring program for that unit. All available and previously unreported water chemistry data received by May 22, 1995, are reported in Tables 13-3 through 13-5. Data are flagged in Tables 13-4 and 13-5 according to the explanation provided in Sections 1.2 and 1.4. Reported constituent concentration values were all below the DWSs, except for pentachlorophenol, which has an MDL that exceeds the DWS.

Figure 13-1. Well Location Map for the 2101-M Pond.

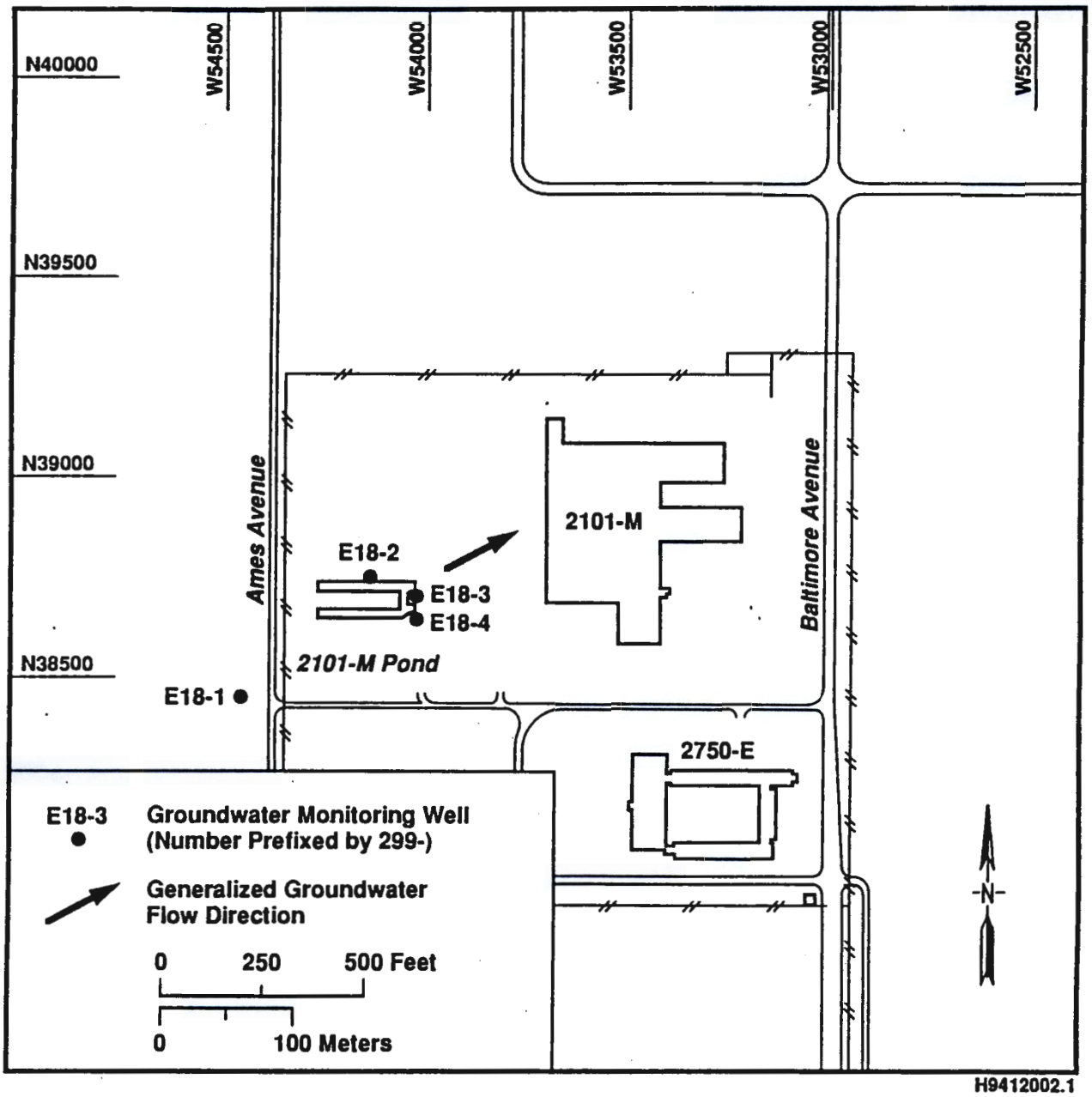

Table 13-1. Monitoring Well Purpose and Sampling Schedule for the 2101-M Pond.

Well no. (299-)	Relative position	Hydrogeologic unit[a]	Sample frequency	Sample date, 1st Qtr 1995
E18-1	Upgradient	Hanford/Ringold: Water Table	Quarterly[b]	03/16/95
E18-2	Downgradient	Hanford/Ringold: Water Table	Semiannually	Not sampled
E18-3	Downgradient	Hanford/Ringold: Water Table	Semiannually	Not sampled
E18-4	Downgradient	Hanford/Ringold: Water Table	Semiannually	Not sampled

[a]The hydrogeologic unit monitored at this site is a muddy, sandy gravel to a slightly muddy, gravelly sand over the screened interval from approximately 92 to 101 m (302 to 331 ft) below top of casing. This interval is interpreted to be near the base of the Hanford formation and the top of the Ringold Formation.

[b]Well 299-E18-1 is sampled on a quarterly basis because it is also designated as an upgradient well for the 216-B-3 Pond System.

Table 13-2. RCRA Water Level Measurement Report
2101-M Pond, First Quarter 1995.

Well	Date	Depth to water (ft)	Water level elevation above msl (ft)	(m)
299-E18-1	3/16/95	319.40	400.90*	122.19
	3/16/95	318.98	401.32	122.32
299-E18-2	3/16/95	320.23	401.20	122.29
299-E18-3	3/16/95	320.80	401.27	122.31
299-E18-4	3/16/95	320.27	401.30	122.32

NOTES:
1. Water level elevations are calculated by subtracting the measured depth-to-water from the surveyed elevation for the well. Vertical deviation correction factors based on inclinometer measurements are: +0.06 ft (+0.018 m) for 299-E18-1, +0.22 ft (+0.067 m) for 299-E18-2, +0.03 ft (+0.009 m) for 299-E18-3, and +0.0 ft (+0.0 m) for 299-E18-4 (Chamness et al. 1990).
2. Depth-to-water values are transcribed from field records.
3. Elevations marked with an '*' were measured at the time of sampling.
4. Elevation marked with a '+' are outside of the expected range, and are supected of error.

Table 13-3. Constituent List and Summary of Results for the 2101-M Pond Data for Reporting Period January 1 through March 31, 1995. (sheet 1 of 2)

CONTAMINATION INDICATOR PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
CONDUCT	94	Conductivity, field	µmhos	1			5	5	
CONDUCT	73	Conductivity, lab	µmhos				1	1	
TOC		Total Organic Carbon	ppb	110			4	1	
TOX		Total Organic Halogen	ppb	5			4	0	
PH	93	pH, field	pH	.01	6.5-8.5	EPAS	5	5	0
PH	125	pH, lab	pH		6.5-8.5	EPAS	1	1	0

DRINKING WATER PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
FBARIUM		Barium, filtered	ppb	.59	1000	EPAI	1	1	0
FCADMIU		Cadmium, filtered	ppb	3.3	10	EPAI	1	0	0
FCHROMI		Chromium, filtered	ppb	4.5	50	EPAI	1	1	0
FLUORID		Fluoride	ppb	36	1400	EPAI	1	1	0
ALPHA		Gross alpha	pCi/L		15	EPA	1	1	0
NITRATE		Nitrate	ppb	11	45000	EPA	1	1	0

GROUNDWATER QUALITY PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
CHLORID		Chloride	ppb	14	250000	EPAS	1	1	0
FIRON		Iron, filtered	ppb	5.24	300	EPAS	1	1	0
FMANGAN		Manganese, filtered	ppb	.72	50	EPAS	1	1	0
LPHENOL		Phenol	ppb	.54			1	0	
FSODIUM		Sodium, filtered	ppb	61			1	1	
SULFATE		Sulfate	ppb	37	250000	EPAS	1	1	0

SITE SPECIFIC AND OTHER CONSTITUENTS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
24-dchp		2,4-Dichlorophenol	ppb	4			1	0	
2METHPH		2-Methylphenol	ppb	5.1			1	0	
2NITPH		2-Nitrophenol	ppb	1.9			1	0	
4METHPH		4-Methylphenol	ppb	7			1	0	
ALKALIN		Alkalinity	ppm	2.8			1	1	
FALUMIN		Aluminum, filtered	ppb	26			1	0	
FANTIMO		Antimony, filtered	ppb	62			1	0	
BENZOTH		Benzothiazole	ppb	1.3			1	0	
FBERYLL		Beryllium, filtered	ppb	.17			1	0	
BIS2EPH		Bis(2-ethylhexyl) phthalate	ppb	5.3			1	0	
BROMIDE		Bromide	ppb	11			1	1	
FCALCIU		Calcium, filtered	ppb	34			1	1	
FCOBALT		Cobalt, filtered	ppb	5.9			1	0	
FCOPPER		Copper, filtered	ppb	4.1	1000	EPAS	1	0	0
DECANE		Decane	ppb	1.9			1	0	

Table 13-3. Constituent List and Summary of Results for the 2101-M Pond Data for Reporting Period January 1 through March 31, 1995. (sheet 2 of 2)

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
DODECAN		Dodecane	ppb	1.1			1	0	
BETA		Gross beta	pCi/L				1	1	
FMAGNES		Magnesium, filtered	ppb	23			1	1	
NAPHTHA		Naphthalene	ppb	1.2			1	0	
FNICKEL		Nickel, filtered	ppb	13			1	0	
NITRITE		Nitrite	ppb	18	1000	EPA	1	0	0
PENTCHP		Pentachlorophenol	ppb	8.3	1	EPA	1	0	1*
PHOSPHA		Phosphate	ppb	82			1	0	
FPOTASS		Potassium, filtered	ppb	850			1	1	
FSILVER		Silver, filtered	ppb	3.6	50	EPAI	1	0	0
TETRADE		Tetradecane	ppb	1.6			1	0	
FTIN		Tin, filtered	ppb	69			1	0	
TRIBUTPH		Tributyl Phosphate	ppb	1.1			1	0	
TDICHPH		Tris-2-chloroethyl phosphate	ppb	.61			1	0	
TURBID	111	Turbidity	NTU				1	1	
TURBID	126	Turbidity	NTU	.016			1	1	
FVANADI		Vanadium, filtered	ppb	6.6			1	1	
FZINC		Zinc, filtered	ppb	6.3	5000	EPAS	1	0	0
MCRESOL		m-Cresol	ppb	2.2			1	0	

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

Table 13-4. Constituents with at Least One Detected Value for the 2101-M Pond Data for Reporting Period January 1 through March 31, 1995.

Well Name	Collection Date	Sample Number	ALKALIN 357/ppm 2.8/.	FBARIUM 34/ppb .59/1000	BROMIDE 124/ppb 11/.	FCALCIU 34/ppb 34/.
299-E18-1	3/16/95	B0DWJ4	100.00		80.00 L	
299-E18-1	3/16/95	B0DWJ8		28.00		53000.00

Well Name	Collection Date	Sample Number	CHLORID 124/ppb 14/250000	FCHROMI 34/ppb 4.5/50	FLUORID 124/ppb 36/1400	ALPHA 135/pCi/L ./15
299-E18-1	3/16/95	B0DWJ4	8000.00		800.00	2.45
299-E18-1	3/16/95	B0DWJ8		7.90 L		

Well Name	Collection Date	Sample Number	BETA 136/pCi/L ./.	FIRON 34/ppb 5.24/300	FMAGNES 34/ppb 23/.	FMANGAN 34/ppb .72/50
299-E18-1	3/16/95	B0DWJ4	4.87			
299-E18-1	3/16/95	B0DWJ8		24.00	13000.00	1.50 L

Well Name	Collection Date	Sample Number	NITRATE 124/ppb 11/45000	FPOTASS 34/ppb 850/.	FSODIUM 34/ppb 61/.	SULFATE 124/ppb 37/250000
299-E18-1	3/16/95	B0DWJ4	14000.00 D			110000.00 D
299-E18-1	3/16/95	B0DWJ8		5700.00	26000.00 B	

Well Name	Collection Date	Sample Number	TURBID 111/NTU ./.	TURBID 126/NTU .016/.	FVANADI 34/ppb 6.6/.
299-E18-1	3/16/95	B0DWJ4	1.62	2.00	
299-E18-1	3/16/95	B0DWJ8			12.00 L

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

Table 13-5. Contamination Indicator Parameters for the 2101-M Pond Data for Reporting Period January 1 through March 31, 1995.

Well Name	Collection Date	Sample Number	COND FIELD µmho 1/.	COND LAB µmho 1/.	pH FIELD .01/6.5-8.5s	pH LAB .01/6.5-8.5s	TOC ppb 110/.	TOX ppb 5/.
299-E18-1	3/16/95	B0DWJ4	494	500	8.19	8.10 H	110 U	5.0 U
		B0DWJ5	495		8.19		200 L	5.0 U
		B0DWJ6	495		8.19		110 U	5.0 U
		B0DWJ7	495		8.19		110 U	5.0 U
299-E18-4	6/03/94	B0C012	249		8.17			

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

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14.0 LOW-LEVEL BURIAL GROUNDS

R. B. Mercer
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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). A description of the waste contained in each burial ground is provided in Table 14-1.

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. Background values have been re-established for LLWMA 3 because recently installed upgradient wells significantly changed the monitoring network. Quarterly sampling for CIPs at LLWMA 3 upgradient wells has been discontinued.

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.

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

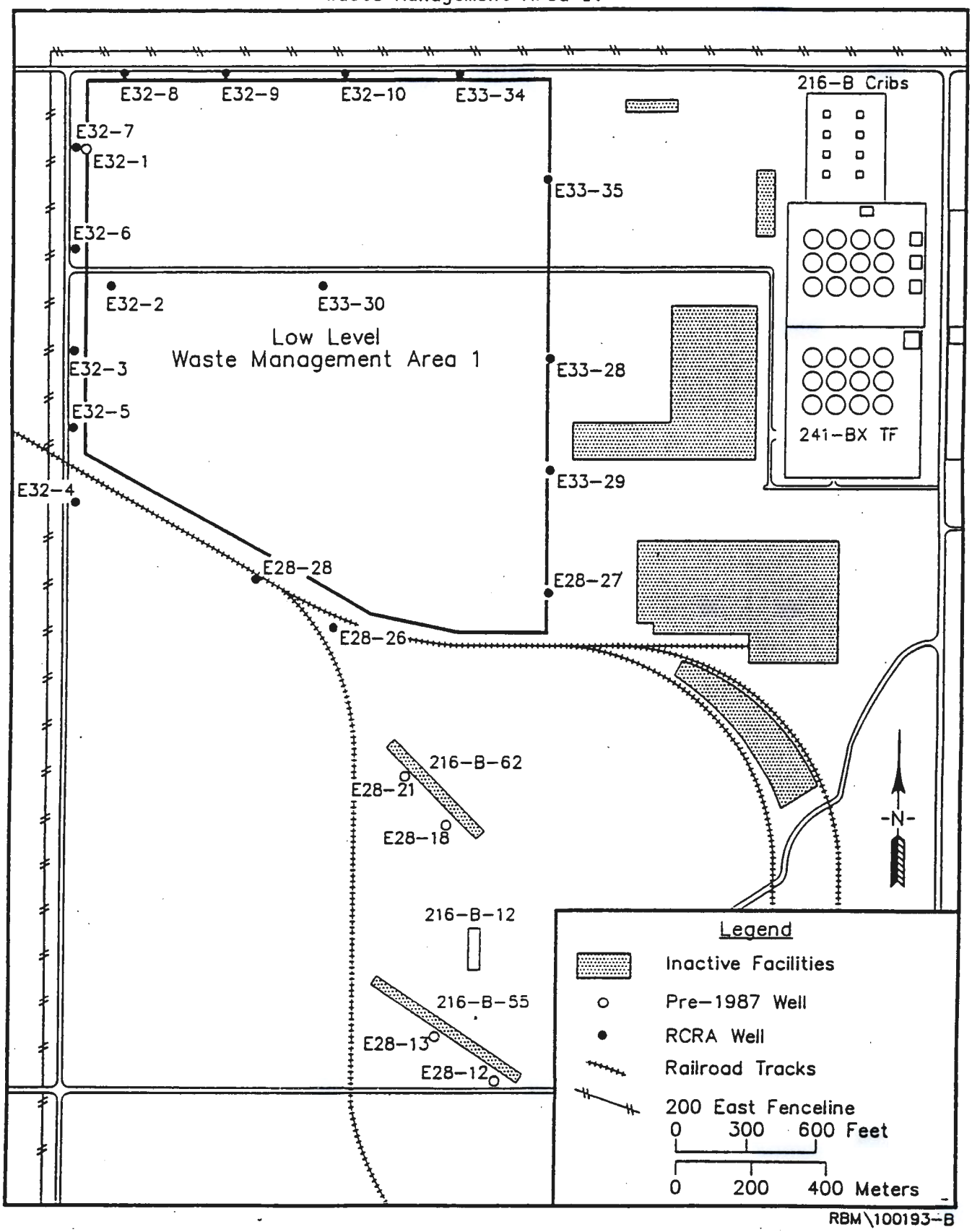
Groundwater samples were collected from all scheduled wells except 299-W7-6. Samples were not collected because of pump problems; samples were collected in April but the analysis results are not available for inclusion in this report. Additional samples were collected at well 299-E32-4 (LLWMA 1) for another project. 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 14-24. These tables also contain any previously unreported data and data that are being re-reported because of changes in the data qualifier flags.

Additional 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. Results for these analyses are reported in the data tables in this section.

Statistical comparisons were done for LLWMA 3 after re-establishing background conditions. Indicator parameters 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 14-25 through 14-29 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.



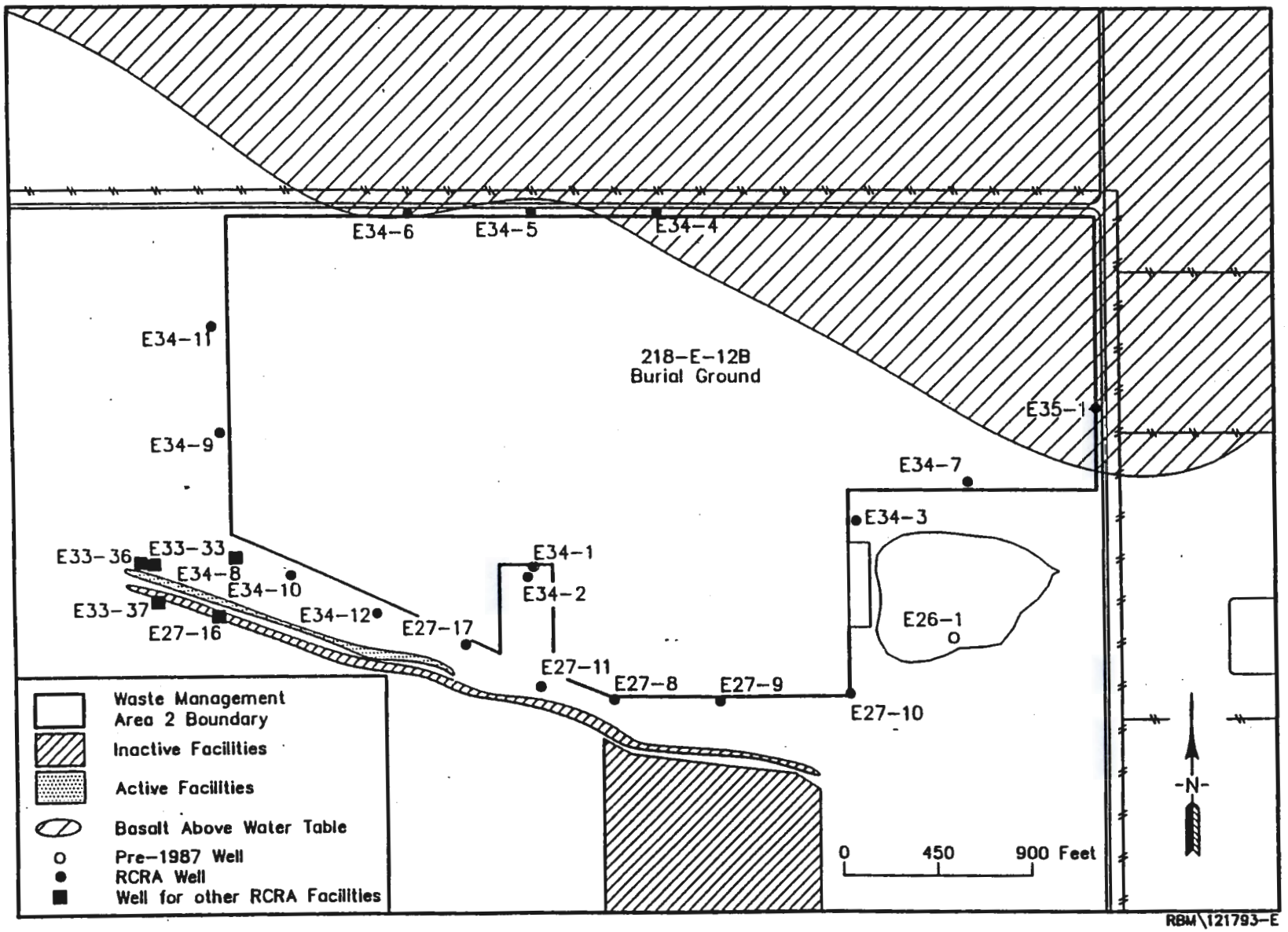


Figure 14-2. Well Location Map for Low-Level Waste Management Area 2.

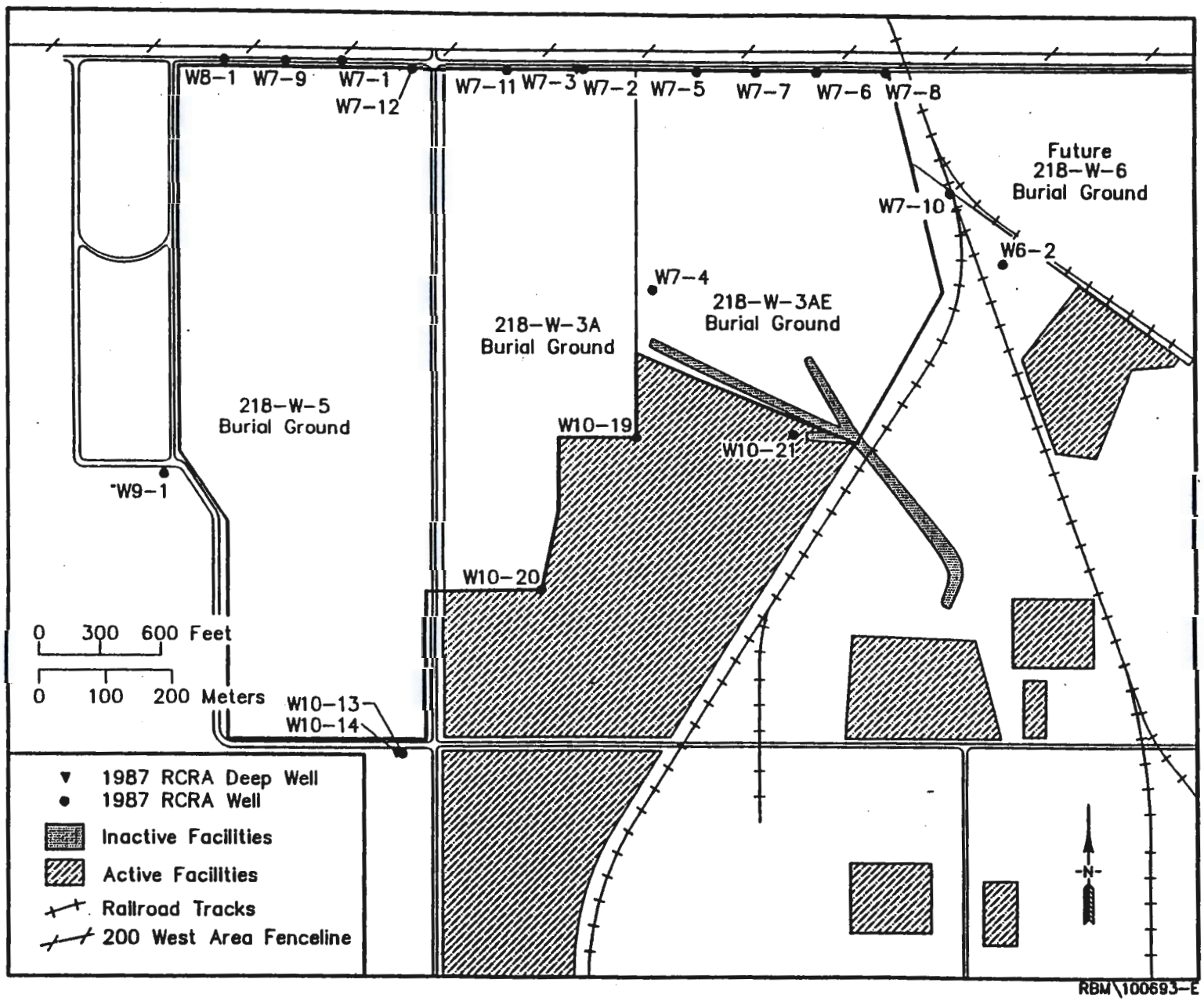


Figure 14-3. Well Location Map for Low-Level Waste Management Area 3.

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

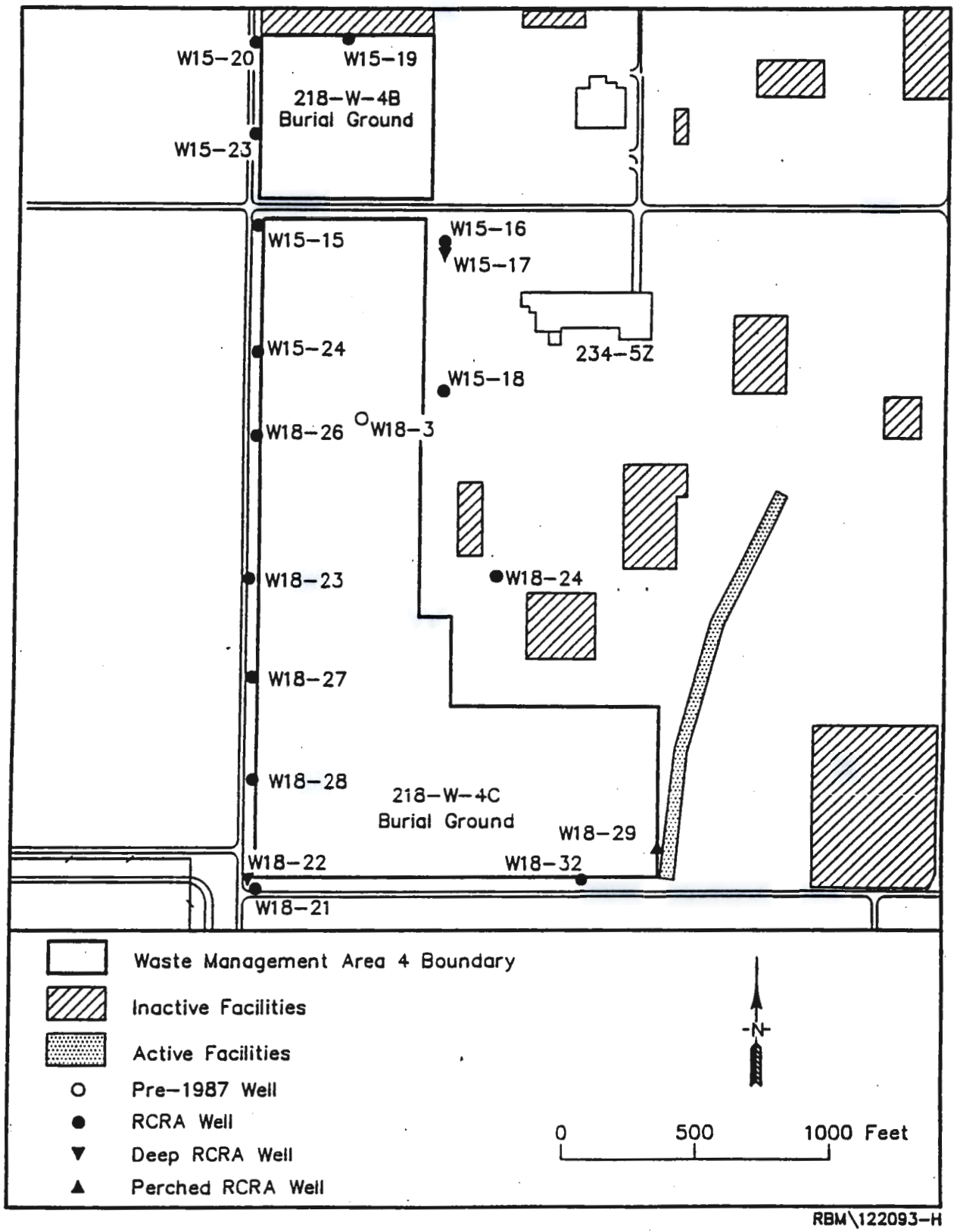


Figure 14-5. Well Location Map for Low-Level Waste Management Area 5.

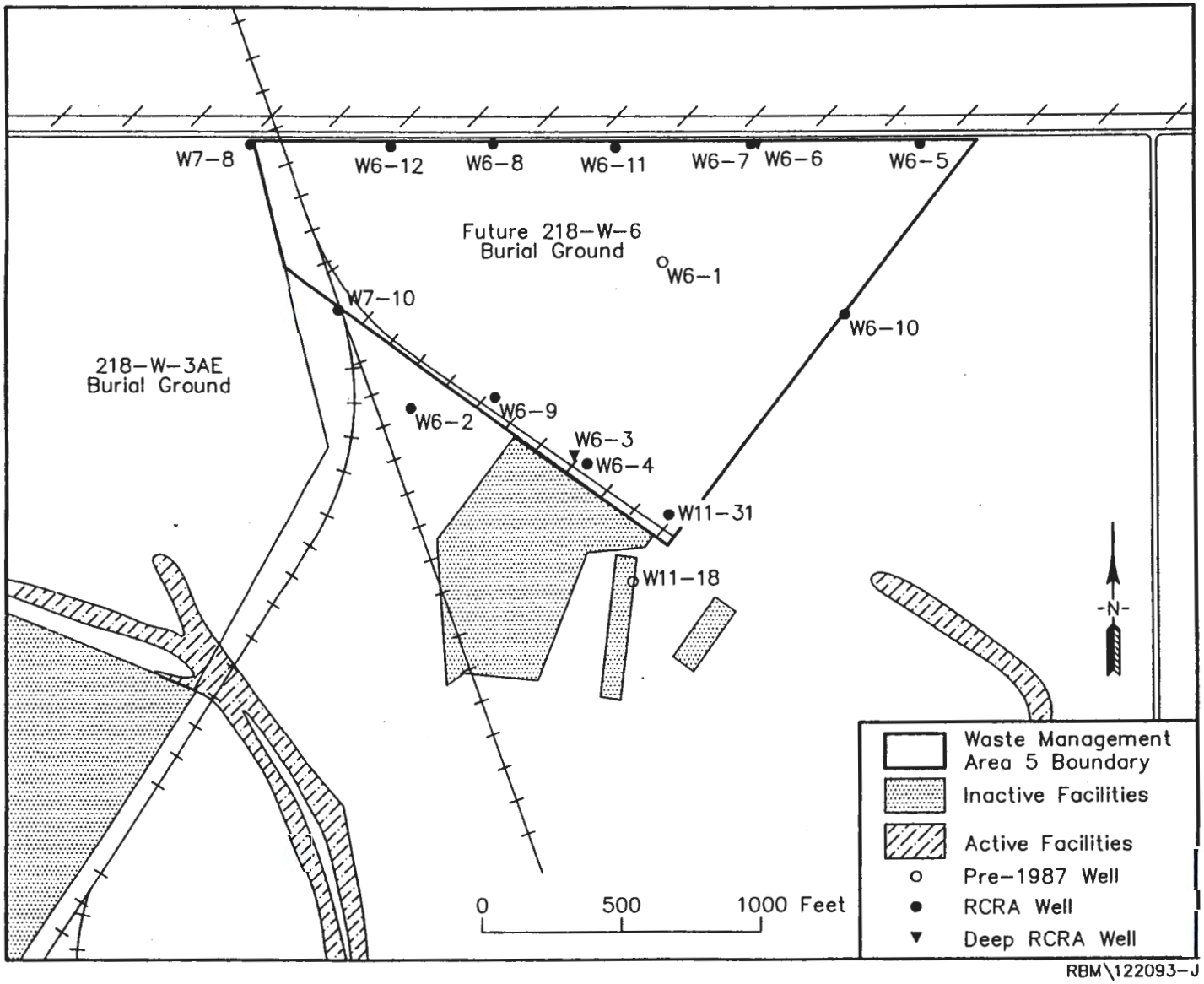


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Table 14-1. Low-Level Burial Grounds.

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: 1st 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	01/06/95 *
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: 1st 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: 1st Qtr 1995
W6-2[87m]	Downgradient	Ringold: Water Table	Semiannually	03/13/95
W7-1[87]	Downgradient	Ringold: Water Table	Semiannually	03/13/95
W7-2[87]	Downgradient	Ringold: Water Table	Semiannually	03/13/95
W7-3[87]	Downgradient	Ringold: Deep	Semiannually	03/13/95
W7-4[87]	Downgradient	Ringold: Water Table	Semiannually	03/14/95
W7-5[87]	Downgradient	Ringold: Water Table	Semiannually	03/14/95
W7-6[87]	Downgradient	Ringold: Water Table	Semiannually	NS
W7-7[89]	Downgradient	Ringold: Water Table	Semiannually	03/14/95
W7-8[89]	Downgradient	Ringold: Water Table	Semiannually	03/14/95
W7-9[90]	Downgradient	Ringold: Water Table	Semiannually	03/14/95
W7-10[90m]	Downgradient	Ringold: Water Table	Semiannually	03/03/95
W7-11[91]	Downgradient	Ringold: Water Table	Semiannually	03/13/95
W7-12[91]	Downgradient	Ringold: Water Table	Semiannually	03/13/95
W8-1[87]	Downgradient	Ringold: Water Table	Semiannually	03/14/95
W9-1[87]	Upgradient	Ringold: Water Table	Semiannually	03/10/95
W10-13[87]	Upgradient	Ringold: Water Table	Semiannually	03/10/95
W10-14[87]	Upgradient	Ringold: Deep	Semiannually	03/10/95
W10-19[92]	Upgradient	Ringold: Water Table	Semiannually	03/09/95
W10-20[93]	Upgradient	Ringold: Water Table	Semiannually	03/09/95
W10-21[93]	Upgradient	Ringold: Water Table	Semiannually	03/09/95

Notes: NS - Not sampled because of pump problems. Re-scheduled for April.
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: 1st 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: 1st Qtr 1995
W6-2[87m]	Upgradient	Ringold: Water Table	Semiannually	03/13/95
W6-3[91]	Upgradient	Ringold: Deep	Semiannually	03/02/95
W6-4[91]	Upgradient	Ringold: Water Table	Semiannually	03/04/95 03/08/95
W6-5[91]	Downgradient	Ringold: Water Table	Semiannually	03/08/95
W6-6[91]	Downgradient	Ringold: Deep	Semiannually	03/09/95
W6-7[91]	Downgradient	Ringold: Water Table	Semiannually	03/08/95
W6-8[91]	Downgradient	Ringold: Water Table	Semiannually	03/08/95
W6-9[92]	Upgradient	Ringold: Water Table	Semiannually	03/02/95 03/08/95
W6-10[92]	Upgradient	Ringold: Water Table	Semiannually	03/03/95 03/08/95
W6-11[92]	Downgradient	Ringold: Water Table	Semiannually	03/08/95
W6-12[92]	Downgradient	Ringold: Water Table	Semiannually	03/09/95
W7-10[90m]	Upgradient	Ringold: Water Table	Semiannually	03/03/95
W11-31[92]	Upgradient	Ringold: Water Table	Semiannually	03/08/95

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, First Quarter 1995.

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	3/13/95	286.16	401.10	122.26
299-E28-27	3/13/95	279.28	401.30	122.32
299-E28-28	3/13/95	285.60	400.95	122.21
299-E32-10	3/13/95	236.70	401.18	122.28
299-E32-2	3/13/95	269.16	400.90	122.19
299-E32-3	3/13/95	275.68	400.83	122.17
299-E32-4	1/06/95	284.96	400.92*	122.20
	3/13/95	285.87	400.01+	121.92
299-E32-5	3/13/95	281.18	400.96	122.21
299-E32-6	3/13/95	266.22	401.23	122.29
299-E32-7	3/13/95	257.20	401.17	122.28
299-E32-8	3/13/95	244.46	401.08	122.25
299-E32-9	3/13/95	242.13	401.20	122.29
299-E33-28	3/13/95	263.13	401.10	122.26
299-E33-29	3/13/95	272.67	401.10	122.26
299-E33-30	3/13/95	262.65	401.05	122.24
299-E33-34	3/13/95	232.34	401.23	122.29
299-E33-35	3/13/95	242.28	400.73	122.14

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. Elevations marked with an '*' were measured at the time of sampling.
4. Elevations marked with a '+' are outside of the expected range, and are suspected of error.

Table 14-8. RCRA Water Level Measurement Report, LLWMA 2, First 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	3/13/95	223.03	401.44	122.36
299-E27-11	3/13/95	242.23	401.06	122.24
299-E27-17	3/13/95	233.30	401.42	122.35
299-E27-8	3/13/95	236.66	401.17	122.28
299-E27-9	3/13/95	227.93	401.28	122.31
299-E34-10	3/13/95	238.32	401.45	122.36
299-E34-11	3/13/95	216.55	401.40	122.35
299-E34-12	3/13/95	237.65	401.18	122.28
299-E34-2	3/13/95	229.55	401.25	122.30
299-E34-3	3/13/95	210.06	401.46	122.37
299-E34-5	3/13/95	188.37	402.42	122.66
299-E34-7	3/13/95	202.88	401.37	122.34
299-E34-9	3/13/95	227.38	401.31	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. Elevations marked with an '*' were measured at the time of sampling.
4. Elevations marked with a '+' are outside of the expected range, and are suspected of error.

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

Well	Date	Depth to water (ft)	Water level elevation above msl (ft)	(m)
LLWMA 3 Wells Monitoring the Top of the Unconfined Aquifer				
299-W10-13	3/10/95	238.45	460.59*	140.39
	3/14/95	238.57	460.47	140.35
299-W10-19	3/09/95	223.57	459.42*	140.03
	3/14/95	223.91	459.08	139.93
299-W6-2	3/13/95	236.43	456.02*	138.99
	3/14/95	236.10	456.35	139.10
299-W7-1	3/13/95	233.84	456.87*	139.25
	3/14/95	233.77	456.94	139.28
299-W7-10	3/03/95	233.95	455.71*	138.90
	3/14/95	234.14	455.52	138.84
299-W7-11	3/13/95	224.87	456.58*	139.17
	3/14/95	224.64	456.81	139.24
299-W7-12	3/13/95	231.04	456.89*	139.26
	3/14/95	231.02	456.91	139.27
299-W7-2	3/13/95	219.91	455.68*	138.89
	3/14/95	219.74	455.85	138.94
299-W7-4	3/14/95	214.16	457.76*	139.53
	3/14/95	214.12	457.80	139.54
299-W7-5	3/14/95	217.73	455.32*	138.78
	3/14/95	217.72	455.33	138.78
299-W7-6	3/14/95	223.37	455.27	138.77
299-W7-7	3/14/95	219.48	455.46	138.82
	3/14/95	219.47	455.47*	138.83
299-W7-8	3/14/95	233.22	454.13*	138.42
299-W7-9	3/14/95	234.67	457.42*	139.42
	3/14/95	234.63	457.46	139.43

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

Well	Date	Depth to water (ft)	Water level elevation above msl (ft)	(m)
LLWMA 3 Wells Monitoring the Top of the Unconfined Aquifer				
299-W8-1	3/14/95	244.30	457.03*	139.30
	3/14/95	243.92	457.41	139.42
299-W9-1	3/10/95	277.92	459.81*	140.15
	3/14/95	278.87	458.86+	139.86
299-W10-20	3/09/95	227.40	460.14*	140.25
	3/14/95	227.87	459.67	140.11
299-W10-21	3/09/95	215.78	458.28*	139.68
	3/14/95	216.12	457.94	139.58
LLWMA 3 Wells Monitoring the Bottom of the Unconfined Aquifer				
299-W10-14	3/10/95	239.90	459.53*	140.06
	3/14/95	239.42	460.01	140.21
299-W7-3	3/13/95	221.52	454.62*	138.57
	3/14/95	221.17	454.97	138.67

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. Elevations marked with an '*' were measured at the time of sampling.
4. Elevations marked with a '+' are outside of the expected range, and are suspected of error.

Table 14-10. RCRA Water Level Measurement Report, LLWMA 4, First Quarter 1995.

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	3/14/95	236.65	461.31	140.61
299-W15-16	3/14/95	223.83	461.06	140.53
299-W15-18	3/14/95	224.76	460.95+	140.50
299-W15-19	3/14/95	230.23	461.37	140.63
299-W15-20	3/14/95	237.11	461.25	140.59
299-W15-23	3/14/95	238.19	461.30	140.60
299-W15-24	3/14/95	238.98	460.39+	140.33
299-W18-21	3/14/95	207.43	461.19	140.57
299-W18-23	3/14/95	235.55	461.26	140.59
299-W18-26	3/14/95	237.78	461.27	140.60
299-W18-27	3/14/95	228.57	461.68	140.72
299-W18-28	3/14/95	218.49	461.50	140.67
299-W18-32	3/14/95	215.56	461.09	140.54
LLWMA 4 Wells Monitoring the Bottom of the Unconfined Aquifer				
299-W15-17	3/14/95	223.88	460.76	140.44
299-W18-22	3/14/95	207.70	460.79	140.45

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. Elevations marked with an '*' were measured at the time of sampling.
4. Elevations marked with a '+' are outside of the expected range, and are suspected of error.

Table 14-11. RCRA Water Level Measurement Report, LLWMA 5, First 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-W6-9	3/02/95	240.08	456.02*	138.99
	3/08/95	239.77	456.33*	139.09
	3/14/95	240.00	456.10	139.02
299-W11-31	3/08/95	250.69	456.17*	139.04
	3/14/95	250.80	456.06	139.01
299-W6-10	3/03/95	259.01	453.47*	138.22
	3/08/95	259.00	453.48*	138.22
	3/14/95	259.14	453.34	138.18
299-W6-11	3/08/95	249.05	453.81*	138.32
	3/14/95	249.42	453.44	138.21
299-W6-12	3/09/95	237.45	455.06*	138.70
	3/14/95	237.98	454.53	138.54
299-W6-2	3/13/95	236.43	456.02*	138.99
	3/14/95	236.10	456.35	139.10
299-W6-4	3/03/95	245.04	456.21*	139.05
	3/08/95	245.30	455.95*	138.97
	3/14/95	245.12	456.13	139.03
299-W6-7	3/08/95	257.37	452.91*	138.05
	3/14/95	257.60	452.68	137.98
299-W6-8	3/08/95	240.43	454.30*	138.47
	3/14/95	240.71	454.02	138.39
299-W7-10	3/03/95	233.95	455.71*	138.90
	3/14/95	234.14	455.52	138.84

Table 14-11. RCRA Water Level Measurement Report, LLWMA 5, First 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-W6-3	3/02/95	244.38	455.45*	138.82
	3/14/95	244.34	455.49	138.83
299-W6-6	3/09/95	256.96	453.03*	138.08
	3/14/95	257.37	452.62	137.96

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. Elevations marked with an '*' were measured at the time of sampling.
4. Elevations 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 January 1 through March 31, 1995. (sheet 1 of 2)

CONTAMINATION INDICATOR PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
CONDUCT	94	Conductivity, field	µmhos	1			4	4	
CONDUCT	73	Conductivity, lab	µmhos				1	1	
TOC		Total Organic Carbon	ppb	110			4	3	
TOX		Total Organic Halogen	ppb	5			4	0	
PH	93	pH, field	pH	.01	6.5-8.5	EPAS	4	4	0
PH	125	pH, lab	pH		6.5-8.5	EPAS	1	1	0

DRINKING WATER PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
FBARIUM		Barium, filtered	ppb	.59	1000	EPAI	1	1	0
FCADMIU		Cadmium, filtered	ppb	3.3	10	EPAI	1	0	0
FCHROMI		Chromium, filtered	ppb	4.5	50	EPAI	1	1	0
FLUORID		Fluoride	ppb	36	1400	EPAI	1	1	0
ALPHA		Gross alpha	pCi/L		15	EPA	1	1	0
NITRATE		Nitrate	ppb	11	45000	EPA	1	1	0

GROUNDWATER QUALITY PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
CHLORID		Chloride	ppb	14	250000	EPAS	1	1	0
FIRON		Iron, filtered	ppb	5.24	300	EPAS	1	1	1
FMANGAN		Manganese, filtered	ppb	.72	50	EPAS	1	1	0
LPHENOL		Phenol	ppb	.54			1	0	
FSODIUM		Sodium, filtered	ppb	61			1	1	
SULFATE		Sulfate	ppb	37	250000	EPAS	1	1	0

SITE SPECIFIC AND OTHER CONSTITUENTS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
24-dchp		2,4-Dichlorophenol	ppb	4			1	0	
2METHPH		2-Methylphenol	ppb	5.1			1	0	
2NITPH		2-Nitrophenol	ppb	1.9			1	0	
4METHPH		4-Methylphenol	ppb	7			1	0	
ALKALIN		Alkalinity	ppm	2.8			1	1	
FALUMIN		Aluminum, filtered	ppb	26			1	0	
FANTIMO		Antimony, filtered	ppb	62			1	0	
BENZOTH		Benzothiazole	ppb	1.3			1	0	
FBERYLL		Beryllium, filtered	ppb	.17			1	0	
BIS2EPH		Bis(2-ethylhexyl) phthalate	ppb	5.3			1	0	
BROMIDE		Bromide	ppb	11			1	1	
FCALCIU		Calcium, filtered	ppb	34			1	1	
FCOBALT		Cobalt, filtered	ppb	5.9			1	0	
FCOPPER		Copper, filtered	ppb	4.1	1000	EPAS	1	0	0
DECANE		Decane	ppb	1.9			1	0	
DODECAN		Dodecane	ppb	1.1			1	0	

Table 14-12. Constituent List and Summary of Results for the Low-Level Waste Management Area 1 Data for Reporting Period January 1 through March 31, 1995. (sheet 2 of 2)

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
BETA		Gross beta	pCi/L				1	1	
FMAGNES		Magnesium, filtered	ppb	23			1	1	
NAPHTHA		Naphthalene	ppb	1.2			1	0	
FNICKEL		Nickel, filtered	ppb	13			1	0	
NITRITE		Nitrite	ppb	18	1000	EPA	1	0	0
PENTCHP		Pentachlorophenol	ppb	8.3	1	EPA	1	0	1*
PHOSPHA		Phosphate	ppb	82			1	0	
FPOTASS		Potassium, filtered	ppb	850			1	1	
FSILVER		Silver, filtered	ppb	3.6	50	EPAI	1	0	0
TETRADE		Tetradecane	ppb	1.6			1	0	
FTIN		Tin, filtered	ppb	69			1	0	
TRIBUTPH		Tributyl Phosphate	ppb	1.1			1	0	
TDICHPH		Tris-2-chloroethyl phosphate	ppb	.61			1	0	
TURBID		Turbidity	NTU	.016			1	1	
FVANADI		Vanadium, filtered	ppb	6.6			1	1	
FZINC		Zinc, filtered	ppb	6.3	5000	EPAS	1	1	0
MCRESOL		m-Cresol	ppb	2.2			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 January 1 through March 31, 1995.

Well Name	Collection Date	Sample Number	ALKALIN 357/ppm 2.8/.	FBARIUM 34/ppb .59/1000	BROMIDE 124/ppb 11/.	FCALCIU 34/ppb 34/.
299-E32-4	1/06/95	BODHV3	120.00 BQ		100.00 L	
299-E32-4	1/06/95	BODHV7		68.00		39000.00

Well Name	Collection Date	Sample Number	CHLORID 124/ppb 14/250000	FCHROMI 34/ppb 4.5/50	FLUORID 124/ppb 36/1400	ALPHA 135/pCi/L ./15
299-E32-4	1/06/95	BODHV3	9100.00		700.00	2.41
299-E32-4	1/06/95	BODHV7		18.00 L		

Well Name	Collection Date	Sample Number	BETA 136/pCi/L ./.	FIRON 34/ppb 5.24/300	FMAGNES 34/ppb 23/.	FMANGAN 34/ppb .72/50
299-E32-4	1/06/95	BODHV3	8.78			
299-E32-4	1/06/95	BODHV7		380.00 QF	13000.00	3.40 L

Well Name	Collection Date	Sample Number	NITRATE 124/ppb 11/45000	FPOTASS 34/ppb 850/.	FSODIUM 34/ppb 61/.	SULFATE 124/ppb 37/250000
299-E32-4	1/06/95	BODHV3	28000.00 D			48000.00 D
299-E32-4	1/06/95	BODHV7		6000.00	24000.00 B	

Well Name	Collection Date	Sample Number	TURBID 126/NTU .016/.	FVANADI 34/ppb 6.6/.	FZINC 34/ppb 6.3/5000
299-E32-4	1/06/95	BODHV3	26.00 Q		
299-E32-4	1/06/95	BODHV7		18.00 L	6.70 L

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 January 1 through March 31, 1995.

Well Name	Collection Date	Sample Number	COND FIELD µmho 1/.	COND LAB µmho 1/.	pH FIELD .01/6.5-8.5s	pH LAB .01/6.5-8.5s	TOC ppb 110/.	TOX ppb 5/.
299-E32-4	1/06/95	BODHV3	411	430	7.12	8.10	110 UQ	5.0 U
		BODHV4	412		7.12		120 LQ	5.0 U
		BODHV5	413		7.14		140 L	5.0 U
		BODHV6	413		7.12		140 L	5.0 U

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 January 1 through March 31, 1995.

DRINKING WATER PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
FLUORID		Fluoride	ppb	36	1400	EPAI	8	8	0
NITRATE		Nitrate	ppb	11	45000	EPA	8	8	0

GROUNDWATER QUALITY PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
CHLORID		Chloride	ppb	14	250000	EPAS	8	8	0
SULFATE		Sulfate	ppb	37	250000	EPAS	8	8	0

SITE SPECIFIC AND OTHER CONSTITUENTS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
BROMIDE		Bromide	ppb	11			8	8	
NITRITE		Nitrite	ppb	18	1000	EPA	8	0	0
PHOSPHA		Phosphate	ppb	82			8	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 January 1 through March 31, 1995.

Well Name	Collection Date	Sample Number	BROMIDE 124/ppb 11/.	CHLORID 124/ppb 14/250000	FLUORID 124/ppb 36/1400	NITRATE 124/ppb 11/45000
299-E27-11	11/18/94	B0D7Y4	46.00 L	7500.00	400.00	7000.00
299-E27-17	11/18/94	B0D7Q9	48.00 L	8000.00	400.00	6600.00
299-E27-8	11/17/94	B0D7R4	38.00 L	6800.00	400.00	5900.00
299-E27-9	11/17/94	B0D7R9	40.00 L	7000.00	400.00	6900.00
299-E34-10	11/21/94	B0D7S4	46.00 L	8300.00 BQ	400.00	6600.00 Q
299-E34-2	11/21/94	B0D7V4	92.00 L	14000.00 DBQ	600.00	14000.00 DQ
299-E34-3	11/21/94	B0D7V9	95.00 L	15000.00 DBQ	500.00	9900.00 DQ
299-E34-7	11/18/94	B0D7W9	67.00 L	11000.00 D	500.00	5700.00

Well Name	Collection Date	Sample Number	SULFATE 124/ppb 37/250000
299-E27-11	11/18/94	B0D7Y4	48000.00 D
299-E27-17	11/18/94	B0D7Q9	51000.00 D
299-E27-8	11/17/94	B0D7R4	44000.00 D
299-E27-9	11/17/94	B0D7R9	49000.00 D
299-E34-10	11/21/94	B0D7S4	53000.00 D
299-E34-2	11/21/94	B0D7V4	120000.00 D
299-E34-3	11/21/94	B0D7V9	72000.00 D
299-E34-7	11/18/94	B0D7W9	50000.00 D

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

Table 14-17. Constituent List and Summary of Results for the Low-Level Waste Management Area 3 Data for Reporting Period January 1 through March 31, 1995. (sheet 1 of 2)

CONTAMINATION INDICATOR PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
CONDUCT	94	Conductivity, field	µmhos	1			76	76	
CONDUCT	73	Conductivity, lab	µmhos				20	20	
TOC		Total Organic Carbon	ppb	110			80	80	
TOX		Total Organic Halogen	ppb	5			80	65	
PH	93	pH, field	pH	.01	6.5-8.5	EPAS	76	76	8
PH	125	pH, lab	pH		6.5-8.5	EPAS	20	20	0

DRINKING WATER PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
FBARIUM		Barium, filtered	ppb	.59	1000	EPAI	20	20	0
FCADMIU		Cadmium, filtered	ppb	3.3	10	EPAI	20	0	0
FCHROMI		Chromium, filtered	ppb	4.5	50	EPAI	20	18	0
FLUORID		Fluoride	ppb	36	1400	EPAI	20	20	0
ALPHA		Gross alpha	pCi/L		15	EPA	20	10	0
FMERCUR		Mercury, filtered	ppb	.05	2	EPA	20	0	0
NITRATE		Nitrate	ppb	11	45000	EPA	20	20	6

GROUNDWATER QUALITY PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
CHLORID		Chloride	ppb	14	250000	EPAS	20	20	0
FIRON		Iron, filtered	ppb	5.24	300	EPAS	20	20	0
FMANGAN		Manganese, filtered	ppb	.72	50	EPAS	20	18	0
LPHENOL		Phenol	ppb	.31			20	0	
FSODIUM		Sodium, filtered	ppb	61			20	20	
SULFATE		Sulfate	ppb	37	250000	EPAS	20	20	0

SITE SPECIFIC AND OTHER CONSTITUENTS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
1,1,1-T		1,1,1-Trichloroethane	ppb	.036	200	EPA	20	2	0
1,1,2-T		1,1,2-Trichloroethane	ppb	.078			20	0	
1,1-DIC		1,1-Dichloroethane	ppb	.058			20	0	
1,2-DIC		1,2-Dichloroethane	ppb	.029	5	EPA	20	0	0
14-dben		1,4-Dichlorobenzene	ppb	.055	75	EPA	20	0	0
246-trp		2,4,6-Trichlorophenol	ppb	1.3			20	0	
24-dchp		2,4-Dichlorophenol	ppb	1.3			20	0	
DIMPHEN		2,4-Dimethylphenol	ppb	1.2			20	0	
DINPHEN		2,4-Dinitrophenol	ppb	3			20	0	
26-dchp		2,6-Dichlorophenol	ppb	1.4			20	0	
CHLPHEN		2-Chlorophenol	ppb	1.6			20	0	
2NITPH		2-Nitrophenol	ppb	1.3			20	0	
BUTDINP		2-sec-Butyl-4,6-dinitrophenol(DN	ppb	1.3			20	0	
46DN2MP		4,6-Dinitro-2-methylphenol	ppb	1.3			20	0	

Table 14-17. Constituent List and Summary of Results for the Low-Level Waste Management Area 3 Data for Reporting Period January 1 through March 31, 1995. (sheet 2 of 2)

Constituent Name				Lab	DWS		Number of Samples		
Short	(Method)	Full	Units	MDL	Limit	Agency	Total	>MDL	>DWS
CHLCRES		4-Chloro-3-methylphenol	ppb	1.3			20	0	
NITPHEN		4-Nitrophenol	ppb	3			20	0	
ALKALIN		Alkalinity	ppm	2.8			20	20	
FALUMIN		Aluminum, filtered	ppb	26			20	1	
FANTIMO		Antimony, filtered	ppb	62			20	0	
BENZENE		Benzene	ppb	.013	5	EPA	20	0	0
FBERYLL		Beryllium, filtered	ppb	.17			20	3	
BE-7		Beryllium-7	pCi/L				4	0	
BROMIDE		Bromide	ppb	11			20	18	
FCALCIU		Calcium, filtered	ppb	34			20	20	
TETRANE		Carbon tetrachloride	ppb	.075	5	EPA	20	19	8
CS-134		Cesium-134	pCi/L				4	0	
CS-137		Cesium-137	pCi/L		200	EPA	4	0	0
CHLFORM		Chloroform	ppb	.041			20	19	
FCOBALT		Cobalt, filtered	ppb	5.9			20	0	
CO-60		Cobalt-60	pCi/L		100	EPA	4	1	0
FCOPPER		Copper, filtered	ppb	4.1	1000	EPAS	20	3	0
CRESOLS		Cresols (methylphenols)	ppb	4.8			20	0	
ETHBENZ		Ethylbenzene	ppb	.051	700	EPA	20	0	0
EU-154		Europium-154	pCi/L				4	0	
EU-155		Europium-155	pCi/L				4	0	
BETA		Gross beta	pCi/L				20	20	
FLEAD		Lead, filtered	ppb	1.5	50	EPAI	20	4	0
FMAGNES		Magnesium, filtered	ppb	23			20	20	
METHYCH		Methylene chloride	ppb	.09			20	0	
FNICKEL		Nickel, filtered	ppb	13			20	4	
NITRITE		Nitrite	ppb	18	1000	EPA	20	0	0
PENTCHP		Pentachlorophenol	ppb	1.3	1	EPA	20	0	20*
PHOSPHA		Phosphate	ppb	82			20	0	
FPOTASS		Potassium, filtered	ppb	850			20	20	
K-40		Potassium-40	pCi/L				4	3	
FSILVER		Silver, filtered	ppb	3.6	50	EPAI	20	0	0
TC-99		Technetium-99	pCi/L		900	EPA	4	4	0
PERCENE		Tetrachloroethene	ppb	.22	5	EPA	20	5	0
TETPHNL		Tetrachlorophenols	ppb	1.5			20	0	
FTIN		Tin, filtered	ppb	69			20	0	
TOLUENE		Toluene	ppb	.016	1000	EPA	20	0	0
TDS		Total Dissolved Solids	ppm	10	500	EPAS	4	4	0
TRICENE		Trichloroethene	ppb	.11	5	EPA	20	8	3
TRIPHNL		Trichlorophenols	ppb	1.7			20	0	
TRITIUM		Tritium	pCi/L		20000	EPA	20	10	0
TURBID	111	Turbidity	NTU				19	19	
TURBID	126	Turbidity	NTU	.016			20	20	
FVANADI		Vanadium, filtered	ppb	6.6			20	19	
VINYIDE		Vinyl chloride	ppb	.13	2	EPA	20	0	0
XYLENE		Xylenes (total)	ppb	.035	10000	EPA	20	0	0
FZINC		Zinc, filtered	ppb	6.3	5000	EPAS	20	0	0
CIS12DE		cis-1,2-Dichloroethylene	ppb	.11	70	EPA	20	0	0
TRANDCE		trans-1,2-Dichloroethylene	ppb	.073	100	EPA	20	0	0

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

Table 14-18. Constituents with at Least One Detected Value for the Low-Level Waste Management Area 3 Data for Reporting Period January 1 through March 31, 1995. (sheet 1 of 7)

Well Name	Collection Date	Sample Number	1,1,1-T 25/ppb .036/200	ALKALIN 357/ppm 2.8/.	FALUMIN 34/ppb 26/.	FBARIUM 34/ppb .59/1000
299-W10-13	3/10/95	B0DW76	.04 U	90.00 B		
299-W10-13	3/10/95	B0DW80			26.00 U	38.00
299-W10-14	3/10/95	B0DW81	.04 U	120.00 B		
299-W10-14	3/10/95	B0DW85			26.00 U	67.00
299-W10-19	3/09/95	B0DW86	.04 U	100.00 B		
299-W10-19	3/09/95	B0DW90			26.00 U	59.00
299-W10-20	3/09/95	B0DW91	.04 U	110.00 B		
299-W10-20	3/09/95	B0DW95			26.00 L	57.00
299-W10-21	3/09/95	B0DW96	.04 U	90.00 B		
299-W10-21	3/09/95	B0DWB0			26.00 U	53.00
299-W6-2	3/13/95	B0DWD5	.04 U	120.00 B		
299-W6-2	3/13/95	B0DWD9			26.00 U	36.00
299-W7-1	3/13/95	B0DWN1	.04 U	90.00 B		
299-W7-1	3/13/95	B0DWN5			26.00 U	28.00
299-W7-10	3/03/95	B0DWP1	.04 U	100.00		
299-W7-10	3/03/95	B0DWP5			26.00 U	34.00
299-W7-11	3/13/95	B0DWQ3	.18 L	90.00 B		
299-W7-11	3/13/95	B0DWQ7			26.00 U	28.00
299-W7-12	3/13/95	B0DWR3	.04 U	100.00 B		
299-W7-12	3/13/95	B0DWR4	.04 U	100.00 B		
299-W7-12	3/13/95	B0DWS1			26.00 U	35.00
299-W7-12	3/13/95	B0DWS2			26.00 U	35.00
299-W7-2	3/13/95	B0DWS3	.08 L	90.00 B		
299-W7-2	3/13/95	B0DWS7			26.00 U	20.00 L
299-W7-3	3/13/95	B0DWS8	.04 U	130.00 B		
299-W7-3	3/13/95	B0DWT2			26.00 U	30.00
299-W7-4	3/14/95	B0DWT3	.04 U	100.00		
299-W7-4	3/14/95	B0DWT7			26.00 U	37.00
299-W7-5	3/14/95	B0DWT8	.04 U	100.00		
299-W7-5	3/14/95	B0DWV2			26.00 U	31.00
299-W7-7	3/14/95	B0DWV8	.04 U	100.00		
299-W7-7	3/14/95	B0DWW2			26.00 U	24.00
299-W7-8	3/14/95	B0DWW3	.04 U	100.00		
299-W7-8	3/14/95	B0DWW7			26.00 U	33.00
299-W7-9	3/14/95	B0DWW8	.04 U	100.00		
299-W7-9	3/14/95	B0DWX2			26.00 U	46.00
299-W8-1	3/14/95	B0DWX3	.04 U	100.00		
299-W8-1	3/14/95	B0DWX7			26.00 U	29.00
299-W9-1	3/10/95	B0DWX8	.04 U	90.00 B		
299-W9-1	3/10/95	B0DWY2			26.00 U	30.00

Well Name	Collection Date	Sample Number	FBERYLL 34/ppb .17/.	BROMIDE 124/ppb 11/.	FCALCIU 34/ppb 34/.	TETRANE 25/ppb .075/5
299-W10-13	3/10/95	B0DW76		200.00 L		15.00
299-W10-13	3/10/95	B0DW80	.17 U		40000.00	
299-W10-14	3/10/95	B0DW81		100.00 L		.08 U
299-W10-14	3/10/95	B0DW85	.17 U		35000.00	
299-W10-19	3/09/95	B0DW86		11.00 UD		1300.00 D
299-W10-19	3/09/95	B0DW90	.55 BLQ		65000.00	
299-W10-20	3/09/95	B0DW91		11.00 UD		1800.00 D
299-W10-20	3/09/95	B0DW95	.60 BLQ		72000.00	
299-W10-21	3/09/95	B0DW96		100.00 LD		530.00 D
299-W10-21	3/09/95	B0DWB0	.52 BLQ		68000.00	

Table 14-18. Constituents with at Least One Detected Value for the Low-Level Waste Management Area 3 Data for Reporting Period January 1 through March 31, 1995. (sheet 2 of 7)

Well Name	Collection Date	Sample Number	FBERYLL 34/ppb .17/.	BROMIDE 124/ppb 11/.	FCALCIU 34/ppb 34/.	TETRANE 25/ppb .075/5
299-W6-2	3/13/95	BODWD5		30.00 L		120.00 D
299-W6-2	3/13/95	BODWD9	.17 U		40000.00	
299-W7-1	3/13/95	BODWN1		100.00 L		2.20
299-W7-1	3/13/95	BODWN5	.17 U		45000.00	
299-W7-10	3/03/95	BODWP1		40.00 L		10.00
299-W7-10	3/03/95	BODWP5	.17 UQ		32000.00	
299-W7-11	3/13/95	BODWQ3		200.00 L		.51 L
299-W7-11	3/13/95	BODWQ7	.17 U		39000.00	
299-W7-12	3/13/95	BODWR3		100.00 L		1.30
299-W7-12	3/13/95	BODWR4		100.00 L		1.20
299-W7-12	3/13/95	BODWS1	.17 U		41000.00	
299-W7-12	3/13/95	BODWS2	.17 U		41000.00	
299-W7-2	3/13/95	BODWS3		100.00 L		.38 L
299-W7-2	3/13/95	BODWS7	.17 U		29000.00	
299-W7-3	3/13/95	BODWS8		50.00 L		.08 L
299-W7-3	3/13/95	BODWT2	.17 U		29000.00	
299-W7-4	3/14/95	BODWT3		100.00 L		540.00 D
299-W7-4	3/14/95	BODWT7	.17 U		57000.00	
299-W7-5	3/14/95	BODWT8		60.00 L		99.00 D
299-W7-5	3/14/95	BODWV2	.17 U		45000.00	
299-W7-7	3/14/95	BODWV8		40.00 L		2.60
299-W7-7	3/14/95	BODWW2	.17 U		30000.00	
299-W7-8	3/14/95	BODWW3		50.00 L		4.70
299-W7-8	3/14/95	BODWW7	.17 U		35000.00	
299-W7-9	3/14/95	BODWW8		100.00 L		.61 L
299-W7-9	3/14/95	BODWX2	.17 U		43000.00	
299-W8-1	3/14/95	BODWX3		100.00 L		4.80
299-W8-1	3/14/95	BODWX7	.17 U		45000.00	
299-W9-1	3/10/95	BODWX8		100.00 L		1.70
299-W9-1	3/10/95	BODWY2	.17 U		45000.00	

Well Name	Collection Date	Sample Number	CHLORID 124/ppb 14/250000	CHLFORM 25/ppb .041/.	FCHROMI 34/ppb 4.5/50	CO-60 140/pCi/L ./100
299-W10-13	3/10/95	BODW76	30000.00 D	.38 L		
299-W10-13	3/10/95	BODW80			4.80 L	
299-W10-14	3/10/95	BODW81	9500.00	.04 U		
299-W10-14	3/10/95	BODW85			4.50 U	
299-W10-19	3/09/95	BODW86	16000.00 DQ	12.00		
299-W10-19	3/09/95	BODW90			19.00 L	
299-W10-19	3/09/95	BODWK8				.49 U
299-W10-20	3/09/95	BODW91	17000.00 DQ	31.00		
299-W10-20	3/09/95	BODW95			11.00 L	
299-W10-20	3/09/95	BODWK9				.50 U
299-W10-21	3/09/95	BODW96	13000.00 DQ	6.20		
299-W10-21	3/09/95	BODW80			31.00	
299-W10-21	3/09/95	BODWL7				1.55
299-W6-2	3/13/95	BODWD5	4900.00 BQ	1.20		
299-W6-2	3/13/95	BODWD9			26.00	
299-W6-2	3/13/95	BODWM7				-.82 U
299-W7-1	3/13/95	BODWN1	12000.00 DBQ	.32 L		
299-W7-1	3/13/95	BODWN5			4.80 L	
299-W7-10	3/03/95	BODWP1	4700.00	.38 L		
299-W7-10	3/03/95	BODWP5			9.90 L	

Table 14-18. Constituents with at Least One Detected Value for the Low-Level Waste Management Area 3 Data for Reporting Period January 1 through March 31, 1995. (sheet 3 of 7)

Well Name	Collection Date	Sample Number	CHLORID 124/ppb 14/250000	CHLFORM 25/ppb .041/.	FCHROMI 34/ppb 4.5/50	CO-60 140/pCi/L ./100
299-W7-11	3/13/95	B0DWQ3	7500.00 BQ	.25 L		
299-W7-11	3/13/95	B0DWQ7			7.90 L	
299-W7-12	3/13/95	B0DWR3	11000.00 DBQ	.36 L		
299-W7-12	3/13/95	B0DWR4	10000.00 DBQ	.34 L		
299-W7-12	3/13/95	B0DWS1			9.40 L	
299-W7-12	3/13/95	B0DWS2			7.60 L	
299-W7-2	3/13/95	B0DWS3	3700.00 BQ	.16 L		
299-W7-2	3/13/95	B0DWS7			13.00 L	
299-W7-3	3/13/95	B0DWS8	4100.00 BQ	.15 L		
299-W7-3	3/13/95	B0DWT2			4.50 U	
299-W7-4	3/14/95	B0DWT3	17000.00 DQ	8.10		
299-W7-4	3/14/95	B0DWT7			11.00 L	
299-W7-5	3/14/95	B0DWT8	15000.00 DQ	2.60		
299-W7-5	3/14/95	B0DWV2			12.00 L	
299-W7-7	3/14/95	B0DWV8	4400.00 Q	.27 L		
299-W7-7	3/14/95	B0DWW2			7.90 L	
299-W7-8	3/14/95	B0DWW3	6200.00 Q	.44 L		
299-W7-8	3/14/95	B0DWW7			11.00 L	
299-W7-9	3/14/95	B0DWW8	14000.00 DQ	.16 L		
299-W7-9	3/14/95	B0DWX2			8.90 L	
299-W8-1	3/14/95	B0DWX3	15000.00 DQ	.28 L		
299-W8-1	3/14/95	B0DWX7			7.10 L	
299-W9-1	3/10/95	B0DWX8	16000.00 D	.12 L		
299-W9-1	3/10/95	B0DWY2			7.70 L	

Well Name	Collection Date	Sample Number	FCOPPER 34/ppb 4.1/1000	FLUORID 124/ppb 36/1400	ALPHA 135/pCi/L ./15	BETA 136/pCi/L ./.
299-W10-13	3/10/95	B0DW76		600.00	.05 U	5.38
299-W10-13	3/10/95	B0DW80	4.10 U			
299-W10-14	3/10/95	B0DW81		700.00	1.75	7.27
299-W10-14	3/10/95	B0DW85	4.10 U			
299-W10-19	3/09/95	B0DW86		700.00	1.47	23.20
299-W10-19	3/09/95	B0DW90	4.10 L			
299-W10-20	3/09/95	B0DW91		700.00	1.23 U	20.90
299-W10-20	3/09/95	B0DW95	4.10 U			
299-W10-21	3/09/95	B0DW96		700.00	1.35 U	20.30
299-W10-21	3/09/95	B0DWB0	4.10 U			
299-W6-2	3/13/95	B0DWD5		700.00	.90 U	10.60
299-W6-2	3/13/95	B0DWD9	4.10 U			
299-W7-1	3/13/95	B0DWN1		500.00	.69 U	4.59
299-W7-1	3/13/95	B0DWN5	4.10 U			
299-W7-10	3/03/95	B0DWP1		700.00	.87 U	6.46
299-W7-10	3/03/95	B0DWP5	5.40 L			
299-W7-11	3/13/95	B0DWQ3		600.00	.01 U	5.19
299-W7-11	3/13/95	B0DWQ7	4.80 L			
299-W7-12	3/13/95	B0DWR3		500.00	1.04 Q	3.83 Q
299-W7-12	3/13/95	B0DWR4		500.00	.53 UQ	5.37 Q
299-W7-12	3/13/95	B0DWS1	4.10 U			
299-W7-12	3/13/95	B0DWS2	4.10 U			
299-W7-2	3/13/95	B0DWS3		600.00	.60 U	2.30
299-W7-2	3/13/95	B0DWS7	4.10 U			
299-W7-3	3/13/95	B0DWS8		600.00	2.16	5.56
299-W7-3	3/13/95	B0DWT2	4.10 U			

Table 14-18. Constituents with at Least One Detected Value for the Low-Level Waste Management Area 3 Data for Reporting Period January 1 through March 31, 1995. (sheet 4 of 7)

Well Name	Collection Date	Sample Number	FCOPPER 34/ppb 4.1/1000	FLUORID 124/ppb 36/1400	ALPHA 135/pCi/L ./15	BETA 136/pCi/L ./.
299-W7-4	3/14/95	B0DWT3		500.00	1.32	17.60
299-W7-4	3/14/95	B0DWT7	4.10 U			
299-W7-5	3/14/95	B0DWT8		600.00	1.83	7.27
299-W7-5	3/14/95	B0DWV2	4.10 U			
299-W7-7	3/14/95	B0DWV8		500.00	1.62	4.83
299-W7-7	3/14/95	B0DWW2	4.10 U			
299-W7-8	3/14/95	B0DWW3		500.00	1.69	5.86
299-W7-8	3/14/95	B0DWW7	4.10 U			
299-W7-9	3/14/95	B0DWW8		500.00	2.01	4.58
299-W7-9	3/14/95	B0DWX2	4.10 U			
299-W8-1	3/14/95	B0DWX3		300.00	3.28	4.64
299-W8-1	3/14/95	B0DWX7	4.10 U			
299-W9-1	3/10/95	B0DWX8		700.00	.55 U	6.31
299-W9-1	3/10/95	B0DWY2	4.10 U			

Well Name	Collection Date	Sample Number	FIRON 34/ppb 5.24/300	FLEAD 40/ppb 1.5/50	FMAGNES 34/ppb 23/.	FMANGAN 34/ppb .72/50
299-W10-13	3/10/95	B0DW80	31.00 B	1.50 U	14000.00	1.10 L
299-W10-14	3/10/95	B0DW85	30.00 B	1.50 U	13000.00	.72 U
299-W10-19	3/09/95	B0DW90	37.00 BQ	1.50 U	22000.00	1.40 L
299-W10-20	3/09/95	B0DW95	32.00 BQ	1.50 U	23000.00	6.10 L
299-W10-21	3/09/95	B0DWB0	27.00 BQ	1.50 U	24000.00	.74 L
299-W6-2	3/13/95	B0DWD9	40.00	1.50 U	17000.00	.77 L
299-W7-1	3/13/95	B0DWN5	60.00	1.50 L	15000.00	5.80 L
299-W7-10	3/03/95	B0DWP5	31.00 Q	1.50 U	13000.00	1.80 L
299-W7-11	3/13/95	B0DWQ7	33.00	1.50 U	13000.00	.94 L
299-W7-12	3/13/95	B0DWS1	46.00 Q	1.80 L	13000.00	1.30 L
299-W7-12	3/13/95	B0DWS2	35.00 Q	1.50 L	13000.00	1.50 L
299-W7-2	3/13/95	B0DWS7	34.00	1.50 U	15000.00	1.30 L
299-W7-3	3/13/95	B0DWT2	110.00	1.50 U	12000.00	35.00
299-W7-4	3/14/95	B0DWT7	38.00	1.50 U	18000.00	.72 U
299-W7-5	3/14/95	B0DWV2	49.00	2.90 L	16000.00	3.90 L
299-W7-7	3/14/95	B0DWW2	36.00	1.50 U	10000.00	1.50 L
299-W7-8	3/14/95	B0DWW7	43.00	1.50 U	12000.00	1.70 L
299-W7-9	3/14/95	B0DWX2	30.00	1.50 U	13000.00	2.60 L
299-W8-1	3/14/95	B0DWX7	24.00	1.50 U	14000.00	.78 L
299-W9-1	3/10/95	B0DWY2	36.00 B	1.50 U	17000.00	.89 L

Well Name	Collection Date	Sample Number	FNICKEL 34/ppb 13/.	NITRATE 124/ppb 11/45000	FPOTASS 34/ppb 850/.	K-40 140/pCi/L ./.
299-W10-13	3/10/95	B0DW76		25000.00 DH		
299-W10-13	3/10/95	B0DW80	35.00		3900.00	
299-W10-14	3/10/95	B0DW81		20000.00 DH		
299-W10-14	3/10/95	B0DW85	13.00 U		4500.00	
299-W10-19	3/09/95	B0DW86		110000.00 DQ		
299-W10-19	3/09/95	B0DW90	13.00 U		4800.00	
299-W10-19	3/09/95	B0DWK8				53.20

Table 14-18. Constituents with at Least One Detected Value for the Low-Level Waste Management Area 3 Data for Reporting Period January 1 through March 31, 1995. (sheet 5 of 7)

Well Name	Collection Date	Sample Number	FNICKEL 34/ppb 13/.	NITRATE 124/ppb 11/45000	FPOTASS 34/ppb 850/.	K-40 140/pCi/L ./.
299-W10-20	3/09/95	BODW91		120000.00 DQ		
299-W10-20	3/09/95	BODW95	13.00 U		5400.00	
299-W10-20	3/09/95	BODWK9				73.40
299-W10-21	3/09/95	BODW96		130000.00 DQ		
299-W10-21	3/09/95	BODWB0	13.00 U		4500.00	
299-W10-21	3/09/95	BODWL7				26.10
299-W6-2	3/13/95	BODWD5		53000.00 DQ		
299-W6-2	3/13/95	BODWD9	13.00 U		3200.00	
299-W6-2	3/13/95	BODWM7				5.54 U
299-W7-1	3/13/95	BODWN1		35000.00 DQ		
299-W7-1	3/13/95	BODWN5	54.00		3500.00	
299-W7-10	3/03/95	BODWP1		23000.00 DH		
299-W7-10	3/03/95	BODWP5	13.00 U		3400.00	
299-W7-11	3/13/95	BODWQ3		42000.00 DQ		
299-W7-11	3/13/95	BODWQ7	13.00 U		3300.00	
299-W7-12	3/13/95	BODWR3		27000.00 DQ		
299-W7-12	3/13/95	BODWR4		27000.00 DQ		
299-W7-12	3/13/95	BODWS1	13.00 U		3600.00	
299-W7-12	3/13/95	BODWS2	13.00 U		4100.00	
299-W7-2	3/13/95	BODWS3		25000.00 DQ		
299-W7-2	3/13/95	BODWS7	13.00 U		2500.00	
299-W7-3	3/13/95	BODWS8		3800.00 Q		
299-W7-3	3/13/95	BODWT2	13.00 U		4700.00	
299-W7-4	3/14/95	BODWT3		98000.00 DQ		
299-W7-4	3/14/95	BODWT7	13.00 U		3500.00	
299-W7-5	3/14/95	BODWT8		55000.00 DQ		
299-W7-5	3/14/95	BODWV2	19.00 L		3200.00	
299-W7-7	3/14/95	BODWV8		17000.00 DQ		
299-W7-7	3/14/95	BODWW2	13.00 U		2900.00	
299-W7-8	3/14/95	BODWW3		31000.00 DQ		
299-W7-8	3/14/95	BODWW7	13.00 U		3100.00	
299-W7-9	3/14/95	BODWW8		27000.00 DQ		
299-W7-9	3/14/95	BODWX2	13.00 U		4200.00	
299-W8-1	3/14/95	BODWX3		28000.00 DQ		
299-W8-1	3/14/95	BODWX7	13.00 U		3700.00	
299-W9-1	3/10/95	BODWX8		36000.00 DH		
299-W9-1	3/10/95	BODWY2	38.00		4300.00	

Well Name	Collection Date	Sample Number	FSODIUM 34/ppb 61/.	SULFATE 124/ppb 37/250000	TC-99 143/pCi/L ./900	PERCENE 25/ppb .22/5
299-W10-13	3/10/95	BODW76		30000.00 D		.22 U
299-W10-13	3/10/95	BODW80	11000.00			
299-W10-14	3/10/95	BODW81		24000.00 D		.22 U
299-W10-14	3/10/95	BODW85	16000.00			
299-W10-19	3/09/95	BODW86		40000.00 D		.63
299-W10-19	3/09/95	BODW90	13000.00 Q			
299-W10-19	3/09/95	BODWK8			71.50	
299-W10-20	3/09/95	BODW91		41000.00 D		.80
299-W10-20	3/09/95	BODW95	15000.00 Q			
299-W10-20	3/09/95	BODWK9			62.30	
299-W10-21	3/09/95	BODW96		36000.00 D		.49 L
299-W10-21	3/09/95	BODWB0	9800.00 Q			
299-W10-21	3/09/95	BODWL7			81.50	

Table 14-18. Constituents with at Least One Detected Value for the Low-Level Waste Management Area 3 Data for Reporting Period January 1 through March 31, 1995. (sheet 6 of 7)

Well Name	Collection Date	Sample Number	FSODIUM 34/ppb 61/.	SULFATE 124/ppb 37/250000	TC-99 143/pCi/L ./900	PERCENE 25/ppb .22/5
299-W6-2	3/13/95	B0DWD5		24000.00 D		.22 U
299-W6-2	3/13/95	B0DWD9	10000.00			
299-W6-2	3/13/95	B0DWM7			33.20	
299-W7-1	3/13/95	B0DWN1		48000.00 D		.22 U
299-W7-1	3/13/95	B0DWN5	9100.00			
299-W7-10	3/03/95	B0DWP1		21000.00 D		.29 L
299-W7-10	3/03/95	B0DWP5	8600.00 Q			
299-W7-11	3/13/95	B0DWQ3		30000.00 D		.22 U
299-W7-11	3/13/95	B0DWQ7	10000.00			
299-W7-12	3/13/95	B0DWR3		33000.00 D		.22 U
299-W7-12	3/13/95	B0DWR4		33000.00 D		.22 U
299-W7-12	3/13/95	B0DWS1	9100.00			
299-W7-12	3/13/95	B0DWS2	9200.00			
299-W7-2	3/13/95	B0DWS3		29000.00 D		.22 U
299-W7-2	3/13/95	B0DWS7	8500.00			
299-W7-3	3/13/95	B0DWS8		23000.00 D		.22 U
299-W7-3	3/13/95	B0DWT2	15000.00			
299-W7-4	3/14/95	B0DWT3		33000.00 D		.60
299-W7-4	3/14/95	B0DWT7	9700.00			
299-W7-5	3/14/95	B0DWT8		28000.00 D		.22 U
299-W7-5	3/14/95	B0DWV2	9800.00			
299-W7-7	3/14/95	B0DWV8		18000.00 D		.22 U
299-W7-7	3/14/95	B0DWW2	8000.00			
299-W7-8	3/14/95	B0DWW3		23000.00 D		.22 U
299-W7-8	3/14/95	B0DWW7	8600.00			
299-W7-9	3/14/95	B0DWW8		46000.00 D		.22 U
299-W7-9	3/14/95	B0DWX2	16000.00			
299-W8-1	3/14/95	B0DWX3		43000.00 D		.22 U
299-W8-1	3/14/95	B0DWX7	9500.00			
299-W9-1	3/10/95	B0DWX8		64000.00 D		.22 U
299-W9-1	3/10/95	B0DWY2	11000.00			

Well Name	Collection Date	Sample Number	TDS 65/ppm 10/500	TRICENE 25/ppb .11/5	TRITIUM 142/pCi/L ./20000	TURBID 111/NTU ./.
299-W10-13	3/10/95	B0DW76		.11 U	85.60 U	1.10
299-W10-14	3/10/95	B0DW81		.11 U	23.10 U	.67
299-W10-19	3/09/95	B0DW86		6.40	1420.00	.62
299-W10-19	3/09/95	B0DWK8	390.00			
299-W10-20	3/09/95	B0DW91		6.50	2120.00	9.44
299-W10-20	3/09/95	B0DWK9	370.00			
299-W10-21	3/09/95	B0DW96		6.60	1260.00	.72
299-W10-21	3/09/95	B0DWL7	400.00			
299-W6-2	3/13/95	B0DWD5		1.70	7680.00	1.12
299-W6-2	3/13/95	B0DWM7	250.00			
299-W7-1	3/13/95	B0DWN1		.11 U	176.00 U	.52
299-W7-10	3/03/95	B0DWP1		.21 L	504.00	1.51
299-W7-11	3/13/95	B0DWQ3		.11 U	90.20 U	1.79
299-W7-12	3/13/95	B0DWR3		.11 UQ	183.00 U	3.21
299-W7-12	3/13/95	B0DWR4		2.90 Q	120.00 U	
299-W7-2	3/13/95	B0DWS3		.11 U	136.00 U	2.35
299-W7-3	3/13/95	B0DWS8		.11 U	226.00	.56
299-W7-4	3/14/95	B0DWT3		2.90	507.00	.84
299-W7-5	3/14/95	B0DWT8		.94 L	260.00	1.31

Table 14-18. Constituents with at Least One Detected Value for the Low-Level Waste Management Area 3 Data for Reporting Period January 1 through March 31, 1995. (sheet 7 of 7)

Well Name	Collection Date	Sample Number	TDS 65/ppm 10/500	TRICENE 25/ppb .11/5	TRITIUM 142/pCi/L ./20000	TURBID 111/NTU ./.
299-W7-7	3/14/95	BODWV8		.11 U	350.00	1.16
299-W7-8	3/14/95	BODWW3		.11 U	451.00	1.45
299-W7-9	3/14/95	BODWW8		.11 U	69.20 U	3.84
299-W8-1	3/14/95	BODWX3		.11 U	45.10 U	2.02
299-W9-1	3/10/95	BODWX8		.11 U	111.00 U	1.80

Well Name	Collection Date	Sample Number	TURBID 126/NTU .016/.	FVANADI 34/ppb 6.6/.
299-W10-13	3/10/95	BODW76	1.50 HQ	
299-W10-13	3/10/95	BODW80		23.00 L
299-W10-14	3/10/95	BODW81	.81 HQ	
299-W10-14	3/10/95	BODW85		31.00
299-W10-19	3/09/95	BODW86	.85 Q	
299-W10-19	3/09/95	BODW90		16.00 L
299-W10-20	3/09/95	BODW91	6.40 Q	
299-W10-20	3/09/95	BODW95		16.00 L
299-W10-21	3/09/95	BODW96	.93 Q	
299-W10-21	3/09/95	BODWB0		23.00 L
299-W6-2	3/13/95	BODWD5	1.10 Q	
299-W6-2	3/13/95	BODWD9		27.00 L
299-W7-1	3/13/95	BODWN1	.71 Q	
299-W7-1	3/13/95	BODWN5		26.00 L
299-W7-10	3/03/95	BODWP1	1.20 HQ	
299-W7-10	3/03/95	BODWP5		24.00 L
299-W7-11	3/13/95	BODWQ3	1.30 Q	
299-W7-11	3/13/95	BODWQ7		25.00 L
299-W7-12	3/13/95	BODWR3	4.00 Q	
299-W7-12	3/13/95	BODWR4	4.00 Q	
299-W7-12	3/13/95	BODWS1		19.00 L
299-W7-12	3/13/95	BODWS2		18.00 L
299-W7-2	3/13/95	BODWS3	1.60 Q	
299-W7-2	3/13/95	BODWS7		28.00 L
299-W7-3	3/13/95	BODWS8	.65 Q	
299-W7-3	3/13/95	BODWT2		18.00 L
299-W7-4	3/14/95	BODWT3	.70 HQ	
299-W7-4	3/14/95	BODWT7		19.00 L
299-W7-5	3/14/95	BODWT8	.67 HQ	
299-W7-5	3/14/95	BODWV2		22.00 L
299-W7-7	3/14/95	BODWV8	2.70 HQ	
299-W7-7	3/14/95	BODWW2		26.00 L
299-W7-8	3/14/95	BODWW3	2.10 HQ	
299-W7-8	3/14/95	BODWW7		23.00 L
299-W7-9	3/14/95	BODWW8	1.50 HQ	
299-W7-9	3/14/95	BODWX2		6.60 U
299-W8-1	3/14/95	BODWX3	1.50 HQ	
299-W8-1	3/14/95	BODWX7		25.00 L
299-W9-1	3/10/95	BODWX8	3.20 HQ	
299-W9-1	3/10/95	BODWY2		21.00 L

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

Table 14-19. Contamination Indicator Parameters for the Low-Level Waste Management Area 3 Data for Reporting Period January 1 through March 31, 1995. (sheet 1 of 2)

Well Name	Collection Date	Sample Number	COND FIELD µmho 1/.	COND LAB µmho 1/.	pH FIELD .01/6.5-8.5s	pH LAB .01/6.5-8.5s	TOC ppb 110/.	TOX ppb 5/.
299-W10-13	3/10/95	BODW76	407	390	8.17	8.20 H	200 L	26.7
		BODW77	405		8.17		300 L	23.3
		BODW78	404		8.16		200 L	22.6
		BODW79	402		8.16		200 L	22.1
299-W10-14	3/10/95	BODW81	355	350	7.85	8.00 H	130 L	9.3
		BODW82	354		7.85		200 L	5.4
		BODW83	355		7.85		200 L	5.5
		BODW84	354		7.85		200 L	7.0
299-W10-19	3/09/95	BODW86	560	590	8.30	8.20 H	200 L	1060.0
		BODW87	561		8.28		300 L	1060.0
		BODW88	563		8.24		200 L	1050.0
		BODW89	565		8.21		200 L	1030.0
299-W10-20	3/09/95	BODW91	612	630	7.80	7.90 H	300 L	1190.0
		BODW92	611		7.81		300 L	1310.0
		BODW93	609		7.81		300 L	1180.0
		BODW94	608		7.80		300 L	1110.0
299-W10-21	3/09/95	BODW96	589	600	7.85	8.00 H	300 L	479.0
		BODW97	589		7.85		300 L	470.0
		BODW98	590		7.85		300 L	476.0
		BODW99	590		7.85		300 L	452.0
299-W6-2	3/13/95	BODWD5	325	390	8.24	8.00 H	300 L	117.0
		BODWD6	336		8.22		300 L	129.0
		BODWD7	348		8.19		400 L	131.0
		BODWD8	359		8.17		400 L	138.0
299-W7-1	3/13/95	BODWN1	423	400	8.07	8.00 H	300 L	8.1
		BODWN2	423		8.07		200 L	7.7
		BODWN3	423		8.06		200 L	7.9
		BODWN4	422		8.05		300 L	5.3
299-W7-10	3/03/95	BODWP1	317	310	8.31	8.20 H	300 L	14.4
		BODWP2	313		8.31		300 L	13.5
		BODWP3	313		8.28		200 L	19.4
		BODWP4	312		8.27		300 L	20.5
299-W7-11	3/13/95	BODWQ3	376	360	8.00	8.10 H	200 L	6.0
		BODWQ4	376		7.99		200 L	8.8
		BODWQ5	376		8.00		200 L	7.1
		BODWQ6	376		8.00		200 L	5.0 U
299-W7-12	3/13/95	BODWR3	374	360	8.23	8.10 H	400 L	5.0 U
		BODWR4	374	360	8.20	8.10 H	200 LQ	6.6
		BODWR5	374		8.17		400 L	5.8
		BODWR6	374		8.15		400 L	7.7
		BODWR7					300 L	10.0
		BODWR8					300 L	7.3
		BODWR9					300 L	11.5
		BODWS0					300 LQ	5.0 U
299-W7-2	3/13/95	BODWS3	294	300	8.78	8.20 H	300 L	5.0 U
		BODWS4	295		8.74		300 L	5.5
		BODWS5	296		8.67		300 L	5.0 U
		BODWS6	301		8.63		300 L	5.0 U
299-W7-3	3/13/95	BODWS8	312	310	8.10	8.10 H	300 L	5.0 U
		BODWS9	312		8.10		200 L	8.9
		BODWT0	313		8.09		200 L	6.2
		BODWT1	310		8.09		200 L	5.0 U
299-W7-4	3/14/95	BODWT3	532	510	8.16	8.10 H	300 LQ	450.0
		BODWT4	528		8.16		300 LQ	483.0
		BODWT5	528		8.16		200 LQ	408.0
		BODWT6	528		8.16		200 LQ	420.0

Table 14-19. Contamination Indicator Parameters for the Low-Level Waste Management Area 3 Data for Reporting Period January 1 through March 31, 1995. (sheet 2 of 2)

Well Name	Collection Date	Sample Number	COND FIELD µmho 1/.	COND LAB µmho 1/.	pH FIELD .01/6.5-8.5s	pH LAB .01/6.5-8.5s	TOC ppb 110/.	TOX ppb 5/.
299-W7-5	3/14/95	B0DWT8	416	410	8.26	8.10 H	300 LQ	99.3
		B0DWT9	416		8.25		300 LQ	106.0
		B0DWV0	417		8.24		300 LQ	94.3
		B0DWV1	417		8.24		200 LQ	103.0
299-W7-7	3/14/95	B0DWV8	284	280	8.38	8.20 H	300 LQ	5.7
		B0DWV9	283		8.35		300 LQ	6.6
		B0DWW0	283		8.36		300 LQ	5.0 U
		B0DWW1	282		8.34		300 LQ	5.0 U
299-W7-8	3/14/95	B0DWW3	314	240 F	8.22	8.10 H	300 LQ	8.7
		B0DWW4	314		8.22		400 LQ	7.2
		B0DWW5	315		8.21		300 LQ	9.9
		B0DWW6	315		8.19		300 LQ	10.3
299-W7-9	3/14/95	B0DWW8	402	400	8.36	8.30 H	200 LQ	5.0 U
		B0DWW9	402		8.36		200 LQ	5.0 U
		B0DWX0	402		8.37		300 LQ	5.4
		B0DWX1	406		8.36		300 LQ	5.0 U
299-W8-1	3/14/95	B0DWX3	406	400	8.53	8.20 H	200 LQ	11.7
		B0DWX4	406		8.52		200 LQ	5.0 U
		B0DWX5	406		8.51		200 LQ	13.2
		B0DWX6	406		8.51		300 LQ	8.0
299-W9-1	3/10/95	B0DWX8	458	430	8.26	8.20 H	300 L	10.5
		B0DWX9	460		8.25		200 L	5.0 U
		B0DWY0	461		8.14		200 L	9.6
		B0DWY1	459		8.12		200 L	5.1

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

Table 14-20. Constituent List and Summary of Results for the Low-Level Waste Management Area 4 Data for Reporting Period January 1 through March 31, 1995.

DRINKING WATER PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
FLUORID		Fluoride	ppb	36	1400	EPAI	3	3	0
NITRATE		Nitrate	ppb	11	45000	EPA	3	3	2

GROUNDWATER QUALITY PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
CHLORID		Chloride	ppb	14	250000	EPAS	3	3	0
SULFATE		Sulfate	ppb	37	250000	EPAS	3	3	0

SITE SPECIFIC AND OTHER CONSTITUENTS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
BROMIDE		Bromide	ppb	11			3	3	
NITRITE		Nitrite	ppb	18	1000	EPA	3	1	0
PHOSPHA		Phosphate	ppb	82			3	0	

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

Table 14-21. Constituents with at Least One Detected Value for the Low-Level Waste Management Area 4 Data for Reporting Period January 1 through March 31, 1995.

Well Name	Collection Date	Sample Number	BROMIDE 124/ppb 11/.	CHLORID 124/ppb 14/250000	FLUORID 124/ppb 36/1400	NITRATE 124/ppb 11/45000
299-W15-17	11/09/94	B0D7H0	40.00 L	14000.00 D	400.00	17000.00 D
299-W15-18	11/08/94	B0D7H5	55.00 LY	13000.00 DQY	900.00 Y	88000.00 DQHY
299-W15-24	11/10/94	B0D7K5	19.00 L	6100.00 Q	500.00	72000.00 DQ

Well Name	Collection Date	Sample Number	NITRITE 124/ppb 18/1000	SULFATE 124/ppb 37/250000
299-W15-17	11/09/94	B0D7H0	18.00 U	28000.00 D
299-W15-18	11/08/94	B0D7H5	18.00 UHY	48000.00 DY
299-W15-24	11/10/94	B0D7K5	300.00	17000.00 D

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

Table 14-22. Constituent List and Summary of Results for the Low-Level Waste Management Area 5 Data for Reporting Period January 1 through March 31, 1995. (sheet 1 of 2)

CONTAMINATION INDICATOR PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
CONDUCT	94	Conductivity, field	µmhos	1			64	64	
CONDUCT	73	Conductivity, lab	µmhos				13	13	
TOC		Total Organic Carbon	ppb	110			56	55	
TOX		Total Organic Halogen	ppb	5			56	55	
PH	93	pH, field	pH	.01	6.5-8.5	EPAS	64	64	0
PH	125	pH, lab	pH		6.5-8.5	EPAS	13	13	0

DRINKING WATER PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
FBARIUM		Barium, filtered	ppb	.59	1000	EPAI	13	13	0
FCADMIU		Cadmium, filtered	ppb	3.3	10	EPAI	13	0	0
FCHROMI		Chromium, filtered	ppb	4.5	50	EPAI	13	12	2
FLUORID		Fluoride	ppb	36	1400	EPAI	13	13	0
ALPHA		Gross alpha	pCi/L		15	EPA	13	8	0
FMERCUR		Mercury, filtered	ppb	.05	2	EPA	13	1	0
NITRATE		Nitrate	ppb	11	45000	EPA	13	13	9

GROUNDWATER QUALITY PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
CHLORID		Chloride	ppb	14	250000	EPAS	13	13	0
FIRON		Iron, filtered	ppb	5.24	300	EPAS	13	13	0
FMANGAN		Manganese, filtered	ppb	.72	50	EPAS	13	11	1
LPHENOL		Phenol	ppb	.31			12	0	
FSODIUM		Sodium, filtered	ppb	61			13	13	
SULFATE		Sulfate	ppb	37	250000	EPAS	13	13	0

SITE SPECIFIC AND OTHER CONSTITUENTS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
1,1,1-T		1,1,1-Trichloroethane	ppb	.036	200	EPA	13	0	0
1,1,2-T		1,1,2-Trichloroethane	ppb	.078			13	0	
1,1-DIC		1,1-Dichloroethane	ppb	.058			13	0	
1,2-DIC		1,2-Dichloroethane	ppb	.029	5	EPA	13	0	0
14-dben		1,4-Dichlorobenzene	ppb	.055	75	EPA	13	0	0
246-trp		2,4,6-Trichlorophenol	ppb	1.3			12	0	
24-dchp		2,4-Dichlorophenol	ppb	1.3			12	0	
DIMPHEN		2,4-Dimethylphenol	ppb	1.2			12	0	
DINPHEN		2,4-Dinitrophenol	ppb	3			12	0	
26-dchp		2,6-Dichlorophenol	ppb	1.4			12	0	
CHLPHEN		2-Chlorophenol	ppb	1.6			12	0	
2NITPH		2-Nitrophenol	ppb	1.3			12	0	
BUTDINP		2-sec-Butyl-4,6-dinitrophenol(DN	ppb	1.3			12	0	
46DN2MP		4,6-Dinitro-2-methylphenol	ppb	1.3			12	0	

Table 14-22. Constituent List and Summary of Results for the Low-Level Waste Management Area 5 Data for Reporting Period January 1 through March 31, 1995. (sheet 2 of 2)

Constituent Name				Lab	DWS		Number of Samples		
Short	(Method)	Full	Units	MDL	Limit	Agency	Total	>MDL	>DWS
CHLCRES		4-Chloro-3-methylphenol	ppb	1.3			12	0	
NITPHEN		4-Nitrophenol	ppb	3			12	0	
ALKALIN		Alkalinity	ppm	2.8			13	13	
FALUMIN		Aluminum, filtered	ppb	26			13	1	
FANTIMO		Antimony, filtered	ppb	62			13	0	
BENZENE		Benzene	ppb	.013	5	EPA	13	0	0
FBERYLL		Beryllium, filtered	ppb	.17			13	8	
BE-7		Beryllium-7	pCi/L				5	0	
BROMIDE		Bromide	ppb	11			13	10	
FCALCIU		Calcium, filtered	ppb	34			13	13	
TETRANE		Carbon tetrachloride	ppb	.075	5	EPA	13	12	9
CS-134		Cesium-134	pCi/L				5	0	
CS-137		Cesium-137	pCi/L		200	EPA	5	0	0
CHLFORM		Chloroform	ppb	.041			13	12	
FCOBALT		Cobalt, filtered	ppb	5.9			13	0	
CO-60		Cobalt-60	pCi/L		100	EPA	5	0	0
FCOPPER		Copper, filtered	ppb	4.1	1000	EPAS	13	5	0
CRESOLS		Cresols (methylphenols)	ppb	4.8			12	0	
ETHBENZ		Ethylbenzene	ppb	.051	700	EPA	13	0	0
EU-154		Europium-154	pCi/L				5	1	
EU-155		Europium-155	pCi/L				5	0	
BETA		Gross beta	pCi/L				13	13	
FLEAD		Lead, filtered	ppb	1.5	50	EPAI	13	0	0
FMAGNES		Magnesium, filtered	ppb	23			13	13	
METHYCH		Methylene chloride	ppb	.09			13	0	
FNICKEL		Nickel, filtered	ppb	13			13	0	
NITRITE		Nitrite	ppb	18	1000	EPA	13	0	0
PENTCHP		Pentachlorophenol	ppb	1.3	1	EPA	12	0	12*
PHOSPHA		Phosphate	ppb	82			13	0	
FPOTASS		Potassium, filtered	ppb	850			13	13	
K-40		Potassium-40	pCi/L				5	3	
FSILVER		Silver, filtered	ppb	3.6	50	EPAI	13	0	0
TC-99		Technetium-99	pCi/L		900	EPA	4	4	0
PERCENE		Tetrachloroethene	ppb	.22	5	EPA	13	7	0
TETPHNL		Tetrachlorophenols	ppb	1.5			12	0	
FTIN		Tin, filtered	ppb	69			13	0	
TOLUENE		Toluene	ppb	.016	1000	EPA	13	0	0
TDS		Total Dissolved Solids	ppm	10	500	EPAS	4	4	0
TRICENE		Trichloroethene	ppb	.11	5	EPA	13	9	3
TRIPHNL		Trichlorophenols	ppb	1.7			12	0	
TRITIUM		Tritium	pCi/L		20000	EPA	13	11	5
TURBID	111	Turbidity	NTU				16	16	
TURBID	126	Turbidity	NTU	.016			13	13	
FVANADI		Vanadium, filtered	ppb	6.6			13	12	
VINYIDE		Vinyl chloride	ppb	.13	2	EPA	13	0	0
XYLENE		Xylenes (total)	ppb	.035	10000	EPA	13	0	0
FZINC		Zinc, filtered	ppb	6.3	5000	EPAS	13	0	0
CIS12DE		cis-1,2-Dichloroethylene	ppb	.11	70	EPA	13	0	0
TRANDCE		trans-1,2-Dichloroethylene	ppb	.073	100	EPA	13	0	0

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

Table 14-23. Constituents with at Least One Detected Value for the Low-Level Waste Management Area 5 Data for Reporting Period January 1 through March 31, 1995. (sheet 1 of 5)

Well Name	Collection Date	Sample Number	ALKALIN 357/ppm 2.8/.	FALUMIN 34/ppb 26/.	FBARIUM 34/ppb .59/1000	FBERYLL 34/ppb .17/.
299-W11-31	3/08/95	BODWB1	130.00 B			
299-W11-31	3/08/95	BODWB5		26.00 U	51.00	.57 BLQ
299-W6-10	3/03/95	BODWB6	140.00 B			
299-W6-10	3/03/95	BODWC0		26.00 U	57.00	.17 U
299-W6-11	3/08/95	BODWC1	110.00 B			
299-W6-11	3/08/95	BODWC5		36.00 L	31.00	.60 BLQ
299-W6-12	3/09/95	BODWC6	100.00 B			
299-W6-12	3/09/95	BODWD0		26.00 U	31.00	.50 BLQ
299-W6-2	3/13/95	BODWD5	120.00 B			
299-W6-2	3/13/95	BODWD9		26.00 U	36.00	.17 U
299-W6-3	3/02/95	BODWF4	100.00			
299-W6-3	3/02/95	BODWF8		26.00 U	67.00	.17 UQ
299-W6-4	3/03/95	BODWG1	100.00			
299-W6-4	3/03/95	BODWG5		26.00 U	63.00	.52 LQ
299-W6-5	3/08/95	BODWH0	90.00 B			
299-W6-5	3/08/95	BODWH4		26.00 U	77.00	.50 BLQ
299-W6-6	3/09/95	BODYD4	130.00 B			
299-W6-6	3/09/95	BODYD8		26.00 U	48.00	.50 BLQ
299-W6-7	3/08/95	BODWJ9	110.00 B			
299-W6-7	3/08/95	BODWK3		26.00 U	62.00	.17 U
299-W6-8	3/08/95	BODWL0	110.00 B			
299-W6-8	3/08/95	BODWL4		26.00 U	41.00	.43 BLQ
299-W6-9	3/02/95	BODWM2	120.00			
299-W6-9	3/02/95	BODWM6		26.00 U	33.00	.46 LQ
299-W7-10	3/03/95	BODWP1	100.00			
299-W7-10	3/03/95	BODWP5		26.00 U	34.00	.17 UQ

Well Name	Collection Date	Sample Number	BROMIDE 124/ppb 11/.	FCALCIU 34/ppb 34/.	TETRANE 25/ppb .075/5	CHLORID 124/ppb 14/250000
299-W11-31	3/08/95	BODWB1	100.00 LD		770.00 D	31000.00 D
299-W11-31	3/08/95	BODWB5		61000.00		
299-W6-10	3/03/95	BODWB6	11.00 UD		870.00 D	21000.00 D
299-W6-10	3/03/95	BODWC0		72000.00		
299-W6-11	3/08/95	BODWC1	60.00 L		66.00 D	6900.00
299-W6-11	3/08/95	BODWC5		45000.00		
299-W6-12	3/09/95	BODWC6	40.00 L		2.10	4600.00 Q
299-W6-12	3/09/95	BODWD0		32000.00		
299-W6-2	3/13/95	BODWD5	30.00 L		120.00 D	4900.00 BQ
299-W6-2	3/13/95	BODWD9		40000.00		
299-W6-3	3/02/95	BODWF4	11.00 UD		1.10	7800.00 B
299-W6-3	3/02/95	BODWF8		70000.00		
299-W6-4	3/03/95	BODWG1	11.00 UD		260.00 D	9500.00 D
299-W6-4	3/03/95	BODWG5		51000.00		
299-W6-5	3/08/95	BODWH0	100.00 LD		380.00 D	11000.00 D
299-W6-5	3/08/95	BODWH4		84000.00		
299-W6-6	3/09/95	BODYD4	60.00 L		.08 U	5100.00 Q
299-W6-6	3/09/95	BODYD8		32000.00		
299-W6-7	3/08/95	BODWJ9	100.00 DL		230.00 D	9600.00 D
299-W6-7	3/08/95	BODWK3		70000.00		
299-W6-8	3/08/95	BODWL0	20.00 L		2.70	3000.00
299-W6-8	3/08/95	BODWL4		31000.00		

Table 14-23. Constituents with at Least One Detected Value for the Low-Level Waste Management Area 5 Data for Reporting Period January 1 through March 31, 1995. (sheet 2 of 5)

Well Name	Collection Date	Sample Number	BROMIDE 124/ppb 11/.	FCALCIU 34/ppb 34/.	TETRANE 25/ppb .075/5	CHLORID 124/ppb 14/250000
299-W6-9	3/02/95	B0DWM2	50.00 L		210.00 D	6400.00 B
299-W6-9	3/02/95	B0DWM6		47000.00		
299-W7-10	3/03/95	B0DWP1	40.00 L		10.00	4700.00
299-W7-10	3/03/95	B0DWP5		32000.00		

Well Name	Collection Date	Sample Number	CHLFORM 25/ppb .041/.	FCHROMI 34/ppb 4.5/50	FCOPPER 34/ppb 4.1/1000	EU-154 140/pCi/L ./.
299-W11-31	3/08/95	B0DWB1	5.20			
299-W11-31	3/08/95	B0DWB5		38.00	4.10 U	
299-W11-31	3/08/95	B0DWL8				.37 U
299-W6-10	3/03/95	B0DWB6	7.80			
299-W6-10	3/03/95	B0DWC0		49.00	4.10 U	
299-W6-10	3/08/95	B0F688				1.81 U
299-W6-11	3/08/95	B0DWC1	.93			
299-W6-11	3/08/95	B0DWC5		32.00	4.10 L	
299-W6-12	3/09/95	B0DWC6	.20 L			
299-W6-12	3/09/95	B0DWD0		9.50 L	4.10 U	
299-W6-2	3/13/95	B0DWD5	1.20			
299-W6-2	3/13/95	B0DWD9		26.00	4.10 U	
299-W6-2	3/13/95	B0DWM7				-1.40 U
299-W6-3	3/02/95	B0DWF4	.74			
299-W6-3	3/02/95	B0DWF8		31.00	4.10 U	
299-W6-4	3/03/95	B0DWG1	6.30			
299-W6-4	3/03/95	B0DWG5		38.00	4.10 U	
299-W6-4	3/08/95	B0F692				4.02
299-W6-5	3/08/95	B0DWH0	4.60			
299-W6-5	3/08/95	B0DWH4		120.00	4.10 L	
299-W6-6	3/09/95	B0DYD4	.04 U			
299-W6-6	3/09/95	B0DYD8		4.50 U	4.10 U	
299-W6-7	3/08/95	B0DWJ9	3.10			
299-W6-7	3/08/95	B0DWK3		74.00	4.10 U	
299-W6-8	3/08/95	B0DWL0	.21 L			
299-W6-8	3/08/95	B0DWL4		6.30 L	6.60 L	
299-W6-9	3/02/95	B0DWM2	1.90			
299-W6-9	3/02/95	B0DWM6		31.00	4.10 L	
299-W6-9	3/08/95	B0F696				-.68 U
299-W7-10	3/03/95	B0DWP1	.38 L			
299-W7-10	3/03/95	B0DWP5		9.90 L	5.40 L	

Well Name	Collection Date	Sample Number	FLUORID 124/ppb 36/1400	ALPHA 135/pCi/L ./15	BETA 136/pCi/L ./.	FIRON 34/ppb 5.24/300
299-W11-31	3/08/95	B0DWB1	1400.00	2.39	92.20	
299-W11-31	3/08/95	B0DWB5				23.00 BQ
299-W6-10	3/03/95	B0DWB6	800.00	3.78	65.80	
299-W6-10	3/03/95	B0DWC0				22.00 B
299-W6-11	3/08/95	B0DWC1	700.00	1.88	11.60	
299-W6-11	3/08/95	B0DWC5				44.00 BQ
299-W6-12	3/09/95	B0DWC6	700.00	1.59	5.95	
299-W6-12	3/09/95	B0DWD0				33.00 BQ

Table 14-23. Constituents with at Least One Detected Value for the Low-Level Waste Management Area 5 Data for Reporting Period January 1 through March 31, 1995. (sheet 3 of 5)

Well Name	Collection Date	Sample Number	FLUORID 124/ppb 36/1400	ALPHA 135/pCi/L ./15	BETA 136/pCi/L ./.	FIRON 34/ppb 5.24/300
299-W6-2	3/13/95	BODWD5	700.00	.90 U	10.60	
299-W6-2	3/13/95	BODWD9				40.00
299-W6-3	3/02/95	BODWF4	700.00	.25 U	12.90	
299-W6-3	3/02/95	BODWF8				29.00 Q
299-W6-4	3/03/95	BODWG1	700.00	1.85	22.60	
299-W6-4	3/03/95	BODWG5				29.00 Q
299-W6-5	3/08/95	BODWH0	800.00	1.11 U	59.20	
299-W6-5	3/08/95	BODWH4				37.00 BQ
299-W6-6	3/09/95	BODYD4	700.00	.50 U	5.32	
299-W6-6	3/09/95	BODYD8				43.00 BQ
299-W6-7	3/08/95	BODWJ9	700.00	4.16	42.20	
299-W6-7	3/08/95	BODWK3				30.00 B
299-W6-8	3/08/95	BODWL0	700.00	1.38	5.13	
299-W6-8	3/08/95	BODWL4				42.00 BQ
299-W6-9	3/02/95	BODWM2	700.00	2.91	16.80	
299-W6-9	3/02/95	BODWM6				35.00 Q
299-W7-10	3/03/95	BODWP1	700.00	.87 U	6.46	
299-W7-10	3/03/95	BODWP5				31.00 Q

Well Name	Collection Date	Sample Number	FMAGNES 34/ppb 23/.	FMANGAN 34/ppb .72/50	FMERCUR 41/ppb .05/2	NITRATE 124/ppb 11/45000
299-W11-31	3/08/95	BODWB1				110000.00 D
299-W11-31	3/08/95	BODWB5	21000.00	1.40 L	.05 U	
299-W6-10	3/03/95	BODWB6				130000.00 DH
299-W6-10	3/03/95	BODWC0	26000.00	.72 U	.05 U	
299-W6-11	3/08/95	BODWC1				74000.00 D
299-W6-11	3/08/95	BODWC5	19000.00	1.30 L	.05 U	
299-W6-12	3/09/95	BODWC6				18000.00 DQ
299-W6-12	3/09/95	BODWD0	13000.00	2.00 L	.05 U	
299-W6-2	3/13/95	BODWD5				53000.00 DQ
299-W6-2	3/13/95	BODWD9	17000.00	.77 L	.05 U	
299-W6-3	3/02/95	BODWF4				200000.00 D
299-W6-3	3/02/95	BODWF8	27000.00	.72 U	.05 U	
299-W6-4	3/03/95	BODWG1				97000.00 DH
299-W6-4	3/03/95	BODWG5	25000.00	1.60 L	.05 U	
299-W6-5	3/08/95	BODWH0				230000.00 D
299-W6-5	3/08/95	BODWH4	37000.00	1.70 L	.05 U	
299-W6-6	3/09/95	BODYD4				9400.00 Q
299-W6-6	3/09/95	BODYD8	13000.00	60.00	.05 U	
299-W6-7	3/08/95	BODWJ9				160000.00 D
299-W6-7	3/08/95	BODWK3	31000.00	2.50 BL	.05 U	
299-W6-8	3/08/95	BODWL0				8800.00
299-W6-8	3/08/95	BODWL4	12000.00	3.10 L	.05 U	
299-W6-9	3/02/95	BODWM2				70000.00 D
299-W6-9	3/02/95	BODWM6	17000.00	.91 L	.07 L	
299-W7-10	3/03/95	BODWP1				23000.00 DH
299-W7-10	3/03/95	BODWP5	13000.00	1.80 L	.05 U	

Table 14-23. Constituents with at Least One Detected Value for the Low-Level Waste Management Area 5 Data for Reporting Period January 1 through March 31, 1995. (sheet 4 of 5)

Well Name	Collection Date	Sample Number	FPOTASS 34/ppb 850/.	K-40 140/pCi/L ./.	FSODIUM 34/ppb 61/.	SULFATE 124/ppb 37/250000
299-W11-31	3/08/95	B0DWB1				63000.00 D
299-W11-31	3/08/95	B0DWB5	5200.00		56000.00 Q	
299-W11-31	3/08/95	B0DWL8		17.40 U		
299-W6-10	3/03/95	B0DWB6				54000.00 D
299-W6-10	3/03/95	B0DWC0	5000.00		25000.00	
299-W6-10	3/08/95	B0F688		67.40		
299-W6-11	3/08/95	B0DWC1				26000.00 D
299-W6-11	3/08/95	B0DWC5	3500.00		10000.00 Q	
299-W6-12	3/09/95	B0DWC6				21000.00 D
299-W6-12	3/09/95	B0DWD0	3100.00		9100.00 Q	
299-W6-2	3/13/95	B0DWD5				24000.00 D
299-W6-2	3/13/95	B0DWD9	3200.00		10000.00	
299-W6-2	3/13/95	B0DWM7		5.54 U		
299-W6-3	3/02/95	B0DWF4				20000.00 D
299-W6-3	3/02/95	B0DWF8	6500.00		20000.00 Q	
299-W6-4	3/03/95	B0DWG1				38000.00 D
299-W6-4	3/03/95	B0DWG5	5000.00		11000.00 Q	
299-W6-4	3/08/95	B0F692		30.50		
299-W6-5	3/08/95	B0DWH0				45000.00 D
299-W6-5	3/08/95	B0DWH4	5800.00		16000.00 Q	
299-W6-6	3/09/95	B0DYD4				26000.00 D
299-W6-6	3/09/95	B0DYD8	5800.00		16000.00 Q	
299-W6-7	3/08/95	B0DWJ9				37000.00 D
299-W6-7	3/08/95	B0DWK3	4600.00		13000.00	
299-W6-8	3/08/95	B0DWL0				18000.00 D
299-W6-8	3/08/95	B0DWL4	3900.00		9200.00 Q	
299-W6-9	3/02/95	B0DWM2				25000.00 D
299-W6-9	3/02/95	B0DWM6	4000.00		12000.00 Q	
299-W6-9	3/08/95	B0F696		37.70		
299-W7-10	3/03/95	B0DWP1				21000.00 D
299-W7-10	3/03/95	B0DWP5	3400.00		8600.00 Q	

Well Name	Collection Date	Sample Number	TC-99 143/pCi/L ./900	PERCENE 25/ppb .22/5	TDS 65/ppm 10/500	TRICENE 25/ppb .11/5
299-W11-31	3/08/95	B0DWB1		.59		12.00
299-W11-31	3/08/95	B0DWL8	316.00		460.00	
299-W6-10	3/03/95	B0DWB6		.66		15.00
299-W6-11	3/08/95	B0DWC1		.22 U		1.00
299-W6-12	3/09/95	B0DWC6		.22 U		.11 U
299-W6-2	3/13/95	B0DWD5		.22 U		1.70
299-W6-2	3/13/95	B0DWM7	33.20		250.00	
299-W6-3	3/02/95	B0DWF4		.22 U		.11 U
299-W6-4	3/03/95	B0DWG1		.33 L		4.30
299-W6-4	3/03/95	B0DWN0	69.80		350.00	
299-W6-5	3/08/95	B0DWH0		.22 L		4.30
299-W6-6	3/09/95	B0DYD4		.22 U		.11 U
299-W6-7	3/08/95	B0DWJ9		.54		5.30
299-W6-8	3/08/95	B0DWL0		.22 U		.11 U
299-W6-9	3/02/95	B0DWM2		.33 L		2.60
299-W6-9	3/02/95	B0DWN6	47.70		300.00	
299-W6-9	3/03/95	B0DWN6	47.70		300.00	
299-W7-10	3/03/95	B0DWP1		.29 L		.21 L

Table 14-23. Constituents with at Least One Detected Value for the Low-Level Waste Management Area 5 Data for Reporting Period January 1 through March 31, 1995. (sheet 5 of 5)

Well Name	Collection Date	Sample Number	TRITIUM 142/pCi/L ./20000	TURBID 111/NTU ./.	TURBID 126/NTU .016/.	FVANADI 34/ppb 6.6/.
299-W11-31	3/08/95	B0DWB1	76200.00	5.60	3.40 Q	
299-W11-31	3/08/95	B0DWB5				23.00 L
299-W6-10	3/03/95	B0DWB6	80400.00	1.57	1.70 HQ	
299-W6-10	3/03/95	B0DWC0				19.00 L
299-W6-10	3/08/95	B0F688		1.84		
299-W6-11	3/08/95	B0DWC1	9450.00	1.21	1.30 Q	
299-W6-11	3/08/95	B0DWC5				28.00 L
299-W6-12	3/09/95	B0DWC6	563.00	3.72	5.30 Q	
299-W6-12	3/09/95	B0DWD0				28.00 L
299-W6-2	3/13/95	B0DWD5	7680.00	1.12	1.10 Q	
299-W6-2	3/13/95	B0DWD9				27.00 L
299-W6-3	3/02/95	B0DWF4	-45.10 U	.51	.68 Q	
299-W6-3	3/02/95	B0DWF8				18.00 L
299-W6-4	3/03/95	B0DWG1	31600.00	7.62	7.80 HQ	
299-W6-4	3/03/95	B0DWG5				12.00 L
299-W6-4	3/08/95	B0F692		8.79		
299-W6-5	3/08/95	B0DWH0	37200.00	1.29	2.10 Q	
299-W6-5	3/08/95	B0DWH4				16.00 L
299-W6-6	3/09/95	B0DYD4	19.00 U	.53	.50 Q	
299-W6-6	3/09/95	B0DYD8				6.60 U
299-W6-7	3/08/95	B0DWJ9	42900.00	15.20	13.00 Q	
299-W6-7	3/08/95	B0DWK3				16.00 L
299-W6-8	3/08/95	B0DWL0	886.00	10.70	12.00 Q	
299-W6-8	3/08/95	B0DWL4				21.00 L
299-W6-9	3/02/95	B0DWM2	10500.00	2.66	4.40 Q	
299-W6-9	3/02/95	B0DWM6				26.00 L
299-W6-9	3/08/95	B0F696		1.51		
299-W7-10	3/03/95	B0DWP1	504.00	1.51	1.20 HQ	
299-W7-10	3/03/95	B0DWP5				24.00 L

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

Table 14-24. Contamination Indicator Parameters for the Low-Level Waste Management Area 5 Data for Reporting Period January 1 through March 31, 1995. (sheet 1 of 2)

Well Name	Collection Date	Sample Number	COND FIELD µmho 1/.	COND LAB µmho 1/.	pH FIELD .01/6.5-8.5s	pH LAB .01/6.5-8.5s	TOC ppb 110/.	TOX ppb 5/.
299-W11-31	3/08/95	B0DWB1	735	730	7.87	7.90 H	300 L	667.0
		B0DWB2	734		7.87		300 L	678.0
		B0DWB3	732		7.87		300 L	691.0
		B0DWB4	731		7.87		300 L	680.0
299-W6-10	3/03/95	B0DWB6	721	710	7.75	7.90 H		
		B0DWB7	720		7.75			
		B0DWB8	719		7.75			
		B0DWB9	721		7.75			
	3/08/95	B0F688	701		7.77		400 L	768.0
		B0F689	701		7.77		400 L	745.0
		B0F690	701		7.78		400 L	737.0
		B0F691	701		7.78		400 L	597.0
299-W6-11	3/08/95	B0DWC1	436	430	8.01	8.00 H	200 L	73.4
		B0DWC2	435		8.01		200 L	632.0
		B0DWC3	433		8.02		200 L	69.9
		B0DWC4	432		8.02		200 L	69.4
299-W6-12	3/09/95	B0DWC6	286	300	7.98	8.10 H	300 L	6.2
		B0DWC7	286		7.98		300 L	8.5
		B0DWC8	286		7.98		400 L	19.2
		B0DWC9	286		7.98		400 L	17.9
299-W6-2	3/13/95	B0DWD5	325	390	8.24	8.00 H	300 L	117.0
		B0DWD6	336		8.22		300 L	129.0
		B0DWD7	348		8.19		400 L	131.0
		B0DWD8	359		8.17		400 L	138.0
299-W6-3	3/02/95	B0DWF4	728	710	7.91	7.90 H	200 L	6.6 U
		B0DWF5	727		7.92		200 L	6.8
		B0DWF6	726		7.92		200 L	6.2
		B0DWF7	724		7.91		200 L	5.0
299-W6-4	3/03/95	B0DWG1	527	540	8.33	8.10 H		
		B0DWG2	528		8.32			
		B0DWG3	530		8.31			
		B0DWG4	531		8.31			
		B0F695	457		8.36		300 L	192.0
	3/08/95	B0F692	458		8.38		300 L	223.0
		B0F693	460		8.38		300 L	251.0
		B0F694	457		8.37		300 L	201.0
299-W6-5	3/08/95	B0DWH0	784	820	7.99	8.00 H	200 L	274.0
		B0DWH1	783		8.00		200 L	373.0
		B0DWH2	781		8.01		200 L	362.0
		B0DWH3	780		8.00		200 L	374.0
299-W6-6	3/09/95	B0DYD4	328	340	8.47	8.10 H	150 L	16.0
		B0DYD5	327		8.48		110 U	11.7
		B0DYD6	326		8.48		150 L	15.8
299-W6-6	3/09/95	B0DYD7	326		8.48		200 L	17.0
299-W6-7	3/08/95	B0DWJ9	659	690	7.94	7.90 H	300 L	220.0
		B0DWK0	662		7.93		300 L	228.0
		B0DWK1	678		7.91		200 L	222.0
		B0DWK2	680		7.90		200 L	212.0
299-W6-8	3/08/95	B0DWL0	285	280	8.31	8.20 H	200 L	20.4
		B0DWL1	285		8.31		200 L	16.9
		B0DWL2	284		8.30		300 L	15.7
		B0DWL3	283		8.30		200 L	7.6

Table 14-24. Contamination Indicator Parameters for the Low-Level Waste Management Area 5 Data for Reporting Period January 1 through March 31, 1995. (sheet 2 of 2)

Well Name	Collection Date	Sample Number	COND FIELD µmho 1/.	COND LAB µmho 1/.	pH FIELD .01/6.5-8.5s	pH LAB .01/6.5-8.5s	TOC ppb 110/.	TOX ppb 5/.
299-W6-9	3/02/95	B0DWM2	432	440	7.93	8.10	400 L	179.0
		B0DWM3	430		7.95		400 L	195.0
		B0DWM4	430		7.96		400 L	187.0
		B0DWM5	430		7.97		600 L	203.0
	3/08/95	B0F696	441		7.94		500 L	224.0
		B0F697	441		7.93		300 L	229.0
		B0F698	441		7.91		300 L	234.0
		B0F699	441		7.91		400 L	187.0
299-W7-10	3/03/95	B0DWP1	317	310	8.31	8.20 H	300 L	14.4
		B0DWP2	313		8.31		300 L	13.5
		B0DWP3	313		8.28		200 L	19.4
		B0DWP4	312		8.27		300 L	20.5

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

Table 14-25. Water Quality Standards Exceeded at Low-Level Waste Management Area 1.

Constituent (DWS)	Wells exceeding DWS
Iron, filtered (300 ppb)	299-E32-4*F

* QC data associated with this sample was out of limits.
F RADE has been filed.

Table 14-26. Water Quality Standards Exceeded at Low-Level Waste Management Area 3.

Constituent (DWS)	Wells exceeding DWS
pH (>8.5)	299-W7-2 299-W8-1
Nitrate (45,000 ppb)	299-W6-2* 299-W7-4* 299-W7-5* 299-W10-19* 299-W10-20* 299-W10-21*
Carbon Tetrachloride (5 ppb)	299-W6-2 299-W7-4 299-W7-5 299-W7-10 299-W10-13 299-W10-19 299-W10-20 299-W10-21
Trichloroethene (5 ppb)	299-W10-19 299-W10-20 299-W10-21

*QC data associated with this sample were out of limits.

Table 14-27. Water Quality Standards Exceeded at Low-Level Waste Management Area 4.

Constituent (DWS)	Wells exceeding DWS
Nitrate (45,000 ppb)	299-W15-18* 299-W15-24*

*QC samples associated with these data exceeded the reliable detection limits.

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

Constituent (DWS)	Wells exceeding DWS		
Chromium, filtered (50 ppb)	299-W6-5	299-W6-7	
Nitrate (45,000 ppb)	299-W6-2* 299-W6-5 299-W6-11	299-W6-3 299-W6-9 299-W11-31	299-W6-4 299-W6-10
Manganese, filtered (50 ppb)	299-W6-6		
Carbon Tetrachloride (5 ppb)	299-W6-2 299-W6-7 299-W6-11	299-W6-4 299-W6-9 299-W7-10	299-W6-5 299-W6-10 299-W11-31
Trichloroethene (5 ppb)	299-W6-7	299-W6-10	299-W11-31
Tritium (20,000 pCi/l)	299-W6-4 299-W6-10	299-W6-5 299-W11-31	299-W6-7

* QC samples associated with these data exceeded the reliable detection limits.
H Holding time exceeded.

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15.0 SINGLE-SHELL TANKS

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15.1 INTRODUCTION

Although decommissioned in 1980, the SSTs are considered to be 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 bismuth 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) each containing 1 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-TY, 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 2,000,000 to 3,800,000 L (530,000 to 1,000,000 gal). The sixteen 200-series tanks hold 208,000 L (55,000 gal) each. 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-TY, are now in detection-level indicator parameter evaluation status and are sampled semiannually. WMAs T and TX-TY continue to be sampled quarterly because 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-TY 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 collection of RCRA samples. One exception is well 2-E27-7, which was constructed in 1982 and has a carbon steel casing, an annular seal, and a stainless steel screen below the carbon steel casing. No carbon steel is in contact with groundwater in well 2-E27-7. Samples are collected from this well, which is upgradient of WMA C, but data from this well are not used in statistical evaluation.

15.2 WATER LEVEL MEASUREMENTS

Water levels measured in 62 wells for this quarter are given in Table 15-2. These data include water level measurements taken when sampling, as well as 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 the high transmissivity of the Hanford formation. The water table map for June 1994 (DOE-RL 1995, Fig 4.11-5) illustrates the very low slope of the water table. Water levels have been declining steadily over the past several years at all SST sites (see hydrographs of all WMAs in DOE-RL [1995]). Increased discharges to the 216-B-3 Pond system related to several campaigns of the 242-A Evaporator in 1994 resulted in no net decline in water level in the 200 East Area for 1994. The steady decline of water level in SST wells in the 200 East Area resumed this quarter, and at a steeper rate than for 1990 to 1993.

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 when a modified RCRA cover is built over the 216-BY cribs. The barrier is the preferred remedial action in the ROD for the 200-BP-1 Operable Unit. Wells 2-E33-1 and 2-E33-5, along with well 2-E33-38, have been used to monitor water levels at SST WMA B-BX-BY 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 funding and approval.

Water levels in 200 West Area SST wells continued to decline as they have since the inception of water level monitoring in RCRA wells in 1990. Water levels in wells 2-W18-25 and 2-W18-31 continue to be lower than in wells 2-W19-31 and 2-W19-32 at WMA U. Five wells have been added to the water level monitoring network in the vicinity of the 241-U Tank Farm to determine the extent of this change (see Table 15-2). Water level data for this quarter continue to confirm the existence of a local high point in the water table slightly south and east of WMA U. However, the highest point of the water table in the 200 West Area continues to be north of the 241-U Tank Farm. Groundwater flow now appears to be to the northwest (at least locally) beneath WMA U. The borehole velocity flowmeter is being run in wells 2-W19-31, 2-W19-32, and 2-W18-25 to more accurately measure the direction of groundwater flow beneath WMA U. An engineering change notice will be prepared to revise the groundwater monitoring plan when these measurements have been completed. The original monitoring network was established in 1989 when groundwater was

flowing to the northeast because of the water table mound that originated beneath the now-decommissioned 216-U-10 Pond in the southwest corner of the 200 West Area.

15.3 WATER CHEMISTRY DATA

Data received from analyses of samples collected during the first quarter of 1995 are provided in Tables 15-3 through 15-23. All SST RCRA Standard wells were sampled this quarter; however, some data from samples collected in September 1994 are reported because they were received after the cutoff date for the October to December-1994 quarterly report. Quarterly sampling is presently conducted in WMAs T and TX-TY because these sites are in groundwater quality assessment monitoring under interim status (40 CFR 265). All other WMAs are sampled semiannually.

Samples are now collected by WHC field samplers. Increased communication and control of sampling has resulted in improvements in the quality of field data. A general decrease in turbidity has been observed as a result of requesting that lower pumping rates be employed during purging and sampling.

All of the laboratory pH data for this quarter are flagged with an "H" indicating that holding time was exceeded. Data flags are explained in Chapter 1. Data for potassium-40 are reported as part of gamma scan analyses; however, potassium-40 is a naturally occurring isotope and is the biggest contributor to natural background radiation.

Samples for analyses of metals are all filtered. Unfiltered samples are no longer submitted for analyses of metals. This change was instituted with an ECN in late 1994.

Regulatory limits for fluoride are not consistent. The primary DWS for fluoride is 4,000 ppb (40 CFR 141); the secondary standard (40 CFR 143.3) is 2,000 ppb. Washington State standards in *Revised Code of Washington* (RCW) 248 and WAC 173-200 are 4,000 ppb. However, Appendix III of 40 CFR 265 (EPA Interim Primary DWS) lists a range of 1.4 to 2.4 ppm (1,400 to 2,400 ppb) for fluoride. The preponderance of promulgated standards is 4,000 ppb. Groundwater quality beneath WMA T is degraded because of fluoride, which has exceeded the 4,000-ppb standard in the past and continues to do so in some wells. Fluorine-bearing compounds were used in the bismuth-phosphate process in 221-T (T Plant) and were discharged to SSTs as well as liquid effluent facilities in the northern part of 200 West Area. Tables 15-12 and 15-13 use the EPA Interim Primary DWS (i.e., 1,400-ppb standard) for fluoride.

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, and specific conductance 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. Values for TOX were not used to calculate a critical mean for each WMA because of QC problems in the laboratory. TOX samples, previously analyzed by DataChem Laboratory, are now being analyzed by Weston. TOX values from background wells have historically been non-detects; therefore, a limit of quantitation is used as a surrogate

upgradient/downgradient comparison value. TOX data from downgradient wells is compared to this quantitation limit. The change in groundwater flow direction beneath WMA U will necessitate starting quarterly sampling for TOX to reestablish 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 can be found on Figures 14-3 (for LLBG WMA 3) or Figure 14-5 (for LLBG WMA 5). Several 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 or west of WMA T. Some data on radionuclides from these wells were received this quarter and are included in Tables 15-15 and 15-16. Additional wells to supplement the groundwater quality assessment program south of WMAs T and TX-TY are being identified and checked before having any remedial work performed and adding them to the SST network. These two WMAs are in groundwater quality assessment status because of elevated specific conductance. Wells are being added to these networks to provide data for determining the possible source and extent of the high conductivity plume in groundwater beneath these two WMAs.

The limit of detection for pentachlorophenol is greater than the regulatory limit; therefore, exceedance of the DWS cannot be determined, so an asterisk (*) is place in the >DWS field. Pentachlorophenol is used in the manufacture of some pesticides, herbicides, and fungicides, but was not widely used on the Hanford Site.

15.3.1 Waste Management Area A-AX

All of the wells in WMA A-AX were sampled this quarter. The analysis of the filtered sample for chromium once again exceeded the 50-ppb interim primary drinking water standard[1] in well 2-E24-19. Results for I-129 exceeded the limit of 1 pCi/L in all wells, and ranged between 4.37 (2-E24-20) and 7.78 pCi/L (2-E24-19). There were no exceedances of the critical mean of any indicator parameters in any well in WMA A-AX this quarter.

15.3.2 Waste Management Area B-BX-BY

All wells in WMA B-BX-BY were sampled this quarter. Samples from all wells exceeded the 1 pCi/L limit for I-129. Analysis results ranged between 3.62 (2-E33-33) and 5.99 pCi/L (2-E33-31) for this constituent. Tc-99, at 948 pCi/L, exceeded the limit of 900 pCi/L in well 2-E33-41. The gross beta value for this sample was 237 pCi/L.

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

Groundwater contaminant plumes north and south of WMA B-BX-BY arising from the 216-BY cribs (Operable Unit 200-BP-1) and 216-B-5 reverse well

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[1]The primary DWS for Cr in 40 CFR 141.62(b) is 100 ppb as of July 1992.

(Operable Unit 200-BP-5) are currently being treated. At both sites, groundwater is being extracted, run through a charcoal and zeolite treatment system, and the resulting effluent injected into the ground. No effect has been observed on water levels or water quality to date at WMA B-BX-BY during the operation of these pump-and-treat systems. The operations are scheduled to conclude in April 1995.

15.3.3 Waste Management Area C

All wells in WMA C were sampled this quarter. All results for I-129 exceeded the drinking water limit of 1 pCi/L, with a range from 2.62 (2-E27-12) to 4.87 pCi/L (2-E27-14). There were no exceedances of the critical mean for any indicator parameters or critical range for pH this quarter at WMA C.

15.3.4 Waste Management Area S-SX

All wells in WMA S-SX were sampled this quarter. Gross beta and Tc-99 are elevated in wells 2-W22-39 and 2-W22-46. Tritium exceeds the 20,000 pCi/L limit in upgradient well 2-W23-14 and downgradient well 2-W23-15. Nitrate has typically exceeded the 45,000-ppb standard in well 2-W23-15; however it is suspiciously low (6,100 ppb) this quarter and a RADE has been instituted. There were no exceedances of the critical mean for field specific conductance, TOX, TOC or critical range for pH.

15.3.5 Waste Management Area T

All wells in WMA T and the expanded network were sampled this quarter. Data in Tables 15-15 through 15-17 include some from wells added to the expanded network for assessment monitoring. Additional data are from wells that are part of the RCRA monitoring network for LLBG WMAs 3 and 5. Carbon tetrachloride exceeds the DWS of 5 ppb in almost all wells. WMA T is located above a plume of this constituent that is widespread throughout the 200 West Area (DOE/RL 1995, Fig. 2-10). One analysis of a filtered sample for chromium in well 2-W10-15 exceeded the 50-ppb interim primary DWS[1]. Fluoride exceeded the 4,000 ppb limit in well 2-W10-15 in both the September 1994 and February 1995 samples. Fluoride exceeded the interim drinking water standard of 1,400 in several other wells (see Table 15-16). Nitrate exceeded the DWS in almost wells, ranging up to 320,000 ppb in well 2-W10-15 in September 1994. The SMCL TDS was exceeded in wells 2-W10-15, 2-W10-16, and 2-W11-28. Tritium exceeded the 20,000 pCi/L DWS in wells 2-W10-15, 2-W10-16, 2-W11-28, 2-W11-31, and 2-W6-4.

Field specific conductance continues to be elevated in downgradient well 2-W10-15 (1,100 mmhos/cm) and is the parameter that triggered this site into groundwater quality assessment monitoring under interim-status regulations. Field specific conductance was also above the SMCL of 700 mmhos/cm in well 2-W11-28.

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[1]The primary DWS for Cr in 40 CFR 141.62(b) is 100 ppb as of July 1992.

All data for well 2-W11-28 are flagged with a "P" because of a NCR relating to the construction of the well differing from specifications and because of the presence of a carbon steel roller bit in the bottom of the well. The well was damaged during construction and has been remediated.

15.3.6 Waste Management Area TX-TY

All wells in WMA TX-TY were sampled this quarter. Nitrate exceeded the DWS in all wells this quarter, with a maximum of 390,000 ppb for September 1994 in well 2-W14-12. Gross beta is elevated in wells 2-W10-18, 2-W14-12, and 2-W15-22 (see Table 15-19). Technetium-99 is elevated in the same wells and may account for elevated gross beta. Tc-99, at 9,950 pCi/L in well 2-W14-12 far exceeds the limit of 900 pCi/L . Samples from wells 2-W10-17 and 2-W10-18 exceed the 1,400-ppb limit for fluoride, but not the 4,000-ppb primary DWS (40 CFR 141). Filtered chromium and manganese exceed the 50 ppb limit in well 2-W14-12. Tritium exceeds the limit of 20,000 pCi/L in all wells except 2-W10-18. A value for ^{129}I in well 2-W14-12 was 47.8 pCi/L. Total dissolved solid (at 970 ppm) exceeds the WAC limit of 500 ppm in well 2-W14-12.

Field specific conductance continues to exceed the critical mean 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 from all wells this quarter at WMA U. There were no exceedances of regulatory limits in any wells for any constituents this quarter. There also were no exceedances of the critical mean or critical range for specific conductance, pH, and TOC this quarter. TOX is not evaluated because a background value has not been reestablished for this parameter. The critical mean for TOX will be reestablished using data from four quarters of sampling from wells 2-W19-31 and 2-W19-32 that are now upgradient because of the change in groundwater flow direction.

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

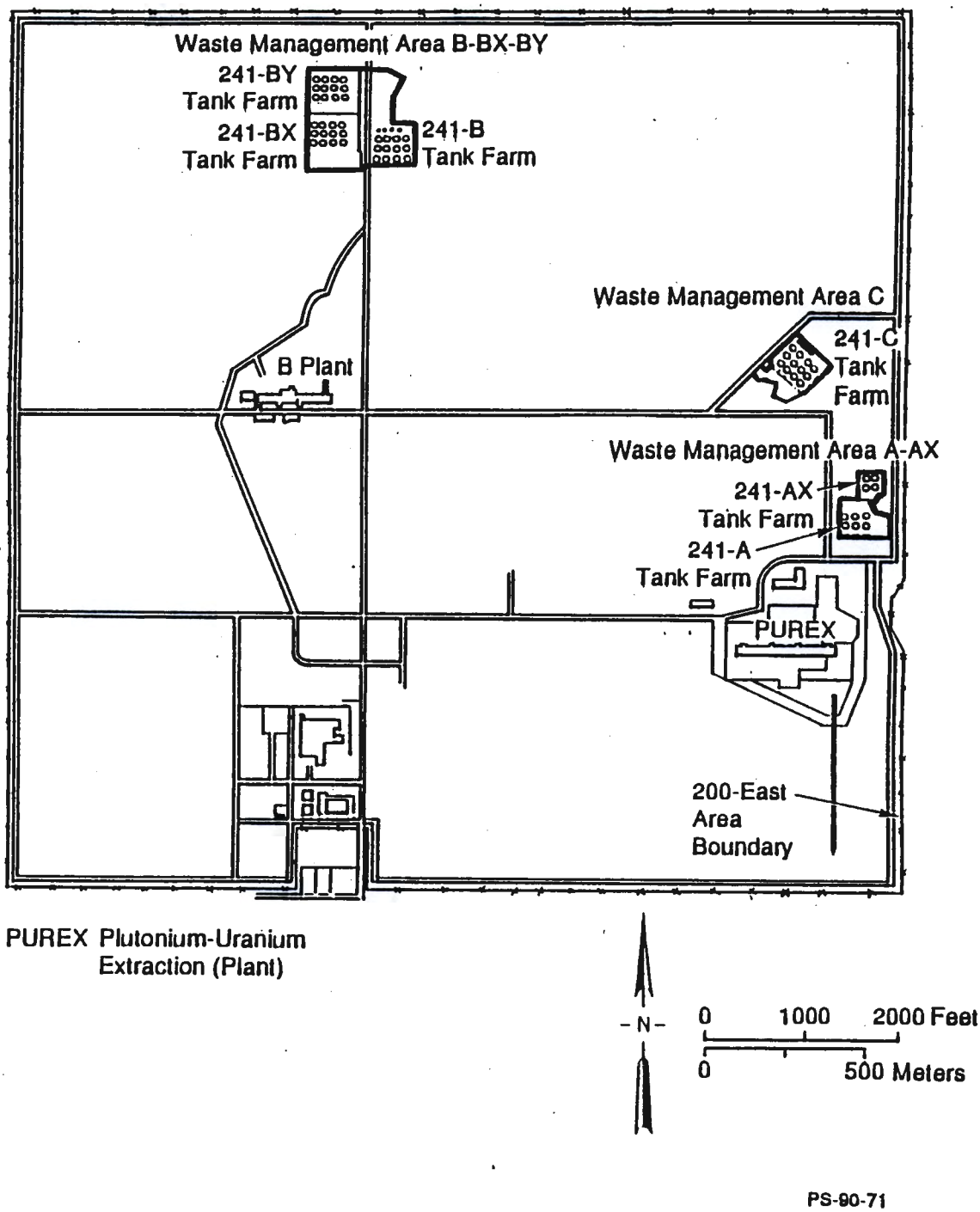
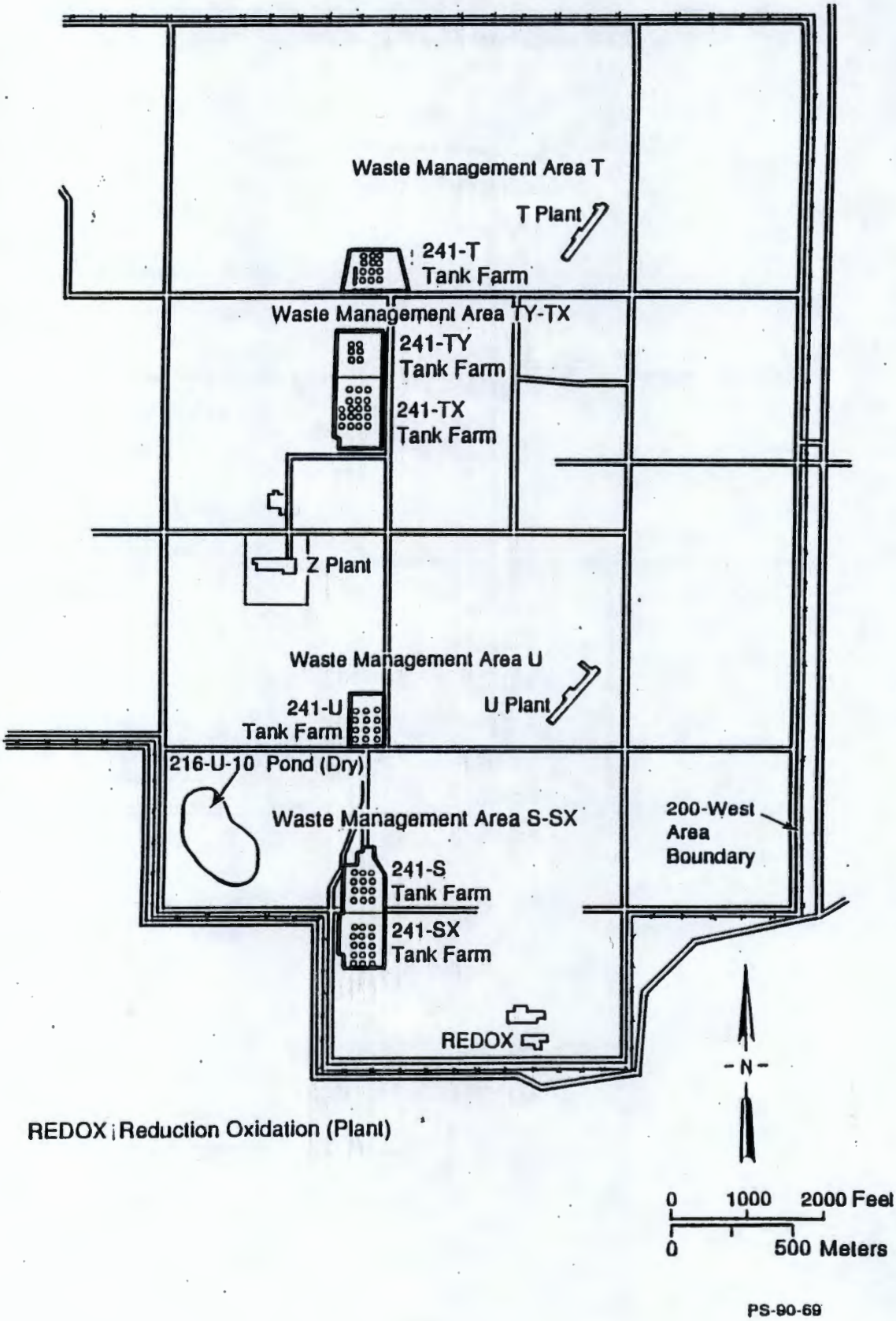


Figure 15-2. Single-Shell Tank Waste Management Areas in the 200 West Area.



REDOX ¡ Reduction Oxidation (Plant)

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

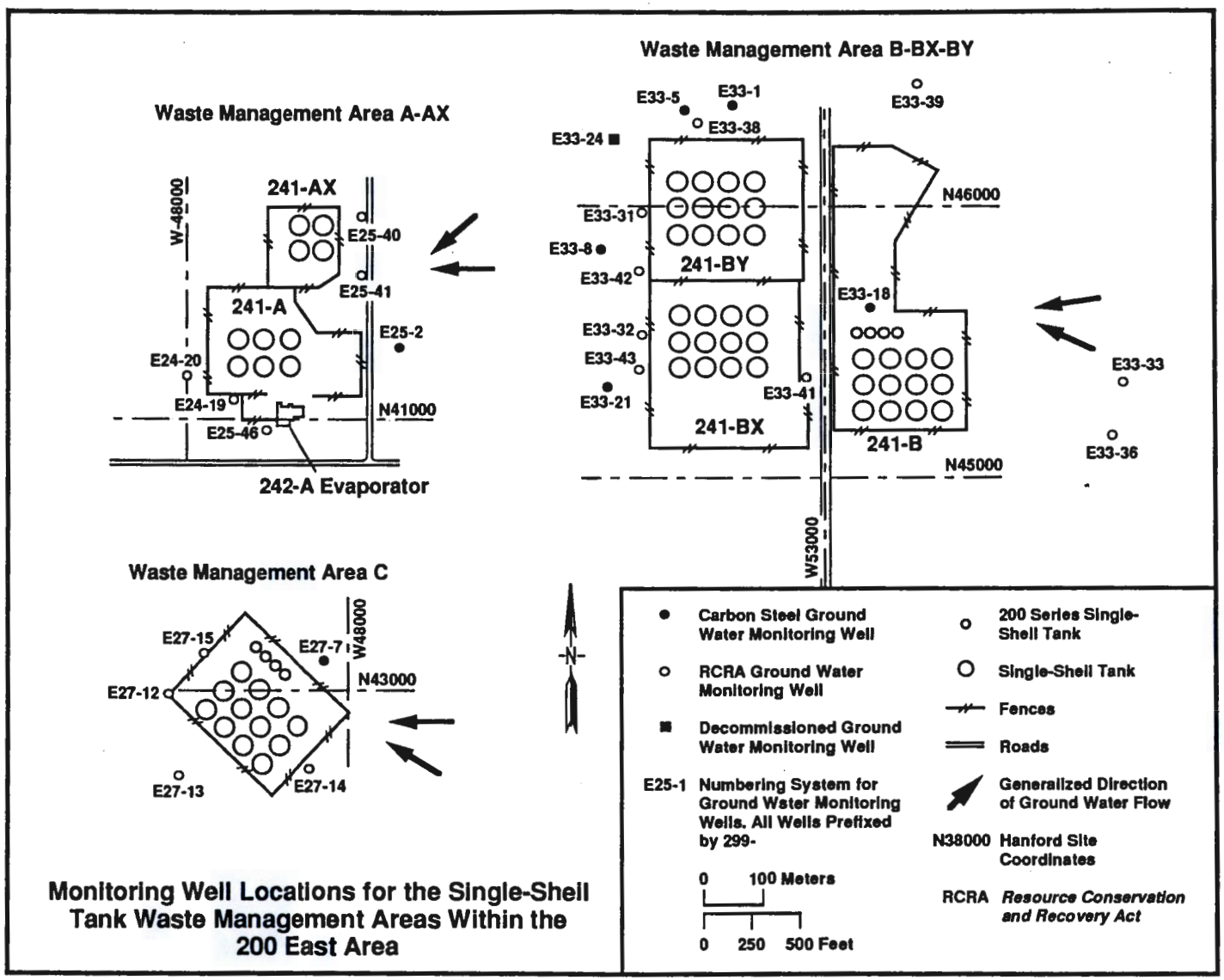


Figure 15-4. Well Location Map for the Single-Shell Tank Waste Management Areas in the 200 West Area.

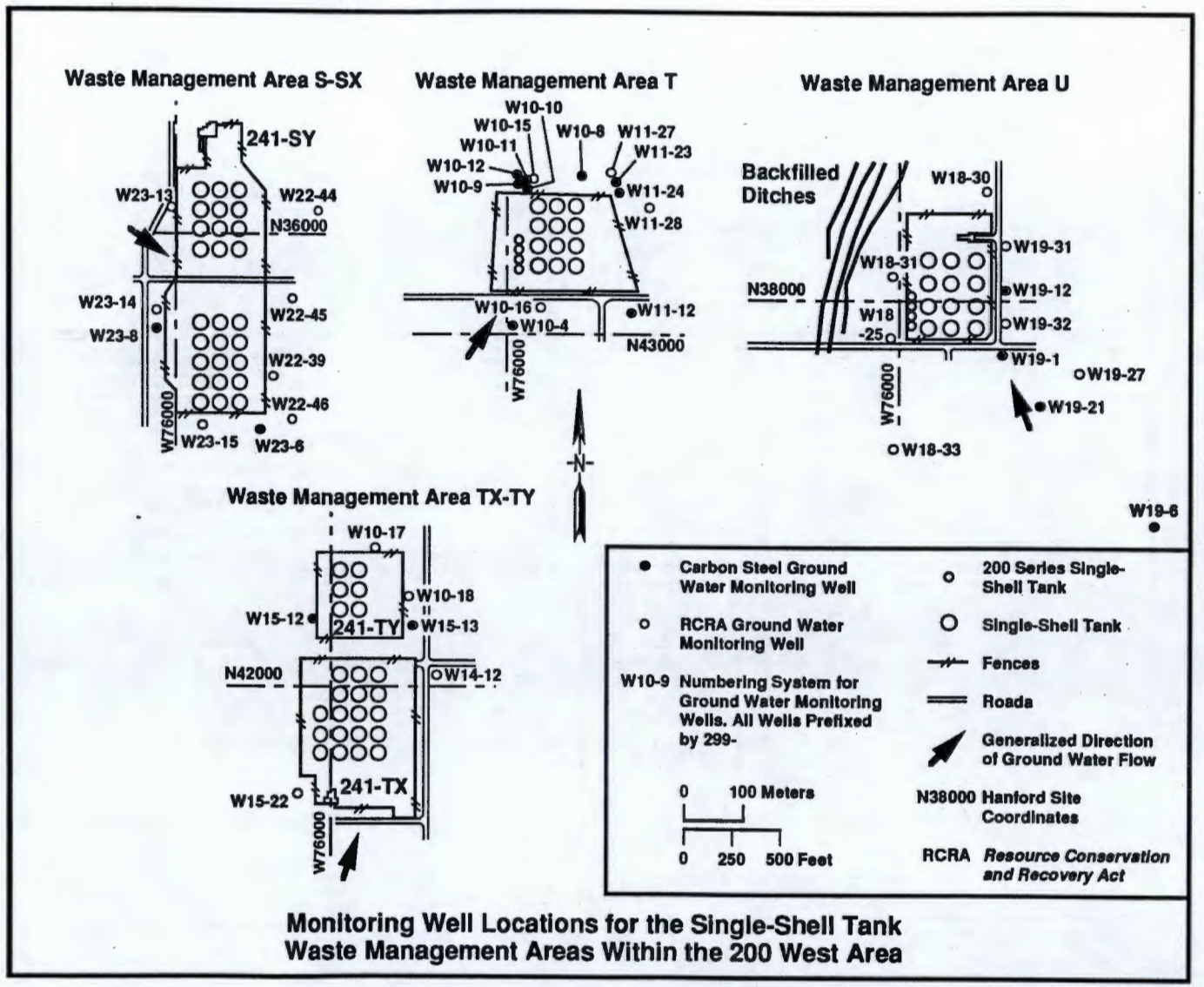


Table 15-1. Groundwater Monitoring Wells for the Single-Shell Tanks. (3 sheets)

Well no. (299-)	Aquifer[a]	Sample frequency	Sample date, 1st Qtr 1995
Single-Shell Tanks Waste Management Area A-AX			
E24-19[89]	Ringold: Water Table	Semiannually	2/02/95
E24-20[91]	Ringold: Water Table	Semiannually	2/02/95
E25-40[89]	Ringold: Water Table	Semiannually	2/06/95
E25-41[89]	Ringold: Water Table	Semiannually	2/06/95
E25-46[92]	Ringold: Water Table	Semiannually	2/06/95
Single-Shell Tanks Waste Management Area B-BX-BY			
E33-31[89]	Hanford: Water Table	Semiannually	2/08/95
E33-32[89]	Hanford: Water Table	Semiannually	2/07/95
E33-33[89]	Hanford: Water Table	Semiannually	2/07/95[d]
E33-36[90]	Hanford: Water Table	Semiannually	2/07/95[d] 3/06/95
E33-41[91b]	Hanford: Water Table	Semiannually	2/13/95
E33-38[91c]	Hanford: Water Table	Semiannually	Not Sampled
E33-39[91c]	Hanford: Water Table	Semiannually	Not Sampled
E33-42[91]	Hanford: Water Table	Semiannually	2/08/95
E33-43[91]	Hanford: Water Table	Semiannually	2/08/95
Single-Shell Tank Waste Management Area C			
E27-12[89]	Ringold: Water Table	Semiannually	2/08/95
E27-13[89]	Ringold: Water Table	Semiannually	2/13/95
E27-14[89]	Ringold: Water Table	Semiannually	2/13/95
E27-15[89]	Ringold: Water Table	Semiannually	2/08/95
E27-7[82]	Ringold: Water Table	Semiannually	2/09/95
Single-Shell Tanks Waste Management Area S-SX			
W22-39[90]	Ringold: Water Table	Semiannually	2/14/95
W22-44[91]	Ringold: Water Table	Semiannually	2/15/95
W22-45[92]	Ringold: Water Table	Semiannually	2/15/95
W22-46[91]	Ringold: Water Table	Semiannually	2/14/95
W23-13[90]	Ringold: Water Table	Semiannually	2/14/95

Table 15-1. Groundwater Monitoring Wells for the Single-Shell Tanks. (3 sheets)

Well no. (299-)	Aquifer[a]	Sample frequency	Sample date, 1st Qtr 1995
W23-14[90]	Ringold: Water Table	Semiannually	2/14/95
W23-15[91]	Ringold: Water Table	Semiannually	2/14/95
Single-Shell Tanks Waste Management Area T			
W10-15[89]	Ringold: Water Table	Quarterly	2/10/95
W10-16[89]	Ringold: Water Table	Quarterly	2/09/95
W10-19[92]	Ringold: Water Table	Quarterly	3/09/95
W10-20[93]	Ringold: Water Table	Quarterly	3/09/95
W10-21[93]	Ringold: Water Table	Quarterly	3/09/95
W11-27[91]	Ringold: Water Table	Quarterly	2/09/95
W11-28[91]	Ringold: Water Table	Quarterly	2/23/95
W11-31[92]	Ringold: Water Table	Quarterly	3/08/95
Single-Shell Tanks Waste Management Area TX-TY			
W10-17[90]	Ringold: Water Table	Quarterly	2/10/95
W10-18[90]	Ringold: Water Table	Quarterly	2/10/95
W14-12[91]	Ringold: Water Table	Quarterly	2/10/95
W15-22[90]	Ringold: Water Table	Quarterly	2/10/95
Single-Shell Tanks Waste Management Area U			
W18-25[90]	Ringold: Water Table	Semiannually	2/13/95
W18-30[91]	Ringold: Water Table	Semiannually	2/13/95
W18-31[91]	Ringold: Water Table	Semiannually	2/13/95
W19-31[90]	Ringold: Water Table	Semiannually	2/11/95

Table 15-1. Groundwater Monitoring Wells for the Single-Shell Tanks. (3 sheets)

Well no. (299-)	Aquifer[a]	Sample frequency	Sample date, 1st Qtr 1995
W19-32[90]	Ringold: Water Table	Semiannually	2/11/95
W19-12[83]	Ringold: Water Table	Semiannually	Not sampled

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

[a]Wells are screened either in sand and gravel of the Hanford formation or in matrix-supported silty sandy gravel of the Ringold Formation.

[b]Well 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.

[c]Part of 200-BP-1 operable unit network. Not sampled regularly as RCRA wells.

[d]Part of network for 216-B-63.

Table 15-2. RCRA Water Level Measurement Report, Single-Shell Tanks, First 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	1/30/95	292.17	401.48	122.37
	2/02/95	292.49	401.16*	122.27
	2/22/95	292.36	401.29	122.31
	3/22/95	292.42	401.23	122.29
299-E24-20	1/30/95	287.54	401.74	122.45
	2/02/95	287.82	401.46*	122.37
	2/22/95	287.70	401.58	122.40
	3/22/95	287.75	401.53	122.39
299-E25-2	1/30/95	273.76	401.89	122.50
	2/22/95	274.06	401.59	122.40
	3/22/95	274.01	401.64	122.42
299-E25-40	1/30/95	264.12	401.79	122.47
	2/06/95	264.38	401.53*	122.39
	2/22/95	264.34	401.57	122.40
	3/22/95	264.37	401.54	122.39
299-E25-41	1/30/95	269.62	401.84	122.48
	2/06/95	269.85	401.61*	122.41
	2/22/95	269.59	401.87	122.49
	3/22/95	269.85	401.61	122.41
299-E25-46	1/30/95	293.03	401.78	122.46
	2/06/95	293.24	401.57*	122.40
	2/22/95	293.19	401.62	122.41
	3/22/95	293.26	401.55	122.39
		241-B/BX/BY Tank Farm Wells		
299-E33-1	1/30/95	230.51	401.60	122.41
	2/22/95	230.68	401.43	122.36
	3/22/95	230.73	401.38	122.34
299-E33-18	1/30/95	250.17	401.69	122.44
	2/22/95	250.34	401.52	122.38
	3/22/95	250.40	401.46	122.37

Table 15-2. RCRA Water Level Measurement Report, Single-Shell Tanks, First 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	1/30/95	266.72	401.67	122.43
	2/22/95	266.89	401.50	122.38
	3/22/95	266.94	401.45	122.36
299-E33-31	1/30/95	245.93	401.55	122.39
	2/08/95	246.12	401.36*	122.33
	2/22/95	246.08	401.40	122.35
	3/22/95	246.13	401.35	122.33
299-E33-32	1/30/95	258.57	401.45	122.36
	2/07/95	258.75	401.27*	122.31
	2/22/95	258.74	401.28	122.31
	3/22/95	258.77	401.25	122.30
299-E33-33	1/30/95	238.79	401.60	122.41
	2/07/95	238.95	401.44*	122.36
	2/22/95	238.98	401.41	122.35
	3/22/95	239.00	401.39	122.34
299-E33-36	2/07/95	246.81	399.86*	121.88
	3/06/95	247.40	399.27*	121.70
	3/16/95	247.59	399.08	121.64
299-E33-38	1/30/95	230.60	401.35	122.33
	2/22/95	230.75	401.20	122.29
	3/22/95	230.79	401.16	122.27
299-E33-39	1/30/95	222.12	401.17	122.28
	2/22/95	222.25	401.04	122.24
	3/22/95	222.30	400.99	122.22
299-E33-41	1/30/95	253.35	401.60	122.41
	2/22/95	253.52	401.43	122.36
	3/22/95	253.66	401.29	122.31
299-E33-42	1/30/95	252.74	401.56	122.40
	2/08/95	252.92	401.38*	122.34
	2/22/95	252.88	401.42	122.35
	3/22/95	252.94	401.36	122.33

Table 15-2. RCRA Water Level Measurement Report, Single-Shell Tanks, First 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	1/30/95	261.33	401.35	122.33
	2/08/95	261.45	401.23*	122.29
	2/22/95	261.52	401.16	122.27
	3/22/95	261.46	401.22	122.29
299-E33-5	1/30/95	233.40	401.32	122.32
	2/22/95	233.20	401.52	122.38
	3/22/95	233.29	401.43	122.36
299-E33-8	1/30/95	249.32	401.67	122.43
	2/22/95	249.46	401.53	122.39
	3/22/95	249.54	401.45	122.36
		241-C Tank Farm Wells		
299-E27-12	1/30/95	259.49	401.66	122.43
	2/08/95	259.76	401.39*	122.34
	2/22/95	259.68	401.47	122.37
	3/22/95	259.72	401.43	122.36
299-E27-13	1/30/95	267.38	401.81	122.47
	2/22/95	267.56	401.63	122.42
	3/22/95	267.58	401.61	122.41
299-E27-14	1/31/95	256.84	401.70	122.44
	2/22/95	257.08	401.46	122.37
	3/22/95	257.13	401.41	122.35
299-E27-15	1/30/95	251.57	401.30	122.32
	2/08/95	251.80	401.07*	122.25
	2/22/95	252.34	400.53	122.08
	3/22/95	250.99	401.88+	122.49
299-E27-7	1/30/95	233.05	401.82	122.47
	2/09/95	233.34	401.53*	122.39
	2/22/95	233.25	401.62	122.41
	3/22/95	233.27	401.60	122.41

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

Well	Date	Depth to water (ft)	Water level elevation above msl (ft)	(m)
		241-S/SX Tank Farm Wells		
299-W22-39	1/31/95	211.60	456.66	139.19
	2/22/95	212.03	456.23	139.06
	3/23/95	212.06	456.20	139.05
299-W22-44	2/01/95	219.75	458.38	139.71
	2/22/95	220.27	457.86	139.56
	3/22/95	220.23	457.90	139.57
299-W22-45	2/01/95	209.31	456.90	139.26
	2/22/95	209.49	456.72	139.21
	3/22/95	209.48	456.73	139.21
299-W22-46	1/31/95	214.80	456.38	139.10
	2/22/95	215.14	456.04	139.00
	3/23/95	215.21	455.97	138.98
299-W23-13	1/31/95	207.43	458.90	139.87
	2/22/95	207.81	458.52	139.76
	3/23/95	207.93	458.40	139.72
299-W23-14	1/31/95	205.48	458.52	139.76
	2/22/95	205.95	458.05	139.61
	3/23/95	206.04	457.96	139.59
299-W23-15	1/31/95	198.22	457.22	139.36
	2/22/95	198.57	456.87	139.25
	3/23/95	198.72	456.72	139.21
299-W23-6	1/31/95	210.25	456.73	139.21
	2/22/95	210.64	456.34	139.09
	3/23/95	210.70	456.28	139.07
299-W23-8	1/31/95	205.27	458.68	139.81
	2/22/95	205.73	458.22	139.67
	3/23/95	205.82	458.13	139.64

Table 15-2. RCRA Water Level Measurement Report, Single-Shell Tanks, First 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	1/31/95	214.86	460.49	140.36
	2/22/95	215.21	460.14	140.25
	3/23/95	215.29	460.06	140.23
299-W10-11	1/31/95	214.75	460.77	140.44
	2/22/95	215.00	460.52	140.37
	3/23/95	215.18	460.34	140.31
299-W10-12	1/31/95	214.46	460.55	140.38
	2/22/95	214.87	460.14	140.25
	3/23/95	214.89	460.12	140.24
299-W10-15	1/31/95	215.45	460.45	140.35
	2/10/95	215.75	460.15*	140.25
	2/22/95	215.82	460.08	140.23
	3/23/95	215.86	460.04	140.22
299-W10-16	1/31/95	211.85	460.91	140.49
	2/09/95	212.40	460.36*	140.32
	2/22/95	212.41	460.35	140.31
	3/23/95	212.47	460.29	140.30
299-W10-8	1/31/95	220.09	460.22	140.28
	2/22/95	220.50	459.81	140.15
	3/23/95	220.43	459.88	140.17
299-W10-9	1/31/95	214.25	460.68	140.42
	2/22/95	214.63	460.30	140.30
	3/23/95	214.68	460.25	140.28
299-W11-23	1/26/95	228.86	459.29*	139.99
	1/31/95	228.26	459.89	140.17
	2/22/95	228.65	459.50	140.06
	3/23/95	228.68	459.47	140.05
299-W11-24	1/31/95	227.02	460.41	140.33
	2/22/95	227.34	460.09	140.24
	3/23/95	227.46	459.97	140.20

Table 15-2. RCRA Water Level Measurement Report, Single-Shell Tanks, First 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	1/31/95	225.16	460.11	140.24
	2/09/95	225.53	459.74*	140.13
	3/23/95	225.58	459.69	140.11
	3/23/95	225.61	459.66	140.10
299-W11-28	2/22/95	232.91	460.57	140.38
	2/23/95	232.91	460.57*	140.38
	3/23/95	232.93	460.55	140.38
	241-TX/TY Tank Farm Wells			
299-W10-17	1/31/95	209.76	461.08	140.54
	2/10/95	210.16	460.68*	140.42
	2/22/95	210.24	460.60	140.39
	3/23/95	210.24	460.60	140.39
299-W10-18	1/31/95	208.95	461.98	140.81
	2/10/95	209.48	461.45*	140.65
	2/22/95	209.36	461.57	140.69
	3/23/95	209.43	461.50	140.67
299-W14-12	1/31/95	207.68	462.84	141.07
	2/10/95	208.12	462.40*	140.94
	2/22/95	208.21	462.31	140.91
	3/23/95	208.19	462.33	140.92
299-W15-12	1/31/95	208.16	461.91	140.79
	2/22/95	208.57	461.50*	140.67
	2/22/95	208.56	461.51	140.67
	3/23/95	208.57	461.50	140.67
299-W15-13	1/31/95	207.95	462.17	140.87
	2/22/95	208.65	461.47	140.66
	3/23/95	208.45	461.67	140.72
299-W15-22	1/31/95	207.24	463.53	141.28
	2/10/95	207.67	463.10*	141.15
	2/22/95	207.68	463.09	141.15
	3/23/95	207.76	463.01	141.13

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

Well	Date	Depth to water (ft)	Water level elevation above msl (ft)	(m)
	241-U Tank Farm Wells			
299-W18-25	1/31/95	204.12	461.92	140.79
	2/22/95	204.62	461.42	140.64
	3/23/95	204.76	461.28	140.60
299-W18-30	1/31/95	210.39	462.45	140.95
	2/22/95	210.88	461.96	140.81
	3/23/95	211.00	461.84	140.77
299-W18-31	1/31/95	202.08	462.08	140.84
	2/22/95	202.64	461.52	140.67
	3/23/95	202.72	461.44	140.65
299-W18-33	1/31/95	207.57	461.34	140.62
	2/22/95	208.08	460.83	140.46
	3/23/95	208.24	460.67	140.41
299-W19-1	1/31/95	211.27	462.50	140.97
	2/22/95	211.87	461.90	140.79
	3/23/95	212.36	461.41	140.64
299-W19-12	2/22/95	211.21	462.04	140.83
	3/23/95	211.46	461.79	140.75
299-W19-21	1/31/95	217.21	461.58	140.69
	2/22/95	217.74	461.05	140.53
	3/23/95	218.06	460.73	140.43
299-W19-27	1/31/95	222.07	461.84	140.77
	2/22/95	222.58	461.33	140.61
	3/23/95	222.87	461.04	140.52
299-W19-31	1/31/95	211.77	462.42	140.95
	2/22/95	212.13	462.06	140.84
	3/23/95	212.35	461.84	140.77
299-W19-32	1/31/95	212.53	462.37	140.93
	2/22/95	213.02	461.88	140.78
	3/23/95	213.24	461.66	140.71

Table 15-2. RCRA Water Level Measurement Report, Single-Shell Tanks, First 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-W19-6	1/31/95	228.28	458.32	139.70
	2/22/95	228.77	457.83	139.55
	3/23/95	228.84	457.76	139.53

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. Elevations marked with an '*' were measured at the time of sampling.
4. Elevations 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 January 1 through March 31, 1995. (sheet 1 of 2)

CONTAMINATION INDICATOR PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
CONDUCT	94	Conductivity, field	µmhos	1			20	20	
CONDUCT	73	Conductivity, lab	µmhos				5	5	
TOC		Total Organic Carbon	ppb	110			20	20	
TOX		Total Organic Halogen	ppb	5			20	16	
PH	93	pH, field	pH	.01	6.5-8.5	EPAS	20	20	0
PH	125	pH, lab	pH		6.5-8.5	EPAS	5	5	0

DRINKING WATER PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
FBARIUM		Barium, filtered	ppb	.59	1000	EPAI	5	5	0
FCADMIU		Cadmium, filtered	ppb	3.3	10	EPAI	5	0	0
FCHROMI		Chromium, filtered	ppb	4.5	50	EPAI	5	3	1
FLUORID		Fluoride	ppb	36	1400	EPAI	5	5	0
ALPHA		Gross alpha	pCi/L		15	EPA	5	4	0
NITRATE		Nitrate	ppb	11	45000	EPA	5	5	0

GROUNDWATER QUALITY PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
CHLORID		Chloride	ppb	14	250000	EPAS	5	5	0
FIRON		Iron, filtered	ppb	5.24	300	EPAS	5	5	0
FMANGAN		Manganese, filtered	ppb	.72	50	EPAS	5	5	0
LPHENOL		Phenol	ppb	.31			5	0	
FSODIUM		Sodium, filtered	ppb	61			5	5	
SULFATE		Sulfate	ppb	37	250000	EPAS	5	5	0

SITE SPECIFIC AND OTHER CONSTITUENTS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
246-trp		2,4,6-Trichlorophenol	ppb	1.3			5	0	
24-dchp		2,4-Dichlorophenol	ppb	1.3			5	0	
DIMPHEN		2,4-Dimethylphenol	ppb	1.2			5	0	
DINPHEN		2,4-Dinitrophenol	ppb	3			5	0	
26-dchp		2,6-Dichlorophenol	ppb	1.4			5	0	
CHLPHEN		2-Chlorophenol	ppb	1.6			5	0	
2NITPH		2-Nitrophenol	ppb	1.3			5	0	
BUTDINP		2-sec-Butyl-4,6-dinitrophenol(DN)	ppb	1.3			5	0	
46DN2MP		4,6-Dinitro-2-methylphenol	ppb	1.3			5	1	
CHLCRES		4-Chloro-3-methylphenol	ppb	1.3			5	0	
NITPHEN		4-Nitrophenol	ppb	3			5	0	
ALKALIN		Alkalinity	ppm	2.8			5	5	
FALUMIN		Aluminum, filtered	ppb	26			5	0	

Table 15-3. Constituent List and Summary of Results for the Single-Shell Tank Waste Management Area A-AX Data for Reporting Period January 1 through March 31, 1995. (sheet 2 of 2)

Constituent Name				Lab	DWS		Number of Samples		
Short	(Method)	Full	Units	MDL	Limit	Agency	Total	>MDL	>DWS
FANTIMO		Antimony, filtered	ppb	62			5	0	
FBERYLL		Beryllium, filtered	ppb	.17			5	0	
BROMIDE		Bromide	ppb	11			5	3	
FCALCIU		Calcium, filtered	ppb	34			5	5	
FCOBALT		Cobalt, filtered	ppb	5.9			5	0	
FCOPPER		Copper, filtered	ppb	4.1	1000	EPAS	5	0	0
CRESOLS		Cresols (methylphenols)	ppb	4.8			5	0	
BETA		Gross beta	pCi/L				5	5	
I-129L		Iodine-129, Low level	pCi/L		1	EPA	5	5	5
FMAGNES		Magnesium, filtered	ppb	23			5	5	
FNICKEL		Nickel, filtered	ppb	13			5	2	
NITRITE		Nitrite	ppb	18	1000	EPA	5	0	0
PENTCHP		Pentachlorophenol	ppb	1.3	1	EPA	5	0	5*
PHOSPHA		Phosphate	ppb	82			5	0	
FPOTASS		Potassium, filtered	ppb	850			5	5	
FSILVER		Silver, filtered	ppb	3.6	50	EPAI	5	4	0
TC-99		Technetium-99	pCi/L		900	EPA	5	5	0
TETPHNL		Tetrachlorophenols	ppb	1.5			5	0	
FTIN		Tin, filtered	ppb	69			5	0	
TDS		Total Dissolved Solids	ppm	10	500	EPAS	5	5	0
TRIPHNL		Trichlorophenols	ppb	1.7			5	0	
TRITIUM		Tritium	pCi/L		20000	EPA	5	5	0
TURBID	111	Turbidity	NTU				5	5	
TURBID	126	Turbidity	NTU	.016			5	5	
URANIUM		Uranium	ppb			*	5	5	
FVANADI		Vanadium, filtered	ppb	6.6			5	5	
FZINC		Zinc, filtered	ppb	6.3	5000	EPAS	5	0	0

For explanation of this table, see Section 1.4 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 January 1 through March 31, 1995. (sheet 1 of 2)

Well Name	Collection Date	Sample Number	46DN2MP 30/ppb 1.3/.	ALKALIN 357/ppm 2.8/.	FBARIUM 34/ppb .59/1000	BROMIDE 124/ppb 11/.
299-E24-19	2/02/95	B0DQ49	2.20 L	90.00		11.00 U
299-E24-19	2/02/95	B0DQ53			20.00	
299-E24-20	2/02/95	B0DQ54	1.30 U	100.00		11.00 U
299-E24-20	2/02/95	B0DQ58			26.00	
299-E25-40	2/06/95	B0DQ59	1.30 U	110.00		20.00 L
299-E25-40	2/06/95	B0DQ63			20.00	
299-E25-41	2/06/95	B0DQ64	1.30 U	90.00		30.00 L
299-E25-41	2/06/95	B0DQ68			24.00	
299-E25-46	2/06/95	B0DQ69	1.30 U	90.00		20.00 L
299-E25-46	2/06/95	B0DQ73			20.00	

Well Name	Collection Date	Sample Number	FCALCIU 34/ppb 34/.	CHLORID 124/ppb 14/250000	FCHROMI 34/ppb 4.5/50	FLUORID 124/ppb 36/1400
299-E24-19	2/02/95	B0DQ49		4000.00		300.00
299-E24-19	2/02/95	B0DQ53	26000.00		410.00	
299-E24-20	2/02/95	B0DQ54		4200.00		300.00
299-E24-20	2/02/95	B0DQ58	27000.00		4.50 U	
299-E25-40	2/06/95	B0DQ59		4700.00		400.00
299-E25-40	2/06/95	B0DQ63	31000.00		10.00 L	
299-E25-41	2/06/95	B0DQ64		6200.00		300.00
299-E25-41	2/06/95	B0DQ68	36000.00		5.20 L	
299-E25-46	2/06/95	B0DQ69		5200.00		300.00
299-E25-46	2/06/95	B0DQ73	28000.00		4.50 U	

Well Name	Collection Date	Sample Number	ALPHA 135/pCi/L ./15	BETA 136/pCi/L ./.	I-129 139/pCi/L ./1	FIRON 34/ppb 5.24/300
299-E24-19	2/02/95	B0DQ49	2.21	26.80	7.78	
299-E24-19	2/02/95	B0DQ53				23.00
299-E24-20	2/02/95	B0DQ54	1.74	6.87	4.37	
299-E24-20	2/02/95	B0DQ58				16.00 L
299-E25-40	2/06/95	B0DQ59	.82 U	11.00	7.03	
299-E25-40	2/06/95	B0DQ63				26.00
299-E25-41	2/06/95	B0DQ64	2.55	14.50	4.57	
299-E25-41	2/06/95	B0DQ68				53.00
299-E25-46	2/06/95	B0DQ69	3.24	28.20	5.87	
299-E25-46	2/06/95	B0DQ73				20.00 L

Well Name	Collection Date	Sample Number	FMAGNES 34/ppb 23/.	FMANGAN 34/ppb .72/50	FNICKEL 34/ppb 13/.	NITRATE 124/ppb 11/45000
299-E24-19	2/02/95	B0DQ49				5800.00 H
299-E24-19	2/02/95	B0DQ53	7900.00	22.00	170.00	
299-E24-20	2/02/95	B0DQ54				10000.00 DH
299-E24-20	2/02/95	B0DQ58	8300.00	1.10 L	13.00 U	
299-E25-40	2/06/95	B0DQ59				3700.00
299-E25-40	2/06/95	B0DQ63	8600.00	2.90 L	13.00 U	

Table 15-4. Constituents with at Least One Detected Value for the Single-Shell Tank Waste Management Area A-AX Data for Reporting Period January 1 through March 31, 1995. (sheet 2 of 2)

Well Name	Collection Date	Sample Number	FMAGNES 34/ppb 23/.	FMANGAN 34/ppb .72/50	FNICKEL 34/ppb 13/.	NITRATE 124/ppb 11/45000
299-E25-41	2/06/95	B0DQ64				11000.00 D
299-E25-41	2/06/95	B0DQ68	12000.00	9.50 L	16.00 L	
299-E25-46	2/06/95	B0DQ69				9300.00
299-E25-46	2/06/95	B0DQ73	8300.00	1.20 L	13.00 U	

Well Name	Collection Date	Sample Number	FPOTASS 34/ppb 850/.	FSILVER 34/ppb 3.6/50	FSODIUM 34/ppb 61/.	SULFATE 124/ppb 37/250000
299-E24-19	2/02/95	B0DQ49				22000.00 D
299-E24-19	2/02/95	B0DQ53	4800.00	6.00 BL	12000.00 B	
299-E24-20	2/02/95	B0DQ54				22000.00 D
299-E24-20	2/02/95	B0DQ58	4500.00	6.40 BL	13000.00 B	
299-E25-40	2/06/95	B0DQ59				41000.00 D
299-E25-40	2/06/95	B0DQ63	4900.00	4.10 BL	18000.00 B	
299-E25-41	2/06/95	B0DQ64				76000.00 D
299-E25-41	2/06/95	B0DQ68	4400.00	3.60 U	18000.00 B	
299-E25-46	2/06/95	B0DQ69				27000.00 D
299-E25-46	2/06/95	B0DQ73	4600.00	4.90 BL	13000.00 B	

Well Name	Collection Date	Sample Number	TC-99 143/pCi/L ./900	TDS 65/ppm 10/500	TRITIUM 142/pCi/L ./20000	TURBID 111/NTU ./.
299-E24-19	2/02/95	B0DQ49	90.20	180.00	3170.00	3.78
299-E24-20	2/02/95	B0DQ54	7.31	150.00	4450.00	1.80
299-E25-40	2/06/95	B0DQ59	8.18	230.00	7780.00	4.60
299-E25-41	2/06/95	B0DQ64	29.30	280.00	3730.00	4.11
299-E25-46	2/06/95	B0DQ69	86.70	190.00	2870.00	1.64

Well Name	Collection Date	Sample Number	TURBID 126/NTU .016/.	URANIUM 145/ppb ./.	FVANADI 34/ppb 6.6/.
299-E24-19	2/02/95	B0DQ49	6.90 H	3.29	
299-E24-19	2/02/95	B0DQ53			14.00 L
299-E24-20	2/02/95	B0DQ54	1.10 H	1.61	
299-E24-20	2/02/95	B0DQ58			27.00 L
299-E25-40	2/06/95	B0DQ59	4.40	2.95	
299-E25-40	2/06/95	B0DQ63			26.00 L
299-E25-41	2/06/95	B0DQ64	7.30	2.76	
299-E25-41	2/06/95	B0DQ68			26.00 L
299-E25-46	2/06/95	B0DQ69	1.20	4.15	
299-E25-46	2/06/95	B0DQ73			29.00 L

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 January 1 through March 31, 1995.

Well Name	Collection Date	Sample Number	COND FIELD µmho 1/.	COND LAB µmho 1/.	pH FIELD .01/6.5-8.5s	pH LAB .01/6.5-8.5s	TOC ppb 110/.	TOX ppb 5/.
299-E24-19	2/02/95	B0DQ49	266	260	7.54	7.70 H	300 L	5.0 U
		B0DQ50	261		7.46		300 L	5.0 U
		B0DQ51	260		7.45		400 L	6.4
		B0DQ52	259		7.49		300 L	8.0
299-E24-20	2/02/95	B0DQ54	281	270	8.13	8.20 H	300 L	5.0 U
		B0DQ55	280		8.14		300 L	8.2
		B0DQ56	278		8.14		300 L	5.0 U
		B0DQ57	277		8.14		300 L	6.5
299-E25-40	2/06/95	B0DQ59	350	320	7.98	8.10 H	300 L	6.6
		B0DQ60	349		7.98		400 L	5.2
		B0DQ61	343		7.98		300 L	8.2
		B0DQ62	344		7.98		300 L	10.2
299-E25-41	2/06/95	B0DQ64	298	390	8.02	7.60 H	300 L	5.8
		B0DQ65	297		8.02		400 L	5.3
		B0DQ66	297		8.02		300 L	5.4
		B0DQ67	297		8.02		400 L	6.3
299-E25-46	2/06/95	B0DQ69	281	280	7.12	8.30 H	400 L	6.2
		B0DQ70	281		7.12		400 L	7.3
		B0DQ71	281		7.12		400 L	6.7
		B0DQ72	281		7.12		400 L	7.1

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 January 1 through March 31, 1995. (sheet 1 of 2)

CONTAMINATION INDICATOR PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
CONDUCT	94	Conductivity, field	µmhos	1			36	36	
CONDUCT	73	Conductivity, lab	µmhos				7	7	
TOC		Total Organic Carbon	ppb	110			28	28	
TOX		Total Organic Halogen	ppb	5			26	18	
PH	93	pH, field	pH	.01	6.5-8.5	EPAS	36	36	0
PH	125	pH, lab	pH		6.5-8.5	EPAS	8	8	0

DRINKING WATER PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
FBARIUM		Barium, filtered	ppb	.59	1000	EPAI	7	7	0
FCADMIU		Cadmium, filtered	ppb	3.3	10	EPAI	7	0	0
FCHROMI		Chromium, filtered	ppb	4.5	50	EPAI	7	3	0
FLUORID		Fluoride	ppb	36	1400	EPAI	9	9	0
ALPHA		Gross alpha	pCi/L		15	EPA	7	6	0
NITRATE		Nitrate	ppb	11	45000	EPA	9	9	0

GROUNDWATER QUALITY PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
CHLORID		Chloride	ppb	14	250000	EPAS	9	9	0
FIRON		Iron, filtered	ppb	5.24	300	EPAS	7	7	0
FMANGAN		Manganese, filtered	ppb	.72	50	EPAS	7	4	0
LPHENOL		Phenol	ppb	.31			7	0	
FSODIUM		Sodium, filtered	ppb	61			7	7	
SULFATE		Sulfate	ppb	37	250000	EPAS	9	9	0

SITE SPECIFIC AND OTHER CONSTITUENTS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
246-trp		2,4,6-Trichlorophenol	ppb	1.3			7	0	
24-dchp		2,4-Dichlorophenol	ppb	1.3			7	0	
DIMPHEN		2,4-Dimethylphenol	ppb	1.2			7	0	
DINPHEN		2,4-Dinitrophenol	ppb	3			7	0	
26-dchp		2,6-Dichlorophenol	ppb	1.4			7	0	
CHLPHEN		2-Chlorophenol	ppb	1.6			7	0	
2NITPH		2-Nitrophenol	ppb	1.3			7	0	
BUTDINP		2-sec-Butyl-4,6-dinitrophenol(DN)	ppb	1.3			7	0	
46DN2MP		4,6-Dinitro-2-methylphenol	ppb	1.3			7	0	
CHLCRES		4-Chloro-3-methylphenol	ppb	1.3			7	0	
NITPHEN		4-Nitrophenol	ppb	3			7	0	
ALKALIN		Alkalinity	ppm	2.8			7	7	
FALUMIN		Aluminum, filtered	ppb	26			7	3	
FANTIMO		Antimony, filtered	ppb	62			7	0	
FBERYLL		Beryllium, filtered	ppb	.17			7	0	

Table 15-6. Constituent List and Summary of Results for the Single-Shell Tank Waste Management Area B-BY-BX Data for Reporting Period January 1 through March 31, 1995. (sheet 2 of 2)

Constituent Name				Lab	DWS		Number of Samples		
Short	(Method)	Full	Units	MDL	Limit	Agency	Total	>MDL	>DWS
BROMIDE		Bromide	ppb	11			9	5	
FCALCIU		Calcium, filtered	ppb	34			7	7	
FCOBALT		Cobalt, filtered	ppb	5.9			7	0	
FCOPPER		Copper, filtered	ppb	4.1	1000	EPAS	7	0	0
CRESOLS		Cresols (methylphenols)	ppb	4.8			7	0	
BETA		Gross beta	pCi/L				7	7	
I-129L		Iodine-129, Low level	pCi/L		1	EPA	7	7	7
FMAGNES		Magnesium, filtered	ppb	23			7	7	
FNICKEL		Nickel, filtered	ppb	13			7	0	
NITRITE		Nitrite	ppb	18	1000	EPA	9	0	0
PENTCHP		Pentachlorophenol	ppb	1.3	1	EPA	7	0	7*
PHOSPHA		Phosphate	ppb	82			9	0	
FPOTASS		Potassium, filtered	ppb	850			7	7	
FSILVER		Silver, filtered	ppb	3.6	50	EPAI	7	0	0
TC-99		Technetium-99	pCi/L		900	EPA	7	7	1
TETPHNL		Tetrachlorophenols	ppb	1.5			7	0	
FTIN		Tin, filtered	ppb	69			7	0	
TDS		Total Dissolved Solids	ppm	10	500	EPAS	7	7	0
TRIPHNL		Trichlorophenols	ppb	1.7			7	0	
TRITIUM		Tritium	pCi/L		20000	EPA	7	7	0
TURBID	111	Turbidity	NTU				8	8	
TURBID	126	Turbidity	NTU	.016			7	7	
URANIUM		Uranium	ppb				7	7	
FVANADI		Vanadium, filtered	ppb	6.6			7	7	
FZINC		Zinc, filtered	ppb	6.3	5000	EPAS	7	0	0

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 January 1 through March 31, 1995. (sheet 1 of 3)

Well Name	Collection Date	Sample Number	ALKALIN 357/ppm 2.8/.	FALUMIN 34/ppb 26/.	FBARIUM 34/ppb .59/1000	BROMIDE 124/ppb 11/.
299-E33-31	2/08/95	B0DQ74	110.00			20.00 L
299-E33-31	2/08/95	B0DQ78		26.00 U	33.00	
299-E33-32	2/07/95	B0DQ79	100.00			11.00 U
299-E33-32	2/07/95	B0DQ83		26.00 U	36.00	
299-E33-33	11/21/94	B0D776				23.00 L
299-E33-33	2/07/95	B0DQ84	100.00			11.00 U
299-E33-33	2/07/95	B0DQ88		26.00 U	33.00	
299-E33-36	11/21/94	B0D780				23.00 L
299-E33-36	2/07/95	B0DQ89	110.00			11.00 U
299-E33-36	2/07/95	B0DQ93		28.00 BL	33.00	
299-E33-41	2/13/95	B0DQ94	100.00			11.00 U
299-E33-41	2/13/95	B0DQ98		26.00 U	34.00	
299-E33-42	2/08/95	B0DQ99	100.00			20.00 L
299-E33-42	2/08/95	B0DQB3		27.00 BL	28.00	
299-E33-43	2/08/95	B0DQB4	100.00			20.00 L
299-E33-43	2/08/95	B0DQB8		50.00 BL	33.00	

Well Name	Collection Date	Sample Number	FCALCIU 34/ppb 34/.	CHLORID 124/ppb 14/250000	FCHROMI 34/ppb 4.5/50	FLUORID 124/ppb 36/1400
299-E33-31	2/08/95	B0DQ74		5600.00		400.00
299-E33-31	2/08/95	B0DQ78	32000.00		4.50 U	
299-E33-32	2/07/95	B0DQ79		8700.00		400.00
299-E33-32	2/07/95	B0DQ83	35000.00		4.50 U	
299-E33-33	11/21/94	B0D776		5900.00 BQ		400.00
299-E33-33	2/07/95	B0DQ84		5500.00		400.00
299-E33-33	2/07/95	B0DQ88	30000.00		4.50 U	
299-E33-36	11/21/94	B0D780		4400.00 BQ		400.00
299-E33-36	2/07/95	B0DQ89		3900.00		400.00
299-E33-36	2/07/95	B0DQ93	28000.00		6.00 L	
299-E33-41	2/13/95	B0DQ94		6100.00		400.00
299-E33-41	2/13/95	B0DQ98	32000.00		6.60 L	
299-E33-42	2/08/95	B0DQ99		5200.00		400.00
299-E33-42	2/08/95	B0DQB3	30000.00		4.50 U	
299-E33-43	2/08/95	B0DQB4		9900.00		400.00
299-E33-43	2/08/95	B0DQB8	30000.00		4.90 L	

Well Name	Collection Date	Sample Number	ALPHA 135/pCi/L ./15	BETA 136/pCi/L ./.	I-129 139/pCi/L ./1	FIRON 34/ppb 5.24/300
299-E33-31	2/08/95	B0DQ74	1.27	65.00	5.99	
299-E33-31	2/08/95	B0DQ78				19.00 LQ
299-E33-32	2/07/95	B0DQ79	1.78	64.60	5.65	
299-E33-32	2/07/95	B0DQ83				21.00 Q
299-E33-33	2/07/95	B0DQ84	2.29	4.68	3.62	
299-E33-33	2/07/95	B0DQ88				12.00 LQ
299-E33-36	2/07/95	B0DQ89	1.39	5.84	5.30	
299-E33-36	2/07/95	B0DQ93				27.00 Q
299-E33-41	2/13/95	B0DQ94	1.83	237.00	5.07	

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 January 1 through March 31, 1995. (sheet 2 of 3)

Well Name	Collection Date	Sample Number	ALPHA 135/pCi/L ./15	BETA 136/pCi/L ./.	I-129 139/pCi/L ./1	FIRON 34/ppb 5.24/300
299-E33-41	2/13/95	B0DQ98				33.00
299-E33-42	2/08/95	B0DQ99	1.23	72.10	5.65	
299-E33-42	2/08/95	B0DQB3				15.00 LQ
299-E33-43	2/08/95	B0DQB4	.52 U	20.60	4.18	
299-E33-43	2/08/95	B0DQB8				27.00 Q

Well Name	Collection Date	Sample Number	FMAGNES 34/ppb 23/.	FMANGAN 34/ppb .72/50	NITRATE 124/ppb 11/45000	FPOTASS 34/ppb 850/.
299-E33-31	2/08/95	B0DQ74			18000.00 D	
299-E33-31	2/08/95	B0DQ78	9600.00	.72 U		5900.00
299-E33-32	2/07/95	B0DQ79			26000.00 D	
299-E33-32	2/07/95	B0DQ83	9900.00	.72 U		5500.00
299-E33-33	11/21/94	B0D776			5100.00 Q	
299-E33-33	2/07/95	B0DQ84			4700.00	
299-E33-33	2/07/95	B0DQ88	8700.00	.72 U		5900.00
299-E33-36	11/21/94	B0D780			2800.00 Q	
299-E33-36	2/07/95	B0DQ89			2500.00	
299-E33-36	2/07/95	B0DQ93	8000.00	1.90 L		5700.00
299-E33-41	2/13/95	B0DQ94			18000.00 D	
299-E33-41	2/13/95	B0DQ98	9700.00	1.90 L		5300.00
299-E33-42	2/08/95	B0DQ99			12000.00 D	
299-E33-42	2/08/95	B0DQB3	8700.00	.96 L		5500.00
299-E33-43	2/08/95	B0DQB4			4800.00	
299-E33-43	2/08/95	B0DQB8	8900.00	3.10 L		5700.00

Well Name	Collection Date	Sample Number	FSODIUM 34/ppb 61/.	SULFATE 124/ppb 37/250000	TC-99 143/pCi/L ./900	TDS 65/ppm 10/500
299-E33-31	2/08/95	B0DQ74		26000.00 D	215.00	210.00
299-E33-31	2/08/95	B0DQ78	15000.00 BQ			
299-E33-32	2/07/95	B0DQ79		27000.00 D	229.00	220.00
299-E33-32	2/07/95	B0DQ83	15000.00 BQ			
299-E33-33	11/21/94	B0D776		33000.00 D		
299-E33-33	2/07/95	B0DQ84		31000.00 D	2.82	200.00
299-E33-33	2/07/95	B0DQ88	15000.00 BQ			
299-E33-36	11/21/94	B0D780		19000.00 D		
299-E33-36	2/07/95	B0DQ89		17000.00 D	4.14	190.00
299-E33-36	2/07/95	B0DQ93	13000.00 BQ			
299-E33-41	2/13/95	B0DQ94		31000.00 D	948.00	220.00
299-E33-41	2/13/95	B0DQ98	18000.00 B			
299-E33-42	2/08/95	B0DQ99		23000.00 D	248.00	200.00
299-E33-42	2/08/95	B0DQB3	14000.00 BQ			
299-E33-43	2/08/95	B0DQB4		28000.00 D	48.40	190.00
299-E33-43	2/08/95	B0DQB8	15000.00 BQ			

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 January 1 through March 31, 1995. (sheet 3 of 3)

Well Name	Collection Date	Sample Number	TRITIUM 142/pCi/L ./20000	TURBID 111/NTU ./.	TURBID 126/NTU .016/.	URANIUM 145/ppb ./.
299-E33-31	2/08/95	B0DQ74	2060.00	4.15	1.20 Q	1.95
299-E33-32	2/07/95	B0DQ79	1600.00	1.06	1.10	2.16
299-E33-33	2/07/95	B0DQ84	3860.00	.96	2.20	2.64
299-E33-36	2/07/95	B0DQ89	2410.00	.73	1.30	2.25
299-E33-36	3/06/95	B0CVW9		.82		
299-E33-41	2/13/95	B0DQ94	2610.00	1.48	2.30 Q	6.46
299-E33-42	2/08/95	B0DQ99	1950.00	1.04	1.00 Q	2.63
299-E33-43	2/08/95	B0DQB4	1470.00	1.42	1.30 Q	2.55

Well Name	Collection Date	Sample Number	FVANADI 34/ppb 6.6/.
299-E33-31	2/08/95	B0DQ78	21.00 L
299-E33-32	2/07/95	B0DQ83	21.00 L
299-E33-33	2/07/95	B0DQ88	23.00 L
299-E33-36	2/07/95	B0DQ93	21.00 L
299-E33-41	2/13/95	B0DQ98	19.00 L
299-E33-42	2/08/95	B0DQB3	21.00 L
299-E33-43	2/08/95	B0DQB8	20.00 L

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 January 1 through March 31, 1995.

Well Name	Collection Date	Sample Number	COND FIELD µmho 1/.	COND LAB µmho 1/.	pH FIELD .01/6.5-8.5s	pH LAB .01/6.5-8.5s	TOC ppb 110/.	TOX ppb 5/.
299-E33-31	2/08/95	B0DQ74	323	310	7.76	8.30 H	300 L	6.9
		B0DQ75	323		7.75		300 L	
		B0DQ76	323		7.75		300 L	5.5
		B0DQ77	323		7.74		300 L	6.5
299-E33-32	2/07/95	B0DQ79	377	340	8.02	8.10 H	300 L	9.6
		B0DQ80	376		8.01		300 L	6.4
		B0DQ81	374		8.03		300 L	12.5
		B0DQ82	373		8.03		200 L	5.3
299-E33-33	2/07/95	B0DQ84	306	300	8.20	8.20 H	300 L	8.9
		B0DQ85	306		8.19		200 L	13.6
		B0DQ86	306		8.18		400 L	10.2
		B0DQ87	306		8.18		300 L	9.8
299-E33-36	2/07/95	B0DQ89	255	270	8.41	8.20 H	200 L	8.4
		B0DQ90	255		8.41		200 L	7.7
		B0DQ91	254		8.40		400 L	6.3
		B0DQ92	258		8.21		300 L	9.5
	3/06/95	B0CVW9	267		8.27	8.20 H		
		B0CVX0	267		8.29			
		B0CVX1	267		8.29			
		B0CVX2	267		8.28			
		B0CVX3	267		8.26			
		B0CVX4	267		8.25			
		B0CVX5	267		8.25			
		B0CVX6	267		8.25			
299-E33-41	2/13/95	B0DQ94	275	330	7.96	8.00 H	300 L	5.0 U
		B0DQ95	275		7.97		300 L	5.0 U
		B0DQ96	277		7.92		300 L	5.0 U
		B0DQ97	277		7.93		300 L	5.0 U
299-E33-42	2/08/95	B0DQ99	304	300	7.52	8.30 H	300 L	5.0 U
		B0DQB0	304		7.53		300 L	5.7
		B0DQB1	304		7.53		200 L	5.3
		B0DQB2	304		7.53		400 L	5.0 U
299-E33-43	2/08/95	B0DQB4	318	310	7.54	8.30 H	300 L	
		B0DQB5	318		7.53		400 L	5.0 U
		B0DQB6	318		7.53		300 L	7.2
		B0DQB7	317		7.53		300 L	5.0 U

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 January 1 through March 31, 1995. (sheet 1 of 2)

CONTAMINATION INDICATOR PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
CONDUCT	94	Conductivity, field	µmhos	1			20	20	
CONDUCT	73	Conductivity, lab	µmhos				5	5	
TOC		Total Organic Carbon	ppb	110			20	20	
TOX		Total Organic Halogen	ppb	5			19	5	
PH	93	pH, field	pH	.01	6.5-8.5	EPAS	20	20	0
PH	125	pH, lab	pH		6.5-8.5	EPAS	5	5	0

DRINKING WATER PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
FBARIUM		Barium, filtered	ppb	.59	1000	EPAI	5	5	0
FCADMIU		Cadmium, filtered	ppb	3.3	10	EPAI	5	0	0
FCHROMI		Chromium, filtered	ppb	4.5	50	EPAI	5	1	0
FLUORID		Fluoride	ppb	36	1400	EPAI	5	4	0
ALPHA		Gross alpha	pCi/L		15	EPA	5	5	0
NITRATE		Nitrate	ppb	11	45000	EPA	5	4	0

GROUNDWATER QUALITY PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
CHLORID		Chloride	ppb	14	250000	EPAS	5	4	0
FIRON		Iron, filtered	ppb	5.24	300	EPAS	5	5	0
FMANGAN		Manganese, filtered	ppb	.72	50	EPAS	5	4	0
LPHENOL		Phenol	ppb	.31			5	0	
FSODIUM		Sodium, filtered	ppb	61			5	5	
SULFATE		Sulfate	ppb	37	250000	EPAS	5	4	0

SITE SPECIFIC AND OTHER CONSTITUENTS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
246-trp		2,4,6-Trichlorophenol	ppb	1.3			5	0	
24-dchp		2,4-Dichlorophenol	ppb	1.3			5	0	
DIMPHEN		2,4-Dimethylphenol	ppb	1.2			5	0	
DINPHEN		2,4-Dinitrophenol	ppb	3			5	0	
26-dchp		2,6-Dichlorophenol	ppb	1.4			5	0	
CHLPHEN		2-Chlorophenol	ppb	1.6			5	0	
2NITPH		2-Nitrophenol	ppb	1.3			5	0	
BUTDINP		2-sec-Butyl-4,6-dinitrophenol(DN)	ppb	1.3			5	0	
46DN2MP		4,6-Dinitro-2-methylphenol	ppb	1.3			5	0	
CHLCRES		4-Chloro-3-methylphenol	ppb	1.3			5	0	
NITPHEN		4-Nitrophenol	ppb	3			5	0	
ALKALIN		Alkalinity	ppm	2.8			5	5	
FALUMIN		Aluminum, filtered	ppb	26			5	3	
FANTIMO		Antimony, filtered	ppb	62			5	0	
FBERYLL		Beryllium, filtered	ppb	.17			5	1	
BROMIDE		Bromide	ppb	11			5	0	

Table 15-9. Constituent List and Summary of Results for the Single-Shell Tank Waste Management Area C Data for Reporting Period January 1 through March 31, 1995. (sheet 2 of 2)

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	DWS Agency	Number of Samples Total	>MDL	>DWS
FCALCIU		Calcium, filtered	ppb	34			5	5	
FCOBALT		Cobalt, filtered	ppb	5.9			5	0	
FCOPPER		Copper, filtered	ppb	4.1	1000	EPAS	5	0	0
CRESOLS		Cresols (methylphenols)	ppb	4.8			5	0	
BETA		Gross beta	pCi/L				5	5	
I-129L		Iodine-129, Low level	pCi/L		1	EPA	5	5	5
FMAGNES		Magnesium, filtered	ppb	23			5	5	
FNICKEL		Nickel, filtered	ppb	13			5	0	
NITRITE		Nitrite	ppb	18	1000	EPA	5	0	0
PENTCHP		Pentachlorophenol	ppb	1.3	1	EPA	5	0	5*
PHOSPHA		Phosphate	ppb	82			5	0	
FPOTASS		Potassium, filtered	ppb	850			5	5	
FSILVER		Silver, filtered	ppb	3.6	50	EPAI	5	0	0
TC-99		Technetium-99	pCi/L		900	EPA	5	2	0
TETPHNL		Tetrachlorophenols	ppb	1.5			5	0	
FTIN		Tin, filtered	ppb	69			5	0	
TDS		Total Dissolved Solids	ppm	10	500	EPAS	5	5	0
TRIPHNL		Trichlorophenols	ppb	1.7			5	0	
TRITIUM		Tritium	pCi/L		20000	EPA	5	5	0
TURBID	111	Turbidity	NTU				5	5	
TURBID	126	Turbidity	NTU	.016			5	5	
FVANADI		Vanadium, filtered	ppb	6.6			5	5	
FZINC		Zinc, filtered	ppb	6.3	5000	EPAS	5	0	0

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 January 1 through March 31, 1995. (sheet 1 of 2)

Well Name	Collection Date	Sample Number	ALKALIN 357/ppm 2.8/.	FALUMIN 34/ppb 26/.	FBARIUM 34/ppb .59/1000	FBERYLL 34/ppb .17/.
299-E27-12	2/08/95	B0DQB9	100.00			
299-E27-12	2/08/95	B0DQC3		28.00 BL	33.00	.17 U
299-E27-13	2/13/95	B0DQC4	100.00			
299-E27-13	2/13/95	B0DQC8		26.00 U	24.00	.17 U
299-E27-14	2/13/95	B0DQC9	100.00			
299-E27-14	2/13/95	B0DQD3		26.00 U	31.00	.17 U
299-E27-15	2/08/95	B0DQD4	100.00			
299-E27-15	2/08/95	B0DQD8		41.00 BL	31.00	.17 U
299-E27-7	2/09/95	B0DQF0	100.00			
299-E27-7	2/09/95	B0DQF4		30.00 L	13.00 L	.33 L

Well Name	Collection Date	Sample Number	FCALCIU 34/ppb 34/.	CHLORID 124/ppb 14/250000	FCHROMI 34/ppb 4.5/50	FLUORID 124/ppb 36/1400
299-E27-12	2/08/95	B0DQB9		14.00 U		36.00 U
299-E27-12	2/08/95	B0DQC3	29000.00		4.50 U	
299-E27-13	2/13/95	B0DQC4		3000.00		300.00
299-E27-13	2/13/95	B0DQC8	26000.00		4.50 U	
299-E27-14	2/13/95	B0DQC9		7500.00		400.00
299-E27-14	2/13/95	B0DQD3	38000.00		5.10 L	
299-E27-15	2/08/95	B0DQD4		3900.00		300.00
299-E27-15	2/08/95	B0DQD8	29000.00		4.50 U	
299-E27-7	2/09/95	B0DQF0		3900.00		200.00
299-E27-7	2/09/95	B0DQF4	30000.00		4.50 U	

Well Name	Collection Date	Sample Number	ALPHA 135/pCi/L ./15	BETA 136/pCi/L ./.	I-129 139/pCi/L ./1	FIRON 34/ppb 5.24/300
299-E27-12	2/08/95	B0DQB9	1.00	6.50	2.62	
299-E27-12	2/08/95	B0DQC3				12.00 LQ
299-E27-13	2/13/95	B0DQC4	1.25	40.10	4.73	
299-E27-13	2/13/95	B0DQC8				19.00 L
299-E27-14	2/13/95	B0DQC9	1.44	26.40	4.87	
299-E27-14	2/13/95	B0DQD3				23.00
299-E27-15	2/08/95	B0DQD4	1.90	6.64	3.71	
299-E27-15	2/08/95	B0DQD8				32.00 Q
299-E27-7	2/09/95	B0DQF0	2.73	6.40	3.19	
299-E27-7	2/09/95	B0DQF4				20.00 LQ

Well Name	Collection Date	Sample Number	FMAGNES 34/ppb 23/.	FMANGAN 34/ppb .72/50	NITRATE 124/ppb 11/45000	FPOTASS 34/ppb 850/.
299-E27-12	2/08/95	B0DQB9			11.00 U	
299-E27-12	2/08/95	B0DQC3	8400.00	.72 U		5800.00
299-E27-13	2/13/95	B0DQC4			3100.00	
299-E27-13	2/13/95	B0DQC8	7500.00	.95 L		4700.00
299-E27-14	2/13/95	B0DQC9			11000.00 D	
299-E27-14	2/13/95	B0DQD3	10000.00	.84 L		5300.00

Table 15-10. Constituents with at Least One Detected Value for the Single-Shell Tank Waste Management Area C Data for Reporting Period January 1 through March 31, 1995. (sheet 2 of 2)

Well Name	Collection Date	Sample Number	FMAGNES 34/ppb 23/.	FMANGAN 34/ppb .72/50	NITRATE 124/ppb 11/45000	FPOTASS 34/ppb 850/.
299-E27-15	2/08/95	B0DQD4			3000.00	
299-E27-15	2/08/95	B0DQD8	8200.00	1.10 L		5600.00
299-E27-7	2/09/95	B0DQF0			2700.00	
299-E27-7	2/09/95	B0DQF4	8400.00	4.70 L		5500.00

Well Name	Collection Date	Sample Number	FSODIUM 34/ppb 61/.	SULFATE 124/ppb 37/250000	TC-99 143/pCi/L ./900	TDS 65/ppm 10/500
299-E27-12	2/08/95	B0DQB9		37.00 U	1.98 U	180.00
299-E27-12	2/08/95	B0DQC3	9300.00 BQ			
299-E27-13	2/13/95	B0DQC4		18000.00 D	148.00	180.00
299-E27-13	2/13/95	B0DQC8	9100.00 B			
299-E27-14	2/13/95	B0DQC9		63000.00 D	84.80	260.00
299-E27-14	2/13/95	B0DQD3	14000.00 B			
299-E27-15	2/08/95	B0DQD4		25000.00 D	.95 U	200.00
299-E27-15	2/08/95	B0DQD8	10000.00 BQ			
299-E27-7	2/09/95	B0DQF0		22000.00 D	.02 U	180.00
299-E27-7	2/09/95	B0DQF4	8600.00 BQ			

Well Name	Collection Date	Sample Number	TRITIUM 142/pCi/L ./20000	TURBID 111/NTU ./.	TURBID 126/NTU .016/.	FVANADI 34/ppb 6.6/.
299-E27-12	2/08/95	B0DQB9	840.00	1.07	1.20 Q	
299-E27-12	2/08/95	B0DQC3				21.00 L
299-E27-13	2/13/95	B0DQC4	1520.00	2.99	1.20 Q	
299-E27-13	2/13/95	B0DQC8				24.00 L
299-E27-14	2/13/95	B0DQC9	675.00	1.12	1.00 Q	
299-E27-14	2/13/95	B0DQD3				23.00 L
299-E27-15	2/08/95	B0DQD4	1010.00	3.68	1.30 Q	
299-E27-15	2/08/95	B0DQD8				21.00 L
299-E27-7	2/09/95	B0DQF0	698.00	2.60	2.30 Q	
299-E27-7	2/09/95	B0DQF4				14.00 L

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 January 1 through March 31, 1995.

Well Name	Collection Date	Sample Number	COND FIELD µmho 1/.	COND LAB µmho 1/.	pH FIELD .01/6.5-8.5s	pH LAB .01/6.5-8.5s	TOC ppb 110/.	TOX ppb 5/.
299-E27-12	2/08/95	B0DQB9	275	260	7.84	8.30 H	400 L	5.0 U
		B0DQC0	274		7.85		300 L	5.0 U
		B0DQC1	274		7.85		500 L	5.0 U
		B0DQC2	275		7.81		400 L	5.0 U
299-E27-13	2/13/95	B0DQC4	246	250	8.23	8.20 H	400 L	5.0 U
		B0DQC5	244		8.19		400 L	5.0 U
		B0DQC6	244		8.17		400 L	5.0 U
		B0DQC7	243		8.16		300 L	5.0 U
299-E27-14	2/13/95	B0DQC9	385	370	8.08	8.20 H	400 L	5.0 U
		B0DQD0	382		8.07		300 L	5.0 U
		B0DQD1	382		8.06		400 L	8.2
		B0DQD2	383		8.05		300 L	5.0 U
299-E27-15	2/08/95	B0DQD4	275	270	7.94	8.30 H	300 L	5.0 U
		B0DQD5	272		7.92		300 L	5.0 U
		B0DQD6	270		7.92		300 L	5.0 U
		B0DQD7	262		7.91		300 L	
299-E27-7	2/09/95	B0DQF0	248	260	7.52	7.90 H	400 L	5.8
		B0DQF1	250		7.52		300 L	7.7
		B0DQF2	250		7.51		400 L	7.2
		B0DQF3	251		7.51		400 L	6.9

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 January 1 through March 31, 1995. (sheet 1 of 2)

CONTAMINATION INDICATOR PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
CONDUCT	94	Conductivity, field	µmhos	1			28	28	
CONDUCT	73	Conductivity, lab	µmhos				8	8	
TOC		Total Organic Carbon	ppb	110			32	32	
TOX		Total Organic Halogen	ppb	5			29	18	
PH	93	pH, field	pH	.01	6.5-8.5	EPAS	28	28	0
PH	125	pH, lab	pH		6.5-8.5	EPAS	8	8	0

DRINKING WATER PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
FBARIUM		Barium, filtered	ppb	.59	1000	EPAI	8	8	0
FCADMIU		Cadmium, filtered	ppb	3.3	10	EPAI	8	0	0
FCHROMI		Chromium, filtered	ppb	4.5	50	EPAI	8	3	0
FLUORID		Fluoride	ppb	36	1400	EPAI	8	8	0
ALPHA		Gross alpha	pCi/L		15	EPA	8	8	0
NITRATE		Nitrate	ppb	11	45000	EPA	8	8	0

GROUNDWATER QUALITY PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
CHLORID		Chloride	ppb	14	250000	EPAS	8	8	0
FIRON		Iron, filtered	ppb	5.24	300	EPAS	8	8	0
FMANGAN		Manganese, filtered	ppb	.72	50	EPAS	8	6	0
LPHENOL		Phenol	ppb	.31			8	0	
FSODIUM		Sodium, filtered	ppb	61			8	8	
SULFATE		Sulfate	ppb	37	250000	EPAS	8	8	0

SITE SPECIFIC AND OTHER CONSTITUENTS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
246-trp		2,4,6-Trichlorophenol	ppb	1.3			8	0	
24-dchp		2,4-Dichlorophenol	ppb	1.3			8	0	
DIMPHEN		2,4-Dimethylphenol	ppb	1.2			8	0	
DINPHEN		2,4-Dinitrophenol	ppb	3			8	0	
26-dchp		2,6-Dichlorophenol	ppb	1.4			8	0	
CHLPHEN		2-Chlorophenol	ppb	1.6			8	0	
2NITPH		2-Nitrophenol	ppb	1.3			8	0	
BUTDINP		2-sec-Butyl-4,6-dinitrophenol(DN)	ppb	1.3			8	0	
46DN2MP		4,6-Dinitro-2-methylphenol	ppb	1.3			8	0	
CHLCRES		4-Chloro-3-methylphenol	ppb	1.3			8	0	
NITPHEN		4-Nitrophenol	ppb	3			8	0	
ALKALIN		Alkalinity	ppm	2.8			8	8	
FALUMIN		Aluminum, filtered	ppb	26			8	0	
FANTIMO		Antimony, filtered	ppb	62			8	0	

Table 15-12. Constituent List and Summary of Results for the Single-Shell Tank Waste Management Area S-SX Data for Reporting Period January 1 through March 31, 1995. (sheet 2 of 2)

Constituent Name			Units	Lab MDL	DWS Limit	DWS Agency	Number of Samples		
Short	(Method)	Full					Total	>MDL	>DWS
FBERYLL		Beryllium, filtered	ppb	.17			8	1	
BROMIDE		Bromide	ppb	11			8	6	
FCALCIU		Calcium, filtered	ppb	34			8	8	
FCOBALT		Cobalt, filtered	ppb	5.9			8	0	
FCOPPER		Copper, filtered	ppb	4.1	1000	EPAS	8	2	0
CRESOLS		Cresols (methylphenols)	ppb	4.8			8	0	
BETA		Gross beta	pCi/L				8	7	
FMAGNES		Magnesium, filtered	ppb	23			8	8	
FNICKEL		Nickel, filtered	ppb	13			8	0	
NITRITE		Nitrite	ppb	18	1000	EPA	8	0	0
PENTCHP		Pentachlorophenol	ppb	1.3	1	EPA	8	0	8*
PHOSPHA		Phosphate	ppb	82			8	0	
FPOTASS		Potassium, filtered	ppb	850			8	8	
FSILVER		Silver, filtered	ppb	3.6	50	EPAI	8	7	0
TC-99		Technetium-99	pCi/L		900	EPA	8	6	0
TETPHNL		Tetrachlorophenols	ppb	1.5			8	0	
FTIN		Tin, filtered	ppb	69			8	0	
TDS		Total Dissolved Solids	ppm	10	500	EPAS	8	8	0
TRIPHNL		Trichlorophenols	ppb	1.7			8	0	
TRITIUM		Tritium	pCi/L		20000	EPA	8	5	2
TURBID	111	Turbidity	NTU				7	7	
TURBID	126	Turbidity	NTU	.016			8	8	
URANIUM		Uranium	ppb				8	8	
FVANADI		Vanadium, filtered	ppb	6.6			8	8	
FZINC		Zinc, filtered	ppb	6.3	5000	EPAS	8	1	0

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 January 1 through March 31, 1995. (sheet 1 of 3)

Well Name	Collection Date	Sample Number	ALKALIN 357/ppm 2.8/.	FBARIUM 34/ppb .59/1000	FBERYLL 34/ppb .17/.	BROMIDE 124/ppb 11/.
299-W22-39	2/14/95	B0DQJ0	90.00			30.00 L
299-W22-39	2/14/95	B0DQJ4		21.00	.17 U	
299-W22-44	2/15/95	B0DQJ5	90.00			11.00 U
299-W22-44	2/15/95	B0DQJ9		19.00 L	.17 U	
299-W22-45	2/15/95	B0DQK0	90.00			30.00 L
299-W22-45	2/15/95	B0DQK4		25.00	.17 U	
299-W22-46	2/14/95	B0DQK5	90.00			20.00 LQ
299-W22-46	2/14/95	B0DQK6	90.00			30.00 LQ
299-W22-46	2/14/95	B0DQL3		19.00 L	.17 U	
299-W22-46	2/14/95	B0DQL4		21.00	.17 U	
299-W23-13	2/14/95	B0DQL5	100.00			20.00 L
299-W23-13	2/14/95	B0DQL9		19.00 L	.17 U	
299-W23-14	2/14/95	B0DQM0	90.00 H			20.00 LY
299-W23-14	2/14/95	B0DQM4		19.00 L	.30 BLQ	
299-W23-15	2/14/95	B0DQM5	100.00			11.00 U
299-W23-15	2/14/95	B0DQM9		24.00	.17 U	

Well Name	Collection Date	Sample Number	FCALCIU 34/ppb 34/.	CHLORID 124/ppb 14/250000	FCHROMI 34/ppb 4.5/50	FCOPPER 34/ppb 4.1/1000
299-W22-39	2/14/95	B0DQJ0		4200.00		
299-W22-39	2/14/95	B0DQJ4	18000.00		11.00 L	4.10 U
299-W22-44	2/15/95	B0DQJ5		1300.00		
299-W22-44	2/15/95	B0DQJ9	14000.00		4.50 U	4.10 U
299-W22-45	2/15/95	B0DQK0		3900.00		
299-W22-45	2/15/95	B0DQK4	18000.00		4.50 U	4.10 U
299-W22-46	2/14/95	B0DQK5		4100.00		
299-W22-46	2/14/95	B0DQK6		4000.00		
299-W22-46	2/14/95	B0DQL3	18000.00		11.00 L	4.10 L
299-W22-46	2/14/95	B0DQL4	19000.00		12.00 L	4.10 U
299-W23-13	2/14/95	B0DQL5		3500.00		
299-W23-13	2/14/95	B0DQL9	20000.00		4.50 U	4.10 U
299-W23-14	2/14/95	B0DQM0		2100.00 Y		
299-W23-14	2/14/95	B0DQM4	17000.00		4.50 U	4.60 L
299-W23-15	2/14/95	B0DQM5		3100.00		
299-W23-15	2/14/95	B0DQM9	19000.00		4.50 U	4.10 U

Well Name	Collection Date	Sample Number	FLUORID 124/ppb 36/1400	ALPHA 135/pCi/L ./15	BETA 136/pCi/L ./.	FIRON 34/ppb 5.24/300
299-W22-39	2/14/95	B0DQJ0	800.00	3.69	216.00	
299-W22-39	2/14/95	B0DQJ4				17.00 L
299-W22-44	2/15/95	B0DQJ5	700.00	4.05	3.20	
299-W22-44	2/15/95	B0DQJ9				24.00
299-W22-45	2/15/95	B0DQK0	700.00	4.99	1.97 U	
299-W22-45	2/15/95	B0DQK4				15.00 L
299-W22-46	2/14/95	B0DQK5	800.00	5.02 Q	137.00 Q	
299-W22-46	2/14/95	B0DQK6	800.00	2.31 Q	106.00 Q	
299-W22-46	2/14/95	B0DQL3				28.00
299-W22-46	2/14/95	B0DQL4				28.00

Table 15-13. Constituents with at Least One Detected Value for the Single-Shell Tank Waste Management Area S-SX Data for Reporting Period January 1 through March 31, 1995. (sheet 2 of 3)

Well Name	Collection Date	Sample Number	FLUORID 124/ppb 36/1400	ALPHA 135/pCi/L ./15	BETA 136/pCi/L ./.	FIRON 34/ppb 5.24/300
299-W23-13	2/14/95	B0DQL5	700.00	11.00	7.55	
299-W23-13	2/14/95	B0DQL9				17.00 L
299-W23-14	2/14/95	B0DQM0	400.00 Y	6.29	8.51	
299-W23-14	2/14/95	B0DQM4				27.00 Q
299-W23-15	2/14/95	B0DQM5	800.00	8.99	64.40	
299-W23-15	2/14/95	B0DQM9				13.00 L

Well Name	Collection Date	Sample Number	FMAGNES 34/ppb 23/.	FMANGAN 34/ppb .72/50	NITRATE 124/ppb 11/45000	FPOTASS 34/ppb 850/.
299-W22-39	2/14/95	B0DQJ0			18000.00 D	
299-W22-39	2/14/95	B0DQJ4	5700.00	1.30 L		3100.00
299-W22-44	2/15/95	B0DQJ5			500.00	
299-W22-44	2/15/95	B0DQJ9	4300.00	1.20 L		2400.00
299-W22-45	2/15/95	B0DQK0			13000.00 D	
299-W22-45	2/15/95	B0DQK4	5500.00	.72 L		2900.00
299-W22-46	2/14/95	B0DQK5			15000.00 D	
299-W22-46	2/14/95	B0DQK6			15000.00 D	
299-W22-46	2/14/95	B0DQL3	5800.00	.79 L		2800.00
299-W22-46	2/14/95	B0DQL4	6000.00	.72 U		3000.00
299-W23-13	2/14/95	B0DQL5			5800.00	
299-W23-13	2/14/95	B0DQL9	6100.00	.72 U		3300.00
299-W23-14	2/14/95	B0DQM0			7800.00 HY	
299-W23-14	2/14/95	B0DQM4	5500.00	1.90 L		3200.00
299-W23-15	2/14/95	B0DQM5			6100.00 F	
299-W23-15	2/14/95	B0DQM9	6100.00	1.20 L		3000.00

Well Name	Collection Date	Sample Number	FSILVER 34/ppb 3.6/50	FSODIUM 34/ppb 61/.	SULFATE 124/ppb 37/250000	TC-99 143/pCi/L ./900
299-W22-39	2/14/95	B0DQJ0			15000.00 D	829.00
299-W22-39	2/14/95	B0DQJ4	4.80 BL	23000.00		
299-W22-44	2/15/95	B0DQJ5			10000.00 D	2.24 U
299-W22-44	2/15/95	B0DQJ9	5.20 BL	19000.00		
299-W22-45	2/15/95	B0DQK0			19000.00 D	5.48
299-W22-45	2/15/95	B0DQK4	5.60 BL	21000.00		
299-W22-46	2/14/95	B0DQK5			16000.00 D	559.00
299-W22-46	2/14/95	B0DQK6			16000.00 D	518.00
299-W22-46	2/14/95	B0DQL3	6.40 BL	21000.00		
299-W22-46	2/14/95	B0DQL4	6.00 BL	22000.00		
299-W23-13	2/14/95	B0DQL5			17000.00 D	.64 U
299-W23-13	2/14/95	B0DQL9	5.20 BL	19000.00		
299-W23-14	2/14/95	B0DQM0			11000.00 DY	13.00
299-W23-14	2/14/95	B0DQM4	3.60 U	22000.00 Q		
299-W23-15	2/14/95	B0DQM5			12000.00 D	325.00
299-W23-15	2/14/95	B0DQM9	5.60 BL	17000.00		

Table 15-13. Constituents with at Least One Detected Value for the Single-Shell Tank Waste Management Area S-SX Data for Reporting Period January 1 through March 31, 1995. (sheet 3 of 3)

Well Name	Collection Date	Sample Number	TDS 65/ppm 10/500	TRITIUM 142/pCi/L ./20000	TURBID 111/NTU ./.	TURBID 126/NTU .016/.
299-W22-39	2/14/95	B0DQJ0	190.00	1120.00	1.68	2.30 Q
299-W22-44	2/15/95	B0DQJ5	140.00	33.80 U	3.98	9.50
299-W22-45	2/15/95	B0DQK0	170.00	81.50 U	6.25	10.00
299-W22-46	2/14/95	B0DQK5	170.00	4640.00	.99	1.10 Q
299-W22-46	2/14/95	B0DQK6	190.00	4900.00		1.10 Q
299-W23-13	2/14/95	B0DQL5	170.00	147.00 U	3.45	5.70 Q
299-W23-14	2/14/95	B0DQM0	150.00	127000.00	4.90	3.70 HQ
299-W23-15	2/14/95	B0DQM5	180.00	44200.00	14.10	21.00 Q

Well Name	Collection Date	Sample Number	URANIUM 145/ppb ./.	FVANADI 34/ppb 6.6/.	FZINC 34/ppb 6.3/5000
299-W22-39	2/14/95	B0DQJ0	6.10		
299-W22-39	2/14/95	B0DQJ4		30.00	6.30 U
299-W22-44	2/15/95	B0DQJ5	4.17		
299-W22-44	2/15/95	B0DQJ9		29.00 L	6.30 U
299-W22-45	2/15/95	B0DQK0	5.26		
299-W22-45	2/15/95	B0DQK4		24.00 L	6.30 U
299-W22-46	2/14/95	B0DQK5	4.23		
299-W22-46	2/14/95	B0DQK6	4.03		
299-W22-46	2/14/95	B0DQL3		30.00	6.30 U
299-W22-46	2/14/95	B0DQL4		32.00	7.40 L
299-W23-13	2/14/95	B0DQL5	19.30		
299-W23-13	2/14/95	B0DQL9		28.00 L	6.30 U
299-W23-14	2/14/95	B0DQM0	12.60		
299-W23-14	2/14/95	B0DQM4		31.00	6.30 UQ
299-W23-15	2/14/95	B0DQM5	14.30		
299-W23-15	2/14/95	B0DQM9		27.00 L	6.30 U

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 January 1 through March 31, 1995.

Well Name	Collection Date	Sample Number	COND FIELD µmho 1/.	COND LAB µmho 1/.	pH FIELD .01/6.5-8.5s	pH LAB .01/6.5-8.5s	TOC ppb 110/.	TOX ppb 5/.
299-W22-39	2/14/95	B0DQJ0	260	260	7.81	8.00 H	200 L	8.1
		B0DQJ1	261		7.81		200 L	5.0 U
		B0DQJ2	260		7.81		200 L	5.6
		B0DQJ3	260		7.81		300 L	5.0 U
299-W22-44	2/15/95	B0DQJ5	196	200	7.98	8.00 H	300 L	8.4
		B0DQJ6	196		7.99		300 L	8.9
		B0DQJ7	196		7.99		300 L	6.0
		B0DQJ8	196		7.99		300 L	8.6
299-W22-45	2/15/95	B0DQK0	249	250	8.04	8.00 H	300 L	5.4
		B0DQK1	248		8.02		300 L	
		B0DQK2	248		8.02		300 L	5.0 U
		B0DQK3	248		8.01		200 L	6.3
299-W22-46	2/14/95	B0DQK5	249	260	7.79	8.00 H	200 L	5.0 U
		B0DQK6	246	260	7.79	8.00 H	200 L	5.0 U
		B0DQK7	244		7.79		200 L	5.0 U
		B0DQK8	243		7.80		200 L	9.1
		B0DQK9					300 L	6.7
		B0DQL0					200 L	5.0 U
		B0DQL1					200 L	8.5
		B0DQL2					200 L	5.0 U
299-W23-13	2/14/95	B0DQL5	275	250	8.10	8.10 H	200 L	5.0
		B0DQL6	277		8.08		200 L	5.0 U
		B0DQL7	275		8.07		300 L	5.0 U
		B0DQL8	274		8.06		300 L	8.3
299-W23-14	2/14/95	B0DQM0	218	230	8.02	7.80 H	200 L	11.8 Y
		B0DQM1	218		8.01		200 L	11.2 Y
		B0DQM2	218		8.00		300 L	12.7 Y
		B0DQM3	218		8.00		200 L	
299-W23-15	2/14/95	B0DQM5	246	240	8.13	8.10 H	140 L	
		B0DQM6	246		8.12		200 L	5.0
		B0DQM7	245		8.12		200 L	5.0 U
		B0DQM8	245		8.11		200 L	6.2

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 January 1 through March 31, 1995. (sheet 1 of 2)

CONTAMINATION INDICATOR PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
CONDUCT	94	Conductivity, field	µmhos	1			48	48	
CONDUCT	73	Conductivity, lab	µmhos				14	14	
TOC		Total Organic Carbon	ppb	110			45	44	
TOX		Total Organic Halogen	ppb	5			45	45	
PH	93	pH, field	pH	.01	6.5-8.5	EPAS	48	48	0
PH	125	pH, lab	pH		6.5-8.5	EPAS	14	14	0

DRINKING WATER PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
FBARIUM		Barium, filtered	ppb	.59	1000	EPAI	14	14	0
FCADMIU		Cadmium, filtered	ppb	3.3	10	EPAI	14	0	0
FCHROMI		Chromium, filtered	ppb	4.5	50	EPAI	14	13	1
FLUORID		Fluoride	ppb	36	1400	EPAI	17	17	7
ALPHA		Gross alpha	pCi/L		15	EPA	14	7	0
FMERCUR		Mercury, filtered	ppb	.05	2	EPA	9	1	0
NITRATE		Nitrate	ppb	11	45000	EPA	17	17	14

GROUNDWATER QUALITY PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
CHLORID		Chloride	ppb	14	250000	EPAS	17	17	0
FIRON		Iron, filtered	ppb	5.24	300	EPAS	14	14	0
FMANGAN		Manganese, filtered	ppb	.72	50	EPAS	14	14	1
LPHENOL		Phenol	ppb	.31			9	0	
FSODIUM		Sodium, filtered	ppb	61			14	14	
SULFATE		Sulfate	ppb	37	250000	EPAS	17	17	0

SITE SPECIFIC AND OTHER CONSTITUENTS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
1,1,1-T		1,1,1-Trichloroethane	ppb	.036	200	EPA	9	0	0
1,1,2-T		1,1,2-Trichloroethane	ppb	.078			9	0	
1,1-DIC		1,1-Dichloroethane	ppb	.058			9	0	
1,2-DIC		1,2-Dichloroethane	ppb	.029	5	EPA	9	0	0
14-dben		1,4-Dichlorobenzene	ppb	.055	75	EPA	9	0	0
246-trp		2,4,6-Trichlorophenol	ppb	1.3			9	0	
24-dchp		2,4-Dichlorophenol	ppb	1.3			9	0	
DIMPHEN		2,4-Dimethylphenol	ppb	1.2			9	0	
DINPHEN		2,4-Dinitrophenol	ppb	3			9	0	
26-dchp		2,6-Dichlorophenol	ppb	1.4			9	0	
CHLPHEN		2-Chlorophenol	ppb	1.6			9	0	
2NITPH		2-Nitrophenol	ppb	1.3			9	0	
BUTDINP		2-sec-Butyl-4,6-dinitrophenol(DN)	ppb	1.3			9	0	
46DN2MP		4,6-Dinitro-2-methylphenol	ppb	1.3			9	0	

Table 15-15. Constituent List and Summary of Results for the Single-Shell Tank Waste Management Area T Data for Reporting Period January 1 through March 31, 1995. (sheet 2 of 2)

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
CHLCRES		4-Chloro-3-methylphenol	ppb	1.3			9	0	
NITPHEN		4-Nitrophenol	ppb	3			9	0	
ALKALIN		Alkalinity	ppm	2.8			14	14	
FALUMIN		Aluminum, filtered	ppb	26			14	3	
FANTIMO		Antimony, filtered	ppb	62			14	0	
BENZENE		Benzene	ppb	.013	5	EPA	9	0	0
FBERYLL		Beryllium, filtered	ppb	.17			14	9	
BE-7		Beryllium-7	pCi/L				7	0	
BROMIDE		Bromide	ppb	11			17	11	
FCALCIU		Calcium, filtered	ppb	34			14	14	
TETRANE		Carbon tetrachloride	ppb	.075	5	EPA	9	8	7
CS-134		Cesium-134	pCi/L				7	0	
CS-137		Cesium-137	pCi/L		200	EPA	7	0	0
CHLFORM		Chloroform	ppb	.041			9	8	
FCOBALT		Cobalt, filtered	ppb	5.9			14	0	
CO-60		Cobalt-60	pCi/L		100	EPA	7	1	0
FCOPPER		Copper, filtered	ppb	4.1	1000	EPAS	14	3	0
CRESOLS		Cresols (methylphenols)	ppb	4.8			9	0	
ETHBENZ		Ethylbenzene	ppb	.051	700	EPA	9	0	0
EU-154		Europium-154	pCi/L				7	1	
EU-155		Europium-155	pCi/L				7	0	
BETA		Gross beta	pCi/L				14	14	
FLEAD		Lead, filtered	ppb	1.5	50	EPAI	9	0	0
FMAGNES		Magnesium, filtered	ppb	23			14	14	
METHYCH		Methylene chloride	ppb	.09			9	0	
FNICKEL		Nickel, filtered	ppb	13			14	0	
NITRITE		Nitrite	ppb	18	1000	EPA	17	3	1
PENTCHP		Pentachlorophenol	ppb	1.3	1	EPA	9	0	9*
PHOSPHA		Phosphate	ppb	82			17	0	
FPOTASS		Potassium, filtered	ppb	850			14	14	
K-40		Potassium-40	pCi/L				7	5	
FSILVER		Silver, filtered	ppb	3.6	50	EPAI	14	0	0
TC-99		Technetium-99	pCi/L		900	EPA	12	12	0
PERCENE		Tetrachloroethene	ppb	.22	5	EPA	9	6	0
TETPHNL		Tetrachlorophenols	ppb	1.5			9	0	
FTIN		Tin, filtered	ppb	69			14	0	
TOLUENE		Toluene	ppb	.016	1000	EPA	9	0	0
TDS		Total Dissolved Solids	ppm	10	500	EPAS	12	12	4
TRICENE		Trichloroethene	ppb	.11	5	EPA	9	7	4
TRIPHNL		Trichlorophenols	ppb	1.7			9	0	
TRITIUM		Tritium	pCi/L		20000	EPA	14	12	6
TURBID	111	Turbidity	NTU				15	15	
TURBID	126	Turbidity	NTU	.016			14	14	
URANIUM		Uranium	ppb				5	5	
FVANADI		Vanadium, filtered	ppb	6.6			14	13	
VINYIDE		Vinyl chloride	ppb	.13	2	EPA	9	0	0
XYLENE		Xylenes (total)	ppb	.035	10000	EPA	9	0	0
FZINC		Zinc, filtered	ppb	6.3	5000	EPAS	14	0	0
CIS12DE		cis-1,2-Dichloroethylene	ppb	.11	70	EPA	9	0	0
TRANDCE		trans-1,2-Dichloroethylene	ppb	.073	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 January 1 through March 31, 1995. (sheet 1 of 6)

Well Name	Collection Date	Sample Number	ALKALIN 357/ppm 2.8/.	FALUMIN 34/ppb 26/.	FBARIUM 34/ppb .59/1000	FBERYLL 34/ppb .17/.
299-W10-15	2/10/95	B0DQN8	150.00			
299-W10-15	2/10/95	B0DQN9		100.00 L	61.00	.17 U
299-W10-16	2/09/95	B0DQP0	150.00			
299-W10-16	2/09/95	B0DQP1		34.00 L	33.00	.17 U
299-W10-19	3/09/95	B0DW86	100.00 B			
299-W10-19	3/09/95	B0DW90		26.00 U	59.00	.55 BLQ
299-W10-20	3/09/95	B0DW91	110.00 B			
299-W10-20	3/09/95	B0DW95		26.00 L	57.00	.60 BLQ
299-W10-21	3/09/95	B0DW96	90.00 B			
299-W10-21	3/09/95	B0DWB0		26.00 U	53.00	.52 BLQ
299-W11-27	2/09/95	B0DQP2	140.00			
299-W11-27	2/09/95	B0DQP3		26.00 U	45.00	.21 L
299-W11-28	2/23/95	B0DQP4	160.00 P			
299-W11-28	2/23/95	B0DQP5	160.00 P			
299-W11-28	2/23/95	B0DQP6		26.00 UP	39.00 P	.17 UP
299-W11-28	2/23/95	B0DQP7		26.00 UP	39.00 P	.17 UP
299-W11-31	3/08/95	B0DWB1	130.00 B			
299-W11-31	3/08/95	B0DWB5		26.00 U	51.00	.57 BLQ
299-W6-2	3/13/95	B0DWD5	120.00 B			
299-W6-2	3/13/95	B0DWD9		26.00 U	36.00	.17 U
299-W6-4	3/03/95	B0DWG1	100.00			
299-W6-4	3/03/95	B0DWG5		26.00 U	63.00	.52 LQ
299-W6-6	3/09/95	B0DYD4	130.00 B			
299-W6-6	3/09/95	B0DYD8		26.00 U	48.00	.50 BLQ
299-W6-8	3/08/95	B0DWL0	110.00 B			
299-W6-8	3/08/95	B0DWL4		26.00 U	41.00	.43 BLQ
299-W6-9	3/02/95	B0DWM2	120.00			
299-W6-9	3/02/95	B0DWM6		26.00 U	33.00	.46 LQ

Well Name	Collection Date	Sample Number	BROMIDE 124/ppb 11/.	FCALCIU 34/ppb 34/.	TETRANE 25/ppb .075/5	CHLORID 124/ppb 14/250000
299-W10-15	9/21/94	B0CZH8	18.00 DL			28000.00 D
299-W10-15	2/10/95	B0DQN8	11.00 UD			27000.00 D
299-W10-15	2/10/95	B0DQN9		36000.00		
299-W10-16	9/21/94	B0CZJ0	27.00 DL			31000.00 D
299-W10-16	2/09/95	B0DQP0	11.00 UD			29000.00 D
299-W10-16	2/09/95	B0DQP1		28000.00		
299-W10-19	3/09/95	B0DW86	11.00 UD		1300.00 D	16000.00 DQ
299-W10-19	3/09/95	B0DW90		65000.00		
299-W10-20	3/09/95	B0DW91	11.00 UD		1800.00 D	17000.00 DQ
299-W10-20	3/09/95	B0DW95		72000.00		
299-W10-21	3/09/95	B0DW96	100.00 LD		530.00 D	13000.00 DQ
299-W10-21	3/09/95	B0DWB0		68000.00		
299-W11-27	2/09/95	B0DQP2	11.00 U			2000.00
299-W11-27	2/09/95	B0DQP3		39000.00		
299-W11-28	9/21/94	B0CZJ6	45.00 DLP			32000.00 DP
299-W11-28	2/23/95	B0DQP4	400.00 LDPF			30000.00 DP
299-W11-28	2/23/95	B0DQP5	400.00 LDPF			30000.00 DP
299-W11-28	2/23/95	B0DQP6		36000.00 BP		
299-W11-28	2/23/95	B0DQP7		36000.00 BP		
299-W11-31	3/08/95	B0DWB1	100.00 LD		770.00 D	31000.00 D
299-W11-31	3/08/95	B0DWB5		61000.00		
299-W6-2	3/13/95	B0DWD5	30.00 L		120.00 D	4900.00 BQ

Table 15-16. Constituents with at Least One Detected Value for the Single-Shell Tank Waste Management Area T Data for Reporting Period January 1 through March 31, 1995. (sheet 2 of 6)

Well Name	Collection Date	Sample Number	BROMIDE 124/ppb 11/.	FCALCIU 34/ppb 34/.	TETRANE 25/ppb .075/5	CHLORID 124/ppb 14/250000
299-W6-2	3/13/95	B0DWD9		40000.00		
299-W6-4	3/03/95	B0DWG1	11.00 UD		260.00 D	9500.00 D
299-W6-4	3/03/95	B0DWG5		51000.00		
299-W6-6	3/09/95	B0DYD4	60.00 L		.08 U	5100.00 Q
299-W6-6	3/09/95	B0DYD8		32000.00		
299-W6-8	3/08/95	B0DWL0	20.00 L		2.70	3000.00
299-W6-8	3/08/95	B0DWL4		31000.00		
299-W6-9	3/02/95	B0DWM2	50.00 L		210.00 D	6400.00 B
299-W6-9	3/02/95	B0DWM6		47000.00		

Well Name	Collection Date	Sample Number	CHLFORM 25/ppb .041/.	FCHROMI 34/ppb 4.5/50	CO-60 140/pCi/L ./100	FCOPPER 34/ppb 4.1/1000
299-W10-15	2/10/95	B0DQN9		110.00		4.10 U
299-W10-16	2/09/95	B0DQP1		43.00		4.10 U
299-W10-19	3/09/95	B0DW86	12.00			
299-W10-19	3/09/95	B0DW90		19.00 L		4.10 L
299-W10-19	3/09/95	B0DWK8			.49 U	
299-W10-20	3/09/95	B0DW91	31.00			
299-W10-20	3/09/95	B0DW95		11.00 L		4.10 U
299-W10-20	3/09/95	B0DWK9			.50 U	
299-W10-21	3/09/95	B0DW96	6.20			
299-W10-21	3/09/95	B0DWB0		31.00		4.10 U
299-W10-21	3/09/95	B0DWL7			1.55	
299-W11-27	2/09/95	B0DQP3		4.90 L		4.10 U
299-W11-28	2/23/95	B0DQP6		47.00 P		4.10 UP
299-W11-28	2/23/95	B0DQP7		43.00 P		4.10 UP
299-W11-31	3/08/95	B0DWB1	5.20			
299-W11-31	3/08/95	B0DWB5		38.00		4.10 U
299-W11-31	3/08/95	B0DWL8			.90 U	
299-W6-2	3/13/95	B0DWD5	1.20			
299-W6-2	3/13/95	B0DWD9		26.00		4.10 U
299-W6-2	3/13/95	B0DWM7			-.82 U	
299-W6-4	3/03/95	B0DWG1	6.30			
299-W6-4	3/03/95	B0DWG5		38.00		4.10 U
299-W6-4	3/08/95	B0F692			.45 U	
299-W6-6	3/09/95	B0DYD4	.04 U			
299-W6-6	3/09/95	B0DYD8		4.50 U		4.10 U
299-W6-8	3/08/95	B0DWL0	.21 L			
299-W6-8	3/08/95	B0DWL4		6.30 L		6.60 L
299-W6-9	3/02/95	B0DWM2	1.90			
299-W6-9	3/02/95	B0DWM6		31.00		4.10 L
299-W6-9	3/08/95	B0F696			.10 U	

Well Name	Collection Date	Sample Number	EU-154 140/pCi/L ./.	FLUORID 124/ppb 36/1400	ALPHA 135/pCi/L ./15	BETA 136/pCi/L ./.
299-W10-15	9/21/94	B0CZH8		5100.00		
299-W10-15	2/10/95	B0DQN8		4700.00	2.30 U	34.30 F
299-W10-16	9/21/94	B0CZJ0		2900.00		
299-W10-16	2/09/95	B0DQP0		2500.00	3.26	28.50

Table 15-16. Constituents with at Least One Detected Value for the Single-Shell Tank Waste Management Area T Data for Reporting Period January 1 through March 31, 1995. (sheet 3 of 6)

Well Name	Collection Date	Sample Number	EU-154 140/pCi/L ./.	FLUORID 124/ppb 36/1400	ALPHA 135/pCi/L ./15	BETA 136/pCi/L ./.
299-W10-19	3/09/95	B0DW86		700.00	1.47	23.20
299-W10-19	3/09/95	B0DWK8	-.17 U			
299-W10-20	3/09/95	B0DW91		700.00	1.23 U	20.90
299-W10-20	3/09/95	B0DWK9	-2.21 U			
299-W10-21	3/09/95	B0DW96		700.00	1.35 U	20.30
299-W10-21	3/09/95	B0DWL7	1.29 U			
299-W11-27	2/09/95	B0DQP2		1000.00	2.28	11.70
299-W11-28	9/21/94	B0CZJ6		3800.00 P		
299-W11-28	2/23/95	B0DQP4		3600.00 P	1.42 UP	80.20 P
299-W11-28	2/23/95	B0DQP5		3600.00 P	1.48 UP	90.70 P
299-W11-31	3/08/95	B0DWB1		1400.00	2.39	92.20
299-W11-31	3/08/95	B0DWL8	.37 U			
299-W6-2	3/13/95	B0DWD5		700.00	.90 U	10.60
299-W6-2	3/13/95	B0DWM7	-1.40 U			
299-W6-4	3/03/95	B0DWG1		700.00	1.85	22.60
299-W6-4	3/08/95	B0F692	4.02			
299-W6-6	3/09/95	B0DYD4		700.00	.50 U	5.32
299-W6-8	3/08/95	B0DWL0		700.00	1.38	5.13
299-W6-9	3/02/95	B0DWM2		700.00	2.91	16.80
299-W6-9	3/08/95	B0F696	-.68 U			

Well Name	Collection Date	Sample Number	FIRON 34/ppb 5.24/300	FMAGNES 34/ppb 23/.	FMANGAN 34/ppb .72/50	FMERCUR 41/ppb .05/2
299-W10-15	2/10/95	B0DQN9	24.00 Q	14000.00	.85 L	
299-W10-16	2/09/95	B0DQP1	23.00 Q	8600.00	1.80 L	
299-W10-19	3/09/95	B0DW90	37.00 BQ	22000.00	1.40 L	.05 U
299-W10-20	3/09/95	B0DW95	32.00 BQ	23000.00	6.10 L	.05 U
299-W10-21	3/09/95	B0DWB0	27.00 BQ	24000.00	.74 L	.05 U
299-W11-27	2/09/95	B0DQP3	20.00 Q	14000.00	1.60 L	
299-W11-28	2/23/95	B0DQP6	61.00 QP	12000.00 P	25.00 P	
299-W11-28	2/23/95	B0DQP7	44.00 QP	12000.00 P	26.00 P	
299-W11-31	3/08/95	B0DWB5	23.00 BQ	21000.00	1.40 L	.05 U
299-W6-2	3/13/95	B0DWD9	40.00	17000.00	.77 L	.05 U
299-W6-4	3/03/95	B0DWG5	29.00 Q	25000.00	1.60 L	.05 U
299-W6-6	3/09/95	B0DYD8	43.00 BQ	13000.00	60.00	.05 U
299-W6-8	3/08/95	B0DWL4	42.00 BQ	12000.00	3.10 L	.05 U
299-W6-9	3/02/95	B0DWM6	35.00 Q	17000.00	.91 L	.07 L

Well Name	Collection Date	Sample Number	NITRATE 124/ppb 11/45000	NITRITE 124/ppb 18/1000	FPOTASS 34/ppb 850/.	K-40 140/pCi/L ./.
299-W10-15	9/21/94	B0CZH8	320000.00 D	18.00 U		
299-W10-15	2/10/95	B0DQN8	230000.00 DH	18.00 UH		
299-W10-15	2/10/95	B0DQN9			4900.00	
299-W10-16	9/21/94	B0CZJ0	140000.00 D	18.00 U		
299-W10-16	2/09/95	B0DQP0	120000.00 D	18.00 U		
299-W10-16	2/09/95	B0DQP1			4200.00	
299-W10-19	3/09/95	B0DW86	110000.00 DQ	18.00 U		
299-W10-19	3/09/95	B0DW90			4800.00	
299-W10-19	3/09/95	B0DWK8				53.20

Table 15-16. Constituents with at Least One Detected Value for the Single-Shell Tank Waste Management Area T Data for Reporting Period January 1 through March 31, 1995. (sheet 4 of 6)

Well Name	Collection Date	Sample Number	NITRATE 124/ppb 11/45000	NITRITE 124/ppb 18/1000	FPOTASS 34/ppb 850/.	K-40 140/pCi/L ./.
299-W10-20	3/09/95	B0DW91	120000.00 DQ	18.00 U		
299-W10-20	3/09/95	B0DW95			5400.00	
299-W10-20	3/09/95	B0DWK9				73.40
299-W10-21	3/09/95	B0DW96	130000.00 DQ	18.00 U		
299-W10-21	3/09/95	B0DWB0			4500.00	
299-W10-21	3/09/95	B0DWL7				26.10
299-W11-27	2/09/95	B0DQP2	4300.00	18.00 U		
299-W11-27	2/09/95	B0DQP3			4900.00	
299-W11-28	9/21/94	B0CZJ6	200000.00 DP	4300.00 P		
299-W11-28	2/23/95	B0DQP4	130000.00 DP	600.00 P		
299-W11-28	2/23/95	B0DQP5	130000.00 DP	600.00 P		
299-W11-28	2/23/95	B0DQP6			4800.00 P	
299-W11-28	2/23/95	B0DQP7			4700.00 P	
299-W11-31	3/08/95	B0DWB1	110000.00 D	18.00 U		
299-W11-31	3/08/95	B0DWB5			5200.00	
299-W11-31	3/08/95	B0DWL8				17.40 U
299-W6-2	3/13/95	B0DWD5	53000.00 DQ	18.00 U		
299-W6-2	3/13/95	B0DWD9			3200.00	
299-W6-2	3/13/95	B0DWM7				5.54 U
299-W6-4	3/03/95	B0DWG1	97000.00 DH	18.00 UH		
299-W6-4	3/03/95	B0DWG5			5000.00	
299-W6-4	3/08/95	B0F692				30.50
299-W6-6	3/09/95	B0DYD4	9400.00 Q	18.00 U		
299-W6-6	3/09/95	B0DYD8			5800.00	
299-W6-8	3/08/95	B0DWL0	8800.00	18.00 U		
299-W6-8	3/08/95	B0DWL4			3900.00	
299-W6-9	3/02/95	B0DWM2	70000.00 D	18.00 U		
299-W6-9	3/02/95	B0DWM6			4000.00	
299-W6-9	3/08/95	B0F696				37.70

Well Name	Collection Date	Sample Number	FSODIUM 34/ppb 61/.	SULFATE 124/ppb 37/250000	TC-99 143/pCi/L ./900	PERCENE 25/ppb .22/5
299-W10-15	9/21/94	B0CZH8		67000.00 D		
299-W10-15	2/10/95	B0DQN8		63000.00 D	509.00 F	
299-W10-15	2/10/95	B0DQN9	160000.00 BQ			
299-W10-16	9/21/94	B0CZJ0		62000.00 D		
299-W10-16	2/09/95	B0DQP0		57000.00 D	128.00	
299-W10-16	2/09/95	B0DQP1	120000.00 BQ			
299-W10-19	3/09/95	B0DW86		40000.00 D		.63
299-W10-19	3/09/95	B0DW90	13000.00 Q			
299-W10-19	3/09/95	B0DWK8			71.50	
299-W10-20	3/09/95	B0DW91		41000.00 D		.80
299-W10-20	3/09/95	B0DW95	15000.00 Q			
299-W10-20	3/09/95	B0DWK9			62.30	
299-W10-21	3/09/95	B0DW96		36000.00 D		.49 L
299-W10-21	3/09/95	B0DWB0	9800.00 Q			
299-W10-21	3/09/95	B0DWL7			81.50	
299-W11-27	2/09/95	B0DQP2		51000.00 D	24.70	
299-W11-27	2/09/95	B0DQP3	19000.00 BQ			
299-W11-28	9/21/94	B0CZJ6		110000.00 DP		
299-W11-28	2/23/95	B0DQP4		81000.00 DP	357.00 P	
299-W11-28	2/23/95	B0DQP5		82000.00 DP	344.00 P	
299-W11-28	2/23/95	B0DQP6	140000.00 QP			

Table 15-16. Constituents with at Least One Detected Value for the Single-Shell Tank Waste Management Area T Data for Reporting Period January 1 through March 31, 1995. (sheet 5 of 6)

Well Name	Collection Date	Sample Number	FSODIUM 34/ppb 61/.	SULFATE 124/ppb 37/250000	TC-99 143/pCi/L ./900	PERCENE 25/ppb .22/5
299-W11-28	2/23/95	B0DQP7	140000.00 QP			
299-W11-31	3/08/95	B0DWB1		63000.00 D		.59
299-W11-31	3/08/95	B0DWB5	56000.00 Q			
299-W11-31	3/08/95	B0DWL8			316.00	
299-W6-2	3/13/95	B0DWD5		24000.00 D		.22 U
299-W6-2	3/13/95	B0DWD9	10000.00			
299-W6-2	3/13/95	B0DWM7			33.20	
299-W6-4	3/03/95	B0DWG1		38000.00 D		.33 L
299-W6-4	3/03/95	B0DWG5	11000.00 Q			
299-W6-4	3/03/95	B0DWN0			69.80	
299-W6-6	3/09/95	B0DYD4		26000.00 D		.22 U
299-W6-6	3/09/95	B0DYD8	16000.00 Q			
299-W6-8	3/08/95	B0DWL0		18000.00 D		.22 U
299-W6-8	3/08/95	B0DWL4	9200.00 Q			
299-W6-9	3/02/95	B0DWM2		25000.00 D		.33 L
299-W6-9	3/02/95	B0DWM6	12000.00 Q			
299-W6-9	3/03/95	B0DWN6			47.70	

Well Name	Collection Date	Sample Number	TDS 65/ppm 10/500	TRICENE 25/ppb .11/5	TRITIUM 142/pCi/L ./20000	TURBID 111/NTU ./.
299-W10-15	2/10/95	B0DQN8	760.00		35200.00	1.74
299-W10-16	2/09/95	B0DQP0	510.00		43800.00	2.19
299-W10-19	3/09/95	B0DW86		6.40	1420.00	.62
299-W10-19	3/09/95	B0DWK8	390.00			
299-W10-20	3/09/95	B0DW91		6.50	2120.00	9.44
299-W10-20	3/09/95	B0DWK9	370.00			
299-W10-21	3/09/95	B0DW96		6.60	1260.00	.72
299-W10-21	3/09/95	B0DWL7	400.00			
299-W11-27	2/09/95	B0DQP2	260.00		202.00 U	1.66
299-W11-28	2/23/95	B0DQP4	620.00 P		57600.00 P	4.98 P
299-W11-28	2/23/95	B0DQP5	590.00 P		58500.00 P	
299-W11-31	3/08/95	B0DWB1		12.00	76200.00	5.60
299-W11-31	3/08/95	B0DWL8	460.00			
299-W6-2	3/13/95	B0DWD5		1.70	7680.00	1.12
299-W6-2	3/13/95	B0DWM7	250.00			
299-W6-4	3/03/95	B0DWG1		4.30	31600.00	7.62
299-W6-4	3/03/95	B0DWN0	350.00			
299-W6-4	3/08/95	B0F692				8.79
299-W6-6	3/09/95	B0DYD4		.11 U	19.00 U	.53
299-W6-8	3/08/95	B0DWL0		.11 U	886.00	10.70
299-W6-9	3/02/95	B0DWM2		2.60	10500.00	2.66
299-W6-9	3/02/95	B0DWN6	300.00			
299-W6-9	3/08/95	B0F696				1.51

Table 15-16. Constituents with at Least One Detected Value for the Single-Shell Tank Waste Management Area T Data for Reporting Period January 1 through March 31, 1995. (sheet 6 of 6)

Well Name	Collection Date	Sample Number	TURBID 126/NTU .016/.	URANIUM 145/ppb ./.	FVANADI 34/ppb 6.6/.
299-W10-15	2/10/95	B0DQN8	1.00 HQ	2.83	
299-W10-15	2/10/95	B0DQN9			42.00
299-W10-16	2/09/95	B0DQP0	2.70 Q	1.58	
299-W10-16	2/09/95	B0DQP1			28.00 L
299-W10-19	3/09/95	B0DW86	.85 Q		
299-W10-19	3/09/95	B0DW90			16.00 L
299-W10-20	3/09/95	B0DW91	6.40 Q		
299-W10-20	3/09/95	B0DW95			16.00 L
299-W10-21	3/09/95	B0DW96	.93 Q		
299-W10-21	3/09/95	B0DWB0			23.00 L
299-W11-27	2/09/95	B0DQP2	16.00 Q	1.65	
299-W11-27	2/09/95	B0DQP3			20.00 L
299-W11-28	2/23/95	B0DQP4	6.30 P	2.25 QP	
299-W11-28	2/23/95	B0DQP5	6.30 P	1.59 QP	
299-W11-28	2/23/95	B0DQP6			24.00 LP
299-W11-28	2/23/95	B0DQP7			23.00 LP
299-W11-31	3/08/95	B0DWB1	3.40 Q		
299-W11-31	3/08/95	B0DWB5			23.00 L
299-W6-2	3/13/95	B0DWD5	1.10 Q		
299-W6-2	3/13/95	B0DWD9			27.00 L
299-W6-4	3/03/95	B0DWG1	7.80 HQ		
299-W6-4	3/03/95	B0DWG5			12.00 L
299-W6-6	3/09/95	B0DYD4	.50 Q		
299-W6-6	3/09/95	B0DYD8			6.60 U
299-W6-8	3/08/95	B0DWL0	12.00 Q		
299-W6-8	3/08/95	B0DWL4			21.00 L
299-W6-9	3/02/95	B0DWM2	4.40 Q		
299-W6-9	3/02/95	B0DWM6			26.00 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 January 1 through March 31, 1995.

Well Name	Collection Date	Sample Number	COND FIELD µmho 1/.	COND LAB µmho 1/.	pH FIELD .01/6.5-8.5s	pH LAB .01/6.5-8.5s	TOC ppb 110/.	TOX ppb 5/.
299-W10-15	2/10/95	B0DQN8	1093	1100	8.19	8.20 H	400 L	682.0
299-W10-16	2/09/95	B0DQP0	740	770	7.41	7.80 H	400 L	710.0
299-W10-19	3/09/95	B0DW86	560	590	8.30	8.20 H	200 L	1060.0
		B0DW87	561		8.28		300 L	1060.0
		B0DW88	563		8.24		200 L	1050.0
		B0DW89	565		8.21		200 L	1030.0
299-W10-20	3/09/95	B0DW91	612	630	7.80	7.90 H	300 L	1190.0
		B0DW92	611		7.81		300 L	1310.0
		B0DW93	609		7.81		300 L	1180.0
		B0DW94	608		7.80		300 L	1110.0
299-W10-21	3/09/95	B0DW96	589	600	7.85	8.00 H	300 L	479.0
		B0DW97	589		7.85		300 L	470.0
		B0DW98	590		7.85		300 L	476.0
		B0DW99	590		7.85		300 L	452.0
299-W11-27	2/09/95	B0DQP2	382	390	7.00	7.90 H	200 L	19.9
299-W11-28	2/23/95	B0DQP4	913 P	920 P	7.98 P	7.90 HP	400 LP	772.0 P
		B0DQP5		920 P		7.90 HP	400 LP	722.0 P
299-W11-31	3/08/95	B0DWB1	735	730	7.87	7.90 H	300 L	667.0
		B0DWB2	734		7.87		300 L	678.0
		B0DWB3	732		7.87		300 L	691.0
		B0DWB4	731		7.87		300 L	680.0
299-W6-2	3/13/95	B0DWD5	325	390	8.24	8.00 H	300 L	117.0
		B0DWD6	336		8.22		300 L	129.0
		B0DWD7	348		8.19		400 L	131.0
		B0DWD8	359		8.17		400 L	138.0
299-W6-4	3/03/95	B0DWG1	527	540	8.33	8.10 H		
		B0DWG2	528		8.32			
		B0DWG3	530		8.31			
		B0DWG4	531		8.31			
		B0F695	457		8.36		300 L	192.0
	3/08/95	B0F692	458		8.38		300 L	223.0
		B0F693	460		8.38		300 L	251.0
		B0F694	457		8.37		300 L	201.0
299-W6-6	3/09/95	B0DYD4	328	340	8.47	8.10 H	150 L	16.0
		B0DYD5	327		8.48		110 U	11.7
		B0DYD6	326		8.48		150 L	15.8
		B0DYD7	326		8.48		200 L	17.0
299-W6-8	3/08/95	B0DWL0	285	280	8.31	8.20 H	200 L	20.4
		B0DWL1	285		8.31		200 L	16.9
		B0DWL2	284		8.30		300 L	15.7
		B0DWL3	283		8.30		200 L	7.6
299-W6-9	3/02/95	B0DWM2	432	440	7.93	8.10	400 L	179.0
		B0DWM3	430		7.95		400 L	195.0
299-W6-9	3/02/95	B0DWM4	430		7.96		400 L	187.0
		B0DWM5	430		7.97		600 L	203.0
	3/08/95	B0F696	441		7.94		500 L	224.0
		B0F697	441		7.93		300 L	229.0
		B0F698	441		7.91		300 L	234.0
		B0F699	441		7.91		400 L	187.0

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 January 1 through March 31, 1995. (sheet 1 of 2)

CONTAMINATION INDICATOR PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
CONDUCT	94	Conductivity, field	µmhos	1			4	4	
CONDUCT	73	Conductivity, lab	µmhos				4	4	
TOC		Total Organic Carbon	ppb	110			4	4	
TOX		Total Organic Halogen	ppb	5			4	4	
PH	93	pH, field	pH	.01	6.5-8.5	EPAS	4	4	0
PH	125	pH, lab	pH		6.5-8.5	EPAS	4	4	0

DRINKING WATER PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
FBARIUM		Barium, filtered	ppb	.59	1000	EPAI	4	4	0
FCADMIU		Cadmium, filtered	ppb	3.3	10	EPAI	4	0	0
FCHROMI		Chromium, filtered	ppb	4.5	50	EPAI	4	4	1
FLUORID		Fluoride	ppb	36	1400	EPAI	7	7	3
ALPHA		Gross alpha	pCi/L		15	EPA	4	1	0
NITRATE		Nitrate	ppb	11	45000	EPA	7	7	7

GROUNDWATER QUALITY PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
CHLORID		Chloride	ppb	14	250000	EPAS	7	7	0
FIRON		Iron, filtered	ppb	5.24	300	EPAS	4	4	0
FMANGAN		Manganese, filtered	ppb	.72	50	EPAS	4	4	1
FSODIUM		Sodium, filtered	ppb	61			4	4	
SULFATE		Sulfate	ppb	37	250000	EPAS	7	7	0

SITE SPECIFIC AND OTHER CONSTITUENTS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
ALKALIN		Alkalinity	ppm	2.8			4	4	
FALUMIN		Aluminum, filtered	ppb	26			4	1	
FANTIMO		Antimony, filtered	ppb	62			4	0	
SB-125		Antimony-125	pCi/L				4	0	
FBERYLL		Beryllium, filtered	ppb	.17			4	2	
BE-7		Beryllium-7	pCi/L				4	1	
BROMIDE		Bromide	ppb	11			7	7	
FCALCIU		Calcium, filtered	ppb	34			4	4	
CEPR-144		Cerium/Praseodymium-144	pCi/L				4	0	
CS-134		Cesium-134	pCi/L				4	1	
CS-137		Cesium-137	pCi/L		200	EPA	4	0	0
FCOBALT		Cobalt, filtered	ppb	5.9			4	0	
CO-60		Cobalt-60	pCi/L		100	EPA	4	1	0
FCOPPER		Copper, filtered	ppb	4.1	1000	EPAS	4	2	0
EU-154		Europium-154	pCi/L				4	1	
EU-155		Europium-155	pCi/L				4	0	
BETA		Gross beta	pCi/L				4	4	

Table 15-18. Constituent List and Summary of Results for the Single-Shell Tank Waste Management Area TX-TY Data for Reporting Period January 1 through March 31, 1995. (sheet 2 of 2)

Constituent Name				Lab	DWS		Number of Samples		
Short	(Method)	Full	Units	MDL	Limit	Agency	Total	>MDL	>DWS
I-129L		Iodine-129, Low level	pCi/L		1	EPA	4	1	1
FMAGNES		Magnesium, filtered	ppb	23			4	4	
FNICKEL		Nickel, filtered	ppb	13			4	3	
NITRITE		Nitrite	ppb	18	1000	EPA	7	1	1
PHOSPHA		Phosphate	ppb	82			7	0	
FPOTASS		Potassium, filtered	ppb	850			4	4	
K-40		Potassium-40	pCi/L				4	3	
RU-106		Ruthenium-106	pCi/L		30	EPA	4	0	0
FSILVER		Silver, filtered	ppb	3.6	50	EPAI	4	1	0
TC-99		Technetium-99	pCi/L		900	EPA	4	4	1
FTIN		Tin, filtered	ppb	69			4	0	
TDS		Total Dissolved Solids	ppm	10	500	EPAS	4	4	1
TRITIUM		Tritium	pCi/L		20000	EPA	4	4	3
TURBID	111	Turbidity	NTU				4	4	
TURBID	126	Turbidity	NTU	.016			4	4	
FVANADI		Vanadium, filtered	ppb	6.6			4	3	
FZINC		Zinc, filtered	ppb	6.3	5000	EPAS	4	0	0
ZN-65		Zinc-65	pCi/L				4	1	
ZRNB-95		Zirconium/Niobium-95	pCi/L				4	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 January 1 through March 31, 1995. (sheet 1 of 3)

Well Name	Collection Date	Sample Number	ALKALIN 357/ppm 2.8/.	FALUMIN 34/ppb 26/.	FBARIUM 34/ppb .59/1000	FBERYLL 34/ppb .17/.
299-W10-17	2/10/95	B0DQN0	140.00			
299-W10-17	2/10/95	B0DQN1		26.00 U	27.00	.22 L
299-W10-18	2/10/95	B0DQN2	110.00			
299-W10-18	2/10/95	B0DQN3		26.00 U	60.00	.17 U
299-W14-12	2/10/95	B0DQN4	80.00			
299-W14-12	2/10/95	B0DQN5		26.00 U	120.00	.69 BLQ
299-W15-22	2/10/95	B0DQN6	100.00			
299-W15-22	2/10/95	B0DQN7		34.00 L	56.00	.17 U

Well Name	Collection Date	Sample Number	BE-7 140/pCi/L ./.	BROMIDE 124/ppb 11/.	FCALCIU 34/ppb 34/.	CS-134 140/pCi/L ./.
299-W10-17	9/22/94	B0CZH2		29.00 DL		
299-W10-17	2/10/95	B0DQN0	-6.24 U	300.00 L		1.06
299-W10-17	2/10/95	B0DQN1			23000.00	
299-W10-18	2/10/95	B0DQN2	11.70	100.00 L		.10 U
299-W10-18	2/10/95	B0DQN3			51000.00	
299-W14-12	9/22/94	B0CZH6		21.00 DL		
299-W14-12	2/10/95	B0DQN4	-6.59 U	300.00 LD		-.84 U
299-W14-12	2/10/95	B0DQN5			160000.00	
299-W15-22	9/22/94	B0CZJ4		39.00 DL		
299-W15-22	2/10/95	B0DQN6	3.42 U	400.00 L		-.24 U
299-W15-22	2/10/95	B0DQN7			61000.00	

Well Name	Collection Date	Sample Number	CHLORID 124/ppb 14/250000	FCHROMI 34/ppb 4.5/50	CO-60 140/pCi/L ./100	FCOPPER 34/ppb 4.1/1000
299-W10-17	9/22/94	B0CZH2	37000.00 D			
299-W10-17	2/10/95	B0DQN0	37000.00 D		.58 U	
299-W10-17	2/10/95	B0DQN1		13.00 L		4.10 U
299-W10-18	2/10/95	B0DQN2	38000.00 D		.89 U	
299-W10-18	2/10/95	B0DQN3		15.00 L		4.10 U
299-W14-12	9/22/94	B0CZH6	81000.00 D			
299-W14-12	2/10/95	B0DQN4	94000.00 D		17.20	
299-W14-12	2/10/95	B0DQN5		290.00		5.40 L
299-W15-22	9/22/94	B0CZJ4	35000.00 D			
299-W15-22	2/10/95	B0DQN6	33000.00 D		.44 U	
299-W15-22	2/10/95	B0DQN7		8.00 L		5.00 L

Well Name	Collection Date	Sample Number	EU-154 140/pCi/L ./.	FLUORID 124/ppb 36/1400	ALPHA 135/pCi/L ./15	BETA 136/pCi/L ./.
299-W10-17	9/22/94	B0CZH2		2400.00		
299-W10-17	2/10/95	B0DQN0	-1.57 U	1900.00	.26 U	30.70
299-W10-18	2/10/95	B0DQN2	1.81 U	1500.00	.67 U	64.70
299-W14-12	9/22/94	B0CZH6		1100.00		
299-W14-12	2/10/95	B0DQN4	4.16	1000.00	-.10 U	2900.00

Table 15-19. Constituents with at Least One Detected Value for the Single-Shell Tank Waste Management Area TX-TY Data for Reporting Period January 1 through March 31, 1995. (sheet 2 of 3)

Well Name	Collection Date	Sample Number	EU-154 140/pCi/L ./.	FLUORID 124/ppb 36/1400	ALPHA 135/pCi/L ./15	BETA 136/pCi/L ./.
299-W15-22	9/22/94	B0CZJ4		1100.00		
299-W15-22	2/10/95	B0DQN6	1.77 U	500.00	3.92	89.20

Well Name	Collection Date	Sample Number	I-129 139/pCi/L ./1	FIRON 34/ppb 5.24/300	FMAGNES 34/ppb 23/.	FMANGAN 34/ppb .72/50
299-W10-17	2/10/95	B0DQN0	.04 U			
299-W10-17	2/10/95	B0DQN1		230.00 Q	7500.00	20.00
299-W10-18	2/10/95	B0DQN2	.27 U			
299-W10-18	2/10/95	B0DQN3		70.00 Q	18000.00	2.60 L
299-W14-12	2/10/95	B0DQN4	47.80			
299-W14-12	2/10/95	B0DQN5		62.00 Q	61000.00	100.00
299-W15-22	2/10/95	B0DQN6	.24 U			
299-W15-22	2/10/95	B0DQN7		21.00 Q	18000.00	1.50 L

Well Name	Collection Date	Sample Number	FNICKEL 34/ppb 13/.	NITRATE 124/ppb 11/45000	NITRITE 124/ppb 18/1000	FPOTASS 34/ppb 850/.
299-W10-17	9/22/94	B0CZH2		100000.00 D	18.00 U	
299-W10-17	2/10/95	B0DQN0		99000.00 DH	18.00 UH	
299-W10-17	2/10/95	B0DQN1	69.00			3700.00
299-W10-18	2/10/95	B0DQN2		83000.00 DH	18.00 UH	
299-W10-18	2/10/95	B0DQN3	81.00			5000.00
299-W14-12	9/22/94	B0CZH6		390000.00 D	18.00 U	
299-W14-12	2/10/95	B0DQN4		450000.00 DH	2200.00 HF	
299-W14-12	2/10/95	B0DQN5	15.00 L			8000.00
299-W15-22	9/22/94	B0CZJ4		120000.00 D	18.00 U	
299-W15-22	2/10/95	B0DQN6		96000.00 DH	18.00 UH	
299-W15-22	2/10/95	B0DQN7	13.00 U			4900.00

Well Name	Collection Date	Sample Number	K-40 140/pCi/L ./.	FSILVER 34/ppb 3.6/50	FSODIUM 34/ppb 61/.	SULFATE 124/ppb 37/250000
299-W10-17	9/22/94	B0CZH2				65000.00 D
299-W10-17	2/10/95	B0DQN0	1.89 U			59000.00 D
299-W10-17	2/10/95	B0DQN1		3.60 U	110000.00 BQ	
299-W10-18	2/10/95	B0DQN2	23.10			42000.00 D
299-W10-18	2/10/95	B0DQN3		4.30 L	36000.00 BQ	
299-W14-12	9/22/94	B0CZH6				74000.00 D
299-W14-12	2/10/95	B0DQN4	39.90			84000.00 D
299-W14-12	2/10/95	B0DQN5		3.60 U	29000.00 Q	
299-W15-22	9/22/94	B0CZJ4				47000.00 D
299-W15-22	2/10/95	B0DQN6	41.30			43000.00 D
299-W15-22	2/10/95	B0DQN7		3.60 U	20000.00 BQ	

Table 15-19. Constituents with at Least One Detected Value for the Single-Shell Tank Waste Management Area TX-TY Data for Reporting Period January 1 through March 31, 1995. (sheet 3 of 3)

Well Name	Collection Date	Sample Number	TC-99 143/pCi/L ./900	TDS 65/ppm 10/500	TRITIUM 142/pCi/L ./20000	TURBID 111/NTU ./.
299-W10-17	2/10/95	B0DQN0	109.00	480.00	35600.00	1.44
299-W10-18	2/10/95	B0DQN2	229.00	390.00	13500.00	3.50
299-W14-12	2/10/95	B0DQN4	9950.00	970.00	585000.00	39.40
299-W15-22	2/10/95	B0DQN6	228.00	380.00	27800.00	3.65

Well Name	Collection Date	Sample Number	TURBID 126/NTU .016/.	FVANADI 34/ppb 6.6/.	ZN-65 140/pCi/L ./.
299-W10-17	2/10/95	B0DQN0	2.20 HQ		.77 U
299-W10-17	2/10/95	B0DQN1		53.00	
299-W10-18	2/10/95	B0DQN2	4.10 HQ		-1.10 U
299-W10-18	2/10/95	B0DQN3		27.00 L	
299-W14-12	2/10/95	B0DQN4	21.00 HQ		-1.01 U
299-W14-12	2/10/95	B0DQN5		6.60 U	
299-W15-22	2/10/95	B0DQN6	68.00 HQ		2.58
299-W15-22	2/10/95	B0DQN7		20.00 L	

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 January 1 through March 31, 1995.

Well Name	Collection Date	Sample Number	COND FIELD µmho 1/.	COND LAB µmho 1/.	pH FIELD .01/6.5-8.5s	pH LAB .01/6.5-8.5s	TOC ppb 110/.	TOX ppb 5/.
299-W10-17	2/10/95	B0DQN0	722	710	8.20	8.10 H	300 L	914.0
299-W10-18	2/10/95	B0DQN2	603	600	7.94	8.00 H	300 L	371.0
299-W14-12	2/10/95	B0DQN4	1520	1500	7.13	7.40 H	500 L	245.0
299-W15-22	2/10/95	B0DQN6	577	590	7.89	7.90 H	300 L	1090.0

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 January 1 through March 31, 1995. (sheet 1 of 2)

CONTAMINATION INDICATOR PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
CONDUCT	94	Conductivity, field	µmhos	1			20	20	
CONDUCT	73	Conductivity, lab	µmhos				5	5	
TOC		Total Organic Carbon	ppb	110			20	20	
TOX		Total Organic Halogen	ppb	5			20	20	
PH	93	pH, field	pH	.01	6.5-8.5	EPAS	20	20	0
PH	125	pH, lab	pH		6.5-8.5	EPAS	5	5	0

DRINKING WATER PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
FBARIUM		Barium, filtered	ppb	.59	1000	EPAI	5	5	0
FCADMIU		Cadmium, filtered	ppb	3.3	10	EPAI	5	0	0
FCHROMI		Chromium, filtered	ppb	4.5	50	EPAI	5	4	0
FLUORID		Fluoride	ppb	36	1400	EPAI	5	5	0
ALPHA		Gross alpha	pCi/L		15	EPA	5	5	0
NITRATE		Nitrate	ppb	11	45000	EPA	5	5	0

GROUNDWATER QUALITY PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
CHLORID		Chloride	ppb	14	250000	EPAS	5	5	0
FIRON		Iron, filtered	ppb	5.24	300	EPAS	5	5	0
FMANGAN		Manganese, filtered	ppb	.72	50	EPAS	5	5	0
LPHENOL		Phenol	ppb	.31			5	0	
FSODIUM		Sodium, filtered	ppb	61			5	5	
SULFATE		Sulfate	ppb	37	250000	EPAS	5	5	0

SITE SPECIFIC AND OTHER CONSTITUENTS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
246-trp		2,4,6-Trichlorophenol	ppb	1.3			5	0	
24-dchp		2,4-Dichlorophenol	ppb	1.3			5	0	
DIMPHEN		2,4-Dimethylphenol	ppb	1.2			5	0	
DINPHEN		2,4-Dinitrophenol	ppb	3			5	0	

Table 15-21. Constituent List and Summary of Results for the Single-Shell Tank Waste Management Area U Data for Reporting Period January 1 through March 31, 1995. (sheet 2 of 2)

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
26-dchp		2,6-Dichlorophenol	ppb	1.4			5	0	
CHLPHEN		2-Chlorophenol	ppb	1.6			5	0	
2NITPH		2-Nitrophenol	ppb	1.3			5	0	
BUTDINP		2-sec-Butyl-4,6-dinitrophenol(DN)	ppb	1.3			5	0	
46DN2MP		4,6-Dinitro-2-methylphenol	ppb	1.3			5	0	
CHLCRES		4-Chloro-3-methylphenol	ppb	1.3			5	0	
NITPHEN		4-Nitrophenol	ppb	3			5	0	
ALKALIN		Alkalinity	ppm	2.8			5	5	
FALUMIN		Aluminum, filtered	ppb	26			5	0	
FANTIMO		Antimony, filtered	ppb	62			5	0	
FBERYLL		Beryllium, filtered	ppb	.17			5	0	
BROMIDE		Bromide	ppb	11			5	3	
FCALCIU		Calcium, filtered	ppb	34			5	5	
FCOBALT		Cobalt, filtered	ppb	5.9			5	0	
FCOPPER		Copper, filtered	ppb	4.1	1000	EPAS	5	2	0
CRESOLS		Cresols (methylphenols)	ppb	4.8			5	0	
BETA		Gross beta	pCi/L				5	5	
FMAGNES		Magnesium, filtered	ppb	23			5	5	
FNICKEL		Nickel, filtered	ppb	13			5	1	
NITRITE		Nitrite	ppb	18	1000	EPA	5	2	0
PENTCHP		Pentachlorophenol	ppb	1.3	1	EPA	5	0	5*
PHOSPHA		Phosphate	ppb	82			5	0	
FPOTASS		Potassium, filtered	ppb	850			5	5	
FSILVER		Silver, filtered	ppb	3.6	50	EPAI	5	1	0
TC-99		Technetium-99	pCi/L		900	EPA	5	4	0
TETPHNL		Tetrachlorophenols	ppb	1.5			5	0	
FTIN		Tin, filtered	ppb	69			5	0	
TDS		Total Dissolved Solids	ppm	10	500	EPAS	5	5	0
TRIPHNL		Trichlorophenols	ppb	1.7			5	0	
TRITIUM		Tritium	pCi/L		20000	EPA	5	3	0
TURBID	111	Turbidity	NTU				5	5	
TURBID	126	Turbidity	NTU	.016			5	5	
URANIUM		Uranium	ppb				4	4	
FVANADI		Vanadium, filtered	ppb	6.6			5	5	
FZINC		Zinc, filtered	ppb	6.3	5000	EPAS	5	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 January 1 through March 31, 1995. (sheet 1 of 2)

Well Name	Collection Date	Sample Number	ALKALIN 357/ppm 2.8/.	FBARIUM 34/ppb .59/1000	BROMIDE 124/ppb 11/.	FCALCIU 34/ppb 34/.
299-W18-25	2/13/95	B0DQF5	100.00		50.00 L	
299-W18-25	2/13/95	B0DQF9		34.00		30000.00
299-W18-30	2/13/95	B0DQG0	100.00		11.00 U	
299-W18-30	2/13/95	B0DQG4		27.00		26000.00
299-W18-31	2/13/95	B0DQG5	100.00		80.00 L	
299-W18-31	2/13/95	B0DQG9		67.00		34000.00
299-W19-31	2/11/95	B0DQH0	100.00		20.00 L	
299-W19-31	2/11/95	B0DQH4		32.00		31000.00
299-W19-32	2/11/95	B0DQH5	140.00		11.00 U	
299-W19-32	2/11/95	B0DQH9		62.00		41000.00

Well Name	Collection Date	Sample Number	CHLORID 124/ppb 14/250000	FCHROMI 34/ppb 4.5/50	FCOPPER 34/ppb 4.1/1000	FLUORID 124/ppb 36/1400
299-W18-25	2/13/95	B0DQF5	8500.00			700.00
299-W18-25	2/13/95	B0DQF9		7.20 L	4.10 U	
299-W18-30	2/13/95	B0DQG0	4200.00			700.00
299-W18-30	2/13/95	B0DQG4		6.50 L	4.10 U	
299-W18-31	2/13/95	B0DQG5	9100.00			700.00
299-W18-31	2/13/95	B0DQG9		6.20 L	4.10 U	
299-W19-31	2/11/95	B0DQH0	4300.00			600.00
299-W19-31	2/11/95	B0DQH4		7.00 L	6.30 L	
299-W19-32	2/11/95	B0DQH5	27000.00 D			500.00
299-W19-32	2/11/95	B0DQH9		4.50 U	8.40 L	

Well Name	Collection Date	Sample Number	ALPHA 135/pCi/L ./15	BETA 136/pCi/L ./.	FIRON 34/ppb 5.24/300	FMAGNES 34/ppb 23/.
299-W18-25	2/13/95	B0DQF5	3.66	2.96		
299-W18-25	2/13/95	B0DQF9			25.00	9400.00
299-W18-30	2/13/95	B0DQG0	2.73	4.95		
299-W18-30	2/13/95	B0DQG4			21.00	7900.00
299-W18-31	2/13/95	B0DQG5	5.65	5.81		
299-W18-31	2/13/95	B0DQG9			21.00	10000.00
299-W19-31	2/11/95	B0DQH0	3.20	16.40		
299-W19-31	2/11/95	B0DQH4			26.00 Q	9000.00
299-W19-32	2/11/95	B0DQH5	8.33	21.60		
299-W19-32	2/11/95	B0DQH9			100.00 Q	13000.00

Well Name	Collection Date	Sample Number	FMANGAN 34/ppb .72/50	FNICKEL 34/ppb 13/.	NITRATE 124/ppb 11/45000	NITRITE 124/ppb 18/1000
299-W18-25	2/13/95	B0DQF5			15000.00 D	18.00 U
299-W18-25	2/13/95	B0DQF9	1.20 L	13.00 U		
299-W18-30	2/13/95	B0DQG0			13000.00 D	18.00 U
299-W18-30	2/13/95	B0DQG4	.78 L	13.00 U		
299-W18-31	2/13/95	B0DQG5			20000.00 D	500.00
299-W18-31	2/13/95	B0DQG9	3.00 L	13.00 U		

Table 15-22. Constituents with at Least One Detected Value for the Single-Shell Tank Waste Management Area U Data for Reporting Period January 1 through March 31, 1995. (sheet 2 of 2)

Well Name	Collection Date	Sample Number	FMANGAN 34/ppb .72/50	FNICKEL 34/ppb 13/.	NITRATE 124/ppb 11/45000	NITRITE 124/ppb 18/1000
299-W19-31	2/11/95	B0DQH0			7700.00	90.00 L
299-W19-31	2/11/95	B0DQH4	1.60 L	13.00 U		
299-W19-32	2/11/95	B0DQH5			1800.00	18.00 U
299-W19-32	2/11/95	B0DQH9	32.00	53.00		

Well Name	Collection Date	Sample Number	FPOTASS 34/ppb 850/.	FSILVER 34/ppb 3.6/50	FSODIUM 34/ppb 61/.	SULFATE 124/ppb 37/250000
299-W18-25	2/13/95	B0DQF5				29000.00 D
299-W18-25	2/13/95	B0DQF9	3300.00	3.60 U	16000.00 B	
299-W18-30	2/13/95	B0DQG0				20000.00 D
299-W18-30	2/13/95	B0DQG4	3200.00	3.60 U	16000.00 B	
299-W18-31	2/13/95	B0DQG5				31000.00 D
299-W18-31	2/13/95	B0DQG9	4400.00	3.60 U	15000.00 B	
299-W19-31	2/11/95	B0DQH0				36000.00 D
299-W19-31	2/11/95	B0DQH4	3600.00	3.80 L	18000.00 BQ	
299-W19-32	2/11/95	B0DQH5				25000.00 D
299-W19-32	2/11/95	B0DQH9	5300.00	3.60 U	21000.00 BQ	

Well Name	Collection Date	Sample Number	TC-99 143/pCi/L ./900	TDS 65/ppm 10/500	TRITIUM 142/pCi/L ./20000	TURBID 111/NTU ./.
299-W18-25	2/13/95	B0DQF5	3.97	210.00	95.90 U	1.25
299-W18-30	2/13/95	B0DQG0	3.45	190.00	358.00	4.12
299-W18-31	2/13/95	B0DQG5	.10 U	200.00	258.00	4.06
299-W19-31	2/11/95	B0DQH0	45.50	220.00	343.00	4.08
299-W19-32	2/11/95	B0DQH5	45.70	260.00	40.00 U	6.80

Well Name	Collection Date	Sample Number	TURBID 126/NTU .016/.	URANIUM 145/ppb ./.	FVANADI 34/ppb 6.6/.	FZINC 34/ppb 6.3/5000
299-W18-25	2/13/95	B0DQF5	2.10 Q			
299-W18-25	2/13/95	B0DQF9			24.00 L	6.30 U
299-W18-30	2/13/95	B0DQG0	5.50 Q	5.69		
299-W18-30	2/13/95	B0DQG4			20.00 L	6.30 U
299-W18-31	2/13/95	B0DQG5	6.10 Q	7.64		
299-W18-31	2/13/95	B0DQG9			8.70 L	6.30 U
299-W19-31	2/11/95	B0DQH0	3.00 HQ	2.68		
299-W19-31	2/11/95	B0DQH4			25.00 L	6.30 U
299-W19-32	2/11/95	B0DQH5	4.60 HQ	9.07		
299-W19-32	2/11/95	B0DQH9			11.00 L	8.40 BL

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 January 1 through March 31, 1995.

Well Name	Collection Date	Sample Number	COND FIELD µmho 1/.	COND LAB µmho 1/.	pH FIELD .01/6.5-8.5s	pH LAB .01/6.5-8.5s	TOC ppb 110/.	TOX ppb 5/.
299-W18-25	2/13/95	B0DQF5	311	320	7.97	7.90 H	200 L	110.0
		B0DQF6	311		7.97		200 L	108.0
		B0DQF7	311		7.97		200 L	107.0
		B0DQF8	311		7.97		200 L	107.0
299-W18-30	2/13/95	B0DQG0	273	270	8.17	8.00 H	300 L	115.0
		B0DQG1	273		8.17		300 L	172.0
		B0DQG2	272		8.16		200 L	164.0
		B0DQG3	272		8.16		200 L	120.0
299-W18-31	2/13/95	B0DQG5	351	340	8.16	7.90 H	300 L	125.0
		B0DQG6	348		8.14		300 L	115.0
		B0DQG7	346		8.14		400 L	137.0
		B0DQG8	345		8.11		300 L	143.0
299-W19-31	2/11/95	B0DQH0	298	310	8.23	8.00 H	200 L	72.0
		B0DQH1	312		8.20		300 L	74.8
		B0DQH2	312		8.13		200 L	80.5
		B0DQH3	313		8.15		200 L	75.0
299-W19-32	2/11/95	B0DQH5	397	410	8.27	8.00 H	300 L	102.0
		B0DQH6	395		8.27		300 L	20.7
		B0DQH7	394		8.23		300 L	22.7
		B0DQH8	392		8.23		200 L	32.7

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

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16.0 300 AREA PROCESS TRENCHES

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16.1 INTRODUCTION

The groundwater near the 300 Area Process Trenches (APT) (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. The plan will take effect later this year when the facility goes into a compliance monitoring program under final status.

The 300 APT 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 was completed and all discharges to the trenches were 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 while two are older, noncompliant wells.

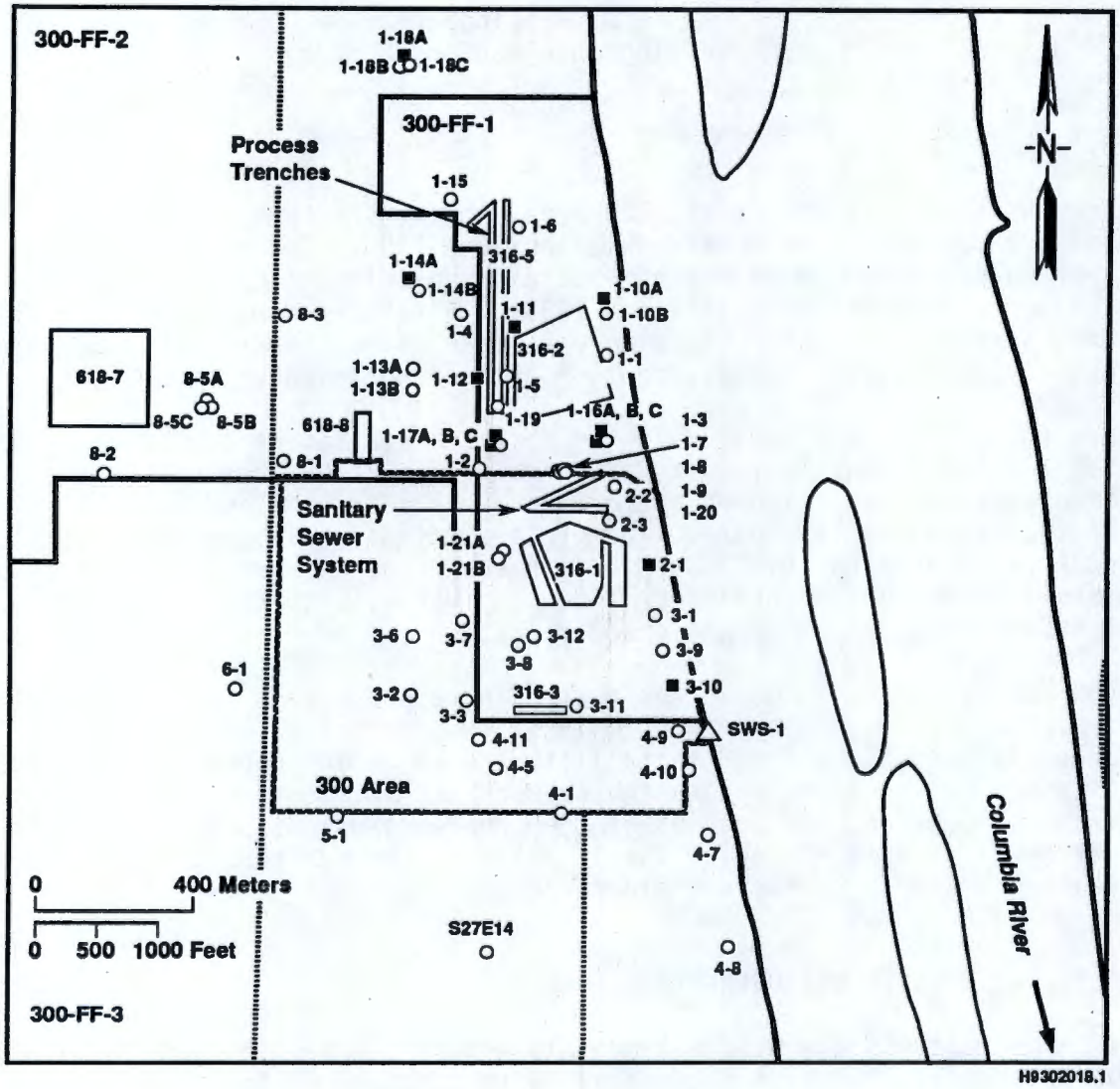
16.2 WATER LEVEL MEASUREMENTS

Water levels are measured monthly and at the time of sampling in selected 300 Area wells. Water level measurements obtained during the first quarter of 1995 are presented in Table 16-2.

16.3 WATER CHEMISTRY DATA

Water chemistry samples are collected semiannually from the 300 APT monitoring wells. In addition to semiannual samples, samples are collected four times per year from well 399-1-17A to provide near-trench monitoring of contaminants. Sampling dates are listed in Table 16-1. Wells on the semiannual sampling schedule were not sampled during the first quarter of 1995. Although well 399-1-17A is sampled four times per year, it was last sampled in December 1994 and will not be sampled again until the second quarter of 1995. Therefore, no water chemistry data are available to report at this time.

Figure 16-1. 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
1-10A	Downgradient	Hanford/Ringold: Water Table	Semiannually	10/05/94
1-11	Adjacent	Hanford/Ringold: Water Table	Semiannually	10/05/94
1-12	Downgradient	Hanford/Ringold: Water Table	Semiannually	10/05/94 10/06/94
1-14A	Adjacent	Hanford: Water Table	Semiannually	10/05/94
1-16A	Downgradient	Ringold: Water Table	Semiannually	10/07/94
1-16B	Downgradient	Ringold: Bottom of Unconfined Aquifer	Semiannually	10/10/94
1-17A	Downgradient	Ringold: Water Table	Quarterly	10/07/94 12/15/94
1-17B	Downgradient	Ringold: Bottom of Unconfined Aquifer	Semiannually	10/07/94
1-18A	Upgradient	Ringold: Water Table	Semiannually	10/05/94
2-1[a]	Downgradient	Hanford/Ringold: Water Table	Semiannually	10/05/94
3-10[a]	Downgradient	Hanford: Water Table	Semiannually	10/10/94

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.

[a]Wells 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, First Quarter 1995. (sheet 1 of 5)

Well	Date	Depth to water (ft)	Water level elevation above msl (ft)	(m)
Wells Monitoring the Top of the Unconfined Aquifer				
399-1-1	1/26/95	34.59	342.07	104.26
	2/27/95	33.94	342.72	104.46
	3/27/95	33.30	343.36	104.66
399-1-10A	1/26/95	31.57	342.00	104.24
	2/27/95	31.80	341.77	104.17
	3/27/95	30.20	343.37	104.66
399-1-11	1/26/95	35.33	342.39	104.36
	2/27/95	34.78	342.94	104.53
	3/27/95	34.26	343.46	104.69
399-1-12	1/26/95	42.38	342.03	104.25
	2/27/95	41.74	342.67	104.45
	3/27/95	41.25	343.16	104.60
399-1-14A	1/26/95	40.78	342.45	104.38
	2/27/95	40.05	343.18	104.60
	3/27/95	39.70	343.53	104.71
399-1-15	1/26/95	36.98	342.55	104.41
	2/27/95	36.35	343.18	104.60
	3/27/95	35.95	343.58	104.72
399-1-16A	1/26/95	39.53	341.94	104.22
	2/27/95	39.03	342.44	104.38
	3/27/95	38.44	343.03	104.56
399-1-17A	1/26/95	35.40	342.04	104.25
	2/27/95	34.87	342.57	104.42
	3/27/95	34.33	343.11	104.58
399-1-18A	1/26/95	47.83	342.95	104.53
	2/27/95	47.23	343.55	104.71
	3/27/95	46.91	343.87	104.81
399-1-19	1/26/95	32.58	342.06	104.26
	2/27/95	31.98	342.66	104.44
	3/27/95	31.46	343.18	104.60

Table 16-2. RCRA Water Level Measurement Report, 300 Area Process Trenches, First Quarter 1995. (sheet 2 of 5)

Well	Date	Depth to water (ft)	Water level elevation above msl (ft)	(m)
Wells Monitoring the Top of the Unconfined Aquifer				
399-1-3	1/26/95	42.72	341.99	104.24
	2/27/95	42.23	342.48	104.39
	3/27/95	41.65	343.06	104.56
399-1-4	1/26/95	38.16	342.42	104.37
	2/27/95	37.56	343.02	104.55
	3/27/95	37.10	343.48	104.69
399-1-5	1/26/95	37.71	342.06	104.26
	2/27/95	37.13	342.64	104.44
	3/27/95	36.58	343.19	104.60
399-1-7	1/26/95	43.57	342.03	104.25
	2/27/95	43.15	342.45	104.38
	3/27/95	42.67	342.93	104.53
399-1-8	1/26/95	42.89	341.99	104.24
	2/27/95	42.40	342.48	104.39
	3/27/95	41.81	343.07	104.57
399-2-1	1/26/95	33.60	341.63	104.13
	2/27/95	32.86	342.37	104.35
	3/27/95	32.23	343.00	104.55
399-2-2	1/26/95	35.59	341.93	104.22
	2/27/95	35.09	342.43	104.37
	3/27/95	34.49	343.03	104.56
399-2-3	1/26/95	33.51	341.91	104.21
	2/27/95	32.98	342.44	104.38
	3/27/95	32.65	342.77	104.48
399-3-1	1/26/95	42.82	341.57	104.11
	2/27/95	42.12	342.27	104.32
	3/27/95	41.48	342.91	104.52
399-3-10	1/26/95	43.68	341.67	104.14
	2/27/95	43.20	342.15	104.29
	3/27/95	42.47	342.88	104.51

Table 16-2. RCRA Water Level Measurement Report, 300 Area Process Trenches, First Quarter 1995. (sheet 3 of 5)

Well	Date	Depth to water (ft)	Water level elevation above msl (ft)	(m)
Wells Monitoring the Top of the Unconfined Aquifer				
399-3-12	1/26/95	46.24	341.80	104.18
	2/27/95	45.76	342.28	104.33
	3/27/95	45.16	342.88	104.51
399-3-6	1/26/95	50.92	341.88	104.21
	2/27/95	51.27	341.53	104.10
	3/27/95	50.77	342.03	104.25
399-3-9	1/26/95	46.28	341.80	104.18
	2/27/95	45.83	342.25	104.32
	3/27/95	45.17	342.91	104.52
399-4-1	1/26/95	53.86	341.74	104.16
	2/27/95	53.45	342.15	104.29
	3/27/95	52.77	342.83	104.49
399-4-10	1/26/95	36.90	341.64	104.13
	2/27/95	36.44	342.10	104.27
	3/27/95	35.69	342.85	104.50
399-4-11	1/26/95	62.66	341.79	104.18
	2/27/95	62.17	342.28	104.33
	3/27/95	61.53	342.92	104.52
399-4-7	1/26/95	36.97	341.59	104.12
	2/27/95	36.48	342.08	104.27
	3/27/95	35.75	342.81	104.49
399-4-9	2/27/95	39.97	342.19	104.30
	3/27/95	39.25	342.91	104.52
399-5-1	1/26/95	53.68	341.85	104.20
	2/27/95	52.87	342.66	104.44
	3/27/95	52.59	342.94	104.53
399-6-1	1/26/95	46.81	341.98	104.24
	2/27/95	45.89	342.90	104.52
	3/27/95	45.74	343.05	104.56

Table 16-2. RCRA Water Level Measurement Report, 300 Area Process Trenches, First Quarter 1995. (sheet 4 of 5)

Well	Date	Depth to water (ft)	Water level elevation above msl (ft)	(m)
Wells Monitoring the Top of the Unconfined Aquifer				
399-8-1	1/26/95	54.12	342.01	104.24
	2/27/95	53.27	342.86	104.50
	3/27/95	53.03	343.10	104.58
399-8-2	1/26/95	55.54	342.48	104.39
	2/27/95	54.73	343.29	104.63
	3/27/95	54.93	343.09	104.57
399-8-3	1/26/95	52.52	342.23	104.31
	2/27/95	51.64	343.11	104.58
	3/27/95	51.49	343.26	104.63
699-S27-E14	1/26/95	57.94	341.74	104.16
	2/27/95	59.97	339.71	103.54
	3/27/95	58.92	340.76	103.86
Wells Monitoring the Bottom of the Unconfined Aquifer				
399-1-16B	1/26/95	39.03	342.05	104.26
	2/27/95	38.54	342.54	104.41
	3/27/95	37.93	343.15	104.59
399-1-17B	1/26/95	35.76	342.04	104.25
	2/27/95	35.14	342.66	104.44
	3/27/95	34.62	343.18	104.60
399-1-18B	1/26/95	46.67	343.22	104.61
	2/27/95	46.11	343.78	104.78
	3/27/95	45.76	344.13	104.89
Wells Monitoring the Confined Aquifer				
399-1-17C	1/26/95	3.16	374.90	114.27
	2/27/95	2.97	375.09	114.33
	3/27/95	2.86	375.20	114.36

Table 16-2. RCRA Water Level Measurement Report, 300 Area Process Trenches, First Quarter 1995. (sheet 5 of 5)

Well	Date	Depth to water (ft)	Water level elevation above msl (ft)	(m)
Wells Monitoring the Confined Aquifer				
399-1-18C	1/26/95	44.19	343.82	104.80
	2/27/95	43.66	344.35	104.96
	3/27/95	43.37	344.64	105.05
399-1-9	1/26/95	26.34	358.42	109.25
	2/27/95	26.75	358.01	109.12
	3/27/95	26.70	358.06	109.14

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. Elevations marked with an '*' were measured at the time of sampling.
4. Elevations marked with a '+' are outside of the expected range, and are suspected of error.

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17.0 NONRADIOACTIVE DANGEROUS WASTE LANDFILL

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17.1 INTRODUCTION

The Nonradioactive Dangerous Waste Landfill (NRDWL) is part of the Hanford Central Landfill 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 (WHC 1993c). The groundwater monitoring network consists of three upgradient 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 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 six monitoring wells of the adjacent Solid Waste Landfill, and in several nearby non-RCRA wells. In addition, water levels were measured in all wells at the time of sampling. Results of the water level measurements are reported in Table 17-2.

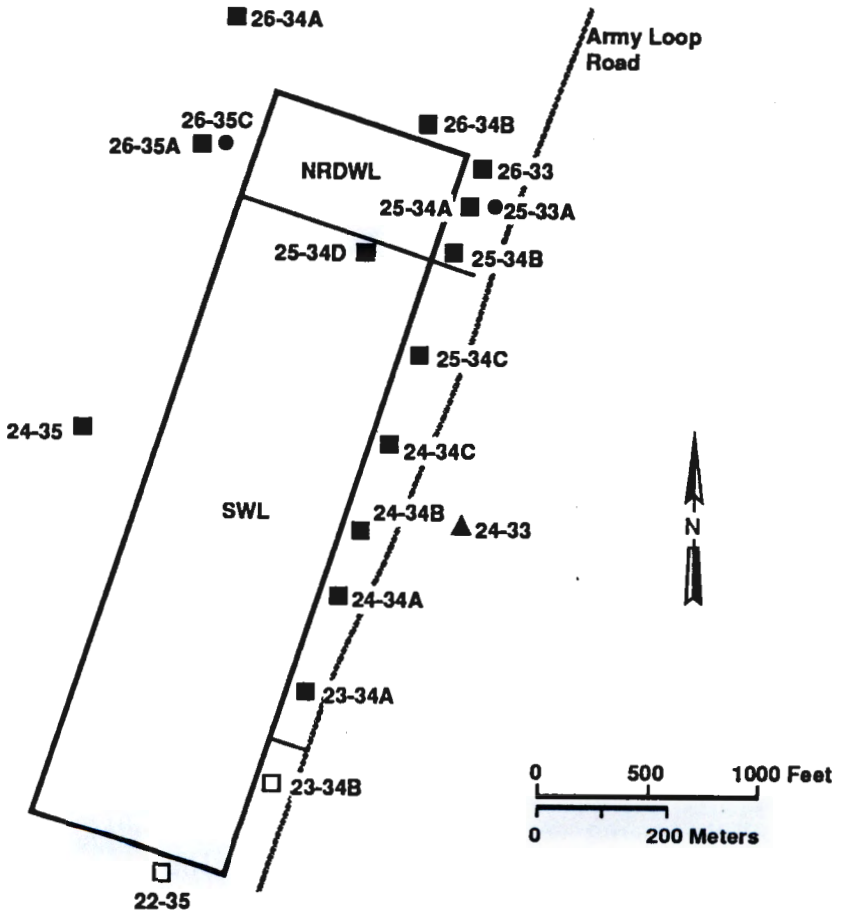
17.3 WATER CHEMISTRY DATA

The monitoring network for the NRDWL is on a semiannual sampling schedule. The monitoring network was sampled in August/September 1994 and was sampled in February 1995, during this quarter. The next scheduled sampling for the NRDWL network is in August 1995. This report contains hydrochemical and water level data for the first quarter of CY 1995.

Values for specific conductance, field pH, TOC, and TOX reported for this quarter do not exceed the critical means for this site.

The DWS for tritium (20,000 pCi/L) was exceeded for eight of the nine wells at the NRDWL during this quarter. Groundwater tritium at the NRDWL has an upgradient source in the 200 Areas and is monitored at the NRDWL to aid in determining groundwater flow rates and directions.

Figure 17-1. Well Location Map for the Nonradioactive Dangerous Waste Landfill and Solid Waste Landfill.



■ Well completed at the top of the unconfined aquifer

● Well completed in the upper Ringold Formation

▲ Well not constructed to RCRA specifications

□ RCRA wells completed in late 1993.

NRDWL Nonradioactive Dangerous Waste Landfill

SWL Solid Waste Landfill

All wells prefixed by 699-

H9402008.24

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, 1st Qtr 1995
26-34A	Upgradient	Hanford: Water Table	Semiannually	2/2/95, 2/28/95
26-35A	Upgradient	Hanford: Water Table	Semiannually	2/28/95
26-35C	Upgradient	Top of Ringold	Semiannually	2/28/95
25-33A	Downgradient	Top of Ringold	Semiannually	2/28/95
25-34A	Downgradient	Hanford: Water Table	Semiannually	2/28/95
25-34B	Downgradient	Hanford: Water Table	Semiannually	2/28/95
25-34D	Downgradient	Hanford: Water Table	Semiannually	2/28/95
26-33	Downgradient	Hanford: Water Table	Semiannually	2/28/95
26-34B	Downgradient	Hanford: Water Table	Semiannually	2/28/95

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.

Table 17-2. RCRA Water Level Measurement Report, Nonradioactive Dangerous Waste Landfill, First 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	1/24/95	129.69	400.62	122.11
	2/24/95	130.04	400.27	122.00
	2/28/95	129.67	400.64*+	122.12
	3/20/95	131.00	399.31	121.71
699-25-34B	2/28/95	128.72	400.68*	122.13
	3/20/95	130.00	399.40	121.74
699-25-34D	1/24/95	136.81	401.10	122.26
	2/24/95	136.98	400.93	122.20
	2/28/95	137.00	400.91*	122.20
	3/20/95	136.88	401.03+	122.23
699-26-33	1/24/95	134.95	400.71	122.14
	2/24/95	135.88	399.78+	121.85
	2/28/95	135.04	400.45*	122.06
	3/20/95	135.04	400.62	122.11
699-26-34A	1/24/95	127.82	400.58	122.10
	2/02/95	127.16	401.24*+	122.30
	2/24/95	127.98	400.42	122.05
	2/28/95	127.80	400.60*+	122.10
	3/20/95	128.00	400.40	122.04
699-26-34B	1/24/95	129.24	401.03	122.23
	2/24/95	129.34	400.93	122.20
	2/28/95	129.36	400.91*	122.20
699-26-35A	1/24/95	131.79	400.87	122.19
	2/24/95	132.06	400.60	122.10
	2/28/95	131.45	401.21*+	122.29
	3/20/95	132.95	399.71	121.83
NRDWL Wells Monitoring the Upper Ringold				
699-25-33A	1/24/95	127.98	400.99	122.22
	2/24/95	128.21	400.76	122.15
	2/28/95	128.20	400.77*	122.15
	3/20/95	128.31	400.66	122.12

Table 17-2. RCRA Water Level Measurement Report, Nonradioactive Dangerous Waste Landfill, First 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	1/24/95	131.67	401.01	122.23
	2/24/95	131.78	400.90	122.19
	2/28/95	131.84	400.84*	122.18
	3/20/95	131.83	400.85	122.18
Other Wells Associated with NRDWL				
699-20-20	1/24/95	106.21	399.37	121.73
	2/24/95	106.25	399.33	121.72
	3/20/95	106.24	399.34	121.72
699-20-39	1/24/95	138.63	401.35	122.33
	2/24/95	138.72	401.26	122.30
	3/20/95	138.52	401.46	122.37
699-22-35	3/01/95	133.12	400.85*	122.18
	3/20/95	133.03	400.94	122.21
699-23-34A	1/24/95	131.94	400.92	122.20
	2/24/95	131.99	400.87	122.19
	3/01/95	131.97	400.89*	122.19
	3/20/95	132.00	400.86	122.18
699-23-34B	3/02/95	132.66	400.84*	122.18
	3/20/95	132.71	400.79	122.16
699-24-33	1/24/95	123.32	400.95	122.21
	2/24/95	123.40	400.87	122.19
	3/01/95	123.43	400.84*	122.18
	3/20/95	123.42	400.85	122.18
699-24-34A	1/24/95	132.97	400.91	122.20
	2/24/95	133.03	400.85	122.18
	3/02/95	132.02	401.86*+	122.49
	3/20/95	133.97	399.91+	121.89
699-24-34B	1/24/95	132.55	400.95	122.21
	2/24/95	132.61	400.89	122.19

Table 17-2. RCRA Water Level Measurement Report, Nonradioactive Dangerous Waste Landfill, First 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	3/01/95	132.60	400.90*	122.19
	3/20/95	132.65	400.85	122.18
699-24-34C	1/24/95	131.66	400.93	122.20
	2/24/95	131.73	400.86	122.18
	3/01/95	131.71	400.88*	122.19
	3/20/95	131.77	400.82	122.17
699-24-35	1/24/95	137.81	401.00	122.22
	2/24/95	137.92	400.89	122.19
	3/01/95	137.96	400.85*	122.18
	3/20/95	137.96	400.85	122.18
699-25-34C	1/24/95	134.54	400.92	122.20
	2/24/95	134.59	400.87	122.19
	3/02/95	134.58	400.88*	122.19
	3/20/95	134.65	400.81	122.17
699-28-40	1/24/95	158.16	401.28	122.31
	2/24/95	158.28	401.16	122.27
	3/20/95	158.22	401.22	122.29
699-31-31	1/24/95	128.46	400.86	122.18
	2/24/95	128.55	400.77	122.15
	3/20/95	128.53	400.79	122.16
699-34-39A	1/24/95	135.63	401.44	122.36
	2/24/95	135.81	401.26	122.30
	3/20/95	135.74	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. Elevations marked with an '*' were measured at the time of sampling.
4. Elevations 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 January 1 through March 31, 1995. (sheet 1 of 3)

CONTAMINATION INDICATOR PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
CONDUCT	94	Conductivity, field	µmhos	1			35	35	
CONDUCT	73	Conductivity, lab	µmhos				10	10	
TOC		Total Organic Carbon	ppb	110			40	28	
TOX		Total Organic Halogen	ppb	5			20	16	
PH	93	pH, field	pH	.01	6.5-8.5	EPAS	37	37	0
PH	125	pH, lab	pH		6.5-8.5	EPAS	10	10	0

DRINKING WATER PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
BARIUM		Barium	ppb	.59	1000	EPAI	1	1	0
FBARIUM		Barium, filtered	ppb	.59	1000	EPAI	10	10	0
CADMIUM		Cadmium	ppb	3.3	10	EPAI	1	0	0
FCADMIU		Cadmium, filtered	ppb	3.3	10	EPAI	10	0	0
CHROMUM		Chromium	ppb	4.5	50	EPAI	1	1	0
FCHROMI		Chromium, filtered	ppb	4.5	50	EPAI	10	9	0
FLUORID		Fluoride	ppb	36	1400	EPAI	10	10	0
ALPHA		Gross alpha	pCi/L		15	EPA	10	9	0
NITRATE		Nitrate	ppb	11	45000	EPA	10	10	0

GROUNDWATER QUALITY PARAMETERS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
CHLORID		Chloride	ppb	14	250000	EPAS	10	10	0
IRON		Iron	ppb	5.24	300	EPAS	1	1	0
FIRON		Iron, filtered	ppb	5.24	300	EPAS	10	8	0
MANGESE		Manganese	ppb	.72	50	EPAS	1	1	0
FMANGAN		Manganese, filtered	ppb	.72	50	EPAS	10	3	0
LPHENOL		Phenol	ppb	.31			10	0	
SODIUM		Sodium	ppb	61			1	1	
FSODIUM		Sodium, filtered	ppb	61			10	10	
SULFATE		Sulfate	ppb	37	250000	EPAS	10	10	0

SITE SPECIFIC AND OTHER CONSTITUENTS

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
1,1,1-T		1,1,1-Trichloroethane	ppb	.036	200	EPA	10	8	0
1,1,2-T		1,1,2-Trichloroethane	ppb	.078			10	0	
1,1-DIC		1,1-Dichloroethane	ppb	.058			10	4	
1,2-DIC		1,2-Dichloroethane	ppb	.029	5	EPA	10	0	0
14-dben		1,4-Dichlorobenzene	ppb	.055	75	EPA	10	0	0
246-trp		2,4,6-Trichlorophenol	ppb	1.3			10	0	
24-dchp		2,4-Dichlorophenol	ppb	1.3			10	0	
DIMPHEN		2,4-Dimethylphenol	ppb	1.2			10	0	

Table 17-3. Constituent List and Summary of Results for the NRDW Landfill Data for Reporting Period January 1 through March 31, 1995. (sheet 2 of 3)

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	DWS Agency	Number of Samples Total	>MDL	>DWS
DINPHEN		2,4-Dinitrophenol	ppb	3			10	0	
26-dchp		2,6-Dichlorophenol	ppb	1.4			10	0	
CHLPHEN		2-Chlorophenol	ppb	1.6			10	0	
2NITPH		2-Nitrophenol	ppb	1.3			10	0	
BUTDINP		2-sec-Butyl-4,6-dinitrophenol(DN)	ppb	1.3			10	0	
46DN2MP		4,6-Dinitro-2-methylphenol	ppb	1.3			10	0	
CHLCRES		4-Chloro-3-methylphenol	ppb	1.3			10	0	
NITPHEN		4-Nitrophenol	ppb	3			10	0	
ALKALIN		Alkalinity	ppm	2.8			10	10	
ALUMNUM		Aluminum	ppb	26			1	1	
FALUMIN		Aluminum, filtered	ppb	26			10	0	
AMMONIU		Ammonium ion	ppb	37			1	0	
ANTIONY		Antimony	ppb	62			1	0	
FANTIMO		Antimony, filtered	ppb	62			10	0	
BENZENE		Benzene	ppb	.013	5	EPA	10	0	0
BERYLUM		Beryllium	ppb	.17			1	0	
FBERYLL		Beryllium, filtered	ppb	.17			10	7	
BROMIDE		Bromide	ppb	11			10	10	
CALCIUM		Calcium	ppb	34			1	1	
FCALCIU		Calcium, filtered	ppb	34			10	10	
TETRANE		Carbon tetrachloride	ppb	.075	5	EPA	10	8	0
COD		Chemical Oxygen Demand	ppm	2.6			1	0	
CHLFORM		Chloroform	ppb	.041			10	6	
COBALT		Cobalt	ppb	5.9			1	0	
FCOBALT		Cobalt, filtered	ppb	5.9			10	0	
COPPER		Copper	ppb	4.1	1000	EPAS	1	0	0
FCOPPER		Copper, filtered	ppb	4.1	1000	EPAS	10	3	0
CRESOLS		Cresols (methylphenols)	ppb	4.8			10	0	
ETHBENZ		Ethylbenzene	ppb	.051	700	EPA	10	0	0
BETA		Gross beta	pCi/L				10	10	
MAGNES		Magnesium	ppb	23			1	1	
FMAGNES		Magnesium, filtered	ppb	23			10	10	
METHYCH		Methylene chloride	ppb	.09			10	0	
NICKEL		Nickel	ppb	13			1	0	
FNICKEL		Nickel, filtered	ppb	13			10	1	
NITRITE		Nitrite	ppb	18	1000	EPA	10	0	0
PENTCHP		Pentachlorophenol	ppb	1.3	1	EPA	10	0	10*
PHOSPHA		Phosphate	ppb	82			10	0	
POTASUM		Potassium	ppb	850			1	1	
FPOTASS		Potassium, filtered	ppb	850			10	10	
SILVER		Silver	ppb	3.6	50	EPAI	1	1	0
FSILVER		Silver, filtered	ppb	3.6	50	EPAI	10	0	0
PERCENE		Tetrachloroethene	ppb	.22	5	EPA	10	8	0
TETPHNL		Tetrachlorophenols	ppb	1.5			10	0	
TIN		Tin	ppb	69			1	0	
FTIN		Tin, filtered	ppb	69			10	0	
TOLUENE		Toluene	ppb	.016	1000	EPA	10	0	0
TC		Total Carbon	ppb	320			10	10	
TDS		Total Dissolved Solids	ppm	10	500	EPAS	10	10	0
TRICENE		Trichloroethene	ppb	.11	5	EPA	10	7	0
TRIPHNL		Trichlorophenols	ppb	1.7			10	0	
TRITIUM		Tritium	pCi/L		20000	EPA	10	10	9
TURBID	111	Turbidity	NTU				10	10	
TURBID	126	Turbidity	NTU	.016			10	10	
VANADUM		Vanadium	ppb	6.6			1	1	
FVANADI		Vanadium, filtered	ppb	6.6			10	10	
VINYIDE		Vinyl chloride	ppb	.13	2	EPA	10	0	0
XYLENE		Xylenes (total)	ppb	.035	10000	EPA	10	0	0

Table 17-3. Constituent List and Summary of Results for the NRDW Landfill Data for Reporting Period January 1 through March 31, 1995. (sheet 3 of 3)

Constituent Name Short	(Method)	Full	Units	Lab MDL	DWS Limit	Agency	Number of Samples Total	>MDL	>DWS
ZINC		Zinc	ppb	6.3	5000	EPAS	1	0	0
FZINC		Zinc, filtered	ppb	6.3	5000	EPAS	10	1	0
CIS12DE		cis-1,2-Dichloroethylene	ppb	.11	70	EPA	10	0	0
TRANDCE		trans-1,2-Dichloroethylene	ppb	.073	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 January 1 through March 31, 1995. (sheet 1 of 6)

Well Name	Collection Date	Sample Number	1,1,1-T 25/ppb .036/200	1,1-DIC 25/ppb .058/.	ALKALIN 357/ppm 2.8/.	ALUMNUM 34/ppb 26/.
699-25-33A	2/28/95	B0DPX3	.04 U	.06 U	130.00	
699-25-34A	2/28/95	B0DPX8	2.20	.11 L	200.00	
699-25-34B	2/28/95	B0DPY3	2.40	.16 L	200.00	
699-25-34B	2/28/95	B0DPY4	2.30	.13 L	200.00	
699-25-34D	2/28/95	B0DPZ3	.70	.06 L	190.00	
699-26-33	2/28/95	B0DPZ8	1.50	.06 U	170.00	
699-26-34A	2/02/95	B0DQ03	.77	.06 U	150.00	
699-26-34A	2/02/95	B0DQ07				35.00 BL
699-26-34B	2/28/95	B0DQ08	.91	.06 U	150.00	
699-26-35A	2/28/95	B0DQV8	1.30	.06 U	160.00	
699-26-35C	2/28/95	B0DQ13	.04 U	.06 U	120.00	

Well Name	Collection Date	Sample Number	FALUMIN 34/ppb 26/.	BARIUM 34/ppb .59/1000	FBARIUM 34/ppb .59/1000	BERYLUM 34/ppb .17/.
699-25-33A	2/28/95	B0DPX7	26.00 U		30.00	
699-25-34A	2/28/95	B0DPY2	26.00 U		51.00	
699-25-34B	2/28/95	B0DPZ1	26.00 U		51.00	
699-25-34B	2/28/95	B0DPZ2	26.00 U		49.00	
699-25-34D	2/28/95	B0DPZ7	26.00 U		52.00	
699-26-33	2/28/95	B0DQ02	26.00 U		45.00	
699-26-34A	2/02/95	B0DQ07		35.00		.17 U
699-26-34A	2/28/95	B0DVM7	26.00 U		36.00	
699-26-34B	2/28/95	B0DQ12	26.00 U		43.00	
699-26-35A	2/28/95	B0DQW2	26.00 U		39.00	
699-26-35C	2/28/95	B0DQ17	26.00 U		47.00	

Well Name	Collection Date	Sample Number	FBERYLL 34/ppb .17/.	BROMIDE 124/ppb 11/.	CALCIUM 34/ppb 34/.	FCALCIU 34/ppb 34/.
699-25-33A	2/28/95	B0DPX3		50.00 L		
699-25-33A	2/28/95	B0DPX7	.17 UQ			34000.00
699-25-34A	2/28/95	B0DPX8		50.00 L		
699-25-34A	2/28/95	B0DPY2	.50 BLQ			57000.00
699-25-34B	2/28/95	B0DPY3		60.00 L		
699-25-34B	2/28/95	B0DPY4		50.00 L		
699-25-34B	2/28/95	B0DPZ1	.22 BLQ			62000.00
699-25-34B	2/28/95	B0DPZ2	.22 BLQ			60000.00
699-25-34D	2/28/95	B0DPZ3		50.00 L		
699-25-34D	2/28/95	B0DPZ7	.22 BLQ			56000.00
699-26-33	2/28/95	B0DPZ8		40.00 L		
699-26-33	2/28/95	B0DQ02	.40 BLQ			48000.00
699-26-34A	2/02/95	B0DQ03		50.00 L		
699-26-34A	2/02/95	B0DQ07			46000.00	
699-26-34A	2/28/95	B0DVM7	.20 BLQ			45000.00
699-26-34B	2/28/95	B0DQ08		50.00 L		
699-26-34B	2/28/95	B0DQ12	.17 UQ			46000.00
699-26-35A	2/28/95	B0DQV8		50.00 L		
699-26-35A	2/28/95	B0DQW2	.21 BLQ			48000.00

Table 17-4. Constituents with at Least One Detected Value for the NRDW Landfill Data for Reporting Period January 1 through March 31, 1995. (sheet 2 of 6)

Well Name	Collection Date	Sample Number	FBERYLL 34/ppb .17/.	BROMIDE 124/ppb 11/.	CALCIUM 34/ppb 34/.	FCALCIU 34/ppb 34/.
699-26-35C	2/28/95	B0DQ13		50.00 L		
699-26-35C	2/28/95	B0DQ17	.17 UQ			46000.00

Well Name	Collection Date	Sample Number	TETRANE 25/ppb .075/5	CHLORID 124/ppb 14/250000	CHLFORM 25/ppb .041/.	CHROMUM 34/ppb 4.5/50
699-25-33A	2/28/95	B0DPX3	.08 U	6100.00	.04 U	
699-25-34A	2/28/95	B0DPX8	.58 L	7300.00 BQ	.16 L	
699-25-34B	2/28/95	B0DPY3	.55 L	7800.00 BQ	.21 LQ	
699-25-34B	2/28/95	B0DPY4	.62 L	7800.00 BQ	.16 LQ	
699-25-34D	2/28/95	B0DPZ3	.52 L	7300.00 BQ	.13 L	
699-26-33	2/28/95	B0DPZ8	.35 L	7000.00 BQ	.04 L	
699-26-34A	2/02/95	B0DQ03	.35 L	7000.00	.04 U	
699-26-34A	2/02/95	B0DQ07				19.00 L
699-26-34B	2/28/95	B0DQ08	.36 L	7500.00	.07 L	
699-26-35A	2/28/95	B0DQV8	.41 L	7100.00 BQ	.04 U	
699-26-35C	2/28/95	B0DQ13	.08 U	8900.00	.04 U	

Well Name	Collection Date	Sample Number	FCHROMI 34/ppb 4.5/50	COPPER 34/ppb 4.1/1000	FCOPPER 34/ppb 4.1/1000	FLUORID 124/ppb 36/1400
699-25-33A	2/28/95	B0DPX3				700.00
699-25-33A	2/28/95	B0DPX7	4.50 U		5.40 L	
699-25-34A	2/28/95	B0DPX8				800.00 Q
699-25-34A	2/28/95	B0DPY2	15.00 L		4.10 L	
699-25-34B	2/28/95	B0DPY3				900.00 Q
699-25-34B	2/28/95	B0DPY4				900.00 Q
699-25-34B	2/28/95	B0DPZ1	15.00 L		4.10 U	
699-25-34B	2/28/95	B0DPZ2	14.00 L		4.10 U	
699-25-34D	2/28/95	B0DPZ3				800.00 Q
699-25-34D	2/28/95	B0DPZ7	15.00 L		4.10 U	
699-26-33	2/28/95	B0DPZ8				800.00 Q
699-26-33	2/28/95	B0DQ02	15.00 L		4.10 U	
699-26-34A	2/02/95	B0DQ03				500.00
699-26-34A	2/02/95	B0DQ07		4.10 U		
699-26-34A	2/28/95	B0DVM7	18.00 L		4.10 U	
699-26-34B	2/28/95	B0DQ08				800.00
699-26-34B	2/28/95	B0DQ12	13.00 L		5.00 L	
699-26-35A	2/28/95	B0DQV8				800.00 Q
699-26-35A	2/28/95	B0DQW2	17.00 L		4.10 U	
699-26-35C	2/28/95	B0DQ13				700.00
699-26-35C	2/28/95	B0DQ17	6.30 L		4.10 U	

Table 17-4. Constituents with at Least One Detected Value for the NRDW Landfill Data for Reporting Period January 1 through March 31, 1995. (sheet 3 of 6)

Well Name	Collection Date	Sample Number	ALPHA 135/pCi/L ./15	BETA 136/pCi/L ./.	IRON 34/ppb 5.24/300	FIRON 34/ppb 5.24/300
699-25-33A	2/28/95	B0DPX3	.41 U	4.90		
699-25-33A	2/28/95	B0DPX7				16.00 LQ
699-25-34A	2/28/95	B0DPX8	2.92	14.70		
699-25-34A	2/28/95	B0DPY2				19.00 LQ
699-25-34B	2/28/95	B0DPY3	4.39	14.90		
699-25-34B	2/28/95	B0DPY4	4.53	14.60		
699-25-34B	2/28/95	B0DPZ1				5.24 UQ
699-25-34B	2/28/95	B0DPZ2				12.00 LQ
699-25-34D	2/28/95	B0DPZ3	3.19	16.20		
699-25-34D	2/28/95	B0DPZ7				15.00 LQ
699-26-33	2/28/95	B0DPZ8	2.62	11.30		
699-26-33	2/28/95	B0DQ02				11.00 LQ
699-26-34A	2/02/95	B0DQ03	3.70	14.00		
699-26-34A	2/02/95	B0DQ07			190.00 Q	
699-26-34A	2/28/95	B0DVM7				23.00 Q
699-26-34B	2/28/95	B0DQ08	3.61	12.50		
699-26-34B	2/28/95	B0DQ12				12.00 LQ
699-26-35A	2/28/95	B0DQV8	3.74	15.40		
699-26-35A	2/28/95	B0DQW2				12.00 LQ
699-26-35C	2/28/95	B0DQ13	1.90	22.90		
699-26-35C	2/28/95	B0DQ17				5.24 UQ

Well Name	Collection Date	Sample Number	MAGNES 34/ppb 23/.	FMAGNES 34/ppb 23/.	MANGESE 34/ppb .72/50	FMANGAN 34/ppb .72/50
699-25-33A	2/28/95	B0DPX7		9200.00		.72 U
699-25-34A	2/28/95	B0DPY2		16000.00		.72 U
699-25-34B	2/28/95	B0DPZ1		16000.00		1.60 L
699-25-34B	2/28/95	B0DPZ2		16000.00		.72 U
699-25-34D	2/28/95	B0DPZ7		15000.00		.74 L
699-26-33	2/28/95	B0DQ02		14000.00		.72 U
699-26-34A	2/02/95	B0DQ07	13000.00		1.40 L	
699-26-34A	2/28/95	B0DVM7		13000.00		.72 U
699-26-34B	2/28/95	B0DQ12		13000.00		.72 U
699-26-35A	2/28/95	B0DQW2		13000.00		.72 U
699-26-35C	2/28/95	B0DQ17		12000.00		.85 L

Well Name	Collection Date	Sample Number	NICKEL 34/ppb 13/.	FNICKEL 34/ppb 13/.	NITRATE 124/ppb 11/45000	POTASUM 34/ppb 850/.
699-25-33A	2/28/95	B0DPX3			3700.00	
699-25-33A	2/28/95	B0DPX7		74.00		
699-25-34A	2/28/95	B0DPX8			24000.00 DQ	
699-25-34A	2/28/95	B0DPY2		13.00 U		
699-25-34B	2/28/95	B0DPY3			26000.00 DQ	
699-25-34B	2/28/95	B0DPY4			26000.00 DQ	
699-25-34B	2/28/95	B0DPZ1		13.00 U		
699-25-34B	2/28/95	B0DPZ2		13.00 U		

Table 17-4. Constituents with at Least One Detected Value for the NRDW Landfill Data for Reporting Period January 1 through March 31, 1995. (sheet 4 of 6)

Well Name	Collection Date	Sample Number	NICKEL 34/ppb 13/.	FNICKEL 34/ppb 13/.	NITRATE 124/ppb 11/45000	POTASUM 34/ppb 850/.
699-25-34D	2/28/95	B0DPZ3			24000.00 DQ	
699-25-34D	2/28/95	B0DPZ7		13.00 U		
699-26-33	2/28/95	B0DPZ8			24000.00 DQ	
699-26-33	2/28/95	B0DQ02		13.00 U		
699-26-34A	2/02/95	B0DQ03			24000.00 DH	
699-26-34A	2/02/95	B0DQ07	13.00 U			7000.00
699-26-34A	2/28/95	B0DVM7		13.00 U		
699-26-34B	2/28/95	B0DQ08			23000.00 D	
699-26-34B	2/28/95	B0DQ12		13.00 U		
699-26-35A	2/28/95	B0DQV8			23000.00 DQ	
699-26-35A	2/28/95	B0DQW2		13.00 U		
699-26-35C	2/28/95	B0DQ13			20000.00 D	
699-26-35C	2/28/95	B0DQ17		13.00 U		

Well Name	Collection Date	Sample Number	FPOTASS 34/ppb 850/.	SILVER 34/ppb 3.6/50	FSILVER 34/ppb 3.6/50	SODIUM 34/ppb 61/.
699-25-33A	2/28/95	B0DPX7	5600.00		3.60 U	
699-25-34A	2/28/95	B0DPY2	7600.00		3.60 U	
699-25-34B	2/28/95	B0DPZ1	7600.00		3.60 U	
699-25-34B	2/28/95	B0DPZ2	7500.00		3.60 U	
699-25-34D	2/28/95	B0DPZ7	7600.00		3.60 U	
699-26-33	2/28/95	B0DQ02	7300.00		3.60 U	
699-26-34A	2/02/95	B0DQ07		4.30 L		24000.00 BQ
699-26-34A	2/28/95	B0DVM7	6900.00		3.60 U	
699-26-34B	2/28/95	B0DQ12	6800.00		3.60 U	
699-26-35A	2/28/95	B0DQW2	6900.00		3.60 U	
699-26-35C	2/28/95	B0DQ17	6200.00		3.60 U	

Well Name	Collection Date	Sample Number	FSODIUM 34/ppb 61/.	SULFATE 124/ppb 37/250000	PERCENE 25/ppb .22/5	TC 127/ppb 320/.
699-25-33A	2/28/95	B0DPX3		21000.00 D	.22 U	32000.00 Q
699-25-33A	2/28/95	B0DPX7	18000.00 Q			
699-25-34A	2/28/95	B0DPX8		40000.00 D	1.50	46000.00
699-25-34A	2/28/95	B0DPY2	27000.00 Q			
699-25-34B	2/28/95	B0DPY3		41000.00 D	1.90	48000.00
699-25-34B	2/28/95	B0DPY4		42000.00 D	1.60	48000.00
699-25-34B	2/28/95	B0DPZ1	26000.00 Q			
699-25-34B	2/28/95	B0DPZ2	25000.00 Q			
699-25-34D	2/28/95	B0DPZ3		38000.00 D	1.10	45000.00
699-25-34D	2/28/95	B0DPZ7	25000.00 Q			
699-26-33	2/28/95	B0DPZ8		38000.00 D	.92	40000.00
699-26-33	2/28/95	B0DQ02	25000.00 Q			
699-26-34A	2/02/95	B0DQ03		37000.00 D	.30 L	40000.00
699-26-34A	2/28/95	B0DVM7	25000.00 Q			
699-26-34B	2/28/95	B0DQ08		40000.00 D	.82	37000.00 Q
699-26-34B	2/28/95	B0DQ12	24000.00 Q			
699-26-35A	2/28/95	B0DQV8		38000.00 D	1.10	40000.00

Table 17-4. Constituents with at Least One Detected Value for the NRDW Landfill Data for Reporting Period January 1 through March 31, 1995. (sheet 5 of 6)

Well Name	Collection Date	Sample Number	FSODIUM 34/ppb 61/.	SULFATE 124/ppb 37/250000	PERCENE 25/ppb .22/5	TC 127/ppb 320/.
699-26-35A	2/28/95	B0DQW2	24000.00 Q			
699-26-35C	2/28/95	B0DQ13		49000.00 D	.22 U	31000.00 Q
699-26-35C	2/28/95	B0DQ17	19000.00 Q			

Well Name	Collection Date	Sample Number	TDS 65/ppm 10/500	TRICENE 25/ppb .11/5	TRITIUM 142/pCi/L ./20000	TURBID 111/NTU ./.
699-25-33A	2/28/95	B0DPX3	200.00	.11 U	366.00	.65
699-25-34A	2/28/95	B0DPX8	340.00	.46 L	179000.00	.22
699-25-34B	2/28/95	B0DPY3	340.00	.53 L	172000.00	.11
699-25-34B	2/28/95	B0DPY4	320.00	.61 L	173000.00	
699-25-34D	2/28/95	B0DPZ3	320.00	.39 L	168000.00	.55
699-26-33	2/28/95	B0DPZ8	300.00	.21 L	178000.00	.39
699-26-34A	2/02/95	B0DQ03	280.00	.11 U	166000.00	2.13
699-26-34A	2/28/95	B0DVM6				.47
699-26-34B	2/28/95	B0DQ08	270.00	.21 L	143000.00	.24
699-26-35A	2/28/95	B0DQV8	290.00	.17 L	160000.00	1.16
699-26-35C	2/28/95	B0DQ13	260.00	.11 U	45300.00	1.15

Well Name	Collection Date	Sample Number	TURBID 126/NTU .016/.	VANADUM 34/ppb 6.6/.	FVANADI 34/ppb 6.6/.	ZINC 34/ppb 6.3/5000
699-25-33A	2/28/95	B0DPX3	.55			
699-25-33A	2/28/95	B0DPX7			7.60 L	
699-25-34A	2/28/95	B0DPX8	2.60			
699-25-34A	2/28/95	B0DPY2			15.00 L	
699-25-34B	2/28/95	B0DPY3	1.10			
699-25-34B	2/28/95	B0DPY4	1.00			
699-25-34B	2/28/95	B0DPZ1			16.00 L	
699-25-34B	2/28/95	B0DPZ2			15.00 L	
699-25-34D	2/28/95	B0DPZ3	.63			
699-25-34D	2/28/95	B0DPZ7			15.00 L	
699-26-33	2/28/95	B0DPZ8	.18			
699-26-33	2/28/95	B0DQ02			18.00 L	
699-26-34A	2/02/95	B0DQ03	4.10 H			
699-26-34A	2/02/95	B0DQ07		19.00 L		6.30 U
699-26-34A	2/28/95	B0DVM7			20.00 L	
699-26-34B	2/28/95	B0DQ08	.30			
699-26-34B	2/28/95	B0DQ12			16.00 L	
699-26-35A	2/28/95	B0DQV8	.52			
699-26-35A	2/28/95	B0DQW2			18.00 L	
699-26-35C	2/28/95	B0DQ13	.94			
699-26-35C	2/28/95	B0DQ17			9.30 L	

Table 17-4. Constituents with at Least One Detected Value for the NRDW Landfill Data for Reporting Period January 1 through March 31, 1995. (sheet 6 of 6)

Well Name	Collection Date	Sample Number	FZINC 34/ppb 6.3/5000
699-25-33A	2/28/95	B0DPX7	22.00 Q
699-25-34A	2/28/95	B0DPY2	6.30 UQ
699-25-34B	2/28/95	B0DPZ1	6.30 UQ
699-25-34B	2/28/95	B0DPZ2	6.30 UQ
699-25-34D	2/28/95	B0DPZ7	6.30 UQ
699-26-33	2/28/95	B0DQ02	6.30 UQ
699-26-34A	2/28/95	B0DVM7	6.30 UQ
699-26-34B	2/28/95	B0DQ12	6.30 UQ
699-26-35A	2/28/95	B0DQW2	6.30 UQ
699-26-35C	2/28/95	B0DQ17	6.30 UQ

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 January 1 through March 31, 1995.

Well Name	Collection Date	Sample Number	COND FIELD µmho 1/.	COND LAB µmho 1/.	pH FIELD .01/6.5-8.5s	pH LAB .01/6.5-8.5s	TOC ppb 110/.	TOX ppb 5/.
699-25-33A	2/28/95	B0DPX3	332	330	8.03	8.30 H	140 L	
		B0DPX4	330		8.03		200 L	5.0 U
		B0DPX5	330		8.02		110 U	5.0 U
		B0DPX6	330		8.01		110 U	5.1
		B0F6B0						5.6
699-25-34A	2/28/95	B0DPX8	499	510	7.53	8.00 H	110 U	
		B0DPX9	498		7.53		120 L	10.4
		B0DPY0	499		7.54		300 L	10.3
		B0DPY1	500		7.53		120 L	9.2
		B0F6B1						9.0
699-25-34B	2/28/95	B0DPY3	529	530	7.48	8.10 H	120 L	
		B0DPY4	528	530	7.49	8.10 H	110 U	
		B0DPY5	528		7.49		200 L	11.8
		B0DPY6	528		7.49		200 L	10.0
		B0DPY7					200 L	12.3
		B0DPY8					200 L	7.1
		B0DPY9					200 L	9.0
		B0DPZ0					200 L	10.1
		B0F6B2						10.5
		B0F6B3						11.2
699-25-34D	2/28/95	B0DPZ3	482	500	7.44	8.10 H	110 U	
		B0DPZ4	485		7.56		110 U	
		B0DPZ5	487		7.57		110 U	
		B0DPZ6	487		7.56		110 L	
699-26-33	2/28/95	B0DPZ8	450	460	7.78	8.20 H	110 U	
		B0DPZ9	450		7.76		130 L	
		B0DQ00	449		7.75		130 L	
		B0DQ01	450		7.74		130 L	
699-26-34A	2/02/95	B0DQ03	446	440	8.18	7.70 H	140 L	6.2
		B0DQ04	446		8.18		110 U	8.8
		B0DQ05			8.18		200 L	5.0 U
		B0DQ06			8.18		110 L	5.0 U
	2/28/95	B0DVM6	444		7.77			
699-26-34B	2/28/95	B0DQ08	431	440	7.79	8.30 H	200 L	
		B0DQ09	430		7.76		200 L	
		B0DQ10	432		7.72		200 L	
		B0DQ11	430		7.70		300 L	
699-26-35A	2/28/95	B0DQV8	455	450	7.56	8.20 H	110 U	
		B0DQV9	454		7.56		130 L	
		B0DQW0	454		7.56		110 U	
		B0DQW1	455		7.55		110 U	
699-26-35C	2/28/95	B0DQ13	416	410	8.07	8.20 H	200 L	
		B0DQ14	417		8.04		130 L	
699-26-35C	2/28/95	B0DQ15	417		8.03		130 L	
		B0DQ16	417		8.03		140 L	

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

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