ENGINEERING CHANGE NOTICE

Page 1 of 2

1. ECN 635349

Proj.
ECN

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3

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Page 2 of 2

1. ECN (use no. from pg. 1)

ECN-635349

16. Design Verification Required ☐ Yes ☒ No	17. Cost Impact		18. Schedule Impact (days)	
	ENGINEERING		CONSTRUCTION	
	Additional ☐ \$	Additional ☐ \$	Improvement ☐	Delay ☐
Savings ☐ \$	Savings ☐ \$			

19. Change Impact Review: Indicate the related documents (other than the engineering documents identified on Side 1) that will be affected by the change described in Block 13. Enter the affected document number in Block 20.

SDD/DD	☐	Seismic/Stress Analysis	☐	Tank Calibration Manual	☐
Functional Design Criteria	☐	Stress/Design Report	☐	Health Physics Procedure	☐
Operating Specification	☐	Interface Control Drawing	☐	Spare Multiple Unit Listing	☐
Criticality Specification	☐	Calibration Procedure	☐	Test Procedures/Specification	☐
Conceptual Design Report	☐	Installation Procedure	☐	Component Index	☐
Equipment Spec.	☐	Maintenance Procedure	☐	ASME Coded Item	☐
Const. Spec.	☐	Engineering Procedure	☐	Human Factor Consideration	☐
Procurement Spec.	☐	Operating Instruction	☐	Computer Software	☐
Vendor Information	☐	Operating Procedure	☐	Electric Circuit Schedule	☐
OM Manual	☐	Operational Safety Requirement	☐	ICRS Procedure	☐
FSAR/SAR	☐	IEFD Drawing	☐	Process Control Manual/Plan	☐
Safety Equipment List	☐	Cell Arrangement Drawing	☐	Process Flow Chart	☐
Radiation Work Permit	☐	Essential Material Specification	☐	Purchase Requisition	☐
Environmental Impact Statement	☐	Fac. Proc. Samp. Schedule	☐	Tickler File	☐
Environmental Report	☐	Inspection Plan	☐		☐
Environmental Permit	☐	Inventory Adjustment Request	☐		☐

20. Other Affected Documents: (NOTE: Documents listed below will not be revised by this ECN.) Signatures below indicate that the signing organization has been notified of other affected documents listed below.

Document Number/Revision	Document Number/Revision	Document Number/Revision
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N/A

21. Approvals

Signature	Date	Signature	Date
Design Authority		Design Agent	
Cog. Eng. C.S. Homi	9/17/96	PE	
Cog. Mgr. J.W. Hunt	9/17/96	QA	
QA		Safety	
Safety		Design	
Environ.		Environ.	
Other		Other	

DEPARTMENT OF ENERGY

Signature or a Control Number that tracks the Approval Signature

ADDITIONAL

FY 1996 Tank Waste Analysis Plan

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Westinghouse Hanford Company, Richland, WA 99352

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Release Approval

Date

Approved for Public Release

FY 1996 Tank Waste Analysis Plan

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WHC-SD-WM-PLN-101, REV 2
FY 1996 Tank Waste Analysis Plan

TABLE OF CONTENTS

1.0	INTRODUCTION	1
1.1	PROGRAM DQO REQUIREMENTS	1
1.2	PROGRAMS SUPPORTED BY THIS TWAP	1
1.3	OVERALL TANK WASTE GENERIC ANALYSIS REQUIREMENTS	2
1.4	TANK WASTE GENERIC ANALYSIS REQUIREMENTS FOR SPECIFIC TANK GROUPS	2
1.5	TANK WASTE CHARACTERIZATION BASIS	4
1.6	TWAP CONTENTS	5
2.0	TANK CHARACTERIZATION PLAN	5
2.1	BASIS FOR TANK CHARACTERIZATION PLANS	5
2.2	TANK CHARACTERIZATION PLAN LIST	5
3.0	TANK CHARACTERIZATION REPORT	5
3.1	PURPOSE AND CONTENT OF TANK CHARACTERIZATION REPORTS	5
3.2	TCRS SCHEDULED FOR FY 1996	6
3.3	CHARACTERIZATION FOCUS	7
3.4	DATA RESTRICTION FOR TCR	7
4.0	SCHEDULES	8
4.1	OVERALL SAMPLING SCHEDULE	8
4.2	DEVIATIONS AND CHANGE CONTROL	8
5.0	REFERENCES	9

APPENDICES

Appendix A.	TANK CHARACTERIZATION PLAN CONTENT	A-1
Appendix B.	FISCAL YEAR 1996 TANK CHARACTERIZATION PLAN LIST	B-1
Appendix C.	TANK CHARACTERIZATION REPORT CONTENT	C-1
Appendix D.	TANK CHARACTERIZATION REPORTS PLANNED FOR FISCAL YEAR 1996	D-1
Appendix E.	LEVEL 1 TANK SAMPLING SCHEDULE	E-1

WHC-SD-WM-PLN-101, REV 2
FY 1996 Tank Waste Analysis Plan

LIST OF ACRONYMS

DOE	U.S. Department of Energy
DQO	Data Quality Objective
DST	Double-Shell Tank
ECN	Engineering Change Notice
FY	Fiscal Year
SST	Single-Shell Tank
TCP	Tank Characterization Plan
TCR	Tank Characterization Report
Tri-Party Agreement	Hanford Federal Facility Agreement and Consent Order
TWAP	Tank Waste Analysis Plan
TWRS	Tank Waste Remediation System

1.0 INTRODUCTION

This Tank Waste Analysis Plan (TWAP) describes the activities of the Tank Waste Remediation System (TWRS) Characterization Project to plan, schedule, obtain, and document characterization information on Hanford waste tanks. This information is required to meet several commitments of Programmatic End-Users and the *Hanford Federal Facility Agreement and Consent Order* (Ecology et al. 1994), also known as the Tri-Party Agreement. This TWAP applies to the activities scheduled to be completed in fiscal year 1996.

1.1 PROGRAM DQO REQUIREMENTS

Each TWRS engineering, operating, and safety program is charged with the responsibility for evaluating information needs to safely operate and monitor facilities that store, receive, retrieve, treat, or dispose of waste materials. Information required by each program is assembled and documented through the Data Quality Objective (DQO) process (EPA 1994). DQO process documentation defines information needs, information use, data quality, boundary requirements, and special handling requirements pertinent to sampling and analyses to be performed.

The TWRS Characterization Project assembles the requirements for information into specific instructions for sampling and analyses to produce the necessary information. DQOs and supplemental requirements documents are listed in the References, Section 5.0.

1.2 PROGRAMS SUPPORTED BY THIS TWAP

Current TWRS program needs are, in priority, to first address pertinent safety issues, then ongoing process activities, and finally disposal needs. The timing and priority of each of these activities may change as the overall program progresses. Priority changes will be reflected in revisions to tank specific Tank Characterization Plans (TCPs).

Elements of this TWAP are designed to satisfy requirements of the following safety, operating, and engineering programs:

- Safety Programs and those subordinate organizations addressing specific safety issues include Ferrocyanide (Meacham et al. 1995), Organic (Turner et al. 1995), Flammable Gas (McDuffie 1995), Vapor (Osborne et al. 1995), and generic Safety Screening (Dukelow et al. 1995 and Babad et al. 1995). DQOs as cited have been issued to address the information needed to support resolution of each of these safety issues.
- TWRS Plant Project is responsible for receipt of wastes from operating facilities, salt well pumping, and transfers of waste tank contents within the tank farms. A Compatibility DQO (Fowler 1995) has been issued which establishes decision rules used to evaluate important characteristics of wastes before transfers and acceptance for storage.

- Other programs include Retrieval, Pretreatment, and Disposal. Pretreatment and Disposal DQO (Slankas et al. 1995) and Strategy (Kupfer et al. 1995) plus the Retrieval DQO (Bloom et al. 1995) were issued in FY 1995.

1.3 OVERALL TANK WASTE GENERIC ANALYSIS REQUIREMENTS

Double Shell Tanks (DSTs) and Single Shell Tanks (SSTs) will be sampled and analyzed to provide data to mitigate and/or close safety issues. The *Tank Safety Screening Data Quality Objectives* (Babad et al. 1995 or Dukelow et al. 1995, depending on date of sampling), hereafter referred to as Safety Screening DQO, initiates the analyses for safety issues. The *Data Quality Objectives for Generic In-Tank Health and Safety Vapor Issue Resolution* (Osborne 1995), hereafter referred to as Vapor Issue DQO, also applies. The need for this DQO is assessed on a tank-by-tank basis.

To meet the sampling and analytical requirements for the Safety Screening DQO, a minimum of two vertical profiles of the waste will be obtained, one each from two widely-spaced risers. These profiles may be obtained using core, auger, or grab samples. The primary analytical requirements for the safety screening of a tank (Babad et al. 1995) are energetics, moisture (water), total alpha activity, and flammable gas concentrations. Dukelow et al. uses moisture not as a primary analyte, but for correction of energetics to a dry basis. Dukelow et al. also requires density measurement for conversion of total alpha to units of g/L. Secondary safety screening analyses may be required, depending upon results from the primary analyses. Secondary analyses may include total organic carbon, total cyanide and/or specific radionuclides.

Data may be needed for the Vapor Issue DQO to identify and quantify both flammable and toxic constituents of Hanford tank headspaces. Resolution of these two issues involves a sequence of sampling events and will be assessed on a tank-by-tank basis. The first step may involve a qualitative assessment of a tank's headspace vapor flammability. Further samples may be taken to determine the composition and concentration of specific flammable constituents. Following resolution of the flammability issue, tank headspace samples may be taken to assess vapor toxicity. Samples are taken from a single location at or near the midpoint of the tank's headspace, below the riser.

1.4 TANK WASTE GENERIC ANALYSIS REQUIREMENTS FOR SPECIFIC TANK GROUPS

Tanks on the Ferrocyanide Watch List will be sampled and analyzed as per *Data Requirements for the Ferrocyanide Safety Issue Developed Through the Data Quality Objectives Process* (Meacham et al. 1995), hereafter referred to as Ferrocyanide DQO. Organic Watch List SSTs sampling and analysis activities are addressed in *Data Quality Objective to Support Resolution of the Organic Complexant Safety Issue* (Turner et al. 1995), hereafter referred to as Organic DQO. Flammable gas requirements for DST core samples are discussed in *Data Requirements for Core Sample Analysis Developed Through the Data Quality*

Objectives Process (McDuffie 1995), hereafter referred to as *Flammable Gas DQO*. Potential waste compatibility analytical needs to address transfer into and within the DST system are addressed in *Data Quality Objective for Waste Compatibility Program* (Fowler 1995). Pretreatment and disposal data needs are discussed in *Data Needs and Attendant Data Quality Objectives for Tank Waste Pretreatment and Disposal* (Slankas et al. 1995) and *Strategy for Sampling Hanford Site Tank Wastes for Development of Disposal Technology* (Kupfer et al. 1995). Retrieval needs are discussed in *Characterization Data Needs for Development, Design, and Operation of Retrieval Equipment Developed Through the Data Quality Objective Process* (Bloom and Nguyen 1995). The *Historical Model Evaluation Data Requirements DQO* (Simpson and McCain 1995), hereafter referred to as the *Historical DQO*, identifies information needed to evaluate the quality of models of tank composition developed from process records.

The Ferrocyanide DQO is used as a guide for characterizing tanks on the Ferrocyanide Watch List. It concludes that the most reliable information will be obtained from core samples and that an average of two core samples taken from risers separated by maximum distances will provide characterization data of sufficient quality to enable decision makers to confidently resolve the safety issues associated with these tanks. Primary parameters, fuel concentration (energetics), moisture content, nickel content and nickel/fuel will be used to support determination of the safety status of a tank.

The Flammable Gas DQO is primarily concerned with the potential for retained gas in DST Watch List tanks. Physical, chemical, and radiochemical measurements of core samples are additional concerns.

The Organic DQO focuses on tanks that contain or may contain, based on safety screening, organic compounds above the established decision thresholds. It identifies the information needed to assess if tanks should be removed from, not removed from, or added to the Organic Watch List. As with the ferrocyanide DQO effort, the sampling and analyses prescribed by this DQO will support safety classification of these tanks. The sampling requirements of the organic DQO are for a minimum of two profiles separated to the maximum extent possible by existing risers. Application of this DQO to non-Organic Watch List tanks is discussed in *Preliminary Safety Criteria for Organic Watch List Tanks at the Hanford Site* (Webb et al. 1995).

The Pretreatment Strategy has prioritized 47 SSTs and 12 DSTs for sampling and characterization to support key TWRs decisions associated with both pretreatment and vitrification. The strategy outlines the process testing that will be performed on waste samples. *Only the sample material is provided by the Characterization project. No analyses are required.* Tank sample selections based on historical sources are being confirmed by the Historical DQO. In addition to the tanks specified in the strategy, sample material from other tanks may be supplied to the pretreatment/disposal programs to augment their information base.

The Historical DQO has identified 20 bounding tanks, plus alternatives to each. The DQO identifies the acquisition and analysis of samples from each of these tanks to determine the range of composition encountered in each of the major waste types which have contributed to the overall tank contents. The identified analyses provide measurement of primary cations, anions, and radionuclides that bound waste processing and safe storage. The current

version of the DQO does not specify a requirement for number of samples or a confidence requirement. In addition to the primary bounding tanks identified in the DQO, the historical evaluation analyses may be applied to other tanks to augment the information available regarding waste type composition.

The DQO, *Characterization Data Needs for Development, Design, and Operation of Retrieval Equipment Developed Through the Data Quality Objective Process* (Bloom and Nguyen 1995), requires sample material from Tank 241-AZ-101 for determining several physical properties. Obtaining sample material from other tanks is not planned at this time.

1.5 TANK WASTE CHARACTERIZATION BASIS

The *Tank Waste Characterization Basis* (Brown et al. 1995) was developed to prioritize tanks for core sampling and to develop a core sampling schedule. The Basis produces technical justification and priorities for core sampling and analyses of a group of tanks. From the group of Basis tanks, the schedule applies operational constraints to determine specific tanks to be sampled. The TWAP is then produced based on the resulting schedule. Data requirements that are met by methods other than core sampling are integrated into the overall schedule. Information gained from the sampling and analysis effort is subsequently used to update the Basis document. The Characterization Basis prioritization process was based on the following seven issues:

- Safety Screening
- Historical
- Ferrocyanide
- Organic
- Flammable Gas
- Retrieval
- Pretreatment

The Safety Screening DQO (Babad et al. 1995) and Pretreatment Strategy (Kupfer et al. 1995) were used for prioritization on all tanks. The Historical DQO was used for all SSTs even though the calculated priority value was zero on many tanks. *SST tank specific TCPs reflect the use of the Historical DQO for prioritization purposes, but application of DQO sampling and analysis requirements are applied for specifically identified tanks only.*

1.6 TWAP CONTENTS

This FY 1996 update of the Tank Waste Analysis Plan outlines in Sections 2.0, 3.0, and 4.0, the following documents to be produced in FY 1996:

- Tank Characterization Plans (TCPs).
- Tank Characterization Reports (TCRs).
- Sampling schedules (FY 1996 and outyears).

2.0 TANK CHARACTERIZATION PLAN

The Tank Characterization Plan (TCP) is the program management plan for a specific tank. It provides an at-time-of-publication schedule of tank characterization activities and a summary of those activities. Past characterization activities are also discussed.

2.1 BASIS FOR TANK CHARACTERIZATION PLANS

The basis for selecting tanks to be characterized is resolution of immediate safety issues, verification of assumptions to support safety screening strategies, confirmation of historical data and models, and obtaining of waste samples for process development and testing. The outline for a TCP is shown in Appendix A.

2.2 TANK CHARACTERIZATION PLAN LIST

Appendix B contains a listing of specific tank TCPs which are attached as separately released documents and submitted for approval. The TCPs apply to the same tanks for which Tank Characterization Reports (TCRs) will be prepared. Each TCP has been assigned a supporting document number and is issued as a stand-alone document. These plans are provided as part of Tri-Party Agreement milestone M44-02B.

3.0 TANK CHARACTERIZATION REPORT

3.1 PURPOSE AND CONTENT OF TANK CHARACTERIZATION REPORTS

The Tank Characterization Report (TCR) addresses all currently developed characterization information about a waste tank and is provided for the further use of end users and stakeholders. The format is standardized to facilitate searches for specific information. The document is built through an iterative process. Available historical records are augmented by results

of current activities (e.g., sampling and analyses since May 1989) and earlier verified data. The document includes a comparison of the current analytical data and historical estimates of chemical inventory and the results of that evaluation. The TCR identifies DQO and revision numbers applicable at the time the information was gathered.

Issued TCRs will be updated quarterly as needed due to addition and/or removal of tank wastes and as new information is obtained. The outline of a TCR is in Appendix C.

3.2 TCRS SCHEDULED FOR FY 1996

Appendix D is a list, identical in tanks to Appendix B, of 40 TCRs identified to support Tri-Party Agreement Milestone M-44-09. The FY 1996 Multi-Year Program Plan supports only 21 of these TCRs to be issued in FY 1996. It is expected, however, that all 40 TCRs will be submitted in FY 1996 and every effort is being made to accomplish that goal. The listing of TCRs includes those tanks for which sampling and analysis efforts were completed in fiscal year 1995 but were not included in fiscal year 1995 issued TCRs. Some information generated in fiscal year 1996 will not reach documentation in TCRs until fiscal year 1997.

The listed 40 TCRs include only 12 of the 28 tanks which have come to be referred to as the High Priority Tanks. Tables 9-2 and 9-4 of the Tank Waste Characterization Basis (Brown et al. 1995) published in August 1995, identify 28 High Priority Tanks for core sampling, tanks for which it is believed will provide optimal information from sampling and analysis in support of programmatic needs. Due to constraints described below, these 28 tanks have not all been sampled prior to the sampling of other tanks.

Six of the 28 High Priority Tanks were originally scheduled for push mode core sampling. Two of these six tanks have been sampled, B-104, followed by S-107. The other four of the six, AW-101, AN-103, AN-104, and AN-105, require push mode sampling using sampling truck #1 with the retained gas sampler (RGS). The RGS became available in January 1996. In order to maintain effective use of sampling crews and systems while awaiting deployment of the RGS, four tanks not on the High Priority list were push mode sampled, B-203, B-204, BX-104, and BX-112. Currently, AW-101 is being push mode sampled with the RGS. The results of this sampling effort will be published in a revision to the AW-101 TCR originally produced in FY 1995. The other three tanks requiring RGS will be sampled following completion of AW-101, but TCRs will not be produced until FY 1997.

The other 22 High Priority tanks were originally scheduled for rotary mode core sampling. Due to subsequently generated flammable gas safety concerns, rotary mode core sampling is not currently authorized in any tanks. However, rotary mode core sampling tests completed on BY-108 and BY-110 in October 1995 revealed that some waste types previously thought to require rotary core sampling, could indeed, be sampled using push mode core sampling instead. Therefore, 10 of the other 22 tanks have been push mode core sampled, with TCRs to be produced in FY 1996 (BY-104, BY-105, BY-106, BY-108, BY-110, S-101, S-102, U-105, U-107, and U-109). Tank S-110 has also been push

mode core sampled and U-108 is currently being sampled. However, TCRs for tanks S-110 and U-108 will not be produced until FY 1997.

The remaining 10 of the other 22 High Priority tanks are still considered to require rotary mode core sampling which will not become authorized until approval of a safety analysis and modifications to the rotary mode core sampling systems. This authorization is currently expected in August 1996. However, no sampling results will become available in TCRs until FY 1997. Until rotary mode core sampling can be resumed and the remaining High Priority tanks sampled, alternate tanks, also of high value but not on the list of 28 High Priority tanks have been designated for push mode core sampling (Eberlein 1996).

The following is additional clarification of the TCRs to be produced in FY 1996. Although not prioritized in the core sampling scope of the Tank Waste Characterization Basis (Brown et al. 1995), 18 tanks will have TCRs produced based on grab and/or auger samples, sampling conducted to permit efficient use of sampling crews. Six other tanks, B-101, B-106, BX-103, BX-109, C-103, and SY-103, will have TCRs produced based on push mode core sampling conducted prior to the August 1995 publication of the Tank Waste Characterization Basis (Brown et al. 1995).

3.3 CHARACTERIZATION FOCUS

Analyses currently in progress are expected to provide sufficient assurance that interim safe storage and later operations, to include retrieval, can be safely performed. When final decisions have been made on the mode of retrieval, further evaluation will be required to assure safety of retrieval operations. Complete characterization of tank waste is likely to not be completed until the waste is retrieved for Pretreatment Processing. At that time, tank contents will theoretically have become homogenized.

3.4 DATA RESTRICTION FOR TCR

Tri-Party Agreement milestone change number M-44-93-01 states: "Because data obtained prior to May 1989 did not have quality assurance and quality control assured under the TPA, acceptable characterization data will be based on some sampling and analysis of each waste phase for each DST and SST as specified through the DQO process". Therefore, pre-May 1989 data alone, will not constitute an acceptable TCR; although, such data should be discussed as appropriate. Later solid/liquid phase analyses will be based on core and auger samples, pure liquid phase on grab samples, and vapor phase on vapor samples.

4.0 SCHEDULES

4.1 OVERALL SAMPLING SCHEDULE

The sampling schedule (Stanton 1996), Appendix E, was developed based on the Tri-Party Agreement milestone M-44-09 which calls for issuing TCRs in accordance with approved TCPs during FY 1996 and beyond to fiscal year 2000. This Level 1 schedule is consistent with the program management as described in the Tank Waste Characterization Basis (Brown et al. 1995). The schedule is subject to change due to unexpected operational constraints, sampling resource availability, analytical laboratory resource availability, and changes in programmatic priorities.

4.2 DEVIATIONS AND CHANGE CONTROL

Scheduled sampling events, the potential for need of issuance of new or revised TCPs, the production of TCRs, and the order in which these events occur are subject to change because of shifting priorities, resource availability, and unexpected operational constraints. It is the intent of the TWRS Characterization Project, however, to accomplish the scope of work indicated by the schedule, within the planned time period. Significant programmatic deviations and changes will be documented by controlled revisions to this plan. Such revisions will be transmitted as Engineering Change Notices (ECNs). These ECNs will provide reasons for the schedule change and the impact to the original schedule. Minor changes such as adding, deleting, or changing sampling order of tanks will be addressed at unit managers meetings, and as required, will be documented by ECNs.

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APPENDICES

TANK CHARACTERIZATION PLAN CONTENT

- 1.0 INTRODUCTION
- 2.0 PROGRAM ELEMENTS REQUIRING INFORMATION FOR 241-X-XXX
 - 2.1 GENERAL SAFETY ISSUES
 - 2.2 SPECIFIC SAFETY ISSUES
 - 2.2.1 Ferrocyanide
 - 2.2.2 Organic
 - 2.2.3 High Heat
 - 2.2.4 Flammable Gas
 - 2.2.5 Vapor
 - 2.2.6 Criticality
 - 2.3 CONTINUING OPERATIONS
 - 2.3.1 Compatibility/Stabilization
 - 2.3.2 Evaporator
 - 2.4 DOUBLE-SHELL TANK WASTE ANALYSIS PLAN
 - 2.5 DISPOSAL
 - 2.5.1 Retrieval
 - 2.5.2 Pretreatment/Vitrification
 - 2.6 HISTORICAL MODEL EVALUATION
- 3.0 HOW INFORMATION WILL BE OBTAINED
- 4.0 PRIORITY OF INFORMATION REQUIREMENTS
- 5.0 WHEN INFORMATION IS NEEDED
- 6.0 REFERENCES

LIST OF TABLES

- 4-1 Integrated DQO Requirements

WHC-SD-WM-PLN-101, REV 2 APPENDIX B
FY 1996 Tank Waste Analysis Plan

FISCAL YEAR 1996 TANK CHARACTERIZATION PLAN LIST

Tank	Planned DQO Analyses*	TCP Document Number
A-102	6	WHC-SD-WM-TP-358 R4
AN-101	6, 7	WHC-SD-WM-TP-413 R3
AN-102	6, 7	WHC-SD-WM-TP-216 R4
AN-106	6	WHC-SD-WM-TP-407 R3
AN-107	6, 7	WHC-SD-WM-TP-215 R4
AP-104	6, 7, 9	WHC-SD-WM-TP-414 R3
AP-108	6, 7	WHC-SD-WM-TP-419 R3
AY-101	6, 7, 9	WHC-SD-WM-TP-406 R3
B-101	6	WHC-SD-WM-TP-350 R4
B-104	5, 6	WHC-SD-WM-TP-349 R4
B-106	5, 6	WHC-SD-WM-TP-353 R4
B-203	6	WHC-SD-WM-TP-354 R3
B-204	6	WHC-SD-WM-TP-355 R3
BX-103	6	WHC-SD-WM-TP-339 R4
BX-104	3, 6	WHC-SD-WM-TP-296 R4
BX-106	6, 7	WHC-SD-WM-TP-240 R4
BX-109	5, 6	WHC-SD-WM-TP-338 R4
BX-110	3, 5, 6	WHC-SD-WM-TP-382 R3
BX-112	5, 6	WHC-SD-WM-TP-341 R3
BY-104	2, 5, 6	WHC-SD-WM-TP-230 R3
BY-105	2, 5, 6, 7	WHC-SD-WM-TP-218 R4
BY-106	2, 3, 5, 6, 7	WHC-SD-WM-TP-217 R4
BY-108	2, 3, 5, 6	WHC-SD-WM-TP-275 R4
BY-110	2, 3, 5, 6	WHC-SD-WM-TP-279 R4

* 1=Flammable gas; 2=Ferrocyanide; 3=Organic; 4=Pretreatment;
5=Historical; 6=Safety screening; 7=Compatibility; 8=Retrieval;
9=Evaporator; 10=High Heat

FISCAL YEAR 1996 TANK CHARACTERIZATION PLAN LIST (cont.)

Tank	Planned DQO Analyses*	TCP Document Number
C-103	3, 6	WHC-SD-WM-TP-207 R5
C-106	6, 7, 10	WHC-SD-WM-TP-212 R4
C-108	2, 6	WHC-SD-WM-TP-211 R5
C-204	6	WHC-SD-WM-TP-307 R4
S-101	5, 6	WHC-SD-WM-TP-386 R3
S-102	3, 5, 6	WHC-SD-WM-TP-238 R3
S-107	5, 6	WHC-SD-WM-TP-348 R4
SX-108	5, 6	WHC-SD-WM-TP-405 R3
SY-103	1, 6	WHC-SD-WM-TP-197 R4
T-106	6	WHC-SD-WM-TP-366 R3
T-108	5, 6	WHC-SD-WM-TP-367 R3
T-109	5, 6	WHC-SD-WM-TP-368 R3
TX-107	6	WHC-SD-WM-TP-420 R3
U-105	3, 5, 6, 7	WHC-SD-WM-TP-289 R3
U-107	3, 5, 6, 7	WHC-SD-WM-TP-244 R3
U-109	3, 5, 6, 7	WHC-SD-WM-TP-316 R3

* 1=Flammable gas; 2=Ferrocyanide; 3=Organic; 4=Pretreatment;
5=Historical; 6=Safety screening; 7=Compatibility; 8=Retrieval;
9=Evaporator; 10=High Heat

TANK CHARACTERIZATION REPORT CONTENT

1.0 INTRODUCTION

- 1.1 PURPOSE
- 1.2 SCOPE

2.0 HISTORICAL TANK INFORMATION

- 2.1 TANK STATUS
- 2.2 TANK DESIGN AND BACKGROUND
- 2.3 PROCESS KNOWLEDGE
 - 2.3.1 Waste Transfer History
 - 2.3.2 Historical Estimation of Tank Contents
- 2.4 SURVEILLANCE DATA
 - 2.4.1 Surface Level Readings
 - 2.4.2 Internal Tank Temperature
 - 2.4.3 Tank 241-XX-XXX Photographs

3.0 TANK SAMPLING OVERVIEW

- 3.1 DESCRIPTION OF 19XX SAMPLING EVENT
 - 3.1.1 Sample Handling (19XX)
 - 3.1.2 Sample Analysis (19XX)
- 3.2 DESCRIPTION OF 19XX SAMPLING EVENT
- 3.3 HISTORICAL SAMPLING EVENTS

4.0 ANALYTICAL RESULTS AND WASTE INVENTORY ESTIMATES

- 4.1 DATA PRESENTATION

5.0 INTERPRETATION OF CHARACTERIZATION RESULTS

- 5.1 ASSESSMENT OF SAMPLING AND ANALYTICAL RESULTS
 - 5.1.1 Field Observations
 - 5.1.2 Quality Control Assessment of Analytical Data
 - 5.1.3 Data Consistency Checks
- 5.2 COMPARISON OF RESULTS FROM DIFFERENT SAMPLING EVENTS
- 5.3 TANK WASTE PROFILE
- 5.4 COMPARISON OF ANALYTICAL AND TRANSFER HISTORY INFORMATION
- 5.5 EVALUATION OF PROGRAM REQUIREMENTS
 - 5.5.1 Safety Evaluation
 - 5.5.2 Operational Evaluations (if applicable)
 - 5.5.3 Environmental Evaluation (if applicable)
 - 5.5.4 Process Development Evaluation (if applicable)
 - 5.5.5 Historical Evaluation (if applicable)

6.0 CONCLUSION AND RECOMMENDATIONS

7.0 REFERENCES

APPENDICES (Sampling Event Data, Analytical Procedures, Photographs)(if applicable)

TANK CHARACTERIZATION REPORTS PLANNED FOR FISCAL YEAR 1996

Tank	Sampling Event Type
A-102	Auger, Vapor
AN-101	Grab
AN-102	Grab
AN-106	Grab
AN-107	Grab, Vapor
AP-104	Grab
AP-108	Grab
AY-101	Grab
B-101	Push
B-104	Push
B-106	Push
B-203	Push
B-204	Push
BX-103	Push
BX-104	Push, Vapor
BX-106	Auger, Grab
BX-109	Push
BX-110	Auger, Rotary in 10/98
BX-112	Push, Auger
BY-104	Push, Vapor
BY-105	Rotary ¹ , Grab, Vapor
BY-106	Rotary/Push ² , Vapor
BY-108	Rotary/Push ³ , Auger, Vapor
BY-110	Rotary/Push ⁴ , Vapor

1. One partial core: started in push mode, switched to rotary mode midway, then switched back to push. Incomplete core recovery.
2. Two rotary and one push cores taken.
3. Four rotary and two push cores taken.
4. Three rotary, six push, and one unspecified cores taken.

TANK CHARACTERIZATION REPORTS PLANNED FOR FISCAL YEAR 1996 (Cont.)

Tank	Sampling Event Type
C-103	Push, Vapor
C-106	Grab, Vapor
C-108	Auger, Vapor
C-204	Auger
S-101	Push, Vapor
S-102	Push, Vapor
S-107	Push
SX-108	Auger, Rotary in 10/97
SY-103	Push ¹
T-106	Auger
T-108	Auger
T-109	Auger
TX-107	Auger
U-105	Push ² , Grab, Vapor
U-107	Push ² , Grab, Vapor
U-109	Push, Grab, Vapor

1. One core only.
2. Partial core recoveries.

LEVEL 1 TANK SAMPLING SCHEDULE

A LEVEL 1 BASELINE SAMPLING SCHEDULE (Stanton 1996) DATED MARCH 4, 1996, FOLLOWS. THIS SCHEDULE IS SUBJECT TO CHANGE BASED ON UNEXPECTED OPERATIONAL CONSTRAINTS, CHANGED PRIORITIES, OR RESOURCE AVAILABILITY.

Sampling Schedule: Subject to Change

ACTIVITY ID	EARLY START	EARLY FINISH	ORIG DUE	1994	1995	1996	1997	1998	1999	2000
				TRUCKS 2, 3, & 4 SAMPLE						
RS04-4	30CT94	140CT94	10	BY-106 Rot Mode Sample 1 Seg 13 High Priority						
Completed AS 200CT94	AF 25JAN95									
RS20-4	10JUL95	200CT95	75	☐ BY-110 Rotary Samples 6 (3R) Seg 6 High Priority						
Completed AS 10JUL95	AF 200CT95									
RS25-4	17JUL95	4SEP95	36	☐ BY-108 Rotary Samples 3 Seg 5 High Priority						
Complete AS 14JUL95	AF 18AUG95									
RS01-4	6SEP95	60CT95	23	☐ BY-105 Rot Samp 2 Seg 8 High Priority OBTAIN 0						
Completed AS 21AUG95	AF 060CT95									
RS03-4	90CT95	29NOV95	36	☐ BY-104 Rotary Samples 2 Segments 7 High Priority						
Completed AS 060CT95	AF 15NOV95									
RS08-4	230CT95	18DEC95	39	☐ RMCST #2 System Outage						
Completed AS 230CT95	AF 29DEC95									
RS90-4	230CT95	3NOV95	10	☐ RMCST #3 System Outage						
Completed AS 020CT95	AF 190CT95									
RS47-4	20NOV95	13DEC95	16	☐ B-203 Rotary Sample 2 Segment 14 (55k Tank)						
Completed AS 190CT95	AF 14DEC95									
RS23-4	30NOV95	15DEC95	12	☐ BY-106 Rotary Samples 1 Seg 13 High Priority						
Completed AS 16NOV95	AF 19DEC95									
RS40-4	14DEC95	6FEB96	32	☐ U-109 Rotary Sample 3 Segment 9 High Priority						
Completed AS 15DEC95	AF 19JAN96									
RS58-4	21DEC95	1FEB96	24	☐ S-102 Rotary Samples 2 Seg 11 High Priority						
RS35-4	2FEB96	7MAR96	24	☐ S-101 Rotary Samples 2 Segments 11 High Priority						
RS30-4	7FEB96	28MAR96	36	☐ U-107 Rotary Samples 3 Segments 8 High Priority						
RS39-4	7FEB96	13MAR96	25	☐ U-105 Rotary Sample 3 Segment 8 High Priority						
RSDE-4	7FEB96	28FEB96	15	☐ RMCST #3 System Outage						
RS80-4	29FEB96	2APR96	24	☐ U-102 Rotary Samples 2 Segments 7 Off Ramp						
RS65-4	8MAR96	10APR96	24	☐ S-110 Rotary Samples 2 Segments 8 High Priority						
RS37-4	29MAR96	2MAY96	25	☐ U-108 Rotary Samples 3 Segments 9 High Priority						
RS36-4	3APR96	6MAY96	24	☐ U-103 Rotary Samples 2 Segments 9 (Off Ramp)						
RSAA-4	11APR96	14MAY96	24	☐ S-111 Rotary Samples 2 Segments 11 Off Ramp						
Plot Date 08APR96				WESTINGHOUSE HANFORD COMPANY						
Data Date 15SEP94				REVISED TANK FARMS SAMPLING SCHEDULE						
Project Start 10CT93				DRAFT SAMPLING SCHEDULE Rev 4.6						
Project Finish 08APR96

Activity Bar/Early Dates										
Project Start										
Project Finish										
(c) Primavera Systems, Inc.										

Sampling Schedule: Subject to Change

ACTIVITY ID	EARLY START	EARLY FINISH	ORIG DUR	1994							1995							1996							1997							1998							1999							2000													
				TRUCKS 2, 3, & 4 SAMPLE																																																							
RS21-4	3MAY96	6JUN96	24	☐ TY-103 Rotary Samples 3 Segments 4 High Priority ☐ S-109 Rotary Samples 2 Segments 11 Off Ramp ☐ RMCST #4 System Outage ☐ TY-102 Rotary Samples 2 Segments 2 Off Ramp ☐ BY-102 Rotary Samples 2 Segments 5 Off Ramp ☐ SX-103 Rotary Samples 2 Seg 11 High Priority ☐ RMCST #3 System Outage ☐ SX-104 Rotary Samples 3 Segments 13 High Priorit ☐ RMCST #2 System Outage ☐ BY-105 Rotary Samples 2 Segments 8 High Priority ☐ SX-101 Rotary Samples 2 Seg 10 High Priority ☐ BY-103 Rotary Samples 2 Segments 8 High Priority ☐ RMCST #4 System Outage ☐ A-101 Rotary Samples 3 Segments 19 High Priority ☐ C-102 Rotary Samples 2 Segments 8 ☐ TX-118 Rotary Samples 3 Segment 7 High Priority ☐ SX-109 Rotary Sample 2 Segment 5 ☐ AX-101 Rotary Samples 3 Segments 15 High Prior ☐ TX-111 Rotary Samples 2 Segments 8 High Prior ☐ SX-107 Rotary Samples 2 Segments 3 ☐ C-104 Rotary Samples 2 Segments 5 High Prior ☐ RMCST #3 System Outage ☐ TX-116 Rotary Samples 2 Segments 12 ☐ RMCST #4 System Outage ☐ RMCST #2 System Outage ☐ SX-110 Rotary Samples 2 Segments 11 ☐ TX-105 Rotary Samples 2 Segments 12 ☐ S-112 Rotary Samples 2 Segments 11																																																							
RS64-4	15MAY96	18JUN96	24																																																								
RS07-4	7JUN96	19AUG96	50																																																								
RS72-4	19JUN96	24JUL96	24																																																								
RS56-4	25JUL96	27AUG96	24																																																								
RS44-4	20AUG96	17SEP96	20																																																								
RS88-4	20AUG96	21OCT96	44																																																								
RS11-4	18SEP96	31OCT96	32																																																								
RS89-4	22OCT96	10JAN97	50																																																								
RS41-4	5NOV96	10DEC96	24																																																								
RS45-4	6NOV96	5DEC96	20																																																								
RS29-4	11DEC96	22JAN97	24																																																								
RS0A-4	12DEC96	10JAN97	15																																																								
RS34-4	13JAN97	5MAR97	36																																																								
RS87-4	17JAN97	21FEB97	24																																																								
RS24-4	27JAN97	19MAR97	36																																																								
TX-118 Sludge\saltcake - 1 core saltcake																																																											
RS12-4	28FEB97	2APR97	24																																																								
RS38-4	6MAR97	24APR97	36																																																								
RS73-4	24MAR97	24APR97	24																																																								
RS10-4	9APR97	12MAY97	24																																																								
RS48-4	25APR97	2JUN97	24																																																								
RS0A-4	29APR97	12MAY97	10																																																								
RS78-4	15MAY97	20JUN97	24																																																								
RS0B-4	19MAY97	11JUN97	15																																																								
RS92-4	5JUN97	25JUN97	15																																																								
RS13-4	18JUN97	22JUL97	24																																																								
RS32-4	25JUN97	29JUL97	24																																																								
TX 105 Sludge\saltcake - 1 core saltcake																																																											
RS43-4	30JUN97	1AUG97	24																																																								

Plot Date 6MAR96
 Date Date 15SEP94
 Project Start 10C93
 Project Finish 8MAY00

Activity Bar/Early Dates
 Original Activity
 Revision/Activity

WESTINGHOUSE HANFORD COMPANY
 REVISED TANK FARMS SAMPLING SCHEDULE
 DRAFT SAMPLING SCHEDULE Rev 4.6

Sheet 2 of 24
 AS OF 03/04/96 Mr. G. Stanton / Mr. G. Carver

Date	Revision	Checked	Approved

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Sampling Schedule: Subject to Change

ACTIVITY ID	EARLY START	EARLY FINISH	ORIG DUR	1994 1995 1996 1997 1998 1999 2000							
				TRUCKS 2, 3, & 4 SAMPLE							
RS14-4	29JUL97	29AUG97	24							☐ SX-111 Rotary Samples 2 Segments 3	
RS83-4	1AUG97	5SEP97	24							☐ TX-101 Rotary Samples 2 Segments 3	
RS59-4	6AUG97	10SEP97	24							☐ S-103 Rotary Samples 2 Segments 6	
RS15-4	9SEP97	10OCT97	24							☐ SX-112 Rotary Samples 2 Segments 3	
RSCB-4	10SEP97	30SEP97	15							☐ RMCST #3 System Outage	
RSBA-4	11SEP97	24SEP97	10							☐ RMCST #2 System Outage	
RS60-4	25SEP97	28OCT97	24							☐ S-105 Rotary Samples 2 Segments 9	
RS84-4	30CT97	5NOV97	24							☐ TX-103 Rotary Samples 2 Segments 3	
RS46-4	15OCT97	17NOV97	24							☐ SX-108 Rotary Samples 2 Segments 2	
RS61-4	31OCT97	5DEC97	24							☐ S-106 Rotary Samples 2 Segments 10	
RS67-4	10NOV97	15DEC97	24							☐ TX-104 Rotary Samples 2 Segments 2	
RS16-4	26NOV97	12JAN98	24							☐ SX-114 Rotary Samples 2 Segments 4	
RS63-4	8DEC97	20JAN98	24							☐ S-108 Rotary Samples 2 Segments 9	
RS77-4	18DEC97	30JAN98	24							☐ TX-115 Rotary Samples 2 Segments 11	
RS31-4	15JAN98	17FEB98	24							☐ SX-106 Rotary Samples 2 Segments 11	
RS05-4	30JAN98	6MAR98	24							☐ U-111 Rotary Samples 2 Segments 7	
RS68-4	6FEB98	13MAR98	24							☐ TX-106 Rotary Samples 2 Segments 7	
RS33-4	16MAR98	16APR98	24							SX-102 Rotary Samples 2 Segments 11 ☐	
RS06-4	17MAR98	17APR98	24							☐ U-106 Rotary Sample 2 Segments 5	
RS69-4	20MAR98	22APR98	24							TX-108 Rotary Samples 2 Segments 3 ☐	
RS0C-4	17APR98	7MAY98	15							☐ RMCST #4 System Outage	
RS85-4	24APR98	29MAY98	24							U-104 Rotary Samples 2 Segments 2 ☐	
RS70-4	30APR98	4JUN98	24							TX-109 Rotary Samples 2 Segments 8 ☐	
RS42-4	12MAY98	16JUN98	24							SX-105 Rotary Samples 2 Segments 14 ☐	
RS86-4	9JUN98	14JUL98	24							U-112 Rotary Samples 2 Segments 1 ☐	
RS74-4	12JUN98	17JUL98	24							TX-112 Rotary Samples 2 Segments 12 ☐	
RS28-4	19JUN98	24JUL98	24							BY-112 Rotary Samples 2 Segments 6 ☐	
RS8B-4	21JUL98	10AUG98	15							☐ RMCST #2 System Outage	
RS75-4	27JUL98	27AUG98	24							TX-113 Rotary Samples 2 Segments 11 ☐	

Plot Date	6MAR96		1831	WESTINGHOUSE HANFORD COMPANY REVISED TANK FARMS SAMPLING SCHEDULE DRAFT SAMPLING SCHEDULE Rev 4.6		AS OF 03/04/96 Mr. G. Stanton / Mr. G. Carver			
Date Date	15SEP94					Date	Revision	Checked	Approved
Project Start	10C193								
Project Finish	6MAR00								

Plot Date 6MAR96
Date Date 15SEP94
Project Start 10C193
Project Finish 6MAR00

Activity Bar/Early Dates
Original Activity
Activity for Milestones/Log Activity

1831

WESTINGHOUSE HANFORD COMPANY
REVISED TANK FARMS SAMPLING SCHEDULE
DRAFT SAMPLING SCHEDULE Rev 4.6

AS OF 03/04/96 Mr. G. Stanton / Mr. G. Carver

Date Revision Checked Approved

Sampling Schedule: Subject to Change

ACTIVITY ID	EARLY START	EARLY FINISH	ORIG DUR									
				1994	1995	1996	1997	1998	1999	2000		
				TRUCKS 2, 3, & 4 SAMPLE								
RS93-4	29JUL98	31AUG98	24				BY-109 Rotary Samples 2 Segments 8	☐				
BY-109 Sludge\saltcake - 2 cores Additional sludge\saltcake - 1 core												
RS09-4	17AUG98	21SEP98	24				BX-102 Rotary Sample 2 Segment 2	☐				
RS26-4	1SEP98	6OCT98	24				BY-107 Rotary Samples 2 Segments 6	☐				
RS00-4	3SEP98	25SEP98	15					☐ RMCST #3 System Outage				
RS50-4	1OCT98	3NOV98	24				BX-110 Rotary Samples 2 Segments 4	☐				
RS76-4	2OCT98	4NOV98	24				TX-114 Rotary Samples 2 Segments 3	☐				
RS27-4	7OCT98	6NOV98	23				BY-111 Rotary Samples 2 Segments 9	☐				
RS51-4	10NOV98	15DEC98	24				BX-111 Rotary Samples 2 Segments 4	☐				
RS66-4	12NOV98	17DEC98	24				TX-102 Rotary Samples 2 Segments 5	☐				
RS49-4	13NOV98	18DEC98	24				BY-101 Rotary Samples 2 Segments 8	☐				
RSBC-4	16DEC98	15JAN99	15					☐ RMCST #2 System Outage				
RS00-4	21DEC98	20JAN99	15					☐ RMCST #4 System Outage				
RS52-4	18JAN99	18FEB99	24				AX-103 Rotary Samples 2 Segments 3	☐				
RS54-4	21JAN99	25FEB99	24				B-107 Rotary Samples 2 Segments 4	☐				
RS71-4	21JAN99	25FEB99	24				TX-110 Rotary Samples 2 Segments 9	☐				
RS22-4	1MAR99	1APR99	24				TY-101 Rotary Samples 2 Segments 3	☐				
RS55-4	4MAR99	6APR99	24				B-105 Rotary Samples 2 Segments 3	☐				
RS79-4	22MAR99	22APR99	24				TX-117 Rotary Samples 2 Segments 10	☐				
RS94-4	2APR99	5MAY99	24				TY-105 Rotary Samples 2 Segments 5	☐				
RS53-4	13APR99	14MAY99	24				A-106 Rotary Sample 2 Segments 3	☐				
RS18-4	17MAY99	21JUN99	24				T-201 Rotary Samples 2 Segments 9	☐				
RS57-4	21MAY99	25JUN99	24				A-103 Rotary Sample 2 Segments 8	☐				
A-103 Sludge\saltcake - 1000 ml scaling												
RS19-4	19JUL99	19AUG99	24				T-202 Rotary Samples 2 Segments 6	☐				
RS81-4	15SEP99	18OCT99	24				T-203 Rotary Samples 2 Segments 10	☐				
RS00-4	10NOV99	20DEC99	15					☐ RMCST #3 System Outage				
RS82-4	30DEC99	18JAN00	24				T-204 Rotary Samples 2 Segments 10	☐				
RS17-4	25JAN00	25FEB00	24				T-101 Rotary Samples 2 Segments 2	☐				

Plot Date: 03MAY99
 Date Date: 10SEP99
 Project Start: 10C193
 Project Finish: 01MAY00

Activity Start/Stop Dates
 Initial Activity
 Progress Activity
 Hold/Waiting Activity

WESTINGHOUSE HANFORD COMPANY
 REVISED TANK FARMS SAMPLING SCHEDULE
 DRAFT SAMPLING SCHEDULE Rev 4.6

AS OF 03/04/98 Mr. G. Stanton / Mr. G. Carver

Date	Revision	Checked	Approved

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Sampling Schedule: Subject to Change

ACTIVITY ID	EARLY START	EARLY FINISH	ORIG DUR	1994	1995	1996	1997	1998	1999	2000
PS02-4	15SEP94	12OCT94	20	TRUCK 1 SAMPLE						
COMPLETED AS 31AUG94	AF 30CT94			☐ SY-103 Push Samples 1 Segments 15						
PS05-4	13OCT94	9NOV94	20	☐ C-103 Push Sample 2 Segments 4						
COMPLETED AS 20OCT94	AF 9FEB95			☐ EQUIPMENT - Visual inspection/repair Push Truck						
PS25-10	10NOV94	20DEC94	15							
Completed AS 2NOV94	AF 9JAN95			☐ C-107 Push Sample 3 Segments 5						
PS68-4	1MAR95	28MAR95	20							
C-107 Sludge/saltcake sample - 2000 ml sca				☐ U-201 Push Sample 3 Segments 2 (Rotary Truck)						
Additional sludge/saltcake 1000ml ad										
Completed AS 1MAR95	AF 10MAR95			☐ C-105 Push Mode Sample 2 Segments 3						
PS16-4	6MAR95	31MAR95	20							
Completed AS 6MAR95	AF 21MAR95			☐ U-202 Push Sample 2 Segments 2 (Rotary Truck)						
PS25-4	29MAR95	25APR95	20							
Completed AS 13MAR95	AF 23MAR95			☐ BX-109 Push Sample 2 Segments 4						
PS17-4	3APR95	26APR95	18							
Completed AS 21MAR95	AF 24MAR95			☐ U-203 Push Sample 2 Segments 2 (Rotary Truck)						
PS65-4	26APR95	5MAY95	8							
BX-109 Sludge/saltcake - 1000 ml scaling				☐ BX-103 Push Sample 2 Segments 1						
Additional sludge/saltcake - 200 ml										
Completed AS 27MAY95	AF 19MAY95			☐ U-204 Push Sample 2 Segments 1 (Rotary Truck)						
PS18-4	27APR95	19MAY95	17							
Completed AS 27MAR95	AF 3APR95			☐ B-104 Push Sample 2 Segments 7 High Priority						
PS60-4	8MAY95	18MAY95	9							
Completed AS 22MAY95	AF 30MAY95			☐ B-101 Push Sample 2 Segments 2						
PS19-4	22MAY95	1JUN95	9							
Completed AS 3APR95	AF 6APR95			☐ B-106 Push Sample 2 Segments 2						
PS08-4	2JUN95	14JUN95	9							
Completed AS 31MAY95	AF 14JUN95									
PS48-4	15JUN95	28JUN95	10							
Completed AS 15JUN95	AF 27JUN95									
PS50-4	17JUL95	28JUL95	10							
Completed AS 29JUN95	AF 15JUL95									

Plot Date 6MAR96
Data Date 15SEP94
Project Start 1OCT93
Project Finish 8MAY00

Activity Bar/Early Dates
Project Activity
Program No.
Mission/Plan Activity

WESTINGHOUSE HANFORD COMPANY
REVISED TANK FARMS SAMPLING SCHEDULE
DRAFT SAMPLING SCHEDULE Rev 4.6

Sheet 5 of 24

AS OF 03/04/96 Mr. G. Stanton / Mr. G. Carver

Date	Revision	Checked	Approved

(c) Primavera Systems, Inc.

Sampling Schedule: Subject to Change

ACTIVITY ID	EARLY START	EARLY FINISH	ORIG DUE	1994	1995	1996	1997	1998	1999	2000
PS13-4	31AUG95	28SEP95	21	TRUCK 1 SAMPLE						
S-107 Sludge\saltcake 1000 ml scaling Completed AS 14AUG95 AF 30SEP95							☐ S-107 Push Sample 3 Segments 8 High Priority			
PS67-4	20CT95	230CT95	16							
Completed AS 60CT95 AF 190CT95							☐ B-204 Push Sample 2 Segments 14 (55K Tank)			
PS64-4	29NOV95	5DEC95	5							
Completed AS 21DEC95 AF 27DEC95							☐ BX-112 Push Sample 2 Segments 3			
PS61-4	2JAN96	12JAN96	9							
Completed AS 2JAN96 AF 6JAN96							☐ BX-104 Push Sample 2 Segments 2			
PS03-4	22JAN96	16FEB96	20							
AW-101 Supernatant - 5500 ml							☐ AW-101 Push Sample 2 Segments 22 High Priority			
PS26-4	8APR96	3MAY96	20							
PS31-4	10JUN96	9JUL96	20				☐ AN-105 Push Sample 2 Segments 22 High Priority			
PS06-4	10JUL96	6AUG96	20				☐ AN-104 Push Sample 2 Segments 21 High Priority			
PS33-4	10CT96	28OCT96	20				☐ PMCST #1 OUTAGE			
PS55-4	29OCT96	18NOV96	15				☐ AN-103 Push Sample 2 Segments 19 High Priority			
SY-102 Pretreatment sludge only - 150 g							☐ SY-102 Push Sample 2 Segments 8			
PS41-4	2JAN97	29JAN97	20							
AW-105 Supernatant - 850 ml							☐ AW-105 Push Sample 2 Segments 20			
PS10-4	6MAR97	2APR97	20							
PS51-4	6MAY97	19MAY97	10				☐ AW-103 Push Sample 2 Segments 10			
PS63-4	23MAY97	24JUN97	20				☐ B-108 Push Sample 2 Segments 2			
B-109 Sludge\saltcake 1000 ml scaling Additional sludge\saltcake 400 ml re							☐ B-109 Push Sample 2 Segments 3			
PS34-4	10CT98	21OCT98	15							
PS15-4	7DEC98	18DEC98	10				T-110 Push Sample 2 Segments 8 ☐			
PS56-4	1MAR99	26MAR99	20				T-105 Push Sample 2 Segments 2 ☐			
PS69-4	24MAY99	22JUN99	20				T-112 Push Sample 2 Segments 2 ☐			
PS04-4	10CT99	28OCT99	20				T-111 Push Sample 2 Segments 7 ☐			
							AW-106 Push Sample 2 Segments 14 ☐			
Plot Date 6MAR96	Activity Bar Chart Dates	TEST								
Data Date 15SEP94	Activity Bar Chart Dates									
Project Start 1OCT93	Activity Bar Chart Dates									
Project Finish 8MAY00	Activity Bar Chart Dates									
(c) Primavera Systems, Inc.				WESTINGHOUSE HANFORD COMPANY				AS OF 03/04/96 Mr. G. Stanton / Mr. G. Carver		
				REVISED TANK FARMS SAMPLING SCHEDULE				DATE		
				DRAFT SAMPLING SCHEDULE Rev 4.6				Revision		
								Checked		
								Approved		

AS OF 03/04/96 MR. G. Stanton / Mr. G. Carver

Sampling Schedule: Subject to Change

ACTIVITY ID	EARLY START	EARLY FINISH	ORIG DUR	1994	1995	1996	1997	1998	1999	2000
				AUGER SAMPLE						
AS04-4	15SEP94	21SEP94	5	AW-101 Auger Sample 3 Segments 1						
Completed AS 23JAN95	AF 27JAN95									
AS08-4	15SEP94	21SEP94	5	BX-105 Auger Sample 2 Segments 1						
Completed AS 28SEP94	AF 06OCT94									
AS05-4	29SEP94	5OCT94	5	1B-102 Auger Sample 2 Segments 1 222s						
Completed AS 12OCT94	AF 17OCT94									
AS99-4	29SEP94	5OCT94	5	1C-102 Auger Sample						
Completed AS 29DEC94	AF 13JAN95									
AS10-4	6OCT94	12OCT94	5	1AX-102 Auger Sample 2 Segment 1						
Completed AS 6FEB95	AF 14FEB95									
AS11-4	13OCT94	19OCT94	5	1A-104 Auger Sample 0						
Completed AS 25OCT94	AF 10NOV94									
AS14-4	27OCT94	2NOV94	5	1C-108 Auger Sample 2 Segment 1						
Completed AS 11NOV94	AF 15DEC94									
AS98-4	3NOV94	9NOV94	5	1BY-108 Auger Sample 2 9" Auger						
Completed AS 16DEC94	AF 30DEC94									
AS06-4	11JAN95	17JAN95	5	1AX-104 Auger Sample 0						
Completed AS 14FEB95	AF 17FEB95									
AS37-4	25JAN95	31JAN95	5	1TY-104 Auger Sample 2 Segments 1						
Completed AS 21FEB95	AF 24FEB95									
AS25-4	1FEB95	7FEB95	5	1TY-105 Auger Sample 2 Segments 1						
Completed AS 27FEB95	AF 3MAR95									
AS30-4	8FEB95	14FEB95	5	1BY-103 Auger Sample 2 Segments 1						
Completed AS 6MAR95	AF 10MAR95									
AS21-4	22FEB95	28FEB95	5	1B-112 Auger Sample 2 Segments 1						
Completed AS 13MAR95	AF 17MAR95									
AS15-4	1MAR95	7MAR95	5	1C-111 Auger Sample 2 Segments 1						
Completed AS 22MAR95	AF 25MAR95									
AS07-4	6MAR95	14MAR95	5	1C-101 Auger Sample 2 Segments 2						
Completed AS 29MAR95	AF 30MAR95									
P101 Date GHAR06 Data Date 15SEP94 Project Start 1OCT93 Project Finish 0MAY00				Activity Bar/Early Dates Critical Activity Legend for Milestones/Flag Activities			WESTINGHOUSE HANFORD COMPANY REVISED TANK FARMS SAMPLING SCHEDULE DRAFT SAMPLING SCHEDULE Rev 4.6			
1c) Primavera Systems, Inc.				Sheet 8 of 24			AS OF 03/04/96 Mr. G. Stanton / Mr. G. Carver			
				Date	Revision	Checked	Approved			

Sampling Schedule: Subject to Change

ACTIVITY ID	EARLY START	EARLY FINISH	ORIG DUR	1994	1995	1996	1997	1998	1999	2000
				AUGER SAMPLE						
AS17-4	22MAR95	28MAR95	5		IC-203 Auger Sample 2 Segments 1					
Completed AS 3APR95 AF 6APR95										
AS27-4	5APR95	11APR95	5		IC-204 Auger Sample 2 Segments 1					
Completed AS 10APR95 AF 2MAY95										
AS20-4	19APR95	25APR95	5		IC-201 Auger Sample 2 Segments 1					
Completed AS 2MAY95 AF 3MAY95										
AS16-4	3MAY95	9MAY95	5		IC-202 Auger Sample 2 Segments 1					
Completed AS 4MAY95 AF 5MAY95										
AS22-4	10MAY95	16MAY95	5		ISX-113 Auger Sample 2 Segments 1					
Completed AS 9MAY95 AF 10MAY95										
AS23-4	17MAY95	23MAY95	5		ISX-115 Auger Sample 2 Segments 1 (Obtained 0)					
Completed AS 16MAY95 AF 18MAY95										
AS13-4	1JUN95	7JUN95	5		IB-103 Auger Sample 2 Segments 1					
Completed AS 24MAY95 AF 2JUN95										
AS28-4	8JUN95	19JUN95	8		IA-102 Auger Sample 2 Segments 1 (Obtained 1)					
Completed AS 6JUN95 AF 8JUN95										
AS19-4	17JUL95	26JUL95	8		IT-108 Auger Sample 3 Segments 1					
Completed AS 14JUL95 AF 25JUL95										
AS24-4	31JUL95	4AUG95	5		IT-106 Auger Sample 2 Segments 1					
Completed AS 25JUL95 AF 11AUG95										
AS34-4	14AUG95	18AUG95	5		IT-109 Auger Sample 2 Segments 1					
Completed AS 14AUG95 AF 22AUG95										
AS40-4	28AUG95	6SEP95	8		ISX-108 Auger Sample 3 Segments 1 (Obtained 2)					
Completed AS 14SEP95 AF 27SEP95										
AS38-4	16OCT95	20OCT95	5		IBX-110 Auger Sample 2 Segments 1					
Completed AS 9OCT95 AF 16OCT95										
AS32-4	20NOV95	28NOV95	5		IBX-112 Auger Sample 2 Segments 1					
COMPLETED AS 13NOV95 AF 17NOV95										
AS31-4	4DEC95	8DEC95	5		IBX-106 Auger Sample 2 Segments 1					
Completed AS 04DEC95 AF 20DEC95										
Plot Date 5MAR96 Data Date 15SEP94 Project Start 10CT93 Project Finish 8MAY00				WESTINGHOUSE HANFORD COMPANY REVISED TANK FARMS SAMPLING SCHEDULE DRAFT SAMPLING SCHEDULE Rev 4.6						
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				Date Revision Checked Approved						

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Sampling Schedule: Subject to Change

Plot Date	6MAR96
Date Date	15SEP94
Project Start	10CT93
Project Finish	04MAY00

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E-12

ACTIVITY ID	EARLY START	EARLY FINISH	ORIG DUR	1994	1995	1996	1997	1998	1999	2000
V50A-4	13FEB95	15FEB95	3	VAPOR SAMPLE						
Completed AS 16FEB95 AF 17FEB95				IU-107 Vapor Sample (3)						
V514-4	16FEB95	21FEB95	3							
Completed AS 23FEB95 AF 24FEB95				IU-105 Vapor Sample (3)						
V566-4	8MAR95	10MAR95	3							
Completed AS 27FEB95 AF 28FEB95				IU-111 Vapor Sample (3)						
V589-4	13MAR95	15MAR95	3							
Completed AS 6MAR95 AF 8MAR95				IU-106 Vapor Sample (3)						
V505-4	23MAR95	27MAR95	3							
Completed AS 13MAR95 AF 14MAR95				IS-102 Vapor Sample (3)						
V507-4	28MAR95	30MAR95	3							
Completed AS 15MAR95 AF 21MAR95				IS-111 Vapor Sample (3)						
V508-4	31MAR95	4APR95	3							
Completed AS 22MAR95 AF 23MAR95				ISX-103 Vapor Sample (3)						
V50F-4	5APR95	7APR95	3							
Completed AS 23MAR95 AF 24MAR95				ISX-106 Vapor Sample (3)						
V508-10	10APR95	14APR95	5							
Completed AS 27MAR95 AF 30MAR95				IUSS Maintenance Window						
V508-4	17APR95	19APR95	3							
Completed AS 5APR95 AF 6APR95				ITY-101 Vapor Sample (3)						
V50C-4	20APR95	24APR95	3							
Completed AS 10APR95 AF 11APR95				ITY-103 Vapor Sample (3)						
V50D-4	25APR95	27APR95	3							
Completed AS 12APR95 27APR95				ITY-104 Vapor Sample (3)						
V50G-4	5MAY95	9MAY95	3							
Completed AS 6JUN95 AF 9JUN95				IA-101 Vapor Sample (3)						
V532-4	17MAY95	19MAY95	3							
Completed AS 12JUN95 AF 15JUN95				IAX-101 Vapor Sample (3)						
V533-4	22MAY95	24MAY95	3							
Completed AS 20JUN95 AF 21JUN95				IAX-103 Vapor Sample (3)						
Plot Date 15MAY95 Project Start 15MAY95 Project Finish 21JUN95 (c) Primavera Systems, Inc.				WESTINGHOUSE HANFORD COMPANY REVISED TANK FARMS SAMPLING SCHEDULE DRAFT SAMPLING SCHEDULE Rev 4.6						
Activity Modified Dates Activity Deleted Dates Activity Deleted Dates Activity Deleted Dates				Sheet 12 of 24 AS OF 03/04/96 Mr. G. Stanton / Mr. G. Camper ISSUE: PRELIMINARY CHECKED: APPROVED						

WHC-SD-WM-PLN-101, REV 2 APPENDIX E
Sampling Schedule: Subject to Change

ACTIVITY ID	EARLY START	EARLY FINISH	ORIG DUR	1994	1995	1996	1997	1998	1999	2000
				VAPOR SAMPLE						
V506-4	30MAY95	1JUN95	3		IA-X-102 Vapor Sample (3)					
V538-4	6JUN95	8JUN95	3		IS-112 Vapor Sample (3)					
V539-4	20JUN95	22JUN95	3		ISX-101 Vapor Sample (3)					
V540-4	23JUN95	27JUN95	3		ISX-102 Vapor Sample (3)					
V541-4	28JUN95	30JUN95	3		ISX-104 Vapor Sample (3)					
V542-4	7JUL95	11JUL95	3		ISX-105 Vapor Sample (3)					
V570-4	12JUL95	14JUL95	3		ISX-109 Vapor Sample (3)					
V515-4	19JUL95	21JUL95	3		IU-203 Vapor Sample (3)					
V516-4	24JUL95	26JUL95	3		IU-204 Vapor Sample (3)					
V504-4	31JUL95	2AUG95	3		IU-108 Vapor Sample (3)					
V571-4	7AUG95	9AUG95	3		IU-109 Vapor Sample (3)					
V511-4	14AUG95	16AUG95	3		IT-110 Vapor Sample (3)					
V517-4	5SEP95	7SEP95	3		IC-301 IMUST Vapor Sample (3)					
V503-4	20CT95	40CT95	3		ITX-111 Vapor Sample (3)					
V518-4	90CT95	110CT95	3		IA-103 Vapor Sample (3)					
V518-4	06NOV95	AF 09NOV95								

Plot Date: 06MAY95 Plot Date Start: 15SEP95 Plot Date End: 15SEP95 Project: Finish BNA00		Activity: Monthly Basis Activity: Weekly Basis Activity: Quarterly Basis Activity: Half-Yearly Basis Activity: Annually Activity: Other	WESTINGHOUSE HANFORD COMPANY REVISED TANK FARMS SAMPLING SCHEDULE DRAFT SAMPLING SCHEDULE Rev 4.6		DATE: 12/3/94 AS OF: 12/04/95 BY: 6. Carver CHECKED: 12/05/95
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Sampling Schedule: Subject to Change

E-15

Sampling Schedule: Subject to Change

ACTIVITY ID	EARLY START	EARLY FINISH	ORIG DUR							
				1994	1995	1996	1997	1998	1999	2000
				VAPOR	SAMPLE					
YSAE-4	1MAY96	2MAY96	2			IBX-104 Temporal Vapor Sample (4)				
VS01-4	3MAY96	16MAY96	10			IVSS OUTAGE				
VSU2-4	17MAY96	20MAY96	2			ITY-102 Vapor Sample (4)				
VS22-4	21MAY96	22MAY96	2			IB-102 Vapor Sample (4)				
VS23-4	23MAY96	24MAY96	2			IB-202 Vapor Sample (4)				
VS24-4	28MAY96	29MAY96	2			IBX-105 Vapor Sample (4)				
VSS0-4	30MAY96	31MAY96	2			IBX-110 Vapor Sample (4)				
VS25-4	7JUN96	10JUN96	2			IC-201 Vapor Sample (4)				
VS26-4	11JUN96	12JUN96	2			IC-202 Vapor Sample (4)				
VS27-4	17JUN96	18JUN96	2			IC-204 Vapor Sample (4)				
VS02-4	19JUN96	2JUL96	10			IVSS OUTAGE				
VS66-4	3JUL96	8JUL96	2			IU-112 Vapor Sample (4)				
VS65-4	9JUL96	10JUL96	2			IU-104 Vapor Sample (4)				
VST7-4	11JUL96	12JUL96	2			ITX-104 Vapor Sample (4)				
VSAC-4	15JUL96	16JUL96	2			IC-107 Temporal Vapor Sample (4)				
VSAD-4	17JUL96	18JUL96	2			IBY-108 Temporal Vapor Sample (4)				
VSAM-4	19JUL96	22JUL96	2			IS-102 Temporal Vapor Sample (4)				
VSAF-4	25JUL96	26JUL96	2			IBX-104 Temporal Vapor Sample (4)				
VSR9-4	29JUL96	30JUL96	2			IBY-101 Vapor Sample (4)				
VS43-4	31JUL96	1AUG96	2			ITY-105 Vapor Sample (4)				
VSX8-4	2AUG96	5AUG96	2			IB-107 Vapor Sample (4)				
VSS5-4	12AUG96	13AUG96	2			IB-105 Vapor Sample (4)				
VSX9-4	20AUG96	21AUG96	2			IBX-102 Vapor Sample (4)				
VSS1-4	22AUG96	23AUG96	2			IBX-111 Vapor Sample (4)				
VS03-4	26AUG96	9SEP96	10			IVSS OUTAGE				
VSY1-4	10SEP96	11SEP96	2			ISX-108 Vapor Sample (4)				
VSP3-4	16SEP96	17SEP96	2			ITX-101 Vapor Sample (4)				
VSP8-4	20SEP96	23SEP96	2			ITX-116 Vapor Sample (4)				
VSP4-4	25SEP96	26SEP96	2			ITX-103 Vapor Sample (4)				
VSP7-4	27SEP96	30SEP96	2			ITX-115 Vapor Sample (4)				
Plot Date 6MAR96 Data Date 15SEP94 Project Start 10CT93 Project Finish 6MAY90				Activity Bar/Early Dates Critical Activity Overrun Mileston/Flag Activity						
ICI Primavera Systems, Inc.				WESTINGHOUSE HANFORD COMPANY REVISED TANK FARMS SAMPLING SCHEDULE DRAFT SAMPLING SCHEDULE Rev 4.6						
				AS OF 03/04/96 Mr. G. Stanton / Mr. G. Carver Date Revision Checked Approved						

Sampling Schedule: Subject to Change

ACTIVITY ID	EARLY START	EARLY FINISH	ORIG DUR												
				1994	1995	1996	1997	1998	1999	2000					
				VAPOR SAMPLE											
VST8-4	10CT96	20CT96	2				TX-106 Vapor Sample (4)								
VS04-4	30CT96	160CT96	10				UVSS OUTAGE								
VSAD-4	170CT96	180CT96	2				IC-107 Temporal Vapor Sample (4)								
VSAR-4	210CT96	220CT96	2				IBY-108 Temporal Vapor Sample (4)								
VSAN-4	230CT96	240CT96	2				IS-102 Temporal Vapor Sample (4)								
VSAG-4	250CT96	280CT96	2				IBX-104 Temporal Vapor Sample (4)								
VSP0-4	290CT96	300CT96	2				IU-102 Vapor Sample (4)								
VSU5-4	310CT96	1NOV96	2				ISX-112 Vapor Sample (4)								
VST9-4	4NOV96	5NOV96	2				ITX-108 Vapor Sample (4)								
VSU5-4	13NOV96	14NOV96	2				ITX-109 Vapor Sample (4)								
VSU4-4	15NOV96	18NOV96	2				ITX-112 Vapor Sample (4)								
VSX0-4	19NOV96	20NOV96	2				ISX-107 Vapor Sample (4)								
VSU6-4	21NOV96	22NOV96	2				ISX-114 Vapor Sample (4)								
VSAT-4	15JAN97	16JAN97	2				IC-107 Temporal Vapor Sample (4)								
VSAR-4	17JAN97	20JAN97	2				IBY-108 Temporal Vapor Sample (4)								
VSAP-4	21JAN97	22JAN97	2				IBX-104 Temporal Vapor Sample (4)								
VSAS-4	23JAN97	24JAN97	2				IS-102 Temporal Vapor Sample (4)								
VSU4-4	27JAN97	28JAN97	2				ISX-111 Vapor Sample (4)								
VS05-4	29JAN97	11FEB97	10				UVSS OUTAGE								
VSP5-4	12FEB97	13FEB97	2				ITX-113 Vapor Sample (4)								
VSP6-4	14FEB97	19FEB97	2				ITX-114 Vapor Sample (4)								
VST6-4	20FEB97	21FEB97	2				ITX-102 Vapor Sample (4)								
VSU1-4	24FEB97	25FEB97	2				ITX-110 Vapor Sample (4)								
VSP9-4	26FEB97	27FEB97	2				ITX-117 Vapor Sample (4)								
VSU3-4	28FEB97	3MAR97	2				ISX-110 Vapor Sample (4)								
VSP1-4	13MAR97	14MAR97	2				IT-203 Vapor Sample (4)								
VSP2-4	24MAR97	25MAR97	2				IT-204 Vapor Sample (4)								
VSU7-4	2APR97	3APR97	2				IT-101 Vapor Sample (4)								
VSU8-4	18APR97	21APR97	2				IT-201 Vapor Sample (4)								
VSU9-4	22APR97	23APR97	2				IT-202 Vapor Sample (4)								
Plot Date 04APR96 Data Date 15SEP94 Project Start 10CT93 Project Finish 04APR96				WESTINGHOUSE HANFORD COMPANY REVISED TANK FARMS SAMPLING SCHEDULE DRAFT SAMPLING SCHEDULE Rev 4.6											
Activity Bar: Early Start Critical Activity Project Bar Milestone/Flag Activity				AS OF 03/04/96 Mr. G. Stanton / Mr. G. Carver											
Date Revision Checked Approved															
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Sampling Schedule: Subject to Change

ACTIVITY ID	EARLY START	EARLY FINISH	ORIG DUE													
				1994	1995	1996	1997	1998	1999	2000						
VAPOR SAMPLE																
VS80-4	24APR97	25APR97	2					IA-104 Vapor Sample (4)								
VS81-4	28APR97	29APR97	2					IA-105 Vapor Sample (4)								
VS82-4	30APR97	1MAY97	2					IA-106 Vapor Sample (4)								
VS83-4	2MAY97	5MAY97	2					IA-104 Vapor Sample (4)								
VS84-4	6MAY97	7MAY97	2					IB-101 Vapor Sample (4)								
VS85-4	9MAY97	9MAY97	2					IB-104 Vapor Sample (4)								
VS86-4	12MAY97	13MAY97	2					IB-106 Vapor Sample (4)								
VS87-4	14MAY97	15MAY97	2					IB-108 Vapor Sample (4)								
VS88-4	16MAY97	19MAY97	2					IB-109 Vapor Sample (4)								
VS89-4	20MAY97	21MAY97	2					IB-110 Vapor Sample (4)								
VS8A-4	22MAY97	23MAY97	2					IB-111 Vapor Sample (4)								
VS8B-4	29MAY97	30MAY97	2					IB-112 Vapor Sample (4)								
VS8C-4	2JUN97	3JUN97	2					IB-201 Vapor Sample (4)								
VS8D-4	4JUN97	5JUN97	2					IB-203 Vapor Sample (4)								
VS8E-4	6JUN97	9JUN97	2					IB-204 Vapor Sample (4)								
VSCD-4	10JUN97	11JUN97	2					IBY-109 Vapor Sample (4)								
VS8F-4	12JUN97	13JUN97	2					IBX-101 Vapor Sample (4)								
VS8G-4	16JUN97	17JUN97	2					IBX-103 Vapor Sample (4)								
VS8H-4	18JUN97	19JUN97	2					IBX-106 Vapor Sample (4)								
VS8I-4	20JUN97	23JUN97	2					IBX-108 Vapor Sample (4)								
VS8J-4	10CT97	20CT97	2					IBX-109 Vapor Sample (4)								
VS8K-4	30CT97	60CT97	2					IBX-112 Vapor Sample (4)								
VS8L-4	70CT97	80CT97	2					IC-203 Vapor Sample (4)								
VS8M-4	90CT97	100CT97	2					IS-104 Vapor Sample (4)								
VS8N-4	130CT97	140CT97	2					ISX-113 Vapor Sample (4)								
VS8P-4	150CT97	160CT97	2					ISX-115 Vapor Sample (4)								
VS8Q-4	170CT97	200CT97	2					IT-102 Vapor Sample (4)								
VS8R-4	210CT97	220CT97	2					IT-103 Vapor Sample (4)								
VS8S-4	230CT97	240CT97	2					IT-105 Vapor Sample (4)								
VS8T-4	270CT97	280CT97	2					IT-106 Vapor Sample (4)								
Plot Date 6MAR96 Data Date 15SEP94 Project Start 10CT93 Project Finish 8MAY00				Activity Bar/Early Dates Critical Activity Progress Bar Milestone/Flag Activity				AS OF 03/04/96 Mr. G. Stanton / Mr. G. Carver								
Westinghouse Hanford Company REVISED TANK FARMS SAMPLING SCHEDULE DRAFT SAMPLING SCHEDULE Rev 4.6				Date Revision Checked Approved												
fcl Primavera Systems, Inc.																

WHC-SD-WM-PLN-101, REV 2 APPENDIX E
Sampling Schedule: Subject to Change

ACTIVITY ID	START	FINISH	DUR	ORIG							
					1994	1995	1996	1997	1998	1999	2000
VSBU-4	29OCT97	30OCT97	2		VAPOR SAMPLE						
VSBU-4	31OCT97	3NOV97	2							IT-108 Vapor Sample (4)	
VSBU-4	4NOV97	5NOV97	2							IT-109 Vapor Sample (4)	
VSBU-4	6NOV97	7NOV97	2							IT-112 Vapor Sample (4)	
VSBU-4	10NOV97	11NOV97	2							ITX-107 Vapor Sample (4)	
VSBU-4	12NOV97	13NOV97	2							ITY-105 Vapor Sample (4)	
VSBU-4	14NOV97	17NOV97	2							IU-101 Vapor Sample (4)	
VSBU-4	18NOV97	19NOV97	2							IU-110 Vapor Sample (4)	
VSBU-4	20NOV97	21NOV97	2							IU-201 Vapor Sample (4)	
VSBU-4	20NOV97	21NOV97	2							IU-202 Vapor Sample (4)	

Print Date	6/18/98	Print Date	6/18/98
Draw Date	1/25/98	Draw Date	1/25/98
Draw Part	153194	Draw Part	153194
Project Finish	BMV00	Project Finish	BMV00
EST: Primavera Systems, Inc.		EST: Primavera Systems, Inc.	
</			

Plot Date: 04/06/98 Data Date: 12/29/94 Project: 101 Project Finish: 04/06/98	Activity: Activity Station: Station	WESTINGHOUSE HANFORD COMPANY REVISED TANK FARM SAMPLING SCHEDULE DRAFT SAMPLING SCHEDULE REV 4.6	AS OF 03/04/98 Mr. G. Stanton / Mr. G. Carter REVISION CHECKED: ADDITIONAL
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Sampling Schedule: Subject to Change

ACTIVITY ID	EARLY START	EARLY FINISH	ORIG OUR								
				1994	1995	1996	1997	1998	1999	2000	
GRAB SAMPLE											
GS56-4 Completed AS 27SEP94 AF 28SEP94	26SEP94	28SEP94	3	IAW-104 Grab Sample Compatability - Jones							
GS57-4 Completed AS 29SEP94 AF 29SEP94	30CT94	50CT94	3	IAW-103 Grab Sample Compatability - Jones							
GS60-4 Completed AS 07OCT94 AF 70CT94	10OCT94	12OCT94	3	IAV-101 Grab Sample Compatability - Jones							
GS81-4 Completed AS 17OCT94 AF 18OCT94	17OCT94	19OCT94	3	IAN-107 Grab Sample Process Control - Jones							
GS58-4 Completed AS 19OCT94 AF 21OCT94	24OCT94	26OCT94	3	IAN-102 Grab Sample Process Control - Jones							
GS55-4 Completed AS 28OCT94 AF 28OCT94	31OCT94	2NOV94	3	IER 311 Grab Sample Process Control (CATCH TANK)							
GS92-4 Completed AS 07NOV94 AF 09NOV94	7NOV94	9NOV94	3	IAW-102 Grab Sample							
GS25-4 Completed AS 07NOV94 AF 17NOV94	14NOV94	16NOV94	3	IAP-106 Grab Sample 242-A CAMPAIGN 95-1							
GS66-4 Obtain 200 ml sludge. Completed AS 06DEC94 AF 07DEC94	30NOV94	2DEC94	3	IAV-102 Grab Sample							
GS20-4 Completed AS 30JAN95 AF 2FEB95	8DEC94	12DEC94	3	IAV-107 242-A CAMPAIGN 95-1 Sample 10 (Grab)							
GS63-4 Completed AS 27DEC94 AF 29DEC94	15DEC94	19DEC94	3	IAV-101 Grab Sample							
GS61-4 Completed AS 21FEB95 AF 22FEB95	9JAN95	11JAN95	3	IAZ-102 Grab Sample							
GS62-4 Completed AS 27FEB95 AF 3MAR95	16JAN95	18JAN95	3	IAZ-101 Grab Sample							
GS06-4 Completed AS 15DEC94 AF 15DEC94	23JAN95	25JAN95	3	IAP-103 Grab Sample							

Plot Date GSHR06
Data Date 15SEP94
Project Start 10CT93
Project Finish 04AY00

Activity Bar/Early Dates
Critical Activity
Support Activity
Milestone/Flag Activity

WESTINGHOUSE HANFORD COMPANY
REVISED TANK FARMS SAMPLING SCHEDULE
DRAFT SAMPLING SCHEDULE Rev 4.6

AS OF 03/04/96 Mr. G. Stanton / Mr. G. Carver

Date	Revision	Checked	Approved

ACTIVITY ID	EARLY START	EARLY FINISH	ORIG DUR	1994	1995	1996	1997	1998	1999	2000
GS15-4	30JAN95	1FEB95	3	GRAB SAMPLE	IAN-102 Grab Sample					
Completed AS 14FEB95 AF 15FEB95										
GS33-4	6FEB95	8FEB95	3		IBX-106 Grab Sample	Compatibility - Jones				
Completed AS 14MAR95 AF 16MAR95										
GS29-4	13FEB95	15FEB95	3		IBY-105 Grab Sample					
Completed AS 21MAR95 AF 23MAR95										
GS30-4	21FEB95	23FEB95	3		IBY-103 Grab Sample	Compatibility - Jones				
Completed AS 22MAR95 AF 23MAR95										
GS17-4	27FEB95	1MAR95	3		IAW-106 Grab Sample	Compatibility - Jones				
Completed AS 7MAR95 AF 9MAR95										
GS54-4	2MAR95	6MAR95	3		I244A Grab Sample	Compatibility - Jones				
Completed AS 23MAR95 AF 23MAR95										
GS10-4	7MAR95	9MAR95	3		IAN-106 Grab Sample					
Completed AS 3APR95 AF 6APR95										
GS12-4	24MAR95	26MAR95	3		IS-110 Grab Sample	Compatibility - Sutey				
Completed AS 5APR95 AF 7APR95										
GS08-4	26APR95	28APR95	3		IU-107 Grab Sample	Compatibility-Sutey/High Priority				
Completed AS 10APR95 AF 13APR95										
GS39-4	11MAY95	15MAY95	3		IU-103 Grab Sample					
Completed AS 23MAY95 AF 24MAY95										
GS42-4	18MAY95	22MAY95	3		IU-108 Grab Sample	Sutey/High Priority				
Completed AS 30MAY95 AF 31MAY95										
GS43-4	25MAY95	30MAY95	4		IU-109 Grab Sample	Sutey/High Priority				
Completed AS 1JUN95 AF 9JUN95										
GS40-4	2JUN95	6JUN95	3		IU-105 Grab Sample	Sutey/High Priority				
Completed AS 12JUN95 AF 16JUN95										
GS14-4	9JUN95	13JUN95	3		IS-102 Grab Sample					
Completed AS 20JUN95 AF 23JUN95										
GS90-4	16JUN95	20JUN95	3		IS-111 Grab Sample	(Obtained 0)				
Completed AS 23JUN95 AF 25JUN95										
Plot Date: 6/29/95 Data Date: 6/29/95 Plot Date: 6/29/95 Data Date: 6/29/95 Project Finish: 6/29/95				WESTINGHOUSE HANFORD COMPANY REVISED TANK FARMS SAMPLING SCHEDULE DRAFT SAMPLING SCHEDULE Rev 4.5						
Plot Date: 6/29/95 Data Date: 6/29/95 Plot Date: 6/29/95 Data Date: 6/29/95 Project Finish: 6/29/95				AS OF 03/04/96 Mr. G. Stanton / Mr. G. Carver DATE: 03/04/96 REVISION:						
Plot Date: 6/29/95 Data Date: 6/29/95 Plot Date: 6/29/95 Data Date: 6/29/95 Project Finish: 6/29/95				DATE: 03/04/96 REVISION:						
Plot Date: 6/29/95 Data Date: 6/29/95 Plot Date: 6/29/95 Data Date: 6/29/95 Project Finish: 6/29/95				DATE: 03/04/96 REVISION:						

Sampling Schedule: Subject to Change

ACTIVITY ID	EARLY START	EARLY FINISH	ORIG DUR	1994	1995	1996	1997	1998	1999	2000		
				GRAB	SAMPLE							
GS93-4	23JUN95	27JUN95	3			IS-112	Grab Sample (Obtained 0)					
Completed AS 26JUN95 AF 28JUN95												
GS94-4	30JUN95	6JUL95	3			ISX-102	Grab Sample (Obtained 0)					
Completed AS 30JUN95 AF 6JUL95												
GS95-4	11JUL95	13JUL95	3			ISX-103	Grab Sample (Obtained 0)					
Completed AS 30JUN95 AF 7JUL95												
GS96-4	18JUL95	20JUL95	3			ISX-105	Grab Sample (Obtained 0)					
Completed AS 11JUL95 AF 12JUL95												
GS24-4	21AUG95	23AUG95	3			IAW-106	Grab Sample Compatability - Jones					
Completed AS 23AUG95 AF 24AUG95												
GS91-4	28AUG95	30AUG95	3			IAW-102	Grab Sample - J. Jones					
Completed AS 24AUG95 AF 25AUG95												
GS13-4	5SEP95	7SEP95	3			IAW-105	Grab Sample					
Completed AS 28AUG95 AF 29AUG95												
GS64-4	8SEP95	12SEP95	3			IAN-103	Grab Sample (Privitization) Obtained 0					
Completed AS 8SEP95 AF 8SEP95												
GS04-4	13SEP95	15SEP95	3			IAN-101	Grab Sample					
Completed AS 31AUG95 AF 6SEP95												
GS41-4	20SEP95	21SEP95	2			IAV-102	Grab Sample - Jones/ (Privitization)					
Completed AS 18SEP95 AF 18SEP95												
GS88-4	23OCT95	25OCT95	3			ISY-102	Grab Sample Compatability - Sutey					
Completed AS 19OCT95 AF 20OCT95												
GS67-4	6NOV95	8NOV95	3			IS-151	DIVERSION BOX Grab Sample - Sutey					
Completed AS 08NOV95 AF 10NOV95												
GS89-4	20NOV95	22NOV95	3			ITX-244	Grab Sample Compatability - Sutey					
Completed AS 08NOV95 AF 10NOV95												
GS71-4	27NOV95	28NOV95	2			IAP-101	Grab Sample Compatability - Sutey					
Completed AS 09NOV95 AF 10NOV95												
GS35-4	29NOV95	1DEC95	3			ISX-104	Grab Sample Compatab- Sutey (Obtained 0)					
Completed AS 20NOV95 AF 23NOV95												
Plot Date 6MAR96 Data Date 15SEP94 Project Start 10C193 Project Finish 6MAY00				Activity Bar/Early Dates Critical Activity Noncritical Activity Milestone/Flag Activity							1831	
(c) Primavera Systems, Inc.				WESTINGHOUSE HANFORD COMPANY REVISED TANK FARMS SAMPLING SCHEDULE DRAFT SAMPLING SCHEDULE Rev 4.6							Sheet 21 of 24 AS OF 03/04/96 Mr. G. Stanton / Mr. G. Carver	
				Date Revision Checked Approved								

WHC-SD-WM-PLN-101, REV 2 APPENDIX E

Sampling Schedule: Subject to Change

ACTIVITY ID	EARLY START	EARLY FINISH	ORIG DUR	1994	1995	1996	1997	1998	1999	2000
GS87-4	4DEC95	6DEC95	3	GRAB	SAMPLE					
Completed AS 17NOV95 AF 21NOV95 Completed Again AS 29DEC95 AF 29DEC95							IAN-106 Grab Sample - Jones/Safety Screening			
GS86-4	7DEC95	11DEC95	3							
Completed AS 27NOV95 AF 30NOV95 Completed Again AS 12DEC95 AF 12DEC95							IAN-102 Grab Sample - Jones/Safety Screening			
GS50-4	14DEC95	18DEC95	3							
Completed AS 11DEC95 AF 12 DEC95							IAN-101 Grab Sample (Safety Screen)			
GSAA-4	19DEC95	21DEC95	3							
Completed AS 02JAN96 AF 05JAN96							IAP-108 Grab Sample (Safety Screening)			
GS45-4	2JAN96	4JAN96	3							
Completed AS 18JAN96 AF 23JAN96							IAP-104 CAMPAIGN 96-1 Grb Sam Von Bargaen (Saf Scrn			
GS19-4	5FEB96	7FEB96	3							
Completed AS 5Feb96 AF 1Mar96							IC-106 Grab Sample			
GS16-4	8FEB96	12FEB96	3							
Completed AS 11FEB96 15FEB96							IAN-107 Grab Sample (Safety Screening)			
GSAC-4	13FEB96	15FEB96	3							
Completed AS 27Feb96 AF 28Feb96							IAY-101 Grab Sample (Saftey Screen)			
GS05-4	16FEB96	21FEB96	3							
Completed AS 28Feb96 AF 28Feb96							IAY-102 Grab Sample			
GS78-4	18MAR96	20MAR96	3							
							IA-101 Grab Sample - Jones			
GS21-4	25MAR96	27MAR96	3							
							IU-102 Grab Sample			
GSBA-4	1APR96	3APR96	3							
							IAY-102 Grab Sample			
GS80-4	4APR96		0							
							◇ TCP Lance Available			
GSBB-4	22APR96	24APR96	3							
							IAY-102 Grab Sample			
GS85-4	9MAY96	13MAY96	3							
							IAP-105 CAMPAIGN 97-1 Grab Sample - Von Bargaen			
GS73-4	29MAY96	31MAY96	3							
							IAN-107 Grab Sample - (Caustic Addition)			
GS77-4	3JUN96	5JUN96	3							
							IAZ-101 Grab Sample - MacLean			
GS84-4	10CT97	30CT97	3	AP-108	CAMPAIGN 97-2	Grab Sample - Von Barga				
GS97-4	60CT97	80CT97	3							
							IAZ-101 Grab Sample - MacLean			
Plot Date 5MAR96 Data Date 15SEP94 Project Start 10CT93 Project Finish 8MAY00				WESTINGHOUSE HANFORD COMPANY REVISED TANK FARMS SAMPLING SCHEDULE DRAFT SAMPLING SCHEDULE Rev 4.6						
AS OF 03/04/96 Mr. G. Stanton / Mr. G. Carver				Date Revision Checked Approved						

Sampling Schedule: Subject to Change

E-24

E-25

DISTRIBUTION SHEET

To Distribution	From Evaluation and Planning	Page 1 of 1			
		Date 09/12/96			
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		ECN No. ECN-635349			
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