Department of Energy
Richland Field Office
P.O. Box 550
Richland, Washington 99352

DEC 01 1994

94-CHD-128

The Honorable John T. Conway
Chairman
Defense Nuclear Facilities Safety Board
Suite 700
625 Indiana Avenue, NW
Washington, D.C. 20004

Dear Mr. Conway:

TRANSMITTAL OF WESTINGHOUSE HANFORD COMPANY, CHARACTERIZATION PROGRAM, SEPTEMBER MONTHLY REPORT, IN ACCORDANCE WITH THE DEPARTMENT OF ENERGY IMPLEMENTATION PLAN FOR BOARD RECOMMENDATION 93-5.

Enclosed is the Westinghouse Hanford Company (WHC) Characterization Program - September Monthly Report (letter #9457269, with attachment, dated October 26, 1994). This report is being submitted to you to provide information and status on actions associated with the 93-5 Implementation Plan.

Significant accomplishments for the month of September were:

- The Fiscal Year 1995 Tank Waste Analysis Plan (TWAP) was submitted to the Washington State Department of Ecology and the Environmental Protection Agency; completing the Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) Milestone M-44-02A.

- Laboratory data packages for 20 tanks was input into the Tank Characterization Database; completing the Tri-Party Agreement Milestone M-44-06 and the Defense Nuclear Facilities Safety Board (DNFSB) 93-5 Implementation Plan Commitment 6.5.

- Progress was made in the licensing of the two PAS-1 casks (DNFSB 93-5 Implementation Plan Commitment 5.14). WHC decided to withdraw the Nuclear Regulatory Commission request for license modification, and is now working with the Department of Energy - Headquarters (DOE-HQ) Certification Office to resolve the issue. An on-time completion of this commitment is anticipated.

- RL submitted the WHC Engineering Study, "Installation of New Risers in Single-Shell Tanks" to the DNFSB, completing the 93-5 Implementation Plan commitment 3.19.

- The Push-Mode sampling of the first riser of 241-SY-103 resulted in excellent sample recovery (>85%).

Problems:

- WHC has completed the Integrated Sampling Schedule (93-5 Implementation Plan commitment 1.11). Based on this schedule, one of the major commitments of the 93-5 Implementation Plan (commitment 2.3 - complete sampling and analysis of all watch-list tanks by October 31, 1995), will not be completed until September 1997. The TWRS Safety Program is developing an alternate strategy for safety issue resolution which may enable the intent of the commitment to be met.

- The 325 Laboratory remains in a standdown. RL and PNL are bringing additional knowledgeable resources to bear on the problem.

- The Rotary Mode Core Sampling system has not completed all pre-start items. The calibration, grooming, and alignment (CG & A) of the system is taking longer than anticipated. Beneficial system use is expected to be achieved in late October 1994 (actual system use began on November 18, 1994, on tank BY-106).

- Efforts to obtain the twenty DOE-7A Los Alamos National Laboratories 12B-65 Fiberboard Boxes with Lead Shielded Inner Packaging continues to be unsuccessful. These shipping containers are required to meet the 93-5 Implementation Plan commitment for sample analysis transport. DOE-HQ is providing assistance to resolve this issue.

- A sampler of material from near the bottom of tank SY-103 unexpectedly expelled sample material when opened in the hot cell of the analytical laboratory. Further sampling of SY-103 is delayed until the safety implications of the event can be assessed.

If you have any questions please contact me or John M. Clark on (509) 376-2246.

Sincerely,

T. R. Sheridan, Acting Assistant Manager
Office of Tank Waste Remediation System

Enclosure

cc:
K. Lang, EM-36 HQ, w/encl.
T. Kelly, WHC, w/o encl.

Westinghouse
Hanford Company

P.O. Box 1970 Richland, WA 99352

94:6488

October 26, 1994

9457269

Mr. J. M. Clark, Acting Director
Characterization Division
Office of Tank Waste Remediation System
U.S. Department of Energy
Richland Operations Office
Richland, Washington 99352

Dear Mr. Clark:

CHARACTERIZATION PROGRAM SEPTEMBER 1994 MONTHLY REPORT

Attached is the Characterization Program Monthly Report for the month of September 1994. This Monthly Report is to keep you informed of the progress of ongoing activities.

If you need further information, please contact L. L. Holle on 373-9263.

Very truly yours,

T. J. Kelley, Manager
Characterization Program
Tank Waste Remediation System Operations Programs

klh

Attachments (3)

HQ - K. T. Lang
J. Poppiti

RL - J. M. Clark
T. Noble
J. R. Noble-Dial
R. O. Puthoff (w/o attachment)

MACTEC - J. P. Haney S1-13

PNL - P. G. Eller
P. J. Mellinger

SAIC - H. G. Sutter

9457269

Attachment 1

9 Pages

Westinghouse
Hanford Company

P.O. Box 1970 Richland, WA 99352

September 23, 1994 9453193.7

Mr. R. E. Gerton, Acting Director
Characterization Division
Office of Tank Waste Remediation System
U.S. Department of Energy
Richland Operations Office
Richland, Washington 99352

Dear Mr. Gerton:

CHARACTERIZATION PROGRAM BIWEEKLY REPORT FOR THE PERIOD ENDING SEPTEMBER 9, 1994

Attached is the Characterization Program Biweekly Report for the period ending September 9, 1994. This Biweekly Report is to keep you informed of the progress of ongoing activities.

If you need further information, please contact Mr. G. T. Frater on 373-1627.

Very truly yours,

C. DeFigh-Price, Manager
Characterization Program
Tank Waste Remediation System Program Office

klh

Attachments (3)

DOE-HQ - K. T. Lang
J. Poppiti

RL - J. M. Clark
P. K. Clark
T. Noble
J. R. Noble-Dial
R. O. Puthoff (w/o attachment)

MACTEC - J. P. Haney

PNL - P. J. Mellinger
P. G. Eller

SAIC - H. G. Sutter

CHARACTERIZATION PROGRAM BIWEEKLY REPORT FOR THE PERIOD ENDING SEPTEMBER 9, 1994

SIGNIFICANT ACCOMPLISHMENTS

The Engineering Study, "Installation of New Risers in Single-Shell Tanks" was completed on August 31, 1994, and delivered to RL, completing WHC action on Defense Nuclear Facilities Safety Board (DNFSB) Commitment 3.19. (WBS 1.1.1.4.2)

The Fiscal Year 1995 Tank Waste Analysis Plan (TWAP) was delivered to U.S. Department of Energy, Richland Operations Office (DOE-RL) for transmission to the Washington State Department of Ecology (Ecology) and the Environmental Protection Agency (EPA) on August 31, 1994. This constitutes completion of Hanford Federal Facility Agreement and Consent Order (Tri-Party Agreement) Milestone M-44-02A, "Submit TWAP annually to Ecology and EPA for approval." The TWAP, which is updated and reissued annually, describes the projected sampling and analysis activities, including Tank Characterization Plans and Tank Characterization Reports, for the following fiscal year. (WBS 1.1.1.4.4)

Loading of laboratory data packages for 20 tanks into the Tank Characterization Database was completed on September 7, 1994. This completes Tri-Party Agreement Milestone M-44-06 and Commitment 6.5 of the Defense Nuclear Facilities Safety Board (DNFSB) 93-5 Implementation Plan ahead of the September 30, 1994, commitment date. (WBS 1.1.1.4.4)

PROBLEMS/ISSUES

Efforts to obtain the twenty DOE-7A LANL 12B-65 Fiberboard Boxes with Lead Shielded Inner Packaging from Los Alamos National Laboratory (LANL) have continued to be unsuccessful. The U.S. Department of Energy-Headquarters (DOE-HQ) has spent considerable effort trying to resolve LANL's desire to obtain Hanford funds for containers that are currently DOE property and not being used. Unless the funding issue is resolved soon, the September 30, 1994, Milestone for receipt of the Type A containers will not be met. (WBS 1.1.1.4.3)

On September 9, 1994, the U.S. Nuclear Regulatory Commission (NRC) stopped review of the license modification for the PAS-1 Cask. The NRC believes that the DOE-HQ Certification Office should review the license modification first. The DOE-HQ Certification Office does not concur with the NRC. Westinghouse Hanford Company (WHC) Transportation is working with DOE-RL to resolve this issue. (WBS 1.1.1.4.3)

DETAILED WORK ACTIVITIES

TECHNICAL INTEGRATION AND PLANNING (WBS 1.1.1.4.1)

Several activities remain to be completed for the Multi-Year Work Plan by September 30, 1994. These activities include having the Characterization Program balanced to the target budget values, schedules, Milestone Description Sheets (MDS) and Work Breakdown Structure Dictionaries (WBS). If necessary, we will continue to make corrections and refinements as required prior to the September 30, 1994, due date.

Science Application International Corporation (SAIC) is working with the Characterization Program to create a method or tool to help integration among the TWRS program offices. Final testing of the new system will be completed in September 1994.

WASTE TANK SAMPLING (WBS 1.1.1.4.2)

The last action item for completion of RL Office of Performance Assessment Audit 93-02, "Single-Shell Tank Push Mode Core Sampling and Analysis," has been submitted to RL for verification and closure. The list of action items included not only those actions established through root cause analysis of the findings, but also supplemental requests from the auditors.

A 60% review draft of the Simulated Riser Installation Project Plan/Test Plan is expected to be issued by late September 21, 1994.

The push mode sampling truck hydraulic system problem with the shielded receiver was narrowed to a possible design inadequacy. The heavier shielded receiver is believed to generate a back pressure in the hydraulic system. The solution options include installing a new off-the-shelf hydraulic component and installing the lighter shielded receiver. A new valve was added to the push mode sampling truck shielded receiver hydraulic system on September 2, 1994. The valve seems to have corrected the pulsating vibrations that prevented sampling for several days. Even though the system problem appears to be corrected, a complete hydraulic system review will be conducted with the vendor. Both solutions will be pursued with the new hydraulic component. The lighter shielded receiver would take several weeks to locate and install.

Three liquid grab samples from 241-U-106 were obtained on August 31, 1994, and shipped to the 222-S Laboratory.

Asbestos abatement was completed on tank 241-U-111 riser #4 on September 7, 1994, in preparation for scheduled vapor sampling.

The type 2 vapor sample was obtained from tank 241-TX-118 riser #9A on September 7, 1994.

Push mode sampling from tank 241-SY-103 resumed in riser #14A on September 8, 1994, following successful repair of the shielded receiver hydraulic problem. The fifth waste sample segment was obtained on September 8, 1994.

ANALYTICAL INTEGRATION (WBS 1.1.1.4.3)

The 241-BX-108 45-Day Safety Screening Report for the first two of three auger samples to be received was issued August 30, 1994, six days early. The third auger material sample is expected to be delivered to the 222-S Laboratory for safety screening analysis the week of September 12, 1994.

The 60-Day Compatibility Data Report for tank 241-T-102 was issued on September 8, 1994, five days early.

Idaho National Engineering Laboratory (INEL) upgrades progress is on schedule for an October 31, 1994, startup to provide safety screening and safety resolution of analytical support for characterization. The Quality of Assessment of INEL's laboratory is scheduled to start on September 20, 1994.

Pacific Northwest Laboratory's (PNL's) 325 Laboratory remains in a standdown but progress toward startup continues. The work activity packages for resumption of the Tank Waste Remediation System (TWRS) 45-Day Safety Screening characterization activities were reviewed by RL and comments incorporated. PNL personnel continue to prepare work activity packages for the resumption of the TWRS 90-Day and 180-Day characterization activities. A letter was received by PNL from RL authorizing the performance of three demonstration tasks as part of the restart of the 325 Laboratory. These demonstration tasks are:

- Repair of the two 325 Building vacuum pumps.
- Analysis of low hazard samples in Laboratory 421.
- Removal of the existing core extruder and installation of the new rotary extruder in the High Radiochemistry Facility hot cell.

The extruder removal and installation demonstration is scheduled to be performed during the RL Operational Readiness Assessment scheduled to start September 21, 1994. The PNL Safety Review Council completed their Readiness Review Plan and initiated their restart Readiness Reviews on September 9, 1994. The analysis of low hazard samples in Laboratory 425 will be performed as a demonstration task during their reviews.

Representatives of the Sample Exchange/Evaluation (SEE) TRIAD met September 8, 1994, to review the final phase II report and phase III test plan. Draft 2 of the phase II report was presented for comments.

The comments will be incorporated into draft 3 for submission to laboratory management for review prior to signature which is schedule later in September. The draft test plan for phase III was reviewed. The contingency plan requested by TWRS to include INEL and proceed without PNL, if the PNL restart is delayed, was developed. A member of the SEE TRIAD will be represented on the team performing the Quality Assessment of INEL starting September 20, 1994, and will determine INEL's capability to participate in phase III.

The fifth push mode sample (Segment 5) from tank 241-SY-103, riser 14A, was received at the 222-S Laboratory on September 9, 1994. Extrusion of the material sample is planned to be performed on September 12, 1994.

The User Acceptance Test was completed on the MULTI LIMS update tapes and the update has been installed for 222-S Laboratory. Although a few minor problems were found, the test was successful. Problem reports were created and forward to Advance Systems Management, Inc. (ASMI) to have these "bugs" fixed.

The Analytical Laboratory Procedure (ALP) database has been updated twice during the week of September 12, 1994. Eight new procedures were added, twenty procedures were updated, four procedures extended two years, and three procedures were inactivated.

The August Laboratory Customer Communication System (LCCS) report was issued on September 9, 1994. This report is now sent to 34 people. Analyses completed in the 222-S Laboratory increased to 4,914 analyses, the highest in Fiscal Year 1994.

The 45-Day Safety Screening Data Package for Tank 241-BX-108 (Risers 2 and 6) was received from 222-S Laboratory. As previously reported via the safety criteria early notification process, the percent moisture content of the auger samples was below the safety criteria limit of <17.0%; however, no energetics were associated with the waste material.

EVALUATION, DOCUMENTATION AND REPORTING (WBS 1.1.1.4.4.)

Tank Characterization Reports on tanks 241-AP-102, 241-AP-103, 241-AP-101, and 241-AP-107 were issued on September 1, 1994. Tank Characterization Reports were issued for tanks 241-AP-106 and 241-B-110 on September 8, 1994. All reports have been transmitted to the Washington State Department of Ecology as part of Tri-Party Agreement Milestone M-44-05. This milestone requires completion of 20 Tank Characterization Reports in FY 1994.

The rotary mode tank 241-BY-106 Tank Characterization Plan was approved and release on September 1, 1994.

The Data Quality Objectives document addressing the ferrocyanide safety issue was released as a WHC supporting document and transmitted to RL.

A previous version of the document had been released in December 1993 as an external publication; the new document contains significant new information.

The loading of the information from the Historical Tank Contents Estimate Report into the electronic Tank Characterization Database has been completed on August 28, 1994. The verification of this information in the database is underway.

Tank Characterization Plans for tanks 241-AX-102 and 241-AX-104 were released on August 26, 1994. Both tanks are non-watch list tanks scheduled to be auger sampled.

Tank Characterization Reports for tanks 241-AP-102, 241-AP-103, 241-AP-101, and 241-AP-107 were issued and are being transmitted to the Washington State Department of Ecology as part of Tri-Party Agreement Milestone M-44-05.

The 241-BY-106 Tank Characterization Plan was approved and released on September 1, 1994.

Tank Characterization Reports were completed and released for tanks 241-AP-106 and 241-B-110 as part of Tri-Party Agreement Milestone M-44-05.

ANALYTICAL TECHNOLOGY DEVELOPMENT (WBS 1.1.1.4.6)

Progress has been made on contract negotiations for the cone penetrometer. All supplier costs have been justified and technical issues with the supplier have been resolved. The final contract is being drafted and scheduled to be let on September 15, 1994. This project is a joint EM-30 and EM-50 activity and will satisfy the EM-50 milestone requiring placement of the order. This milestone is scheduled to be complete by September 30, 1994.

The supplier will procure and prepare the waste simulants for the initial test on phase I of the contract. This decision was based on recommendations of required container sizes from the supplier and the results of PNL's final report of recommended waste simulants. PNL tested the recommended simulants and determined that temperature, transportation, aging, and humidity had an effect on the simulants. The effects will be minimized by the supplier preparing the simulants on site.

A meeting was held with stress analysis personnel to scope analysis on the cone penetrometer impact on tanks. The analysis will examine riser/tank dome loading issues as well as cone penetrometer rod effects on the tank. The results from this analysis are required for the initial design as well as the operation of the system. A cost estimate and schedule is being prepared.

INFORMATION MANAGEMENT (WBS 1.1.1.4.7)

None to report.

CHARACTERIZATION PROGRAM
Milestone Control Log

TYPE	#	TITLE OF MDS	DUE DATE	STATUS (WHC to DOE)	ACTIVITY MGR
DNFSB	3.6	Restore Rotary Mode Sampling (TPA)	3/31/94	Behind	G. Stanton
DNFSB	1.11	Field Schedule for Sampling All Activ's FY95-6	6/30/94	Behind	G. Stanton
DNFSB	3.10	Qual of 2 Additional Crews/Push & Rotary Trucks	6/30/94	Behind	G. Stanton
DNFSB	1.21	Pretreatment DQO Draft Report	8/22/94	Complete on 8/22/94	S. Eberlein
DNFSB	3.19	Eng'g Eval. of Installing New Risers in SSTs	8/31/94	Complete on 8/31/94	C. DeFigh-Price
DNFSB	1.20	TWRS Risk Acceptance Criteria	8/31/94	Behind 1 month	C. DeFigh-Price/SJE
DNFSB	5.7	Dev. & Implement Training for Laboratory Staff	8/31/94	Complete on 6/30/94	D. Bratzel
DNFSB	1.21	HLW Immobilization DQO Draft Report	9/06/94	Complete on 8/22/94	D. McCain
DNFSB	1.21	LLW Immobilization DQO Draft Report	9/21/94	Complete on 8/22/94	D. McCain
DNFSB	5.1	Install Core Scanning in Hot Cell	9/30/94	Change Request/delete	D. Forehand
DNFSB	5.4	Cyanide Speciation Tech Transfer (PNL)	9/30/94	Change Request/delete	D. Forehand
DNFSB	5.8	Procure & Receive 2 PAS-1 Casks (DOE-RL)	9/30/94	Complete on 8/10/94	G. Stanton
DNFSB	3.11	Additional Rotary Mode Core Systems (DOE-RL)	9/30/94	Behind 4-5 months	G. Stanton
DNFSB	1.16	Historical Tank Layering Models	9/30/94	On schedule	S. Eberlein
DNFSB	6.5	Data Loading of 20 Tanks into TCD (M-44-06)	9/30/94	On schedule	S. Eberlein
RL	456	Demonstration of In Situ Characterization	9/15/94	Behind	D. Forehand
RL	424	Priority 1 Safety Analysis for 2 Cores from DSTs	9/22/94	Behind	D. Bratzel
RL	430	Issue Results Priority 1 Safety Analysis for 14 Cores	9/22/94	Behind	D. Bratzel
RL	431	Issue Results Priority 1 Safety Analysis for 7 Cores	9/22/94	Behind	D. Bratzel
RL	475	Demonstrate IR Moisture Detection	9/23/94	Behind 2 months	D. Forehand
RL	409	Obtain 3 DST Core Samples from 3 DSTs (PM)	9/29/94	Change Request	G. Stanton
RL	410	Obtain 13 SST Core Samples from 6 SSTs (RM)	9/29/94	Change Request	G. Stanton
RL	411	Obtain 8 SST Cores from 3 SSTs PMode	9/29/94	Change Request	G. Stanton
RL	416	12 SST Auger Surface Samples from 12 Tanks	9/29/94	Change Request	G. Stanton
TPA	447	Annual Update to TWAP to EPA/Ecology (M-44-02A)	8/31/94	Complete on 8/31/94	S. Eberlein
TPA	519	20 Tank Characterization Reports/(M-44-05)	9/30/94	On schedule	S. Eberlein

SITE MANAGEMENT SYSTEM	WESTINGHOUSE HANFORD COMPANY 1.1 TANK WASTE REMEDIATION SYSTEM	AUGUST 1994

EXPENSE COST PERFORMANCE *

($ In Millions)

WBS / TITLE	FY TO DATE					AT COMPLETION (FY)				COMMENTS
	BUDGET COST		ACTUAL COST	VARIANCE		BAC *	EAC **	FYSF	PROJ'D C / O SCOPE	
	WORK SCHED	WORK PERF	WORK PERF	SCHED	COST					
(1130-0) CHARACTERIZATION										
-WESTINGHOUSE HANFORD COMPANY										
1.1.1.4.1 Tech. Integration & Planning	1.3	1.3	0.8	0.0	0.5	1.3	0.9	0.9	0.0	
1.1.1.4.2 Waste Tank Sampling	7.2	6.1	15.7	(1.1)	(9.6)	9.2	20.8	17.8	3.0	
1.1.1.4.3 Analytical Integration	24.3	19.9	19.9	(4.4)	0.0	26.8	24.3	22.8	1.5	
1.1.1.4.4 Eval'n, Doc. & Report.	2.2	2.2	3.5	0.0	(1.3)	2.5	3.9	3.9	0.0	
1.1.1.4.6 Analytical Tech. Develop.	6.4	5.8	4.8	(0.6)	1.0	6.8	5.1	5.1	0.0	
1.1.1.4.7 TWRS Info. Mgmt.	3.4	3.3	2.4	(0.1)	0.9	3.9	2.6	2.6	0.0	
TOTAL - W.H.C.	44.8	38.6	47.1	(6.2)	(8.5)	50.5	57.6	53.1	4.5	
-P.N.L.										
1.1.1.4.1 Tech. Integration & Planning	0.3	0.3	0.3	0.0	0.0	0.3	0.3	0.3	0.0	
1.1.1.4.2 Waste Tank Sampling	1.3	0.7	0.5	(0.6)	0.2	1.4	1.2	0.5	0.7	
1.1.1.4.4 Eval'n, Doc. & Report.	3.0	2.9	2.6	(0.1)	0.3	3.2	3.6	3.2	0.4	
1.1.1.4.6 Analytical Tech. Develop.	6.0	4.8	4.7	(1.2)	0.1	6.5	5.9	4.9	1.0	
TOTAL - P.N.L.	10.6	8.7	8.1	(1.9)	0.6	11.4	11.0	8.9	2.1	
-DOE										
?????? GEOTECH	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.0	
TOTAL - DOE	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.0	
-L.A.N.L.										
1.1.1.4.3 Analytical Integration	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	
1.1.1.4.4 Eval'n, Doc. & Report.	2.0	1.7	1.7	(0.3)	0.0	2.4	2.2	2.2	0.0	
1.1.1.4.6 Analytical Tech. Develop.	0.8	0.9	0.9	0.1	0.0	0.9	0.8	0.8	0.0	
TOTAL - L.A.N.L.	2.8	2.6	2.6	(0.2)	0.0	3.4	3.1	3.1	0.0	
-S.N.L.										
1.1.1.4.6 Analytical Tech. Develop.	0.4	0.4	0.4	0.0	0.0	0.5	0.5	0.5	0.0	
TOTAL 1.1.1.4 (1130)	58.6	50.3	58.2	(8.3)	(7.9)	65.8	72.6	66.0	6.6	

* EAC IS DEFINED AS THE ESTIMATED TOTAL COST TO COMPLETE THE WORKSCOPE AS DEFINED BY THE F.Y.W.P. AND CLASS 1 CHANGES

9457269

Attachment 2

8 Pages

Westinghouse
Hanford Company

P.O. Box 1970 Richland, WA 99352

October 7, 1994 9453193.8

Mr. J. M. Clark, Acting Director
Characterization Division
Office of Tank Waste Remediation System
U.S. Department of Energy
Richland Operations Office
Richland, Washington 99352

Dear Mr. Clark:

CHARACTERIZATION PROGRAM BIWEEKLY REPORT FOR THE PERIOD ENDING SEPTEMBER 23, 1994

Attached is the Characterization Program Biweekly Report for the period ending September 23, 1994. This Biweekly Report is to keep you informed of the progress of ongoing activities.

If you need further information, please contact Mr. G. T. Frater on 373-1627.

Very truly yours,

T. J. Kelley, Manager
Characterization Program
Tank Waste Remediation System Operations Programs

klh

Attachment

DOE-HQ - K. T. Lang
J. Poppiti

RL - P. K. Clark
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J. R. Noble-Dial
R. O. Puthoff (w/o attachment)

MACTEC - J. P. Haney

PNL - P. J. Mellinger
P. G. Eller

SAIC - H. G. Sutter

CHARACTERIZATION PROGRAM BIWEEKLY REPORT FOR THE PERIOD ENDING SEPTEMBER 23, 1994

SIGNIFICANT ACCOMPLISHMENTS

The Baseline Sampling Schedule, Revision 3 was completed on September 21, 1994. The signed and approved schedule shows field activities including 82 rotary, 40 push, 30 auger, 53 grab, and 92 vapor samples scheduled through October 1997. This document is an integrated sampling schedule. The schedule will be sent to the U.S. Department of Energy, Richland Operations Office (RL) and then to the Defense Nuclear Facilities Safety Board (DNFSB) to meet the 93-5 Commitment 1.11.
(WBS 1.1.1.4.2)

Personnel from Westinghouse Transportation, RL, and U.S. Department of Energy-Headquarters (DOE-HQ) met on September 21, 1994, to resolve the issue relative to the Nuclear Regulatory Commission (NRC) stopping review of the PAS-1 Waste Tank Sample Amendment for license modification. Westinghouse Hanford Company (WHC) decided to withdraw the request for review from the NRC and submit the request for review to the DOE-HQ Certification Office. To expedite the review to meet the January 1995 goal for certification, DOE-HQ agreed to accept the previous NRC approvals of the PAS-1 Cask without re-review and WHC agreed to make available for the review team a PAS-1 Cask for inspection in a meeting to be held in the near future. (WBS 1.1.1.4.5)

PROBLEMS/ISSUES

Efforts to obtain twenty DOE-7A LANL 12B-65 Fiberboard Boxes with Lead Shielded Inner Packaging for transfer from Los Alamos National Laboratory (LANL) to Hanford continue to be unsuccessful. DOE-HQ assistance in resolving this issue continues. Transfer of these containers to Hanford is essential in order to meet the September 30, 1994, Defense Nuclear Facilities Safety Board (DNFSB) 93-5 Implementation Plan commitment for sample analysis transport. Meeting the commitment date is in jeopardy. (WBS 1.1.1.4.5)

DETAILED WORK ACTIVITIES

TECHNICAL INTEGRATION AND PLANNING (WBS 1.1.1.4.1)

DOE-HQ requested a status meeting at Hanford on September 26, 1994, to receive status on the 93-5 Implementation Plan commitments.

The Multi-Year Work Plan (MYWP) was approved by WHC and RL senior management on September 23, 1994. Currently TWRS is working to prioritze all FY-95 and FY-96 work under the program. This includes defining Planning Priority Gride (PPG) scoring team to score and

prioritze scope with each Program Manager. The PPG score will determine the benefit associated with each activity. The results will be placed into a database and prioritzed for Program Integration Team (PIT) review. The cost/benefit ratio will be the primary method for determining prioritization.

We are currently reviewing with RL all planned work scope, including work scope approved by RL at mid year to move into FY 1995, plus work scope not completed at FY 1994 year end. Once all remaining FY 1994 and new FY 1995 work scope is agreed to by RL, the aggregated scope of the two years will be balanced to FY 1995 budget target. The lowest priority FY 1995 scope will be moved to FY 1996 to reach Characterization Program budget celings.

WASTE TANK SAMPLING (WBS 1.1.1.4.2)

Push mode sampling continued in tank 241-SY-103 on September 13, 1994. Five additional segments (segments #6, #7, #8, #9, and #10) from tank riser #14A were shipped to the laboratory on September 15, 1994.

Three push mode core samples (#11, #12, and #13) were obtained from tank 241-SY-103, riser #14A, on September 16, 1994 and shipped to the 222-S Laboratory on September 19, 1994.

The last two push mode segments (#14 and #15) from tank 241-SY-103 were removed on September 19, 1994, which completed the planned sampling in riser #14A. Truck set up for push mode sampling in riser #7B is in progress.

The auger sample from tank 241-BY-108 was completed on September 13, 1994.

Set up for the heated vapor probe sample from tank 241-C-111 was completed and the vapor sample obtained on September 13, 1994.

Two push mode segments from riser #14A were shipped to the 222-S Laboratory on September 21, 1994. The segments, #14 and #15, from tank 241-SY-103 were the last to be taken from this riser.

Sampling set up was completed on September 21, 1994, in preparation for type 2 vapor sampling of tank 241-BY-109. The vapor sample was obtained on September 22, 1994.

ANALYTICAL INTEGRATION (WBS 1.1.1.4.3)

Idaho National Engineering Laboratory (INEL) upgrades are on schedule for a October 31, 1994, startup to provide safety screening and safety resolution analytical support for characterization. The Quality Assessment of INEL's Laboratory was performed, under the direction of WHC Office of Quality Assessment, during the week ending September 23,

1994, and preliminary results indicate that no major issues have been identified.

Pacific Northwest Laboratory's (PNL's) 325 Laboratory remains in a standdown but progress toward startup continues. The PNL Safety Review Council (SRC) completed their assessment of facility operations. This assessment included staff interviews, laboratory observations, and a Laboratory 421 Demonstration (i.e., Mass Spectrometer calibration and sample analysis). All action items identified except two have been completed. The Readiness Plan for Resumption of 325 Building Radiological Work was issued.

RL completed an assessment of the 325 Building Operations. This assessment included the evaluation of Safe Operating Procedure training including post training practice sessions and other observations of the Laboratory 421 and extruder removal demonstrations. Initial RL comments addressing radiological activities in the facility have been provided. A meeting with RL to address open items and corrective action is scheduled for September 27, 1994. The RL Operational Readiness Assessment is scheduled to start the week of September 26, 1994.

Tank 241-SY-103 push mode material segment five from riser #14A was extruded on September 12, 1994. Segment five contained approximately 27 grams of solid material (saltcake) and 270 milliliters of drainable fluid.

The remaining push mode samples (segments 6-15) from tank 241-SY-103, riser #14A, were received at the 222-S Laboratory. Segments 6-13 were extruded during this two week period with segments 14 and 15 scheduled for extrusion September 26, 1994. Segments 1-8 were very similar in appearance (i.e., primarily dark brown drainable fluid with varying amounts of slushy crystalline solids present). A clear change occurred with segment 9 as the sample appeared as a thin sludge or drainable solid with subsequent segments (10-13) increasing in thickness until sample was paste like and held its shape following extrusion.

A summary of percent sample recovery, available through September 23, 1994, is as follows:

Segment Number	Percent Recovery
1	91.3
2	91.3
3	91.2
4	100
5	95
6	92
7	88
8	98
9	92

The tank 241-U-106 compatibility grab sample was received at the 222-S Laboratory for analyses on September 15, 1994.

222-S Laboratory and 325 Laboratory personnel participated in a September 22, 1994, meeting to discuss changing the nature of the Tank Characterization Plans (TCPs). Details have yet to be finalized but under the newly proposed document scheme, TCPs would no longer serve as a contract between the laboratories and Tank Waste Remediation System (TWRS). This function would instead be served by a more succinct sampling and analysis plan. Additional research is being conducted by TWRS relative to the viability of this approach.

The Sample Exchange/Evaluation (SEE) triad has transmitted the Phase II final report to 222-S Laboratory and 325 Laboratory management for approval. A meeting is scheduled September 28, 1994, for signature.

EVALUATION, DOCUMENTATION, AND REPORTING (WBS 1.1.1.4.4)

Revision 1 of the "Interim Data Quality Objectives for Waste Pretreatment and Vitrification" was finalized and released on September 15, 1994. This report documents the current characterization requirements to support pretreatment, low level waste immobilization, and high level waste immobilization.

The Data Quality Objectives (DQOs) Review Team met September 15 and September 20, 1994, to review the DQO process as applied to TWRS. Several significant problems were identified affecting the ability to apply the DQO process to disposal programs. Action items to resolve these problems were identified. The results of the meetings are being documented and distributed.

ANALYTICAL TECHNOLOGY DEVELOPMENT (WBS 1.1.1.4.6)

None to report.

INFORMATION MANAGEMENT (WBS 1.1.1.4.7)

None to report.

9457269

Attachment 3

12 Pages

SITE MANAGEMENT SYSTEM	WESTINGHOUSE HANFORD COMPANY 1.1 TANK WASTE REMEDIATION SYSTEM	SEPTEMBER 1994

EXPENSE COST PERFORMANCE

($ In Millions)

WBS / TITLE	FY TO DATE					AT COMPLETION (FY)				COMMENTS
	BUDGET COST		ACTUAL COST	VARIANCE		BAC	EAC **	FYSF	PROJ'D C / O SCOPE	
	WORK SCHED	WORK PERF	WORK PERF	SCHED	COST					
(1130-0) CHARACTERIZATION										
-WESTINGHOUSE HANFORD COMPANY										
1.1.1.4.1 Tech. Integration & Planning	1.4	1.2	1.1	(0.2)	0.1	1.4	0.9	0.9	0.0	
1.1.1.4.2 Waste Tank Sampling	9.0	6.9	18.5	(2.1)	(11.6)	9.0	20.8	17.8	3.0	
1.1.1.4.3 Analytical Integration	26.8	23.2	22.7	(3.6)	0.5	26.8	24.9	23.4	1.5	
1.1.1.4.4 Eval'n, Doc. & Report.	2.5	2.5	3.9	0.0	(1.4)	2.5	3.8	3.8	0.0	
1.1.1.4.6 Analytical Tech. Develop.	6.8	5.7	5.1	(1.1)	0.6	6.8	5.1	5.1	0.0	
1.1.1.4.7 TWRS Info. Mgmt.	3.9	3.6	2.8	(0.3)	0.8	3.9	2.6	2.6	0.0	
TOTAL - W.H.C.	50.4	43.1	54.1	(7.3)	(11.0)	50.4	58.1	53.6	4.5	
-P.N.L.										
1.1.1.4.1 Tech. Integration & Planning	0.3	0.3	0.3	0.0	0.0	0.3	0.3	0.3	0.0	
1.1.1.4.2 Waste Tank Sampling	1.3	0.7	0.6	(0.6)	0.1	1.4	1.2	0.5	0.7	
1.1.1.4.4 Eval'n, Doc. & Report.	3.3	3.1	2.8	(0.2)	0.3	3.2	3.6	3.2	0.4	
1.1.1.4.6 Analytical Tech. Develop.	6.5	5.9	5.1	(0.6)	0.8	6.5	5.9	4.8	1.1	
TOTAL - P.N.L.	11.4	10.0	8.8	(1.4)	1.2	11.4	11.0	8.8	2.2	
-DOE										
?????? GEOTECH	0.1	0.1	0.1	0.0	0.0	0.1	0.4	0.4	0.0	
TOTAL - DOE	0.1	0.1	0.1	0.0	0.0	0.1	0.4	0.4	0.0	
-L.A.N.L.										
1.1.1.4.3 Analytical Integration	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	
1.1.1.4.4 Eval'n, Doc. & Report.	2.4	2.1	2.2	(0.3)	(0.1)	2.4	2.2	2.2	0.0	
1.1.1.4.6 Analytical Tech. Develop.	1.0	1.0	0.9	0.0	0.1	1.0	0.8	0.8	0.0	
TOTAL - L.A.N.L.	3.4	3.1	3.1	(0.3)	(0.0)	3.4	3.1	3.1	0.0	
-S.N.L.										
1.1.1.4.6 Analytical Tech. Develop.	0.5	0.5	0.5	0.0	0.0	0.5	0.5	0.5	0.0	
TOTAL 1.1.1.4 (1130)	65.8	56.8	66.6	(9.0)	(9.8)	65.8	73.1	66.4	6.7	

** EAC IS DEFINED AS THE ESTIMATED TOTAL COST TO COMPLETE THE WORKSCOPE AS DEFINED BY THE F.Y.W.P. AND CLASS 1 CHANGES

CHARACTERIZATION PROGRAM
Milestones Completed in September

TYPE	#	TITLE OF MDS	DUE DATE	STATUS (WHC to DOE)
DNFSB	1.11	Field Schedule for Sampling All Activ's FY95-6	6/30/94	Submitted on 9/26/94
WHC	507	Analysis of Scanning Data	8/26/94	Submitted on 9/30/94
DNFSB	1.20	TWRS Risk Acceptance Criteria	8/31/94	Submitted on 9/30/94
WHC	501	Issue Monthly QA Report	9/12/94	Submitted on 9/12/94
Other		August Monthly report to DOE-RL *(Informal DNFSB)	9/15/94	Submitted on 9/26/94
WHC	514	Recommend TIC/TOC Methods	9/16/94	Submitted on 9/30/94
WHC	434	TWRS DQO Applications	9/21/94	Submitted on 9/15/94
WHC	473	Final Letter FY94 LA/MS Activities	9/23/94	Submitted on 9/30/94
WHC	505	LA/MS Hot Cell Safety Analysis (PNL)	9/23/94	Submitted on 9/23/94
WHC	509	Issue Feasibility Report on Acoustics	9/23/94	Submitted on 9/26/94
WHC	513	Annual Report of Waste Reduct. Techn Achievemts	9/28/94	Submitted on 9/28/94
WHC	464	Status Report on In Situ Viscosity Measurement Sys	9/29/94	Submitted on 9/30/94
WHC	484	Sample Waste Storage Disposal Study and Report	9/29/94	Submitted on 9/29/94
WHC	534	Procurement of Cone Penetrometer Delivery System	9/29/94	Submitted on 9/21/94
DNFSB	1.16	Historical Tank Layering Models	9/30/94	Submitted on 9/30/94
DNFSB	6.5	Data Loading of 20 Tanks into TCD/(M-44-06)	9/30/94	Submitted on 9/30/94
TPA	519	20 Tank Characterization Reports/(M-44-05)	9/30/94	Submitted on 9/28/94
WHC	436	3 Tank Characterization Reports (PNL)	9/30/94	Submitted on 9/28/94
WHC	437	4 Tank Characterization Reports (WHC)	9/30/94	Submitted on 9/30/94
WHC	439	Historical Tank Content Estimate Reports	9/30/94	Submitted on 9/29/94
WHC	520	13 Tank Characterization Reports (LATA)	9/30/94	Submitted on 9/28/94
WHC	443	2 Releases of TCD Software Enhancements	9/30/94	Submitted on 9/27/94

ISSUES

WBS NO.	DATE IDENT	ISSUE	IMPACT	STATUS
Characterization				
1.1.1.4-27	1/94	Rotary Mode Core Sampling System redeployment schedule has experienced a delay due to mechanical design problems with the grapple box cable shaft and other component failures.	The Rotary Mode Core Sampling redeployment milestone of March 31, 1994 has been missed. Sampling schedules are being adjusted to accommodate FY 1994 sampling commitments.	The rotary truck is still not deployed. The rotary mode core sampling truck has one remaining pre-start item to close prior to deployment for sampling in Tank 241-BY-106. Completion is now expected by the first quarter of FY 1995. All issues are resolved except welding issues. Upon completion of the planned corrective actions, the truck will be released to Operations to begin sampling.
1.1.1.4-47	4/94	Many SSTs only have one to three risers available for sampling instrument installations.	Presently, safety initiative and Tri-Party Agreement milestone schedules show instruments (Thermocouple trees (TCs), Liquid Observation Wells (LOWs) installed before the tank is sampled, further reducing the number of available risers.	An integrated sampling schedule (that did not include LOW integration) has been developed and issued and includes logic to install TCs/LOWs after the tank has been characterized.

ISSUES

WBS NO.	DATE IDENT	ISSUE	IMPACT	STATUS
1.1.1.4-64	6/94	The 325 laboratory has not restarted radiological work as the latest restart package was not accepted by DOE-HQ and RL. (Refer to issue number 1.1.2.3-57 on pg. XIII-9, for more details).	Radiological activities in the 325 Building continue to be suspended due to the radiation control incidents.	325 Building restart approval milestone has been moved from October 18, 1994 to November 9, 1994. The WHC 340 Facility has committed to take 325 Shielded Analytical Laboratory (SAL) waste. Waste generated during hot cell cleanout is very acidic and does not meet the waste acceptance criteria for the 340 Facility. Permission is needed by Ecology to treat this waste.

Activity ID	Early start	Early finish	Remaining duration	Activity
PS02-4	17AUG94A	26SEP94A	0	SY-103 Push Sample 2 Segment 15 (Hold for Analy)
VS02-3	31AUG94A	01SEP94A	0	C-101 Vapor Sample (3)
HP08-4	01SEP94A	01SEP94A	0	C-101 INSTALL HVP
VS67-4	07SEP94A	07SEP94A	0	TX-118 Vapor Sample (2)
GS09-4	12SEP94A	14SEP94A	0	U-106 Process Grab Sample
VS02-A	12SEP94A	12SEP94A	0	C-111 Vapor Sample (3)
GS56-4	27SEP94A	27SEP94A	0	AW-104 Grab Sample Compatability-Jones
HP29-6	27SEP94A	27SEP94A	0	C-107 INSTALL HVP
AS08-4	28SEP94A	05OCT94A	0	BX-105 Auger Sample 2 Segment 2
VS02-5	28SEP94A	29SEP94A	0	C-107 Vapor Sample (3)
GS57-4	29SEP94A	29SEP94A	0	AW-103 Grab Sample Compatability-Jones
GS60-4	04OCT94A	04OCT94A	2	AY-101 Grab Sample Compability - Jones
AS05-4	12OCT94A	17OCT94A	0	B-102 Auger Sample 1 Segment 1
GS81-4	17OCT94A	18OCT94A	0	AN-107 Grab Sample Process Control - Jones
HPE6-4	19OCT94A	20OCT94A	0	BY-108 Install HVP
GS58-4	20OCT94A	20OCT94A	0	AN-102 Grab Sample Process Control - Jones
PS05-10	24OCT94	28OCT94	5	EQUIPMENT - Visual inspection Push Truck
RS04-4	24OCT94*	18NOV94	20	BY-106 Rotary Sample 2 Segment 13
AS11-4	25OCT94*	27OCT94	3	A-104 Auger Sample 4 Segment 1
VS0K-4	25OCT94*	26OCT94	2	BY-107 Vapor Sample (3) (TC Installed)
GS54-4	26OCT94*	27OCT94	2	244A DCRT Grab Sampling
HP0M-4	27OCT94*	27OCT94	1	BY-103 Install HVP
VSE6-4	27OCT94	31OCT94	3	BY-108 Vapor Sample (3)
GS55-4	28OCT94	31OCT94	2	ER 311 Grab Sample Process Control(CATCH T
VS0M-4	28OCT94*	01NOV94	3	BY-103 Vapor Sample (3)
PS05-4	31OCT94	29NOV94	20	C-103 Push Sample 2 Segment 4
TC21-4	31OCT94*	02NOV94	3	T-107 Thermocouple Installation

AUG 8 15 22 29 | SEP 5 12 19 26 | OCT 3 10 17 24 31 | NOV 7 14 21 28 | DEC 5 12

Project Start 01OCT93
Project Finish 29DEC97
Data Date 24OCT94
Plot Date 25OCT94

(c) Primavera Systems, Inc.

Early Bar
Progress Bar
Critical Activity

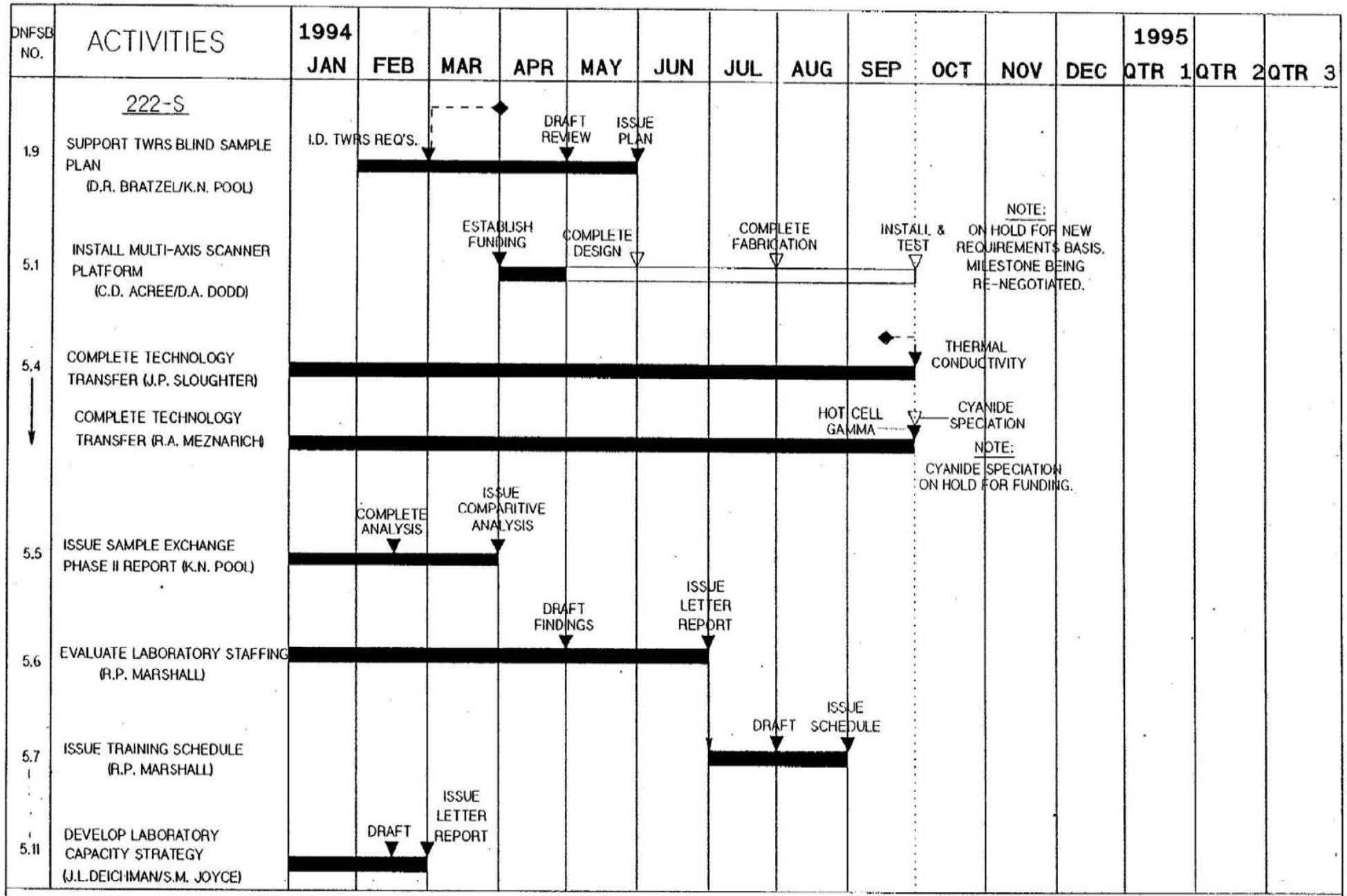
WESTINGHOUSE-HANFORD
TANK FARM OPERATIONS SAMPLING
FY 95 CURRENT SCHEDULE REV 3

Sheet 1 of 1

D.HEALEY 2-3698 G.STANTON 3-5590

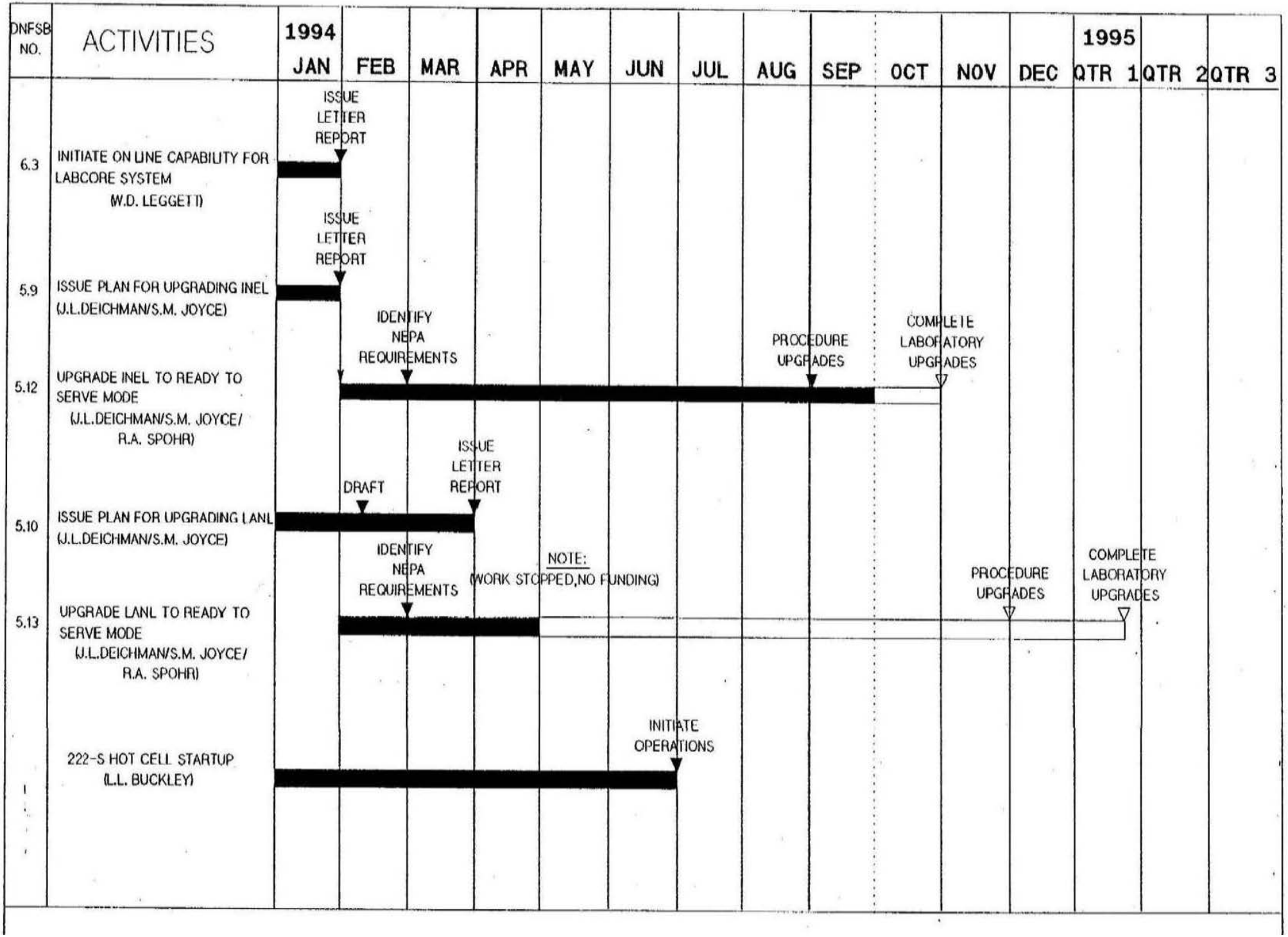
Date	Revision	Checked	Approved

93-5 IMPLEMENTATION PLAN

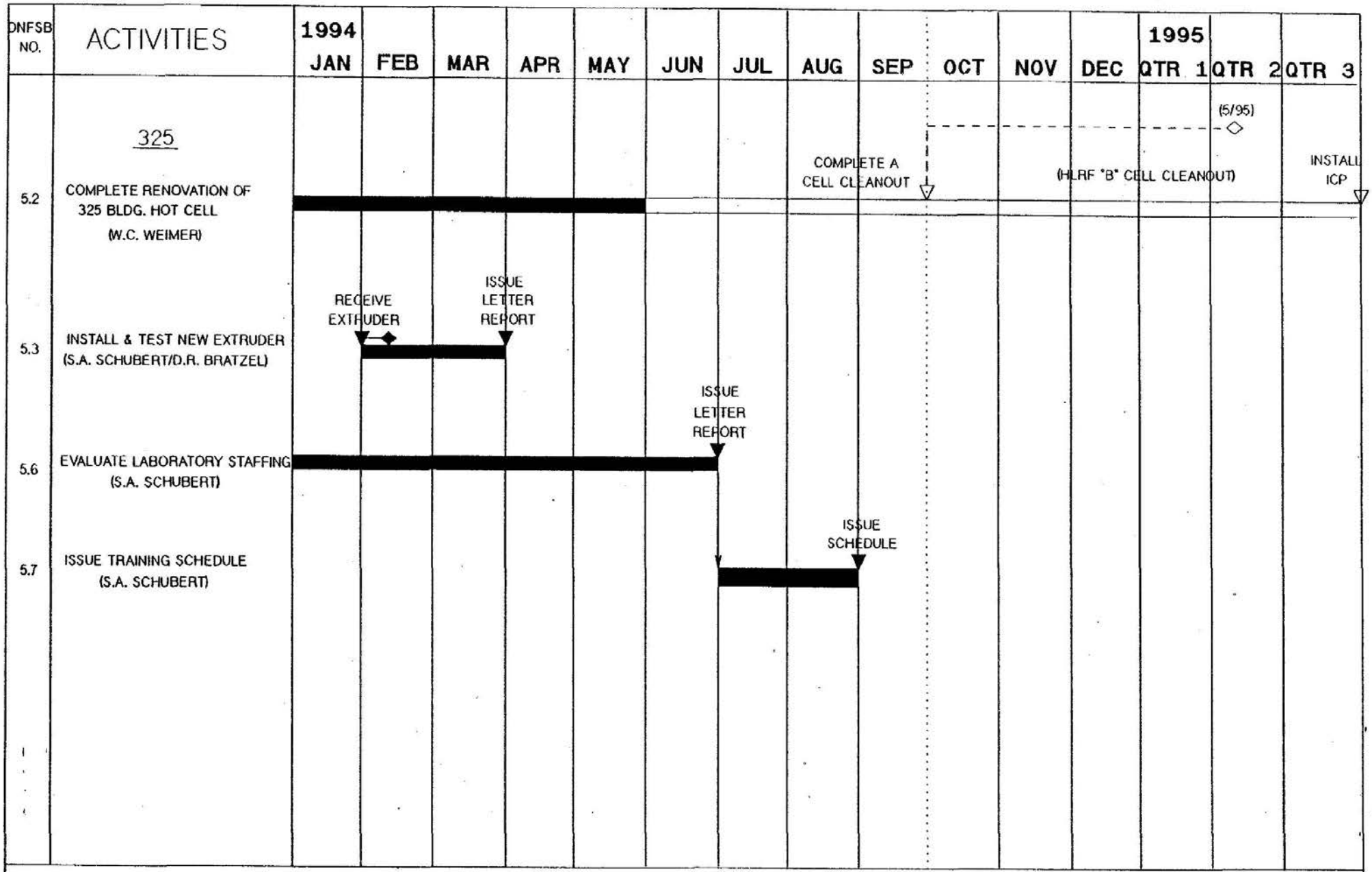


DATE: 2/4/94 REV. 0 ◇ FORECAST DATE PAGE 1

93-5 IMPLEMENTATION PLAN



93-5 IMPLEMENTATION PLAN

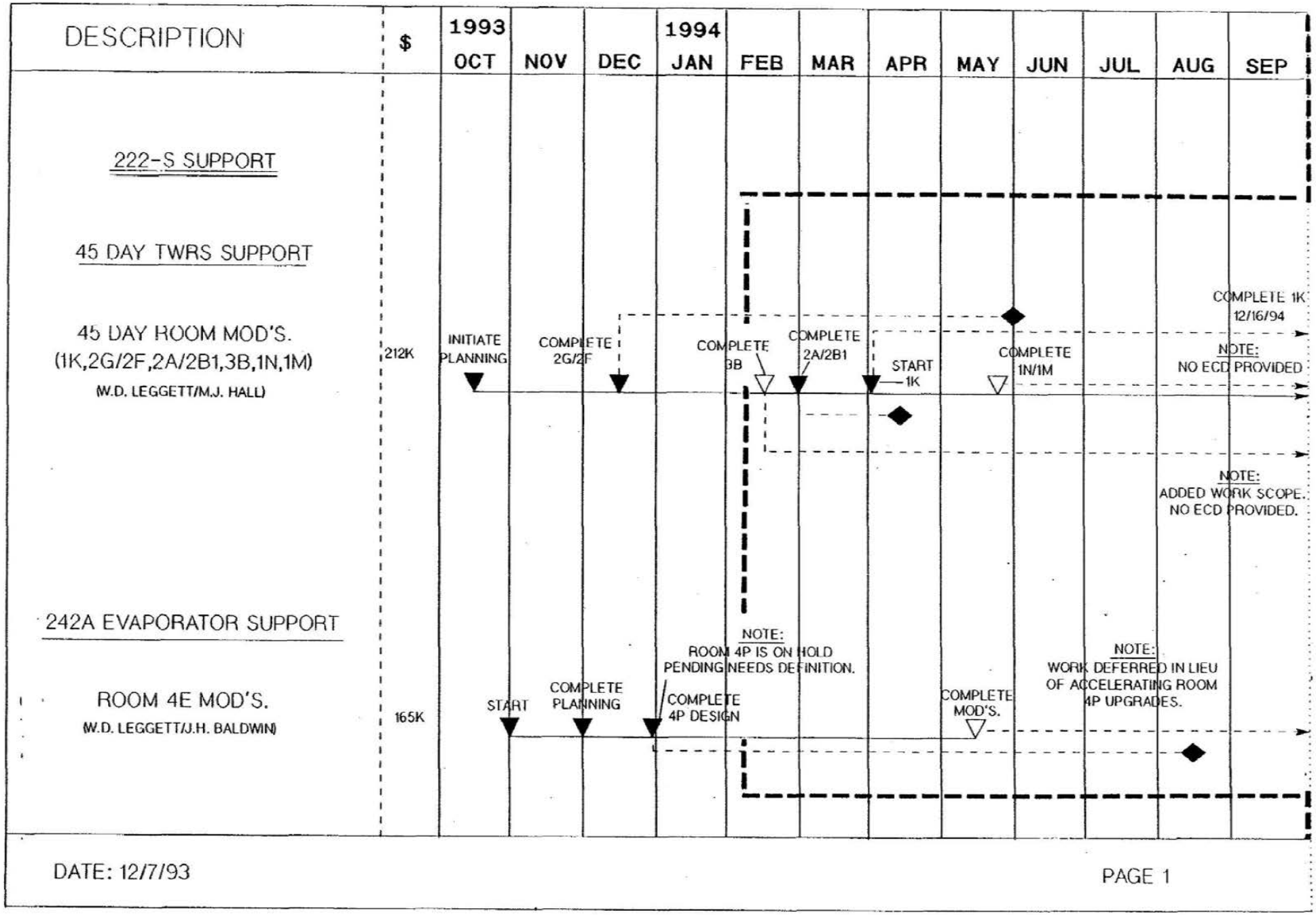


DATE: 2/4/94 REV. 0 ◇ FORECAST DATE PAGE 3

222-S & 325 PREPARATIONS TO SUPPORT TWRS RE-START

REV. 1

1N4C32, LABORATORY CONTINUITY OF SERVICE

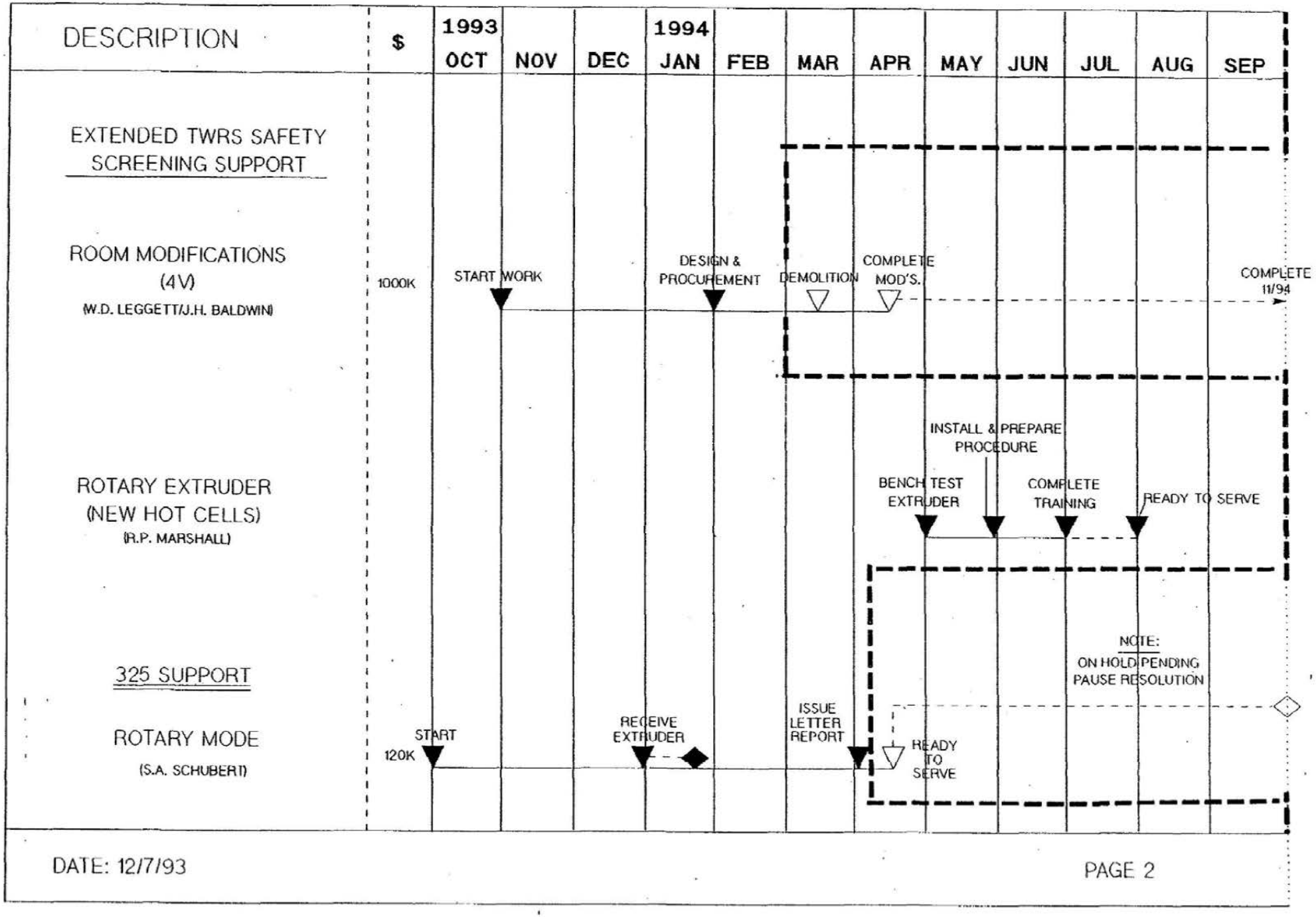


DATE: 12/7/93

222-S & 325 PREPARATIONS TO SUPPORT TWRS RE-START

1N4C32, LABORATORY CONTINUITY OF SERVICE

REV. 1



DATE: 12/7/93

Date: 10/03/94

HANFORD LABORATORIES ANALYTICAL COMMITMENTS

Lab	Tank Number	Date Sampled *	Date Rec'vd *	Safety Screen deliverable due date	Safety Screen deliverable comp. date	Lab data deliverable due date (TCP / TWAP)	Lab data deliverable comp. date	Data package valid. due date	Data package valid. comp. date	Data package release due date	Data Package release comp. date
	AP-108	06/29/94	06/30/94			09/27/94		10/29/94		11/12/94	
	C-111	04/22/94	04/22/94	06/06/94	06/06/94	10/19/94		11/18/94		11/24/94	
W	Slurry1-5	06/09/94	06/09/94			09/12/94	09/22/94	10/13/94		10/24/94	
H	C-108	≡06/01/94	¤	07/17/94	07/14/94						
C	SY-103 (auger)	06/08/94	06/10/94			07/20/94 10/24/94	07/14/94				
2	BX-108	≡	¤07/22/94	¤09/05/94	08/30/94	¤09/05/94	08/30/94				
2	U-106	09/15/94	09/15/94			11/14/94					
2	SY-103	09/21/94	09/21/94	11/05/94		03/20/95		04/19/95		04/19/95	
S	BX-105	≡09/30/94	¤								
P	AP-108	03/21/94	03/28/94								
N											
L											
3											
2											
5											

* Date is based on last sample taken from tank

¤ Clock not started; Last sample not received

≡ Some samples have been taken

Not required

222-S & 325 Weekly Production Report

SST AND DST Tank Analysis

Date: 10/03/94		222-S Laboratory						Analytical Chemistry Laboratory						AS				Current Status
Tank	TOTAL AEU	EXTRUSION & SAMPLE PREP		ANALYSIS		REPORT PREP		EXTRUSION & SAMPLE PREP		ANALYSIS		REPORT PREP		VALIDATION		RELEASE		
		% SCH	% COM	% SCH	% COM	% SCH	% COM	% SCH	% COM	% SCH	% COM	% SCH	% COM	% SCH	% COM	% SCH	% COM	
AP-108	0.8	100	100	100	100	100	99	0	100	0	100	0	70	0	0	0	0	OS
C-111	0.2	100	100	100	98	75	72	-	-	-	-	-	-	0	0	0	0	*5DB
Slurry (1-5)	0.6	100	100	100	100	100	100	-	-	-	-	-	-	40	33	0	0	OS
C-108	0.3	100	100	95	96	40	61											*OS
SY-103(A)	0.2	100	100	100	100	85	82											7DA
SY-103(P)	2.5	40	60	5	10	0	0											5DA

Legend: (1) Not Statused (D)-Days (B)-Behind (A)-Ahead (OS)-On Schedule (AOS) Ahead of schedule

*Based on 222-S internal schedule, clock not officially started.

**Based on first two auger samples.

ACCOMPLISHMENTS:

- To date 15 segments have been extruded from SY-103 of a total of 15 received.

ISSUES/COMMENTS:

- 325 Lab in temp. radiological operations pause; 222-S can handle TWRS sample load June - October period.
- Approximately 1.0 AEU's in process at 222-S Lab.
- TWRS sampling will move from SY-103 to C-103.
- Data Package for AP-108 will be sent for validation this week.

CURRENT PLANNED TANK RECEIPT

TANK	LAB	AEU	PLANNED DATE	TCP AVAIL.
BX-105	222-S	0.1	10/03/94	Yes
B-102	222-S	0.2	10/07/94	Yes
C-103	222-S	2.1	10/06/94 to 11/02/94	No

TOTAL FYTD TANK AEU PRODUCTION

222-S	3.82
325	0.23
Total	4.05

WEEKLY TANK AEU PRODUCTION

222-S	0.29
325	0.00
TOTAL	0.29

Prepared by
C. L. Thomas 10/03/94