

SECTION B:2

ANALYTICAL

SERVICES

(222-S, HASP, WSCF)



PROJECT MANAGERS

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SUMMARY

Analytical Services [222-S, Hanford Analytical Services Program (HASP), Waste Sampling and Characterization Facility (WSCF)] consists of Analytical Services, PBS WM06, WBS 1.2.4.

NOTE: Unless otherwise noted, the Safety, Conduct of Operations, Milestone Achievement, and Cost/Schedule data contained herein is as of April 30, 2000. Other information is updated as of May 19, unless otherwise noted.

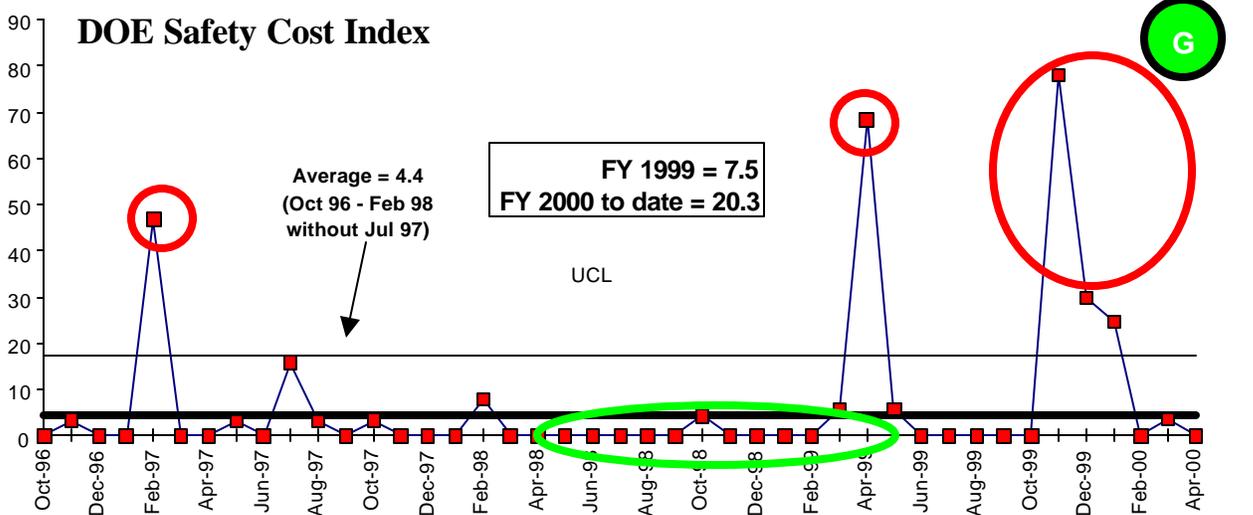
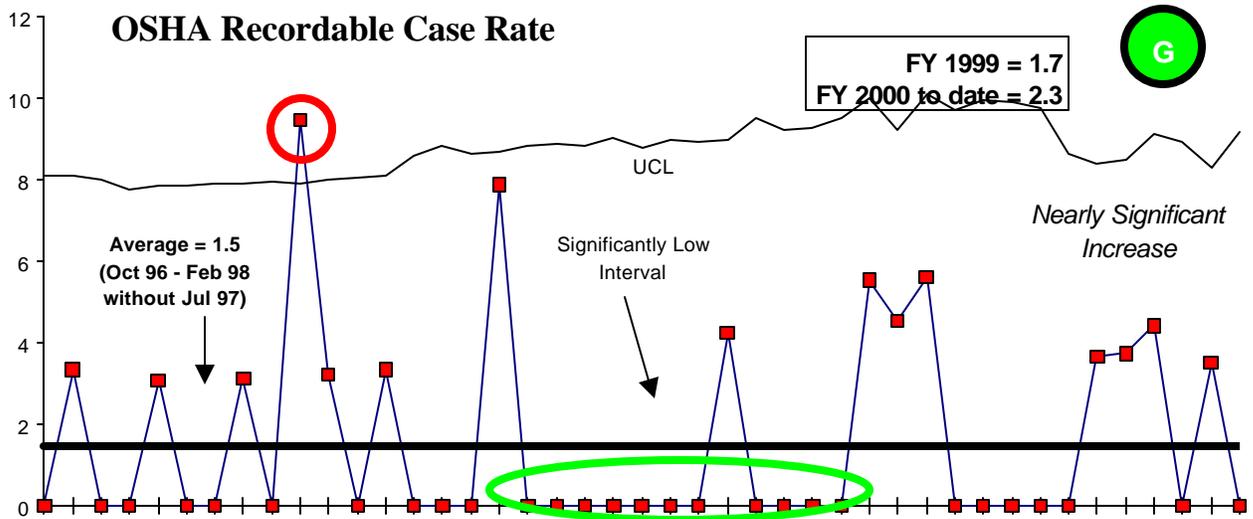
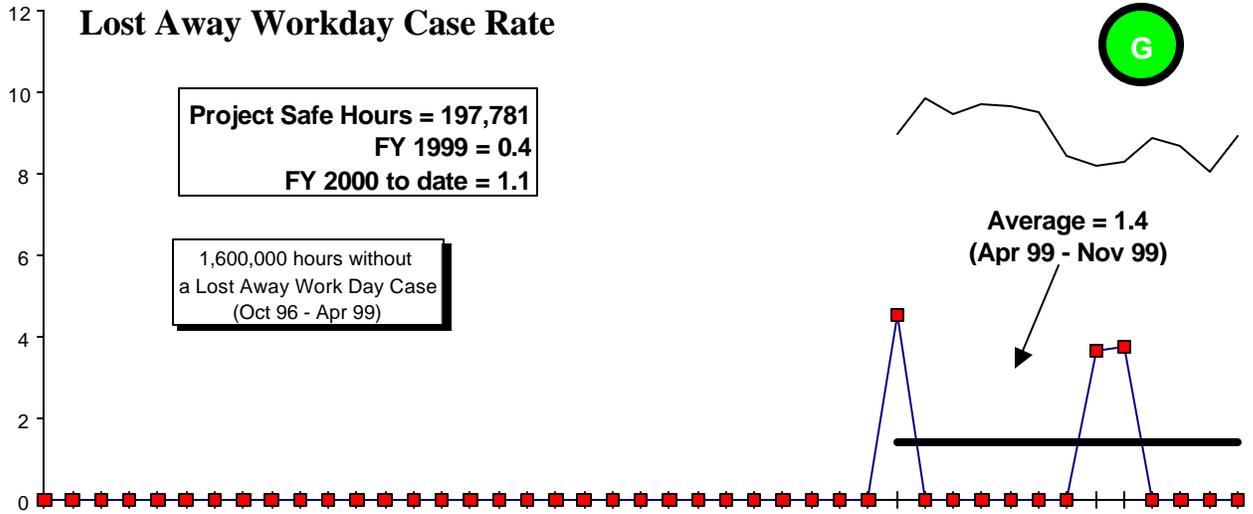
Fiscal-year-to-date-milestone performance (EA, DOE-HQ and RL) shows no milestones are due this reporting period.

ACCOMPLISHMENTS

- A total of 6.7 Analytical Equivalent Unit (AEUs) processed at the 222-S Laboratory through April 2000 (FYTD) versus the planned 6.5 AEUs in support of the RPP (TWRS) tank characterization program. Production through May 19 is 7.7 AEUs. On track to meet the 11 AEU commitment. Supported completion of the 242A Evaporator campaign that was completed on May 2, seven days ahead of schedule. Performed 11,000 analyses (FYTD) through May 17 at Waste Sampling and Characterization Facility (WSCF) for a wide variety of customers as planned.
- Procedures, methods, equipment, and training were significantly revised to meet the new Waste Isolation Pilot Plant (WIPP) permit from the State of New Mexico. Supported closure of the Corrective Action Reports (CARs) from the Carlsbad Area Office audit of the Hanford Transuranic (TRU) Project. Gas Chromatograph (GC) Mass Spectrometer #7 successfully passed the Preconceptual Design Phase (PDP) (WIPP) and the operating procedure was declared WIPP qualified. GC Mass Spectrometer # 7 is a new, automated gas chromatograph and will support vapor analysis for drums to be shipped to Carlsbad.
- Hanford Analytical Services Program (HASP) developed a FY 2001 Instrument Capital Plan for both 222-S and WSCF, based on instrument age, instrument utilization rate, efficiency, and sample forecast. A national survey on instrument utilization rates was obtained and compared to the Analytical Services (AS) laboratories. The Instrument Capital Plan will support development of the FY 2001 baseline. Analytical Services won awards for booth displays in two categories at the Health and Safety Expo 2000: “Most Interactive” and “Kid’s Favorite.” This was out of a possible total of five awards given for booth displays.

SAFETY

In April, there were no OSHA recordable cases, no lost/restricted days and four first aid cases. The project continues to focus on safety and personal and team accountability. The five-month trend is a positive indication for performance during the second half of FY2000.

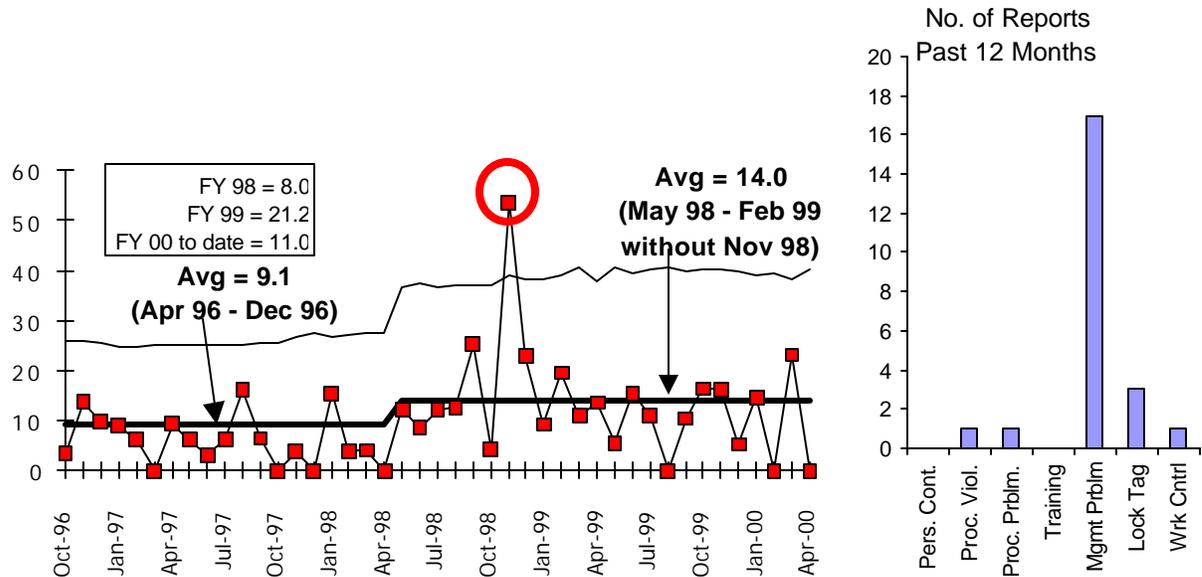


CONDUCT OF OPERATIONS / ISMS STATUS

CONDUCT OF OPERATIONS

EVENTS PER 200,000 HOURS

Green



ISMS STATUS

Green

Analytical Services ISMS status is included in the Waste Management Project Section of this report. Overall, on track for the June 2000 Phase II verification. Prepare Projects for, and support DOE Phase II efforts.

BREAKTHROUGHS

Green

The Site Management Board's decision (May 1, 2000) to retain Waste Sampling and Characterization Facility (WSCF) as a core laboratory while seeking ways to make it more like a commercial operation (to reduce costs) enables planning to consider the 222-S/WSCF laboratories as a single support system for site processing facilities - including the vitrification plant. It also should slow attrition of key staff needed to support critical site milestones and for potential cold testing support to the vitrification plant.

Green

OPPORTUNITIES FOR IMPROVEMENT

British Nuclear Fuel Limited, Inc. (BNFL) and Bechtel International have begun (May 2000) providing laboratory analytical requirements and turnaround time needs to determine whether support from 222-S/WSCF would enable a significant downsizing of the process support laboratory planned for the vitrification plant. A white paper was funded by CH2M Hill Group (CHG) to estimate cost reduction opportunities through the use of 222-S and WSCF resources.

UPCOMING ACTIVITIES

WIPP Certification and Waste Shipments — Continue to support the production goal of headspace analysis of 253 drums for shipment to WIPP. Complete automation of Gas Chromatographs (GC) #7 and #8 to support WIPP package assembly.

ORP Readiness to Proceed — It has been determined that Analytical Services is prepared to support the readiness to proceed decision for the BNFL/Bechtel contract. Key follow-up actions are:

- Formal specification of requirements from ORP to RL and then to FH
- Stable funding of needed equipment and facility repair in Multi-Year Work Plans (RL and ORP)
- Funding replacement of obsolete laboratory support systems (Information Management)
- Funding of staff to maintain core competency.

COST PERFORMANCE (\$M):

	BCWP	ACWP	VARIANCE
Analytical Services	\$15.4	\$16.4	- \$1.0

The \$1.0 million (6 percent) unfavorable cost variance is due to increased cost for 222-S Laboratory polychlorinated biphenyl (PCB) recovery and increased resources required to support compliance issues.

SCHEDULE PERFORMANCE (\$M):

	BCWP	BCWS	VARIANCE
Analytical Services	\$15.4	\$16.0	- \$0.5

The \$0.5 million (3 percent) unfavorable schedule variance is within the established threshold.

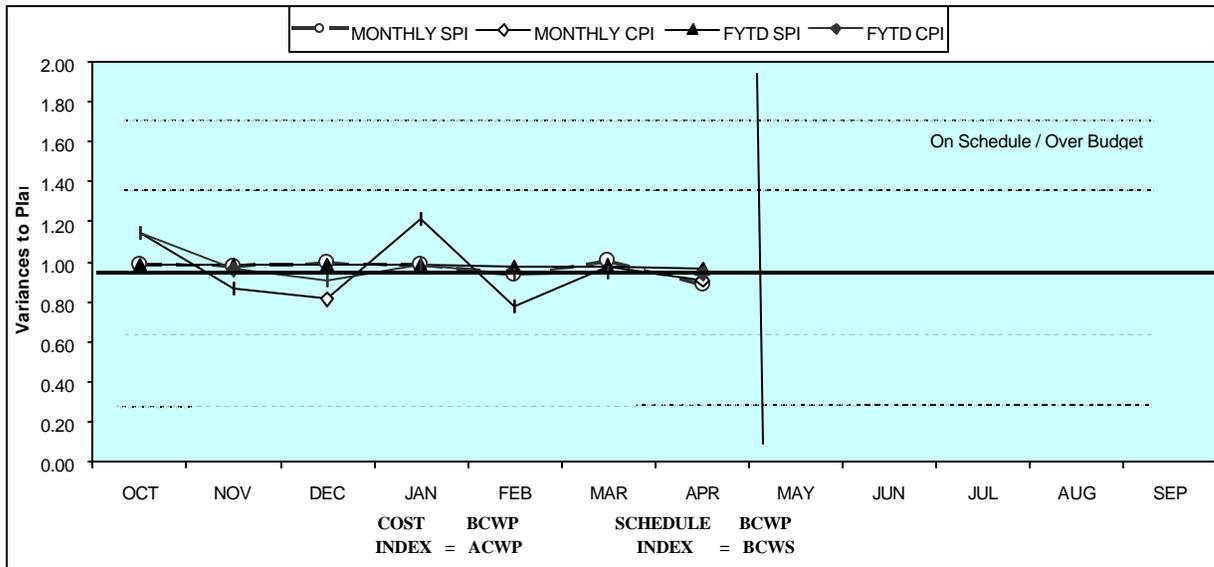
FY 2000 COST/SCHEDULE PERFORMANCE – ALL FUND TYPES CUMULATIVE TO DATE STATUS – (\$000)

		FYTD									
Bv PBS	Analytical Services	BCWS	BCWP	ACWP	SV	%	CV	%	PEM	FYSF	EAC
	WBS 1.2.4 Analytical PBSWM06 Services	\$ 15,973	\$ 15,431	\$ 16,401	\$ (541)	-3%	\$ (970)	-6%	\$ 27,818	\$ 28,664	\$ 29,062
	Total	\$ 15,973	\$ 15,431	\$ 16,401	\$ (541)	-3%	\$ (970)	-6%	\$ 27,818	\$ 28,664	\$ 29,062

Note: FYSF includes projected costs for RL-managed workscope (steam and laundry).

The current spending forecast indicates an overrun of \$0.9M. Due to the unforeseen significant extra costs for Polychlorinated biphenyl (PCB) management, FH senior management has included that full recovery to budget will not be necessary.

COST/SCHEDULE PERFORMANCE INDICES (APRIL 2000 AND FYTD)



FY 2000	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MONTHLY SPI	0.99	0.98	0.99	0.98	0.94	1.00	0.88					
MONTHLY CPI	1.14	0.87	0.81	1.22	0.78	0.98	0.91					
FYTD SPI	0.99	0.98	0.99	0.98	0.97	0.98	0.97					
FYTD CPI	1.14	0.96	0.91	0.99	0.94	0.95	0.94					
MONTHLY BCWS	\$1,588	\$2,340	\$1,973	\$2,896	\$2,283	\$2,613	\$2,279	\$2,673	\$1,990	\$1,084	\$2,581	\$2,617
MONTHLY BCWP	\$1,566	\$2,288	\$1,960	\$2,848	\$2,135	\$2,624	\$2,010					
MONTHLY ACWP	\$1,369	\$2,640	\$2,414	\$2,342	\$2,741	\$2,686	\$2,208					
FYTD BCWS	\$1,588	\$3,928	\$5,901	\$8,797	\$11,080	\$13,693	\$15,973	\$18,646	\$20,635	\$22,620	\$25,201	\$27,818
FYTD BCWP	\$1,566	\$3,854	\$5,814	\$8,662	\$10,797	\$13,421	\$15,431					
FYTD ACWP	\$1,369	\$4,009	\$6,423	\$8,765	\$11,506	\$14,193	\$16,401					

COST VARIANCE ANALYSIS: (- \$1.0M)

WBS/PBS

Title

1.2.4/WM06

Analytical Services

Description/Cause: The unfavorable cost variance of \$1.0 million (6 percent) is due to increased costs for 222-S Tank 104 poly-chlorinated biphenyl recovery activities; increased resources in support of compliance issues, ISM implementation, corrective action management, and chemical technologist training development.

Impact: Current yearend spending projections indicate a \$0.9M overrun.

Corrective Action: Corrective actions have been identified and implemented to control spending. Due to the unforeseen significant extra costs for PCB management, FH senior management has indicated that full recovery to budget will not be necessary.

SCHEDULE VARIANCE ANALYSIS: (- \$0.5M)

WBS/PBS

Title

1.2.4/WM06

Analytical Services

Description /Cause: The unfavorable schedule variance of \$0.5M (3 percent) is within established threshold.

Impact: None.

Corrective Action: None required.

ISSUES

Technical Issues

None.

DOE/Regulator/External Issues

PCB Management — ORP is establishing a new PCB management approach. Impacts to 222-S and WSCF could be significant and very costly, depending on the final approach taken by ORP. DOE-RL plans to seek funding from ORP to assess impacts and implementation costs of ORP changes in regulation approach.

Delay in 222-S RCRA Part B Application — Analytical Services is requesting a three month delay in submittal of the RCRA Part B application to Ecology. Delay will allow for continued good progress for resolving issues and should result in permit conditions that can be implemented.

BASELINE CHANGE REQUESTS CURRENTLY IN PROCESS (\$000)

PROJECT CHANGE NUMBER	DATE ORIGIN	BCR TITLE	FY00 COST IMPACT \$000	SCH	TECH	DATE TO CCR	CCB APP'VD	RI	APP'VD	CURRENT STATUS
WM-2000-002	1/3/00	Waste Management FY 2000 Mandated Funds Reduction	-\$879			02/17/00				Approved by RL 5/15/2000
ADVANCE WORK AUTHORIZATIONS										
		Nothing to report at this time.								

ANALYTICAL SERVICES – WBS 1.2.4 MILESTONE ACHIEVEMENT

MILESTONE TYPE	FISCAL YEAR-TO-DATE				REMAINING SCHEDULED			TOTAL FY 2000
	Completed Early	Completed On Schedule	Completed Late	Overdue	Forecast Early	Forecast On Schedule	Forecast Late	
Enforceable Agreement	0	0	0	0	0	0	0	0
DOE-HQ	0	0	0	0	0	0	0	0
EO	0	0	0	0	0	0	0	0
RI	0	0	0	0	0	1	0	1
Total Project	0	0	0	0	0	1	0	1

Tri-Party Agreement / EA Milestones
Nothing to report.
DNFSB Commitments
Nothing to report.

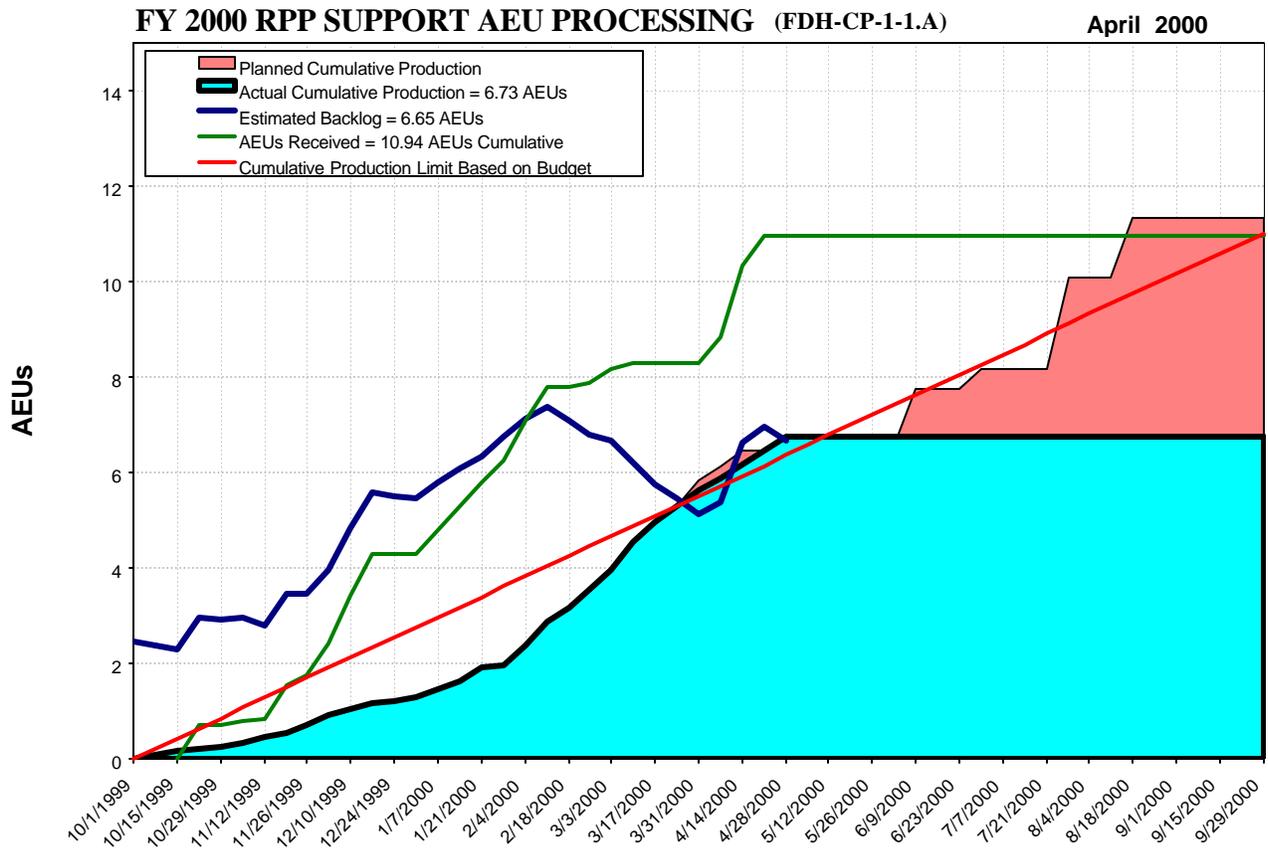
MILESTONE EXCEPTION REPORT

<u>Number/WBS</u>	<u>Level</u>	<u>Milestone Title</u>	<u>Baseline Date</u>	<u>Forecast Date</u>
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OVERDUE – 0

FORECAST LATE – 0

PERFORMANCE OBJECTIVES



Continue working with RPP on 222-S laboratory production integration. Will meet the September 2000 commitment of eleven AEUs. Production through April 2000 is 6.7 AEUs, versus a planned 6.5 AEUs. Production through May 19, 2000 is 7.7 AEUs.

KEY INTEGRATION ACTIVITIES

- Continue to support BNFL/Bechtel efforts to establish required analytical support for glassification operations.
 - In the longer term, BNFL/Bechtel could utilize unused space at WSCF for cold run test support and process laboratory analytical equipment testing.
 - The 222-S laboratory, with some refurbishment, might become a low cost option to a new large-scale laboratory associated with the glassification facility.