

Value Stream Map of HETL Environmental Labs

June 7, 2007

Improvement Suggestions

- Lab Space/layout
- Better Printing of reports
- Improve the time to approve a sample
- Improve turn-around time
- Automatic transfer of data
- More space
- Reduce paperwork
- Improve communication & delegation of responsibility
- Data entry flow easily into Starlms
- Check for different address types in LIMS
- Reduce interruptions

HETL Environmental Metrics

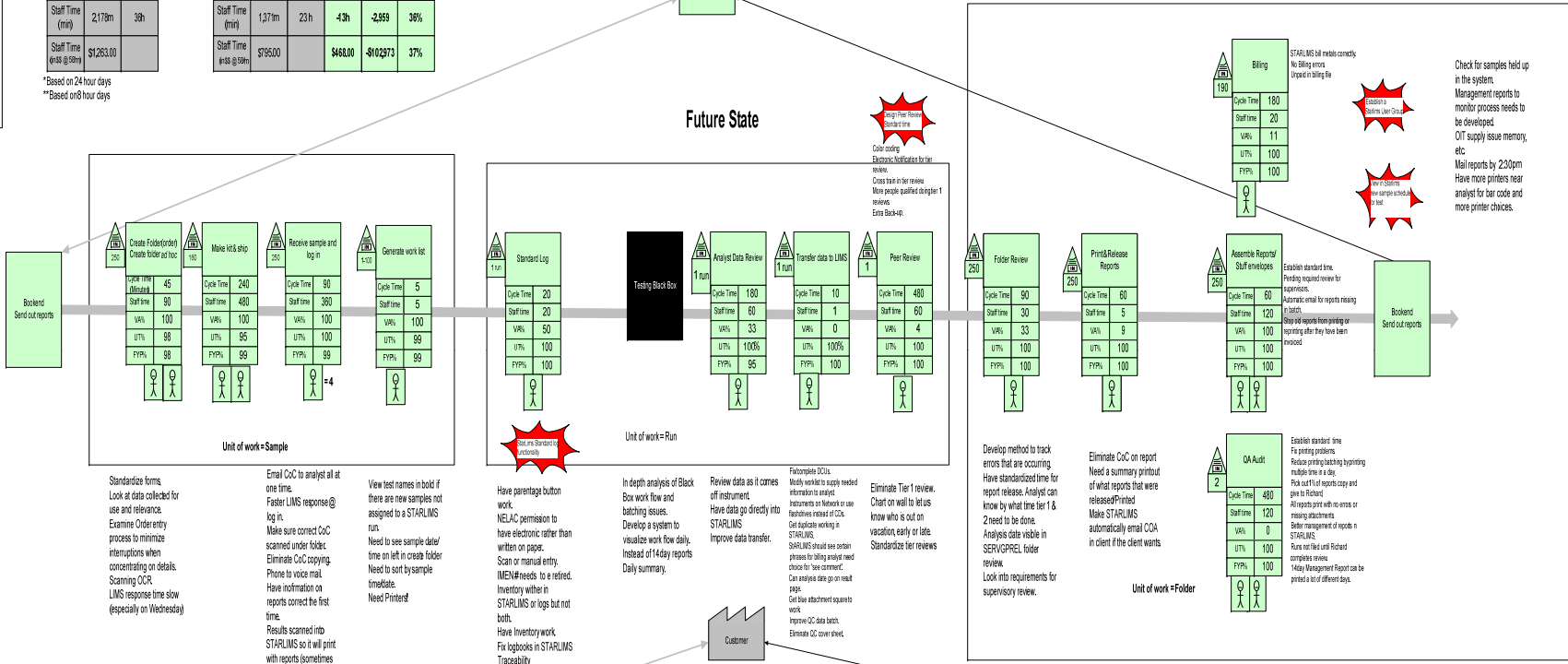
Current state

Lead Time	16:35m	28h
NVA Time	15:591m	26h
Staff Time (min)	2,170m	3h
Staff Time (cost @ \$9m)	\$1,263.00	

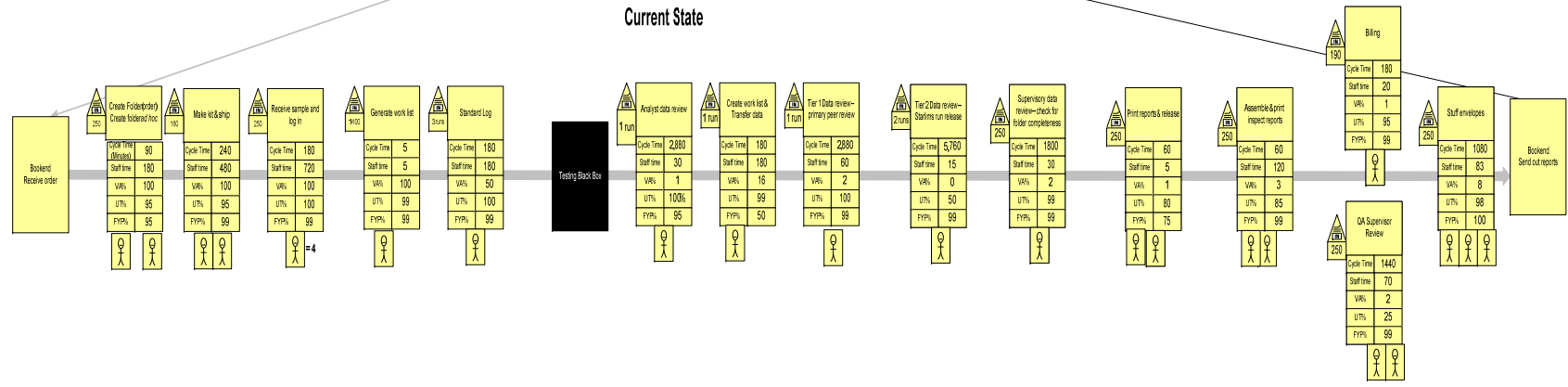
*Based on 24 hour days
**Based on 8 hour days

Future State

	Per Process Change	Annual Change (Round-trip cost)	Percent Improvement
Lead Time	1700m	28h	-55%
NVA Time	1,190m	20h	-54%
Staff Time (min)	1,271m	23h	-41%
Staff Time (cost @ \$9m)	\$7,950.00	\$468.00	-102%



Current State



VSM RESULTS MEASURES

	CURRENT	FUTURE	% IMPROVEMENT
LEAD TIME	281 h	28 h	90%
STAFF TIME	36 h	23 h	36%
STAFF COST	\$1263/d	\$795/d	\$468/d

IMPLEMENTATION

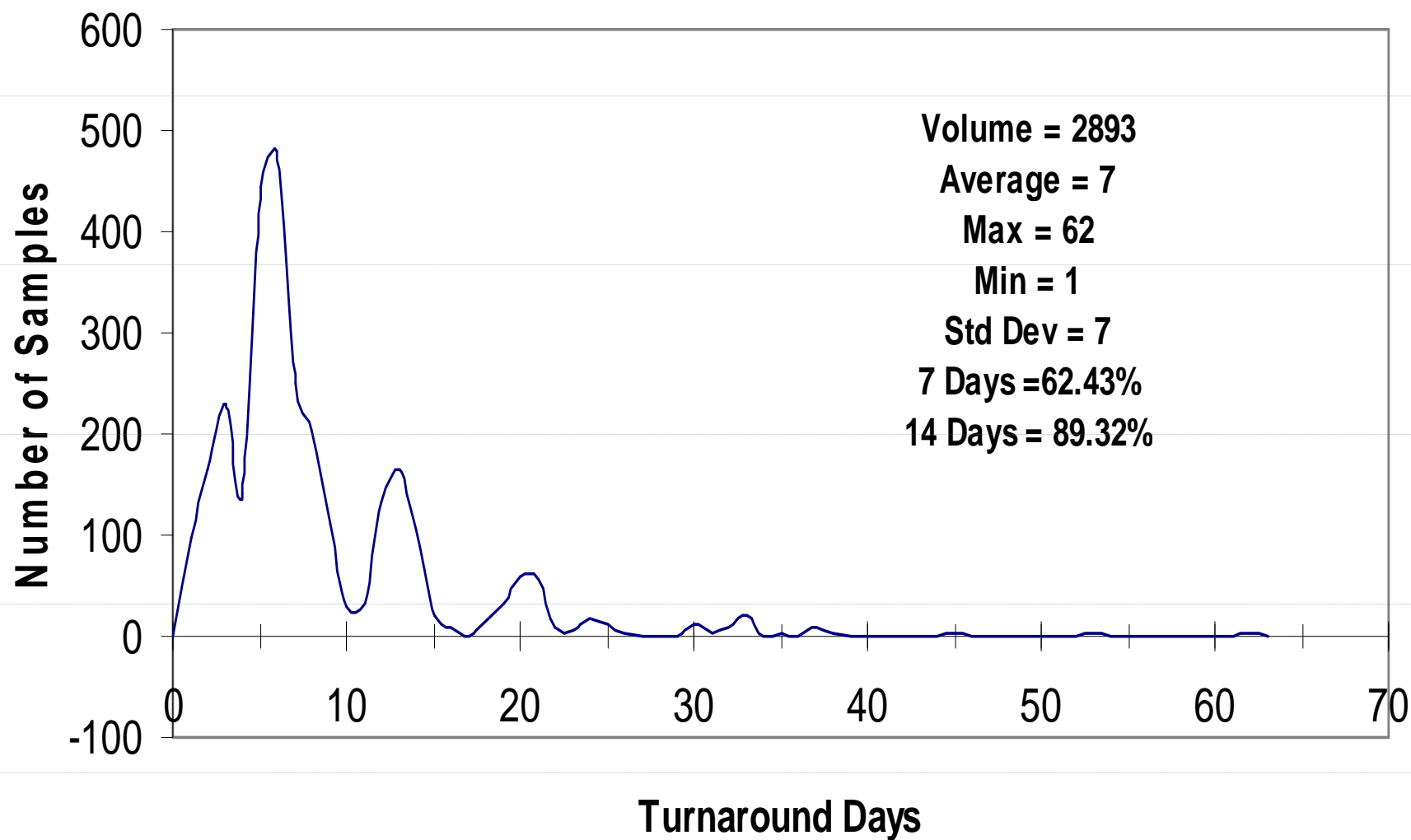


complete DCUs.	Tom	9/30/2007	★			
MS should see certain phrases for analyst need choice for “see nt”.	Tom	9/30/2007	★			
ents on Network or use ves instead of CDs.	Tom	9/30/2007	★			
s date visible in SERVGPREL view.	Tom	9/30/2007	★			
o automatic releasing of runs	Tom	9/30/2007				
view New Samples - Bold	Tom	9/30/2007				
	Tom/Linda	9/30/2007		IT Resources Funding	Satisfied Customers Fewer errors Less Waiting Less rework Less NVA	
rts print with no errors or attachments.	Tom/Linda	9/30/2007	★			15
summary printout of what reports e released/Printed	Tom/Linda	9/30/2007	★			P 1 r
printing batching by printing times in a day.	Tom/Linda	9/30/2007				P
mmmary.	Tom/Linda	9/30/2007				P 1 r

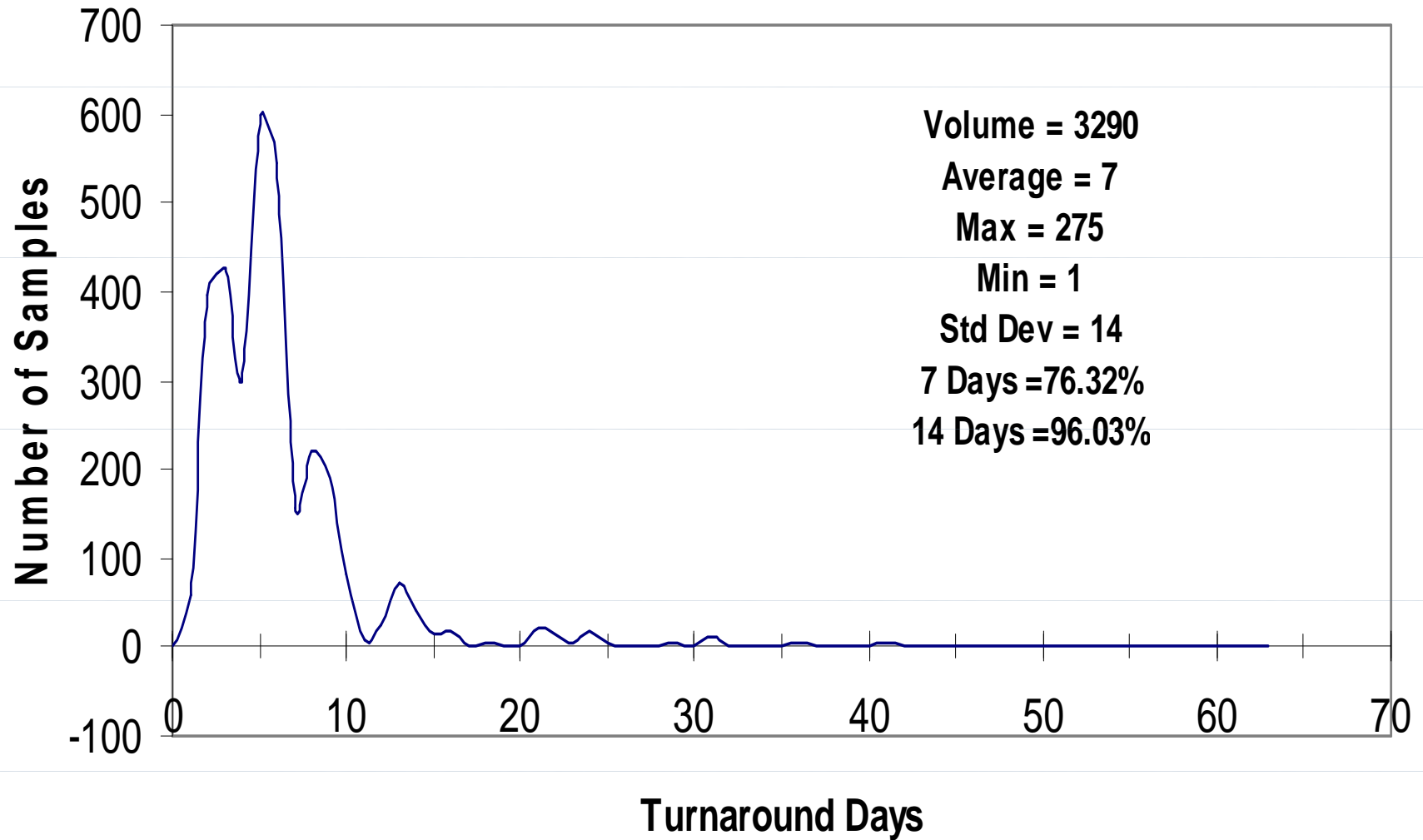
HETL TURNAROUND TIME REDUCTION RESULTS

Inorganics Section

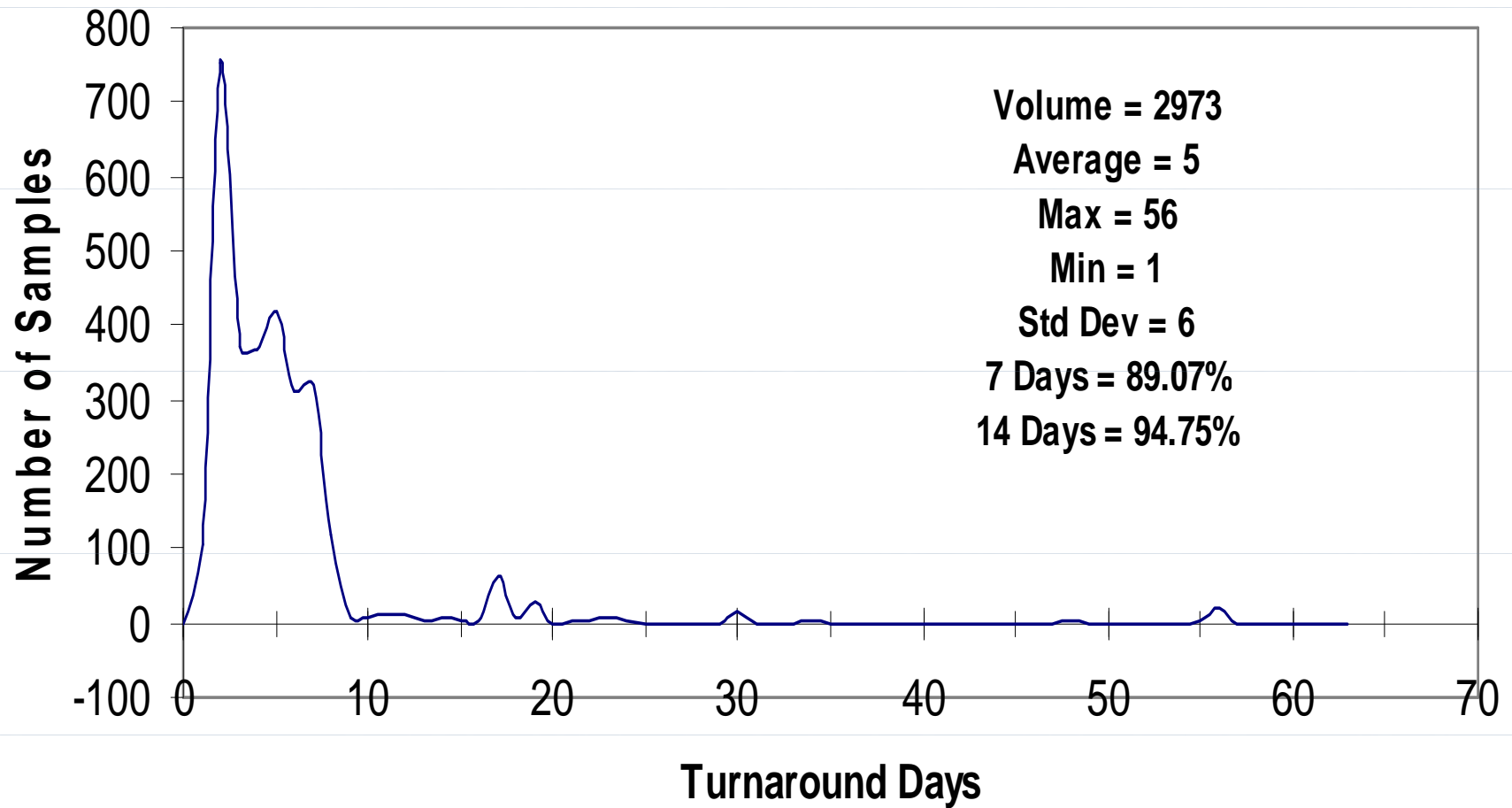
TURNAROUND MAY 2006



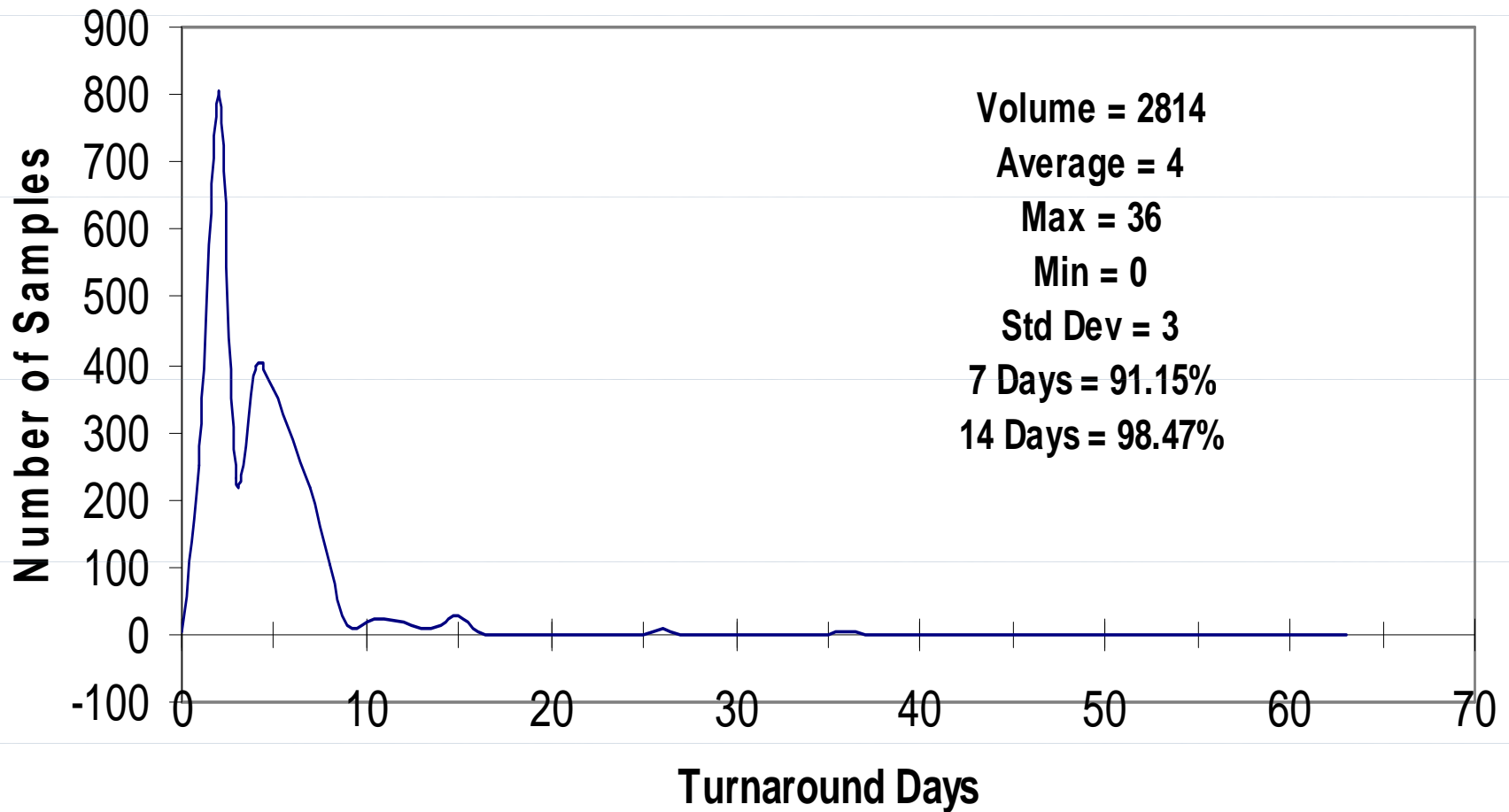
TURNAROUND MAY 2007



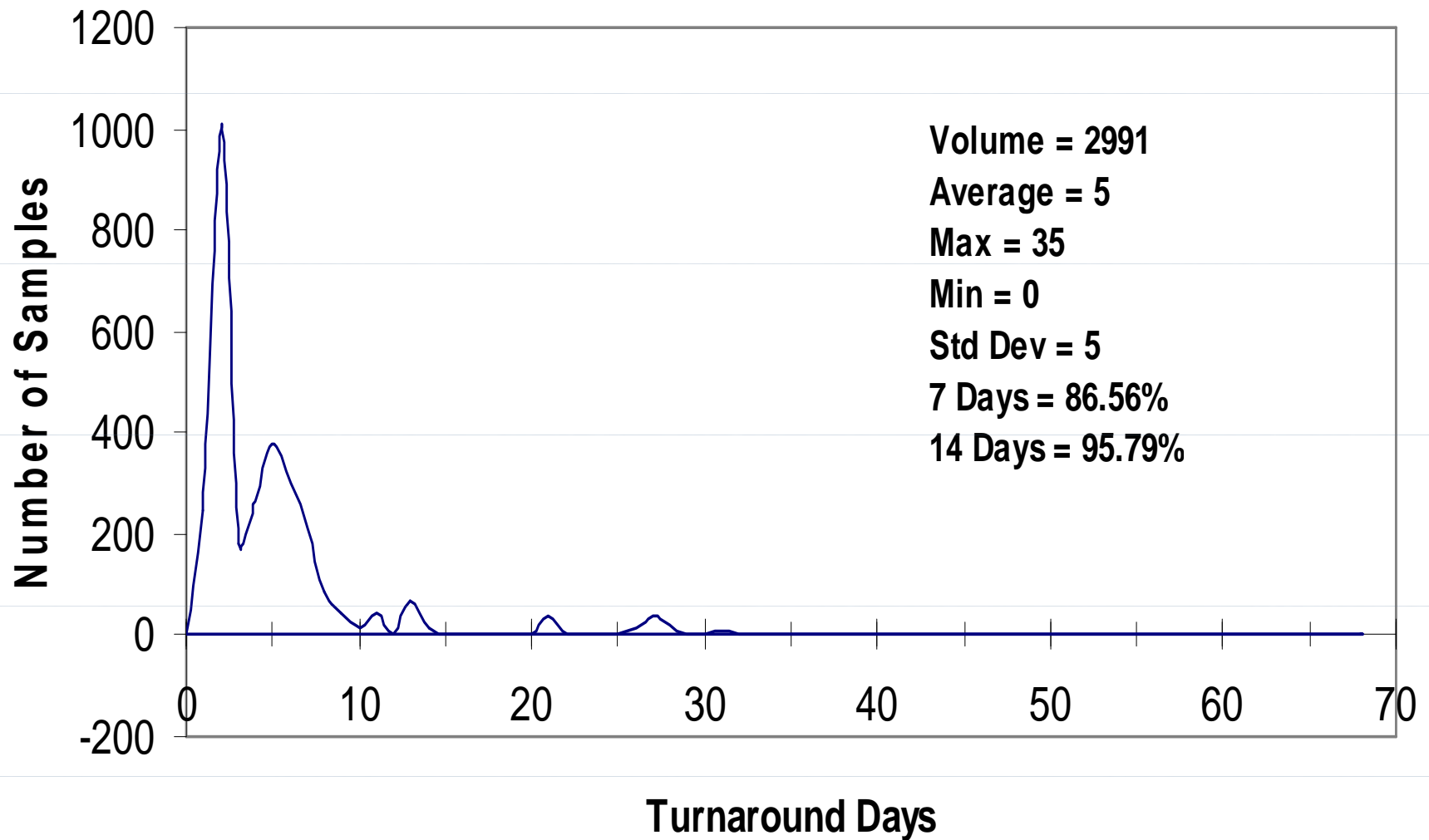
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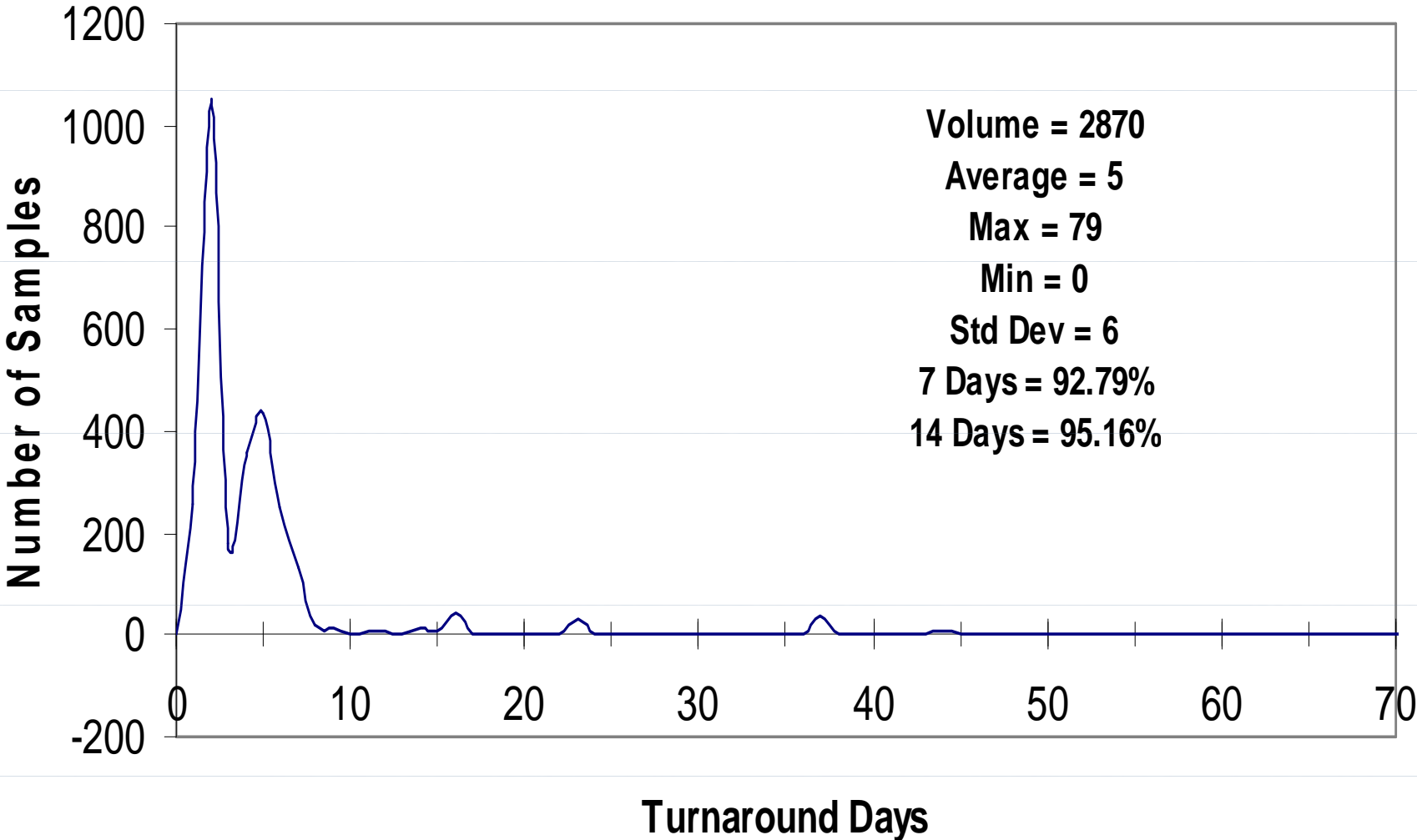
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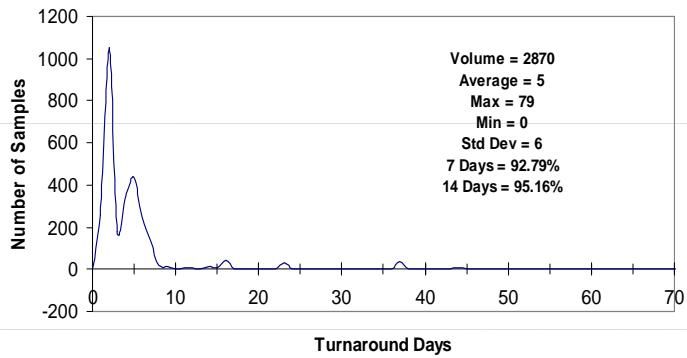
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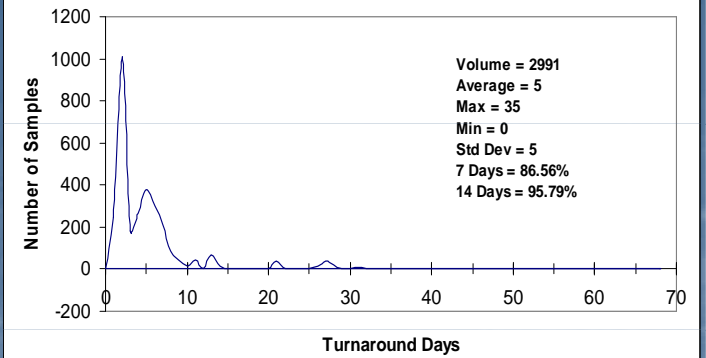
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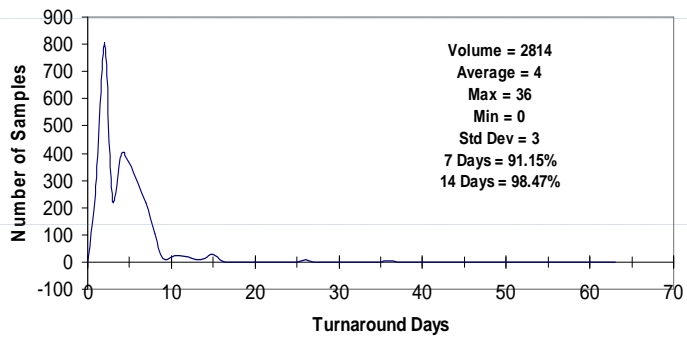
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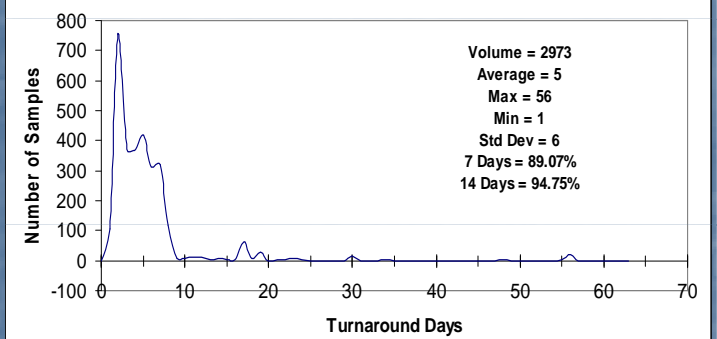
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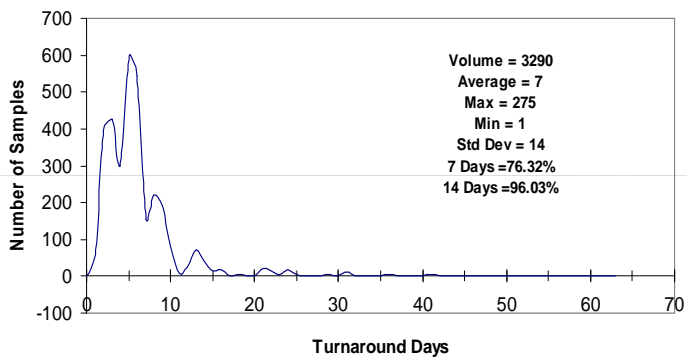
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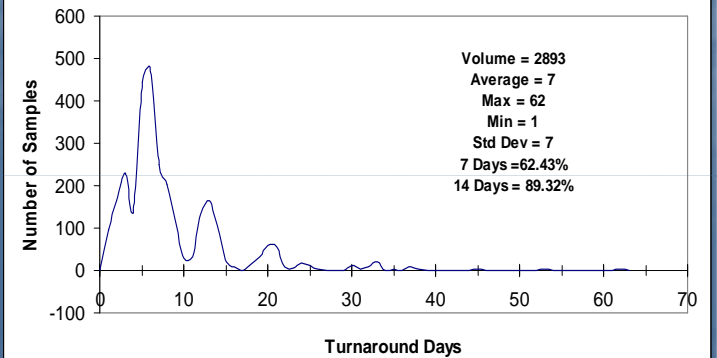
TURNAROUND MAY 2008



TURNAROUND MAY 2007

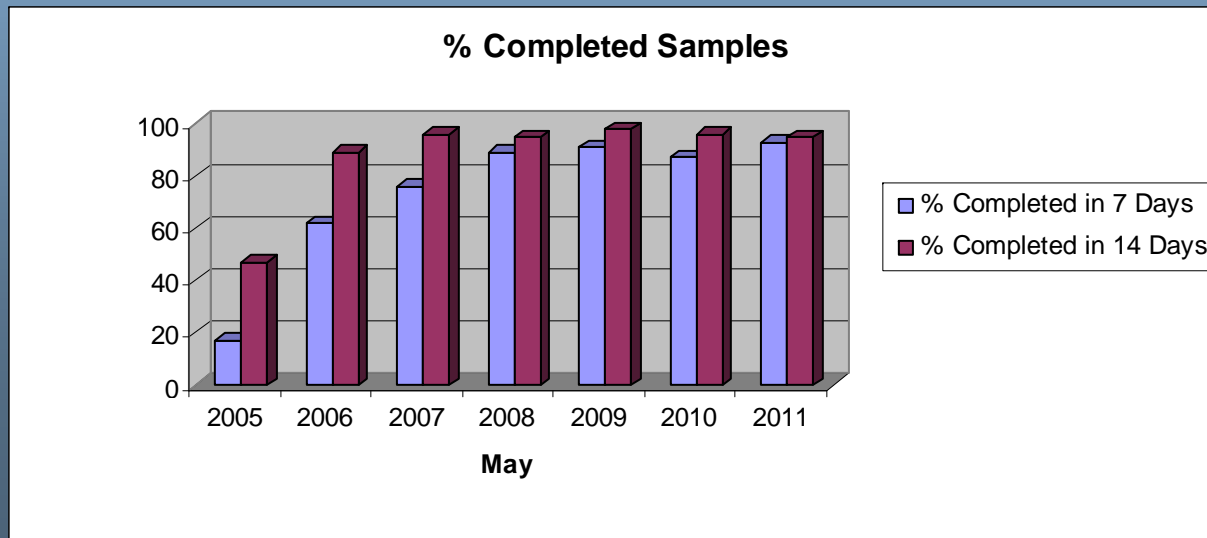
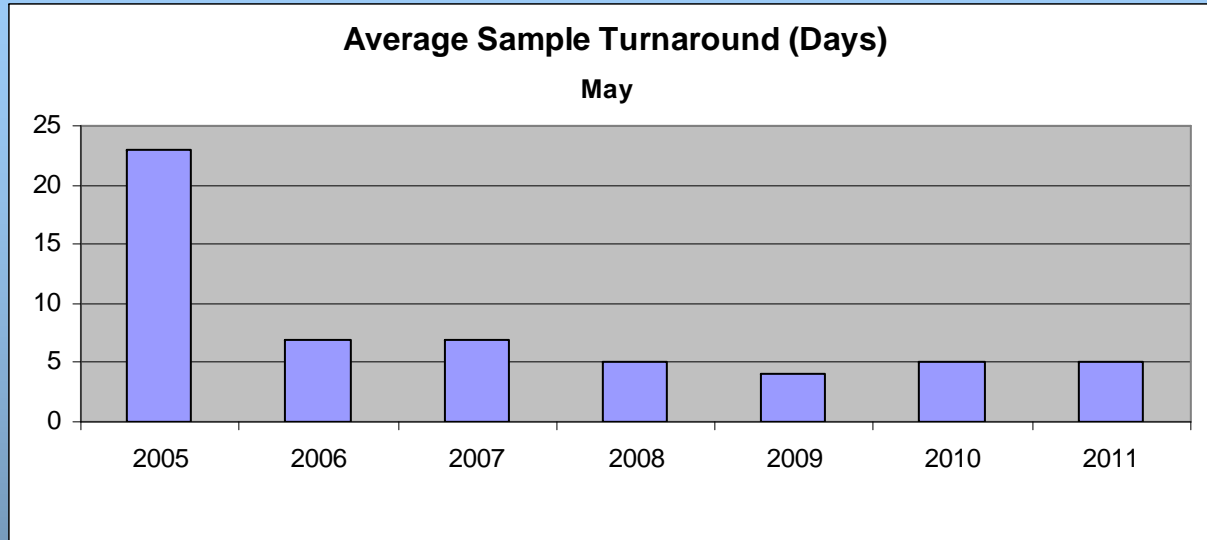


TURNAROUND MAY 2006



Improving Laboratory Efficiency

Streamlining Sample Processing



A photograph of a dense forest of tall, thin evergreen trees. The trees are heavily covered in moss, particularly on their branches and lower trunks. Sunlight filters through the canopy, creating a dappled light effect on the forest floor. The ground is covered in moss and fallen branches. The overall atmosphere is serene and natural.

THANK YOU