



*It's real.
It's time.*

Worldwide Facilities
DM4 - 200mm Conversion Team

Jeff Joiner
DMOS 4 200mm Conversion
Water Optimization Strategy

The World Leader In DSP and Analog

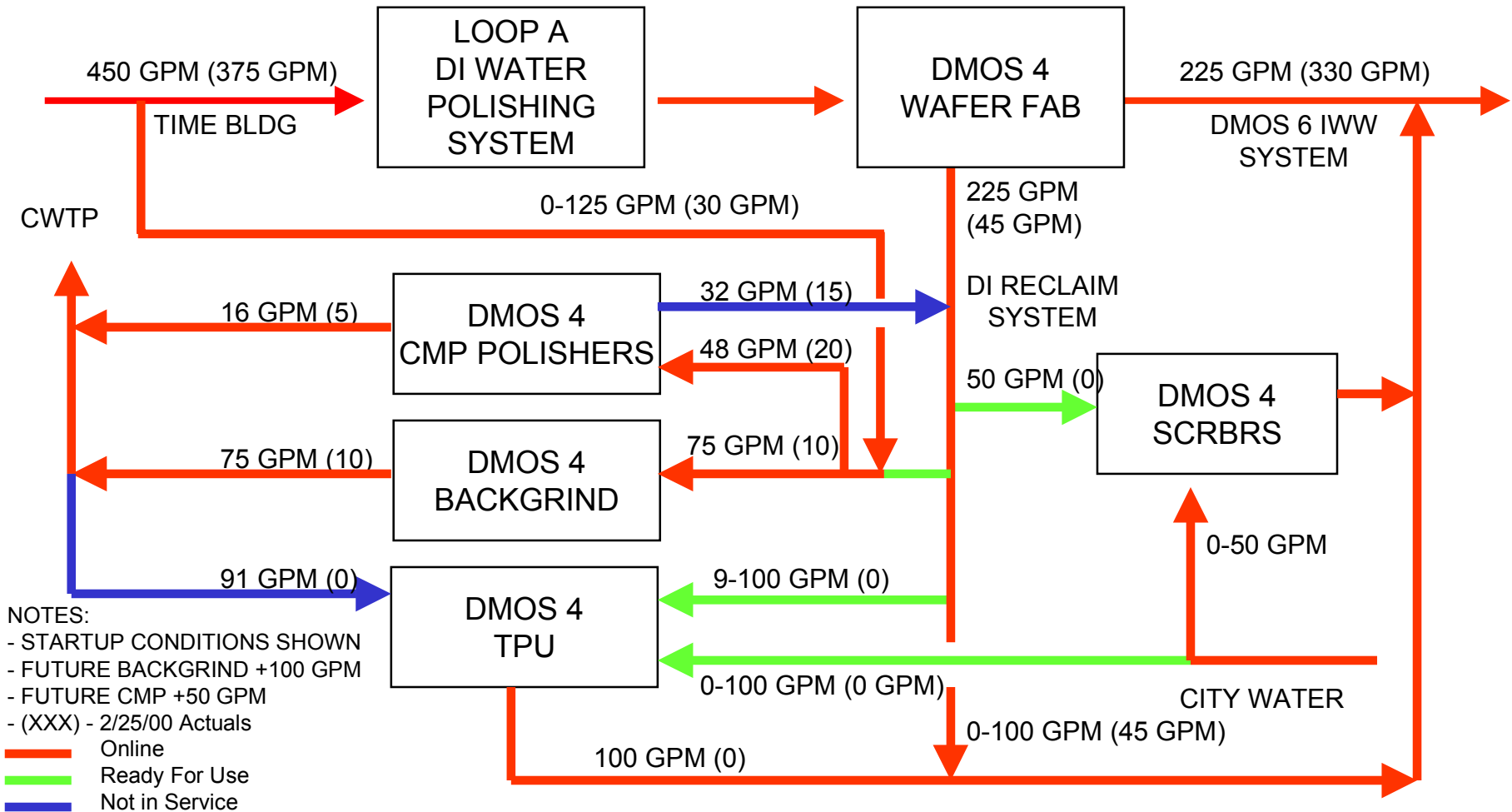




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DMOS 4 WATER RECLAIM PLAN

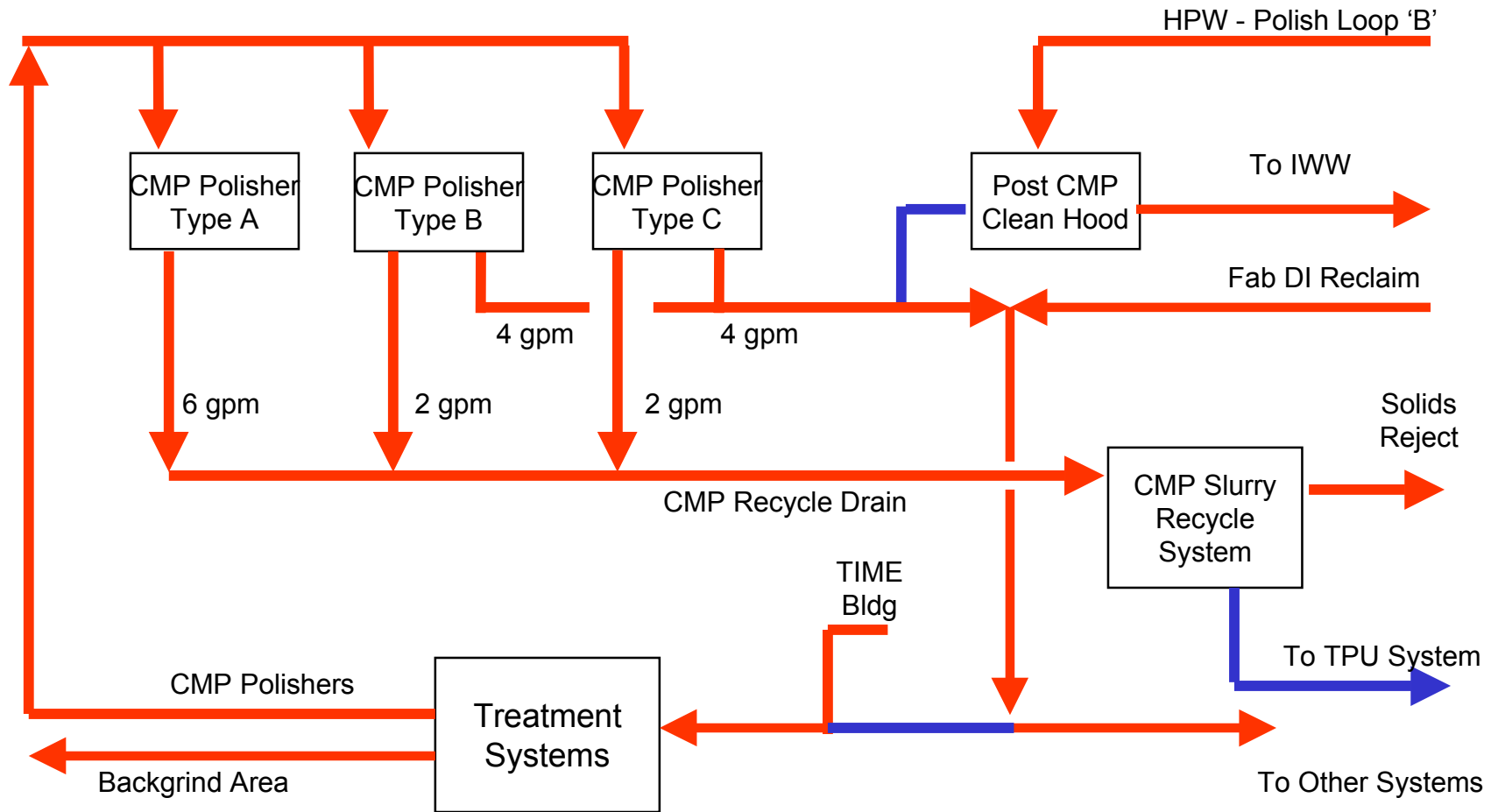




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DMOS 4 CMP AREA WATER STRATEGY

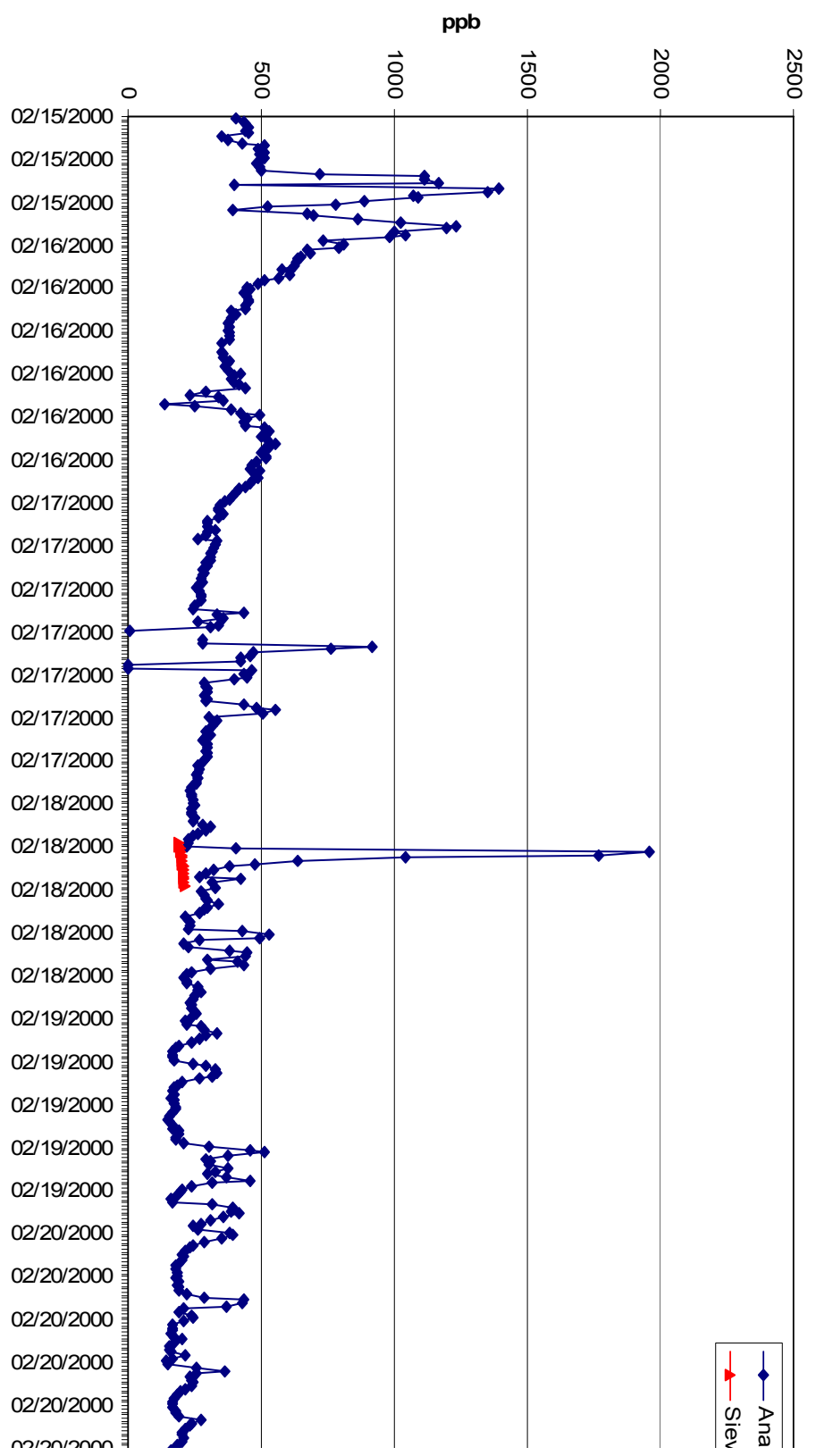




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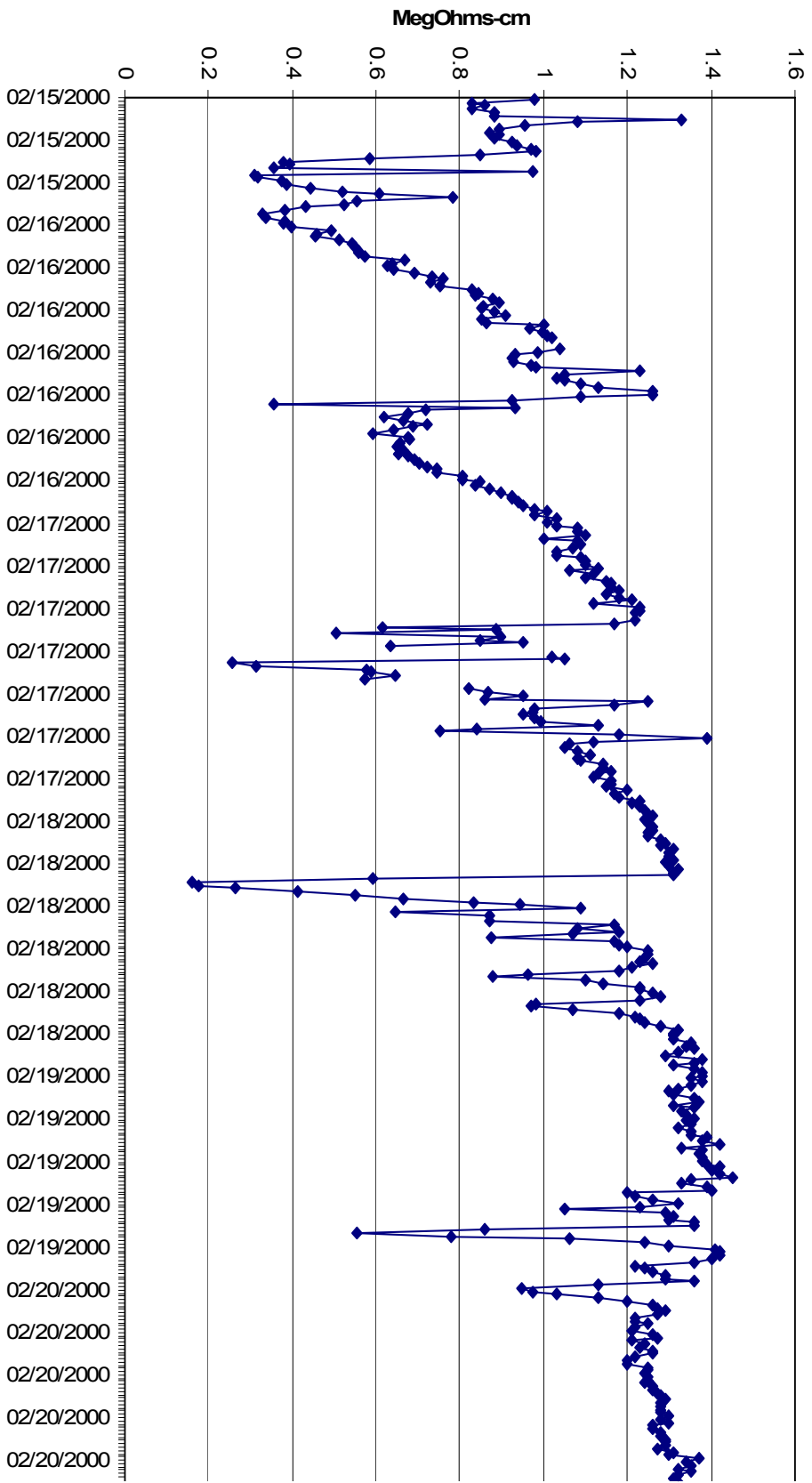
DMOS 4 Recycled Stream Anatel A1000 TOC





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DMOS 4 Recycled Stream
Anatel A1000 Resistivity
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DMOS 4 Recycled Stream Ion Data

	DM4- Recycled Stream	DM4- Recycled Stream	DM4- Recycled Stream	DM4- Recycled Stream	DM4- Recycled Stream
AL Sample ID	108036	108214	108495		
Date Sampled	02/15/2000	02/16/2000	02/18/2000		
GFAA					
Calcium	4.531	19.1	1.09		
Iron	1.139	2.83	0.3		
Potassium	0.06	0.02	<0.010		
Sodium	0.26	3.6	0.04		
IC CATIONS					
Ammonium		2902	4396		
ICPMS					
Aluminum	<0.010	<0.010	<0.010		
Antimony	0.02	<0.010	<0.010		
Arsenic	<0.010	<0.010	<0.010		
Barium	0.03	<0.010	<0.010		
Beryllium	<0.010	<0.010	<0.010		
Bismuth	<0.010	<0.010	<0.010		
Boron	0.11	0.18	0.19		
Cadmium	<0.010	<0.010	<0.010		
Chromium	<0.010	<0.010	<0.030		
Cobalt	<0.010	<0.010	<0.010		
Copper	0.03	0.03	0.01		
Gallium	<0.010	<0.010	<0.010		
Germanium	<0.010	<0.010	<0.010		
Gold	<0.020	<0.010	<0.010		
Indium	<0.010	<0.010	<0.010		
Lanthanum	<0.010	<0.010	<0.010		
Lead	<0.010	<0.010	<0.010		
Lithium	<0.010	<0.010	<0.010		
Magnesium	0.06	0.79	0.02		
Manganese	0.06	0.2	<0.010		
Molybdenum	<0.010	<0.010	<0.010		
Nickel	<0.010	<0.010	<0.010		
Niobium	<0.010	<0.010	<0.010		
Palladium	<0.010	<0.010	<0.010		
Platinum	<0.010	<0.010	<0.020		
Silver	<0.010	<0.010	<0.010		
Strontium	0.01	<0.010	<0.010		
Tantalum	<0.010	<0.010	<0.010		
Thallium	<0.010	<0.010	<0.010		
Tin	<0.010	<0.010	<0.010		
Titanium	0.01	0.07	<0.010		
Tungsten	<0.010	<0.010	<0.010		
Vanadium	<0.010	<0.010	<0.010		
Zinc	0.17	0.21	0.13		



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DMOS 4 WATER OPTIMIZATION PLAN

- **TOTAL WATER REQUIREMENTS**

<u>AREA</u>	<u>QUANTITY</u>	<u>TYPE</u>	<u>ALTERNATE</u>
– WAFER FAB	450 GPM	UPW	NONE
– CMP POLISHING	100 GPM	DIW	DI RECLAIM
– BACKGRIND	175 GPM	DIW	DI RECLAIM
– TPU's	100 GPM	CITY	CMP RECLAIM
– SCRUBBERS	50 GPM	CITY	DI RECLAIM
– TOWERS	175 GPM	CITY	NONE
• TOTAL	1,050 GPM		

- **ACTUAL REQUIREMENTS**

– UPW	450 GPM
– CITY	175 GPM
• TOTAL	625 GPM