



WOOD GROUP PRATT AND WHITNEY
GG4C-1D PERFORMANCE EVALUATION



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ACCEPTANCE TEST LIMITS

CUSTOMER:	WGP&W	DATE:	13-Aug-08
ENGINE MODEL:	GG4	TEST SITE:	Plattsburgh
SUB-MODEL:	C-1D	WG TEST REP.:	Todd Munsell
E/S/N:	686625		

PARAMETER		OBSERVED VALUES	OEM LIMITS	
			OEM MAX.	OEM MIN.
Maximum EGT:	Steady State	1228 °F obs	1250 °F obs	N/A
	Idle Spread	97 °F	200 °F	N/A
	EGT Delta	120 °F obs	135 °F obs	N/A
N1		6433 rpm obs	7160 rpm obs	N/A
N2		8338 rpm obs	9350 rpm obs	N/A
Idle Main Oil Pressure		42 psig	N/A	35 psig
Maximum Continuous Oil Pressure		47 psig	50 psig	40 psig
Oil Consumption		0.0 gal/hr	0.2 gal/hr	N/A
Oil Temperature-Stabilized		213 °F	215 °F	185 °F
Breather Pressure-Stabilized		0.33 in. Hg	3.0 in. Hg	N/A
Fuel Inlet Pressure		27.39 psia	50 psia	5 psig
VIBRATION LIMITS-INLET:				
All Pick-ups above 6300 N2 obs.		1.33 mils (p/p)	2.0 mils (p/p)	N/A
All Pick-ups upto 6300 N2 obs.		0.57 mils (p/p)	4.0 mils (p/p)	N/A
VIBRATION LIMITS-DIFFUSER:				
All Pick-ups above 6300 N2 obs.		1.46 mils (p/p)	2.0 mils (p/p)	N/A
All Pick-ups upto 6300 N2 obs.		0.86 mils (p/p)	4.0 mils (p/p)	N/A
VIBRATION LIMITS-EXHAUST:				
All Pick-ups above 6300 N2 obs.		0.53 mils (p/p)	2.0 mils (p/p)	N/A
All Pick-ups upto 6300 N2 obs.		0.24 mils (p/p)	4.0 mils (p/p)	N/A
BLEED VALVE LIMITS-CLOSING				
Bleed Valve Right		80 psig	80 psig	75 psig
Bleed Valve Top		100 psig	100 psig	95 psig
Bleed Valve Left		119 psig	120 psig	115 psig
BLEED VALVE LIMITS-OPENING				
Bleed Valve Right		75 psig	80 psig	74 psig
Bleed Valve Top		98 psig	100 psig	94 psig
Bleed Valve Left		116 psig	119 psig	113 psig

Engineering Analysis Approval: _____

August 15, 2008
Date: _____



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Pratt & Whitney
A United Technologies Company

FULL ACCEPTANCE TEST DATA

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WGP&W		MODEL: GG4C-1D		E/S/N: 686625		DATE: 13-Aug-08		
PARAMETER	EPR	1.117	2.985	2.877	2.776	2.667	2.575	
Time	hr:min	19:22	19:07	19:09	19:11	19:14	19:16	
Dry Bulb	F	67	67	67	67	67	67	
Wet Bulb	F	62	62	62	62	62	62	
Baro	inHg	29.77	29.77	29.77	29.77	29.77	29.77	
Cell Dep.	insH2O	-0.388	-2.548	-2.604	-2.631	-2.133	-2.382	
P ref	psia	14.62	14.56	14.56	14.56	14.57	14.56	
T2	°C	19.44	19.44	19.44	19.44	19.44	19.30	
T2	°F	67	67	67	67	67	67	
PT2	psia	14.62	14.54	14.54	14.54	14.55	14.54	
Ps3	psia	17.62	61.76	60.06	58.66	57.07	55.66	
Ps4	psia	41.02	186.96	180.26	173.86	167.57	161.76	
PT7	psia	16.32	43.39	41.82	40.35	38.81	37.45	
PT7	in Hg	33.21	88.30	85.10	82.11	78.98	76.21	
Fuel Press	psig	27	2	2	3	3	4	
Fuel Tmp	°F	70	68	68	68	68	68	
N1	rpm	3055	6433	6314	6204	6097	6001	
N2	rpm	6036	8338	8269	8203	8139	8077	
Main Oil Temp	°F	188	209	212	213	213	213	
Main Oil Press	psig	41.90	47.50	47.00	46.70	46.50	46.40	
Breather Press	in Hg	0.14	0.33	0.33	0.33	0.31	0.31	
Inlet Vibration	p/p	0.57	0.83	0.84	0.91	0.62	1.33	
Diffuser Vibration	p/p	0.86	1.46	1.33	1.01	0.81	1.01	
Exhaust Vibration	p/p	0.24	0.44	0.41	0.40	0.53	0.43	
Fuel Flow Uncorr	pph	598	3937	3700	3476	3267	3075	
EGT Avg.	°F	637	1228	1187	1149	1113	1079	
EGT Spread	°F	97	120	115	117	112	108	
EGT 1	°F	598	1186	1145	1105	1072	1041	
EGT 2	°F	618	1211	1173	1131	1094	1059	
EGT 3	°F	640	1256	1215	1178	1141	1106	
EGT 4	°F	695	1306	1260	1222	1184	1149	
EGT 5	°F	628	1223	1180	1145	1106	1072	
EGT 6	°F	643	1187	1150	1113	1078	1046	
CORRECTED, CALCULATED DATA								
EPR			1.117	2.985	2.877	2.776	2.667	2.575
N1		rpm	3033	6386	6268	6159	6053	5959
N2		rpm	5992	8277	8209	8143	8080	8019
FUEL FLOW		pph	603	3990	3750	3523	3308	3115
EGT		°C	327	651	627	606	588	570
EGT		°R	1080	1663	1620	1583	1549	1517
Ps3/P _{T2}			1.21	4.25	4.13	2.96	2.94	2.91
Ps4/P _{T2}			2.81	12.86	12.40	11.96	11.51	11.12



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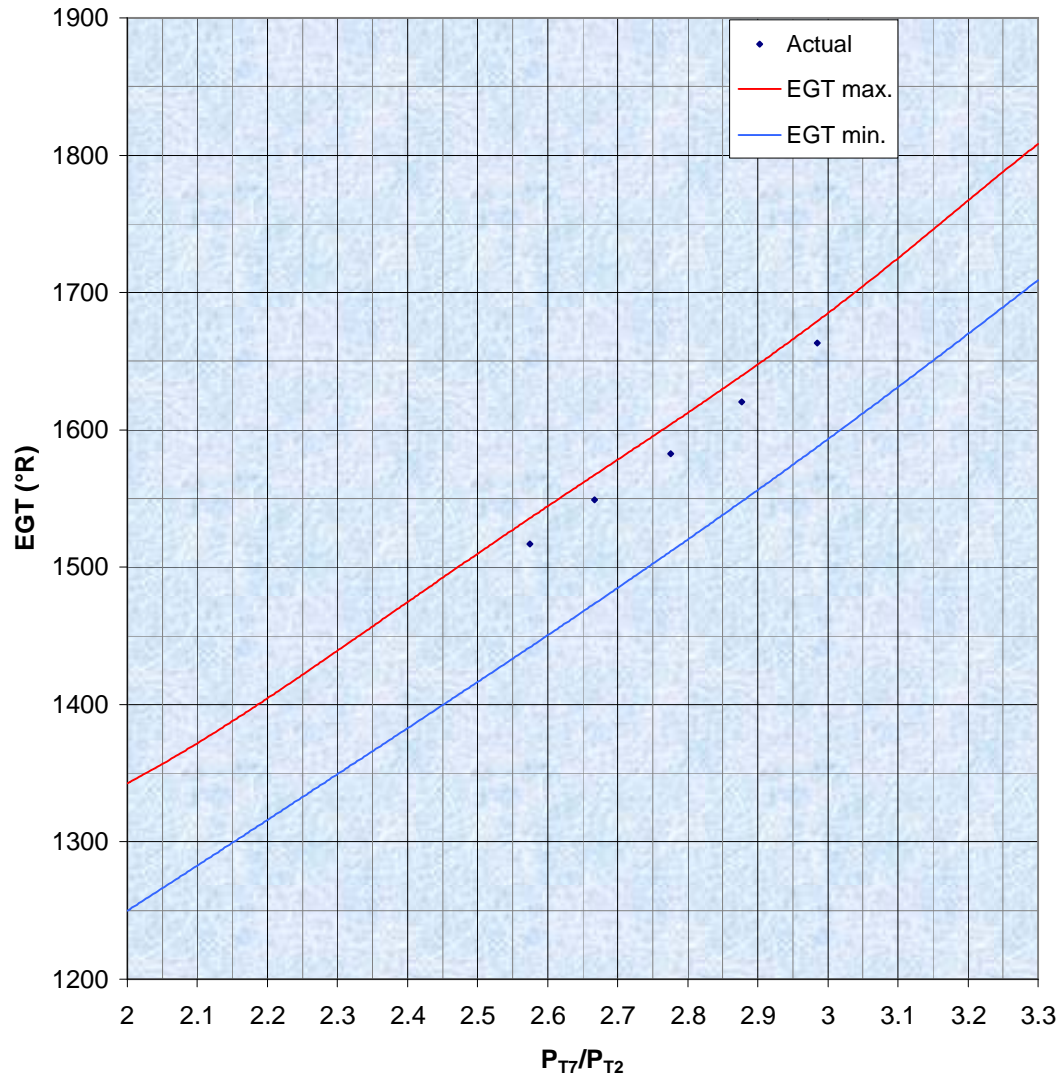
WGP&W

MODEL: GG4C-1D

E/S/N: 686625

DATE: 13-Aug-08

Generator Match Limits (GG4C-1D)



Reference: Pratt & Whitney GG4C Overhaul Manual P/N 729003, Section 1-00-1 Figure 703A



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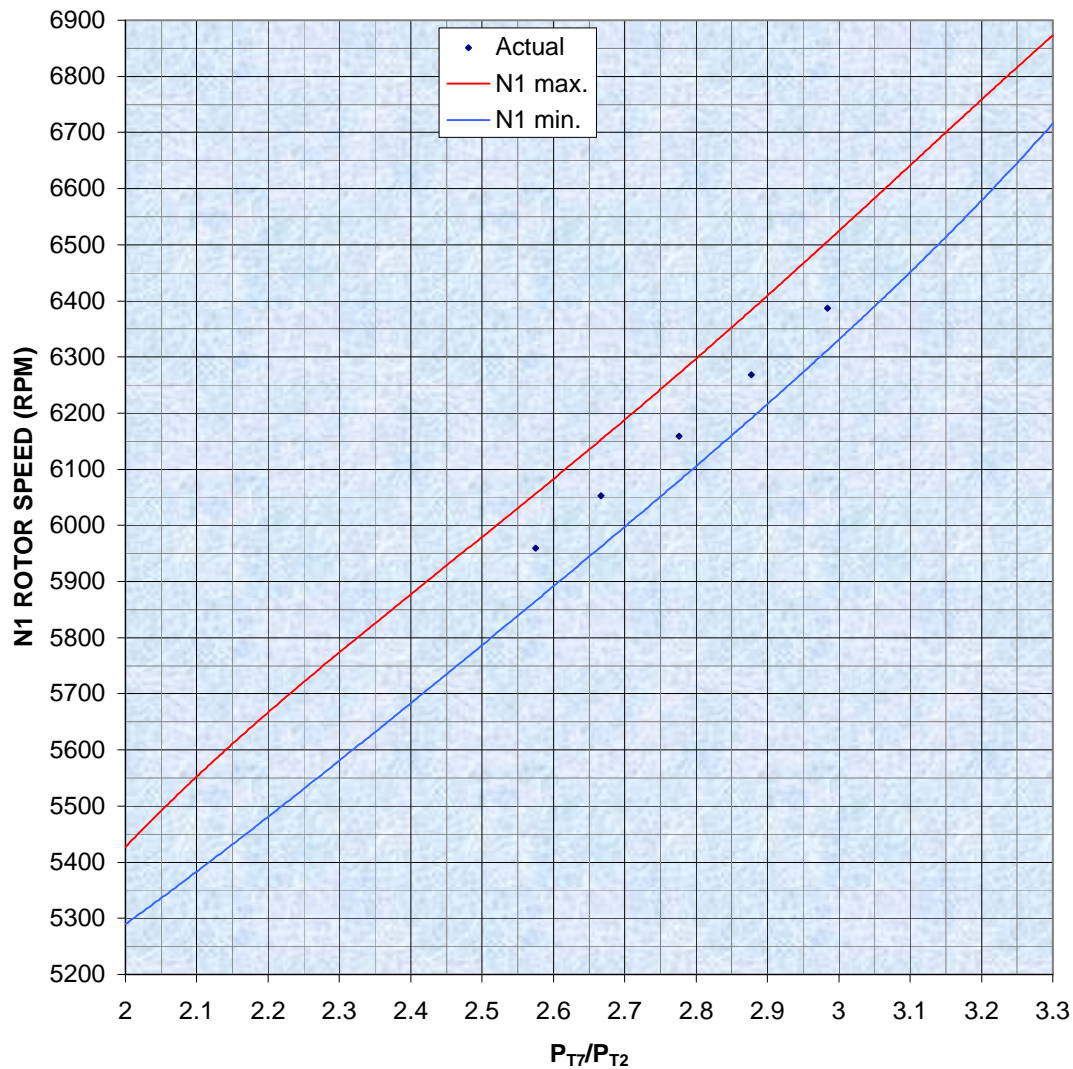
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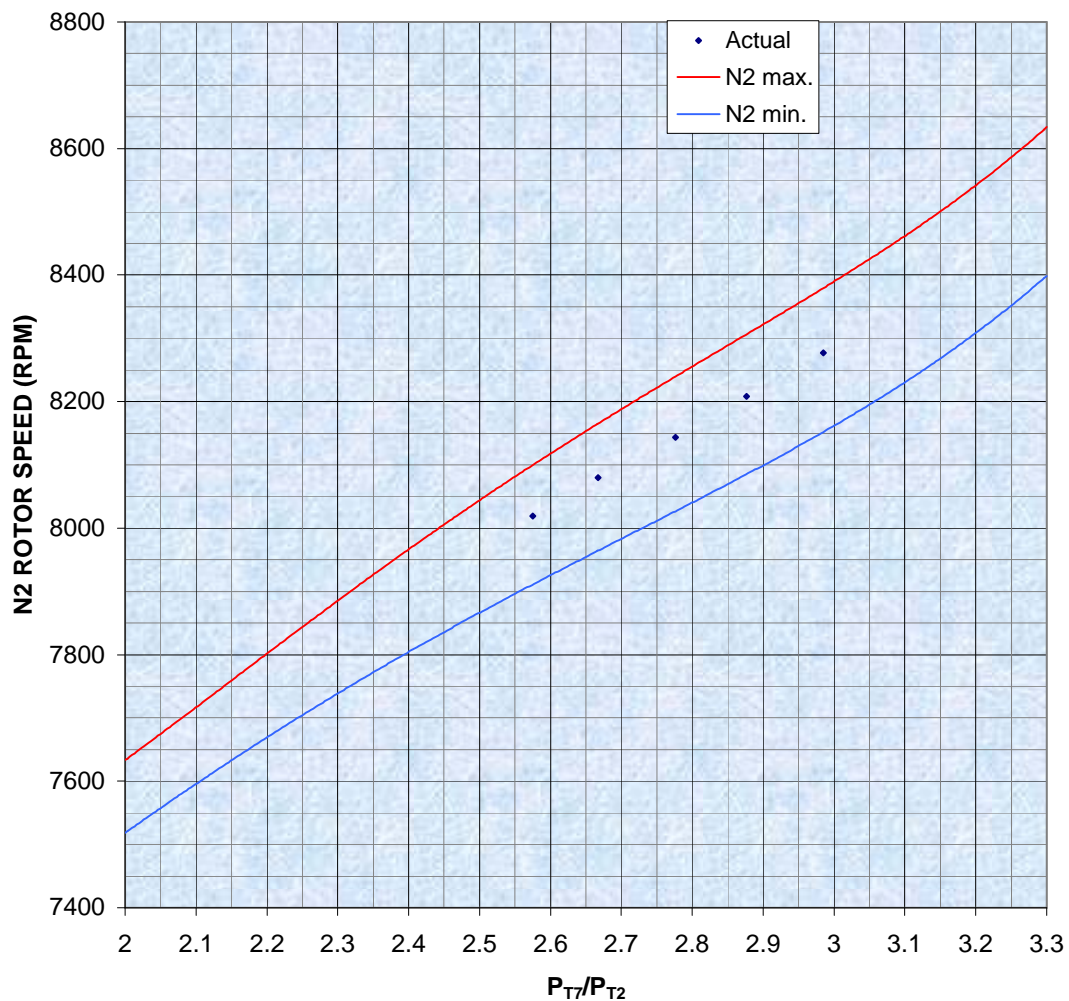
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Reference: Pratt & Whitney GG4C Overhaul Manual P/N 729003, Section 1-00-1 Figure 703



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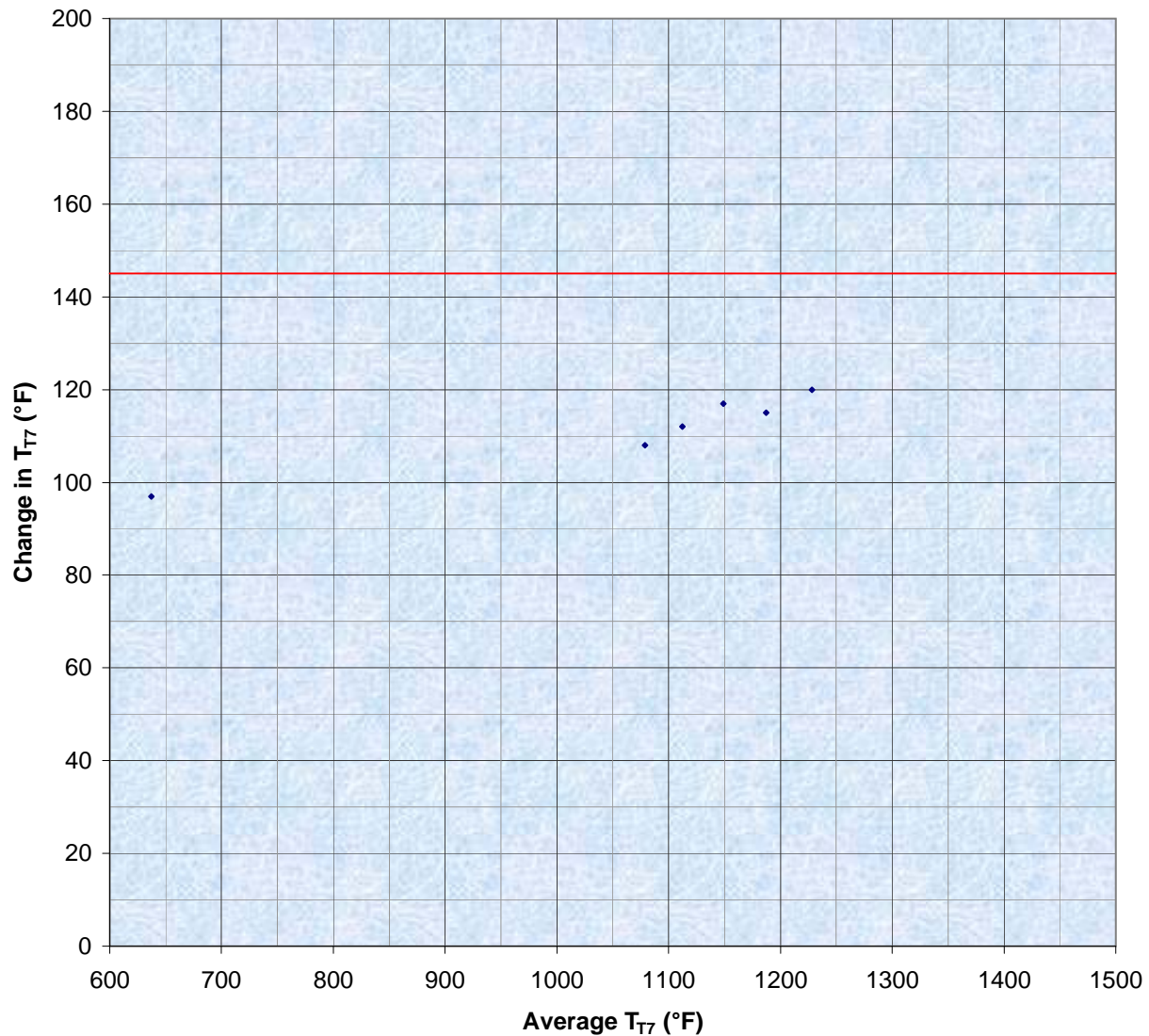
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Exhaust Gas Temperature Spread Check



Reference: Pratt & Whitney GG4C Overhaul Manual P/N 729003, Section 1-00-1 Figure 707



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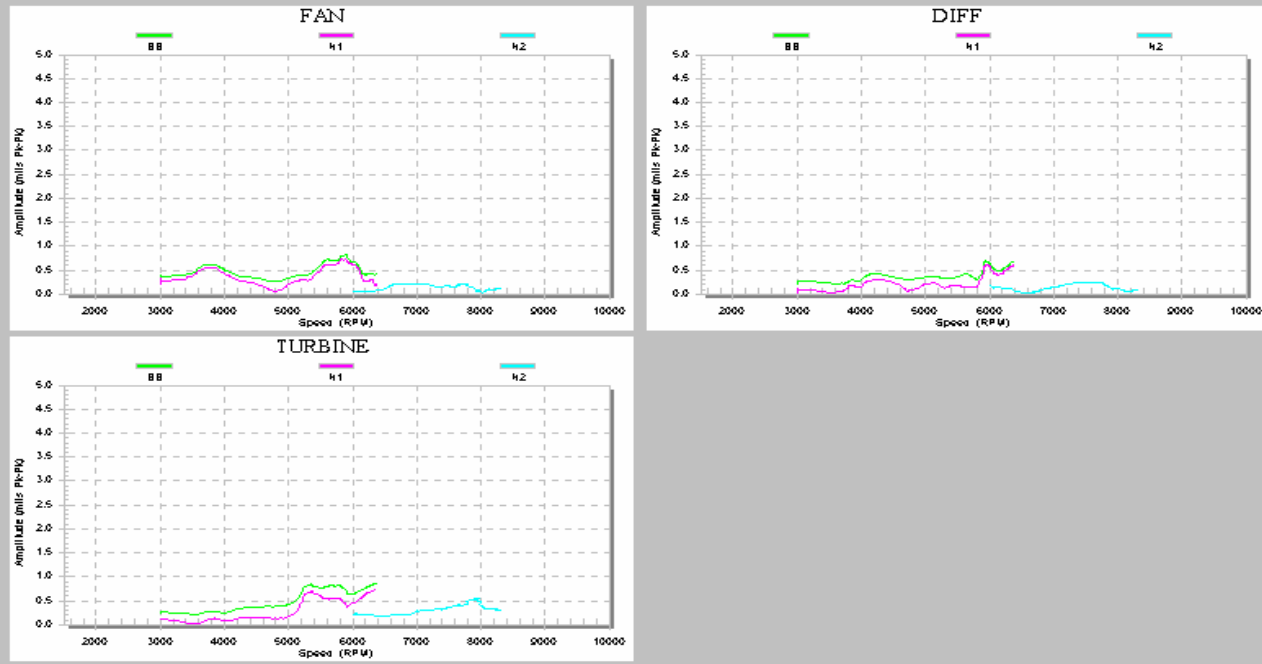
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GG4C
12988 / 686625

Accel Vibration Survey

08/13/2008
18:15:21



GG4C
12988 / 686625

Decel Vibration Survey

08/13/2008
18:16:26

