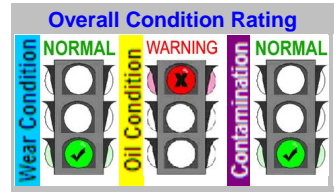


C Code : 22005
 U Name :
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 O Address : No. 11, I-5 Rd., Maptaphud, Muang,
 M Rayong 21150
 E
 R Site :
 Location :
 Test code : 813

Unit ID : 31 42 2TGH CTG 2
 Unit Type : Engine Turbine Gas
 Unit Make : GENERAL ELECTRIC
 Unit Model : PG6551
 Oil type / Viscosity : CALTEX REGAL EP 32
 Oil System Capacity : 8706 Liters



Notes (Finding, Evaluation, Interpretation, Suggestion and Recommendation)

FTIR scan shows phenolic-type anti-oxidant additive to be depleted.
 All other wear tests and oil condition tests appear satisfactory, and the oil was still serviceable at the time of sampling.
 Continue routine sampling interval.

AS / Andy Sitton

			Current Sample			Previous Sample			Baseline and Alarm Limit								
Condition History			Wear	Oil	Cont.	Wear	Oil	Cont.	Wear	Oil	Cont.	Alarm Limit					
			N	W	N	N	W	N	N	W	N	B A S E L I N E	Alarm Limit Matrix -Set Name (Equipment type / oil type)				
													ETG GE CTX Regal EP 32 (Glow)01/10				
													RDE fine RFS coarse				
													U-Caution U-Warning U-Caution U-Warning				
													U-Caution U-Warning U-Caution U-Warning				
Lab ID	Test Method	Result															
Bottle ID			150612	148642	146766												
Date Sampled			923298	922511	922481												
Oil Hours (Kms)			23-Dec-10	23-Nov-10	22-Oct-10												
Unit Hours (Kms)			53480	53262	52663												
Filters Hours (Kms)			102214	101996	101397												
Wear Condition			RDE fine		RFS coarse		RDE fine		RFS coarse		The New Oil (TNO)	RDE fine		RFS coarse			
Wear Element	Method	Unit															
Iron	D-6595	PPM	0.6	0.4	1.6	0.0	0.0	0.0	1.0	0	>4	>7	>4	>7			
Chromium	D-6595	PPM	0.0	0.2	0.1	0.0	0.0	0.0	0.0	0	>1	>2	>1	>2			
Lead	D-6595	PPM	0.7	1.5	0.6	0.0	0.0	0.0	0.0	0	>1	>2	>3	>6			
Copper	D-6595	PPM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	>12	>19	>1	>2			
Tin	D-6595	PPM	0.0	0.0	0.8	0.8	0.0	0.0	0.0	1	>4	>6	>5	>9			
Aluminum	D-6595	PPM	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0	>1	>2	>2	>4			
Nickel	D-6595	PPM	0.3	0.0	0.0	0.0	0.0	0.2	0.0	0	>1	>2	>1	>2			
Silver	D-6595	PPM	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0							
Molybdenum	D-6595	PPM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0							
Titanium	D-6595	PPM	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0							
Oil Condition			TNO		L-Warning		L-Caution		U-Caution		U-Warning						
Viscosity @ 40°C	D-445	cSt	31.8		31.7		32.0			31.3	<27.9	<29.5	>32.7	>34.2			
Viscosity @ 100°C	D-445	cSt															
Oxidation	FTIR	Abs	10.3		10.1		9.9			8.0			>11.1	>11.6			
Nitration	FTIR	Abs	8.6		8.5		8.4			7.6			>10	>11.1			
TAN	D-974	mg KOH/g.	0.07		0.07		0.08			0.13			>0.23	>0.33			
TBN	D-4739	mg KOH/g.															
Contamination			TNO		U-Caution		U-Warning										
Water	T-H2O Check™	% (Wt.)	0.013		0.008		0.011			0.015			>0.03	>0.05			
Sodium	D-6595	PPM	1		0		0										
Silicon	D-6595	PPM	0.0	0.1	2.8	0.6	0.1	0.8		0	>3	>5	>3	>5			
Additive Element			TNO		U-Caution		U-Warning										
Boron	D-6595	PPM	0		0		0			0							
Magnesium	D-6595	PPM	0		0		0			0							
Calcium	D-6595	PPM	0		0		0			0							
Barium	D-6595	PPM	7		0		0			0							
Phosphorus	D-6595	PPM	18		11		15			39							
Zinc	D-6595	PPM	1	1	1	0	1	1		0							
Additional Test			TNO		U-Caution		U-Warning										
Flash Point	D-3828	°C															
Viscosity Index	D-2270																

Note: Alarm Limits are variable and dependent upon dataset size and to be used as general guideline.
 No Sign or **N** : NORMAL, **C** or **CAUTION** (first level warning limit), **W** or **WARNING** (second level warning limit)
 U-Caution : Upper CAUTION Level, L-Caution : Lower CAUTION Level, First Level Alarm, Alert Limit in Upper Level and/or Lower Level
 U-Warning : Upper WARNING Level, L-Warning : Lower WARNING required Level, Second Level Alarm, Alert Limit in Upper Level and/or Lower Level
 Baseline will be data of either "The new oil" or "Reference oil" or "Oil specification". TNO = The new oil, RO = Reference oil, OS = Oil Specification
 Accuracy of interpretation and recommendation are based on representatives sample and information supplied. No warranty is expressed or implied for this report.

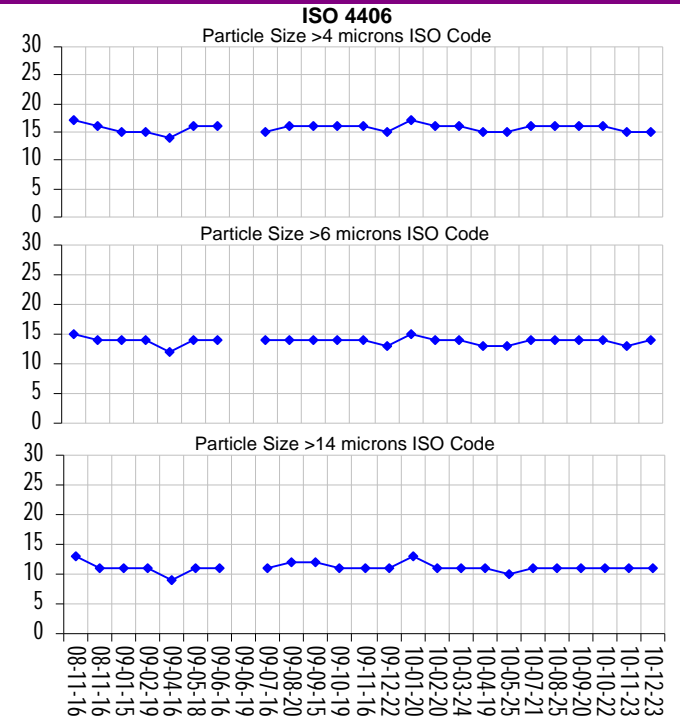
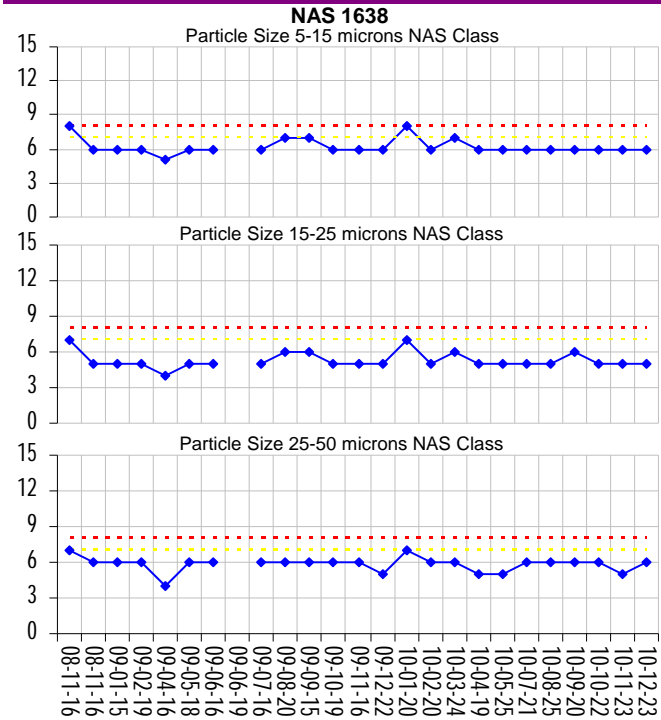
C Code : **22005**
 U Name :
 T
 O Address : No. 11, I-5 Rd., Maptaphud, Muang,
 M Rayong 21150
 E
 R Site :
 Location :
 Test code : 813

Unit ID : 31 42 2TGH CTG 2
 Unit Type : Engine Turbine Gas
 Unit Make : GENERAL ELECTRIC
 Unit Model : PG6551
 Oil type / Viscosity : CALTEX REGAL EP 32
 Oil System Capacity : 8706 Liters

Notes (Finding, Evaluation, Interpretation, Suggestion and Recommendation)

Particle count indicates oil cleanliness level is clean.

Lab ID	Current Sample		Previous Sample				Particle Count	
	Bottle ID	150612	148642	146766		NAS 1638		ISO 4406
Date Sampled	23-Dec-10	23-Nov-10	22-Oct-10		ETG GE CTX Regal EP 32		(Glow)01/10	
Oil Hours (Kms)	53480	53262	52663		U-Warning			
Unit Hours (Kms)	102214	101996	101397		U-Warning			
Oil Added (Liters)					U-Warning			
Filters Hours (Kms)					U-Warning			
Contamination								
Particle Count NAS 1638 System Standard								
Particle Size Range	No. of Particles / 100ml.	Class	No. of Particles / 100ml.	Class	No. of Particles / 100ml.	Class	Class	
Particle Size 5-15 microns	10,200	6	9,600	6	13,200	6	>16000 7 >32000 8	
Particle Size 15-25 microns	1,000	5	900	5	1,200	5	>2850 7 >5700 8	
Particle Size 25-50 microns	200	6	200	5	300	6	>506 7 >1012 8	
Particle Size 50-100 microns	<100	5	<100	5	<100	5		
Particle Size >100 microns	<100	2	<100	2	<100	3		
Particle Count ISO 4406:1999 System Standard								
Particle Size Range	No. of Particles / ml.	Class	No. of Particles / ml.	Class	No. of Particles / ml.	Class	Class	
Particle Size > 4 microns	307	15	288	15	393	16		
Particle Size > 6 microns	86	14	80	13	110	14		
Particle Size > 14 microns	12	11	11	11	15	11		
ISO 4406 Class Rating	15/14/11		15/13/11		16/14/11			


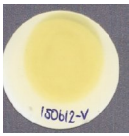


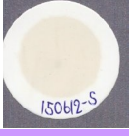
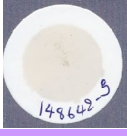
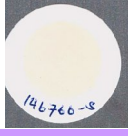
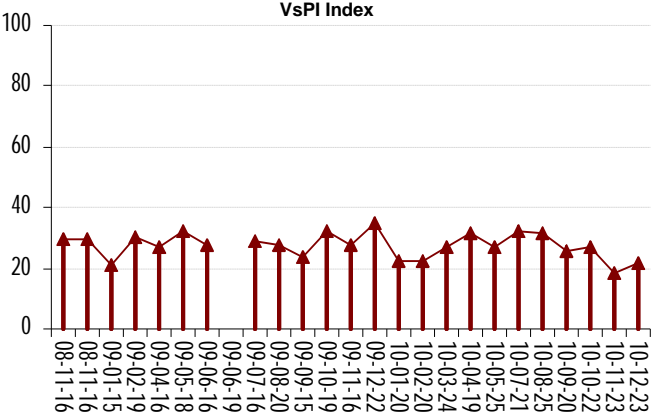
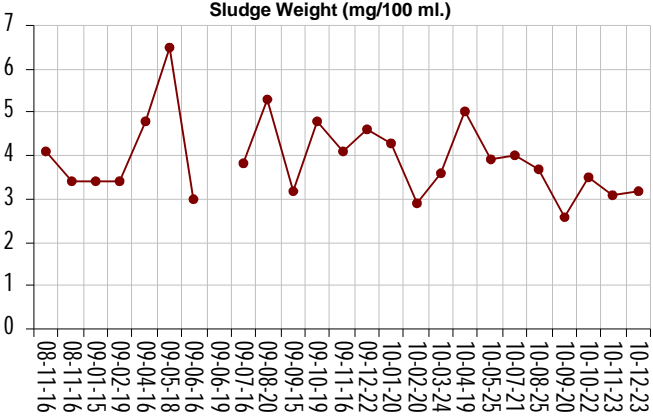


C Code : **22005**
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Unit ID : **31 42 2TGH CTG 2**
 Unit Type : Engine Turbine Gas
 Unit Make : GENERAL ELECTRIC
 Unit Model : PG6551
 Oil type / Viscosity : CALTEX REGAL EP 32
 Oil System Capacity : 8706 Liters

Notes (Finding, Evaluation, Interpretation, Suggestion and Recommendation)

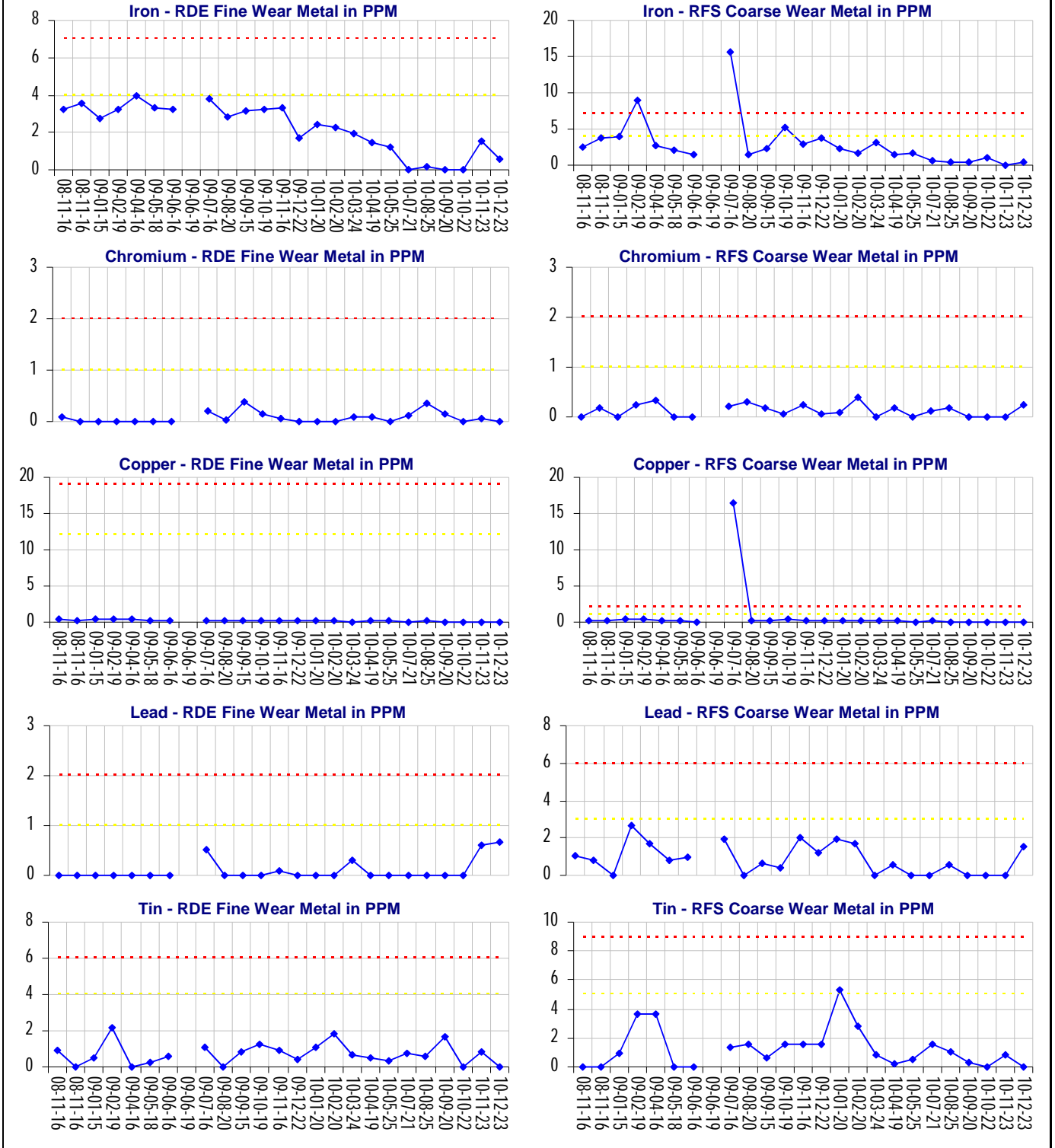
Varnish & Sludge Potential Index (VsPI) indicates some varnish & sludge products are present in the oil, but the level is ACCEPTABLE at this time.

	Current Sample	Previous Sample		
Lab ID	150612	148642	146766	
Bottle ID	923298	922511	922481	
Date Sampled	23-Dec-10	23-Nov-10	22-Oct-10	
Oil Hours (Kms)	53480	53262	52663	
Unit Hours (Kms)	102214	101996	101397	
Oil Added (Liters)				
Filters Hours (Kms)				
Contamination				
Varnish and Sludge Potential Index™ (VsPI™)				
VPI (Varnish Potential Index) : Soluble Varnish Contamination in Oil				
	VPI View	VPI View	VPI View	The New Oil
VPI (Varnish Potential Index) Soluble Varnish Contaminant				VPI View
VPI Rating	34.4	28.6	45.3	
SPI (Sludge Potential Index) : or MPC test (Membrane Patch Colorimetric Test) : Insoluble Varnish Contamination in Oil				
	SPI View	SPI View	SPI View	The New Oil
SPI (Sludge Potential Index) Insoluble Varnish Contaminant				SPI View
SPI Rating	8.9	8.6	8.1	
Sludge Weight	3.2 mg/100 ml	3.1 mg/100 ml	3.5 mg/100 ml	
Alarm Limit Name ETG GE CTX Regal EP 32 (Glow)01/10				
	Caution	Warning		
VsPI VsPI = (VPI + SPI) / 2	21.7	18.6	26.7	>30 >40
VsPI Index		Sludge Weight (mg/100 ml.)		
				

C Code : **22005**
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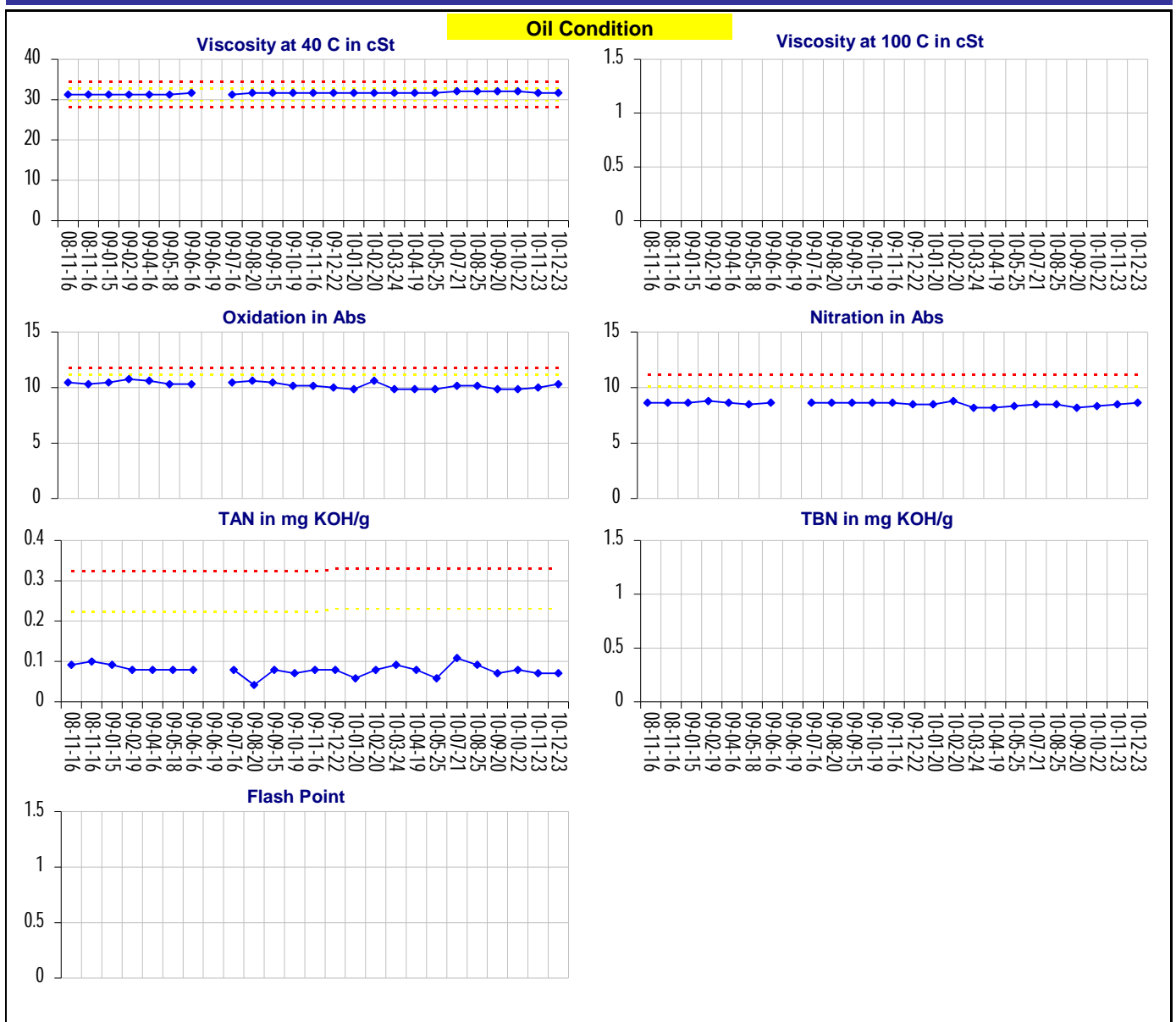
Unit ID : **31 42 2TGH CTG 2**
 Unit Type : Engine Turbine Gas
 Unit Make : GENERAL ELECTRIC
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 Oil type / Viscosity : CALTEX REGAL EP 32
 Oil System Capacity : 8706 Liters

Wear Condition



C Code : 22005
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E Unit ID : 31 42 2TGH CTG 2
 O Unit Type : Engine Turbine Gas
 I Unit Make : GENERAL ELECTRIC
 P Unit Model : PG6551
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 E Oil type /
 N Viscosity : CALTEX REGAL EP 32
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 Oil System Capacity : 8706 Liters



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