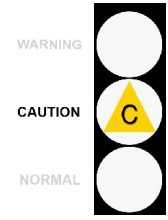


C Code : 28032002
 U Name :
 S
 T
 O
 M
 E
 R Address : Saraburi Plant 99 Moo 9
 Friendship Highway, Tabkwang
 Kaengkoi, Saraburi 18260
 Site : ESN 502970
 Location :
 Test code : E802

Unit ID : PC 2000 8 No 1 Eng
 Unit Type : Engine Diesel
 Unit Make : KOMATSU
 Unit Model : PC 2000-8
 Oil type / Viscosity : SHELL RIMULA R4 SAE 15W40
 Oil System Capacity : 130 Liters



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

Trace amount of soot level.
 Oil condition tests indicate that the oil is slightly degraded.
 Recommend change oil and flush system with clean oil to remove contamination, if the oil from this sample is still in use in this component.

Somchai J.

			Current Sample			Previous Sample			Baseline and Alarm Limit						
Condition History			Wear	Oil	Cont.	Wear	Oil	Cont.	Wear	Oil	Cont.	Alarm Limit			
			N	C	C	N	C	C	N	C	C	Alarm Limit Matrix -Set Name (Equipment type / oil type)			
Lab ID	Test Method	Result										Engine Diesel Komatsu PC2000-8 SH Rimula R4 SAE 15W40(Siam City Cement Public)			
Bottle ID			251283	247362	242430										
Date Sampled			1030186	1030441	1030459										
Oil Hours (Kms)			17-Mar-14	11-Feb-14	07-Jan-14										
Unit Hours (Kms)			463	482	495										
Oil Change			14963	14482	13995										
Oil Added (Liters) Filters Hours (Kms)															
Wear Condition			Fine(small) Wear	Coarse(large) Wear	Fine(small) Wear	Coarse(large) Wear	Fine(small) Wear	Coarse(large) Wear	The New Oil (TNO)	Fine Wear U-Caution	U-Warning	Coarse wear U-Caution	U-Warning		
Iron	D-6595	PPM	13.8	2.5	14.3	2.2	19.0	2.8	0	>100	>200	>100	>200		
Chromium	D-6595	PPM	1.6	0.6	1.4	0.0	1.5	0.1	0	>10	>25	>10	>25		
Lead	D-6595	PPM	0.4	0.0	0.7	0.0	1.5	0.0	0	>40	>120	>40	>120		
Copper	D-6595	PPM	3.2	0.6	2.7	0.1	2.9	0.1	0	>25	>70	>25	>70		
Tin	D-6595	PPM	0.0	0.0	0.0	0.4	0.0	0.0	0						
Aluminum	D-6595	PPM	1.8	0.7	1.6	0.0	1.6	0.0	0	>8	>16	>8	>16		
Nickel	D-6595	PPM	0.1	0.0	0.1	0.0	0.3	0.0	0						
Silver	D-6595	PPM	0.1	0.1	0.0	0.1	0.1	0.0	0						
Molybdenum	D-6595	PPM	38.2	7.0	39.0	5.3	36.0	5.1	37						
Titanium	D-6595	PPM	0.3	0.0	0.2	0.0	0.3	0.0	0						
Oil Condition			TNO	L-Warning	L-Caution	U-Caution	U-Warning								
Viscosity @ 40°C	D-445	cSt													
Viscosity @ 100°C	D-445	cSt	14.3		14.7		14.8		15.6	<12.56	<14.1	>17.1	>18.56		
Oxidation		Abs	14.0		14.7		14.6		11.0		>16.5	>19.2			
Nitration		Abs	7.8 W		7.4 C		7.8 W		3.4		>6.8	>7.7			
TAN	D-974	mg KOH/g													
TBN	D-4739	mg KOH/g							10.6	<2	<5.3				
Contamination			TNO	L-Warning	L-Caution	U-Caution	U-Warning								
Water	FTIR	%(Wt.)	0.067		0.065		0.061		0.067		>0.15	>0.5			
Fuel	SAW	%(Wt.)	0.10		0.10		0.10				>3	>4			
Glycol	FTIR	Abs	0		0		0								
Soot	FTIR	%(Wt.)	1.08 C		1.06 C		1.03 C				>0.9	>1.6			
Vanadium	D-6595	PPM	0		0		0		0						
Sodium	D-6595	PPM	7		5		4		4	>50	>100				
Silicon	D-6595	PPM	8.2	0.1	9.0	1.7	8.4	0.0	6	>20	>40	>20	>40		
Additive Element			TNO	L-Warning	L-Caution	U-Caution	U-Warning								
Boron	D-6595	PPM	321		345		325		380						
Magnesium	D-6595	PPM	21		15		14		12						
Calcium	D-6595	PPM	3505		3374		3244		3002						
Barium	D-6595	PPM	0		0		0		0						
Phosphorus	D-6595	PPM	1180		1134		1202		1256						
Zinc	D-6595	PPM	1415	298	1414	122	1440	139	1245						
Additional Test			TNO	L-Warning	L-Caution	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 **C** : CAUTION (first level warning limit) , **W** or **W** : Warning (second level warning limit)
U-Caution : Upper CAUTION Level **L-Caution** : Lower CAUTION Level **U-Warning** : Upper WARNING Level **L-Warning** : Lower WARNING required Level
 Baseline will be data of either "The new oil" or "Reference oil" or "Oil specification".
 Accuracy of interpretation and recommendation are based on representatives sample and information supplied.
 First Level Alarm -Alert Limit in Upper Level and/or Lower Level
 Second Level Alarm -Alert Limit in Upper Level and/or Lower Level
 TNO = The new oil , RO = Reference oil , OS = Oil Specification
 No warranty is expressed or implied for this report.

C Code : **28032002**

U Name :

O Address : Saraburi Plant 99 Moo 9
M Friendship Highway, Tabkwang
E Kaengko, Saraburi 18260

R Site : ESN 502970

Location :

Test code : E80202

E Unit ID : **PC 2000 8 No 1 Eng**

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Oil type / Viscosity : SHELL RIMULA R4 SAE 15W40

Oil System Capacity : 130 Liters

Lab ID : 251283 **Date sampled :** 17-Mar-14 **Hours on Oil :** 463 **Hours on Unit :** 14963 **Bottle ID :** 1030186**ส่วนที่ 1 : หน้าหลัก**[Section 1 : Main Page](#)

สังเกต ระดับค่าเขม่า เล็กน้อย

ผลทดสอบคุณสมบัติน้ำมัน ชีวภาพน้ำมันเสื่อมสภาพไปเล็กน้อย

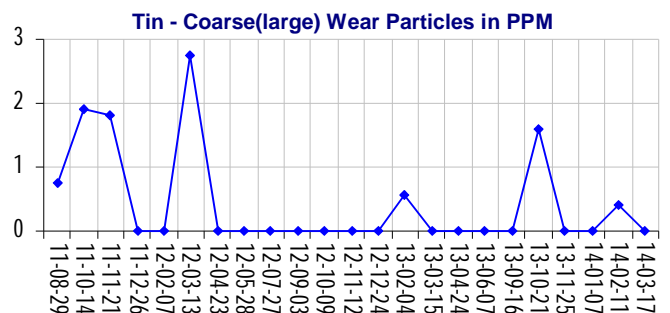
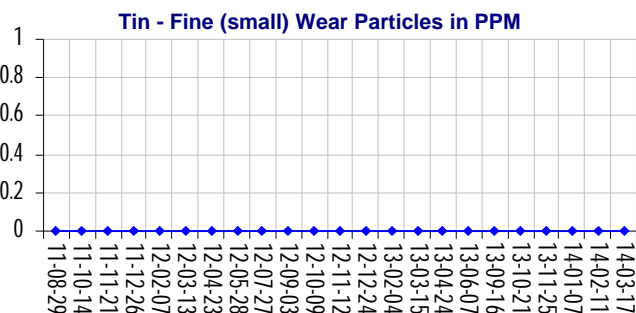
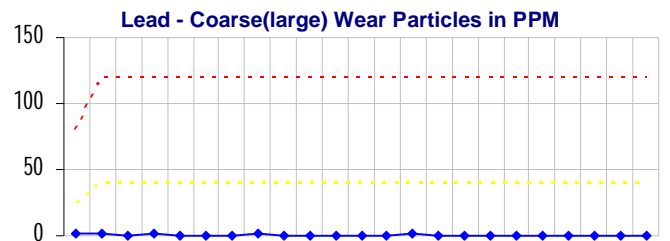
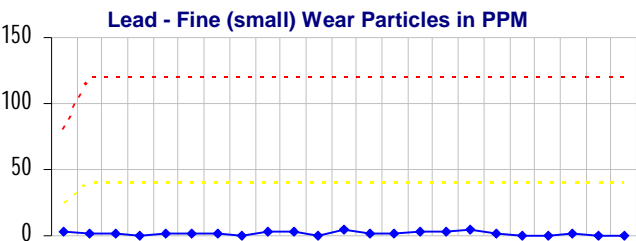
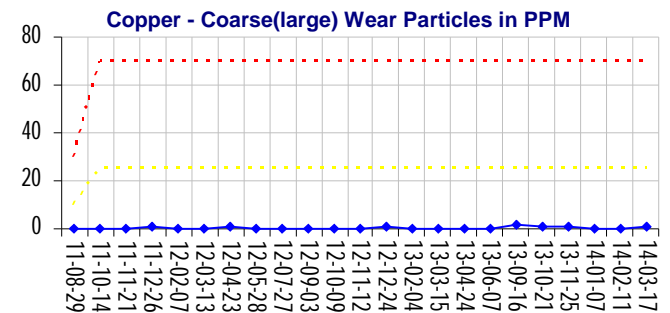
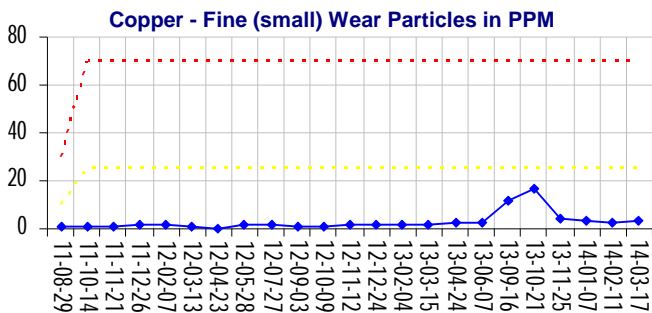
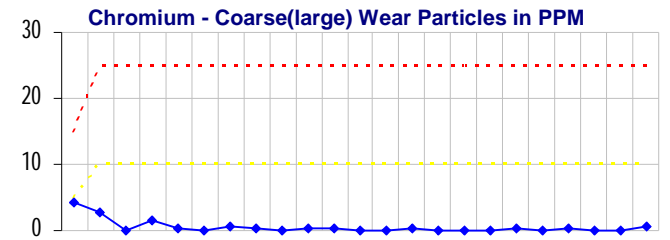
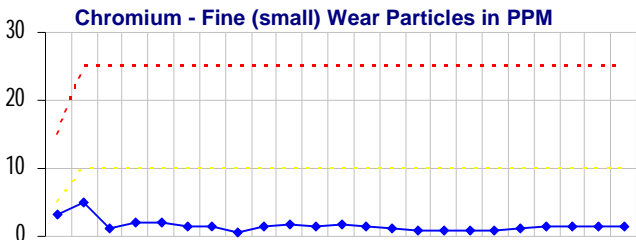
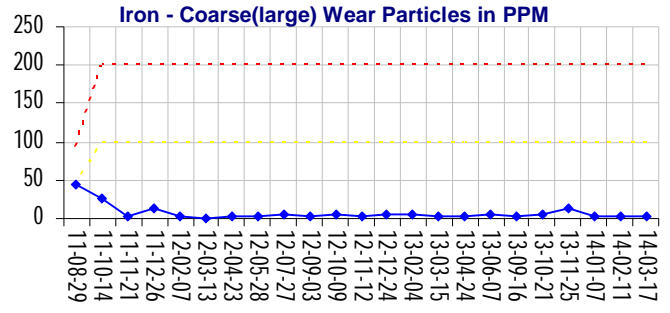
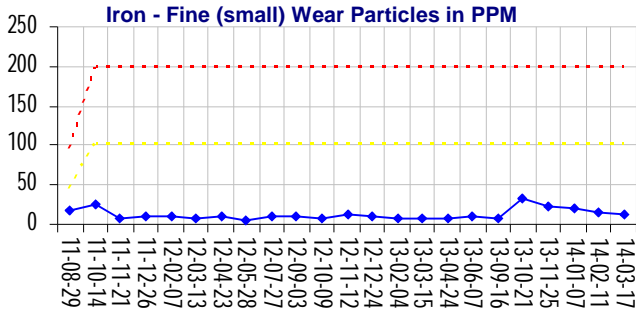
แนะนำให้ถ่ายน้ำมันและล้างระบบด้วยน้ำมันใหม่เพื่อขจัดสิ่งปนเปื้อน ถ้าน้ำมันหล่อลื่นนี้ยังคงใช้งานในขณะนี้

ส่วนที่ 2 : หน้าของ Particle Count[Section 2 : Particle Count](#)**ส่วนที่ 3 : หน้าของ Ferrographic Analysis**[Section 3 : Ferrographic Analysis](#)**ส่วนที่ 4 : หน้าของ Varnish and Sludge Potential**[Section 4 : Varnish and Sludge Potential](#)**ส่วนที่ 5 : หน้าของ Gravimetric Analysis**[Section 5 : Gravimetric Analysis](#)

C Code : **28032002**
 U Name :
 S Address : Saraburi Plant 99 Moo 9
 T Friendship Highway, Tabkwang
 O Kaengkoi, Saraburi 18260
 M Site : ESN 502970
 E Location :
 R Test code : E80202

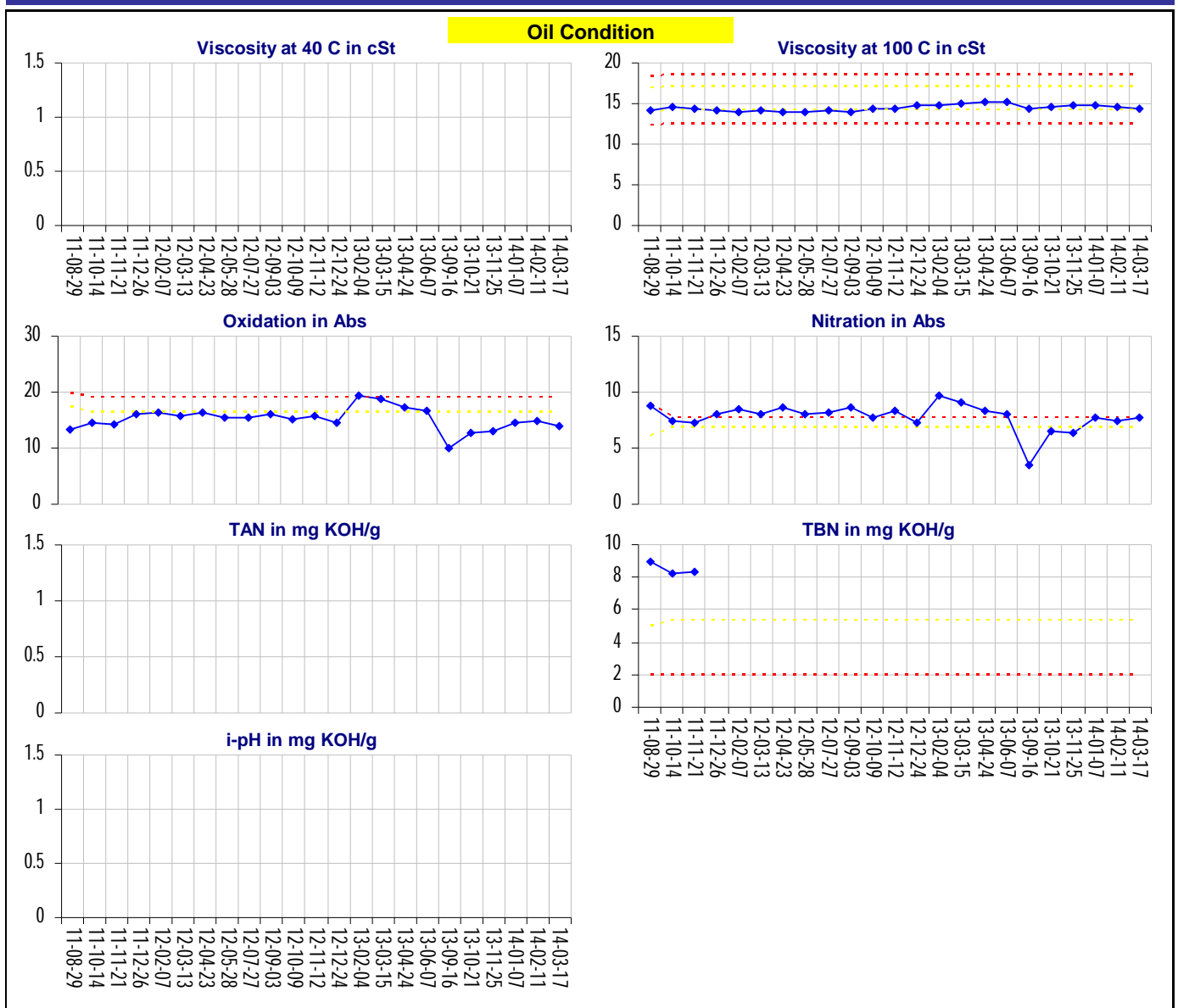
E Unit ID : **PC 2000 8 No 1 Eng**
 O Unit Type : Engine Diesel
 U Unit Make : KOMATSU
 I Unit Model : PC 2000-8
 P Oil type / Viscosity : SHELL RIMULA R4 SAE 15W40
 L Oil System Capacity : 130 Liters

Wear Condition



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 E Viscosity :
 N
 L Oil System Capacity : 130 Liters

