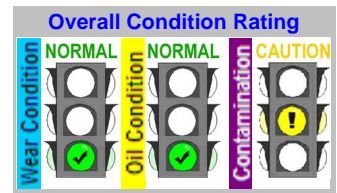


C Code : 16005190
 U Name : B005
 T
 O Address : c/o Technoplus Asia Co.,Ltd.
 M 634/3 Soi Ramkhamhaeng 39 (Thepleela 1)
 E Wangthonglang Bangkok 10310
 R Site :
 Location :
 Test code : 89308

E Unit ID : **Furnace Hyd**
 O Unit Type : Hyd Syst Industrial
 I Unit Make : DANIELI
 P Unit Model : (not given)
 M Oil type /
 E Viscosity : 7 LUBRICANTS ISO 46
 N
 L Oil System Capacity : 2400 Liters



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

Particle count indicates that oil cleanliness level is in unacceptable range.
 All other wear tests and oil condition tests appear satisfactory, and the oil was still serviceable at the time of sampling.
 Recommend check the oil filters for proper operation and suggest using an off-line filtration system to clean up the oil system.

Somchai J / Andy Siltton

		Current Sample			Previous Sample		Baseline and Alarm Limit							
Condition History		Wear	Oil	Cont.			Alarm Limit							
Lab ID Bottle ID Date Sampled Oil Hours (Kms) Unit Hours (Kms) Oil Added (Liters) Filters Hours (Kms)	Test Method	Result	N	N	C			Alarm Limit Matrix -Set Name (Equipment type / oil type) Hydraulic System General ISO 46						
			150872	924854	28-Dec-10	1800	10 years							
			Wear Condition							Oil Specification (SO)	RDE fine		RFS coarse	
			Wear Element	Method	Unit	RDE fine	RFS coarse			U-Caution	U-Warning	U-Caution	U-Warning	
			Iron	D-6595	PPM	5.4			>10	>20	>10	>20		
			Chromium	D-6595	PPM	1.0	C		>1	>2	>1	>2		
			Lead	D-6595	PPM	0.4			>5	>9	>6	>10		
Copper	D-6595	PPM	3.0			>45	>75	>30	>55					
Tin	D-6595	PPM	0.1			>2	>3	>3	>6					
Aluminum	D-6595	PPM	0.1			>2	>3	>2	>4					
Nickel	D-6595	PPM	0.0			>1	>2	>2	>3					
Silver	D-6595	PPM	0.0											
Molybdenum	D-6595	PPM	0.0											
Titanium	D-6595	PPM	0.0											
Oil Condition							OS	L-Warning	L-Caution	U-Caution	U-Warning			
Viscosity @ 40°C	D-445	cSt	44.8			46.0	<41.1	<43.7	>48.3	>50.6				
Viscosity @ 100°C	D-445	cSt												
Oxidation	FTIR	Abs	3.4											
Nitration	FTIR	Abs	3.9											
TAN	D-974	mg KOH/g.	0.64						>1	>1.5				
TBN	D-4739	mg KOH/g.												
Contamination							OS			U-Caution	U-Warning			
Water	T-H2O Check™	% (Wt.)	0.020						>0.03	>0.05				
Sodium	D-6595	PPM	2											
Silicon	D-6595	PPM	0.0											
Additive Element							OS							
Boron	D-6595	PPM	0											
Magnesium	D-6595	PPM	0											
Calcium	D-6595	PPM	12											
Barium	D-6595	PPM	0											
Phosphorus	D-6595	PPM	390											
Zinc	D-6595	PPM	542											
Additional Test							OS	U-Caution	U-Warning	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, 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".
 Accuracy of interpretation and recommendation are based on representatives sample and information supplied.
 TNO = The new oil, RO = Reference oil, OS = Oil Specification
 No warranty is expressed or implied for this report.

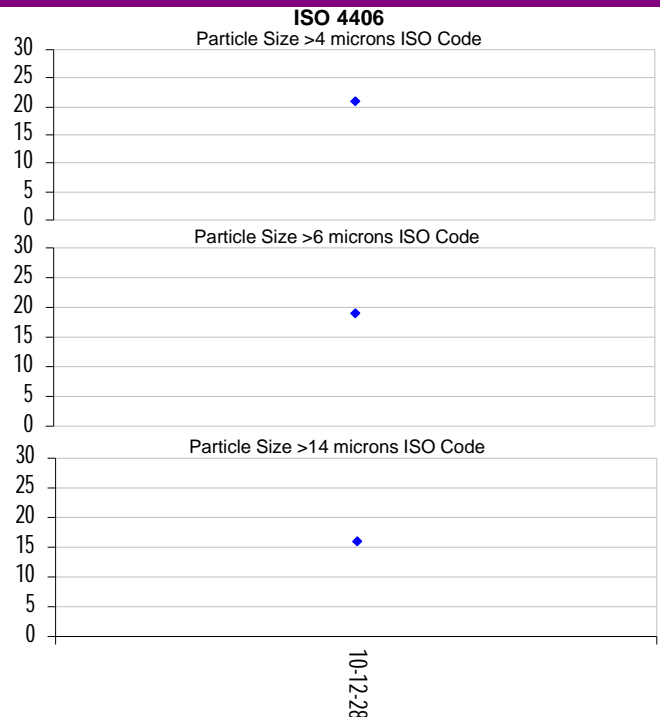
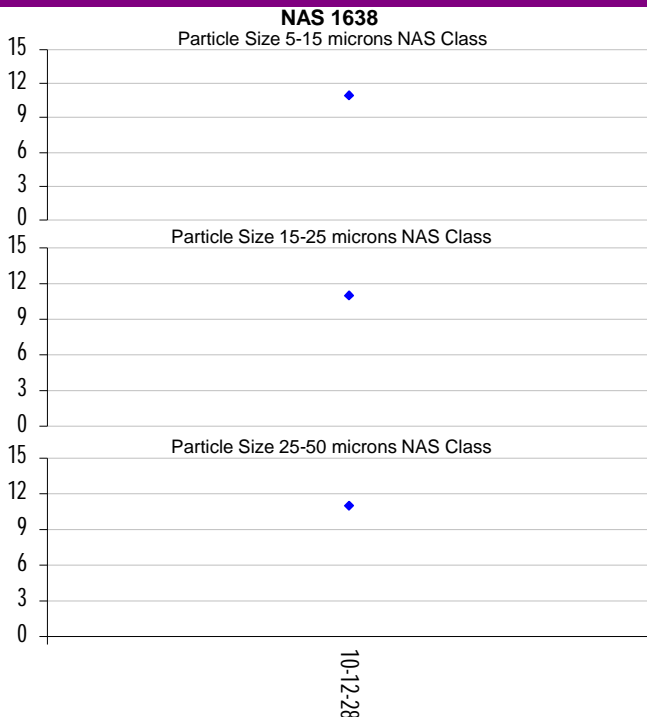
C Code : **16005190**
 U S Name : **B005**
 T O M E R Address : c/o Technoplus Asia Co.,Ltd.
 634/3 Soi Ramkhamhaeng 39 (Thepleela 1)
 Wangthonglanq Bangkok 10310
 Site :
 Location :
 Test code : 89308

Unit ID : **Furnace Hyd**
 Unit Type : Hyd Syst Industrial
 Unit Make : DANIELI
 Unit Model : (not given)
 Oil type / Viscosity : 7 LUBRICANTS ISO 46
 Oil System Capacity : 2400 Liters

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

Particle count indicates that oil cleanliness level is in unacceptable range.

Lab ID	Current Sample		Previous Sample				Particle Count		NAS 1638		ISO 4406	
	Bottle ID	Date Sampled	Oil Hours (Kms)	Unit Hours (Kms)	Oil Added (Liters)	Filters Hours (Kms)	Class	No. of Particles / 100ml	Class	No. of Particles / 100ml	Class	
	150872	28-Dec-10	1800	10 years								
Contamination							BASELINE		Alarm Limit			
Particle Count NAS 1638 System Standard							Hydraulic System General ISO 46		U-Warning		U-Warning	
Particle Count ISO 4406:1999 System Standard							U-Caution		U-Warning			
Particle Size Range	No. of Particles / 100ml.	Class	No. of Particles / 100ml.	Class	No. of Particles / 100ml.	Class	Class	No. of Particles / 100ml.	Class	No. of Particles / 100ml.	Class	
Particle Size 5-15 microns	506,600	11 W						>16000	7	>32000	8	
Particle Size 15-25 microns	46,100	11 W						>2850	7	>5700	8	
Particle Size 25-50 microns	13,100	11 W						>506	7	>1012	8	
Particle Size 50-100 microns	1400	10										
Particle Size >100 microns	<100	9										
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	No. of Particles / ml.	Class	No. of Particles / ml.	Class	
Particle Size > 4 microns	15,198	21										
Particle Size > 6 microns	4,254	19										
Particle Size > 14 microns	597	16										
ISO 4406 Class Rating	21/19/16											



C Code : **16005190**U S Name : **B005**T O M E R Address : c/o Technoplus Asia Co.,Ltd.
634/3 Soi Ramkhamhaeng 39 (Thepleela 1)
Wangthonglang Bangkok 10310

Site :

Location :

Test code : 89308

E O U I Unit ID : **Furnace Hyd**

P Unit Type : Hyd Syst Industrial

M Unit Make : DANIELI

E N T Unit Model : (not given)

o Oil type/
I Viscosity : 7 LUBRICANTS ISO 46

L Oil System Capacity : 2400 Liters

Lab ID : 150872 **Date sampled :** 28-Dec-10 **Hours on Oil :** 1800 **Hours on Unit :** 10 years **Bottle ID :** 924854**ส่วนที่ 1 : หน้าหลัก**[Section 1 : Main Page](#)

ผลการตรวจนับอนุภาคสิ่งสกปรกซึ่งวัดระดับความสะอาดของน้ำมันยอมรับไม่ได้แล้ว

ผลการทดสอบการสึกหรอและคุณสมบัติของน้ำมันอื่นๆทั้งหมด พบว่ามีค่าเป็นปกติและน้ำมันยังคงสามารถใช้งานต่อไปได้นับจากเวลาที่เก็บตัวอย่าง

แนะนำให้ตรวจสอบการทำงานของกรองน้ำมัน เพื่อตรวจสอบหาการทำงานที่ผิดปกติ และแนะนำใช้ระบบกรองภายนอกพร้อมด้วย เพื่อจัดการให้ระบบน้ำมันสะอาดขึ้น

ส่วนที่ 2 : หน้าที่สอง[Section 2 : Second Page](#)

ผลการตรวจนับอนุภาคสิ่งสกปรกซึ่งวัดระดับความสะอาดของน้ำมันยอมรับไม่ได้แล้ว

ส่วนที่ 3 : หน้าของ Analytical Ferrography[Section 3 : Analytical Ferrography Page](#)**ส่วนที่ 4 : หน้าของ Gravimetric Page**[Section 4 : Gravimetric Page](#)