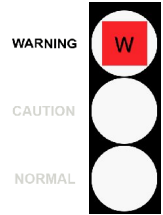


C Code : 25040
 U Name :
 T
 O Address : 29th - 31st Floor, Shinawatra Tower 3,
 M 1010 Viphavadi Rangsit Road,
 E Chatuchak, Bangkok 10900
 R
 Site :
 Location :
 Test code : P804

Unit ID : **WP D P1801 A DE**
 Unit Type : Pump
 Unit Make : GOULDS PUMP
 Unit Model : 3700 LX
 Oil type/
 I Viscosity : MOBIL DTE 26 ISO 68
 L
 Oil System Capacity : 2.5 Liters



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

Note abnormal wear metals.
 Dirt (silicon) is present and resulting in abrasive wear.
 Note viscosity is higher than normal limits.
 Recommend check to determine how dirt is entering the system and correct the problem to prevent further dirt entry.
 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.	Alarm Limit				
			W	C	C	Alarm Limit Matrix -Set Name (Equipment type / oil type)				
						Pump General Mobil DTE 26 ISO 68 (Mubadala Petroleum)				
Lab ID	Test Method	Result				Reference Oil (RO)	RDE fine		RFS coarse	
Bottle ID			RDE fine	RFS coarse		U-Caution	U-Warning	U-Caution	U-Warning	
Date Sampled		223713				0	>15	>25	>23	>40
Oil Hours (Kms)		1015391				0	>2	>3	>2	>3
Unit Hours (Kms)		19-Jul-13				0	>1	>2	>8	>13
Oil Added (Liters)		1027				0	>9	>16	>8	>13
Filters Hours (Kms)		1027				0	>2	>4	>2	>4
Wear Condition						0	>1	>2	>2	>4
Wear Element	Method	Unit	RDE fine	RFS coarse		0	>1	>2	>2	>3
Iron	D-6595	PPM	32.7 W	232.5 W		0				
Chromium	D-6595	PPM	0.7	3.0 W		0				
Lead	D-6595	PPM	0.0	0.1		0				
Copper	D-6595	PPM	2.4	6.4		0				
Tin	D-6595	PPM	0.1	0.5		0				
Aluminum	D-6595	PPM	0.4	3.1 C		0				
Nickel	D-6595	PPM	0.4	0.8		0				
Silver	D-6595	PPM	0.0	0.0		0				
Molybdenum	D-6595	PPM	0.1	1.4		0				
Titanium	D-6595	PPM	0.0	3.4		0				
Oil Condition						RO	L-Warning	L-Caution	U-Caution	U-Warning
Viscosity @ 40°C	D-445	cSt	70.5 W			64.0	<57.6	<60.8	>67.2	>70.4
Viscosity @ 100°C	D-445	cSt				8.5				
Oxidation	FTIR	Abs	7.7							
Nitration	FTIR	Abs	7.0							
TAN	D-974	mg KOH/g.	1.16			1.07			>1.27	>1.57
TBN	D-4739	mg KOH/g.								
Contamination						RO			U-Caution	U-Warning
Water	T-H2O CheckTM	% (Wt.)	0.028			0.023			>0.06	>0.1
						RDE fine		RFS coarse		
						U-Caution	U-Warning	U-Caution	U-Warning	
Sodium	D-6595	PPM	3			2				
Silicon	D-6595	PPM	2.8	10.5 W		0	>7	>12	>5	>8
Additive Element						RO				
Boron	D-6595	PPM	0			0				
Magnesium	D-6595	PPM	1			1				
Calcium	D-6595	PPM	81			81				
Barium	D-6595	PPM	0			0				
Phosphorus	D-6595	PPM	376			516				
Zinc	D-6595	PPM	693	145		663				
Additional Test						RO	L-Caution	L-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 **▲** : 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.