

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL

Machine Id 2004007787

Component Port Diesel Engine Fluid SAE 15W40 (--- GAL)

DIAGNOSIS

Recommendation

Échantillonner de nouveau l'équipement au prochain intervalle de vidange afin d'en surveiller la condition.

Wear

Les taux d'usure de tous les composants sont normaux.

Contamination

Il n`y a aucun indice de contamination dans l'huile.

Fluid Condition

L'état de l'huile est acceptable pour la durée de service.

SAMPLE INFORM	IATION	method	limit/base	current	history1	history2
Sample Number		Client Info		CU0023369		
Sample Date		Client Info		05 Apr 2024		
Machine Age	hrs	Client Info		0		
Oil Age	hrs	Client Info		0		
Oil Changed		Client Info		Not Changd		
Sample Status				NORMAL		
CONTAMINATION	N	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0		
Water		WC Method	>0.2	NEG		
Glycol		WC Method		NEG		
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m)	>100	11		
Chromium	ppm	ASTM D5185(m)	>20	<1		
Nickel	ppm	ASTM D5185(m)	>4	<1		
Titanium	ppm	ASTM D5185(m)		<1		
Silver	ppm	ASTM D5185(m)	>3	0		
Aluminum	ppm	ASTM D5185(m)	>20	2		
Lead	ppm	ASTM D5185(m)	>40	2		
Copper	ppm	ASTM D5185(m)	>330	3		
Tin	ppm	ASTM D5185(m)	>15	<1		
Antimony	ppm	ASTM D5185(m)		0		
Vanadium	ppm	ASTM D5185(m)		0		
Beryllium	ppm	ASTM D5185(m)		0		
Cadmium	ppm	ASTM D5185(m)		0		
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		121		
Barium	ppm	ASTM D5185(m)		<1		
Molybdenum	ppm	ASTM D5185(m)		0		
Manganese	ppm	ASTM D5185(m)		0		
Magnesium	ppm	ASTM D5185(m)		93		
Calcium	ppm	ASTM D5185(m)		1964		
Phosphorus	ppm	ASTM D5185(m)		902		
Zinc	ppm	ASTM D5185(m)		1092		
Sulfur	ppm	ASTM D5185(m)		2667		
Lithium	ppm	ASTM D5185(m)		1		
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m)	>25	4		
Sodium	ppm	ASTM D5185(m)	>57	4		
Potassium	ppm	ASTM D5185(m)	>20	2		
INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	>3	0		
Nitration	Abs/cm	ASTM D7624*	>20	8.6		
Sulfation	Abs/.1mm	ASTM D7415*	>30	22.6		



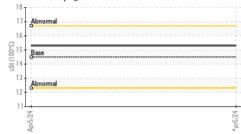
OIL ANALYSIS REPORT

FLUID DEGRADATION method limit/base

FT-IR (Direct Trend)



Viscosity @ 100°C



FLUID DEGRADATIC	JN	method	limit/base	current	history1	history2
Oxidation Abs	s/.1mm	ASTM D7414*	>25	19.8		
VISUAL		method	limit/base	current	history1	history2
White Metal sc	calar	Visual*	NONE	NONE		
Yellow Metal sc	calar	Visual*	NONE	NONE		
Precipitate sc	calar	Visual*	NONE	NONE		
Silt sc	calar	Visual*	NONE	NONE		
Debris sc	calar	Visual*	NONE	NONE		
Sand/Dirt sc	calar	Visual*	NONE	NONE		
Appearance sc	calar	Visual*	NORML	NORML		
Odor sc	calar	Visual*	NORML	NORML		
Emulsified Water sc	calar	Visual*	>0.2	NEG		
Free Water sc	calar	Visual*		NEG		
FLUID PROPERTIES	S	method	limit/base	current	history1	history2
Visc @ 100°C cS	St	ASTM D7279(m)	14.5	15.3		
GRAPHS						
Iron (ppm)			100	Lead (ppm)		
250			100- 80-	Severe		
E 150 100 Abnormal			e 60-	Abnormal		-
50			20-			
²⁴ 0			-0- -0-	/24		/24
Apr5/24			Apr5/24	Apr5/24		Apr5/24
Aluminum (ppm)			50-	Chromium (pp	m)	
40 Severe			40-	Severe		
Abnormal			트 ³⁰ -			
				Abnormal		-
10			10-			
Apr5/24			Apr5/24	Apr5/24		Apr5/24 -
Apré			Apré	Apri		Apré
Copper (ppm)			80-	Silicon (ppm)		
300 - Severe			60.			
툴 200			틆 40			
100-			20-	Abnormal		
0			0			
Apr5/24 -			Apr5/24	Apr5/24 -		Apr5/24 -
∝ Viscosity @ 100°C			A	₹ Soot %		A
¹⁸ Abnormal			6.0	SOOL %		
10				T		
G 10 Base 14 Abnormal			e ^{4.0} * ت 2.0*	Abnormal		
^경 12 <mark>Abnormal</mark>			2.0			
10			0.0			
Apr5/24			Apr5/24	Apr5/24		Apr5/24
đ			Ā	A		AI

MARINA ST. MATHIAS Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 CALA Sample No. : CU0023369 Received : 10 Apr 2024 Lab Number : 02627833 Tested : 10 Apr 2024 ISO 17025:2017 Accredited Laboratory : 10 Apr 2024 - Wes Davis Unique Number : 5760965 Diagnosed Test Package : MOB 1 (Additional Tests: Visual) To discuss this sample report, contact Customer Service at 1-800-268-2131. Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Validity of results and interpretation are based on the sample and information as supplied.

874 CH. DES PATRIOTES ST-MATHIAS, QC CA J3L 6A2 Contact: Steve Lajeunesse slajeunesse@marinasm.com T: (405)467-3868 F: (450)467-2111

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