MAR II

WEAR CHECK Inland Marine Oil Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
WILLIAM P MORELLI
Machine Id
[WILLIAM P MORELLI] 007 520785-7
Component
Port Genset
Fluid
CHEVRON DELO 400 LE 15W40 (6 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

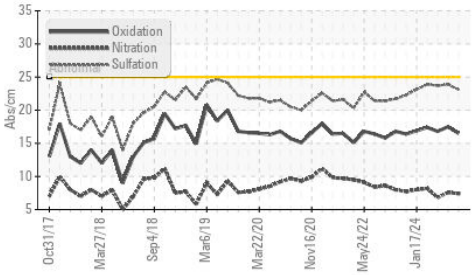
There is no indication of any contamination in the oil.

FLUID CONDITION

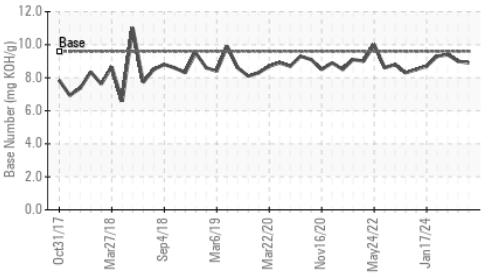
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		MW0020445	MW0067922	MW0067921
Sample Date		Client Info		16 Apr 2024	18 Mar 2024	11 Mar 2024
Machine Age	hrs	Client Info		13598	13280	13113
Oil Age	hrs	Client Info		300	0	0
Filter Age	hrs	Client Info		300	0	0
Oil Changed		Client Info		Not Changd	N/A	N/A
Filter Changed		Client Info		Not Changd	N/A	N/A
Sample Status				NORMAL	ABNORMAL	NORMAL
Iron	ppm	ASTM D5185m	>50	9	14	10
Chromium	ppm	ASTM D5185m	>4	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	0	<1	<1
Titanium	ppm	ASTM D5185m		2	1	1
Silver	ppm	ASTM D5185m	>5	0	0	0
Aluminum	ppm	ASTM D5185m	>12	3	4	5
Lead	ppm	ASTM D5185m	>17	<1	2	<1
Copper	ppm	ASTM D5185m	>70	53	▲ 99	54
Tin	ppm	ASTM D5185m	>15	<1	1	<1
Vanadium	ppm	ASTM D5185m		<1	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	6	7	7
Potassium	ppm	ASTM D5185m	>20	2	2	4
Fuel		WC Method	>4.0	<1.0	<1.0	<1.0
Water		WC Method	>0.1	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844		0.3	0.4	0.3
Nitration	Abs/cm	*ASTM D7624	>20	7.4	7.6	6.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.1	23.9	23.7
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG	NEG
Sodium	ppm	ASTM D5185m		0	0	0
Boron	ppm	ASTM D5185m		362	383	412
Barium	ppm	ASTM D5185m		2	2	2
Molybdenum	ppm	ASTM D5185m		125	133	135
Manganese	ppm	ASTM D5185m		1	2	2
Magnesium	ppm	ASTM D5185m		583	670	677
Calcium	ppm	ASTM D5185m		1636	1833	1820
Phosphorus	ppm	ASTM D5185m	1200	705	767	758
Zinc	ppm	ASTM D5185m	1300	796	906	901
Sulfur	ppm	ASTM D5185m	3200	2716	3064	3015
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.5	17.5	16.8
Base Number (BN)	mg KOH/g	ASTM D2896	9.6	8.9	9.0	9.4
Visc @ 100°C	cSt	ASTM D445	15.7	13.2	13.3	13.3

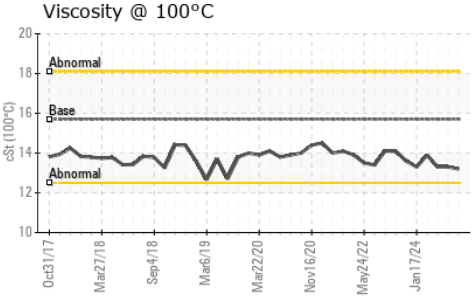
FT-IR (Direct Trend)



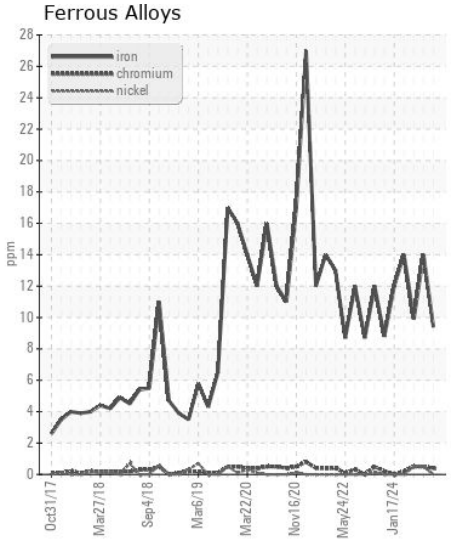
Base Number



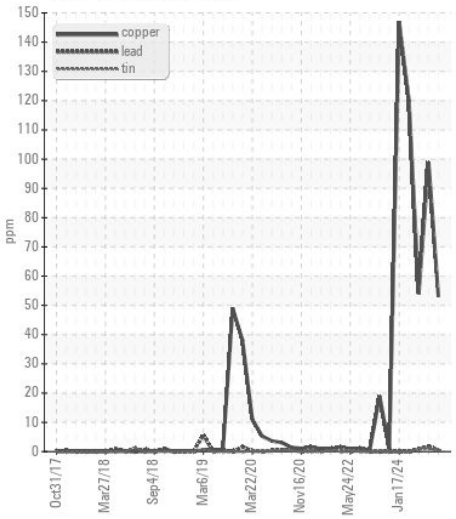
Viscosity @ 100°C



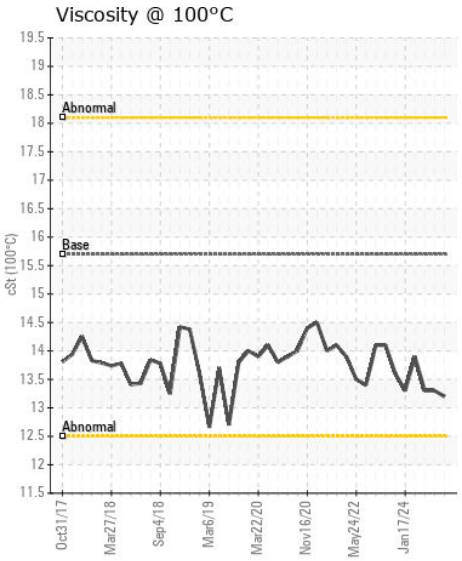
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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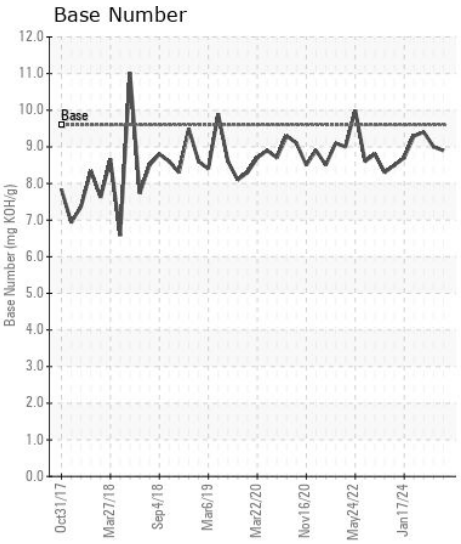

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : MW0020445
Lab Number : 06176605
Unique Number : 11022658
Test Package : MAR 2

Received : 10 May 2024
Tested : 13 May 2024
Diagnosed : 13 May 2024 - Wes Davis

To discuss this sample report, contact Customer Service at 1-800-237-1369.
** - Denotes test methods that are outside of the ISO 17025 scope of accreditation.*
Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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