MAR II

WEAR CHECK Inland Marine Oil Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
SAFETY LEGEND (S/N J5951)
Component
Port Main Engine
Fluid
CHEVRON DELO 400 MULTIGRADE 15W40 (11 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

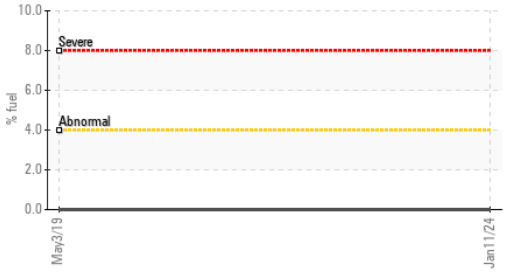
Tests indicate that there is no fuel present in the oil. There is no indication of any contamination in the oil.

FLUID CONDITION

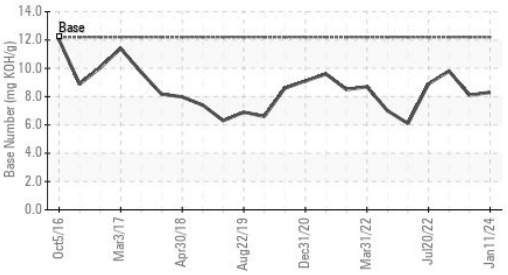
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		MW0064244	MW0051885	MW0037917
Sample Date		Client Info		11 Jan 2024	08 May 2023	16 Aug 2022
Machine Age	hrs	Client Info		25918	25421	50061
Oil Age	hrs	Client Info		127	256	0
Filter Age	hrs	Client Info		127	256	0
Oil Changed		Client Info		Not Changd	Changed	Changed
Filter Changed		Client Info		Not Changd	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>75	5	10	4
Chromium	ppm	ASTM D5185m	>8	<1	<1	0
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m	>3	0	0	14
Silver	ppm	ASTM D5185m	>2	0	0	<1
Aluminum	ppm	ASTM D5185m	>15	3	<1	<1
Lead	ppm	ASTM D5185m	>18	<1	6	<1
Copper	ppm	ASTM D5185m	>80	4	2	1
Tin	ppm	ASTM D5185m	>14	<1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>20	6	5	4
Potassium	ppm	ASTM D5185m	>20	2	<1	2
Fuel	%	ASTM D3524	>4.0	0.0	<1.0	<1.0
Water		WC Method	>0.1	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844		0.4	0.8	0.1
Nitration	Abs/cm	*ASTM D7624	>20	6.0	10.0	7.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.3	26.0	19.6
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	>75	6	5	0
Boron	ppm	ASTM D5185m		340	241	111
Barium	ppm	ASTM D5185m		<1	0	0
Molybdenum	ppm	ASTM D5185m		122	127	32
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		671	644	694
Calcium	ppm	ASTM D5185m		1563	1724	1577
Phosphorus	ppm	ASTM D5185m	1360	744	728	697
Zinc	ppm	ASTM D5185m	1480	896	887	802
Sulfur	ppm	ASTM D5185m		2706	2703	3055
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.2	21.1	13.6
Base Number (BN)	mg KOH/g	ASTM D2896	12.2	8.3	8.1	9.8
Visc @ 100°C	cSt	ASTM D445	15.1	12.4	13.5	14.3

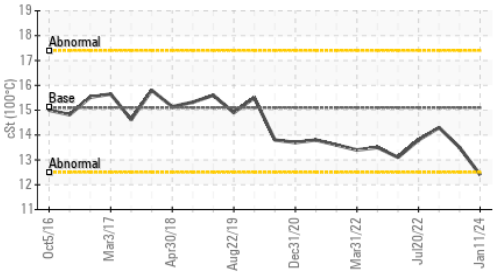
Fuel Dilution



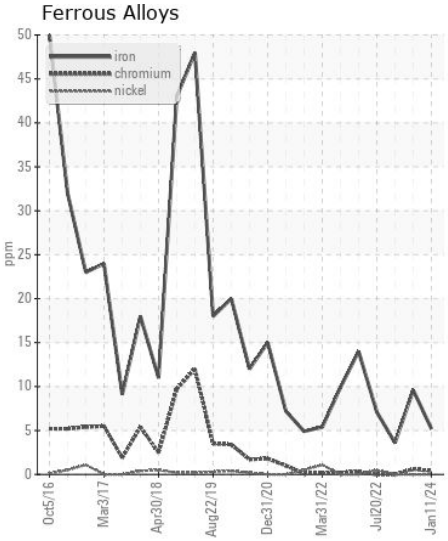
Base Number



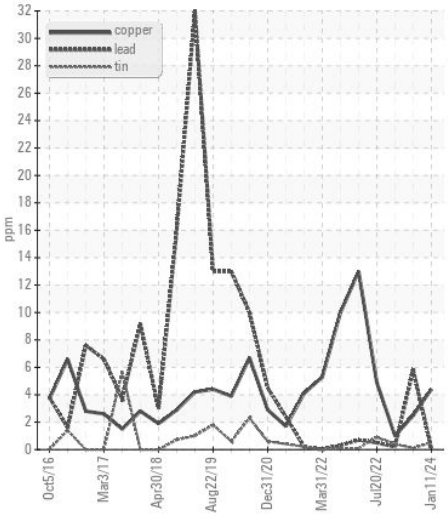
Viscosity @ 100°C



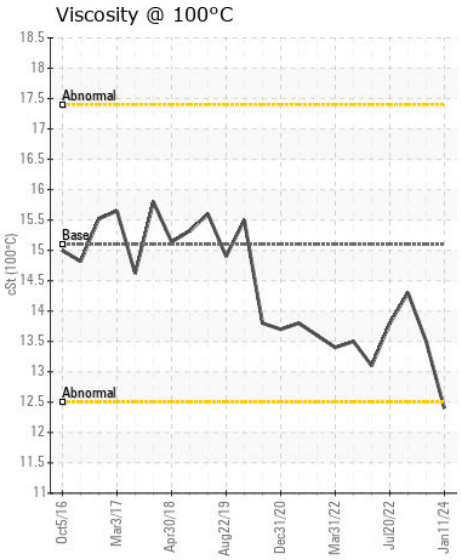
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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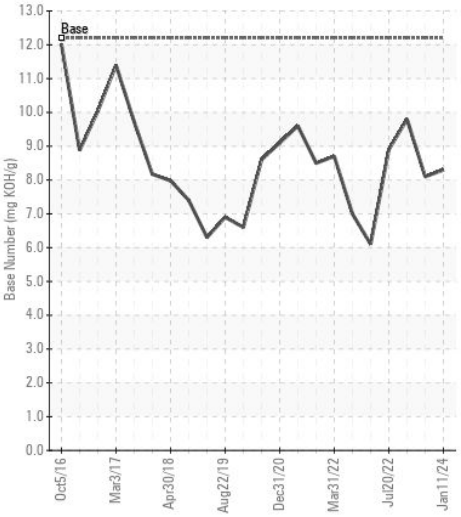

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : MW0064244 **Recieved** : 19 Jan 2024
Lab Number : 06065362 **Diagnosed** : 23 Jan 2024
Unique Number : 10836744 **Diagnostician** : Wes Davis
Test Package : MAR 2 (Additional Tests: FuelDilution, PercentFuel)

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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