MAR II

WEAR CHECK Inland Marine Oil Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
MISS ELLIE
Component
Port Genset
Fluid
CHEVRON DELO 400 MULTIGRADE 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

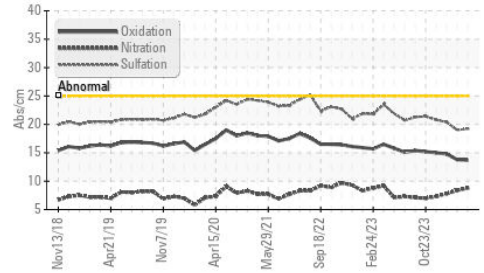
There is no indication of any contamination in the oil.

FLUID CONDITION

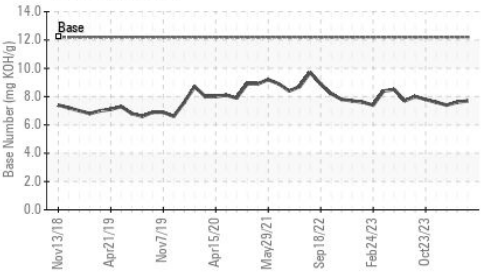
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		MW0062070	MW0044339	MW0027470
Sample Date		Client Info		07 May 2024	28 Mar 2024	07 Jan 2024
Machine Age	hrs	Client Info		32331	31854	30867
Oil Age	hrs	Client Info		466	494	500
Filter Age	hrs	Client Info		466	494	500
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>50	6	4	5
Chromium	ppm	ASTM D5185m	>4	<1	<1	0
Nickel	ppm	ASTM D5185m	>2	<1	<1	<1
Titanium	ppm	ASTM D5185m		14	14	6
Silver	ppm	ASTM D5185m	>5	<1	0	0
Aluminum	ppm	ASTM D5185m	>12	2	2	2
Lead	ppm	ASTM D5185m	>17	0	<1	0
Copper	ppm	ASTM D5185m	>70	<1	<1	<1
Tin	ppm	ASTM D5185m	>15	0	<1	0
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	5	4	5
Potassium	ppm	ASTM D5185m	>20	3	4	2
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		0.5	0.4	0.4
Nitration	Abs/cm	*ASTM D7624	>20	8.8	8.4	7.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.2	19.0	20.4
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		2	0	1
Boron	ppm	ASTM D5185m		114	150	182
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		50	52	84
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		750	698	655
Calcium	ppm	ASTM D5185m		1590	1549	1547
Phosphorus	ppm	ASTM D5185m	1360	823	741	733
Zinc	ppm	ASTM D5185m	1480	895	863	855
Sulfur	ppm	ASTM D5185m		3142	3551	2710
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.7	13.8	14.8
Base Number (BN)	mg KOH/g	ASTM D2896	12.2	7.7	7.6	7.4
Visc @ 100°C	cSt	ASTM D445	15.1	13.4	13.3	13.1

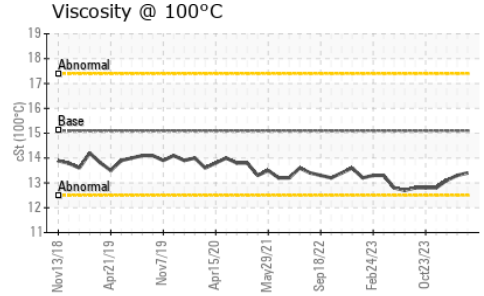
FT-IR (Direct Trend)



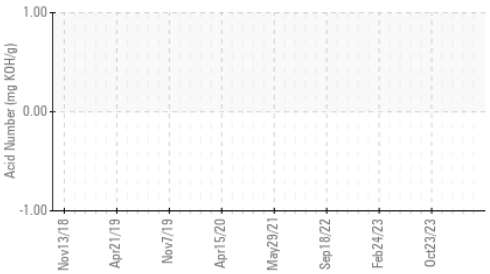
Base Number



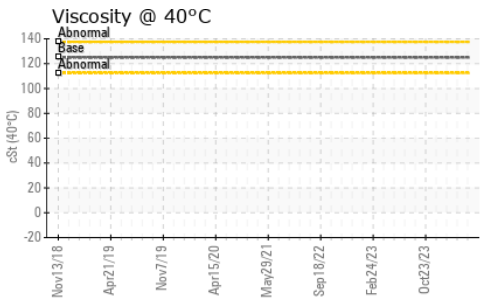
Viscosity @ 100°C



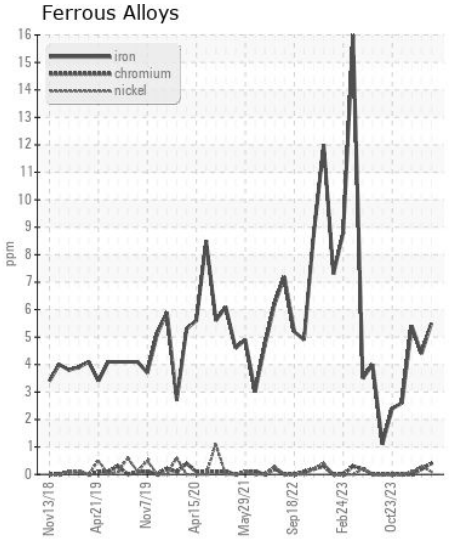
Acid Number



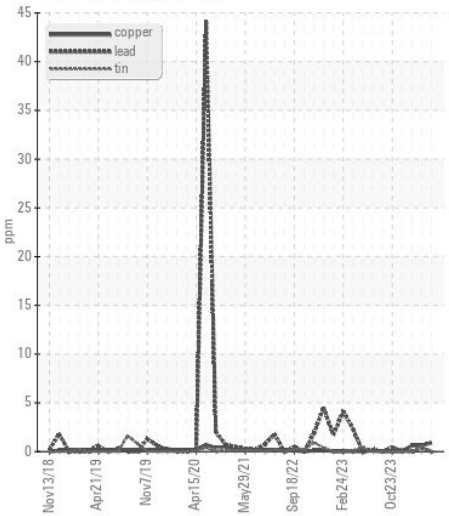
Viscosity @ 40°C



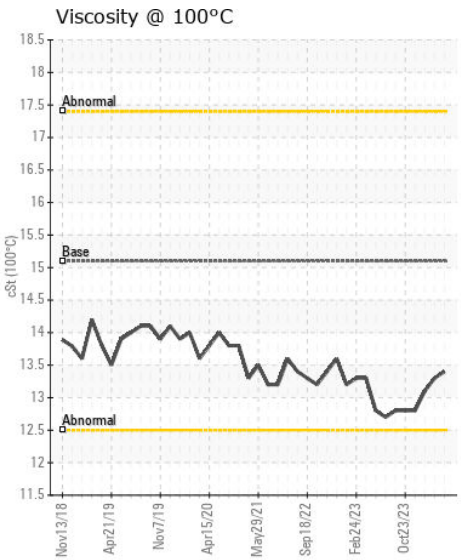
Ferrous Alloys



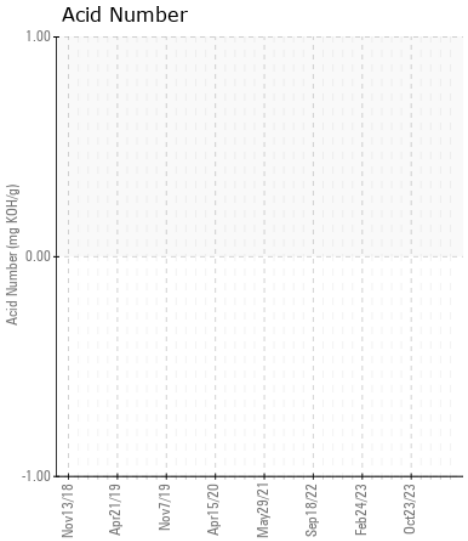
Non-ferrous Metals



Viscosity @ 100°C



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : MW0062070
Lab Number : 06224204
Unique Number : 11102401
Test Package : MAR 2 (Additional Tests: KV40, TAN Man)

Received : 28 Jun 2024
Tested : 01 Jul 2024
Diagnosed : 01 Jul 2024 - Angela Borella

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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