MAR II

WEAR CHECK Inland Marine Oil Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

Machine Id
HBR
Component
Port Genset
Fluid
CHEVRON URSA SUPER PLUS 40 (5 GAL)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

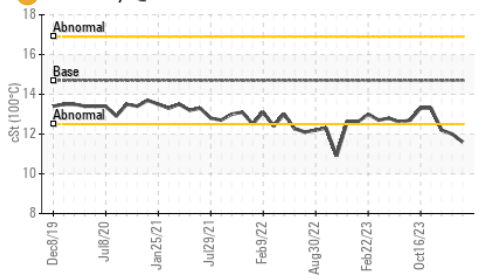
Fuel content negligible. There is no indication of any contamination in the oil.

FLUID CONDITION

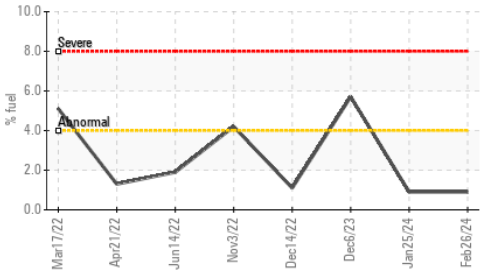
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		MW06101490	MW06071459	MW06028302
Sample Date		Client Info		26 Feb 2024	25 Jan 2024	06 Dec 2023
Machine Age	hrs	Client Info		21881	21368	20970
Oil Age	hrs	Client Info		513	398	444
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				ATTENTION	NORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>50	8	7	7
Chromium	ppm	ASTM D5185m	>4	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	<1	0	0
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>5	0	0	0
Aluminum	ppm	ASTM D5185m	>12	3	2	3
Lead	ppm	ASTM D5185m	>17	<1	2	0
Copper	ppm	ASTM D5185m	>70	<1	<1	<1
Tin	ppm	ASTM D5185m	>15	<1	<1	0
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	5	4	4
Potassium	ppm	ASTM D5185m	>20	3	<1	2
Fuel	%	ASTM D3524	>4.0	0.9	0.9	▲ 5.7
Water		WC Method	>0.1	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844		0.1	0.2	0.2
Nitration	Abs/cm	*ASTM D7624	>20	7.0	7.3	7.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.9	20.6	20.7
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		<1	1	1
Boron	ppm	ASTM D5185m		126	181	219
Barium	ppm	ASTM D5185m		1	0	5
Molybdenum	ppm	ASTM D5185m		40	62	72
Manganese	ppm	ASTM D5185m		<1	<1	0
Magnesium	ppm	ASTM D5185m		186	276	318
Calcium	ppm	ASTM D5185m		1877	2033	1986
Phosphorus	ppm	ASTM D5185m	1000	830	827	857
Zinc	ppm	ASTM D5185m	1090	996	977	1012
Sulfur	ppm	ASTM D5185m		3555	2692	3418
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.7	15.9	15.6
Base Number (BN)	mg KOH/g	ASTM D2896	7.4	6.9	7.4	7.6
Visc @ 100°C	cSt	ASTM D445	14.7	● 11.6	12.0	▲ 12.2

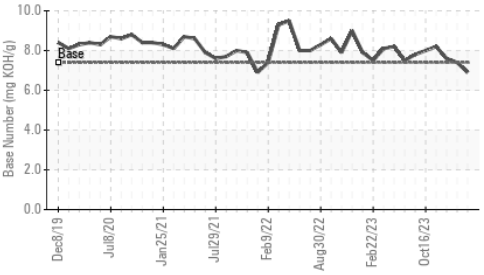
Viscosity @ 100°C



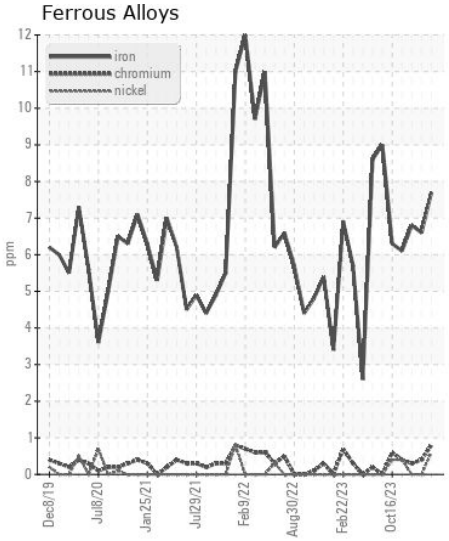
Fuel Dilution



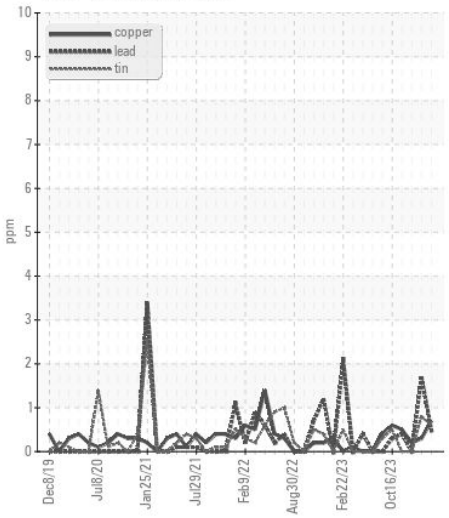
Base Number



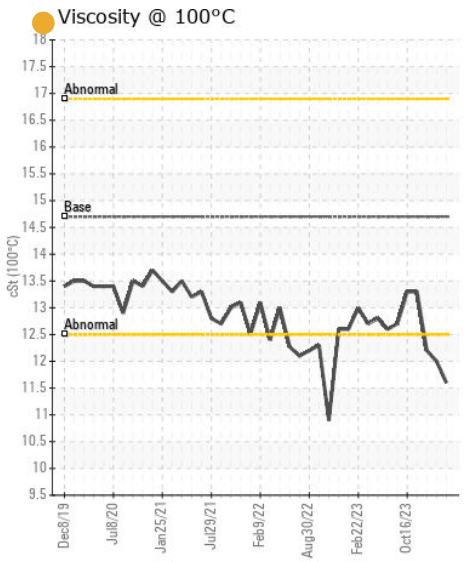
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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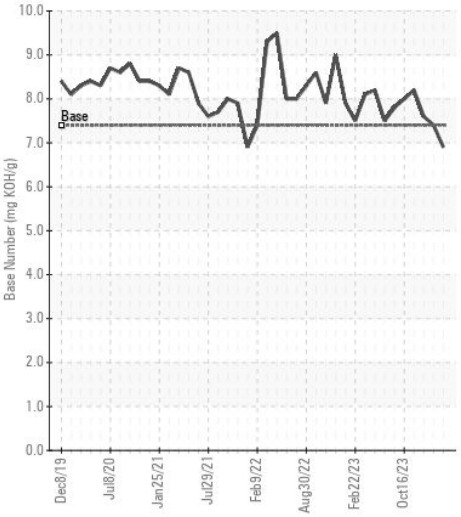

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : MW06101490 **Received** : 27 Feb 2024
Lab Number : 06101490 **Tested** : 04 Mar 2024
Unique Number : 10899720 **Diagnosed** : 04 Mar 2024 - Jonathan Hester
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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