MAR II

WEAR CHECK Inland Marine Oil Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	ABNORMAL

Machine Id
CWR
Component
Port Genset
Fluid
CHEVRON URSA SUPER PLUS 40 (--- GAL)

RECOMMENDATION

We advise that you check the fuel injection system. Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

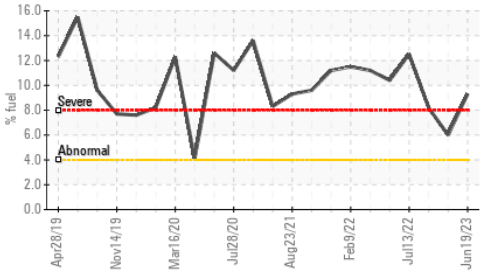
There is a high amount of fuel present in the oil.

FLUID CONDITION

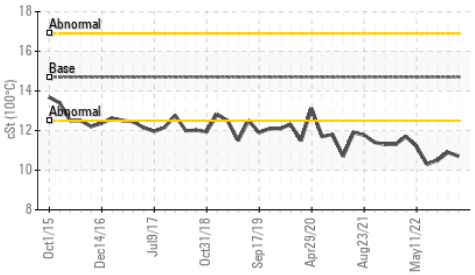
Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		MW05877879	MW05749256	MW05685054
Sample Date		Client Info		19 Jun 2023	24 Jan 2023	03 Nov 2022
Machine Age	hrs	Client Info		33025	32971	32624
Oil Age	hrs	Client Info		154	347	639
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				SEVERE	ABNORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>25	14	8	7
Chromium	ppm	ASTM D5185m	>5	0	<1	0
Nickel	ppm	ASTM D5185m	>5	0	<1	0
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m	>5	0	0	0
Aluminum	ppm	ASTM D5185m	>10	1	3	1
Lead	ppm	ASTM D5185m	>10	2	3	1
Copper	ppm	ASTM D5185m	>20	<1	<1	<1
Tin	ppm	ASTM D5185m	>5	<1	1	<1
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	8	6	5
Potassium	ppm	ASTM D5185m	>20	1	<1	<1
Fuel	%	ASTM D3524	>4.0	▲ 9.3	▲ 6.0	▲ 8.2
Water		WC Method	>0.1	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844		0.2	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	10.9	8.8	9.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	28.4	25.4	27.6
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		0	0	1
Boron	ppm	ASTM D5185m		245	275	213
Barium	ppm	ASTM D5185m		2	<1	0
Molybdenum	ppm	ASTM D5185m		91	90	41
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		441	460	126
Calcium	ppm	ASTM D5185m		1344	1455	1806
Phosphorus	ppm	ASTM D5185m	1000	616	631	536
Zinc	ppm	ASTM D5185m	1090	764	780	646
Sulfur	ppm	ASTM D5185m		2491	2482	2464
Oxidation	Abs/.1mm	*ASTM D7414	>25	34.4	28.2	33.4
Base Number (BN)	mg KOH/g	ASTM D2896	7.4	5.3	5.6	▲ 3.1
Visc @ 100°C	cSt	ASTM D445	14.7	▲ 10.7	▲ 10.9	▲ 10.5

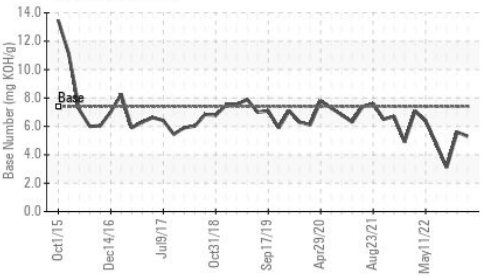
Fuel Dilution



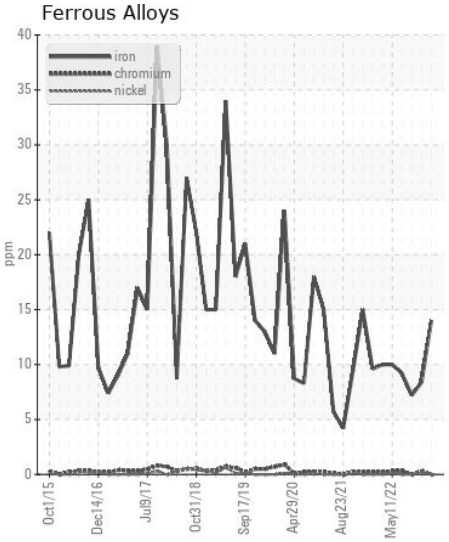
Viscosity @ 100°C



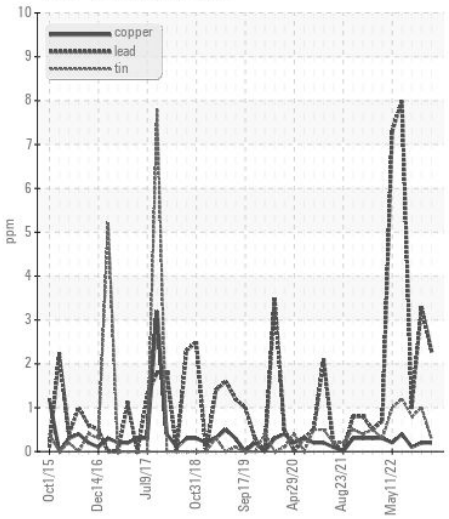
Base Number



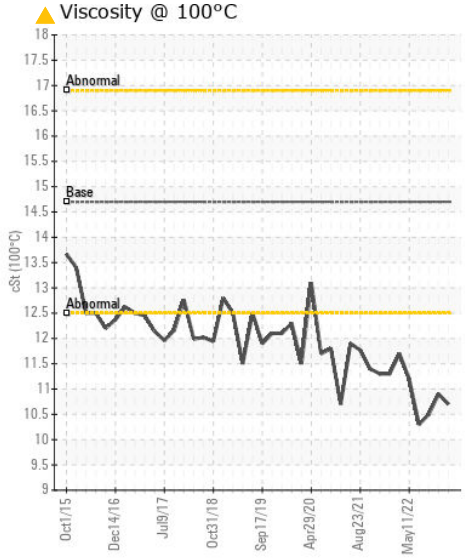
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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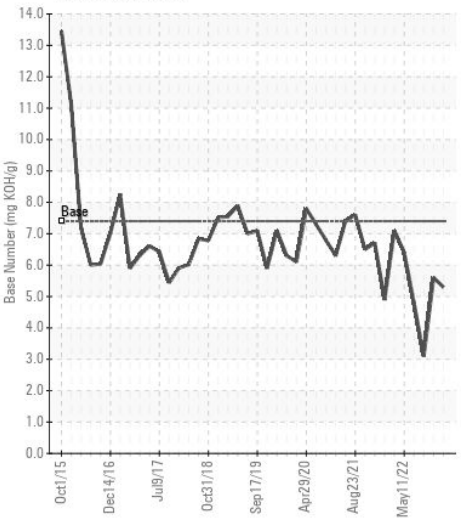

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : MW05877879
Lab Number : 05877879
Unique Number : 10522982
Test Package : MAR 2 (Additional Tests: PercentFuel)

Certificate L2367

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)

Received : 20 Jun 2023
Tested : 21 Jun 2023
Diagnosed : 22 Jun 2023 - Angela Borella

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