



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
MITSUBISHI DANNY K
Component
Starboard Main Engine
Fluid
CHEVRON DELO 400 SAE 40 (150 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		MW0060479	MW0060644	MW0014375
Sample Date		Client Info		26 Jan 2024	14 Sep 2023	02 Nov 2022
Machine Age	hrs	Client Info		28594	26250	19524
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>75	62	15	18
Chromium	ppm	ASTM D5185m	>8	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	<1	0	0
Titanium	ppm	ASTM D5185m	>3	15	11	2
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>15	2	3	2
Lead	ppm	ASTM D5185m	>18	4	<1	5
Copper	ppm	ASTM D5185m	>80	6	1	3
Tin	ppm	ASTM D5185m	>14	1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

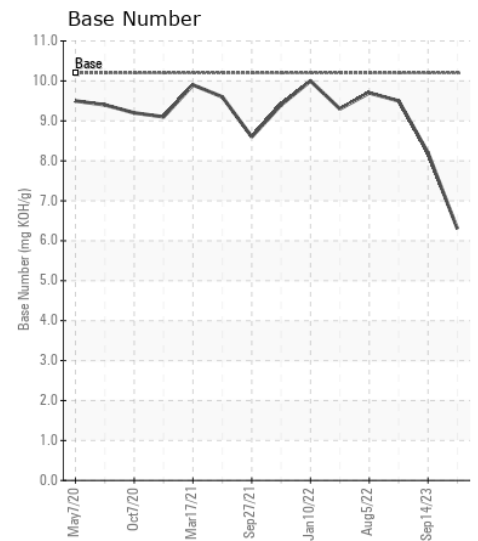
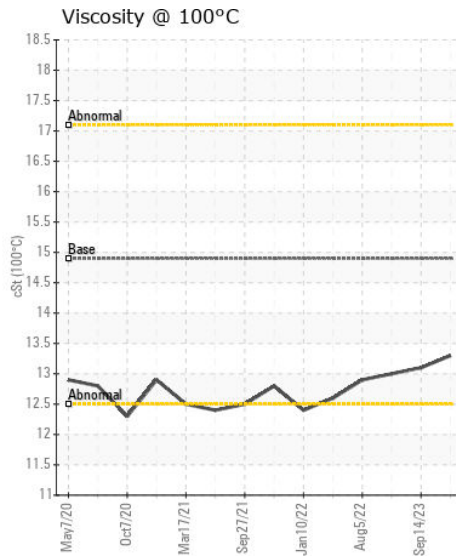
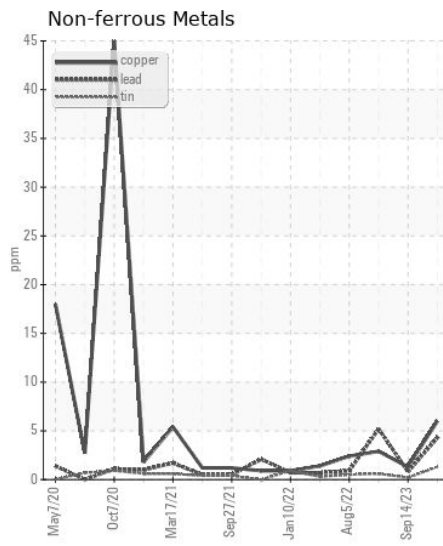
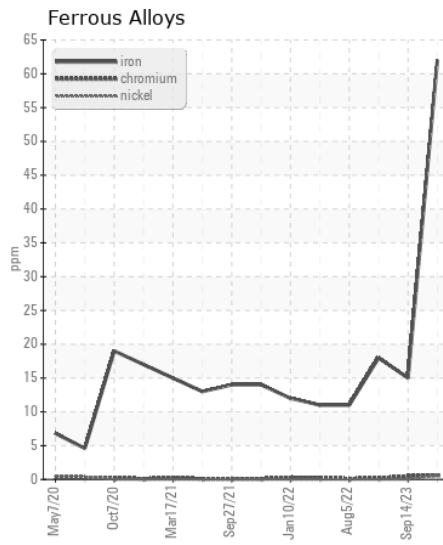
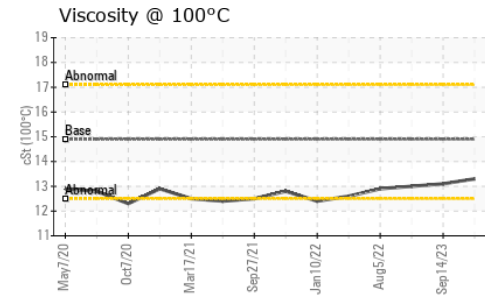
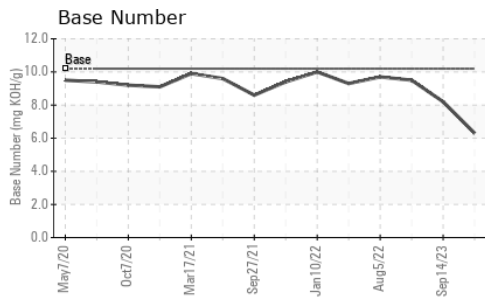
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	5	6	4
Potassium	ppm	ASTM D5185m	>20	2	2	0
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		2.4	0.7	1.2
Nitration	Abs/cm	*ASTM D7624	>20	10.6	7.6	9.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	24.1	19.8	25.4
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

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.

Sodium	ppm	ASTM D5185m	>75	0	1	<1
Boron	ppm	ASTM D5185m		70	138	248
Barium	ppm	ASTM D5185m		13	0	0
Molybdenum	ppm	ASTM D5185m		45	58	105
Manganese	ppm	ASTM D5185m		1	<1	<1
Magnesium	ppm	ASTM D5185m		674	689	621
Calcium	ppm	ASTM D5185m		1513	1563	1553
Phosphorus	ppm	ASTM D5185m	1160	718	687	682
Zinc	ppm	ASTM D5185m	1270	792	824	771
Sulfur	ppm	ASTM D5185m		3346	3324	2932
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.3	14.4	17.9
Base Number (BN)	mg KOH/g	ASTM D2896	10.2	6.3	8.2	9.5
Visc @ 100°C	cSt	ASTM D445	14.9	13.3	13.1	13.0



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : MW0060479

Lab Number : 06085748

Unique Number : 10873193

Test Package : MAR 2

Received : 12 Feb 2024

Tested : 12 Feb 2024

Diagnosed : 13 Feb 2024 - Don Baldrige

ERGON MARINE

100 LEE STREET

VICKSBURG, MS

US 39180

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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)