



Machine Id
PRS
Component
Starboard Main Engine
Fluid
CHEVRON DELO 400 XLE 15W40 (28 GAL)

RECOMMENDATION

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		MW05862886	MW05823803	MW05823790
Sample Date		Client Info		01 Jun 2023	18 Apr 2023	18 Apr 2023
Machine Age	hrs	Client Info		29389	28186	28766
Oil Age	hrs	Client Info		623	652	580
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	ATTENTION	NORMAL

WEAR

All component wear rates are normal.

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

CONTAMINATION

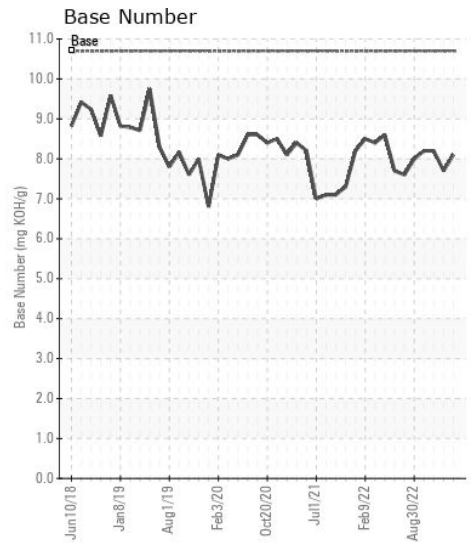
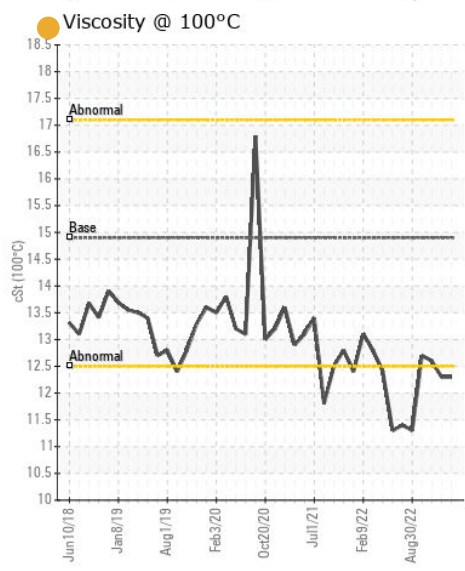
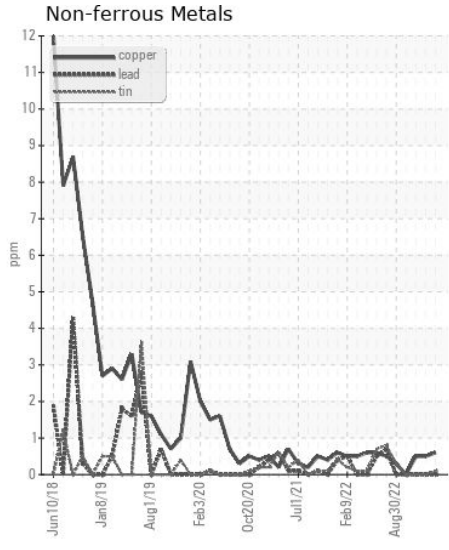
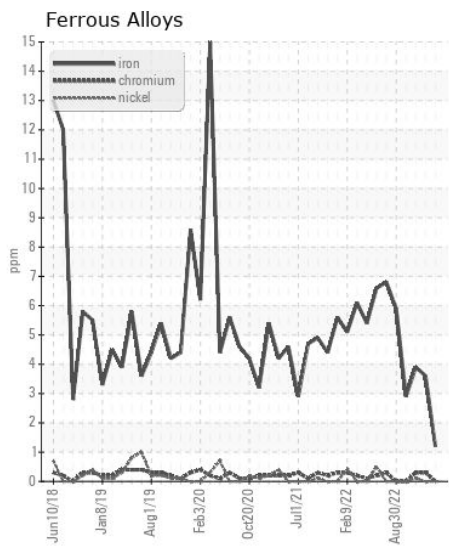
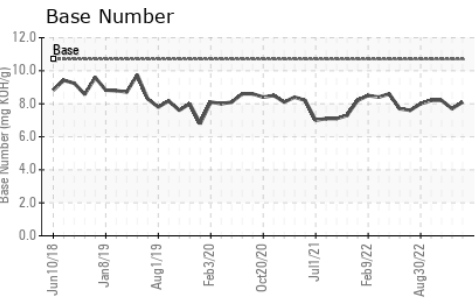
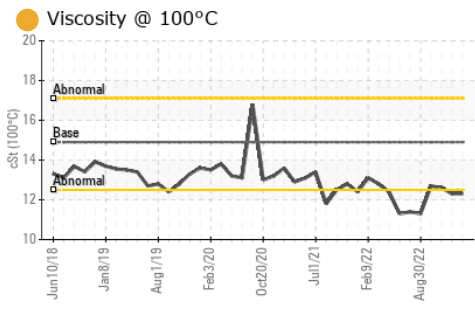
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	4	5	5
Potassium	ppm	ASTM D5185m	>20	5	12	8
Fuel		WC Method	>4.0	<1.0	▲ 2.4	<1.0
Water		WC Method	>0.1	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844		0.1	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	5.9	5.8	5.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.4	21.9	21.2
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 oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m	>75	8	5	9
Boron	ppm	ASTM D5185m		255	289	300
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		85	105	99
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		507	540	489
Calcium	ppm	ASTM D5185m		1616	1328	1577
Phosphorus	ppm	ASTM D5185m	760	726	710	731
Zinc	ppm	ASTM D5185m	830	879	853	876
Sulfur	ppm	ASTM D5185m	2770	3154	2432	2733
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.3	16.7	15.2
Base Number (BN)	mg KOH/g	ASTM D2896	10.7	8.1	7.7	8.2
Visc @ 100°C	cSt	ASTM D445	14.9	● 12.3	● 12.3	12.6



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : MW05862886
Lab Number : 05862886
Unique Number : 10497351
Test Package : MAR 2
Received : 02 Jun 2023
Tested : 02 Jun 2023
Diagnosed : 05 Jun 2023 - Don Baldrige

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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)