



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		MW06101483	MW06048283	MW06017187
Sample Date		Client Info		26 Feb 2024	01 Jan 2024	23 Nov 2023
Machine Age	hrs	Client Info		31955	31123	30321
Oil Age	hrs	Client Info		832	802	507
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	ABNORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>75	4	2	3
Chromium	ppm	ASTM D5185m	>8	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	1	0	<1
Titanium	ppm	ASTM D5185m	>3	<1	<1	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>15	1	<1	2
Lead	ppm	ASTM D5185m	>18	<1	<1	0
Copper	ppm	ASTM D5185m	>80	13	2	<1
Tin	ppm	ASTM D5185m	>14	<1	<1	0
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

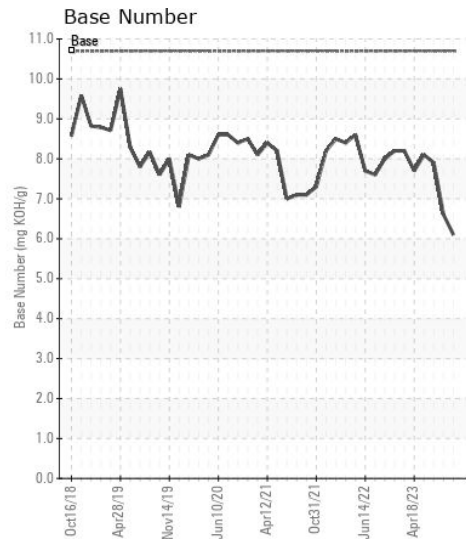
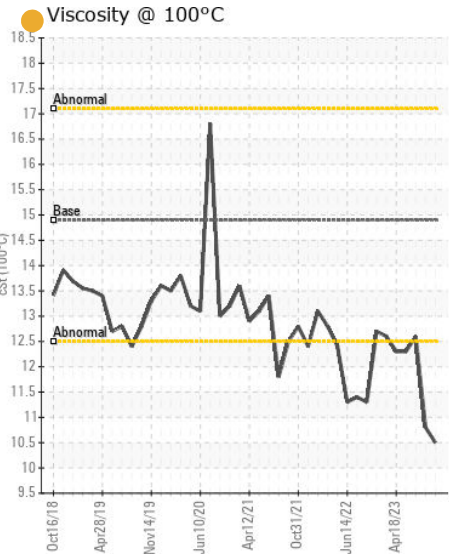
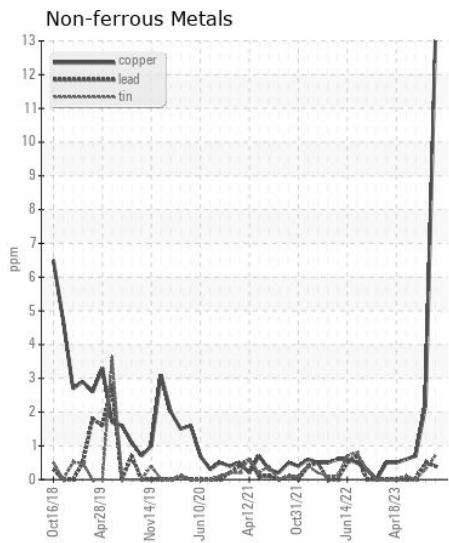
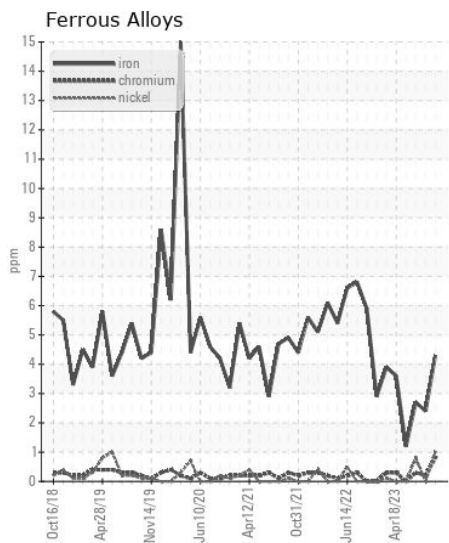
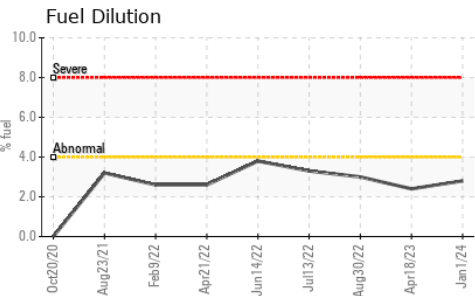
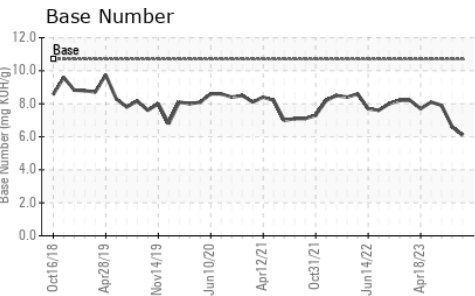
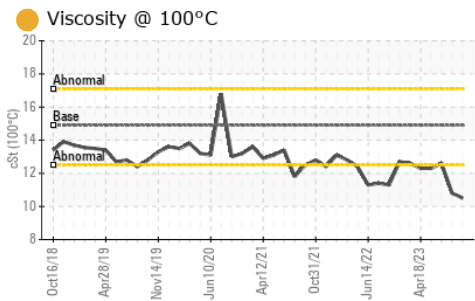
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	4	3	5
Potassium	ppm	ASTM D5185m	>20	5	5	5
Fuel	%	ASTM D3524	>4.0	<1.0	▲ 2.8	<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	6.1	6.3	5.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.0	18.5	21.9
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	4	7	5
Boron	ppm	ASTM D5185m		65	● 87	332
Barium	ppm	ASTM D5185m		1	0	0
Molybdenum	ppm	ASTM D5185m		26	● 38	112
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		107	● 215	532
Calcium	ppm	ASTM D5185m		1835	1972	1381
Phosphorus	ppm	ASTM D5185m	760	780	788	654
Zinc	ppm	ASTM D5185m	830	935	1100	848
Sulfur	ppm	ASTM D5185m	2770	3462	3352	2581
Oxidation	Abs/.1mm	*ASTM D7414	>25	12.7	13.7	16.1
Base Number (BN)	mg KOH/g	ASTM D2896	10.7	6.1	6.6	7.9
Visc @ 100°C	cSt	ASTM D445	14.9	● 10.5	▲ 10.8	12.6



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : MW06101483
Lab Number : 06101483
Unique Number : 10899713
Test Package : MAR 2 (Additional Tests: FuelDilution, PercentFuel)

Received : 27 Feb 2024
Tested : 29 Feb 2024
Diagnosed : 29 Feb 2024 - Jonathan Hester

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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)