



Area
PHILLIP M PFEFFER
Machine Id
[PHILLIP M PFEFFER] 008 647184-8
Component
Starboard Genset
Fluid
CHEVRON DELO 400 LE 15W40 (6 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		MW06211007	MW06098860	MW0025750
Sample Date		Client Info		01 Jun 2024	04 Feb 2024	01 May 2023
Machine Age	hrs	Client Info		0	7294	400
Oil Age	hrs	Client Info		0	7294	400
Filter Age	hrs	Client Info		0	0	400
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				ATTENTION	ATTENTION	ATTENTION

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>50	11	8	6
Chromium	ppm	ASTM D5185m	>4	0	0	0
Nickel	ppm	ASTM D5185m	>2	0	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>5	0	0	0
Aluminum	ppm	ASTM D5185m	>12	3	3	3
Lead	ppm	ASTM D5185m	>17	0	<1	0
Copper	ppm	ASTM D5185m	>70	<1	<1	<1
Tin	ppm	ASTM D5185m	>15	0	0	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

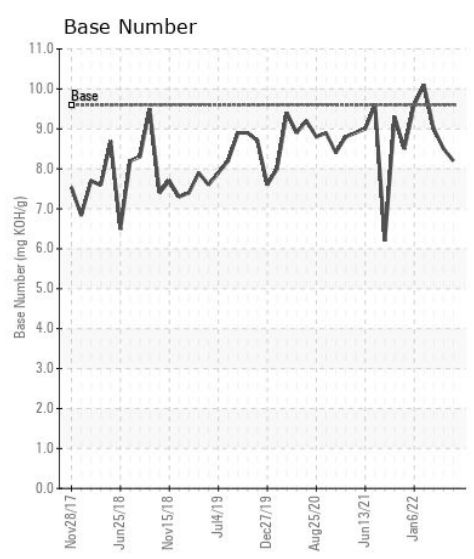
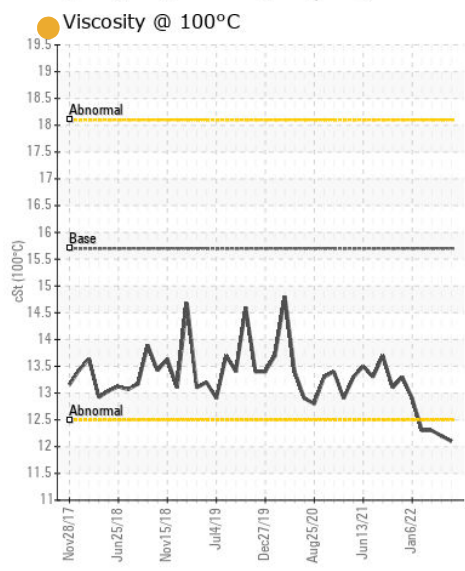
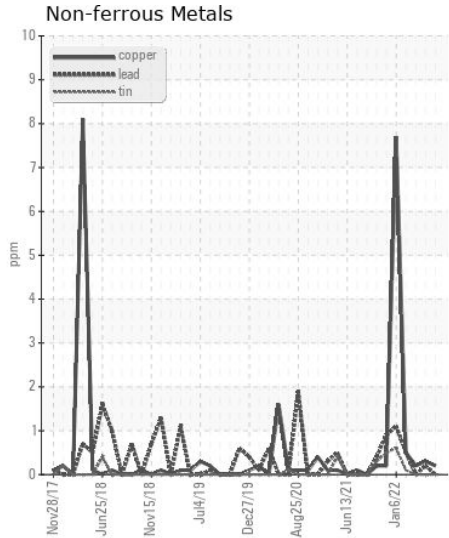
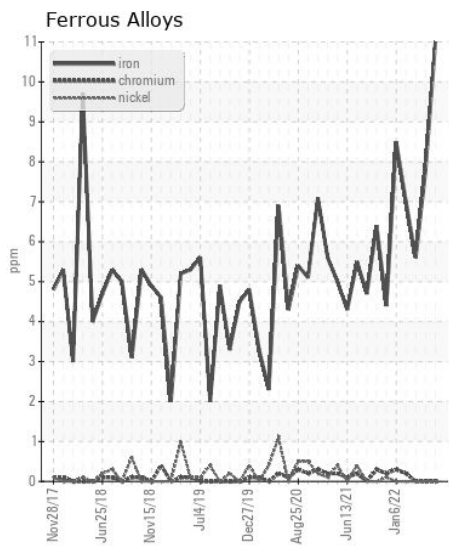
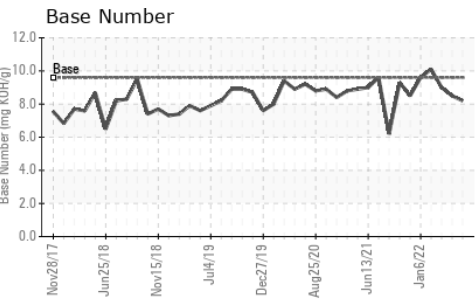
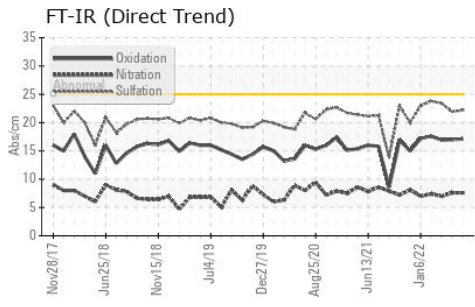
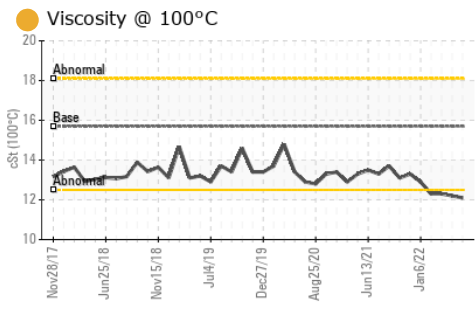
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	6	6	6
Potassium	ppm	ASTM D5185m	>20	2	0	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		0.1	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	7.6	7.6	7.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.2	21.9	23.4
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 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		<1	<1	2
Boron	ppm	ASTM D5185m		328	381	322
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		127	106	128
Manganese	ppm	ASTM D5185m		3	1	<1
Magnesium	ppm	ASTM D5185m		613	584	671
Calcium	ppm	ASTM D5185m		1550	1706	1602
Phosphorus	ppm	ASTM D5185m	1200	815	798	695
Zinc	ppm	ASTM D5185m	1300	1099	931	838
Sulfur	ppm	ASTM D5185m	3200	3406	2905	3102
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.1	17.0	16.9
Base Number (BN)	mg KOH/g	ASTM D2896	9.6	8.2	8.5	9.0
Visc @ 100°C	cSt	ASTM D445	15.7	12.1	12.2	12.3



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : MW06211007 **Received** : 14 Jun 2024
Lab Number : 06211007 **Tested** : 18 Jun 2024
Unique Number : 11083871 **Diagnosed** : 18 Jun 2024 - Sean Felton
Test Package : MAR 2

INGRAM BARGE
 900 S 3RD ST
 PADUCAH, KY
 US 42003
 Contact: JUSTIN WHEELER
 justin.wheeler@ingrambargo.com
 T:
 F: (615)695-3697

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)