

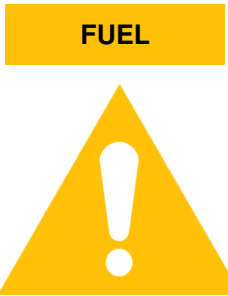
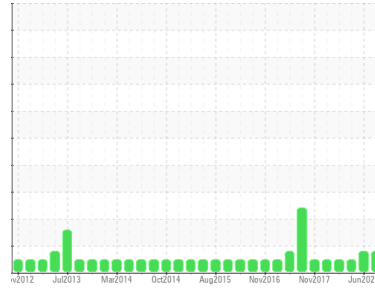


PROBLEM SUMMARY



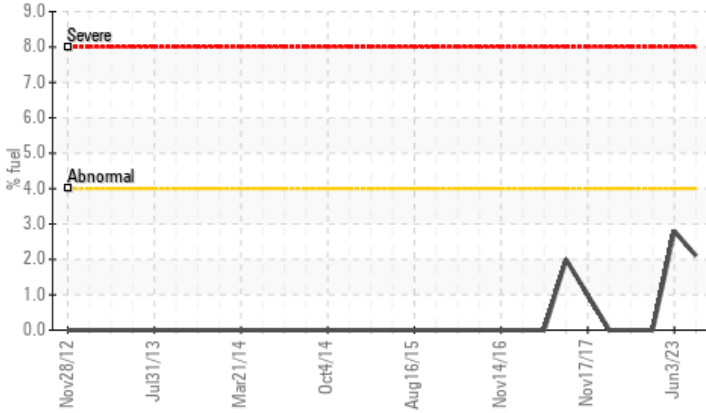
Machine Id
Stbd Ship Service Generator (S/N C6T00281)
 Component
Starboard Genset
 Fluid
CAT DIESEL ENGINE OIL 15W40 (18 LTR)

Sample Rating Trend



COMPONENT CONDITION SUMMARY

▲ Fuel Dilution



RECOMMENDATION

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. No other corrective action is recommended at this time.

PROBLEMATIC TEST RESULTS

Sample Status				MARGINAL	MARGINAL	NORMAL
Fuel	%	ASTM D7593*	>4.0	▲ 2.1	▲ 2.8	<1.0

Customer Id: CCGSVLAD
 Sample No.: WC0829975
 Lab Number: 02590184
 Test Package: MAR 1



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Wes Davis +1 905-569-8600 x223
wesd@wearcheck.ca

To change component or sample information:
 Gloria Gonzalez +1 (289)291-4643 x4643
gloria.gonzalez@wearcheck.com

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

03 Jun 2023 Diag: Wes Davis

FUEL



The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. No other corrective action is recommended at this time. All component wear rates are normal. Light fuel dilution occurring. No other contaminants were detected in the oil. The condition of the oil is acceptable for the time in service.

view report



24 Nov 2022 Diag: Wes Davis

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

view report



14 May 2022 Diag: Wes Davis

NORMAL



Resample at the next service interval to monitor. All component wear rates are normal. There is no indication of any contamination in the oil. The condition of the oil is acceptable for the time in service.

view report



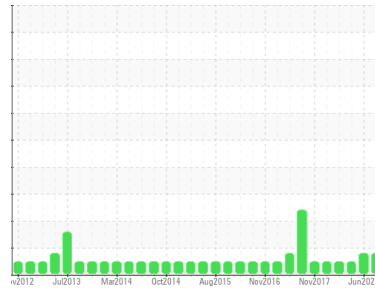


OIL ANALYSIS REPORT



Machine Id
Stbd Ship Service Generator (S/N C6T00281)
 Component
Starboard Genset
 Fluid
CAT DIESEL ENGINE OIL 15W40 (18 LTR)

Sample Rating Trend



FUEL



DIAGNOSIS

Recommendation

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. No other corrective action is recommended at this time.

Wear

All component wear rates are normal.

Contamination

Light fuel dilution occurring. No other contaminants were detected in the oil.

Fluid Condition

The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0829975	WC0754145	WC0754156
Sample Date	Client Info		15 Oct 2023	03 Jun 2023	24 Nov 2022
Machine Age	hrs	Client Info	30000	28500	27610
Oil Age	hrs	Client Info	500	500	110
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			MARGINAL	MARGINAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185(m) >62	6	8	3
Chromium	ppm	ASTM D5185(m) >3	0	0	0
Nickel	ppm	ASTM D5185(m) >2	1	<1	0
Titanium	ppm	ASTM D5185(m)	0	0	<1
Silver	ppm	ASTM D5185(m) >5	<1	0	0
Aluminum	ppm	ASTM D5185(m) >4	1	1	1
Lead	ppm	ASTM D5185(m) >25	2	1	<1
Copper	ppm	ASTM D5185(m) >274	4	6	<1
Tin	ppm	ASTM D5185(m) >2	0	0	0
Antimony	ppm	ASTM D5185(m)	0	0	<1
Vanadium	ppm	ASTM D5185(m)	0	0	0
Beryllium	ppm	ASTM D5185(m)	0	0	0
Cadmium	ppm	ASTM D5185(m)	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)	40	41	60
Barium	ppm	ASTM D5185(m)	<1	0	0
Molybdenum	ppm	ASTM D5185(m)	42	42	43
Manganese	ppm	ASTM D5185(m)	0	<1	<1
Magnesium	ppm	ASTM D5185(m)	512	508	495
Calcium	ppm	ASTM D5185(m)	1727	1705	1732
Phosphorus	ppm	ASTM D5185(m)	908	937	953
Zinc	ppm	ASTM D5185(m) 1460	1081	1080	1055
Sulfur	ppm	ASTM D5185(m)	2382	2294	2450
Lithium	ppm	ASTM D5185(m)	<1	<1	<1

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185(m) >15	4	3	7
Sodium	ppm	ASTM D5185(m)	3	3	3
Potassium	ppm	ASTM D5185(m) >20	0	0	<1
Fuel	%	ASTM D7593* >4.0	▲ 2.1	▲ 2.8	<1.0

INFRA-RED

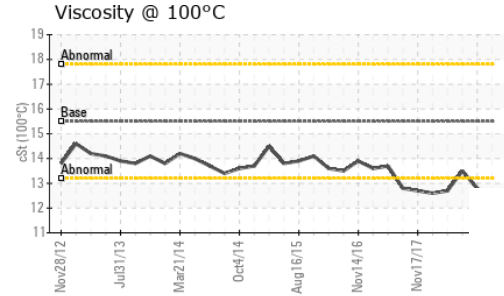
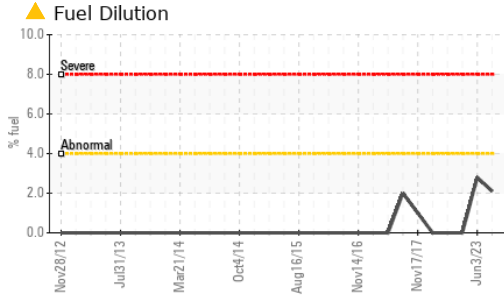
	method	limit/base	current	history1	history2
Soot %	%	ASTM D7844*	0.1	0.2	0.6
Nitration	Abs/cm	ASTM D7624* >20	6.7	7.4	5.5
Sulfation	Abs/.1mm	ASTM D7415* >30	22.7	23.2	21.5

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	ASTM D7414* >25	20.5	21.2	19.2



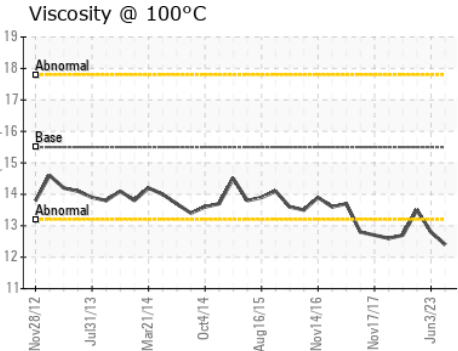
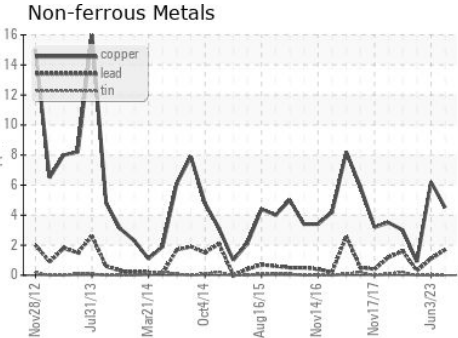
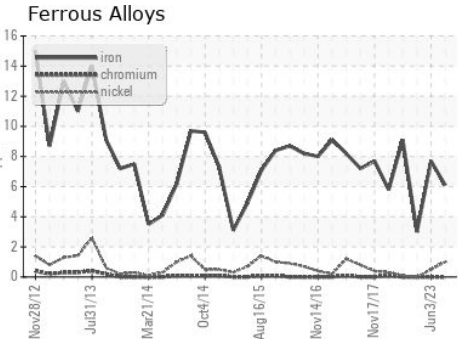
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2	
White Metal	scalar	Visual*	NONE	VLITE	NONE	NONE
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	NONE
Precipitate	scalar	Visual*	NONE	NONE	NONE	NONE
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
Free Water	scalar	Visual*		NEG	NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D7279(m)	15.5	12.4	12.8	13.5

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0829975
Lab Number : **02590184**
Unique Number : 5659250
Test Package : MAR 1 (Additional Tests: FuelDilution, PercentFuel)

CANADIAN COAST GUARD
 CCGS Vladkov, P.O. Box 5667, 280 Southside Rd.
 St. John's, NL
 CA A1C 5X1
 Contact: Geoff Stewart
 geoffrey.stewart@dfo-mpo.gc.ca
 T: (709)772-4216
 F: (709)772-3652

To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.