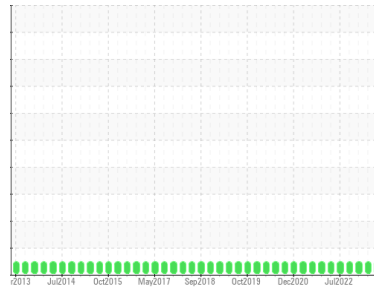




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
L14-3112 Starboard Generator (S/N C6T00185)
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON HP 15W40 (17 LTR)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

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.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0821971	WC0821968	WC0729403
Sample Date	Client Info		25 Jun 2024	10 May 2024	22 Apr 2023
Machine Age	hrs	Client Info	24947	24540	24038
Oil Age	hrs	Client Info	500	500	500
Oil Changed	Client Info		Changed	Not Changd	Changed
Sample Status			NORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<1.0	<1.0	<1.0
Water	WC Method	>0.2	NEG	NEG	NEG
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>100	21	22	24
Chromium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Nickel	ppm	ASTM D5185(m)	>2	<1	0	0
Titanium	ppm	ASTM D5185(m)	>2	0	0	0
Silver	ppm	ASTM D5185(m)	>2	0	0	0
Aluminum	ppm	ASTM D5185(m)	>25	1	<1	1
Lead	ppm	ASTM D5185(m)	>40	0	0	<1
Copper	ppm	ASTM D5185(m)	>330	2	2	2
Tin	ppm	ASTM D5185(m)	>15	0	0	0
Antimony	ppm	ASTM D5185(m)		0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	<1
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)	0	2	2	2
Barium	ppm	ASTM D5185(m)	0	0	0	0
Molybdenum	ppm	ASTM D5185(m)	60	59	60	60
Manganese	ppm	ASTM D5185(m)	0	<1	<1	<1
Magnesium	ppm	ASTM D5185(m)	1010	970	978	1001
Calcium	ppm	ASTM D5185(m)	1070	1029	1049	1102
Phosphorus	ppm	ASTM D5185(m)	1150	951	970	1061
Zinc	ppm	ASTM D5185(m)	1270	1183	1174	1194
Sulfur	ppm	ASTM D5185(m)	2060	2451	2389	2528
Lithium	ppm	ASTM D5185(m)		<1	<1	<1

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>25	2	2	3
Sodium	ppm	ASTM D5185(m)		2	2	2
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	<1

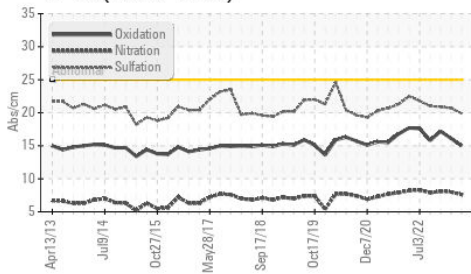
INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*	>3	0.8	0.8	0.6
Nitration	Abs/cm	ASTM D7624*	>20	7.6	8.0	8.1
Sulfation	Abs./1mm	ASTM D7415*	>30	19.9	20.7	20.9

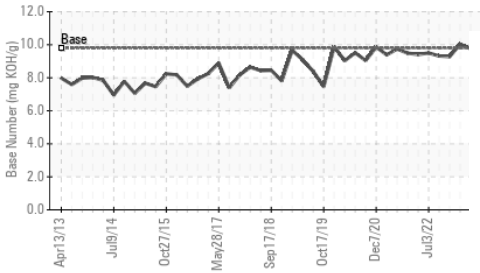


OIL ANALYSIS REPORT

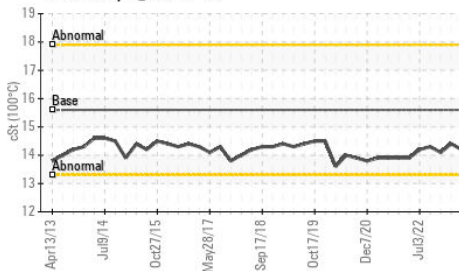
FT-IR (Direct Trend)



Base Number



Viscosity @ 100°C



FLUID DEGRADATION method limit/base current history1 history2

Oxidation	Abs/.1mm	ASTM D7414*	>25	15.0	16.1	17.2
Base Number (BN)	mg KOH/g	ASTM D2896*	9.8	9.76	10.03	9.28

VISUAL method limit/base current history1 history2

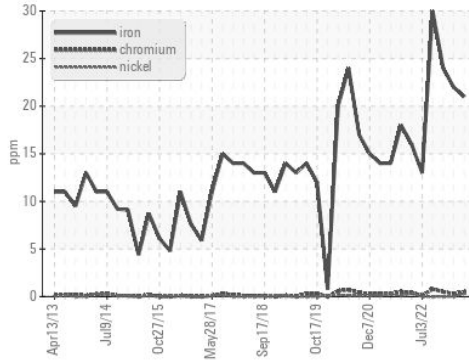
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG
Free Water	scalar	Visual*		NEG	NEG	NEG

FLUID PROPERTIES method limit/base current history1 history2

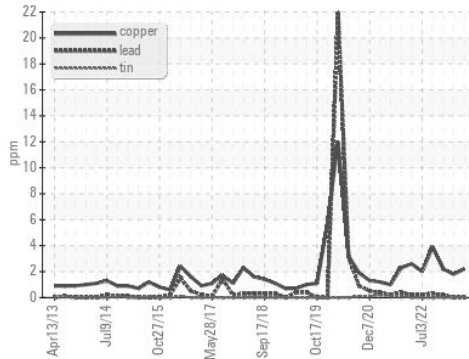
Visc @ 100°C	cSt	ASTM D7279(m)	15.6	14.2	14.4	14.1
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GRAPHS

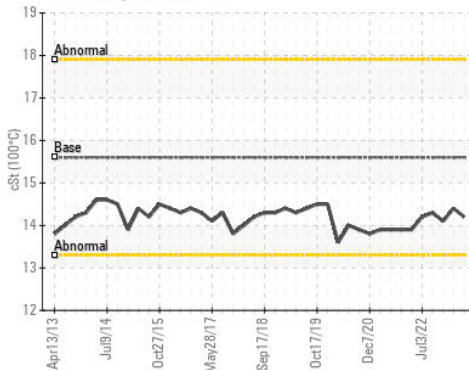
Ferrous Alloys



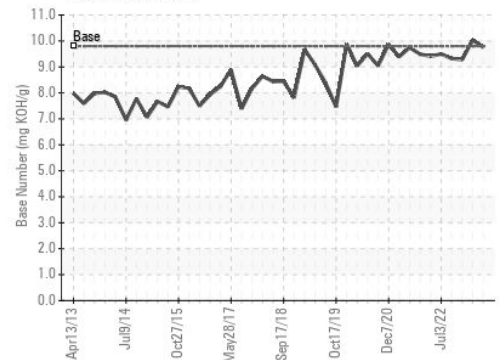
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0821971 **Received** : 03 Jul 2024
Lab Number : **02645122** **Tested** : 03 Jul 2024
Unique Number : 5802661 **Diagnosed** : 03 Jul 2024 - Wes Davis
Test Package : MAR 2

CANADIAN COAST GUARD
 CCGS LIMNOS, 867 LAKESHORE ROAD
 BURLINGTON, ON
 CA L7R 4A6
 Contact: Laurie Bosley
 Laurie.Bosley@dfo-mpo.gc.ca

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.

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