



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
L14-3111 Port Generator (S/N C6T00184)
 Component
Diesel Engine
 Fluid
PETRO CANADA 15W40 (66 LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0821967	WC0729391	WC0729402
Sample Date		Client Info		10 May 2024	03 May 2024	08 May 2023
Machine Age	hrs	Client Info		24015	23995	23485
Oil Age	hrs	Client Info		500	513	500
Filter Age	hrs	Client Info		500	513	500
Oil Changed		Client Info		Not Changed	Changed	Changed
Filter Changed		Client Info		Not Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>100	6	10	8
Chromium	ppm	ASTM D5185(m)	>20	0	0	0
Nickel	ppm	ASTM D5185(m)	>2	0	0	<1
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	<1	0	0
Copper	ppm	ASTM D5185(m)	>330	24	1	<1
Tin	ppm	ASTM D5185(m)	>15	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

There is no indication of any contamination in the oil.

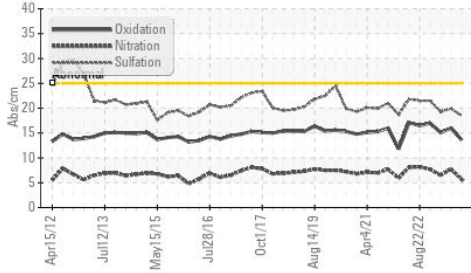
Silicon	ppm	ASTM D5185(m)	>25	1	1	2
Potassium	ppm	ASTM D5185(m)	>20	<1	<1	0
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0.1	0.4	0.3
Nitration	Abs/cm	ASTM D7624*	>20	5.7	7.7	6.5
Sulfation	Abs/.1mm	ASTM D7415*	>30	18.5	19.9	19.3
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

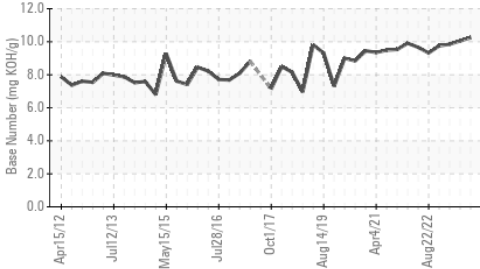
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185(m)		26	5	6
Boron	ppm	ASTM D5185(m)		2	2	2
Barium	ppm	ASTM D5185(m)		0	0	0
Molybdenum	ppm	ASTM D5185(m)		64	59	59
Manganese	ppm	ASTM D5185(m)		<1	<1	<1
Magnesium	ppm	ASTM D5185(m)		959	974	953
Calcium	ppm	ASTM D5185(m)		1023	1041	1066
Phosphorus	ppm	ASTM D5185(m)		973	945	1049
Zinc	ppm	ASTM D5185(m)		1153	1163	1155
Sulfur	ppm	ASTM D5185(m)		2517	2403	2555
Oxidation	Abs/.1mm	ASTM D7414*	>25	13.6	16.0	15.1
Base Number (BN)	mg KOH/g	ASTM D2896*		10.25	10.05	9.85
Visc @ 100°C	cSt	ASTM D7279(m)		14.2	14.2	14.3

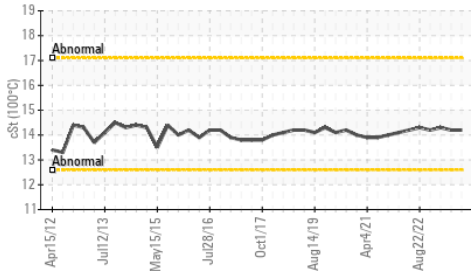
FT-IR (Direct Trend)



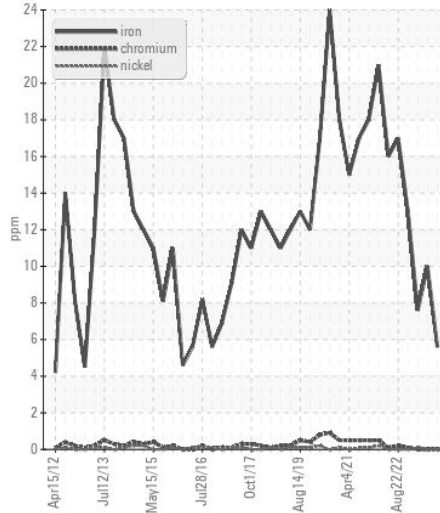
Base Number



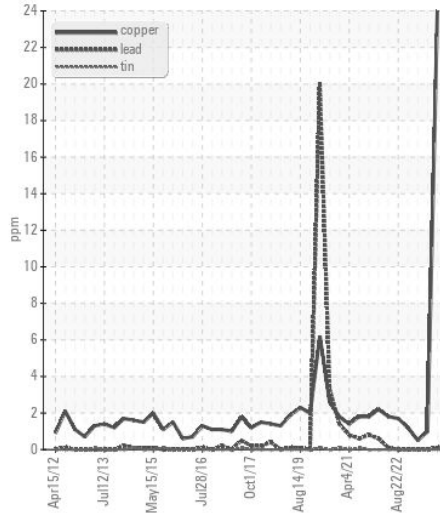
Viscosity @ 100°C



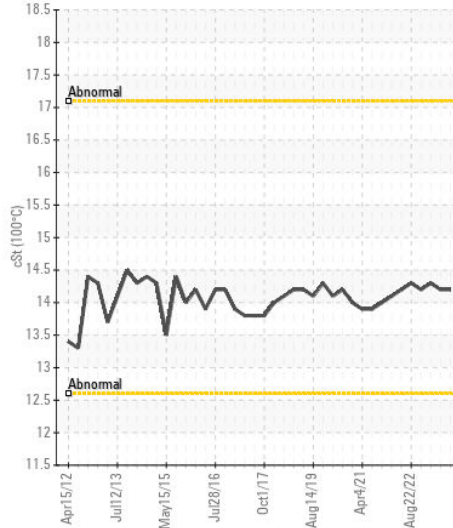
Ferrous Alloys



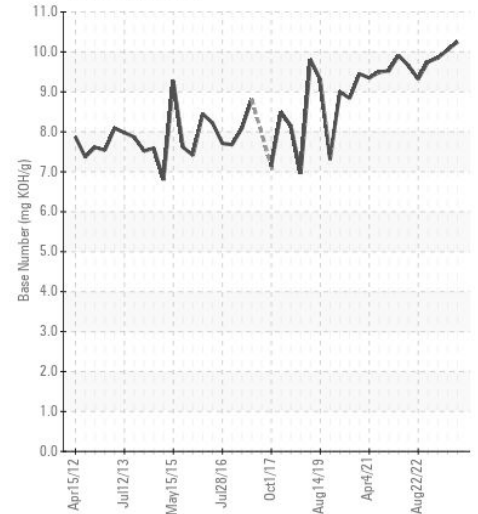
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : WC0821967
Lab Number : 02635168
Unique Number : 5776321
Test Package : MAR 2

Received : 14 May 2024
Tested : 15 May 2024
Diagnosed : 15 May 2024 - Kevin Marson

CANADIAN COAST GUARD
 CCGS LIMNOS, 867 LAKESHORE ROAD
 BURLINGTON, ON
 CA L7R 4A6
 Contact: Laurie Bosley
 Laurie.Bosley@dfo-mpo.gc.ca
 T:
 F: (519)383-1994

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.